



EA Engineering, P.C.
EA Science and Technology

6712 Brooklawn Parkway, Suite 104
Syracuse, New York 13211-2158
Telephone: 315-431-4610
www.eaest.com

16 November 2017

Mr. Payson Long
New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway
Albany, New York 12233

RE: National Heatset Printing Site
Operation & Maintenance and Monitoring Report (July 2017 – September 2017)
Soil Vapor Extraction System, In-Well Stripping Systems, and Groundwater Monitoring
1 Adams Boulevard, Town of Babylon, New York
New York State Department of Environmental Conservation Site Number (No.) 152140
EA Project No. 14907.16

Dear Mr. Long:

This letter report provides an overview of the ongoing operation of the site remediation systems (i.e., soil vapor extraction [SVE] system, on-site density-driven convection [DDC] systems, and off-site DDC system), as well as groundwater monitoring activities at the National Heatset Printing site in the Town of Babylon, New York (Figure 1). EA Engineering, P.C. and its affiliate EA Science and Technology (EA) assumed management of the on-site SVE system under New York State Department of Environmental Conservation (NYSDEC) Work Assignment No. D004441-29. EA is currently performing site management under NYSDEC Work Assignment No. D007624-16, which was approved on 6 November 2012 and amended in April 2013 (EA assumed responsibility for management of the on-site and off-site DDC systems beginning on 12 April 2013). EA's task assignment includes monthly/quarterly visits for the DDC systems, a monthly visit for the SVE system, and quarterly groundwater sampling. The activities are being conducted under the NYSDEC State Superfund Standby Contract. Remedial system details are presented in the NYSDEC-approved Site Management Plan (EA 2013)¹, which includes the Operation & Maintenance (O&M) Manual for each system.

During the reporting period (July 2017 – September 2017), an O&M visit was performed on the following dates by EA and/or one of EA's subcontractors (i.e., Preferred Environmental Services [PES], D&D Electric).

¹ EA. 2013. National Heatset Printing Co. State Superfund Site, Suffolk County, Town of Babylon, New York. Site Management Plan. Final. June.



Mr. Payson Long
NYSDEC
16 November 2017
Page 2

Site Visit and System Maintenance Log

Date	System	Purpose	Personnel
6/13/17 – 6/14/17	On-site	PES responded to a high temperature alarm at on-site system #1. System shut down until following day once ambient temperatures had decreased.	PES
6/27/17	On-site and off-site	Monthly visit. Conducted monthly O&M and collected air samples from SVE system. Changed off-site system to run off blower B-501. Excess condensation observed to be building up in system process piping. EA turned off system as a precaution until issue can be further evaluated (anticipated for week of 10 July 2017).	EA & PES
7/5/17	On-site and off-site	EA onsite to provide oversight (at request of NYSDEC) of paving activities planned for north and west sides of building. However, pavers did not actually perform site work on 7/5/17. Returned to off-site system to further address condensate in the offsite system. Drained process piping of excess moisture and restarted system. System was operating upon departure.	EA
7/11/17 – 7/12/17	On-site and off-site	Re-adjusted set-point temperature of chiller unit at offsite system. Determined low set-point temperature was the cause of generating excess condensate in process piping. Additionally, oversaw paving operations at 1 Adams Boulevard.	EA, D&D
7/17/17 – 7/19/17	On-site and off-site	EA onsite to perform routine quarterly O&M for SVE and DDC systems including groundwater monitoring. Collected system air samples. Switched operation of SVE system to run off of horizontal well legs 2 and 4. Previously using legs 1 and 5.	EA, PES, D&D
7/20/17	On-site	PES responded to a high temperature alarm at on-site system #1. System shut down until 7/25/17 once ambient temperatures had decreased.	PES
7/25/17	On-site	PES restarted on-site system #1	PES
8/28/17-8/29/17	On-site and Off-site	Monthly visit. Conducted monthly O&M and collected air samples from SVE system. Conducted one-time groundwater sampling of select monitoring wells on-site and off-site for 1,4-dioxane.	EA, PES
9/21/17	On-site and off-site	Monthly visit. Conducted monthly O&M and collected air samples from SVE system.	EA

NOTE: Shaded cells indicate O&M events performed during a previous reporting period.

In addition, quarterly groundwater monitoring activities were performed by EA from 17 to 19 July 2017. EA also conducted a one-time sampling of select monitoring wells for 1,4-dioxane at the request of the NYSDEC from 28 to 29 August 2017.



1. SYSTEM OPERATION

1.1 SOIL VAPOR EXTRACTION

The SVE system was operational for a total of 2,064 hours out of an available 2,064 hours (100 percent of the total available) during this reporting period (July 2017 – September 2017) as presented in Table 1. The location of the SVE system and associated monitoring wells/points are presented in Figure 2.

On 17 July 2017, EA isolated and tested each horizontal well leg for flow rates and volatile organic compound (VOC) concentrations. EA ran the SVE system with each horizontal leg (one at a time) for an hour each, measuring flow rates with an air velocity meter and VOC with a ppbRAE photoionization detector (PID) every 15 minutes. It was determined that using well legs 2 and 4 resulted in the most optimized flow rates and VOC concentrations. The SVE system was switched from operating well legs 1 and 5 to operating wells 2 and 4 for the remainder of the reporting period.

1.2 ON-SITE DDC

There are two separate DDC systems located in the vicinity of the source area referred to as “on-site DDC system #1” and “on-site DDC system #2”. On-site DDC system #1 operates using DDC wells 1 and 2, and on-site DDC system #2 operates using DDC wells 3 and 4. During this reporting period (July 2017 – September 2017), on-site DDC system #1 was operational for a total of 1,945 hours out of an available 2,065 hours (94.16 percent of the total available); on-site DDC system #2 was operational for a total of 2,066 hours out of an available 2,066 hours (99.99 percent of the total available). A summary of the operational time associated with the on-site DDC systems is presented in Table 1. The locations of the on-site DDC systems and associated monitoring wells are shown in Figure 3.

On 20 July 2017, EA received a high-temperature alarm call out from on-site DDC system #1 due to high ambient temperatures. EA contacted PES, who then responded to the alarm. PES shut the system down and restarted the system once the ambient temperature decreased on 25 July 2017.

1.3 OFF-SITE DDC

The off-site DDC system is located along the downgradient edge of the dissolved-phase groundwater plume and is currently equipped with two blowers (designated as “B-501” and “B-502”). Blower B-501 was used to operate all DDC wells (5, 6, 7, 8, 9, and 10) during the reporting period of July 2017 – September 2017. During this reporting period (July 2017 – September 2017), blower B-501 was operational for a total of 1,874 hours out of an available 2,068 hours (90.63 percent of the total available for B-501). A summary of the operational time associated with the off-site DDC system is presented in Table 1. The locations of the off-site DDC system and associated monitoring wells are shown in Figure 4.



During the previous reporting period on 27 June 2017, EA attempted to switch the operation of the blowers associated with the off-site system. After EA turned off blower B-502 and restarted the system using blower B-501, excess condensation was observed in the process piping and water was leaking from a pressure transmitter downstream of the heat exchanger. As a precaution, EA shut down the system until further assessment could be conducted. The system remained off into the beginning of this quarter.

On 5 July 2017, EA returned to the offsite system to address excess condensation. EA drained the condensate from the process piping and restarted the system using blower B-501. EA returned to the offsite system with D&D Electricians on 12 July 2017 to determine the cause of excess condensation. It was determined that a low set temperature (50 °F) on the system's chiller unit was causing condensate to be generated in the process piping. The chiller temperature was increased to 72 °F, and no condensate has been generated since.

2. SYSTEM PERFORMANCE MONITORING

2.1 SOIL VAPOR EXTRACTION SYSTEM

Operational data for this period have been based on the system measurements and vapor sample data collected during the July 2017 - September 2017 monthly visits. EA operated the SVE system with two legs (1 and 5) to target areas of high VOC concentrations during the previous reporting period. On 17 July 2017, EA switched operation to wells 2 and 4. The average SVE blower flow rate for this period when the system was running was 220 cubic feet/minute (cfm), at an applied vacuum of 57.6 inches (in.) of water. A complete set of operational data collected is presented in Table 2A, as well as Attachment A.

Monitoring Points (Vacuum/Photoionization Detector Measurements)

On 18 July 2017, 28 August 2017, and 21 September 2017, EA performed field soil vapor screening at several of the vapor monitoring points within 1 Adams Boulevard. Some of the monitoring points could not be accessed due to daily operations associated with the tenant inside the facility. VOCs were detected at the concentrations presented in the table below using a ppbRAE PID. EA also collected differential pressure data from the monitoring points to help gauge the effectiveness of the HSVE wells.



Mr. Payson Long
NYSDEC
16 November 2017
Page 5

Soil Vapor Concentration and Vacuum Levels (1 Adams Blvd.)

July 2017*						
Vapor Point ID	VP-1	VP-2	VP-3	VP-3 (Former)	VP-7	VP-8
PID (ppm)	NS	NS	1.433	2.001	NS	NS
Vacuum (in.H2O)	NS	NS	0.003	0.003	NS	NS
Vapor Point ID	VP-9	VP-10	VP-11	VP-12	VP-13	VP-14
PID (ppm)	NS	2.001	1.903	NS	1.092	NS
Vacuum (in.H2O)	NS	-0.395	-0.055	NS	0.064	NS
Vapor Point ID	VP-15	VP-16	VP-17	VP-18	VP-19	VP-20
PID (ppm)	NS	NS	3.402	2.703	NS	32.7
Vacuum (in.H2O)	NS	NS	-0.142	-1.185	NS	-0.19
August 2017*						
Vapor Point ID	VP-1	VP-2	VP-3	VP-3 (Former)	VP-7	VP-8
PID (ppm)	NS	NS	0.108	0.434	NS	NS
Vacuum (in.H2O)	NS	NS	-0.49	0	NS	NS
Vapor Point ID	VP-9	VP-10	VP-11	VP-12	VP-13	VP-14
PID (ppm)	NS	NS	0.022	NS	NS	NS
Vacuum (in.H2O)	NS	NS	-0.097	NS	NS	NS
Vapor Point ID	VP-15	VP-16	VP-17	VP-18	VP-19	VP-20
PID (ppm)	NS	3.329	0.022	0.079	NS	NS
Vacuum (in.H2O)	NS	-0.093	-0.138	-1.487	NS	NS
September 2017*						
Vapor Point ID	VP-1	VP-2	VP-3	VP-3 (Former)	VP-7	VP-8
PID (ppm)	NS	NS	0.054	0.058	NS	NS
Vacuum (in.H2O)	NS	NS	-0.438	0	NS	NS
Vapor Point ID	VP-9	VP-10	VP-11	VP-12	VP-13	VP-14
PID (ppm)	NS	0.044	NS	0.046	NS	NS
Vacuum (in.H2O)	NS	-0.335	NS	-0.62	NS	NS
Vapor Point ID	VP-15	VP-16	VP-17	VP-18	VP-19	VP-20
PID (ppm)	NS	NS	0.976	0.228	NS	NS
Vacuum (in.H2O)	NS	NS	-1.3	-1.484	NS	NS

NOTE: NS = Not sampled
ID = Identification
PID = Photoionization detector
ppm = parts per million
VP = Vapor point
* Operating only two well legs (2 & 4)

2.2 ON-SITE DDC SYSTEMS

Operational data for this period have been based on the monthly system measurements. For on-site DDC system #1, the average vapor extraction flow rate was 393.6 cfm at an average applied vacuum of 38 in. of water. For on-site DDC system #2, the average vapor extraction flow rate was 278.6 cfm at an average applied vacuum of 13.6 in. of water.

Operational data are summarized in Tables 2B and 2C, and on the site visit data collection forms provided in Attachment A.



2.3 OFF-SITE DDC SYSTEM

Operational data for this period have been based on the monthly system measurements. The average vapor extraction flow rate was 577.6 cfm at an average applied vacuum of 55 in. of water.

Operational data are summarized in Tables 2D and 2E, and on the site visit data collection forms provided in Attachment A.

3. GROUNDWATER MONITORING

Groundwater monitoring activities performed during the July 2017 quarterly event included well gauging and collection of groundwater samples for off-site laboratory analysis. Well gauging and groundwater sampling activities were performed in accordance with the Site Management Plan (EA 2013)¹. Groundwater samples were obtained at the on-site wells on 17 - 19 July 2017 and off-site wells on 18 - 19 July 2017. Duplicate samples were obtained from on-site well MW-15S (onsite) (sample number “152140-FD-01”) and off-site well MW-1D (sample number “152140-FD-02”). All groundwater samples were analyzed for VOCs using United States Environmental Protection Agency (EPA) Method 8260B.

Groundwater monitoring activities performed on 28-29 August 2017 included gauging and collection of groundwater samples from select wells for 1,4-dioxane by offsite laboratory analysis. Well gauging and groundwater sampling activities were performed at the request of the NYSDEC. Results of the 1,4-dioxane sampling conducted in August 2017 were presented in a table and tag map figure provided to the NYSDEC by email.

4. RESULTS

4.1 SOIL VAPOR EXTRACTION SYSTEM

The SVE system was sampled on 18 July 2017, 28 August 2017, and 21 September 2017. EA personnel collected grab air samples from the system influent and effluent using Summa[®] canisters and submitted the samples to Eurofins Air Toxics, Inc. The samples were analyzed for VOCs using EPA Method TO-15.

Based on the difference between the influent and effluent sampling results at the SVE system, 12.24 pounds (lbs) of tetrachloroethylene (PCE), 0.91 lbs of trichloroethylene (TCE), and a negligible amount of dichloroethene (DCE) were recovered from the source area during the reporting period.

During this reporting period and the entire year to date, there has been minimal discharge of PCE, TCE and DCE to the atmosphere. The most recent GAC change out event was in May 2016, and based on analytical lab results for influent/effluent samples, the GAC is properly removing contaminants recovered from the subsurface (as designed).



A summary of the field monitoring results, laboratory air discharge analytical results, and estimated mass recovery are presented in Table 2A; the laboratory data reports are presented in Attachment B.

4.2 ON-SITE DDC SYSTEMS

The on-site DDC systems were sampled on 18 July 2017. EA personnel collected grab air samples from the system influent and effluent at both on-site DDC systems using Summa® canisters and submitted the samples to Eurofins Air Toxics, Inc. Grab samples were also obtained between the carbon vessels at both on-site DDC systems. The samples were analyzed for VOCs using EPA Method TO-15.

A summary of the field monitoring results, laboratory air discharge analytical results, and estimated mass recovery are presented in Tables 2B and 2C; the laboratory data reports are presented in Attachment B.

Based on the difference between the influent and effluent sampling results, an estimated total of 11.51 lbs (on-site DDC system #1) and 0.65 lbs (on-site DDC system #2) of PCE were recovered from the subsurface in the vicinity of the source area during the reporting period. A negligible amount of TCE and DCE were recovered from the subsurface in the vicinity of on-site DDC system #1 and on-site DDC system #2 during the reporting period.

4.3 OFF-SITE DDC SYSTEM

The off-site DDC system was sampled on 18 July 2017. EA personnel collected grab air samples from the system influent, mid-1, mid-2, and effluent at the off-site DDC system (Blower B-501) using Summa® canisters and submitted the samples to Eurofins Air Toxics, Inc. Grab samples were also obtained between the carbon vessels at both on-site DDC systems. The samples were analyzed for VOCs using EPA Method TO-15.

A summary of the field monitoring results, laboratory air discharge analytical results, and estimated mass recovery are presented in Tables 2D and 2E; the laboratory data reports are presented in Attachment B.

Based on the difference between the influent and effluent sampling results at the off-site DDC system, 0.19 lbs of PCE and 0.22 lbs of TCE were recovered from the off-site area during the reporting period. A negligible amount of DCE was recovered from the off-site area during the reporting period.



4.4 GROUNDWATER MONITORING

4.4.1 Well Gauging

Based on gauging data obtained from the on-site and off-site wells, the groundwater flow direction across the site is to the southeast on-site and to the northeast off-site, as depicted in Figures 5 and 6. Gauging data are provided in Table 4, and on Figures 5 and 6, as well as the field data sheets (Attachment A).

4.4.2 Groundwater Laboratory Analytical Results

On-site Monitoring Wells

A summary of the detected VOC concentrations for groundwater samples obtained from the on-site monitoring wells are presented in Table 3A for the July 2017 quarterly sampling event. Laboratory analytical results are included in Attachment C. PCE, TCE, and/or DCE were identified at concentrations greater than the corresponding ambient water quality standard in 7 of the 17 samples collected. VOCs were detected in 14 of 17 on-site samples. Concentrations of compounds detected in on-site groundwater samples collected during the July 2017 sampling event are shown in Figure 7.

Off-site Monitoring Wells

A summary of the detected VOC concentrations for groundwater samples obtained from the off-site monitoring wells are presented in Table 3B for the July 2017 quarterly sampling event. Laboratory analytical results are included in Attachment C. Samples for MW-1S and MW-1D were inadvertently switched with samples from MW-2S and MW-2D in the field. The results presented in Table 3 have been updated to reflect the correct sample designation. The results of MW-2S have been switched with the results of MW-1S. Similarly, the results of MW-2D were switched with the results of MW-2S.

PCE, TCE, and DCE were identified at concentrations greater than the corresponding ambient water quality standard in 10 of the 18 samples collected. VOCs were not detected in 4 of the off-site samples: DDC-6-PD, MW-1S, MW-2S, and MW-3S. Concentrations of compounds detected in off-site groundwater samples collected during the July 2017 sampling event are shown in Figure 8.



Mr. Payson Long
NYSDEC
16 November 2017
Page 9

5. CONCLUSIONS AND RECOMMENDATIONS

Based on the data collected from the remediation systems and site groundwater during this reporting period, EA recommends continued operation of each system (i.e., SVE, on-site DDC, and off-site DDC).

Please do not hesitate to contact me at 315-431-4610 ext. 1857 with any questions you might have regarding this report.

Sincerely,

EA SCIENCE AND TECHNOLOGY

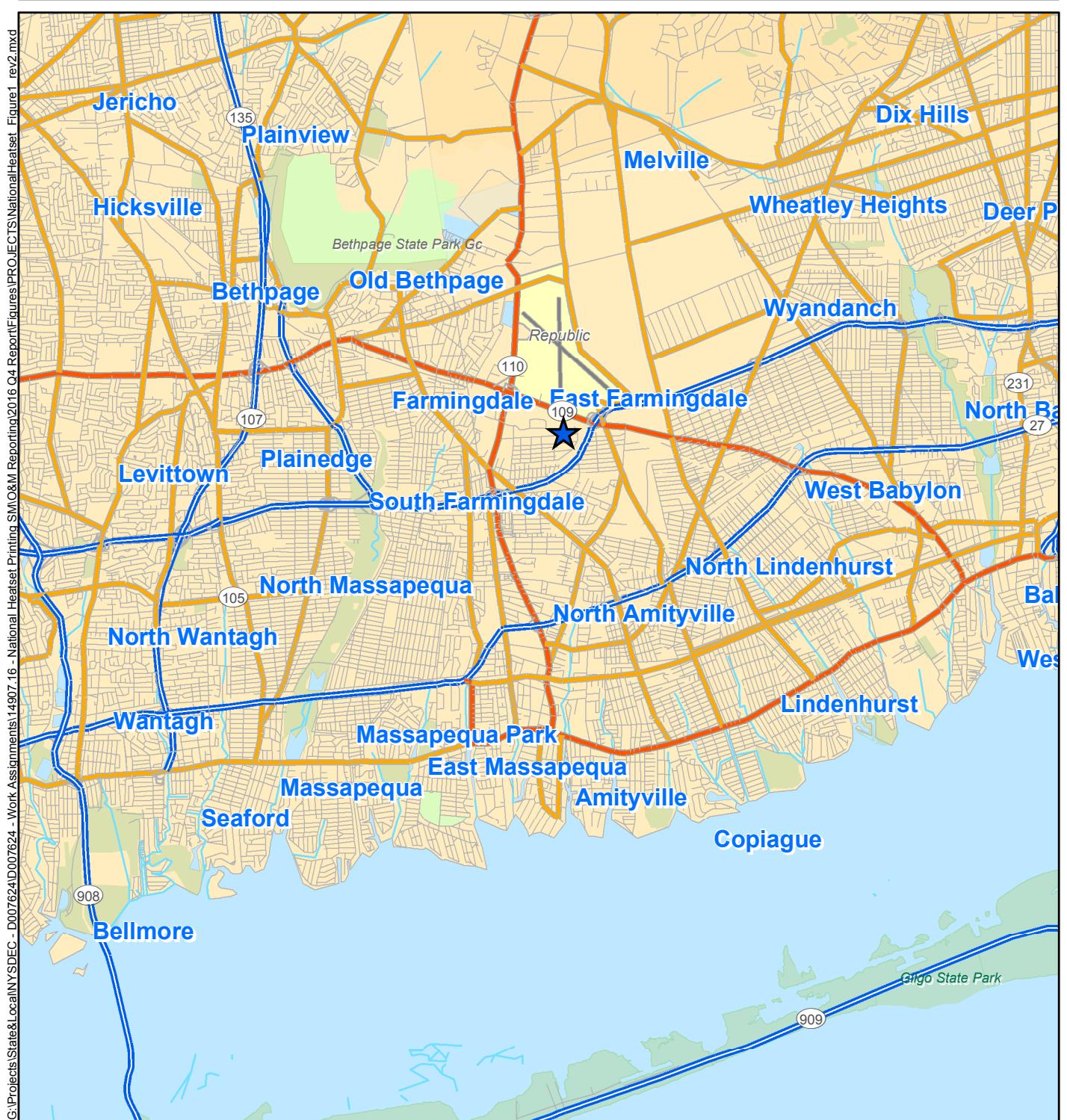
A handwritten signature in black ink that reads "James C. Hayward". The signature is fluid and cursive, with "James" and "C." being more stylized and "Hayward" being more clearly legible.

James C. Hayward, P.E.
Project Manager

JCH
Attachments

Figures

This page intentionally left blank



Legend

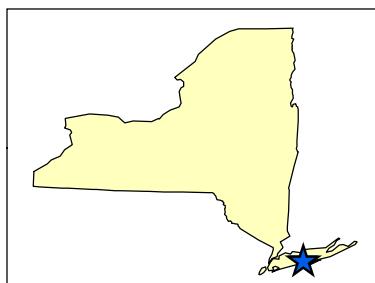
★ Site Location

Figure 1

SITE LOCATION MAP

NATIONAL HEATSET SITE (152140)
BABYLON, NEW YORK
SUFFOLK COUNTY

Map Date: 2/21/2017
Source: ESRI, 2011



0 0.5 1 2
Miles

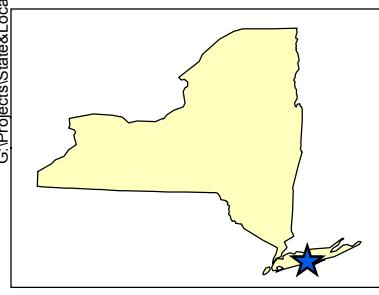
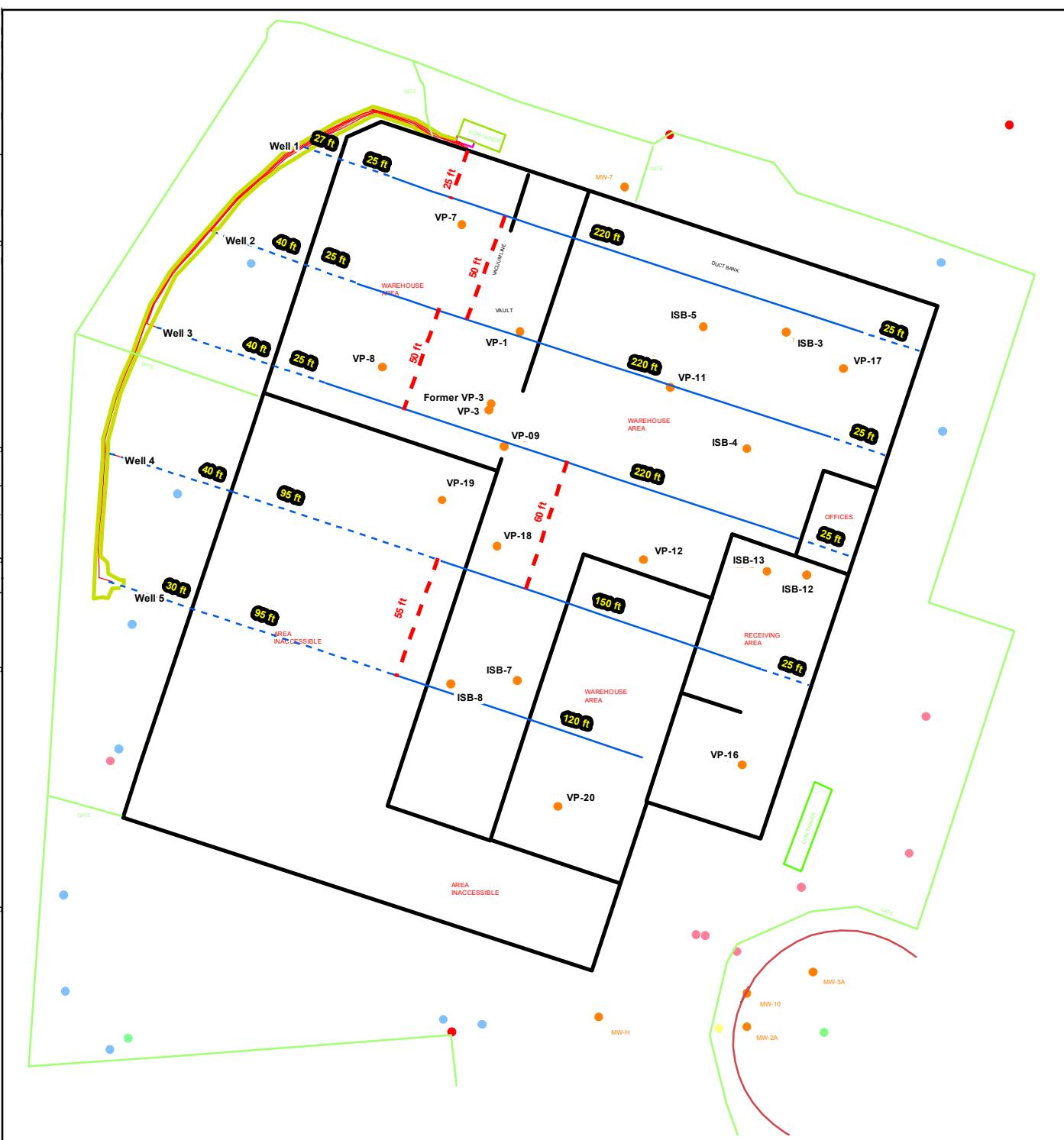
1 inch = 1.5 miles

N



Department of
Environmental
Conservation





0 15 30 60
Feet
1 inch = 66.67 feet

Legend

- | | |
|-----------------------------------|-----------------------------|
| - - - HSVE Solid PVC Pipe | □ Catch Basin Square |
| — HSVE Well Screen | ○ Catch Basin Round |
| — HSVE Well Piping (EA Installed) | ● Manhole |
| — HSVE Trench | ● Sanitary Manhole |
| ■ HSVE Manifold Shed | ◆ Soil Boring / Vapor Point |
| — 1 Adams Blvd Building Outline | ● Soil Boring |
| ■ Site Location | ● Monitoring Well |
| | — Chainlink Fence |

Figure 2
ONSITE TREATMENT SYSTEM LOCATION
SVE System
NATIONAL HEATSET SITE (152140)
BABYLON, NEW YORK
SUFFOLK COUNTY

Map Date: 2/21/2017
Source: ESRI, 2011



Department of
Environmental
Conservation



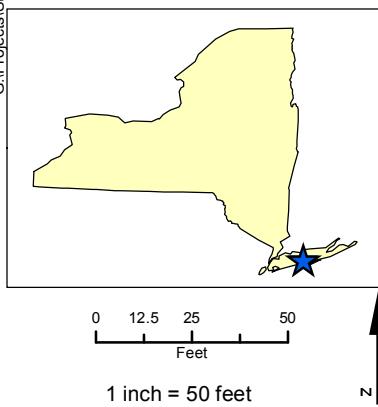
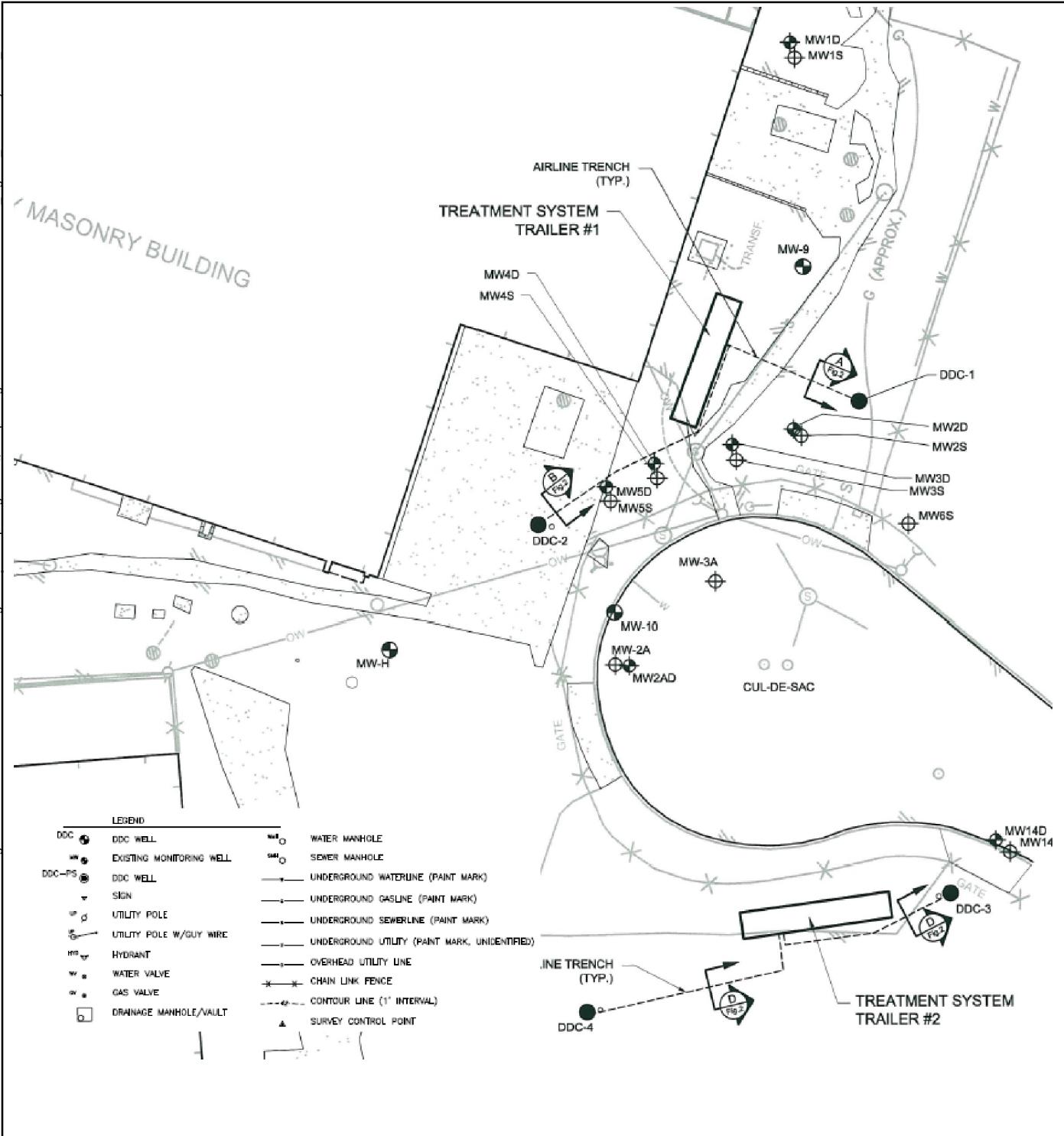


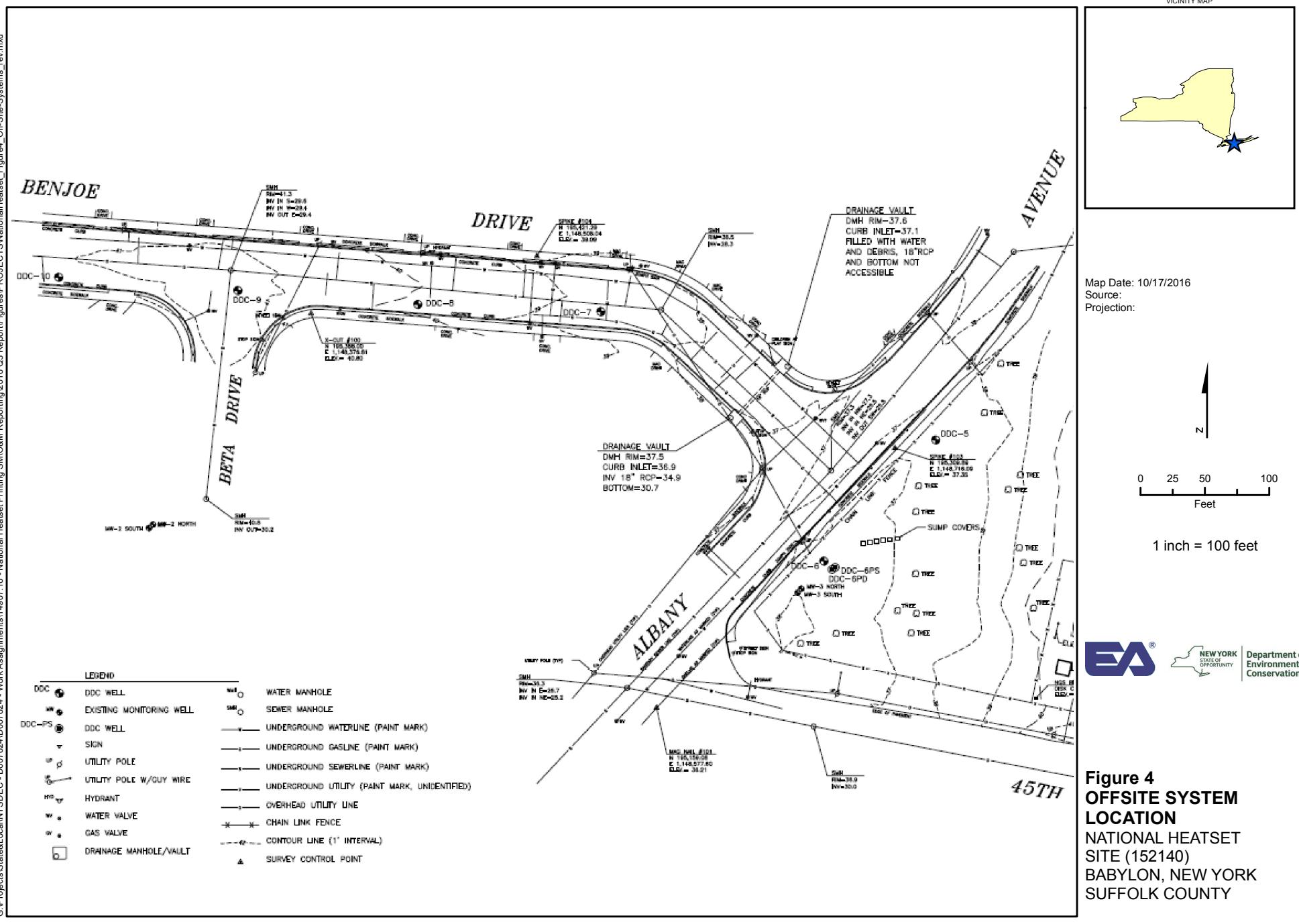
Figure 3
ONSITE TREATMENT SYSTEM LOCATION
DDC #1 and DDC #2
NATIONAL HEATSET SITE (152140)
BABYLON, NEW YORK
SUFFOLK COUNTY

Map Date: 2/20/2017
Source: ESRI, 2011



Department of
Environmental
Conservation





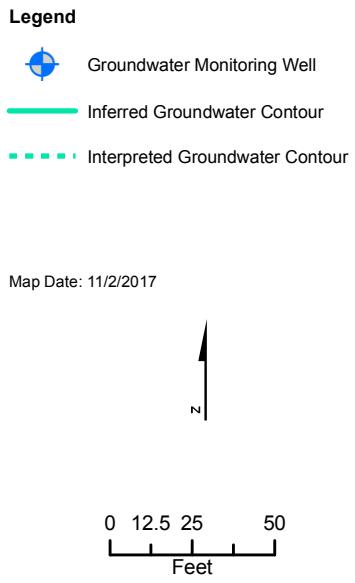
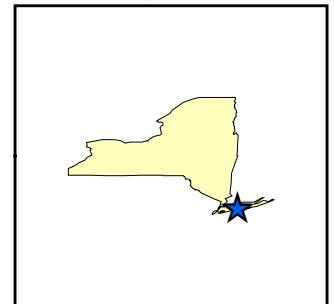
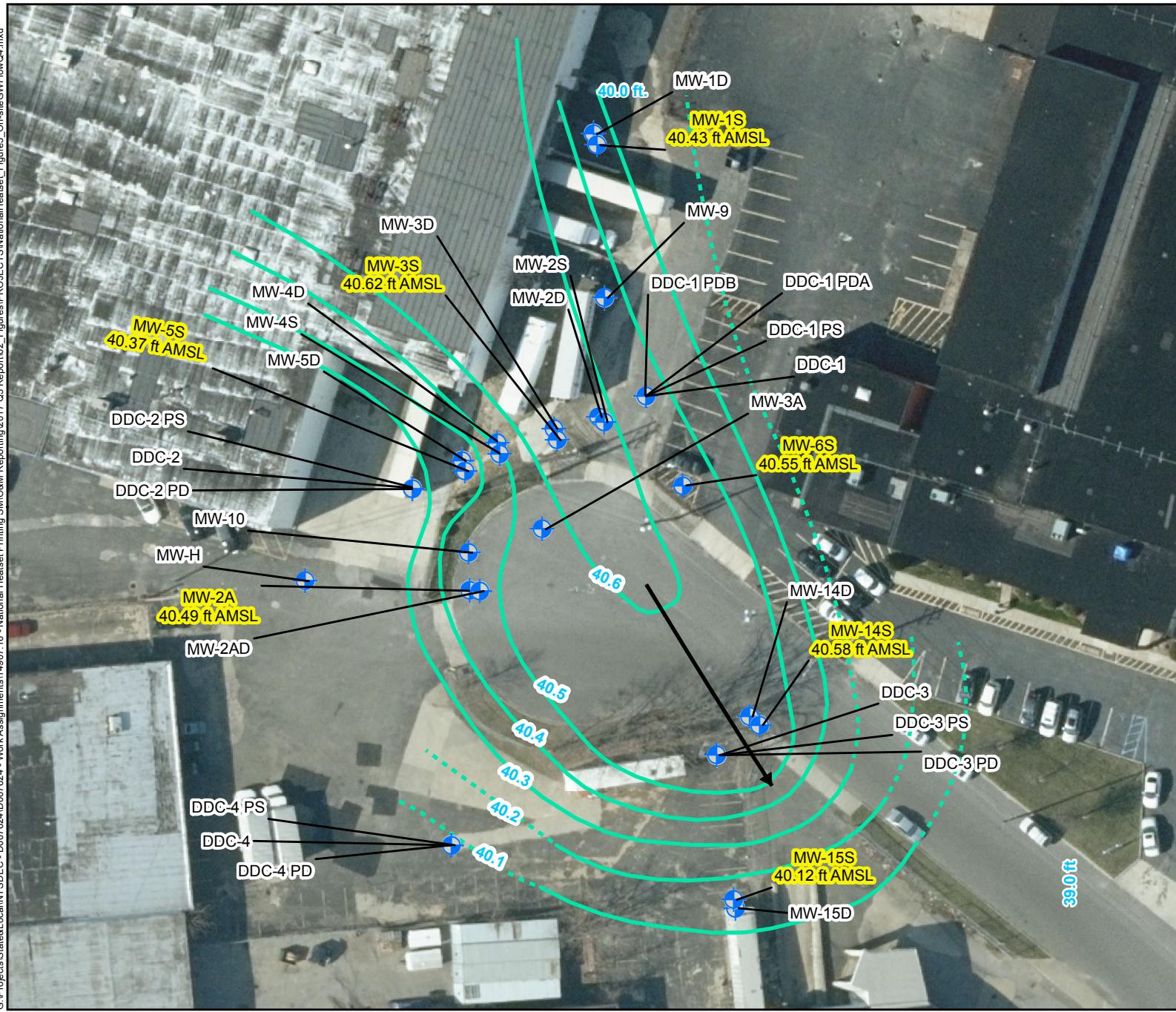
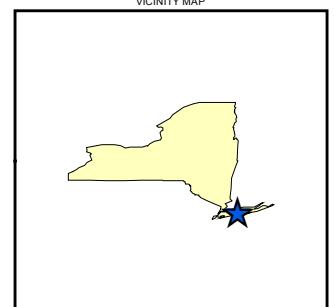
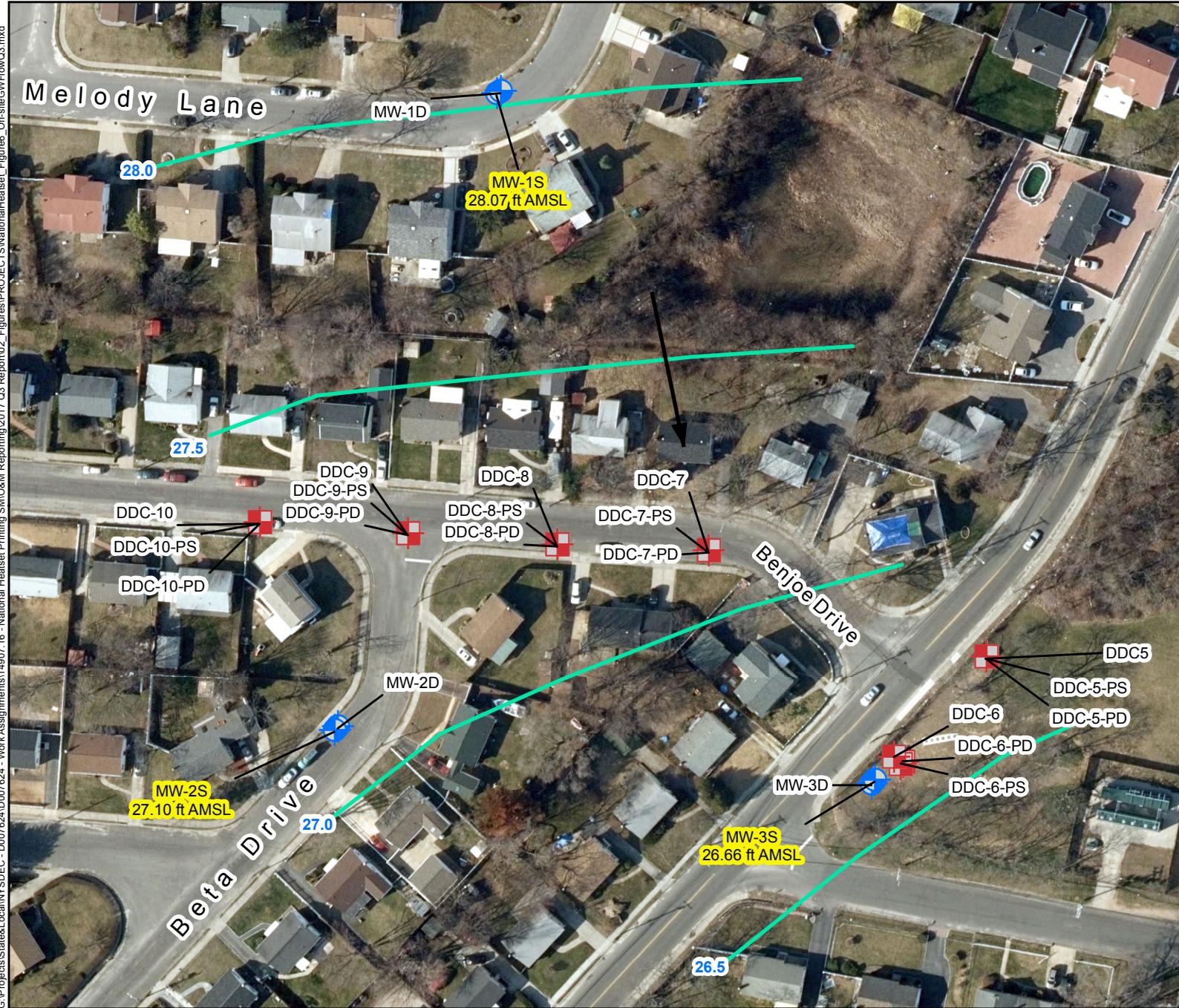


Figure 5
ONSITE GROUNDWATER FLOW DIRECTION
(July 2017)
NATIONAL HEATSET SITE (152140)
BABYLON, NEW YORK
SUFFOLK COUNTY



Legend:

- DDC Well Cluster:** Red square icon.
- Groundwater Monitoring Well:** Blue circle icon.
- Inferred Groundwater Contour:** Cyan line.
- Groundwater Flow Direction:** Arrow pointing generally southeast.

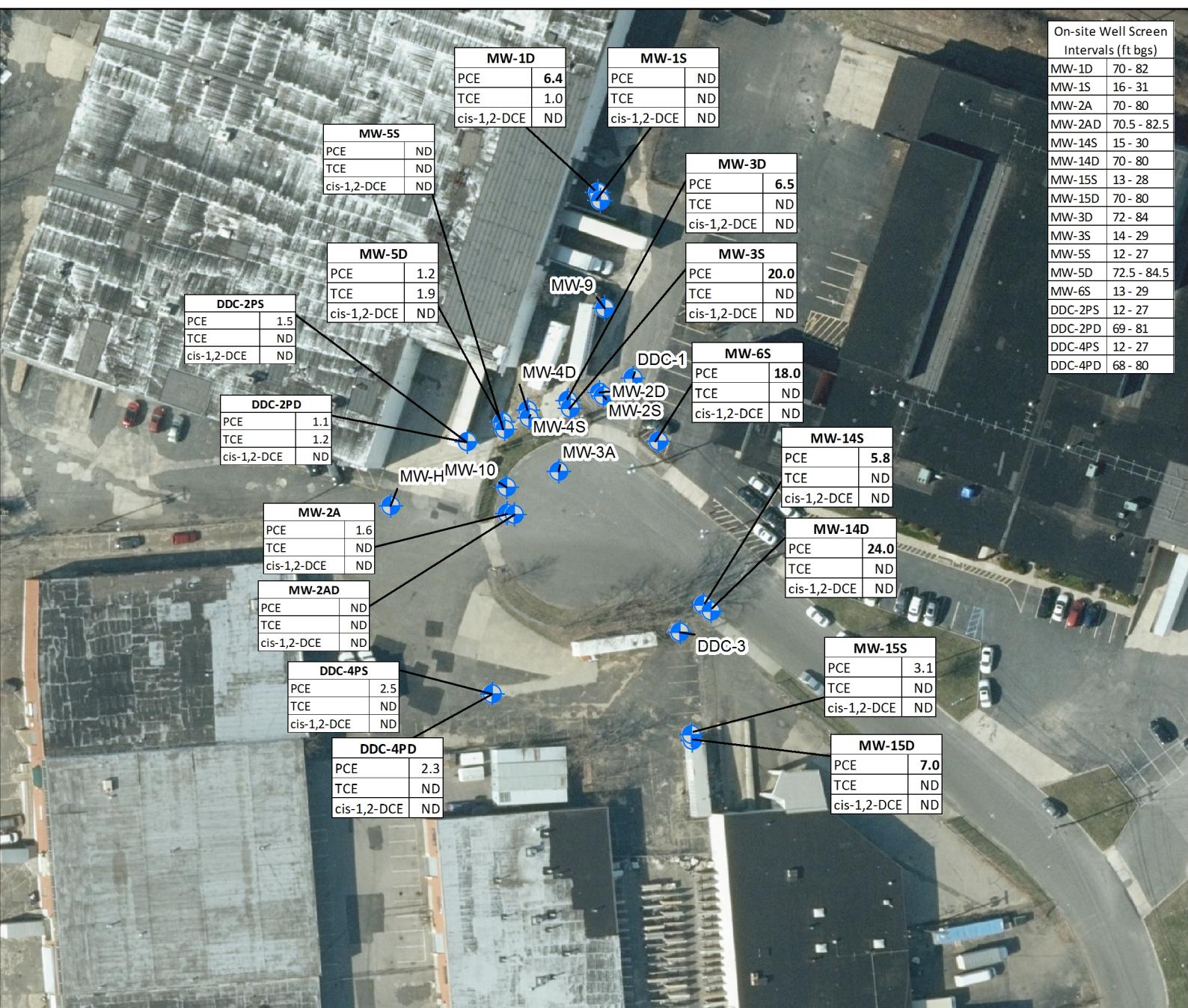
Map Date: 11/14/2017

N

0 37.5 75 150
Feet

EA® **NEW YORK** *Empire of Opportunity* **Department of Environmental Conservation**

Figure 6
OFFSITE GROUNDWATER FLOW DIRECTION (July 2017)
NATIONAL HEATSET SITE (152140)
BABYLON, NEW YORK
SUFFOLK COUNTY



Legend

Groundwater Monitoring Well

DDC-2PS	
PCE	1.5
TCE	ND
cis-1,2-DCE	ND

PCE - Tetrachloroethene
TCE - Trichloroethene
CIS-1,2-DCE - cis-1,2-Dichloroethene

ND - Non detect

Results are reported in µg/L
Bold values indicate exceedance of NYS AWQS (5 µg/L)

Map Date: 11/9/2017
Source: ESRI, 2011

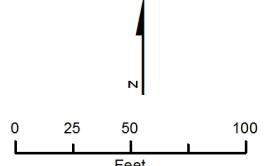
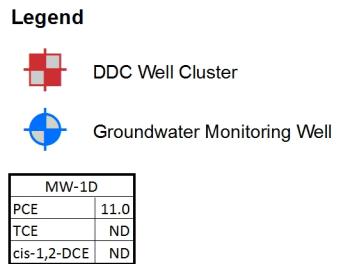
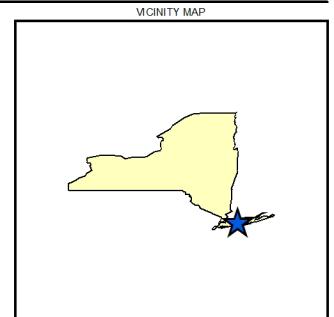
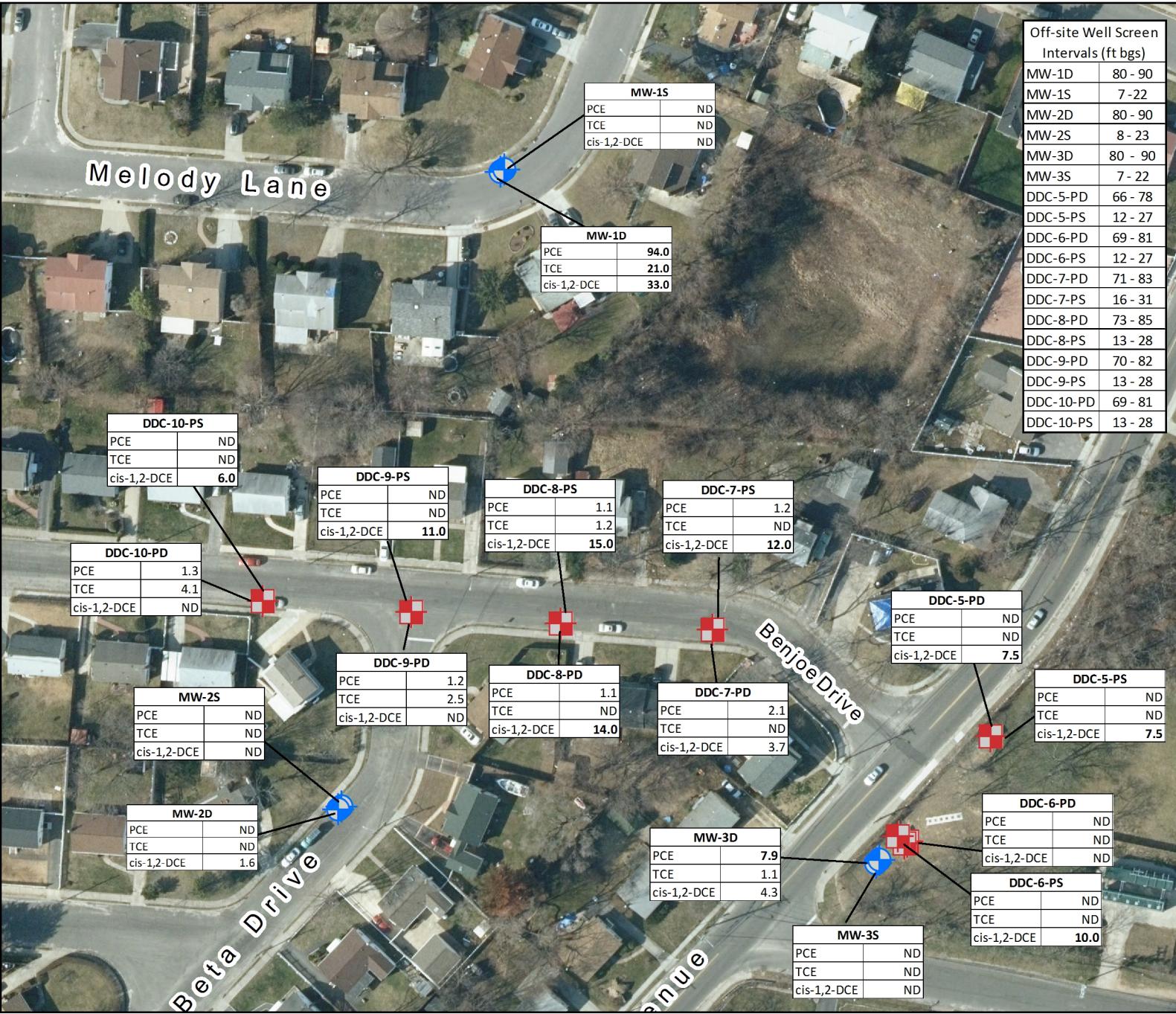


Figure 7
ON-SITE GROUNDWATER QUALITY
(July 2017)
NATIONAL HEATSET SITE (152140)
BABYLON, NEW YORK
SUFFOLK COUNTY



PCE - Tetrachloroethene
TCE - Trichloroethene
CIS-1,2-DCE - cis-1,2-Dichloroethene
ND - Non detect

Results are reported in µg/L
Bold values indicate exceedance of NYS AWQS (5 µg/L)

Map Date: 11/14/2017
Source: ESRI, 2011

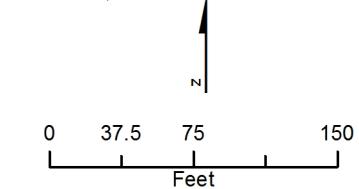


Figure 8
**OFF-SITE GROUNDWATER
QUALITY (July 2017)**
**NATIONAL HEATSET
SITE (152140)**
BABYLON, NEW YORK
SUFFOLK COUNTY

Tables

This page intentionally left blank

Table 1 Treatment System Runtime
System Readings

Date	Notes	SVE System					On-Site DDC Treatment System								Off-Site DDC Treatment System											
		SVE Blower				System #1				System #2				Blower B-501				Blower B-502								
		Meter Reading (Hrs)	Time	Elapsed Runtime (Hrs.)	Elapsed Available (Hrs.)	Runtime (%)	Meter Reading (Hrs)	Time	Elapsed Runtime (Hrs.)	Elapsed Available (Hrs.)	Runtime (%)	Meter Reading (Hrs)	Time	Elapsed Runtime (Hrs.)	Elapsed Available (Hrs.)	Runtime (%)	Meter Reading (Hrs)	Time	Elapsed Runtime (Hrs.)	Elapsed Available (Hrs.)	Runtime (%)					
01/25/17		24561.53	7:00	583.02	583.02	100.00	40706.70	10:40	586.68	586.68	100.00	47393.50	8:00	584.22	584.02	100.03	23478.70	13:53	--	--	19620.00	13:53	589.55	589.90	99.94	
02/07/17		24882.53	16:00	321.00	321.00	100.00	41021.20	12:53	314.50	314.22	100.09	47707.00	11:46	313.50	315.77	99.28	23478.70	9:45	--	--	19928.00	9:45	308.00	307.87	100.04	
03/27/17		25928.00	8:30	1045.47	1144.50	91.35	42169.00	11:16	1147.80	1150.38	99.78	48853.00	7:30	1146.00	1147.73	99.85	23502.00	9:00			21077.00	9:00	1149.00	1151.25	99.80	
Quarterly Run-Time				1949.49	2048.52	95.17			2048.98	2051.28	99.89			2043.72	2047.52	99.81							2046.55	2049.02	99.88	
04/18/17		26456.00	9:00	528.00	528.50	99.91	42694.07	8:20	525.07	525.07	100.00	48853.00	9:00	0.00	529.50	0.00	23502.00	14:00	--	--	21610.00	14:00	533.00	533.00	100.00	
05/23/17		27294.00	12:00	838.00	843.00	99.41	42860.00	9:20	165.93	841.00	19.73	49018.00	9:00	165.00	840.00	19.64	23502.00	9:49	--	--	22444.00	9:49	834.00	835.82	99.78	
06/27/17		28137.00	12:00	843.00	840.00	100	43679.00	11:00	819.00	841.67	97.31	49859.00	10:45	841.00	841.75	99.91	23502.00	9:00	--	--	23283.18	9:00	839.18	839.18	100.00	
Quarterly Run-Time				2209.00	2211.50	99.89			1510.00	2207.73	68.40			1006.00	2211.25	45.49							2206.18	2208.00	99.92	
07/18/17		28638.06	7:30	501.06	499.50	100.00	44180.00	8:00	501.00	501.00	100.00	50360.50	8:30	501.50	501.75	99.95	23813.00	10:00	311.00	505.00	61.58	23283.18	10:00	--	--	--
08/28/17		29630.24	15:40	992.18	992.17	100.00	45050.50	14:46	870.50	990.77	87.86	51350.20	14:06	989.70	989.60	100.01	24822.90	11:42	1009.90	985.70	102.46	23283.18	11:42	--	--	--
09/21/17		30202.57	12:00	572.33	572.33	100.00	45624.00	12:40	573.50	573.90	99.93	51924.80	12:50	574.60	574.73	99.98	25376.50	13:20	553.60	577.63	95.84	23283.18	13:20	--	--	--
Quarterly Run-Time				2064.00	2064.00	100			1945.00	2065.67	94.16			2065.80	2066.08	99.99							1874.50	2068.33	90.63	
NOTE:	SVE	= Soil Vapor Extraction																								
	DDC	= Density Driven Convection																								
	--	=																								
	A	= "Meter Reading" value was corrected for the SVE system to override a malfunctioning run-clock meter																								
	B	= "Meter Reading" value was updated and calculation overridden to incorporate new run-clock meter																								
	C	= On-site DDC System #1 not running. Hour reading only parameter collected																								
	D	= Hours were projected to close reporting period																								
	E	= Hours were corrected to align with new run-clock meter																								
	Shaded cells indicate O&M events performed during a previous reporting period.																									
	* 10/26/16 and 6/27/16: Switched blowers at the Offsite System																									

Table 2A Summary of Estimated Recovery Rate via Soil Vapor Extraction System

Date	Field/System Data				Laboratory Results						Mass Discharged						Recovery based on Laboratory Results						
					SYS INFLUENT			SYS EFFLUENT			PCE Discharge During Period: lb/hr	PCE Discharge During Period (lb)	TCE Discharge During Period (lb/hr)	TCE Discharge During Period (lb)	cis -1,2-DCE Discharge During Period (lb/hr)	cis -1,2-DCE Discharge During Period (lb)	PCE Recovery During Period: lb/hr	PCE Recovery During Period (lb)	TCE Recovery During Period (lb/hr)	TCE Recovery During Period (lb)	cis -1,2-DCE Recovery During Period (lb/hr)	cis -1,2-DCE Recovery During Period (lb)	
	SVE Blower Flow Rate (cfm)	Applied Vacuum (in. H ₂ O)	System Discharge VOC Concentration (ppmv)	Elapsed Run-Time (day)	PCE (mg/m ³)	TCE (mg/m ³)	cis -1,2-DCE (mg/m ³)	PCE (mg/cu m.)	TCE (mg/cu m.)	cis -1,2-DCE (mg/cu m.)	PCE Discharge During Period: lb/hr	PCE Discharge During Period (lb)	TCE Discharge During Period (lb/hr)	TCE Discharge During Period (lb)	cis -1,2-DCE Discharge During Period (lb/hr)	cis -1,2-DCE Discharge During Period (lb)	PCE Recovery During Period: lb/hr	PCE Recovery During Period (lb)	TCE Recovery During Period (lb/hr)	TCE Recovery During Period (lb)	cis -1,2-DCE Recovery During Period (lb/hr)	cis -1,2-DCE Recovery During Period (lb)	
1/25/2017	215	60	0.1	34	2.90	0.12	0.02	0.000	0.000	0.0670	0.0000	0.000	0.0000	0.00	0.0000	0.00	0.0023	1.9074	0.0001	0.0789	0.000	0.0000	
2/7/2017	225	50	0.1	13	3.30	0.24	0.56	0.041	0.000	0.0850	0.0000	0.011	0.0000	0.00	0.0000	0.00	0.0027	0.8577	0.0002	0.0632	0.000	0.1250	
3/27/2017	160	80	0.0	48	0.35	0.03	0.01	0.000	0.000	0.0580	0.0000	0.000	0.0000	0.00	0.0000	0.00	0.0002	0.2419	0.0000	0.0235	0.000	0.0000	
04/18/17	200	65	0.0	22	0.16	0.01	0.00	0.000	0.000	0.1300	0.0000	0.000	0.0000	0.00	0.0000	0.00	0.0001	0.0633	0.0000	0.0044	0.000	0.0000	
05/23/17	200	65	0.0	35	4.60	0.31	0.06	0.000	0.000	0.1600	0.0000	0.000	0.0000	0.00	0.0000	0.00	0.0034	2.8972	0.0002	0.1952	0.000	0.0000	
06/27/17	200	65	0.0	35	4.20	0.39	0.08	0.000	0.000	0.0000	0.0000	0.000	0.0000	0.00	0.0000	0.00	0.0031	2.6453	0.0003	0.2456	0.000	0.0510	
07/18/17	200	63	0.0	21	7.40	0.63	0.16	0.024	0.000	0.2200	0.0000	0.009	0.0000	0.00	0.0000	0.00	0.0055	2.7874	0.0005	0.2381	0.000	0.0000	
08/28/17	230	55	0.0	41	7.10	0.52	0.08	0.000	0.000	0.1100	0.0000	0.000	0.0000	0.00	0.0000	0.00	0.0061	6.0242	0.0004	0.4412	0.000	0.0000	
09/21/17	230	55	0.1	24	6.90	0.46	0.10	0.000	0.000	0.1400	0.0000	0.000	0.0000	0.00	0.0000	0.00	0.0059	3.4270	0.0004	0.2285	0.000	0.0000	
PERIOD TOTALS =												0.01		0.00		0.00		12.24		0.91		0.0000	
<p>NOTE: SVE = Soil Vapor Extraction cfm = cubic feet per minute ppmv = parts per million (vol./vol.) mg/m³ = milligrams per cubic meter PCE = Tetrachloroethylene TCE = Trichloroethene cis-1,2-DCE = cis-1,2-Dichloroethene Mass Recovery (Lab Res., lb/hr) = flow (cfm)*effluent conc. (mg/cu. m.)*1g/1000mg*1lb/453.6g*1cu. m./35.31cu. ft*60min/1 hr Mass Recovery (Lab Res., lb) = Discharge Rate (lb/hr) * # of days*24hours/day Permit limit for PCE is 0.031 lb/hr and 270 lb/yr; TCE is 0.014 lb/hr and 120 lb/year; cis-1,2-DCE is 0.63 lb/hr and 5.510 lb/year Samples for month of September 2016 were collected on 9/30/16, while sample measurements were taken on 9/12/16 Shaded cells indicate O&M events performed during a previous reporting period.</p> <p>NOTE: Air samples were collected on 8/18/16 after SVE system was restarted with five new horizontal SVE wells. Carbon changeout occurred in 05/2016 Samples collected in 2/2017, 3/2017, 4/2017, 5/2017, and 6/2017 with only well legs 1 and 5 were running Samples collected in 7/2017, 8/2017, and 9/2017 with only well legs 2 and 4 running</p>																							

Table 2B Summary of Estimated Recovery Rate via Onsite DDC System #1

Date	Field/System Data			Elapsed Run-Time (days)	Laboratory Results								Recovery based on Laboratory Results							
	Vacuum Flow Rate (cfm)	Applied Vacuum (in. H ₂ O)	System Influent VOC Concentration (ppmv)		SYS1-INF1			SYS1-MIDGAC			SYS1-EFF			PCE Recovery During Period: lb/hr	PCE Recovery During Period (lb)	TCE Recovery During Period (lb/hr)	TCE Recovery During Period (lb)	<i>cis</i> -1,2-DCE Recovery During Period (lb/hr)	<i>cis</i> -1,2-DCE Recovery During Period (lb)	
					PCE (mg/m ³)	TCE (mg/m ³)	<i>cis</i> -1,2-DCE (mg/m ³)	PCE (mg/m ³)	TCE (mg/m ³)	<i>cis</i> -1,2-DCE (mg/m ³)	PCE (mg/m ³)	TCE (mg/m ³)	<i>cis</i> -1,2-DCE (mg/m ³)							
1/25/2017	240	43	2.6	34	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
2/7/2017	260	44	2.321	13	2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0017	3,9320	0.0000	0.0000	0.0000		
3/27/2017	190	44	1.302	48	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
04/18/17	-	-	-	22	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
05/23/17	100	42	1.065	35	6.1	0	0	0	0	0.0036	0.0076	0	0	0.0034	7,5647	0.0000	0.0000	0.0000		
06/27/17	200	40	1.451	35	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
07/18/17	236	38	2.051	21	3.8	0	0	0.013	0	0.0071	0.022	0	0.0063	0.006	11,508	0.000	0.000	0.000		
08/28/17	470	44	1.032	41	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
09/21/17	475	32	0.952	24	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
PERIOD TOTALS =															11.51	0.00	0.00			

NOTE: cfm = cubic feet per minute
VOC = Volatile organic compound
ppmv = parts per million (vol./vol.)
mg/m³ = milligrams per cubic meter
PCE = Tetrachloroethylene
TCE = Trichloroethene
cis-1,2-DCE = *cis*-1,2-Dichloroethene
Mass Recovery (Lab Res., lb/hr) = flow (cfm)*effluent conc. (mg/cu. m.)*1g/1000mg*1lb/453.6g*1cu. m./35.31cu. ft*60min/1 hr
Mass Recovery (Lab Res., lb) = Discharge Rate (lb/hr) * # of days*24hours/day
Shaded cells indicate O&M events performed during a previous reporting period.

Table 2C Summary of Estimated Recovery Rate via Onsite DDC System #2

Date	Field/System Data			Elapsed Run-Time (day)	Laboratory Results								Recovery based on Laboratory Results							
	Vacuum Flow Rate (cfm)	Applied Vacuum (in. H ₂ O)	System Influent VOC Concentration (ppmv)		SYS2-INF1			SYS2-INF2			SYS2-EFF			PCE Recovery During Period: lb/hr	PCE Recovery During Period (lb)	TCE Recovery During Period (lb/hr)	TCE Recovery During Period (lb)	<i>cis</i> -1,2-DCE Recovery During Period (lb/hr)	<i>cis</i> -1,2-DCE Recovery During Period (lb)	
					PCE (mg/m ³)	TCE (mg/m ³)	<i>cis</i> -1,2-DCE (mg/m ³)	PCE (mg/m ³)	TCE (mg/m ³)	<i>cis</i> -1,2-DCE (mg/m ³)	PCE (mg/m ³)	TCE (mg/m ³)	<i>cis</i> -1,2-DCE (mg/m ³)							
1/25/2017	375	13.6	1.744	34	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
2/7/2017	375	13.6	1.684	13	0.38	0	0.048	0.43	0	0.047	0.13	0	0.63	0.0004	0.396	0.000	0.000	0.000		
3/27/2017	350	13.6	0.969	48	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
04/18/17	-	-	-	22	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
05/23/17	230	13.6	0.64	35	1	0.0087	0.0320	0.8800	0.0069	0.0280	0.0000	0.0000	0.0000	0.0009	1.575	0.000	0.014	0.000	0.050	
06/27/17	270	13.6	0.714	35	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
07/18/17	256	13.6	0.262	21	0.3	0	0.044	0.28	0	0.04	0	0	0.044	0.0003	0.6469	0.0000	0.0000	0.0000		
08/28/17	266	13.6	0.051	41	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
09/21/17	314	13.6	0.069	24	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
PERIOD TOTALS =															0.65	0.00	0.00			

NOTE: cfm = cubic feet per minute
VOC = Volatile organic compound
ppmv = parts per million (vol.vol.)
mg/m³ = milligrams per cubic meter
PCE = Tetrachloroethylene
TCE = Trichloroethene
cis-1,2-DCE = *cis*-1,2-Dichloroethene
Mass Recovery (Lab Res., lb/hr) = flow (cfm)*effluent conc. (mg/cu. m.)*1g/1000mg*1lb/453.6g*1cu. m./35.31cu. ft*60min/1 hr
Mass Recovery (Lab Res., lb) = Discharge Rate (lb/hr) * # of days*24hours/day
Shaded cells indicate O&M events performed during a previous reporting period.

Table 2D Summary of Estimated Recovery Rate via Offsite DDC System (Blower B501)

Date	Field/System Data			Elapsed Run-Time (day)	Laboratory Results										Recovery based on Laboratory Results								
	Vacuum Flow Rate (cfm)	Applied Vacuum (in. H ₂ O)	System Influent VOC Concentration (ppmv)		B501-INF1			B501-INTER1			B501-INTER2			B501-EFF			PCE Recovery During Period: lb/hr	PCE Recovery During Period (lb)	TCE Recovery During Period (lb/hr)	TCE Recovery During Period (lb)	<i>cis</i> -1,2-DCE Recovery During Period (lb/hr)	<i>cis</i> -1,2-DCE Recovery During Period (lb)	
					PCE (mg/m ³)	TCE (mg/m ³)	<i>cis</i> -1,2-DCE (mg/m ³)	PCE (mg/m ³)	TCE (mg/m ³)	<i>cis</i> -1,2-DCE (mg/m ³)	PCE (mg/m ³)	TCE (mg/m ³)	<i>cis</i> -1,2-DCE (mg/m ³)	PCE (mg/m ³)	TCE (mg/m ³)	<i>cis</i> -1,2-DCE (mg/m ³)							
1/25/2017	--	--	--	34	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
2/7/2017	--	--	--	13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
3/27/2017	--	--	--	48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
04/18/17	--	--	--	22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
05/23/17	--	--	--	35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
06/27/17	--	--	--	35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
07/18/17	541	55	--	21	0.0430	0.0500	0.7900	0.0000	0.3500	0.6600	0.0000	0.0000	1.0000	0.0000	0.0000	0.8500	0.0001	0.1856	0.0001	0.2158	-0.0001	0.00	
08/28/17	612	55	0.000	41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
09/21/17	520	55	0.019	24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
PERIOD TOTALS = 0.19 0.22 0.00																							
NOTE: cfm = cubic feet per minute VOC = Volatile organic compound ppmv = parts per million (vol./vol.) mg/m ³ = milligrams per cubic meter PCE = Tetrachloroethylene TCE = Trichloroethene <i>cis</i> -1,2-DCE = <i>cis</i> -1,2-Dichloroethene Mass Recovery (Lab Res., lb/hr) = flow (cfm)*effluent conc. (mg/cu. m.)*1g/1000mg*1lb/453.6g*1cu. m./35.31cu. ft*60min/1 hr Mass Recovery (Lab Res., lb) = Discharge Rate (lb/hr) * # of days*24hours/day Shaded cells indicate O&M events performed during a previous reporting period. * 4/13/16: Switched blowers at the Offsite System; switched from blower B-502 to B-501. Samples collected from B-502 ** 10/16/2016 Switched from B-501 from B-502. Samples collected from B-501; B-501 operational data was combined with B-502 system operational data to determine mass recovery for the whole quarter ***6/27/17 Switched blowers from B-502 to B-501. Samples for the second quarter collected from B-502. System turned off due to water in lines and water leaking out of gauges when switching blowers. No readings collected. Samples collected from B-501 in the third quarter																							

Table 2E Summary of Estimated Recovery Rate via Offsite DDC System (Blower B502)

Date	Field/System Data			Elapsed Run-Time (day)	Laboratory Results										Recovery based on Laboratory Results							
					B502-INF1			B502-INTER1			B502-INTER2			B502-EFF			PCE Recovery During Period: lb/hr	PCE Recovery During Period (lb)	TCE Recovery During Period (lb/hr)	TCE Recovery During Period (lb)	<i>cis</i> -1,2-DCE Recovery During Period (lb/hr)	<i>cis</i> -1,2-DCE Recovery During Period (lb)
	Vacuum Flow Rate (cfm)	Applied Vacuum (in. H ₂ O)	System Influent VOC Concentration (ppmv)		PCE (mg/m ³)	TCE (mg/m ³)	<i>cis</i> -1,2-DCE (mg/m ³)	PCE (mg/m ³)	TCE (mg/m ³)	<i>cis</i> -1,2-DCE (mg/m ³)	PCE (mg/m ³)	TCE (mg/m ³)	<i>cis</i> -1,2-DCE (mg/m ³)	PCE (mg/m ³)	TCE (mg/m ³)	<i>cis</i> -1,2-DCE (mg/m ³)						
1/25/2017	479	54	1.147	34	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
2/7/2017	498	54	1.117	13	0.1200	0.0630	0.1600	0.0550	0.0045	0.2700	0.0400	0.0000	0.2000	0.0810	0.0000	0.0000	0.0001	0.17	0.0001	0.27	0.0003	0.68
3/27/2017	520	54	1.060	48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
04/18/17	478	54	0.136	22	0.0850	0.0440	0.1900	0.0000	0.0160	0.3300	0.0000	0.0000	0.4200	0.0000	0.0000	0.0570	0.0002	0.40	0.0001	0.21	0.0003	0.63
05/23/17	670	47	0.230	35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6/27/2017***	--	--	--	35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
07/18/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/28/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/21/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PERIOD TOTALS =																		0.00	0.00	0.00	0.00	

NOTE: cfm = cubic feet per minute
VOC = Volatile organic compound
ppmv = parts per million (vol./vol.)
mg/m³ = milligrams per cubic meter
PCE = Tetrachloroethylene
TCE = Trichloroethene
cis-1,2-DCE = *cis*-1,2-Dichloroethene
Mass Recovery (Lab Res., lb/hr) = flow (cfm)*effluent conc. (mg/cu. m.)*1g/1000mg*1lb/453.6g*1cu. m./35.31cu. ft*60min/1 hr
Mass Recovery (Lab Res., lb) = Discharge Rate (lb/hr) * # of days*24hours/day
Shaded cells indicate O&M events performed during a previous reporting period.
* 4/13/16: Switched blowers at the Offsite System; switched from blower B-502 to B-501. Samples collected from B-502
* 10/26/16 Switched blowers from B-501 to B-502. Samples collected from B-501; B-501 operational data was combined with B-502 system operational data to determine mass recovery for the whole quarter
**6/27/17 Switched blowers from B-502 to B-501. Samples for the second quarter collected from B-502. System turned off due to water in lines and water leaking out of gauges when switching blowers. No readings collected.
Samples collected from B-501 in the third quarter.

Table 3A Summary of Detected Volatile Organic Compounds in On-Site Groundwater Samples Quarterly Sampling Event - July 2017

Parameters List EPA Method 8260B	Sample ID	DDC-2-PD	DDC-2-PS	DDC-4-PD	DDC-4-PS	MW-1D	MW-1S	MW-2A	MW-2AD	MW-6S	152140-FD-01	NYSDEC AWQS (µg/L)
	Sample Type	Groundwater	Duplicate									
	Sample Date	7/18/2017	7/18/2017	7/17/2017	7/17/2017	7/18/2017	7/17/2017	7/18/2017	7/18/2017	7/18/2017	7/17/2017	
cis - 1,2-Dichloroethene	(µg/L)	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<1)	U	5 (s)
trans - 1,2-Dichloroethene	(µg/L)	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<1)	U	5 (s)
Trichloroethene	(µg/L)	1.2		(<1)	U	(<1)	U	1		(<1)	U	5 (s)
Tetrachloroethene	(µg/L)	1.1		1.5		2.3		2.5		6.4		5 (s)
Vinyl Chloride	(µg/L)	(<1)	U	(<1)	U	(<1)	U	(<1)	U	18		5 (s)
Parameters List EPA Method 8260B	Sample ID	MW-3D	MW-3S	MW-5D	MW-5S	MW-14D	MW-14S	MW-15D	MW-15S	NYSDEC AWQS (µg/L)		
	Sample Type	Groundwater										
	Sample Date	7/18/2017	7/18/2017	7/17/2017	7/17/2017	7/17/2017	7/17/2017	7/17/2017	7/17/2017			
cis - 1,2-Dichloroethene	(µg/L)	(<1)	U	(<1)	U	(<1)	U	(<1)	U	5 (s)		
trans - 1,2-Dichloroethene	(µg/L)	(<1)	U	(<1)	U	(<1)	U	(<1)	U	5 (s)		
Trichloroethene	(µg/L)	(<1)	U	(<1)	U	1.9		(<1)	U	5 (s)		
Tetrachloroethene	(µg/L)	6.5		20		1.2		(<1)	U	24		5 (s)
Vinyl Chloride	(µg/L)	(<1)	U	(<1)	U	(<1)	U	(<1)	U	7		3.1
NOTE: EPA = U.S. Environmental Protection Agency ID = Identification NYSDEC = New York State Department of Environmental Conservation AWQS = Ambient Water Quality Standard µg/L = Micrograms per liter (parts per billion) U = Analyte not detected at the listed laboratory reporting limit.												
152140-FD-01 was a blind field duplicate quality assurance/quality control sample of on-site sample MW-15S for this sampling event. Bold values indicate that the analyte was detected greater than the NYSDEC AWQS.												

Table 3B Summary of Detected Volatile Organic Compounds in Off-Site Groundwater Samples Quarterly Sampling Event - July 2017

Parameters List EPA Method 8260B	Sample ID	DDC-5-PD	DDC-5-PS	DDC-6-PD	DDC-6-PS	DDC-7-PD	DDC-7-PS	DDC-8-PD	DDC-8-PS	152140-FD-02	NYSDEC AWQS (µg/L)											
	Sample Type	Groundwater	Duplicate																			
	Sample Date	7/19/2017	7/19/2017	7/19/2017	7/19/2017	7/18/2017	7/18/2017	7/18/2017	7/18/2017	7/18/2017												
cis - 1,2-Dichloroethene	(µg/L)	7.5		7.5		(<1)	U	10		3.7		12		14		15		1.2		5 (s)		
trans -1,2-Dichloroethene	(µg/L)	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<1)	U	1	U	5 (s)		
Vinyl Chloride	(µg/L)	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<1)	U	5 (s)		
Trichloroethene	(µg/L)	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<1)	U	1.2		43	U	5 (s)		
Tetrachloroethene	(µg/L)	(<1)	U	(<1)	U	(<1)	U	(<1)	U	2.1		1.2		1.1		1.1		36	U	5 (s)		
Parameters List EPA Method 8260B	Sample ID	DDC-9-PD	DDC-9-PS	DDC-10-PD	DDC-10-PS	MW-2D	MW-2S	MW-1D	MW-1S	MW-3D	MW-3S	NYSDEC AWQS (µg/L)										
	Sample Type	Groundwater	Groundwater																			
	Sample Date	7/18/2017	7/18/2017	7/18/2017	7/18/2017	7/18/2017	7/18/2017	7/18/2017	7/18/2017	7/19/2017	7/19/2017											
cis - 1,2-Dichloroethene	(µg/L)	(<1)	U	11		(<1)	U	6		1.6		(<1)	U	33		(<1)	U	4.3		(<1)	U	5 (s)
trans -1,2-Dichloroethene	(µg/L)	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<1)	U	5 (s)
Vinyl Chloride	(µg/L)	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<1)	U	5 (s)
Trichloroethene	(µg/L)	2.5		(<1)	U	4.1		(<1)	U	(<1)	U	(<1)	U	21		(<1)	U	1.1		(<1)	U	5 (s)
Tetrachloroethene	(µg/L)	1.2		(<1)	U	1.3		(<1)	U	(<1)	U	(<1)	U	94		(<1)	U	7.9		(<1)	U	5 (s)

NOTE: EPA = U.S. Environmental Protection Agency
ID = Identification
NYSDEC = New York State Department of Environmental Conservation
AWQS = Ambient Water Quality Standard
µg/L = Micrograms per liter (parts per billion)
U = Analyte not detected at the listed laboratory reporting limit.
152140-FD-02 was a blind field duplicate quality assurance/quality control sample of on-site sample MW-1D for this sampling event.
Samples MW-1S/MW-1D were inadvertently switched with samples MW-2S/MW-2D in the field. Results have been updated to reflect correct sample designation.
Bold values indicate that the analyte was detected greater than the NYSDEC AWQS.

**Table 4 Well Gauging Data
July 2017**

On-Site				Off-Site			
Well ID	DTW	Top of Casing	ft AMSL	Well ID	DTW	Top of Casing	ft AMSL
MW-1S	17.4	57.83	40.43	MW-1S	8.81	36.88	28.07
MW-1D	17.39	58.17	40.78	MW-1D	9.97		
MW-2A	17.71	58.20	40.49	MW-2S	13.24	40.34	27.10
MW-2AD	18.25	58.51	40.26	MW-2D	13.35		
MW-3S	17.98	58.60	40.62	MW-3S	9.21	35.87	26.66
MW-3D	18.13	58.65	40.52	MW-3D	9.51		
MW-5S	16.51	56.88	40.37	DDC-5-PS	11.72		
MW-5D	15.65	56.19	40.54	DDC-5-PD	15.29		
MW-6S	17.53	58.08	40.55	DDC-6-PS	9.75		
MW-14S	16.61	57.19	40.58	DDC-6-PD	9.96		
MW-14D	16.98	57.31	40.33	DDC-7-PS	9.88		
MW-15S	17.17	57.29	40.12	DDC-7-PD	12.4		
MW-15D	17.2	57.25	40.05	DDC-8-PS	9.46		
DDC-2-PS	15.32	56.70	41.38	DDC-8-PD	13.95		
DDC-2-PD	16.48	56.70	40.22	DDC-9-PS	10.55		
DDC-4-PS	9.48	56.50	47.02	DDC-9-PD	14.73		
DDC-4-PD	16.39	56.50	40.11	DDC-10-PS	11.34		
				DDC-10-PD	11.07		
NOTE:	ID	= Identification					
	DTW	= Depth to Water					
	AMSL	= Above Mean Sea Level					

Attachment A

System Data Sheets

A-1: SVE O&M

1 Adams Boulevard, Farmingdale, New York
EA Engineering

Personnel: E.Cummings Time: 13:00
Weather: Partly cloudy, 80 F Date: 7/17/2017

System Status:

Arrival: Running
Departure: Running
Run Timer Reading: 28,619.00
Electric Meter Reading: -

System Data:

Extraction Well F Gate Valve: 100 % Open
Dilution Valve: 0 % Open

Blower Inlet (Extraction Well)

Flow: 200 CFM
Vacuum: 63 "H2O
PID Reading: - PPB
Temperature: 172 °F

Blower Outlet / Carbon Influent

Flow: 198 CFM
Pressure: >15 "H2O
PID Reading: 6.65 PPM
Temperature: - °F

SVE Effluent

Flow: 160 CFM
Pressure: - "H2O
PID Reading: 0 PPB
Temperature: - °F

Carbon Monitoring:

Pre: 6.65 PPM
Mid: - PPB
Effluent: 0 PPB

Carbon influent & effluent sample collected & shipped to lab?

No

Knockout Tank Drained?

No

Monitoring Well Gauging / Vapor Point Monitoring:

Well/V.P. ID:	MW-G	MW-E	VP-1	VP-2	VP-3	VP-3 (Former)	VP-7	VP-8	VP-9	VP-10	VP-11	VP-12	VP-13	VP-14	VP-15
PID (ppm)															
Diff. Pressure (in. H2O)															
Well/V.P. ID:	VP-16	VP-17	VP-18	VP-19	VP-20										
PID (ppm)															
Diff. Pressure (in. H2O)															

Comments: Began SVE well leg isolation to determine which legs to switch to. Was running system with legs 1 & 5 open, switched to legs 2 & 4

1 Adams Boulevard, Farmingdale, New York
EA Engineering

Personnel: E.Cummings Time: 7:30
Weather: Partly cloudy, 80 F Date: 7/18/2017

System Status:

Arrival:	<u>Running</u>
Departure:	<u>Running</u>
Run Timer Reading:	<u>28,638.06</u>
Electric Meter Reading:	<u>-</u>

System Data:

Extraction Well F Gate Valve: 100 % Open
Dilution Valve: 0 % Open

Blower Inlet (Extraction Well)

Flow:	<u>230</u> CFM
Vacuum:	<u>54</u> "H2O
PID Reading:	<u>-</u> PPB
Temperature:	<u>154</u> °F

Blower Outlet / Carbon Influent

Flow:	<u>221.85</u> CFM
Pressure:	<u>>15</u> "H2O
PID Reading:	<u>5.083</u> PPM
Temperature:	<u>146.6</u> °F

SVE Effluent

Flow:	<u>209.63</u> CFM
Pressure:	<u>-</u> "H2O
PID Reading:	<u>0</u> PPB
Temperature:	<u>107.4</u> °F

Carbon Monitoring:

Pre:	<u>5.083</u> PPM
Mid:	<u>6.352</u> PPM
Effluent:	<u>0</u> PPB

Carbon influent & effluent sample collected & shipped to lab?

Yes

Knockout Tank Drained?

No

Monitoring Well Gauging / Vapor Point Monitoring:

Well/V.P. ID:	MW-G	MW-E	VP-1	VP-2	VP-3	VP-3 (Former)	VP-7	VP-8	VP-9	VP-10	VP-11	VP-12	VP-13	VP-14	VP-15
PID (ppm)					1.433	2.001				2.001	1.903		1.092		
Diff. Pressure (in. H2O)					0.003	0.003				-0.395	-0.055		0.064		
Well/V.P. ID:	VP-16	VP-17	VP-18	VP-19	VP-20										
PID (ppm)		3.402	2.703		32.7										
Diff. Pressure (in. H2O)		-0.142	-1.185		-0.19										

Comments: Operating with legs 2 & 4

1 Adams Boulevard, Farmingdale, New York
EA Engineering

Personnel: E.Cummings Time: 15:40
Weather: Partly cloudy, 70 F Date: 8/28/2017

System Status:

Arrival: Running
Departure: Running
Run Timer Reading: 29,630.24
Electric Meter Reading: -

System Data:

Extraction Well F Gate Valve: 100 % Open
Dilution Valve: 0 % Open

Blower Inlet (Extraction Well)

Flow: 230 CFM
Vacuum: 56 "H2O
PID Reading: - PPB
Temperature: 155 °F

Blower Outlet / Carbon Influent

Flow: 225 CFM
Pressure: >15 "H2O
PID Reading: 1.960 PPM
Temperature: 154.1 °F

SVE Effluent

Flow: 210 CFM
Pressure: - "H2O
PID Reading: 19 PPB
Temperature: 108.0 °F

Carbon Monitoring:

Pre: 1.960 PPM
Mid: 1.780 PPM
Effluent: 19 PPB

Carbon influent & effluent sample collected & shipped to lab?

Yes

Knockout Tank Drained?

No

Monitoring Well Gauging / Vapor Point Monitoring:

Well/V.P. ID:	MW-G	MW-E	VP-1	VP-2	VP-3	VP-3 (Former)	VP-7	VP-8	VP-9	VP-10	VP-11	VP-12	VP-13	VP-14	VP-15
PID (ppb)					108	434					22				
Diff. Pressure (in. H2O)					-0.49	0					-0.097				
Well/V.P. ID:	VP-16	VP-17	VP-18	VP-19	VP-20										
PID (ppb)	3329	22	79												
Diff. Pressure (in. H2O)	-0.093	-0.138	-1.487												

Comments: Operating with legs 2 & 4

1 Adams Boulevard, Farmingdale, New York
EA Engineering

Personnel: E.Cummings Time: 12:00
Weather: Overcast, 70 F Date: 9/21/2017

System Status:

Arrival: Running
Departure: Running
Run Timer Reading: 30,202.57
Electric Meter Reading: -

System Data:

Extraction Well F Gate Valve: 100 % Open
Dilution Valve: 0 % Open

Blower Inlet (Extraction Well)

Flow: 230 CFM
Vacuum: 55 "H2O
PID Reading: - PPB
Temperature: 154 °F

Blower Outlet / Carbon Influent

Flow: 220 CFM
Pressure: >15 "H2O
PID Reading: 1.736 PPM
Temperature: 157.0 °F

SVE Effluent

Flow: 205 CFM
Pressure: - "H2O
PID Reading: 73 PPB
Temperature: 114.0 °F

Carbon Monitoring:

Pre: 1.736 PPM
Mid: 1.712 PPM
Effluent: 73 PPB

Carbon influent & effluent sample collected & shipped to lab?

Yes

Knockout Tank Drained?

No

Monitoring Well Gauging / Vapor Point Monitoring:

Well/V.P. ID:	MW-G	MW-E	VP-1	VP-2	VP-3	VP-3 (Former)	VP-7	VP-8	VP-9	VP-10	VP-11	VP-12	VP-13	VP-14	VP-15
PID (ppb)		637	103		54	58				44		46			
Diff. Pressure (in. H2O)		0	-0.005		-0.438	0				-0.335		-0.62			
Well/V.P. ID:	VP-16	VP-17	VP-18	VP-19	VP-20										
PID (ppb)		976	228												
Diff. Pressure (in. H2O)		-1.3	-1.484												

Comments: Operating system with legs 2 & 4

A-2: On-site DDC O&M

Project: National Heatset Printing Site - On-Site - Site Management
Contractors: EA Engineering, P.C. and Preferred Environmental Services

EA Job No: 1490716
Site No: 152140

EA Project Manager: James Hayward

EA Engineering, P.C.
6712 Brooklawn Parkway, Suite 104
Syracuse, NY 13211-2158
Phone: 315-431-4610,
Fax: 315-431-4280

DAILY REPORT

Day:	S	M	T	W	TH	F	S
------	---	---	---	---	----	---	---

Date: 18-Jul-17

REPORT No.

PAGE No. 1

PREPARED BY: Emily Cummings TITLE: Site Rep.

WEATHER	Bright Sun	Partly Cloudy	Overcast	Rain	Clear
TEMP	To 32	32-50	50-70	70-85	85 and up
WIND	Light	Moderate	High		
HUMIDITY	Dry	Moderate	Humid		
WIND DIR	NE	NW	SE	SW	
	N	S	E	W	

AVERAGE FIELD FORCE

Name of Contractor	Title	Hours Worked	Remarks
Scott Underwood	Scientist	0700-1700	EA Engineering
Emily Cummings	Engineer	0700-1700	EA Engineering

VISITORS

Name	Time (From - To)	Representing	Remarks

EQUIPMENT AT THE SITE

I = Idle

W = Working

1. Camera - W	3. Pressure Gauges - W	5. Vacuum Pump - W	7. VelociCalc - TSI 9555/9 -W
2. PID (ppb Rae) - W	4. Interface Probe - W	6. Four Gas Meter - W	

OPERATION & MAINTENANCE ACTIVITIES

EA/Preferred Site Rep: Emily Cummings - EA

DESCRIPTION OF WORK PERFORMED AND OBSERVED

0730 - EA onsite to conduct monthly O&M

EA performed O&M on all systems and collected summa canister samples from Onsite DDC & SVE systems

13:30- Maintenance completed. EA locked all systems upon departure. DDC systems were on upon departure

x - Designates report is continued on additional pages

EA Engineering/Preferred Site Rep:

Emily Cummings (EA)

Project Manager: J. Hayward

O&M DATA SHEET - NATIONAL HEATSET - ON-SITE SYSTEM #1

Date: 7/18/2017

Time: 8:00

Weather: Partly Cloudy / 80F

Treatment System #1 Status on Arrival: Up / Down / OFF

Alarm Light Status on Arrival: ON / OFF

Alarm Light Reset on Arrival: YES / NO

SYSTEM OPERATING DATA

ID	Hours	Blower Speed			
Hours	44,180.0	32 Hz			

Time	Location	TI-ID	Tempurature deg. C	Temperature deg. F	Comments
1240	Extracted From Well	TI-01	20.0	68.0	DDC-1
1240	Extracted From Well	TI-02	26.0	78.8	DDC-2
1241	Pre-Heater Outlet	TI-03	35.0	95.0	Post Shell and Tubing
1241	Pre-Heater Input	TI-04	22.0	71.6	Before Shell and Tubing
1242	After Cooler Outlet	TI-05	39.0	102.2	Post Cooler Reading
1242	After Cooler Input	TI-06	46.0	114.8	Before Cooler Reading
1243	Blower Outlet	TI-07	57.0	134.6	Going to Pre-heater
1243	Between GAC Units	TI-08	31.0	87.8	After GAC #1
1244	GAC Unit Output	TI-09	30.0	86.0	After GAC #2

Pressure/Vacuum Monitoring

Time	Location	PI/VI-ID	Pressure	Comments
1250	Discharge to Well	PI-01	2.5	DDC-1
1250	Discharge to Well	PI-02	2.8	DDC-2
1250	Drum	PI-03	38 in. H2O	Vacuum Reading to Blower

FLOW RATES

Time	Location	IF-ID	Flow (SCFM)	Comments
1240	Extracted From DDC-1	FI-01	224	
1240	Extracted From DDC-2	FI-02	12	

VOC Monitoring (ppb)

Time	Location	PID VOC (ppb)	Temp. (F)	COMMENTS
1250	Influent	2051	90.7	
1250	Between Vessels	780	87.6	
1251	Effluent	110	84.2	

System Observations

Water Column in DDC Wells

Well ID	Comments
DDC-1	Bubbling in well is sufficient
DDC-2	Bubbling in well is sufficient

Sump Inspection

Well ID	Comments
DDC-1	No sump associated with well
DDC-2	No water observed in sump

Additional Comments/Recommendations

Summas collected from influent, mid and effluent

O&M DATA SHEET - NATIONAL HEATSET - ON-SITE SYSTEM #2

Date: 7/18/2017 Time: 8:30 Weather: Partly Cloudy / 80F
 Treatment System #2 Status on Arrival: UP / Down / Off
 Alarm Light Status on Arrival: ON / OFF Alarm Light Reset on Arrival: YES / NO

SYSTEM OPERATING DATA

ID	Hours	Blower Speed
Hours	49,859.0	32 Hz

Temperature Monitoring

Time	Location	TI-ID	Temperature deg. C	Temperature deg. F	Comments
1020	Carbon Unit Inlet	CA01	30.0	86.0	Carbon Unit #1
1020	Pre-Heater	PHA01	32.2	90.0	After Shell and Tubing
1020	Blower Panel	B01	121.1	250.0	Exiting Blower
1020	After Cooler Outlet	AC01	32.2	90.0	Post Cooler Piping
1020	Pre-Heater	PHB01	54.4	130.0	Before Shell and Tubing

Pressure/Vacuum Monitoring

Time	Location	PI/VI-ID	Pressure	Comments
1020	Knock-Out Tank	T01	0	Vacuum gauge on knock-out tank
1020	Carbon-Unit #1 Outlet	CA1	-2.0 in. Hg	Vacuum exiting GAC #1
1020	Discharge to Wells	WD2	2.0 PSI	Pressure before splicing off to both wells
1020	Blower Panel	BP01	1 in. Hg	Vacuum coming off of blower
1020	Carbon Unit #2 Outlet	CA2	-1.6 in. Hg	Vacuum exiting GAC #2
1020	DDC-3	N/A	PSI	Pressure gauge on well head
1020	DDC-4	N/A	PSI	Pressure gauge on well head

FLOW RATES

Time	Location	IF-ID	Flow (SCFM)	Comments
1042	Injected to DDC-3	WD01	130	
1342	Injection to DDC-4	WD02	126	

VOC Monitoring (ppb)

Time	Location	PID VOC (ppb)	Temp. (F)	COMMENTS
1050	Influent #1	262	79.5	
1050	Influent #2	139	84.2	
1050	Effluent	50	86.1	

System Observations

Water Column in DDC Wells

Well ID	Comments
DDC-3	Bubbling in well is sufficient
DDC-4	Bubbling in well is sufficient

Sump Inspection

Well ID	Comments
DDC-3	No water pooled in well
DDC-4	No water pooled in well

Additional Comments/Recommendations

Blower gauge still malfunctioning

Project: National Heatset Printing Site - On-Site - Site Management
Contractors: EA Engineering, P.C. and Preferred Environmental Services

EA Job No: 1490716
Site No: 152140

EA Project Manager: James Hayward

EA Engineering, P.C.
6712 Brooklawn Parkway, Suite 104
Syracuse, NY 13211-2158
Phone: 315-431-4610,
Fax: 315-431-4280

DAILY REPORT

Day:	S	M	T	W	TH	F	S
------	---	---	---	---	----	---	---

Date: 28-Aug-17

REPORT No.

PAGE No. 1

PREPARED BY: Emily Cummings TITLE: Site Rep.

WEATHER	Bright Sun	Partly Cloudy	Overcast	Rain	Clear
TEMP	To 32	32-50	50-70	70-85	85 and up
WIND	Light	Moderate	High		
HUMIDITY	Dry	Moderate	Humid		
WIND DIR	NE	NW	SE	SW	
	N	S	E	W	

AVERAGE FIELD FORCE

Name of Contractor	Title	Hours Worked	Remarks
Emily Cummings	Engineer	1200-1700	EA Engineering
Matt	Scientist	1200-1700	Preferred Environmental

VISITORS

Name	Time (From - To)	Representing	Remarks

EQUIPMENT AT THE SITE

I = Idle

W = Working

1. Camera - W	3. Pressure Gauges - W	5. Vacuum Pump - W	7. VelociCalc - TSI 9555/9 -W
2. PID (ppb Rae) - W	4. Interface Probe - W	6. Four Gas Meter - W	

OPERATION & MAINTENANCE ACTIVITIES

EA/Preferred Site Rep: Emily Cummings - EA

DESCRIPTION OF WORK PERFORMED AND OBSERVED

1200 - EA & PES onsite to conduct monthly O&M

EA performed O&M on all systems and collected summa canister samples from Onsite DDC & SVE systems

1700- Maintenance completed. EA locked all systems upon departure. DDC systems were on upon departure

x - Designates report is continued on additional pages

EA Engineering/Preferred Site Rep:

Emily Cummings (EA)

Project Manager: J. Hayward

O&M DATA SHEET - NATIONAL HEATSET - ON-SITE SYSTEM #1

Date: 8/28/2017

Time: 14:46

Weather: Overcast / 70 F

Treatment System #1 Status on Arrival: Up / Down / OFF

Alarm Light Status on Arrival: ON / OFF

Alarm Light Reset on Arrival: YES / NO

SYSTEM OPERATING DATA

ID	Hours	Blower Speed			
Hours	45,050.5	32 Hz			

Time	Location	TI-ID	Tempurature deg. C	Temperature deg. F	Comments
1240	Extracted From Well	TI-01	21.0	69.8	DDC-1
1240	Extracted From Well	TI-02	24.0	75.2	DDC-2
1241	Pre-Heater Outlet	TI-03	33.0	91.4	Post Shell and Tubing
1241	Pre-Heater Input	TI-04	22.0	71.6	Before Shell and Tubing
1242	After Cooler Outlet	TI-05	36.0	96.8	Post Cooler Reading
1242	After Cooler Input	TI-06	43.0	109.4	Before Cooler Reading
1243	Blower Outlet	TI-07	55.0	131.0	Going to Pre-heater
1243	Between GAC Units	TI-08	29.0	84.2	After GAC #1
1244	GAC Unit Output	TI-09	27.0	80.6	After GAC #2

Pressure/Vacuum Monitoring

Time	Location	PI/VI-ID	Pressure	Comments
1250	Discharge to Well	PI-01	2.2	DDC-1
1250	Discharge to Well	PI-02	2.5	DDC-2
1250	Drum	PI-03	-44 in. H2O	Vacuum Reading to Blower

FLOW RATES

Time	Location	IF-ID	Flow (SCFM)	Comments
1240	Extracted From DDC-1	FI-01	360	Measured with Velocicalc
1240	Extracted From DDC-2	FI-02	110	

VOC Monitoring (ppb)

Time	Location	PID VOC (ppb)	Temp. (F)	COMMENTS
1250	Influent	1032	91.9	
1250	Between Vessels	0	81.1	
1251	Effluent	0	78.7	

System Observations

Water Column in DDC Wells

Well ID	Comments
DDC-1	Bubbling in well is sufficient
DDC-2	Bubbling in well is sufficient

Sump Inspection

Well ID	Comments
DDC-1	No sump associated with well
DDC-2	No water observed in sump

Additional Comments/Recommendations

Opened gate valve on DDC-2 two turns to increase flow to well.

O&M DATA SHEET - NATIONAL HEATSET - ON-SITE SYSTEM #2

Date: 8/28/2017 Time: 14:06 Weather: Overcast / 65F
 Treatment System #2 Status on Arrival: UP / Down / Off
 Alarm Light Status on Arrival: ON / OFF Alarm Light Reset on Arrival: YES / NO

SYSTEM OPERATING DATA

ID	Hours	Blower Speed
Hours	51,350.2	32 Hz

Temperature Monitoring

Time	Location	TI-ID	Temperature deg. C	Temperature deg. F	Comments
1020	Carbon Unit Inlet	CA01	28.0	82.4	Carbon Unit #1
1020	Pre-Heater	PHA01	32.2	90.0	After Shell and Tubing
1020	Blower Panel	B01	69.0	156.2	Exiting Blower
1020	After Cooler Outlet	AC01	30.0	86.0	Post Cooler Piping
1020	Pre-Heater	PHB01	50.0	122.0	Before Shell and Tubing

Pressure/Vacuum Monitoring

Time	Location	PI/VI-ID	Pressure	Comments
1020	Knock-Out Tank	T01	0	Vacuum gauge on knock-out tank
1020	Carbon-Unit #1 Outlet	CA1	-2.4 in. Hg	Vacuum exiting GAC #1
1020	Discharge to Wells	WD2	2.0 PSI	Pressure before splicing off to both wells
1020	Blower Panel	BP01	- in. Hg	Vacuum coming off of blower
1020	Carbon Unit #2 Outlet	CA2	-1.9 in. Hg	Vacuum exiting GAC #2
1020	DDC-3	N/A	PSI	Pressure gauge on well head
1020	DDC-4	N/A	PSI	Pressure gauge on well head

FLOW RATES

Time	Location	IF-ID	Flow (SCFM)	Comments
1042	Injected to DDC-3	WD01	133	
1342	Injection to DDC-4	WD02	133	

VOC Monitoring (ppb)

Time	Location	PID VOC (ppb)	Temp. (F)	COMMENTS
1050	Influent #1	31	80.8	
1050	Influent #2	51	78.8	
1050	Effluent	-	78.9	

System Observations

Water Column in DDC Wells

Well ID	Comments
DDC-3	Bubbling in well is sufficient
DDC-4	Bubbling in well is sufficient

Sump Inspection

Well ID	Comments
DDC-3	No water pooled in well
DDC-4	No water pooled in well

Additional Comments/Recommendations

Blower gauge still malfunctioning; increased blower speed to 37 @ 1445

Project: National Heatset Printing Site - On-Site - Site Management
Contractors: EA Engineering, P.C. and Preferred Environmental Services

EA Job No: 1490716
Site No: 152140

EA Project Manager: James Hayward

EA Engineering, P.C.
6712 Brooklawn Parkway, Suite 104
Syracuse, NY 13211-2158
Phone: 315-431-4610,
Fax: 315-431-4280

DAILY REPORT

Day:	S	M	T	W	TH	F	S
------	---	---	---	---	----	---	---

Date: 21-Sep-17

REPORT No.

PAGE No. 1

PREPARED BY: Emily Cummings TITLE: Site Rep.

WEATHER	Bright Sun	Partly Cloudy	Overcast	Rain	Clear
TEMP	To 32	32-50	50-70	70-85	85 and up
WIND	Light	Moderate	High		
HUMIDITY	Dry	Moderate	Humid		
WIND DIR	NE	NW	SE	SW	
	N	S	E	W	

AVERAGE FIELD FORCE

Name of Contractor	Title	Hours Worked	Remarks
Erica Thielman	Scientist	1200 - 1700	EA Engineering
Emily Cummings	Engineer	1200-1700	EA Engineering

VISITORS

Name	Time (From - To)	Representing	Remarks

EQUIPMENT AT THE SITE

I = Idle

W = Working

1. Camera - W	3. Pressure Gauges - W	5. Vacuum Pump - W	7. VelociCalc - TSI 9555/9 -W
2. PID (ppb Rae) - W	4. Interface Probe - W	6. Four Gas Meter - W	

OPERATION & MAINTENANCE ACTIVITIES

EA/Preferred Site Rep: Emily Cummings - EA

DESCRIPTION OF WORK PERFORMED AND OBSERVED

1200 - EA onsite to conduct monthly O&M

EA performed O&M on all systems and collected summa canister samples from Onsite DDC & SVE systems

1700- Maintenance completed. EA locked all systems upon departure. DDC systems were on upon departure

x - Designates report is continued on additional pages

EA Engineering/Preferred Site Rep:

Emily Cummings (EA)

Project Manager: J. Hayward

O&M DATA SHEET - NATIONAL HEATSET - ON-SITE SYSTEM #1

Date: 9/21/2017

Time: 12:40

Weather: Partly Cloudy / 70 F

Treatment System #1 Status on Arrival: Up / Down / OFF

Alarm Light Status on Arrival: ON / OFF

Alarm Light Reset on Arrival: YES / NO

SYSTEM OPERATING DATA

ID	Hours	Blower Speed			
Hours	45,624.0	32 Hz			

Time	Location	TI-ID	Tempurature deg. C	Temperature deg. F	Comments
1240	Extracted From Well	TI-01	20.0	68.0	DDC-1
1240	Extracted From Well	TI-02	23.0	73.4	DDC-2
1241	Pre-Heater Outlet	TI-03	33.0	91.4	Post Shell and Tubing
1241	Pre-Heater Input	TI-04	22.0	71.6	Before Shell and Tubing
1242	After Cooler Outlet	TI-05	34.0	93.2	Post Cooler Reading
1242	After Cooler Input	TI-06	44.0	111.2	Before Cooler Reading
1243	Blower Outlet	TI-07	55.0	131.0	Going to Pre-heater
1243	Between GAC Units	TI-08	29.0	84.2	After GAC #1
1244	GAC Unit Output	TI-09	28.0	82.4	After GAC #2

Pressure/Vacuum Monitoring

Time	Location	PI/VI-ID	Pressure	Comments
1250	Discharge to Well	PI-01	2.2	DDC-1
1250	Discharge to Well	PI-02	2.4	DDC-2
1250	Drum	PI-03	-32 in. H2O	Vacuum Reading to Blower

FLOW RATES

Time	Location	IF-ID	Flow (SCFM)	Comments
1240	Extracted From DDC-1	FI-01	345	Measured with Velocicalc
1240	Extracted From DDC-2	FI-02	130	

VOC Monitoring (ppb)

Time	Location	PID VOC (ppb)	Temp. (F)	COMMENTS
1250	Influent	952	84.2	
1250	Between Vessels	76	80.5	
1251	Effluent	4	80.1	

System Observations

Water Column in DDC Wells

Well ID	Comments
DDC-1	Bubbling in well is sufficient
DDC-2	Bubbling in well is sufficient

Sump Inspection

Well ID	Comments
DDC-1	No sump associated with well
DDC-2	No water observed in sump

Additional Comments/Recommendations

--

O&M DATA SHEET - NATIONAL HEATSET - ON-SITE SYSTEM #2

Date: 9/21/2017	Time: 12:50	Weather: Overcast / 65F
Treatment System #2 Status on Arrival: UP / Down / Off		
Alarm Light Status on Arrival: ON / OFF		Alarm Light Reset on Arrival: YES / NO

SYSTEM OPERATING DATA

ID	Hours	Blower Speed
Hours	51,924.8	37 Hz

Temperature Monitoring

Time	Location	TI-ID	Temperature deg. C	Temperature deg. F	Comments
1020	Carbon Unit Inlet	CA01	30.0	86.0	Carbon Unit #1
1020	Pre-Heater	PHA01	35.0	95.0	After Shell and Tubing
1020	Blower Panel	B01	48.9	120.0	Exiting Blower
1020	After Cooler Outlet	AC01	33.4	92.2	Post Cooler Piping
1020	Pre-Heater	PHB01	58.9	138.0	Before Shell and Tubing

Pressure/Vacuum Monitoring

Time	Location	PI/VI-ID	Pressure	Comments
1020	Knock-Out Tank	T01	0	Vacuum gauge on knock-out tank
1020	Carbon-Unit #1 Outlet	CA1	-3.8 in. Hg	Vacuum exiting GAC #1
1020	Discharge to Wells	WD2	2.1 PSI	Pressure before splicing off to both wells
1020	Blower Panel	BP01	- in. Hg	Vacuum coming off of blower
1020	Carbon Unit #2 Outlet	CA2	-2.6 in. Hg	Vacuum exiting GAC #2
1020	DDC-3	N/A	PSI	Pressure gauge on well head
1020	DDC-4	N/A	PSI	Pressure gauge on well head

FLOW RATES

Time	Location	IF-ID	Flow (SCFM)	Comments
1042	Injected to DDC-3	WD01	150	
1342	Injection to DDC-4	WD02	164	

VOC Monitoring (ppb)

Time	Location	PID VOC (ppb)	Temp. (F)	COMMENTS
1050	Influent #1	69	81.5	
1050	Influent #2	65	81.1	
1050	Effluent	12	82.7	

System Observations

Water Column in DDC Wells

Well ID	Comments
DDC-3	Bubbling in well is sufficient
DDC-4	Bubbling in well is sufficient

Sump Inspection

Well ID	Comments
DDC-3	No water pooled in well
DDC-4	No water pooled in well

Additional Comments/Recommendations

Blower gauge still malfunctioning

A-3: Off-site DDC O&M

Project: National Heatset Printing Site - Off-Site - Site Management
 Contractors: EA Engineering, P.C. and Preferred Environmental Services
 EA Job No: 1490716
 Site No: 152140
 EA Project Manager: James Hayward

EA Engineering, P.C.
 6712 Brooklawn Parkway, Suite 104
 Syracuse, NY 13211-2158
 Phone: 315-431-4610,
 Fax: 315-431-4280

DAILY REPORT

Day:	S	M	T	W	TH	F	S
------	---	---	---	---	----	---	---

Date: 18-Jul-17

REPORT No.

PAGE No. 1

PREPARED BY: Emily Cummings TITLE: Site Rep.

WEATHER	Bright Sun	Partly Cloudy	Overcast	Rain	Clear
TEMP	To 32	32-50	50-70	70-85	85 and up
WIND	Light	Moderate	High		
HUMIDITY	Dry	Moderate	Humid		
WIND DIR	NE	NW	SE	SW	
	N	S	E	W	

AVERAGE FIELD FORCE

Name of Contractor	Title	Hours Worked	Remarks
Scott Underwood	Scientist	0700 - 1700	EA Engineering
Emily Cummings	Engineer	0700 - 1700	EA Engineering

VISITORS

Name	Time (From - To)	Representing	Remarks

EQUIPMENT AT THE SITE

I = Idle W = Working

1. Camera - W	3. Pressure Gauges - W	5. Vacuum Pump - W	7. VelociCalc - TSI 9555/9 -W
2. PID (ppb Rae) - W	4. Interface Probe - W	6. Four Gas Meter - W	

OPERATION & MAINTENANCE ACTIVITIES

EA/Preferred Site Rep: Emily Cummings - EA

DESCRIPTION OF WORK PERFORMED AND OBSERVED

9300 - EA on-site to conduct monthly O&M.

1700 - O&M completed. EA locked both sheds and the access gate. System off on departure.



- Designates report is continued on additional pages

EA Engineering/Preferred Site Rep:

Emily Cummings (EA)

Project Manager: J. Hayward

O&M DATA SHEET - NATIONAL HEATSET - OFF-SITE SYSTEM

Date: 7/18/2017

Time: 10:00

Weather: Partly Cloudy / 80 F

B-501 Status on Arrival: Up / Down / Off

B-502 Status on Arrival: Up / Down / Off

Alarm Light Status on Arrival: ON / OFF

Alarm Light Reset on Arrival: YES / NO

SYSTEM OPERATING DATA

ID	B-501	TP-211	B-502	TP-212	B-503	TP-213	Time
Hours	23,813.0	4.1	23,285.0	40.3	-	-	9:00
VI-501	-55	IWC	VI-502				IWC
SP-501	-	ppb / ppm	SP-502				ppb / ppm
TI-501	-	°F	TI-502				°F
VI-501A	-58	IWC	VI-502A				IWC

INJECTION & EXTRACTION MANIFOLD OPERATING DATA

Well ID	4" - INJECTION		6" - EXTRACTION		
	Temp (°F)	Pressure (PSI)	Temp (°F)	Flow (CFM)	VOCs (ppb or ppm)
DDC-05	85.0	4.8	80.0	91	231
DDC-10	95.0	4.5	82.0	56	200.0
DDC-09	90.0	5.0	79.0	118	409
DDC-08	90.0	4.0	80.0	105	577
DDC-07	90.0	5.0	85.0	96	334.0
DDC-06	95.0	4.5	79.0	85	285

DDC WELLHEAD OPERATING DATA

WELL ID	PZ SHALLOW (FT)	PZ DEEP (FT)	Air Space (FT)	COMMENTS	MW ID	DTW (FT)
DDC-05	11.72	15.29	3.6	Good bubbling	MW-1D	9.97
DDC-10	11.34	11.07	-0.3	Good Bubbling	MW-1S	8.81
DDC-09	10.55	14.73	4.2	Good bubbling	MW-2D	13.35
DDC-08	9.46	13.95	4.5	Good bubbling	MW-2S	13.24
DDC-07	9.88	12.40	2.5	Good bubbling	MW-3D	9.51
DDC-06	9.75	9.96	0.2	Good bubbling	MW-3S	9.21

AIR SAMPLING DATA

B-501			B-502		
Sample Port Position	SAMPLE PORT ID	VOC Reading (ppb / ppm)	Sample Port Position	SAMPLE PORT ID	VOC Reading (ppb / ppm)
Influent	SP-401B	-	Influent	SP-402B	
Intermediate #1	SP-403B	-	Intermediate	SP-403A	
Intermediate #2	SP-401A	931.0	Intermediate	SP-402A	
Effluent	SP-501	-	Effluent	SP-502	

CHILLER

TECHNICIAN COMMENTS/NOTES:

Set Temp. (°F)	NA	Sampling pump could not overcome vaccum at sampling ports, unable to collect PID readings
Actual Temp. (°F)	NA	
Pump Pressure (PSI)	NA	
Freon High Pres. (PSI)	NA	
Freon Low Pres. (PSI)	NA	

Project: National Heatset Printing Site - Off-Site - Site Management
 Contractors: EA Engineering, P.C. and Preferred Environmental Services
 EA Job No: 1490716
 Site No: 152140
 EA Project Manager: James Hayward

EA Engineering, P.C.
 6712 Brooklawn Parkway, Suite 104
 Syracuse, NY 13211-2158
 Phone: 315-431-4610,
 Fax: 315-431-4280

DAILY REPORT

Day:	S	M	T	W	TH	F	S
------	---	---	---	---	----	---	---

Date: 28-Aug-17

REPORT No.

PAGE No. 1

PREPARED BY: Emily Cummings TITLE: Site Rep.

WEATHER	Bright Sun	Partly Cloudy	Overcast	Rain	Clear
TEMP	To 32	32-50	50-70	70-85	85 and up
WIND	Light	Moderate	High		
HUMIDITY	Dry	Moderate	Humid		
WIND DIR	NE	NW	SE	SW	
	N	S	E	W	

AVERAGE FIELD FORCE

Name of Contractor	Title	Hours Worked	Remarks
Matt	Scientist	0700 - 1700	Preferred
Emily Cummings	Engineer	0700 - 1700	EA Engineering

VISITORS

Name	Time (From - To)	Representing	Remarks

EQUIPMENT AT THE SITE

I = Idle W = Working

1. Camera - W	3. Pressure Gauges - W	5. Vacuum Pump - W	7. VelociCalc - TSI 9555/9 -W
2. PID (ppb Rae) - W	4. Interface Probe - W	6. Four Gas Meter - W	

OPERATION & MAINTENANCE ACTIVITIES

EA/Preferred Site Rep: Emily Cummings - EA

DESCRIPTION OF WORK PERFORMED AND OBSERVED

9300 - EA on-site to conduct monthly O&M.

1700 - O&M completed. EA locked both sheds and the access gate. System off on departure.



- Designates report is continued on additional pages

EA Engineering/Preferred Site Rep:

Emily Cummings (EA)

Project Manager: J. Hayward

O&M DATA SHEET - NATIONAL HEATSET - OFF-SITE SYSTEM

Date: 8/29/2017 Time: 11:42 Weather: Overcast /70 F

B-501 Status on Arrival: Up / Down / Off B-502 Status on Arrival: Up / Down / Off

Alarm Light Status on Arrival: ON / OFF Alarm Light Reset on Arrival: YES / NO

SYSTEM OPERATING DATA							
ID	B-501	TP-211	B-502	TP-212	B-503	TP-213	Time
Hours	24,822.9	4.1	23,285.0	40.3	-	-	9:00
VI-501	-55	IWC	VI-502				IWC
SP-501	-	ppb / ppm	SP-502				ppb / ppm
TI-501	70	°F	TI-502				°F
VI-501A	-58	IWC	VI-502A				IWC

INJECTION & EXTRACTION MANIFOLD OPERATING DATA

Well ID	4" - INJECTION		6" - EXTRACTION		
	Temp (°F)	Pressure (PSI)	Temp (°F)	Flow (CFM)	VOCs (ppb or ppm)
DDC-05	75.0	4.9	74.0	55	174
DDC-10	75.0	4.5	75.0	93	108
DDC-09	75.0	4.9	74.0	122	209
DDC-08	75.0	4.2	76.0	145	368
DDC-07	70.0	4.7	76.0	109	263
DDC-06	70.0	4.2	76.0	88	255

DDC WELLHEAD OPERATING DATA

WELL ID	PZ SHALLOW (FT)	PZ DEEP (FT)	Air Space (FT)	COMMENTS	MW ID	DTW (FT)
DDC-05	10.55	10.71	0.2	Good bubbling	MW-1D	10.77
DDC-10	12.25	13.84	1.6	Good Bubbling	MW-1S	
DDC-09	11.19	15.98	4.8	Good bubbling	MW-2D	
DDC-08	10.20	15.05	4.9	Good bubbling	MW-2S	
DDC-07	10.65	12.92	2.3	Good bubbling	MW-3D	
DDC-06	16.00	15.16	-0.8	Good bubbling	MW-3S	

AIR SAMPLING DATA

B-501			B-502		
Sample Port Position	SAMPLE PORT ID	VOC Reading (ppb / ppm)	Sample Port Position	SAMPLE PORT ID	VOC Reading (ppb / ppm)
Influent	SP-401B	0.0	Influent	SP-402B	
Intermediate #1	SP-403B	22.0	Intermediate	SP-403A	
Intermediate #2	SP-401A	0.0	Intermediate	SP-402A	
Effluent	SP-501	23.0	Effluent	SP-502	

CHILLER

TECHNICIAN COMMENTS/NOTES:

Set Temp. (°F)	70	
Actual Temp. (°F)	68	
Pump Pressure (PSI)	-	
Freon High Pres. (PSI)	160	
Freon Low Pres. (PSI)	110	

Project: National Heatset Printing Site - Off-Site - Site Management
 Contractors: EA Engineering, P.C. and Preferred Environmental Services
 EA Job No: 1490716
 Site No: 152140
 EA Project Manager: James Hayward

EA Engineering, P.C.
 6712 Brooklawn Parkway, Suite 104
 Syracuse, NY 13211-2158
 Phone: 315-431-4610,
 Fax: 315-431-4280

DAILY REPORT

Day:	S	M	T	W	TH	F	S
------	---	---	---	---	----	---	---

Date: 28-Aug-17

REPORT No.

PAGE No. 1

PREPARED BY: Emily Cummings TITLE: Site Rep.

WEATHER	Bright Sun	Partly Cloudy	Overcast	Rain	Clear
TEMP	To 32	32-50	50-70	70-85	85 and up
WIND	Light	Moderate	High		
HUMIDITY	Dry	Moderate	Humid		
WIND DIR	NE	NW	SE	SW	
	N	S	E	W	

AVERAGE FIELD FORCE

Name of Contractor	Title	Hours Worked	Remarks
Matt	Scientist	0700 - 1700	Preferred
Emily Cummings	Engineer	0700 - 1700	EA Engineering

VISITORS

Name	Time (From - To)	Representing	Remarks

EQUIPMENT AT THE SITE

I = Idle W = Working

1. Camera - W	3. Pressure Gauges - W	5. Vacuum Pump - W	7. VelociCalc - TSI 9555/9 -W
2. PID (ppb Rae) - W	4. Interface Probe - W	6. Four Gas Meter - W	

OPERATION & MAINTENANCE ACTIVITIES

EA/Preferred Site Rep: Emily Cummings - EA

DESCRIPTION OF WORK PERFORMED AND OBSERVED

9300 - EA on-site to conduct monthly O&M.

1700 - O&M completed. EA locked both sheds and the access gate. System off on departure.



- Designates report is continued on additional pages

EA Engineering/Preferred Site Rep:

Emily Cummings (EA)

Project Manager: J. Hayward

O&M DATA SHEET - NATIONAL HEATSET - OFF-SITE SYSTEM

Date: 9/21/2017

Time: 13:20

Weather: Partly Cloudy / 70 F

B-501 Status on Arrival: Up / Down / Off

B-502 Status on Arrival: Up / Down / Off

Alarm Light Status on Arrival: ON / OFF

Alarm Light Reset on Arrival: YES / NO

SYSTEM OPERATING DATA

ID	B-501	TP-211	B-502	TP-212	B-503	TP-213	Time
Hours	24,822.9	4.1	23,285.0	40.3	-	-	9:00
VI-501	-55	IWC	VI-502				IWC
SP-501	-	ppb / ppm	SP-502				ppb / ppm
TI-501	70	°F	TI-502				°F
VI-501A	-58	IWC	VI-502A				IWC

INJECTION & EXTRACTION MANIFOLD OPERATING DATA

Well ID	4" - INJECTION		6" - EXTRACTION		
	Temp (°F)	Pressure (PSI)	Temp (°F)	Flow (CFM)	VOCs (ppb or ppm)
DDC-05	80.0	4.9	76.0	46	122
DDC-10	83.0	4.1	76.0	76	116
DDC-09	82.0	4.7	75.5	108	220
DDC-08	82.0	3.9	76.0	10	356
DDC-07	78.0	4.6	78.0	86	365
DDC-06	80.0	4.3	76.0	82	233

DDC WELLHEAD OPERATING DATA

WELL ID	PZ SHALLOW (FT)	PZ DEEP (FT)	Air Space (FT)	COMMENTS	MW ID	DTW (FT)
DDC-05	15.10	15.08	0.0	Good bubbling	MW-1D	N/A
DDC-10	12.34	12.71	0.4	Good Bubbling	MW-1S	N/A
DDC-09	11.37	15.70	4.3	Good bubbling	MW-2D	N/A
DDC-08	10.42	15.10	4.7	Good bubbling	MW-2S	N/A
DDC-07	10.80	12.62	1.8	Good bubbling	MW-3D	N/A
DDC-06	10.69	10.84	0.2	Good bubbling	MW-3S	N/A

AIR SAMPLING DATA

B-501			B-502		
Sample Port Position	SAMPLE PORT ID	VOC Reading (ppb / ppm)	Sample Port Position	SAMPLE PORT ID	VOC Reading (ppb / ppm)
Influent	SP-401B	19.0	Influent	SP-402B	
Intermediate #1	SP-403B	25.0	Intermediate	SP-403A	
Intermediate #2	SP-401A	12.0	Intermediate	SP-402A	
Effluent	SP-501	143.0	Effluent	SP-502	

CHILLER

TECHNICIAN COMMENTS/NOTES:

Set Temp. (°F)	NA	
Actual Temp. (°F)	NA	
Pump Pressure (PSI)	NA	
Freon High Pres. (PSI)	NA	
Freon Low Pres. (PSI)	NA	

A-4: On-site Groundwater Monitoring Field Data



EA Engineering, P.C.
EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-1S (onsite)	EA Personnel: PES	Client: NYSDEC							
Location: National Heatset Printing, Babylon, NY	Well Condition: Good, no bolts	Weather: 92F/Sunny							
Sounding Method: Heron Skinny Dipper 100-ft water level tape	Gauge Date: 7/7/2017 Gauge Time: 12:40	Measurement Ref: Top of Casing (TOC)							
Stick Up/Down (ft): Down ~4" bgs	PID Headspace Reading: 0	Well Diameter (in): 2.0 in							
Purge Date: 7-Jul-17		Purge Time: 12:45							
Purge Method: Low Flow via Peristaltic Pump		Field Technician: JM							
Well Volume									
A. Well Depth (ft): 30.2	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: Down ~4" bgs							
B. Depth to Water (ft): 17.40	E. Well Volume (gal) (C*D): 2.0864	Pump Type: Peristaltic Pump							
C. Liquid Depth (ft) (A-B): 12.8	F. Three Well Volumes (gal) (E3): 6.2592	Pump Intake Depth: NA							
Water Quality Parameters									
Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
12:45	7.31	0.297	4.1	5.59	27.07	62	16.57	0.30	0.9
12:48	6.57	0.284	3.3	5.73	24.5	44	16.21	0.30	1.8
12:51	6.42	0.288	2.0	5.70	23.14	105	16.21	0.30	2.7
12:54	6.40	0.285	2.6	5.64	23	109	16.20	0.30	3.6
12:57	6.25	0.285	3.0	5.75	22.47	124	16.20	0.30	4.5
13:00	6.22	0.286	2.8	5.86	22.33	130	16.20	0.30	5.4
13:03	6.21	0.285	2.7	5.85	22.24	137	16.20	0.30	6.3
Total Quantity of Water Removed (gal): <u>6.30</u>			Sampling Time: <u>13:09</u>						
Samplers: <u>BC</u>			Split Sample With: <u>-</u>						
Sampling Date: <u>7/17/2017</u>			Sample Type: <u>VOC-GW Grab</u>						
COMMENTS AND OBSERVATIONS: <u>No odor / sheen</u>									



EA Engineering, P.C.
EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-1D (onsite)	EA Personnel: PED	Client: NYSDEC								
Location: National Heatset Printing, Babylon, NY	Well Condition: Good	Weather: 90s/Sunny								
Sounding Method: Solinst 100-ft water level tape	Gauge Date: 7/7/2017 Gauge Time: 12:45	Measurement Ref: Top of Casing (TOC)								
Stick Up/Down (ft): Down 0.5-ft	PID Headspace Reading: 0	Well Diameter (in): 2.0 in								
Purge Date: 7-Jul-17	Purge Time: 12:45									
Purge Method: Low Flow via Peristaltic Pump	Field Technician: JZ									
Well Volume										
A. Well Depth (ft): 81.14	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: Down 0.5-ft								
B. Depth to Water (ft): 17.39	E. Well Volume (gal) (C*D): 10.39125	Pump Type: Peristaltic Pump								
C. Liquid Depth (ft) (A-B): 63.75	F. Three Well Volumes (gal) (E3): 31.17375	Pump Intake Depth: NA								
Water Quality Parameters										
Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)	
1248	8.77	0.522	11.1	3.33	24.57	-109	17.4	0.30	0.9	
1251	7.29	0.35	8.7	0.46	21.63	31	17.4	0.30	1.8	
1254	6.80	0.33	15.1	0.39	21.57	39	17.41	0.30	2.7	
1257	6.35	0.315	19.8	0.25	21.48	69	17.41	0.30	3.6	
1300	6.15	0.308	22.0	0.22	2.43	75	17.41	0.30	4.5	
1303	5.94	0.303	23.8	0.14	21.44	90	17.4	0.30	5.4	
1306	5.86	0.297	23.9	0.19	21.15	97	17.4	0.30	6.3	
Total Quantity of Water Removed (gal): Samplers: Sampling Date:	1.66 JZ 7/17/2017				Sampling Time: Split Sample With: Sample Type:	13:07 -- VOC-GW Grab				
COMMENTS AND OBSERVATIONS:										



EA Engineering, P.C.
EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM

Well I.D.:	EA Personnel:	Client:							
MW-6S	PES	NYSDEC							
Location:	Well Condition:	Weather:							
National Heatset Printing, Babylon, NY	Good	81 F / Sunny							
Sounding Method:	Gauge Date:	Measurement Ref:							
Solinst 100-ft water level tape	7/18/2017	Top of Casing (TOC)							
Stick Up/Down (ft):	Gauge Time:								
Down 0.3-ft	7:36:00								
PID Headspace Reading:	0	Well Diameter (in):							
		2.0 in							
Purge Date: 18-Jul-17		Purge Time: 7:39							
Purge Method: Low Flow via Peristaltic Pump		Field Technician: JZ							
Well Volume									
A. Well Depth (ft): 28.59	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: Down 0.3-ft							
B. Depth to Water (ft): 17.53	E. Well Volume (gal) (C*D): 1.80278	Pump Type: Peristaltic Pump							
C. Liquid Depth (ft) (A-B): 11.06	F. Three Well Volumes (gal) (E3): 5.40834	Pump Intake Depth: NA							
Water Quality Parameters									
Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
739	5.77	0.331	0.0	6.15	23.4	77	17.52	0.30	0.90
742	5.79	0.267	0.0	6.22	23.04	88	17.53	0.30	1.80
745	5.57	0.253	0.0	4.96	22.06	98	17.53	0.30	2.70
748	5.47	0.247	5.4	5.01	21.67	104	17.53	0.30	3.60
751	5.42	0.244	6.7	4.95	21.18	112	17.53	0.30	4.50
754	5.36	0.24	8.5	5.09	21.44	117	17.53	0.30	5.40
757	5.34	0.239	8.2	4.99	21.37	120	17.53	0.30	6.30
Total Quantity of Water Removed (gal):	1.66			Sampling Time:	7:57				
Samplers:	JZ			Split Sample With:	--				
Sampling Date:	7/18/2017			Sample Type:	GW Grab				
COMMENTS AND OBSERVATIONS:									



EA Engineering, P.C.
EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM

Well I.D.:	EA Personnel:	Client:							
MW-14S	PES	NYSDEC							
Location:	Well Condition:	Weather:							
National Heatset Printing, Babylon, NY	Good	90 F / Sunny							
Sounding Method:	Gauge Date:	Measurement Ref:							
Solinst 100-ft water level tape	7/17/2017	Top of Casing (TOC)							
Stick Up/Down (ft):	Gauge Time:								
Down 0.1-ft	15:10								
	PID Headspace Reading:	Well Diameter (in):							
	0	1.0 in							
Purge Date: 17-Jul-17		Purge Time: 15:13							
Purge Method: Low Flow via Peristaltic Pump		Field Technician: BC							
Well Volume									
A. Well Depth (ft): 27.6	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: Down 0.1-ft							
B. Depth to Water (ft): 16.61	E. Well Volume (gal) (C*D): 1.79137	Pump Type: Peristaltic Pump							
C. Liquid Depth (ft) (A-B): 10.99	F. Three Well Volumes (gal) (E3): 5.37411	Pump Intake Depth: NA							
Water Quality Parameters									
Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1513	6.12	0.247	78.0	11.31	17.95	98	17	0.30	0.90
1516	5.98	0.249	35.0	12.64	17.81	82	17.02	0.30	1.80
1519	6.01	0.248	20.3	12.67	17.6	70	17.02	0.30	2.70
1522	6.01	0.248	10.2	12.69	17.06	70	17.02	0.30	3.60
1525	6	0.247	6.2	12.74	17.01	73	17.02	0.30	4.50
1528	5.99	0.249	5.0	12.73	14.76	76	17.02	0.30	5.40
Total Quantity of Water Removed (gal):	1.43			Sampling Time:	15:35				
Samplers:	BC			Split Sample With:					
Sampling Date:	7/17/2017			Sample Type:	VOC- GW Grab				
COMMENTS AND OBSERVATIONS:									



EA Engineering, P.C.
EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM

Well I.D.:	EA Personnel:	Client:							
MW-14D	PES	NYSDEC							
Location:	Well Condition:	Weather:							
National Heatset Printing, Babylon, NY	Good	50°F/Sunny							
Sounding Method:	Gauge Date:	Measurement Ref:							
Solinst 100-ft water level tape	7/17/2017	Top of Casing (TOC)							
Stick Up/Down (ft):	Gauge Time:								
Down 0.5-ft	15:35:00								
PID Headspace Reading:	Well Diameter (in):								
0	1.0 in								
Purge Date: 17-Jul-17		Purge Time: 15:40							
Purge Method: Low Flow via Peristaltic Pump		Field Technician: BC							
Well Volume									
A. Well Depth (ft): 54.98	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: Down 0.5-ft							
B. Depth to Water (ft): 16.98	E. Well Volume (gal) (C*D): 6.194	Pump Type: Peristaltic Pump							
C. Liquid Depth (ft) (A-B): 38	F. Three Well Volumes (gal) (E3): 18.582	Pump Intake Depth: NA							
Water Quality Parameters									
Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1540	5.95	0.222	1.8	6.63	17.39	104	16.98	0.30	0.90
1543	5.88	0.228	0.8	9.90	17.2	130	16.98	0.30	1.80
1546	5.86	0.229	0.8	9.98	17.1	150	17	0.30	2.70
1549	5.85	0.229	0.8	9.99	17.25	156	17	0.30	3.60
1552	5.85	0.23	0.8	9.92	17.06	164	17	0.30	4.50
1555	5.84	0.229	0.9	9.93	17.02	163	17.05	0.30	5.40
Total Quantity of Water Removed (gal): <u>1.43</u>			Sampling Time: <u>16:00</u>						
Samplers: <u>BC</u>			Split Sample With: <u>-</u>						
Sampling Date: <u>7/17/2017</u>			Sample Type: <u>GW Grab</u>						
COMMENTS AND OBSERVATIONS:									



EA Engineering, P.C.
EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-2AD	EA Personnel: PES	Client: NYSDEC							
Location: National Heatset Printing, Babylon, NY	Well Condition: Good	Weather: 85°F/Sunny							
Sounding Method: Solinst 100-ft water level tape	Gauge Date: 7/18/2017 Gauge Time: 8:53:00	Measurement Ref: Top of Casing (TOC)							
Stick Up/Down (ft): Down 0.16-ft	PID Headspace Reading: 0	Well Diameter (in): 1.0 in							
Purge Date: 18-Jul-17		Purge Time: 8:58							
Purge Method: Low Flow via Peristaltic Pump		Field Technician: BC							
Well Volume									
A. Well Depth (ft): 77.61	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: Down 0.16-ft							
B. Depth to Water (ft): 18.25	E. Well Volume (gal) (C*D): 9.67568	Pump Type: Peristaltic Pump							
C. Liquid Depth (ft) (A-B): 59.36	F. Three Well Volumes (gal) (E3): 29.02704	Pump Intake Depth: NA							
Water Quality Parameters									
Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
858	6.57	0.271	13.6	1.11	19.12	198	18.28	0.30	0.90
901	6.00	0.269	7.5	0.00	17.92	190	18.28	0.30	1.8
904	5.92	0.272	11.0	0.00	17.63	195	18.28	0.30	2.7
907	5.90	0.274	7.4	0.00	17.48	194	18.29	0.30	3.6
910	5.89	0.277	8.9	0.00	17.35	200	18.31	0.30	4.5
913	5.88	0.278	8.3	0.00	17.41	203	18.35	0.30	5.4
916	5.88	0.279	8.3	0.00	17.27	205	18.4	0.30	6.3
Total Quantity of Water Removed (gal): <u>1.66</u>			Sampling Time: <u>9:20</u>						
Samplers: <u>BC</u>			Split Sample With: <u>--</u>						
Sampling Date: <u>7/18/2017</u>			Sample Type: <u>GW Grab</u>						
COMMENTS AND OBSERVATIONS: <u>No odor / sheen</u>									



EA Engineering, P.C.
EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM

Well I.D.:	EA Personnel:	Client:							
MW-2A	PES	NYSDEC							
Location:	Well Condition:	Weather:							
National Heatset Printing, Babylon, NY	Good	81°F Overcast							
Sounding Method:	Gauge Date:	Measurement Ref:							
Solinst 100-ft water level tape	7/18/2017	Top of Casing (TOC)							
Stick Up/Down (ft):	Gauge Time:								
Down 0.33-ft	8:45:00								
PID Headspace Reading:	10	Well Diameter (in):							
		1							
Purge Date: 18-Jul-17		Purge Time: 8:47							
Purge Method: Low Flow via Peristaltic Pump		Field Technician: JZ							
Well Volume									
A. Well Depth (ft): 23.35	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: Down 0.33-ft							
B. Depth to Water (ft): 17.71	E. Well Volume (gal) (C*D): 0.91932	Pump Type: Peristaltic Pump							
C. Liquid Depth (ft) (A-B): 5.64	F. Three Well Volumes (gal) (E3): 2.75796	Pump Intake Depth: NA							
Water Quality Parameters									
Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
8:47	5.54	0.244	1.0	5.82	25.77	113	17.71	0.30	0.9
8:50	5.67	0.216	0.0	4.73	25.18	115	17.71	0.30	1.8
8:53	5.69	0.213	0.0	4.35	24.61	116	17.71	0.30	2.7
8:56	5.69	0.21	1.9	4.11	24.07	117	17.71	0.30	3.6
8:59	5.7	0.209	6.1	3.99	23.8	118	17.71	0.30	4.5
9:02	5.7	0.208	7.5	4.35	23.37	119	17.71	0.30	5.4
9:05	5.7	0.208	7.5	4.43	23.04	120	17.72	0.30	6.3
9:08	5.7	0.207	6.7	4.45	23.25	121	17.72	0.30	7.2
Total Quantity of Water Removed (gal):	7.20				Sampling Time:	9:08			
Samplers:	JZ				Split Sample With:	--			
Sampling Date:	7/18/2017				Sample Type:	VOC- GW Grab			
COMMENTS AND OBSERVATIONS: None									



EA Engineering, P.C.
EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-3S (onsite)	EA Personnel: PES	Client: NYSDEC							
Location: National Heatset Printing, Babylon, NY	Well Condition: Good (no bolts)	Weather: 85F/Sunny							
Sounding Method: Solinst 100-ft water level tape	Gauge Date: 7/18/2017 Gauge Time: 9:35	Measurement Ref: Top of Casing (TOC)							
Stick Up/Down (ft): 6" bgs	PID Headspace Reading: 0	Well Diameter (in): 2.0 in							
Purge Date: 18-Jul-17		Purge Time: 9:37							
Purge Method: Low Flow via Peristaltic Pump		Field Technician: PES							
Well Volume									
A. Well Depth (ft): 28.7	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: 6" bgs							
B. Depth to Water (ft): 17.98	E. Well Volume (gal) (C*D): 1.74736	Pump Type: Peristaltic Pump							
C. Liquid Depth (ft) (A-B): 10.72	F. Three Well Volumes (gal) (E3): 5.24208	Pump Intake Depth: NA							
Water Quality Parameters									
Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
937	6.37	0.212	9.6	10.4	14.11	176	17.97	0.30	0.9
940	6.32	0.21	0.5	8.72	17.82	206	17.97	0.30	1.8
943	6.31	0.209	0.3	8.68	17.69	212	17.97	0.30	2.7
946	6.31	0.209	0.2	8.47	17.97	220	18	0.30	3.6
949	6.3	0.207	0.1	8.44	17.98	224	18	0.30	4.5
952	6.31	0.207	0.0	8.29	17.97	225	18	0.30	5.4
955	6.31	0.206	0	8.22	18.22	227	18	0.30	6.3
Total Quantity of Water Removed (gal): <u>1.66</u>			Sampling Time: <u>10:00</u>						
Samplers: <u>PES</u>			Split Sample With: <u>--</u>						
Sampling Date: <u>7/18/2017</u>			Sample Type: <u>GW Grab</u>						
COMMENTS AND OBSERVATIONS: <u>No odor / sheen</u>									



EA Engineering, P.C.
EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-3D (onsite)	EA Personnel: PES	Client: NYSDEC							
Location: National Heatset Printing, Babylon, NY	Well Condition: Good	Weather: 81°F/ Sunny							
Sounding Method: Solinst 100-ft water level tape	Gauge Date: 7/18/2017 Gauge Time: 9:42	Measurement Ref: Top of Casing (TOC)							
Stick Up/Down (ft): Down 0.5"	PID Headspace Reading: 0	Well Diameter (in): 2.0 in							
Purge Date: 18-Jul-17		Purge Time: 9:45							
Purge Method: Low Flow via Peristaltic Pump		Field Technician: JZ							
Well Volume									
A. Well Depth (ft): 83.21	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: Down 0.5"							
B. Depth to Water (ft): 18.13	E. Well Volume (gal) (C*D): 10.60804	Pump Type: Peristaltic Pump							
C. Liquid Depth (ft) (A-B): 65.08	F. Three Well Volumes (gal) (E3): 31.82412	Pump Intake Depth: NA							
Water Quality Parameters									
Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
945	5.80	0.262	0.0	2.42	25.07	118	18.13	0.30	0.90
948	5.69	0.219	0.0	1.56	24.82	140	18.13	0.30	1.8
951	4.88	0.167	0.0	1.27	23.9	164	18.13	0.30	2.7
954	4.67	0.152	0.0	1.35	23.6	170	18.13	0.30	3.6
957	4.62	0.148	2.5	0.96	22.83	174	18.13	0.30	4.5
1000	4.62	0.146	3.1	0.88	22.66	177	18.13	0.30	5.4
1003	4.64	0.148	3.9	0.68	22.58	179	18.13	0.30	6.3
Total Quantity of Water Removed (gal): <u>1.66</u>					Sampling Time: <u>10:03</u>				
Samplers: <u>JZ</u>					Split Sample With: <u>--</u>				
Sampling Date: <u>7/18/2017</u>					Sample Type: <u>VOC- GW Grab</u>				
COMMENTS AND OBSERVATIONS: _____									



EA Engineering, P.C.
EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM

Well I.D.:	EA Personnel:	Client:							
DDC-4-PS	PES	NYSDEC							
Location:	Well Condition:	Weather:							
National Heatset Printing, Babylon, NY	Good	85 F / Sunny							
Sounding Method:	Gauge Date:	Measurement Ref:							
Solinst 100-ft water level tape	7/17/2017	Top of Casing (TOC)							
Stick Up/Down (ft):	Gauge Time:								
Down 1.5-ft	14:30								
	PID Headspace Reading:	Well Diameter (in):							
	0	2.0 in							
Purge Date: 17-Jul-17		Purge Time: 14:35							
Purge Method: Low Flow via Peristaltic Pump		Field Technician: PES							
Well Volume									
A. Well Depth (ft): 25.95	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: Down 1.5-ft							
B. Depth to Water (ft): 9.45	E. Well Volume (gal) (C*D): 2.6895	Pump Type: Peristaltic Pump							
C. Liquid Depth (ft) (A-B): 16.5	F. Three Well Volumes (gal) (E3): 8.0685	Pump Intake Depth: NA							
Water Quality Parameters									
Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1435	5.97	0.237	1.0	5.85	17.97	166	9.45	0.30	0.90
1438	5.70	0.24	1.5	5.69	17.45	188	9.45	0.30	1.80
1441	5.58	0.241	1.8	5.58	17.06	202	9.45	0.30	2.70
1444	5.52	0.242	1.2	11.74	16.86	212	9.45	0.30	3.60
1447	5.51	0.217	0.8	11.61	16.76	217	9.45	0.30	4.50
1450	5.5	0.242	0.8	11.50	16.74	219	9.45	0.30	5.40
1453	5.49	0.242	0.6	11.51	16.74	220	9.45	0.30	6.30
Total Quantity of Water Removed (gal): <u>1.66</u>			Sampling Time: <u>15:00</u>						
Samplers: <u>BC</u>			Split Sample With: <u>--</u>						
Sampling Date: <u>7/17/2017</u>			Sample Type: <u>VOC- GW Grab</u>						
COMMENTS AND OBSERVATIONS: <u>No odor / sheen</u>									



EA Engineering, P.C.
EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM

Well I.D.:	EA Personnel:	Client:							
DDC-4-PD	PES	NYSDEC							
Location:	Well Condition:	Weather:							
National Heatset Printing, Babylon, NY	Good	80°F/Cloudy							
Sounding Method:	Gauge Date:	Measurement Ref:							
Solinst 100-ft water level tape	7/17/2017	Top of Casing (TOC)							
Stick Up/Down (ft):	Gauge Time:								
Flush ~1.5' bgs	14:48:00								
PID Headspace Reading:	0	Well Diameter (in):							
2.0 in									
Purge Date: 17-Jul-17		Purge Time: 14:48							
Purge Method: Low Flow via Peristaltic Pump		Field Technician: JZ							
Well Volume									
A. Well Depth (ft): 78.5	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: Flush ~1.5' bgs							
B. Depth to Water (ft): 16.39	E. Well Volume (gal) (C*D): 10.12393	Pump Type: Peristaltic Pump							
C. Liquid Depth (ft) (A-B): 62.11	F. Three Well Volumes (gal) (E3): 30.37179	Pump Intake Depth: NA							
Water Quality Parameters									
Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1452	5.74	0.143	100.0	7.05	21.22	105	16.39	0.30	0.90
1455	5.2	0.137	86.2	5.50	19.66	125	16.39	0.30	1.80
1458	5.09	0.138	87.9	5.31	18.98	131	16.39	0.30	2.70
1501	5.01	0.138	83.6	5.16	18.97	138	16.39	0.30	3.60
1504	4.99	0.138	77.3	5.14	18.81	143	16.4	0.30	4.50
1507	4.96	0.141	74.0	5.12	18.81	150	16.39	0.30	5.40
1510	4.95	0.145	60.6	4.64	18.94	156	16.39	0.30	6.30
1513	4.94	0.15	61.2	4.58	19.38	158	16.39	0.30	7.20
1516	4.93	0.151	63.4	4.93	19.11	162	16.39	0.30	8.10
1519	4.91	0.162	50.7	4.87	19.13	168	16.39	0.30	9.00
1522	4.92	0.164	46.2	4.88	19.42	170	16.39	0.30	9.90
1525	4.94	0.168	44	5.01	19.4	171	16.39	0.30	10.80
Total Quantity of Water Removed (gal): 2.85			Sampling Time: 15:25						
Samplers: JZ			Split Sample With:						
Sampling Date: 7/17/2017			Sample Type: GW Grab						
COMMENTS AND OBSERVATIONS:									



**EA Engineering, P.C.
EA Science and Technology**

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-5S (onsite)	EA Personnel: PES	Client: NYSDEC							
Location: National Heatset Printing, Babylon, NY	Well Condition: Good	Weather: 80F / Partly Cloudy							
Sounding Method: Solinst 100-ft water level tape	Gauge Date: 7/17/2017 Gauge Time: 13:38:00	Measurement Ref: Top of Casing (TOC)							
Stick Up/Down (ft): Flush 3' bgs	PID Headspace Reading: 0	Well Diameter (in): 2.0 in							
Purge Date: 17-Jul-17		Purge Time: 13:41							
Purge Method: Low Flow via Peristaltic Pump		Field Technician: PES							
Well Volume									
A. Well Depth (ft): 26.9	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: Flush 3' bgs							
B. Depth to Water (ft): 16.51	E. Well Volume (gal) (C*D): 1.69357	Pump Type: Peristaltic Pump							
C. Liquid Depth (ft) (A-B): 10.39	F. Three Well Volumes (gal) (E3): 5.08071	Pump Intake Depth: NA							
Water Quality Parameters									
Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
13451	6.13	0.3	209.0	0.72	27.3	-117	16.51	0.30	0.90
1344	5.91	0.279	146.0	0.00	26.68	-104	16.51	0.30	1.80
1347	5.79	0.269	142.0	0.00	26.34	-97	16.5	0.30	2.70
1350	5.71	0.262	146.0	0.00	25.97	-88	16.5	0.30	3.60
1353	5.69	0.303	112.0	0.08	18.97	-91	16.5	0.30	4.50
1356	5.63	0.299	86.8	0.00	18.61	-83	16.5	0.30	5.40
1359	5.6	0.291	81.8	0.00	18.89	-77	16.5	0.30	6.30
1402	5.59	0.29	77.9	0.00	18.97	-74	16.5	0.30	7.20
1405	5.59	0.29	58.4	0	19	-70	16.5	0.30	8.10
1408	5.6	0.289	41.0	0.00	19.02	-69	16.51	0.30	9.00
1411	5.61	0.289	42.5	0	18.98	-67	16.5	0.30	9.90
1414	5.6	0.287	43.1	0	18.92	-64	16.5	0.30	10.80
Total Quantity of Water Removed (gal): 2.85			Sampling Time: 14:14						
Samplers: JZ			Split Sample With: --						



EA Engineering, P.C.
EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-5D (onsite)	EA Personnel: PES	Client: NYSDEC							
Location: National Heatset Printing, Babylon, NY	Well Condition: Okay/No Screws	Weather:							
Sounding Method: Solinst 100-ft water level tape	Gauge Date: 7/17/2017 Gauge Time: 13:40:00	Measurement Ref: Top of Casing (TOC)							
Stick Up/Down (ft): Flush 2" bgs	PID Headspace Reading: 0	Well Diameter (in): 2.0 in							
Purge Date: 17-Jul-17		Purge Time: 13:40							
Purge Method: Low Flow via Peristaltic Pump		Field Technician: PES							
Well Volume									
A. Well Depth (ft): 80.85	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: Flush 2" bgs							
B. Depth to Water (ft): 15.65	E. Well Volume (gal) (C*D): 10.6276	Pump Type: Peristaltic Pump							
C. Liquid Depth (ft) (A-B): 65.2	F. Three Well Volumes (gal) (E3): 31.8828	Pump Intake Depth: NA							
Water Quality Parameters									
Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0:00	6.81	0.295	5.1	6.43	21.56	114	15.67	0.30	0.90
1343	6.65	0.29	4.8	2.60	20.36	134	15.67	0.30	1.80
1346	6.04	0.293	3.7	1.60	19.06	156	15.68	0.30	2.70
1349	5.79	0.297	3.5	1.10	18.73	170	15.68	0.30	3.60
1352	5.5	0.304	2.7	0.05	17.44	189	15.68	0.30	4.50
1355	5.35	0.307	2.3	0.09	17.32	201	15.68	0.30	5.40
1358	5.31	0.309	2.6	0.00	17.02	207	15.68	0.30	6.30
1401	5.27	0.311	3.8	0.00	17.2	211	15.68	0.30	7.20
1404	5.25	0.312	2.1	0.00	17.06	215	15.68	0.30	8.10
1407	5.22	0.312	1.6	0.00	17.13	219	15.68	0.30	9.00
Total Quantity of Water Removed (gal): 2.38					Sampling Time: 1408				
Samplers: BC					Split Sample With: --				
Sampling Date: 7/17/2017					Sample Type: GW Grab				
COMMENTS AND OBSERVATIONS: No odor / sheen									



EA Engineering, P.C.
EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-15S	EA Personnel: PES	Client: NYSDEC
Location: National Heatset Printing, Babylon, NY	Well Condition: Good	Weather: 80°F / Cloudy
Sounding Method: Solinst 100-ft water level tape	Gauge Date: 7/17/2017 Gauge Time: 16:14:00	Measurement Ref: Top of Casing (TOC)
Stick Up/Down (ft): Down ~0.166' bgs	PID Headspace Reading: 0	Well Diameter (in): 1

Purge Date: 17-Jul-17	Purge Time: 16:18
Purge Method: Low Flow via Peristaltic Pump	Field Technician: JZ

Well Volume

A. Well Depth (ft): 27.44	D. Well Volume (ft): 0.041	Depth/Height of Top of PVC: Down ~0.166' bgs
B. Depth to Water (ft): 17.17	E. Well Volume (gal) (C*D): 0.42107	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 10.27	F. Three Well Volumes (gal) (E3): 1.26321	Pump Intake Depth: NA

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1618	5.45	0.262	55.4	9.15	20.42	127	17.19	0.30	0.90
1621	5.54	0.261	48.5	7.60	20.19	134	17.18	0.30	1.8
1624	5.55	0.262	60.1	7.12	20.56	138	17.18	0.30	2.7
1627	5.57	0.263	69.8	6.88	20.94	139	17.18	0.30	3.6
1630	5.60	0.261	71.2	6.00	21.59	140	17.18	0.30	4.5
1633	5.58	0.262	70.5	6.69	20.9	143	17.19	0.30	5.4
1636	5.59	0.265	50.1	6.65	20.85	143	17.19	0.30	6.3
1639	5.57	0.264	20.1	6.64	20.82	141	17.19	0.30	7.2
1641	5.57	0.266	19.3	6.62	20.84	141	17.19	0.30	8.1
1644	5.57	0.264	10.2	6.60	20.8	144	17.19	0.30	9

Total Quantity of Water Removed (gal): 0.00	Sampling Time: 16:45
Samplers: JZ	Split Sample With: Dup-1
Sampling Date: 7/17/2017	Sample Type: VOC- GW Grab

COMMENTS AND OBSERVATIONS: FD-1 Collected



EA Engineering, P.C.
EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM



EA Engineering, P.C.
EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: DDC-2-PD	EA Personnel: K. Thapa/ J. Marra	Client: NYSDEC							
Location: National Heatset Printing, Babylon, NY	Well Condition: Good	Weather: 72oF/Sunny							
Sounding Method: Solinst 100-ft water level tape	Gauge Date: 7/18/2017 Gauge Time: 7:35	Measurement Ref: Top of Casing (TOC)							
Stick Up/Down (ft): Down -1ft	PID Headspace Reading: 0	Well Diameter (in): 2.0 in							
Purge Date: 18-Jul-17		Purge Time: 7:40							
Purge Method: Low Flow via Peristaltic Pump		Field Technician: BC							
Well Volume									
A. Well Depth (ft): 79.55	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: Down -1ft							
B. Depth to Water (ft): 16.48	E. Well Volume (gal) (C*D): 10.28041	Pump Type: Peristaltic Pump							
C. Liquid Depth (ft) (A-B): 63.07	F. Three Well Volumes (gal) (E3): 30.84123	Pump Intake Depth: NA							
Water Quality Parameters									
Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
740	5.60	0.253	40.7	11.63	20.51	237	16.5	0.30	0.90
743	5.86	0.243	27.6	10.91	18.28	240	16.5	0.30	1.80
746	5.78	0.253	19.1	9.93	17.41	254	16.51	0.30	2.70
749	5.73	0.252	12.0	9.55	17.21	259	16.51	0.30	3.60
752	5.68	0.255	8.5	9.05	17.11	265	16.51	0.30	4.50
755	5.58	0.261	6.8	8.19	17.08	275	16.5	0.30	5.40
758	5.53	0.263	6.6	7.47	17.45	281	16.5	0.30	6.30
801	5.48	0.266	6.4	7.39	17.63	285	16.5	0.30	7.20
804	5.46	0.268	6.5	7.35	17.69	288	16.5	0.30	8.10
Total Quantity of Water Removed (gal): 2.14			Sampling Time: 8:11						
Samplers: BC			Split Sample With: --						
Sampling Date: 7/18/2017			Sample Type: GW Grab						
COMMENTS AND OBSERVATIONS: No odor / sheen									



EA Engineering, P.C.
EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM

Well I.D.:	EA Personnel:	Client:							
DDC-2-PS	PES	NYSDEC							
Location:	Well Condition:	Weather:							
National Heatset Printing, Babylon, NY	Good	85°F/Sunny							
Sounding Method:	Gauge Date:	Measurement Ref:							
Solinst 100-ft water level tape	7/18/2017	Top of Casing (TOC)							
Stick Up/Down (ft):	Gauge Time:								
Down 1' bgs	8:15:00								
PID Headspace Reading:	Well Diameter (in):								
0	2.0 in								
Purge Date:		Purge Time:							
18-Jul-17		8:20							
Purge Method:		Field Technician:							
Low Flow via Peristaltic Pump		BC							
Well Volume									
A. Well Depth (ft): 24.59	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: Down 1' bgs							
B. Depth to Water (ft): 15.32	E. Well Volume (gal) (C*D): 1.51101	Pump Type: Peristaltic Pump							
C. Liquid Depth (ft) (A-B): 9.27	F. Three Well Volumes (gal) (E3): 4.53303	Pump Intake Depth: NA							
Water Quality Parameters									
Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
820	6.36	0.127	9.7	4.79	19	220	15.38	0.30	0.90
823	6.42	0.108	7.3	3.55	18.9	220	15.38	0.30	1.8
826	6.44	0.104	6.1	2.50	18.57	222	15.37	0.30	2.7
829	6.45	0.106	4.5	2.31	18.39	223	15.37	0.30	3.6
832	6.42	0.107	5.7	2.14	15.3	223	15.37	0.30	4.5
835	6.4	0.108	4.2	2.05	18.26	227	15.37	0.30	5.4
838	6.39	0.108	3.9	2.01	18.12	228	15.37	0.30	6.3
Total Quantity of Water Removed (gal):			1.66			Sampling Time:			8:40
Samplers:			BC			Split Sample With:			--
Sampling Date:			7/18/2017			Sample Type:			VOC- GW Grab
COMMENTS AND OBSERVATIONS:									

A-5: Off-site Groundwater Monitoring Field Data



EA Engineering, P.C.
EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-2S (offsite)	EA Personnel: PES	Client: NYSDEC
Location: National Heatset Printing, Babylon, NY	Well Condition: Good	Weather: 85F/Sunny
Sounding Method: Solinst 100-ft water level tape	Gauge Date: 7/18/2017 Gauge Time: 14:50	Measurement Ref: Top of Casing (TOC)
Stick Up/Down (ft): Flush 5" bgs	PID Headspace Reading: 0	Well Diameter (in): 1.0-in

Purge Date: 18-Jul-17	Purge Time: 14:55
Purge Method: Low Flow via Peristaltic Pump	Field Technician: PES

Well Volume

A. Well Depth (ft): 23.89	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: Flush 5" bgs
B. Depth to Water (ft): 13.24	E. Well Volume (gal) (C*D): 1.73595	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 10.65	F. Three Well Volumes (gal) (E3): 5.20785	Pump Intake Depth: NA

Water Quality Parameters

Total Quantity of Water Removed (gal): 1.90

Samplers:

Sampling Date: 7/18/2017

Sampling Time: 1519

Split Sample With:

Sample Type: GW Grab

COMMENTS AND OBSERVATIONS:



EA Engineering, P.C. EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-2D (offsite)	EA Personnel: PES	Client: NYSDEC
Location: National Heatset Printing, Babylon, NY	Well Condition: Good	Weather: 85oF/Sunny
Sounding Method: Solinst 100-ft water level tape	Gauge Date: 7/18/2017 Gauge Time: 14:55	Measurement Ref: Top of Casing (TOC)
Stick Up/Down (ft): ~4" bgs	PID Headspace Reading: 0	Well Diameter (in): 1.0-in

Purge Date: 18-Jul-17	Purge Time: 14:58
Purge Method: Low Flow via Peristaltic Pump	Field Technician: PES

Well Volume

A. Well Depth (ft): 84.9	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: ~4" bgs
B. Depth to Water (ft): 13.35	E. Well Volume (gal) (C*D): 11.66265	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 71.55	F. Three Well Volumes (gal) (E3): 34.98795	Pump Intake Depth: NA

Water Quality Parameters

Total Quantity of Water Removed (gal): 1.66

Sampling Time: 13:25

Samplers: PES

Split Sample With:

Sampling Date: 7/18/2017

Sample Type: GW Grab

COMMENTS AND OBSERVATIONS:



EA Engineering, P.C.
EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-1S (offsite)	EA Personnel: PES	Client: NYSDEC
Location: National Heatset Printing, Babylon, NY	Well Condition: Good	Weather: 82F/Sunny
Sounding Method: Solinst 100-ft water level tape	Gauge Date: 7/18/2017 Gauge Time: 15:53	Measurement Ref: Top of Casing (TOC)
Stick Up/Down (ft): Down 0.25-ft	PID Headspace Reading: 0	Well Diameter (in): 1.0-in

Purge Date: 18-Jul-17	Purge Time: 15:55
Purge Method: Low Flow via Peristaltic Pump	Field Technician: BC

Well Volume

A. Well Depth (ft): 21.7	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: Down 0.25-ft
B. Depth to Water (ft): 8.81	E. Well Volume (gal) (C*D): 2.10107	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 12.89	F. Three Well Volumes (gal) (E3): 6.30321	Pump Intake Depth: NA

Water Quality Parameters

Total Quantity of Water Removed (gal): 1.43

Samplers: BC

Sampling Date: 7/18/2017

Sampling Time: 1621

Split Sample With:

Sample Type:

— —

GW Grab

COMMENTS AND OBSERVATIONS: No odor or sheen



EA Engineering, P.C.
EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-1D (offsite)	EA Personnel: PES	Client: NYSDEC
Location: National Heatset Printing, Babylon, NY	Well Condition: Good	Weather: 82F/Sunny
Sounding Method: Solinst 100-ft water level tape	Gauge Date: 7/18/2017 Gauge Time: 15:50	Measurement Ref: Top of Casing (TOC)
Stick Up/Down (ft): Down 0.25-ft	PID Headspace Reading: 0	Well Diameter (in): 1.0-in

Purge Date: 18-Jul-17	Purge Time: 15:54
Purge Method: Low Flow via Peristaltic Pump	Field Technician: JZ

Well Volume

A. Well Depth (ft): 85.06	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: Down 0.25-ft
B. Depth to Water (ft): 9.97	E. Well Volume (gal) (C*D): 12.23967	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 75.09	F. Three Well Volumes (gal) (E3): 36.71901	Pump Intake Depth: NA

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1554	5.62	0.138	0	0.25	23.49	9	9.97	--	-
1557	5.45	0.138	0	0.00	22.92	40	9.98	0.30	0.9
1600	5.26	0.138	0	0.00	22.32	74	10.01	0.30	1.8
1603	5.22	0.138	0	0.00	22.18	85	10.01	0.30	2.7
1606	5.16	0.139	2.1	0.00	22.11	97	10.05	0.30	3.6
1609	5.13	0.138	0.5	0.00	22.1	107	10.07	0.30	4.5
1612	5.1	0.138	0	0.00	22.11	114	10.08	0.30	5.4
1615	5.07	0.137	0	0.00	22.05	120	10.1	0.30	6.3
1618	5.06	0.137	0	0	21.98	124	10.1	0.30	7.2

Total Quantity of Water Removed (gal): 1.90	Sampling Time: 1618
Samplers: PES	Split Sample With: --
Sampling Date: 7/18/2017	Sample Type: GW Grab

COMMENTS AND OBSERVATIONS:



EA Engineering, P.C.
EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-3S (onsite)	EA Personnel: EGC	Client: NYSDEC
Location: National Heatset Printing, Babylon, NY	Well Condition: No bolts	Weather: 80F/Sunny
Sounding Method: Solinst 100-ft water level tape	Gauge Date: 7/19/2017 Gauge Time: 7:10	Measurement Ref: Top of Casing (TOC)
Stick Up/Down (ft): Down ~1"	PID Headspace Reading: 0	Well Diameter (in): 1.0 in

Purge Date: 19-Jul-17	Purge Time: 715
Purge Method: Low Flow via Peristaltic Pump	Field Technician: EGC

Well Volume

A. Well Depth (ft): 21.98	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: Down ~1"
B. Depth to Water (ft): 9.21	E. Well Volume (gal) (C*D): 2.08151	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 12.77	F. Three Well Volumes (gal) (E3): 6.24453	Pump Intake Depth: NA

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
716	6.94	0.322	10.7	4.95	22.02	165	9.21	0.30	--
719	6.11	0.371	5.3	3.84	20.58	201	9.4	0.30	0.9
722	6.07	0.389	4.5	3.69	20.26	207	9.4	0.30	1.8
725	5.99	0.409	5.7	3.35	20.01	218	9.4	0.30	2.7
730	5.92	0.44	5.7	2.81	19.84	231	9.4	0.30	3.6
733	5.91	0.448	5.5	2.77	19.7	234	9.4	0.30	4.5
736	5.87	0.465	5.7	2.59	19.66	240	9.4	0.30	5.4
739	5.85	0.476	5.2	2.47	19.69	244	9.4	0.30	6.3
742	5.83	0.477	5	2.39	19.79	249	9.4	0.30	7.2

Total Quantity of Water Removed (gal): 1.90	Sampling Time: 742
Samplers: EGC	Split Sample With: --
Sampling Date: 7/19/2017	Sample Type: GW Grab

COMMENTS AND OBSERVATIONS: _____



**EA Engineering, P.C.
EA Science and Technology**

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-3D (offsite)	EA Personnel: PES	Client: NYSDEC
Location: National Heatset Printing, Babylon, NY	Well Condition: Good	Weather: 79F/ Sunny
Sounding Method: Solinst 100-ft water level tape	Gauge Date: 7/19/2017 Gauge Time: 7:11:00	Measurement Ref: Top of Casing (TOC)
Stick Up/Down (ft): ~1" bgs	PID Headspace Reading: 0	Well Diameter (in): 1.0 in

Purge Date: 19-Jul-17	Purge Time: 7:17
Purge Method: Low Flow via Peristaltic Pump	Field Technician: JZ

Well Volume

A. Well Depth (ft): 88.59	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: ~1" bgs
B. Depth to Water (ft): 9.51	E. Well Volume (gal) (C*D): 12.89004	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 79.08	F. Three Well Volumes (gal) (E3): 38.67012	Pump Intake Depth: NA

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
717	5.88	0.087	6.6	1.47	23.04	-133	9.51	0.30	--
720	5.28	0.12	0	0.26	21.4	-89	9.56	0.30	0.9
723	4.98	0.148	0	1.69	20.01	-15	9.56	0.30	1.5
726	4.88	0.153	0	1.83	19.66	-1	9.56	0.30	2.4
729	4.86	0.158	2.5	1.85	19.26	15	9.56	0.30	3.3
732	4.84	0.161	0	1.80	18.95	17	9.56	0.30	4.2
735	4.83	0.162	0.9	1.82	18.76	19	9.56	0.30	5.1
738	4.82	0.163	0	1.77	18.65	23	9.56	0.30	6
741	4.8	0.164	0	1.76	18.56	23	9.56	0.30	6.9

Total Quantity of Water Removed (gal):	1.82	Sampling Time:	741
Samplers:	JZ	Split Sample With:	--
Sampling Date:	7/19/2017	Sample Type:	GW Grab

COMMENTS AND OBSERVATIONS: _____



EA Engineering, P.C.
EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: DDC-5-PS	EA Personnel: EGC	Client: NYSDEC
Location: National Heatset Printing, Babylon, NY	Well Condition: Good	Weather: 80 F / Sun
Sounding Method: Solinst 100-ft water level tape	Gauge Date: 7/19/2017 Gauge Time: 8:30	Measurement Ref: Top of Casing (TOC)
Stick Up/Down (ft): Up 3.0 ft.	PID Headspace Reading: 0	Well Diameter (in): 2

Purge Date: 19-Jul-17	Purge Time: 8:30
Purge Method: Low Flow via Peristaltic Pump	Field Technician: EC

Well Volume

A. Well Depth (ft): 80	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: Up 3.0 ft.
B. Depth to Water (ft): 11.72	E. Well Volume (gal) (C*D): 2.97964	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 18.28	F. Three Well Volumes (gal) (E3): 8.93892	Pump Intake Depth: NA

Water Quality Parameters

Total Quantity of Water Removed (gal): 1.19

Samplers: EC

Sampling Date: 7/19/2017

Sampling Time: 8:49

Split Sample With:

Sample Type: GW Grab

COMMENTS AND OBSERVATIONS:



EA Engineering, P.C.
EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: DDC-5-PD	EA Personnel: PES	Client: NYSDEC
Location: National Heatset Printing, Babylon, NY	Well Condition: Good	Weather: 81 F / Sunny
Sounding Method: Solinst 100-ft water level tape	Gauge Date: 7/19/2017 Gauge Time: 8:30	Measurement Ref: Top of Casing (TOC)
Stick Up/Down (ft): Up 3.0 ft.	PID Headspace Reading: 0	Well Diameter (in): 2

Purge Date: 19-Jul-17	Purge Time: 8:34
Purge Method: Low Flow via Peristaltic Pump	Field Technician: JZ

Well Volume

A. Well Depth (ft): 81.88	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: Up 3.0 ft.
B. Depth to Water (ft): 15.29	E. Well Volume (gal) (C*D): 10.85417	Pump Type: <u>Peristaltic Pump</u>
C. Liquid Depth (ft) (A-B): 66.59	F. Three Well Volumes (gal) (E3): 32.56251	Pump Intake Depth: NA

Water Quality Parameters

Total Quantity of Water Removed (gal): 1.43
Samplers: JZ
Sampling Date: 7/19/2017

Sampling Time: 8:52
Split Sample With: --
Sample Type: GW Gra

COMMENTS AND OBSERVATIONS:



EA Engineering, P.C.
EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM

Well I.D.:	EA Personnel:	Client:
DDC-6-PS	EGC	NYSDEC
Location: National Heatset Printing, Babylon, NY	Well Condition: Good	Weather: 80 F / Sunny
Sounding Method: Solinst 100-ft water level tape	Gauge Date: 7/19/2017 Gauge Time: 7:55	Measurement Ref: Top of Casing (TOC)
Stick Up/Down (ft): Down 0.5-ft	PID Headspace Reading: 0	Well Diameter (in): 2.0-in

Purge Date: 19-Jul-17	Purge Time: 7:55
Purge Method: Low Flow via Peristaltic Pump	Field Technician: EGC

Well Volume

A. Well Depth (ft): 29.19	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: Down 0.5-ft
B. Depth to Water (ft): 9.75	E. Well Volume (gal) (C*D): 3.16872	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 19.44	F. Three Well Volumes (gal) (E3): 9.50616	Pump Intake Depth: NA

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
757	6.05	0.203	2	7.85	21.29	237	9.75	0.30	-
800	5.77	0.185	2.6	7.00	20.44	258	9.75	0.30	0.9
803	5.75	0.183	2.1	6.66	20.19	264	9.75	0.30	1.8
86	5.77	0.183	2	6.49	20.15	266	9.76	0.30	2.7
809	5.80	0.183	2.3	6.34	20.15	270	9.75	0.30	3.6
812	5.79	0.185	2.3	6.25	20.20	275	9.75	0.30	4.5

Total Quantity of Water Removed (gal): Samplers: EGC	1.19	Sampling Time: Split Sample With: Sample Type:	812 -- GW Grab
Sampling Date:	7/19/2017		

COMMENTS AND OBSERVATIONS:



EA Engineering, P.C.
EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM

Well I.D.:	EA Personnel:	Client:
DDC-6-PD	PES	NYSDEC
Location:	Well Condition:	Weather:
National Heatset Printing, Babylon, NY	Good	79 F / Sunny
Sounding Method:	Gauge Date:	Measurement Ref:
Solinst 100-ft water level tape	7/19/2017	Top of Casing (TOC)
Stick Up/Down (ft):	Gauge Time:	
Down ~0.33-ft	7:54	
	PID Headspace Reading:	Well Diameter (in):
	0	2.0-in

Purge Date:	Purge Time:
19-Jul-17	7:58
Purge Method:	Field Technician:
Low Flow via Peristaltic Pump	JZ

Well Volume

A. Well Depth (ft): 80.21	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: Down ~0.33-ft
B. Depth to Water (ft): 9.96	E. Well Volume (gal) (C*D): 11.45075	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 70.25	F. Three Well Volumes (gal) (E3): 34.35225	Pump Intake Depth: NA

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
758	5.10	0.193	4.9	4.49	20.03	30	9.96	0.30	-
801	5.14	0.202	0.9	4.47	19.4	58	9.95	0.30	0.9
804	5.2	0.22	0.3	2.71	19.16	64	9.96	0.30	1.8
807	5.27	0.24	0.4	1.44	19.02	71	9.97	0.30	2.7
810	5.27	2.48	0.4	1.35	19.01	76	9.97	0.30	3.6
813	5.3	2.62	1.3	1.08	19.20	80	9.97	0.30	4.5
816	5.31	0.267	1.2	1.01	19.2	83	9.96	0.30	5.4
819	5.31	0.27	1.4	0.99	19.27	87	9.96	0.30	6.3

Total Quantity of Water Removed (gal):	1.66	Sampling Time:	819
Samplers:	JZ	Split Sample With:	--
Sampling Date:	7/19/2017	Sample Type:	GW Grab

COMMENTS AND OBSERVATIONS: _____



EA Engineering, P.C.
EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: DDC-7-PS	EA Personnel: PES	Client: NYSDEC
Location: National Heatset Printing, Babylon, NY	Well Condition: Good	Weather: 81F / Sunny
Sounding Method: Solinst 100-ft water level tape	Gauge Date: 7/18/2017 Gauge Time: 11:20	Top of Casing (TOC)
Stick Up/Down (ft): Down ~8"	PID Headspace Reading: 0 ppm	Well Diameter (in): 2.0-in

Purge Date: 18-Jul-17	Purge Time: 11:26
Purge Method: Low Flow via Peristaltic Pump	Field Technician: JZ

Well Volume

A. Well Depth (ft): 27.53	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: Down ~8"
B. Depth to Water (ft): 9.88	E. Well Volume (gal) (C*D): 2.87695	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 17.65	F. Three Well Volumes (gal) (E3): 8.63085	Pump Intake Depth: NA

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1126	5.18	0.225	0	5.79	29.37	132	9.88	0.30	-
1129	5.23	0.219	0	5.37	26.01	136	9.89	0.30	0.9
1132	5.25	0.227	5.9	5.03	24.73	137	9.88	0.30	1.8
1135	5.26	0.228	11.1	5.01	24.17	138	9.88	0.30	2.7
1138	5.29	0.227	13.4	5.28	23.47	139	9.89	0.30	3.6
1141	5.31	0.231	15.1	5.30	23.75	138	9.88	0.30	4.5
1144	5.33	0.234	16.3	5.39	23.72	139	9.88	0.30	5.4

Total Quantity of Water Removed (gal): <u>1.43</u>	Sampling Time: <u>1144</u>
Samplers: <u>JZ</u>	Split Sample With: <u>--</u>
Sampling Date: <u>7/18/2017</u>	Sample Type: <u>GW Grab</u>

COMMENTS AND OBSERVATIONS:



EA Engineering, P.C.
EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: DDC-7-PD	EA Personnel: PES	Client: NYSDEC
Location: National Heatset Printing, Babylon, NY	Well Condition: Good	Weather: 90 F / Sunny
Sounding Method: Solinst 100-ft water level tape	Gauge Date: 7/18/2017 Gauge Time: 11:15	Measurement Ref: Top of Casing (TOC)
Stick Up/Down (ft): Down 1.0-ft	PID Headspace Reading: 0	Well Diameter (in): 2.0-in

Purge Date: 18-Jul-17	Purge Time: 11:26
Purge Method: Low Flow via Peristaltic Pump	Field Technician: BC

Well Volume

A. Well Depth (ft): 81.85	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: Down 1.0-ft
B. Depth to Water (ft): 12.4	E. Well Volume (gal) (C*D): 11.32035	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 69.45	F. Three Well Volumes (gal) (E3): 33.96105	Pump Intake Depth: NA

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1120	6.42	0.209	6.5	7.30	23.23	169	12.4	0.30	-
1123	6.23	0.235	2.5	5.12	20.26	190	12.4	0.30	0.9
1126	6.17	0.252	1.3	4.46	18.88	205	12.4	0.30	1.8
1129	6.11	0.26	0.9	3.85	17.84	218	12.4	0.30	2.7
1132	6.05	0.260	1.2	3.46	17.68	227	12.4	0.30	3.6
1135	5.98	0.261	1.3	3.15	17.54	237	12.4	0.30	4.5
1138	5.88	0.26	0.8	3.09	17.57	241	12.4	0.30	5.4

Total Quantity of Water Removed (gal): 1.43	Sampling Time: 11:42
Samplers: BC	Split Sample With: --
Sampling Date: 7/18/2017	Sample Type: GW Grab

COMMENTS AND OBSERVATIONS: No sheen nor odor



EA Engineering, P.C.
EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: DDC-8-PS	EA Personnel: PES	Client: NYSDEC
Location: National Heatset Printing, Babylon, NY	Well Condition: Good	Weather: 81 F / Sunny
Sounding Method: Solinst 100-ft water level tape	Gauge Date: 7/18/2017 Gauge Time: 12:10	Measurement Ref: Top of Casing (TOC)
Stick Up/Down (ft): Down 1.0-ft	PID Headspace Reading: 0	Well Diameter (in): 2.0-in

Purge Date: 18-Jul-17	Purge Time: 12:18
Purge Method: Low Flow via Peristaltic Pump	Field Technician: BC

Well Volume

A. Well Depth (ft): 26.21	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: Down 1.0-ft
B. Depth to Water (ft): 9.46	E. Well Volume (gal) (C*D): 2.73025	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 16.75	F. Three Well Volumes (gal) (E3): 8.19075	Pump Intake Depth: NA

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1218	5.98	0.209	0	8.51	25.26	108	9.45	0.30	-
1221	5.91	0.204	0	5.89	24.27	110	9.5	0.30	0.9
1224	5.76	2.06	0	5.03	23.23	117	9.5	0.30	1.8
1227	5.57	0.208	0	5.24	22.23	74	9.52	0.30	2.7
1230	5.48	0.209	4.1	5.28	21.88	133	9.55	0.30	3.6
1233	5.44	0.21	6	5.15	21.64	137	9.55	0.30	4.5
1236	5.4	0.211	8	5.24	21.57	140	9.56	0.30	5.4
1239	5.39	0.21	7.1	5.30	21.33	137	9.53	0.30	6.3

Total Quantity of Water Removed (gal): Samplers: Sampling Date:	1.66 BC 7/18/2017	Sampling Time: Split Sample With: Sample Type:	12:45 -- GW Grab
---	-------------------------	--	------------------------

COMMENTS AND OBSERVATIONS:	No odor/sheen



EA Engineering, P.C.
EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: DDC-8-PD	EA Personnel: PES	Client: NYSDEC
Location: National Heatset Printing, Babylon, NY	Well Condition: Good	Weather: 81 F / Sunny
Sounding Method: Solinst 100-ft water level tape	Gauge Date: 7/18/2017 Gauge Time: 12:03	Measurement Ref: Top of Casing (TOC)
Stick Up/Down (ft): Down 1.0-ft	PID Headspace Reading: 0	Well Diameter (in): 2.0-in

Purge Date: 18-Jul-17	Purge Time: 12:08
Purge Method: Low Flow via Peristaltic Pump	Field Technician: JZ

Well Volume

A. Well Depth (ft): 84.42	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: Down 1.0-ft
B. Depth to Water (ft): 13.95	E. Well Volume (gal) (C*D): 11.48661	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 70.47	F. Three Well Volumes (gal) (E3): 34.45983	Pump Intake Depth: NA

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1208	6.47	0.200	0.0	10.83	22.42	186	13.98	0.30	-
1211	6.26	0.2	0.5	9.27	18.75	211	14.05	0.30	0.9
1214	6.25	0.199	0.6	8.76	18.41	219	14	0.30	1.8
1217	6.25	0.197	0.4	8.54	18.47	224	14.01	0.30	2.7
1220	6.23	0.198	0.0	8.42	17.73	232	14.01	0.30	3.6
1223	6.21	0.2	0.1	8.36	17.43	238	14.03	0.30	4.5
1226	6.18	0.199	0	8.22	17.37	244	14	0.30	5.4
1229	6.17	0.199	0	8.24	17.47	246	14.02	0.30	6.3

Total Quantity of Water Removed (gal): 1.66	Sampling Time: 12:29
Samplers: JZ	Split Sample With:
Sampling Date: 7/18/2017	Sample Type: GW Grab

COMMENTS AND OBSERVATIONS:



EA Engineering, P.C.
EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: DDC-9-PS	EA Personnel: PES	Client: NYSDEC
Location: National Heatset Printing, Babylon, NY	Well Condition: Good	Weather: 82F/Sunny
Sounding Method: Solinst 100-ft water level tape	Gauge Date: 7/18/2017 Gauge Time: 13:20	Measurement Ref: Top of Casing (TOC)
Stick Up/Down (ft): Down 1.0-ft	PID Headspace Reading: 0	Well Diameter (in): 2.0-in

Purge Date: 18-Jul-17	Purge Time: 13:30
Purge Method: Low Flow via Peristaltic Pump	Field Technician: BC

Well Volume

A. Well Depth (ft): 28.76	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: Down 1.0-ft
B. Depth to Water (ft): 10.55	E. Well Volume (gal) (C*D): 2.96823	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 18.21	F. Three Well Volumes (gal) (E3): 8.90469	Pump Intake Depth: NA

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1030	5.80	0.213	0.0	9.05	23.66	99	10.59	0.30	-
1033	5.78	0.21	0.0	6.93	22.68	101	10.6	0.30	0.9
1036	5.62	0.21	0.0	5.54	22.15	112	10.6	0.30	1.8
1039	5.59	0.211	0.0	5.58	21.95	118	10.6	0.30	2.7
1042	5.54	0.211	0.0	5.63	21.78	120	10.6	0.30	3.6
1045	5.46	0.212	0.0	5.75	21.51	126	10.6	0.30	4.5
1048	5.56	0.213	0.0	5.77	21.46	128	10.6	0.30	5.4

Total Quantity of Water Removed (gal): <u>1.43</u>	Sampling Time: <u>13:50</u>
Samplers: <u>BC</u>	Split Sample With: <u>--</u>
Sampling Date: <u>7/18/2017</u>	Sample Type: <u>GW Grab</u>

COMMENTS AND OBSERVATIONS: No Odor/Sheen



EA Engineering, P.C.
EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM

Well I.D.:	EA Personnel:	Client:
DDC-9-PD	PES	NYSDEC
Location:	Well Condition:	Weather:
National Heatset Printing, Babylon, NY	Good	60F/Sunny
Sounding Method:	Gauge Date:	Measurement Ref:
Solinst 100-ft water level tape	7/18/2017	Top of Casing (TOC)
Stick Up/Down (ft):	Gauge Time:	
Down 1.0-ft	13:08	
	PID Headspace Reading:	Well Diameter (in):
	0	2.0-in

Purge Date:	Purge Time:
18-Jul-17	13:19
Purge Method:	Field Technician:
Low Flow via Peristaltic Pump	BC

Well Volume

A. Well Depth (ft): 81.26	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: Down 1.0-ft
B. Depth to Water (ft): 14.73	E. Well Volume (gal) (C*D): 10.84439	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 66.53	F. Three Well Volumes (gal) (E3): 32.53317	Pump Intake Depth: NA

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1319	6.52	0.172	2	11.49	22.36	177	14.71	0.30	-
1322	6.23	0.142	1.1	9.98	22.2	197	14.75	0.30	0.9
1325	6.14	0.139	0.9	9.21	21.2	207	14.75	0.30	1.8
1328	6.07	0.140	0.9	8.61	20.95	219	14.74	0.30	2.7
1331	6.04	0.140	0.6	7.72	22.24	224	14.74	0.30	3.6
1334	6.08	0.140	0.5	7.54	22.01	228	14.74	0.30	4.5
1337	6.07	0.141	0.4	7.70	22.14	231	14.74	0.30	5.4

Total Quantity of Water Removed (gal):	1.43	Sampling Time:	13:37
Samplers:	BC	Split Sample With:	--
Sampling Date:	7/18/2017	Sample Type:	GW Grab

COMMENTS AND OBSERVATIONS:



EA Engineering, P.C.
EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: DDC-10-PS	EA Personnel: PES	Client: NYSDEC
Location: National Heatset Printing, Babylon, NY	Well Condition: Missing PVC cap	Weather: 60F/Sunny
Sounding Method: Solinst 100-ft water level tape	Gauge Date: 7/18/2017 Gauge Time: 14:05	Measurement Ref: Top of Casing (TOC)
Stick Up/Down (ft): Down 0.5-ft	PID Headspace Reading: 0	Well Diameter (in): 2.0-in

Purge Date: 18-Jul-17	Purge Time: 14:09
Purge Method: Low Flow via Peristaltic Pump	Field Technician: BC

Well Volume

A. Well Depth (ft): 27.77	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: Down 0.5-ft
B. Depth to Water (ft): 11.34	E. Well Volume (gal) (C*D): 2.67809	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 16.43	F. Three Well Volumes (gal) (E3): 8.03427	Pump Intake Depth: NA

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1409	6.27	0.181	0.4	11.39	18.16	234	11.21	0.30	-
1412	6	0.182	0.7	11.00	18.18	237	11.2	0.30	0.9
1415	5.89	0.183	0.7	9.78	17.8	256	11.2	0.30	1.8
1418	5.8	0.183	0.5	9.54	17.68	267	11.2	0.30	2.7
1421	5.74	0.183	0.4	9.48	17.37	275	11.2	0.30	3.6
1424	5.61	0.183	0	9.39	17.34	281	11.2	0.30	4.5
1427									

Total Quantity of Water Removed (gal): 1.19	Sampling Time: 14:30
Samplers: BC	Split Sample With: --
Sampling Date: 7/18/2017	Sample Type: GW Grab

COMMENTS AND OBSERVATIONS:



EA Engineering, P.C.
EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: DDC-10-PD	EA Personnel: PES	Client: NYSDEC
Location: National Heatset Printing, Babylon, NY	Well Condition: Good	Weather: 50s/Sunny
Sounding Method: Solinst 100-ft water level tape	Gauge Date: 7/18/2017 Gauge Time: 14:05	Measurement Ref: Top of Casing (TOC)
Stick Up/Down (ft): Down 0.5 ft	PID Headspace Reading: 0	Well Diameter (in): 2.0-in

Purge Date: 18-Jul-17	Purge Time: 14:10
Purge Method: Low Flow via Peristaltic Pump	Field Technician: PES

Well Volume

A. Well Depth (ft): 81.14	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: Down 0.5 ft
B. Depth to Water (ft): 11.07	E. Well Volume (gal) (C*D): 11.42141	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 70.07	F. Three Well Volumes (gal) (E3): 34.26423	Pump Intake Depth: NA

Water Quality Parameters

Total Quantity of Water Removed (gal): 1.43

Samplers: JZ

Sampling Date: 7/18/2017

Sampling Time:

14:28

Split Sample With:

GW Grab

COMMENTS AND OBSERVATIONS:

Attachment B

Laboratory Analytical Data – System Vapor Samples

8/2/2017

Mr. Jim Hayward
EA Engineering
6712 Brooklawn Parkway

Syracuse NY 13211

Project Name: Heatset

Project #:
Workorder #: 1707435

Dear Mr. Jim Hayward

The following report includes the data for the above referenced project for sample(s) received on 7/28/2017 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Ausha Scott
Project Manager

A Eurofins Lancaster Laboratories Company

WORK ORDER #: 1707435

Work Order Summary

CLIENT: Mr. Jim Hayward
 EA Engineering
 6712 Brooklawn Parkway
 Syracuse, NY 13211

BILL TO: Accounts Payable
 EA Engineering
 3 Washington Center
 Newburgh, NY 12550

PHONE: 315-431-4610 **P.O. #:** 1490716
FAX: 315-431-4280 **PROJECT #:** Heatset
DATE RECEIVED: 07/28/2017 **CONTACT:** Ausha Scott
DATE COMPLETED: 08/02/2017

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	SVE Influent	TO-15	7.1 "Hg	4.7 psi
02A	SVE Effluent	TO-15	7.1 "Hg	4.3 psi
03A	System 1 Inf	TO-15	6.9 "Hg	5.1 psi
04A	System 1 Mid	TO-15	8.2 "Hg	4.7 psi
05A	System 1 Eff	TO-15	6.3 "Hg	5 psi
06A	Sys #2 - Infl #2	TO-15	9.4 "Hg	4.5 psi
07A	Sys #2 - Eff	TO-15	7.8 "Hg	4.8 psi
08A	Sys #2 - Inf #1	TO-15	7.6 "Hg	4.6 psi
09A	Offsite intermediate #1	TO-15	7.8 "Hg	5.2 psi
10A	Offsite intermediate #2	TO-15	7.6 "Hg	5.1 psi
11A	Offsite inlet	TO-15	5.7 "Hg	4.8 psi
12A	Offsite eff	TO-15	7.6 "Hg	4.5 psi
13A	Lab Blank	TO-15	NA	NA
14A	CCV	TO-15	NA	NA
15A	LCS	TO-15	NA	NA
15AA	LCSD	TO-15	NA	NA

CERTIFIED BY:

DATE: 08/02/17

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
 TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
 Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)

Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.

Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

**LABORATORY NARRATIVE
EPA Method TO-15
EA Engineering
Workorder# 1707435**

Twelve 6 Liter Summa Canister samples were received on July 28, 2017. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

The Chain of Custody (COC) information for samples SVE Influent and Sys #2 - Infl #2 did not match the information on the canisters with regard to canister identification. The client was notified of the discrepancy and the information on the canisters was used to process and report the samples.

The Chain of Custody (COC) information for sample Offsite inlet did not match the entry on the sample tag with regard to sample identification. The information on the COC was used to process and report the sample.

Analytical Notes

Dilution was performed on samples SVE Influent and System 1 Inf due to the presence of high level target species.

Dilution was performed on sample Sys #2 - Inf #1 due to matrix interference.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue



Air Toxics

Summary of Detected Compounds EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVE Influent**Lab ID#: 1707435-01A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	4.9	42	20	160
1,1,1-Trichloroethane	4.9	9.2	27	50
Trichloroethene	4.9	120	26	630
Tetrachloroethene	4.9	1100	34	7400

Client Sample ID: SVE Effluent**Lab ID#: 1707435-02A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Ethanol	3.4	5.5	6.4	10
trans-1,2-Dichloroethene	0.84	1.2	3.4	5.0
cis-1,2-Dichloroethene	0.84	57	3.4	220
Tetrahydrofuran	0.84	5.8	2.5	17
Chloroform	0.84	1.5	4.1	7.5
Toluene	0.84	1.8	3.2	6.8
Tetrachloroethene	0.84	3.5	5.7	24

Client Sample ID: System 1 Inf**Lab ID#: 1707435-03A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Toluene	2.2	4.1	8.2	15
Tetrachloroethene	2.2	560	15	3800

Client Sample ID: System 1 Mid**Lab ID#: 1707435-04A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Ethanol	3.6	4.4	6.8	8.3
cis-1,2-Dichloroethene	0.91	1.8	3.6	7.1
Chloroform	0.91	2.2	4.4	11
Toluene	0.91	1.4	3.4	5.3

Summary of Detected Compounds EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: System 1 Mid

Lab ID#: 1707435-04A

Tetrachloroethene	0.91	1.9	6.2	13
-------------------	------	-----	-----	----

Client Sample ID: System 1 Eff

Lab ID#: 1707435-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Ethanol	3.4	4.7	6.4	8.8
cis-1,2-Dichloroethene	0.85	1.6	3.4	6.3
Chloroform	0.85	1.4	4.2	7.1
Benzene	0.85	1.9	2.7	6.0
Toluene	0.85	2.6	3.2	9.7
Tetrachloroethene	0.85	3.2	5.8	22

Client Sample ID: Sys #2 - Infl #2

Lab ID#: 1707435-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Ethanol	3.8	12	7.2	22
Acetone	9.5	48	22	110
Hexane	0.95	1.1	3.3	3.9
2-Butanone (Methyl Ethyl Ketone)	3.8	18	11	54
cis-1,2-Dichloroethene	0.95	10	3.8	40
Tetrahydrofuran	0.95	57	2.8	170
Chloroform	0.95	2.6	4.6	13
Toluene	0.95	2.7	3.6	10
Tetrachloroethene	0.95	42	6.4	280

Client Sample ID: Sys #2 - Eff

Lab ID#: 1707435-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.90	0.96	2.3	2.4
Ethanol	3.6	4.4	6.7	8.2
Acetone	9.0	46	21	110



Air Toxics

Summary of Detected Compounds EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: Sys #2 - Eff**Lab ID#: 1707435-07A**

Hexane	0.90	1.0	3.2	3.5
2-Butanone (Methyl Ethyl Ketone)	3.6	19	10	56
cis-1,2-Dichloroethene	0.90	11	3.5	44
Tetrahydrofuran	0.90	64	2.6	190
Chloroform	0.90	2.5	4.4	12
Toluene	0.90	1.3	3.4	4.8

Client Sample ID: Sys #2 - Inf #1**Lab ID#: 1707435-08A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	7.0	11	28	44
Tetrahydrofuran	7.0	47	21	140
Tetrachloroethene	7.0	44	48	300

Client Sample ID: Offsite intermediate #1**Lab ID#: 1707435-09A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.92	3.3	2.3	8.4
Ethanol	3.7	4.3	6.9	8.0
1,1-Dichloroethene	0.92	1.5	3.6	5.8
Acetone	9.2	88	22	210
trans-1,2-Dichloroethene	0.92	2.5	3.6	9.8
1,1-Dichloroethane	0.92	2.1	3.7	8.4
2-Butanone (Methyl Ethyl Ketone)	3.7	26	11	77
cis-1,2-Dichloroethene	0.92	160	3.6	660
Tetrahydrofuran	0.92	74	2.7	220
Chloroform	0.92	2.4	4.5	12
Trichloroethene	0.92	65	4.9	350
Toluene	0.92	1.5	3.4	5.6

Client Sample ID: Offsite intermediate #2**Lab ID#: 1707435-10A**



Air Toxics

Summary of Detected Compounds EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: Offsite intermediate #2**Lab ID#: 1707435-10A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.90	2.9	2.3	7.5
Ethanol	3.6	6.1	6.8	11
1,1-Dichloroethene	0.90	1.4	3.6	5.6
Acetone	9.0	63	21	150
trans-1,2-Dichloroethene	0.90	3.4	3.6	13
1,1-Dichloroethane	0.90	2.1	3.6	8.4
2-Butanone (Methyl Ethyl Ketone)	3.6	27	11	79
cis-1,2-Dichloroethene	0.90	250	3.6	1000
Tetrahydrofuran	0.90	79	2.6	230
Chloroform	0.90	3.2	4.4	16
Toluene	0.90	1.4	3.4	5.2

Client Sample ID: Offsite inlet**Lab ID#: 1707435-11A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.82	2.7	2.1	6.9
Ethanol	3.3	4.4	6.2	8.4
1,1-Dichloroethene	0.82	1.5	3.2	5.9
Acetone	8.2	63	19	150
trans-1,2-Dichloroethene	0.82	2.7	3.2	11
Hexane	0.82	0.83	2.9	2.9
1,1-Dichloroethane	0.82	2.3	3.3	9.3
2-Butanone (Methyl Ethyl Ketone)	3.3	23	9.7	67
cis-1,2-Dichloroethene	0.82	200	3.2	790
Tetrahydrofuran	0.82	85	2.4	250
Chloroform	0.82	7.3	4.0	36
Heptane	0.82	1.0	3.4	4.3
Trichloroethene	0.82	9.3	4.4	50
Toluene	0.82	1.5	3.1	5.5
Tetrachloroethene	0.82	6.4	5.6	43

**Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN**

Client Sample ID: Offsite eff

Lab ID#: 1707435-12A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.88	2.9	2.2	7.5
1,1-Dichloroethene	0.88	1.6	3.5	6.3
Acetone	8.8	63	21	150
trans-1,2-Dichloroethene	0.88	2.8	3.5	11
1,1-Dichloroethane	0.88	2.7	3.5	11
2-Butanone (Methyl Ethyl Ketone)	3.5	26	10	76
cis-1,2-Dichloroethene	0.88	210	3.5	850
Tetrahydrofuran	0.88	88	2.6	260
Chloroform	0.88	2.7	4.3	13
Toluene	0.88	1.4	3.3	5.4



Air Toxics

Client Sample ID: SVE Influent

Lab ID#: 1707435-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17073007	Date of Collection:	7/18/17 11:51:00 AM	
Dil. Factor:	9.88	Date of Analysis:	7/30/17 11:26 AM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	4.9	Not Detected	24	Not Detected
Freon 114	4.9	Not Detected	34	Not Detected
Chloromethane	49	Not Detected	100	Not Detected
Vinyl Chloride	4.9	Not Detected	13	Not Detected
1,3-Butadiene	4.9	Not Detected	11	Not Detected
Bromomethane	49	Not Detected	190	Not Detected
Chloroethane	20	Not Detected	52	Not Detected
Freon 11	4.9	Not Detected	28	Not Detected
Ethanol	20	Not Detected	37	Not Detected
Freon 113	4.9	Not Detected	38	Not Detected
1,1-Dichloroethene	4.9	Not Detected	20	Not Detected
Acetone	49	Not Detected	120	Not Detected
2-Propanol	20	Not Detected	48	Not Detected
Carbon Disulfide	20	Not Detected	62	Not Detected
3-Chloropropene	20	Not Detected	62	Not Detected
Methylene Chloride	49	Not Detected	170	Not Detected
Methyl tert-butyl ether	20	Not Detected	71	Not Detected
trans-1,2-Dichloroethene	4.9	Not Detected	20	Not Detected
Hexane	4.9	Not Detected	17	Not Detected
1,1-Dichloroethane	4.9	Not Detected	20	Not Detected
2-Butanone (Methyl Ethyl Ketone)	20	Not Detected	58	Not Detected
cis-1,2-Dichloroethene	4.9	42	20	160
Tetrahydrofuran	4.9	Not Detected	14	Not Detected
Chloroform	4.9	Not Detected	24	Not Detected
1,1,1-Trichloroethane	4.9	9.2	27	50
Cyclohexane	4.9	Not Detected	17	Not Detected
Carbon Tetrachloride	4.9	Not Detected	31	Not Detected
2,2,4-Trimethylpentane	4.9	Not Detected	23	Not Detected
Benzene	4.9	Not Detected	16	Not Detected
1,2-Dichloroethane	4.9	Not Detected	20	Not Detected
Heptane	4.9	Not Detected	20	Not Detected
Trichloroethene	4.9	120	26	630
1,2-Dichloropropane	4.9	Not Detected	23	Not Detected
1,4-Dioxane	20	Not Detected	71	Not Detected
Bromodichloromethane	4.9	Not Detected	33	Not Detected
cis-1,3-Dichloropropene	4.9	Not Detected	22	Not Detected
4-Methyl-2-pentanone	4.9	Not Detected	20	Not Detected
Toluene	4.9	Not Detected	19	Not Detected
trans-1,3-Dichloropropene	4.9	Not Detected	22	Not Detected
1,1,2-Trichloroethane	4.9	Not Detected	27	Not Detected
Tetrachloroethene	4.9	1100	34	7400
2-Hexanone	20	Not Detected	81	Not Detected



Air Toxics

Client Sample ID: SVE Influent

Lab ID#: 1707435-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17073007	Date of Collection: 7/18/17 11:51:00 AM		
Dil. Factor:	9.88	Date of Analysis: 7/30/17 11:26 AM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	4.9	Not Detected	42	Not Detected
1,2-Dibromoethane (EDB)	4.9	Not Detected	38	Not Detected
Chlorobenzene	4.9	Not Detected	23	Not Detected
Ethyl Benzene	4.9	Not Detected	21	Not Detected
m,p-Xylene	4.9	Not Detected	21	Not Detected
o-Xylene	4.9	Not Detected	21	Not Detected
Styrene	4.9	Not Detected	21	Not Detected
Bromoform	4.9	Not Detected	51	Not Detected
Cumene	4.9	Not Detected	24	Not Detected
1,1,2,2-Tetrachloroethane	4.9	Not Detected	34	Not Detected
Propylbenzene	4.9	Not Detected	24	Not Detected
4-Ethyltoluene	4.9	Not Detected	24	Not Detected
1,3,5-Trimethylbenzene	4.9	Not Detected	24	Not Detected
1,2,4-Trimethylbenzene	4.9	Not Detected	24	Not Detected
1,3-Dichlorobenzene	4.9	Not Detected	30	Not Detected
1,4-Dichlorobenzene	4.9	Not Detected	30	Not Detected
alpha-Chlorotoluene	4.9	Not Detected	26	Not Detected
1,2-Dichlorobenzene	4.9	Not Detected	30	Not Detected
1,2,4-Trichlorobenzene	20	Not Detected	150	Not Detected
Hexachlorobutadiene	20	Not Detected	210	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	88	70-130



Air Toxics

Client Sample ID: SVE Effluent

Lab ID#: 1707435-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17073008	Date of Collection:	7/18/17 12:19:00 PM	
Dil. Factor:	1.69	Date of Analysis:	7/30/17 11:54 AM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.84	Not Detected	4.2	Not Detected
Freon 114	0.84	Not Detected	5.9	Not Detected
Chloromethane	8.4	Not Detected	17	Not Detected
Vinyl Chloride	0.84	Not Detected	2.2	Not Detected
1,3-Butadiene	0.84	Not Detected	1.9	Not Detected
Bromomethane	8.4	Not Detected	33	Not Detected
Chloroethane	3.4	Not Detected	8.9	Not Detected
Freon 11	0.84	Not Detected	4.7	Not Detected
Ethanol	3.4	5.5	6.4	10
Freon 113	0.84	Not Detected	6.5	Not Detected
1,1-Dichloroethene	0.84	Not Detected	3.4	Not Detected
Acetone	8.4	Not Detected	20	Not Detected
2-Propanol	3.4	Not Detected	8.3	Not Detected
Carbon Disulfide	3.4	Not Detected	10	Not Detected
3-Chloropropene	3.4	Not Detected	10	Not Detected
Methylene Chloride	8.4	Not Detected	29	Not Detected
Methyl tert-butyl ether	3.4	Not Detected	12	Not Detected
trans-1,2-Dichloroethene	0.84	1.2	3.4	5.0
Hexane	0.84	Not Detected	3.0	Not Detected
1,1-Dichloroethane	0.84	Not Detected	3.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.4	Not Detected	10	Not Detected
cis-1,2-Dichloroethene	0.84	57	3.4	220
Tetrahydrofuran	0.84	5.8	2.5	17
Chloroform	0.84	1.5	4.1	7.5
1,1,1-Trichloroethane	0.84	Not Detected	4.6	Not Detected
Cyclohexane	0.84	Not Detected	2.9	Not Detected
Carbon Tetrachloride	0.84	Not Detected	5.3	Not Detected
2,2,4-Trimethylpentane	0.84	Not Detected	3.9	Not Detected
Benzene	0.84	Not Detected	2.7	Not Detected
1,2-Dichloroethane	0.84	Not Detected	3.4	Not Detected
Heptane	0.84	Not Detected	3.5	Not Detected
Trichloroethene	0.84	Not Detected	4.5	Not Detected
1,2-Dichloropropane	0.84	Not Detected	3.9	Not Detected
1,4-Dioxane	3.4	Not Detected	12	Not Detected
Bromodichloromethane	0.84	Not Detected	5.7	Not Detected
cis-1,3-Dichloropropene	0.84	Not Detected	3.8	Not Detected
4-Methyl-2-pentanone	0.84	Not Detected	3.5	Not Detected
Toluene	0.84	1.8	3.2	6.8
trans-1,3-Dichloropropene	0.84	Not Detected	3.8	Not Detected
1,1,2-Trichloroethane	0.84	Not Detected	4.6	Not Detected
Tetrachloroethene	0.84	3.5	5.7	24
2-Hexanone	3.4	Not Detected	14	Not Detected



Air Toxics

Client Sample ID: SVE Effluent

Lab ID#: 1707435-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17073008	Date of Collection: 7/18/17 12:19:00 PM		
Dil. Factor:	1.69	Date of Analysis: 7/30/17 11:54 AM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.84	Not Detected	7.2	Not Detected
1,2-Dibromoethane (EDB)	0.84	Not Detected	6.5	Not Detected
Chlorobenzene	0.84	Not Detected	3.9	Not Detected
Ethyl Benzene	0.84	Not Detected	3.7	Not Detected
m,p-Xylene	0.84	Not Detected	3.7	Not Detected
o-Xylene	0.84	Not Detected	3.7	Not Detected
Styrene	0.84	Not Detected	3.6	Not Detected
Bromoform	0.84	Not Detected	8.7	Not Detected
Cumene	0.84	Not Detected	4.2	Not Detected
1,1,2,2-Tetrachloroethane	0.84	Not Detected	5.8	Not Detected
Propylbenzene	0.84	Not Detected	4.2	Not Detected
4-Ethyltoluene	0.84	Not Detected	4.2	Not Detected
1,3,5-Trimethylbenzene	0.84	Not Detected	4.2	Not Detected
1,2,4-Trimethylbenzene	0.84	Not Detected	4.2	Not Detected
1,3-Dichlorobenzene	0.84	Not Detected	5.1	Not Detected
1,4-Dichlorobenzene	0.84	Not Detected	5.1	Not Detected
alpha-Chlorotoluene	0.84	Not Detected	4.4	Not Detected
1,2-Dichlorobenzene	0.84	Not Detected	5.1	Not Detected
1,2,4-Trichlorobenzene	3.4	Not Detected	25	Not Detected
Hexachlorobutadiene	3.4	Not Detected	36	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	88	70-130



Air Toxics

Client Sample ID: System 1 Inf

Lab ID#: 1707435-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17073009		Date of Collection:	7/18/17 12:31:00 PM
Dil. Factor:	4.37		Date of Analysis:	7/30/17 12:20 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	2.2	Not Detected	11	Not Detected
Freon 114	2.2	Not Detected	15	Not Detected
Chloromethane	22	Not Detected	45	Not Detected
Vinyl Chloride	2.2	Not Detected	5.6	Not Detected
1,3-Butadiene	2.2	Not Detected	4.8	Not Detected
Bromomethane	22	Not Detected	85	Not Detected
Chloroethane	8.7	Not Detected	23	Not Detected
Freon 11	2.2	Not Detected	12	Not Detected
Ethanol	8.7	Not Detected	16	Not Detected
Freon 113	2.2	Not Detected	17	Not Detected
1,1-Dichloroethene	2.2	Not Detected	8.7	Not Detected
Acetone	22	Not Detected	52	Not Detected
2-Propanol	8.7	Not Detected	21	Not Detected
Carbon Disulfide	8.7	Not Detected	27	Not Detected
3-Chloropropene	8.7	Not Detected	27	Not Detected
Methylene Chloride	22	Not Detected	76	Not Detected
Methyl tert-butyl ether	8.7	Not Detected	32	Not Detected
trans-1,2-Dichloroethene	2.2	Not Detected	8.7	Not Detected
Hexane	2.2	Not Detected	7.7	Not Detected
1,1-Dichloroethane	2.2	Not Detected	8.8	Not Detected
2-Butanone (Methyl Ethyl Ketone)	8.7	Not Detected	26	Not Detected
cis-1,2-Dichloroethene	2.2	Not Detected	8.7	Not Detected
Tetrahydrofuran	2.2	Not Detected	6.4	Not Detected
Chloroform	2.2	Not Detected	11	Not Detected
1,1,1-Trichloroethane	2.2	Not Detected	12	Not Detected
Cyclohexane	2.2	Not Detected	7.5	Not Detected
Carbon Tetrachloride	2.2	Not Detected	14	Not Detected
2,2,4-Trimethylpentane	2.2	Not Detected	10	Not Detected
Benzene	2.2	Not Detected	7.0	Not Detected
1,2-Dichloroethane	2.2	Not Detected	8.8	Not Detected
Heptane	2.2	Not Detected	9.0	Not Detected
Trichloroethene	2.2	Not Detected	12	Not Detected
1,2-Dichloropropane	2.2	Not Detected	10	Not Detected
1,4-Dioxane	8.7	Not Detected	31	Not Detected
Bromodichloromethane	2.2	Not Detected	15	Not Detected
cis-1,3-Dichloropropene	2.2	Not Detected	9.9	Not Detected
4-Methyl-2-pentanone	2.2	Not Detected	9.0	Not Detected
Toluene	2.2	4.1	8.2	15
trans-1,3-Dichloropropene	2.2	Not Detected	9.9	Not Detected
1,1,2-Trichloroethane	2.2	Not Detected	12	Not Detected
Tetrachloroethene	2.2	560	15	3800
2-Hexanone	8.7	Not Detected	36	Not Detected



Air Toxics

Client Sample ID: System 1 Inf

Lab ID#: 1707435-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17073009	Date of Collection:	7/18/17 12:31:00 PM	
Dil. Factor:	4.37	Date of Analysis:	7/30/17 12:20 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	2.2	Not Detected	19	Not Detected
1,2-Dibromoethane (EDB)	2.2	Not Detected	17	Not Detected
Chlorobenzene	2.2	Not Detected	10	Not Detected
Ethyl Benzene	2.2	Not Detected	9.5	Not Detected
m,p-Xylene	2.2	Not Detected	9.5	Not Detected
o-Xylene	2.2	Not Detected	9.5	Not Detected
Styrene	2.2	Not Detected	9.3	Not Detected
Bromoform	2.2	Not Detected	22	Not Detected
Cumene	2.2	Not Detected	11	Not Detected
1,1,2,2-Tetrachloroethane	2.2	Not Detected	15	Not Detected
Propylbenzene	2.2	Not Detected	11	Not Detected
4-Ethyltoluene	2.2	Not Detected	11	Not Detected
1,3,5-Trimethylbenzene	2.2	Not Detected	11	Not Detected
1,2,4-Trimethylbenzene	2.2	Not Detected	11	Not Detected
1,3-Dichlorobenzene	2.2	Not Detected	13	Not Detected
1,4-Dichlorobenzene	2.2	Not Detected	13	Not Detected
alpha-Chlorotoluene	2.2	Not Detected	11	Not Detected
1,2-Dichlorobenzene	2.2	Not Detected	13	Not Detected
1,2,4-Trichlorobenzene	8.7	Not Detected	65	Not Detected
Hexachlorobutadiene	8.7	Not Detected	93	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	89	70-130



Air Toxics

Client Sample ID: System 1 Mid

Lab ID#: 1707435-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17073010	Date of Collection:	7/18/17 12:30:00 PM	
Dil. Factor:	1.82	Date of Analysis:	7/30/17 12:49 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.91	Not Detected	4.5	Not Detected
Freon 114	0.91	Not Detected	6.4	Not Detected
Chloromethane	9.1	Not Detected	19	Not Detected
Vinyl Chloride	0.91	Not Detected	2.3	Not Detected
1,3-Butadiene	0.91	Not Detected	2.0	Not Detected
Bromomethane	9.1	Not Detected	35	Not Detected
Chloroethane	3.6	Not Detected	9.6	Not Detected
Freon 11	0.91	Not Detected	5.1	Not Detected
Ethanol	3.6	4.4	6.8	8.3
Freon 113	0.91	Not Detected	7.0	Not Detected
1,1-Dichloroethene	0.91	Not Detected	3.6	Not Detected
Acetone	9.1	Not Detected	22	Not Detected
2-Propanol	3.6	Not Detected	8.9	Not Detected
Carbon Disulfide	3.6	Not Detected	11	Not Detected
3-Chloropropene	3.6	Not Detected	11	Not Detected
Methylene Chloride	9.1	Not Detected	32	Not Detected
Methyl tert-butyl ether	3.6	Not Detected	13	Not Detected
trans-1,2-Dichloroethene	0.91	Not Detected	3.6	Not Detected
Hexane	0.91	Not Detected	3.2	Not Detected
1,1-Dichloroethane	0.91	Not Detected	3.7	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.6	Not Detected	11	Not Detected
cis-1,2-Dichloroethene	0.91	1.8	3.6	7.1
Tetrahydrofuran	0.91	Not Detected	2.7	Not Detected
Chloroform	0.91	2.2	4.4	11
1,1,1-Trichloroethane	0.91	Not Detected	5.0	Not Detected
Cyclohexane	0.91	Not Detected	3.1	Not Detected
Carbon Tetrachloride	0.91	Not Detected	5.7	Not Detected
2,2,4-Trimethylpentane	0.91	Not Detected	4.2	Not Detected
Benzene	0.91	Not Detected	2.9	Not Detected
1,2-Dichloroethane	0.91	Not Detected	3.7	Not Detected
Heptane	0.91	Not Detected	3.7	Not Detected
Trichloroethene	0.91	Not Detected	4.9	Not Detected
1,2-Dichloropropane	0.91	Not Detected	4.2	Not Detected
1,4-Dioxane	3.6	Not Detected	13	Not Detected
Bromodichloromethane	0.91	Not Detected	6.1	Not Detected
cis-1,3-Dichloropropene	0.91	Not Detected	4.1	Not Detected
4-Methyl-2-pentanone	0.91	Not Detected	3.7	Not Detected
Toluene	0.91	1.4	3.4	5.3
trans-1,3-Dichloropropene	0.91	Not Detected	4.1	Not Detected
1,1,2-Trichloroethane	0.91	Not Detected	5.0	Not Detected
Tetrachloroethene	0.91	1.9	6.2	13
2-Hexanone	3.6	Not Detected	15	Not Detected



Air Toxics

Client Sample ID: System 1 Mid

Lab ID#: 1707435-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17073010	Date of Collection: 7/18/17 12:30:00 PM		
Dil. Factor:	1.82	Date of Analysis: 7/30/17 12:49 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.91	Not Detected	7.8	Not Detected
1,2-Dibromoethane (EDB)	0.91	Not Detected	7.0	Not Detected
Chlorobenzene	0.91	Not Detected	4.2	Not Detected
Ethyl Benzene	0.91	Not Detected	4.0	Not Detected
m,p-Xylene	0.91	Not Detected	4.0	Not Detected
o-Xylene	0.91	Not Detected	4.0	Not Detected
Styrene	0.91	Not Detected	3.9	Not Detected
Bromoform	0.91	Not Detected	9.4	Not Detected
Cumene	0.91	Not Detected	4.5	Not Detected
1,1,2,2-Tetrachloroethane	0.91	Not Detected	6.2	Not Detected
Propylbenzene	0.91	Not Detected	4.5	Not Detected
4-Ethyltoluene	0.91	Not Detected	4.5	Not Detected
1,3,5-Trimethylbenzene	0.91	Not Detected	4.5	Not Detected
1,2,4-Trimethylbenzene	0.91	Not Detected	4.5	Not Detected
1,3-Dichlorobenzene	0.91	Not Detected	5.5	Not Detected
1,4-Dichlorobenzene	0.91	Not Detected	5.5	Not Detected
alpha-Chlorotoluene	0.91	Not Detected	4.7	Not Detected
1,2-Dichlorobenzene	0.91	Not Detected	5.5	Not Detected
1,2,4-Trichlorobenzene	3.6	Not Detected	27	Not Detected
Hexachlorobutadiene	3.6	Not Detected	39	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	88	70-130



Air Toxics

Client Sample ID: System 1 Eff

Lab ID#: 1707435-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17073011	Date of Collection:	7/18/17 12:30:00 PM	
Dil. Factor:	1.70	Date of Analysis:	7/30/17 01:17 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.85	Not Detected	4.2	Not Detected
Freon 114	0.85	Not Detected	5.9	Not Detected
Chloromethane	8.5	Not Detected	18	Not Detected
Vinyl Chloride	0.85	Not Detected	2.2	Not Detected
1,3-Butadiene	0.85	Not Detected	1.9	Not Detected
Bromomethane	8.5	Not Detected	33	Not Detected
Chloroethane	3.4	Not Detected	9.0	Not Detected
Freon 11	0.85	Not Detected	4.8	Not Detected
Ethanol	3.4	4.7	6.4	8.8
Freon 113	0.85	Not Detected	6.5	Not Detected
1,1-Dichloroethene	0.85	Not Detected	3.4	Not Detected
Acetone	8.5	Not Detected	20	Not Detected
2-Propanol	3.4	Not Detected	8.4	Not Detected
Carbon Disulfide	3.4	Not Detected	10	Not Detected
3-Chloropropene	3.4	Not Detected	11	Not Detected
Methylene Chloride	8.5	Not Detected	30	Not Detected
Methyl tert-butyl ether	3.4	Not Detected	12	Not Detected
trans-1,2-Dichloroethene	0.85	Not Detected	3.4	Not Detected
Hexane	0.85	Not Detected	3.0	Not Detected
1,1-Dichloroethane	0.85	Not Detected	3.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.4	Not Detected	10	Not Detected
cis-1,2-Dichloroethene	0.85	1.6	3.4	6.3
Tetrahydrofuran	0.85	Not Detected	2.5	Not Detected
Chloroform	0.85	1.4	4.2	7.1
1,1,1-Trichloroethane	0.85	Not Detected	4.6	Not Detected
Cyclohexane	0.85	Not Detected	2.9	Not Detected
Carbon Tetrachloride	0.85	Not Detected	5.3	Not Detected
2,2,4-Trimethylpentane	0.85	Not Detected	4.0	Not Detected
Benzene	0.85	1.9	2.7	6.0
1,2-Dichloroethane	0.85	Not Detected	3.4	Not Detected
Heptane	0.85	Not Detected	3.5	Not Detected
Trichloroethene	0.85	Not Detected	4.6	Not Detected
1,2-Dichloropropane	0.85	Not Detected	3.9	Not Detected
1,4-Dioxane	3.4	Not Detected	12	Not Detected
Bromodichloromethane	0.85	Not Detected	5.7	Not Detected
cis-1,3-Dichloropropene	0.85	Not Detected	3.8	Not Detected
4-Methyl-2-pentanone	0.85	Not Detected	3.5	Not Detected
Toluene	0.85	2.6	3.2	9.7
trans-1,3-Dichloropropene	0.85	Not Detected	3.8	Not Detected
1,1,2-Trichloroethane	0.85	Not Detected	4.6	Not Detected
Tetrachloroethene	0.85	3.2	5.8	22
2-Hexanone	3.4	Not Detected	14	Not Detected



Air Toxics

Client Sample ID: System 1 Eff

Lab ID#: 1707435-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17073011	Date of Collection: 7/18/17 12:30:00 PM		
Dil. Factor:	1.70	Date of Analysis: 7/30/17 01:17 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.85	Not Detected	7.2	Not Detected
1,2-Dibromoethane (EDB)	0.85	Not Detected	6.5	Not Detected
Chlorobenzene	0.85	Not Detected	3.9	Not Detected
Ethyl Benzene	0.85	Not Detected	3.7	Not Detected
m,p-Xylene	0.85	Not Detected	3.7	Not Detected
o-Xylene	0.85	Not Detected	3.7	Not Detected
Styrene	0.85	Not Detected	3.6	Not Detected
Bromoform	0.85	Not Detected	8.8	Not Detected
Cumene	0.85	Not Detected	4.2	Not Detected
1,1,2,2-Tetrachloroethane	0.85	Not Detected	5.8	Not Detected
Propylbenzene	0.85	Not Detected	4.2	Not Detected
4-Ethyltoluene	0.85	Not Detected	4.2	Not Detected
1,3,5-Trimethylbenzene	0.85	Not Detected	4.2	Not Detected
1,2,4-Trimethylbenzene	0.85	Not Detected	4.2	Not Detected
1,3-Dichlorobenzene	0.85	Not Detected	5.1	Not Detected
1,4-Dichlorobenzene	0.85	Not Detected	5.1	Not Detected
alpha-Chlorotoluene	0.85	Not Detected	4.4	Not Detected
1,2-Dichlorobenzene	0.85	Not Detected	5.1	Not Detected
1,2,4-Trichlorobenzene	3.4	Not Detected	25	Not Detected
Hexachlorobutadiene	3.4	Not Detected	36	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	88	70-130



Air Toxics

Client Sample ID: Sys #2 - Infl #2

Lab ID#: 1707435-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17073012	Date of Collection:	7/18/17 12:46:00 PM	
Dil. Factor:	1.90	Date of Analysis:	7/30/17 01:45 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.95	Not Detected	4.7	Not Detected
Freon 114	0.95	Not Detected	6.6	Not Detected
Chloromethane	9.5	Not Detected	20	Not Detected
Vinyl Chloride	0.95	Not Detected	2.4	Not Detected
1,3-Butadiene	0.95	Not Detected	2.1	Not Detected
Bromomethane	9.5	Not Detected	37	Not Detected
Chloroethane	3.8	Not Detected	10	Not Detected
Freon 11	0.95	Not Detected	5.3	Not Detected
Ethanol	3.8	12	7.2	22
Freon 113	0.95	Not Detected	7.3	Not Detected
1,1-Dichloroethene	0.95	Not Detected	3.8	Not Detected
Acetone	9.5	48	22	110
2-Propanol	3.8	Not Detected	9.3	Not Detected
Carbon Disulfide	3.8	Not Detected	12	Not Detected
3-Chloropropene	3.8	Not Detected	12	Not Detected
Methylene Chloride	9.5	Not Detected	33	Not Detected
Methyl tert-butyl ether	3.8	Not Detected	14	Not Detected
trans-1,2-Dichloroethene	0.95	Not Detected	3.8	Not Detected
Hexane	0.95	1.1	3.3	3.9
1,1-Dichloroethane	0.95	Not Detected	3.8	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.8	18	11	54
cis-1,2-Dichloroethene	0.95	10	3.8	40
Tetrahydrofuran	0.95	57	2.8	170
Chloroform	0.95	2.6	4.6	13
1,1,1-Trichloroethane	0.95	Not Detected	5.2	Not Detected
Cyclohexane	0.95	Not Detected	3.3	Not Detected
Carbon Tetrachloride	0.95	Not Detected	6.0	Not Detected
2,2,4-Trimethylpentane	0.95	Not Detected	4.4	Not Detected
Benzene	0.95	Not Detected	3.0	Not Detected
1,2-Dichloroethane	0.95	Not Detected	3.8	Not Detected
Heptane	0.95	Not Detected	3.9	Not Detected
Trichloroethene	0.95	Not Detected	5.1	Not Detected
1,2-Dichloropropane	0.95	Not Detected	4.4	Not Detected
1,4-Dioxane	3.8	Not Detected	14	Not Detected
Bromodichloromethane	0.95	Not Detected	6.4	Not Detected
cis-1,3-Dichloropropene	0.95	Not Detected	4.3	Not Detected
4-Methyl-2-pentanone	0.95	Not Detected	3.9	Not Detected
Toluene	0.95	2.7	3.6	10
trans-1,3-Dichloropropene	0.95	Not Detected	4.3	Not Detected
1,1,2-Trichloroethane	0.95	Not Detected	5.2	Not Detected
Tetrachloroethene	0.95	42	6.4	280
2-Hexanone	3.8	Not Detected	16	Not Detected



Air Toxics

Client Sample ID: Sys #2 - Infl #2

Lab ID#: 1707435-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17073012	Date of Collection: 7/18/17 12:46:00 PM		
Dil. Factor:	1.90	Date of Analysis: 7/30/17 01:45 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.95	Not Detected	8.1	Not Detected
1,2-Dibromoethane (EDB)	0.95	Not Detected	7.3	Not Detected
Chlorobenzene	0.95	Not Detected	4.4	Not Detected
Ethyl Benzene	0.95	Not Detected	4.1	Not Detected
m,p-Xylene	0.95	Not Detected	4.1	Not Detected
o-Xylene	0.95	Not Detected	4.1	Not Detected
Styrene	0.95	Not Detected	4.0	Not Detected
Bromoform	0.95	Not Detected	9.8	Not Detected
Cumene	0.95	Not Detected	4.7	Not Detected
1,1,2,2-Tetrachloroethane	0.95	Not Detected	6.5	Not Detected
Propylbenzene	0.95	Not Detected	4.7	Not Detected
4-Ethyltoluene	0.95	Not Detected	4.7	Not Detected
1,3,5-Trimethylbenzene	0.95	Not Detected	4.7	Not Detected
1,2,4-Trimethylbenzene	0.95	Not Detected	4.7	Not Detected
1,3-Dichlorobenzene	0.95	Not Detected	5.7	Not Detected
1,4-Dichlorobenzene	0.95	Not Detected	5.7	Not Detected
alpha-Chlorotoluene	0.95	Not Detected	4.9	Not Detected
1,2-Dichlorobenzene	0.95	Not Detected	5.7	Not Detected
1,2,4-Trichlorobenzene	3.8	Not Detected	28	Not Detected
Hexachlorobutadiene	3.8	Not Detected	40	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	92	70-130



Air Toxics

Client Sample ID: Sys #2 - Eff

Lab ID#: 1707435-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17073013	Date of Collection: 7/18/17 1:37:00 PM		
Dil. Factor:	1.79	Date of Analysis: 7/30/17 02:14 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.90	Not Detected	4.4	Not Detected
Freon 114	0.90	Not Detected	6.2	Not Detected
Chloromethane	9.0	Not Detected	18	Not Detected
Vinyl Chloride	0.90	0.96	2.3	2.4
1,3-Butadiene	0.90	Not Detected	2.0	Not Detected
Bromomethane	9.0	Not Detected	35	Not Detected
Chloroethane	3.6	Not Detected	9.4	Not Detected
Freon 11	0.90	Not Detected	5.0	Not Detected
Ethanol	3.6	4.4	6.7	8.2
Freon 113	0.90	Not Detected	6.8	Not Detected
1,1-Dichloroethene	0.90	Not Detected	3.5	Not Detected
Acetone	9.0	46	21	110
2-Propanol	3.6	Not Detected	8.8	Not Detected
Carbon Disulfide	3.6	Not Detected	11	Not Detected
3-Chloropropene	3.6	Not Detected	11	Not Detected
Methylene Chloride	9.0	Not Detected	31	Not Detected
Methyl tert-butyl ether	3.6	Not Detected	13	Not Detected
trans-1,2-Dichloroethene	0.90	Not Detected	3.5	Not Detected
Hexane	0.90	1.0	3.2	3.5
1,1-Dichloroethane	0.90	Not Detected	3.6	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.6	19	10	56
cis-1,2-Dichloroethene	0.90	11	3.5	44
Tetrahydrofuran	0.90	64	2.6	190
Chloroform	0.90	2.5	4.4	12
1,1,1-Trichloroethane	0.90	Not Detected	4.9	Not Detected
Cyclohexane	0.90	Not Detected	3.1	Not Detected
Carbon Tetrachloride	0.90	Not Detected	5.6	Not Detected
2,2,4-Trimethylpentane	0.90	Not Detected	4.2	Not Detected
Benzene	0.90	Not Detected	2.8	Not Detected
1,2-Dichloroethane	0.90	Not Detected	3.6	Not Detected
Heptane	0.90	Not Detected	3.7	Not Detected
Trichloroethene	0.90	Not Detected	4.8	Not Detected
1,2-Dichloropropane	0.90	Not Detected	4.1	Not Detected
1,4-Dioxane	3.6	Not Detected	13	Not Detected
Bromodichloromethane	0.90	Not Detected	6.0	Not Detected
cis-1,3-Dichloropropene	0.90	Not Detected	4.1	Not Detected
4-Methyl-2-pentanone	0.90	Not Detected	3.7	Not Detected
Toluene	0.90	1.3	3.4	4.8
trans-1,3-Dichloropropene	0.90	Not Detected	4.1	Not Detected
1,1,2-Trichloroethane	0.90	Not Detected	4.9	Not Detected
Tetrachloroethene	0.90	Not Detected	6.1	Not Detected
2-Hexanone	3.6	Not Detected	15	Not Detected



Air Toxics

Client Sample ID: Sys #2 - Eff

Lab ID#: 1707435-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17073013	Date of Collection: 7/18/17 1:37:00 PM		
Dil. Factor:	1.79	Date of Analysis: 7/30/17 02:14 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.90	Not Detected	7.6	Not Detected
1,2-Dibromoethane (EDB)	0.90	Not Detected	6.9	Not Detected
Chlorobenzene	0.90	Not Detected	4.1	Not Detected
Ethyl Benzene	0.90	Not Detected	3.9	Not Detected
m,p-Xylene	0.90	Not Detected	3.9	Not Detected
o-Xylene	0.90	Not Detected	3.9	Not Detected
Styrene	0.90	Not Detected	3.8	Not Detected
Bromoform	0.90	Not Detected	9.2	Not Detected
Cumene	0.90	Not Detected	4.4	Not Detected
1,1,2,2-Tetrachloroethane	0.90	Not Detected	6.1	Not Detected
Propylbenzene	0.90	Not Detected	4.4	Not Detected
4-Ethyltoluene	0.90	Not Detected	4.4	Not Detected
1,3,5-Trimethylbenzene	0.90	Not Detected	4.4	Not Detected
1,2,4-Trimethylbenzene	0.90	Not Detected	4.4	Not Detected
1,3-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected
1,4-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected
alpha-Chlorotoluene	0.90	Not Detected	4.6	Not Detected
1,2-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected
1,2,4-Trichlorobenzene	3.6	Not Detected	26	Not Detected
Hexachlorobutadiene	3.6	Not Detected	38	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	92	70-130



Air Toxics

Client Sample ID: Sys #2 - Inf #1

Lab ID#: 1707435-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17073014	Date of Collection:	7/18/17 1:53:00 PM	
Dil. Factor:	14.1	Date of Analysis:	7/30/17 02:39 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	7.0	Not Detected	35	Not Detected
Freon 114	7.0	Not Detected	49	Not Detected
Chloromethane	70	Not Detected	140	Not Detected
Vinyl Chloride	7.0	Not Detected	18	Not Detected
1,3-Butadiene	7.0	Not Detected	16	Not Detected
Bromomethane	70	Not Detected	270	Not Detected
Chloroethane	28	Not Detected	74	Not Detected
Freon 11	7.0	Not Detected	40	Not Detected
Ethanol	28	Not Detected	53	Not Detected
Freon 113	7.0	Not Detected	54	Not Detected
1,1-Dichloroethene	7.0	Not Detected	28	Not Detected
Acetone	70	Not Detected	170	Not Detected
2-Propanol	28	Not Detected	69	Not Detected
Carbon Disulfide	28	Not Detected	88	Not Detected
3-Chloropropene	28	Not Detected	88	Not Detected
Methylene Chloride	70	Not Detected	240	Not Detected
Methyl tert-butyl ether	28	Not Detected	100	Not Detected
trans-1,2-Dichloroethene	7.0	Not Detected	28	Not Detected
Hexane	7.0	Not Detected	25	Not Detected
1,1-Dichloroethane	7.0	Not Detected	28	Not Detected
2-Butanone (Methyl Ethyl Ketone)	28	Not Detected	83	Not Detected
cis-1,2-Dichloroethene	7.0	11	28	44
Tetrahydrofuran	7.0	47	21	140
Chloroform	7.0	Not Detected	34	Not Detected
1,1,1-Trichloroethane	7.0	Not Detected	38	Not Detected
Cyclohexane	7.0	Not Detected	24	Not Detected
Carbon Tetrachloride	7.0	Not Detected	44	Not Detected
2,2,4-Trimethylpentane	7.0	Not Detected	33	Not Detected
Benzene	7.0	Not Detected	22	Not Detected
1,2-Dichloroethane	7.0	Not Detected	28	Not Detected
Heptane	7.0	Not Detected	29	Not Detected
Trichloroethene	7.0	Not Detected	38	Not Detected
1,2-Dichloropropane	7.0	Not Detected	32	Not Detected
1,4-Dioxane	28	Not Detected	100	Not Detected
Bromodichloromethane	7.0	Not Detected	47	Not Detected
cis-1,3-Dichloropropene	7.0	Not Detected	32	Not Detected
4-Methyl-2-pentanone	7.0	Not Detected	29	Not Detected
Toluene	7.0	Not Detected	26	Not Detected
trans-1,3-Dichloropropene	7.0	Not Detected	32	Not Detected
1,1,2-Trichloroethane	7.0	Not Detected	38	Not Detected
Tetrachloroethene	7.0	44	48	300
2-Hexanone	28	Not Detected	120	Not Detected



Air Toxics

Client Sample ID: Sys #2 - Inf #1

Lab ID#: 1707435-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17073014	Date of Collection: 7/18/17 1:53:00 PM		
Dil. Factor:	14.1	Date of Analysis: 7/30/17 02:39 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	7.0	Not Detected	60	Not Detected
1,2-Dibromoethane (EDB)	7.0	Not Detected	54	Not Detected
Chlorobenzene	7.0	Not Detected	32	Not Detected
Ethyl Benzene	7.0	Not Detected	31	Not Detected
m,p-Xylene	7.0	Not Detected	31	Not Detected
o-Xylene	7.0	Not Detected	31	Not Detected
Styrene	7.0	Not Detected	30	Not Detected
Bromoform	7.0	Not Detected	73	Not Detected
Cumene	7.0	Not Detected	35	Not Detected
1,1,2,2-Tetrachloroethane	7.0	Not Detected	48	Not Detected
Propylbenzene	7.0	Not Detected	35	Not Detected
4-Ethyltoluene	7.0	Not Detected	35	Not Detected
1,3,5-Trimethylbenzene	7.0	Not Detected	35	Not Detected
1,2,4-Trimethylbenzene	7.0	Not Detected	35	Not Detected
1,3-Dichlorobenzene	7.0	Not Detected	42	Not Detected
1,4-Dichlorobenzene	7.0	Not Detected	42	Not Detected
alpha-Chlorotoluene	7.0	Not Detected	36	Not Detected
1,2-Dichlorobenzene	7.0	Not Detected	42	Not Detected
1,2,4-Trichlorobenzene	28	Not Detected	210	Not Detected
Hexachlorobutadiene	28	Not Detected	300	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	96	70-130
4-Bromofluorobenzene	92	70-130



Air Toxics

Client Sample ID: Offsite intermediate #1

Lab ID#: 1707435-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17073015	Date of Collection:	7/18/17 1:07:00 PM	
Dil. Factor:	1.83	Date of Analysis:	7/30/17 03:08 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.92	Not Detected	4.5	Not Detected
Freon 114	0.92	Not Detected	6.4	Not Detected
Chloromethane	9.2	Not Detected	19	Not Detected
Vinyl Chloride	0.92	3.3	2.3	8.4
1,3-Butadiene	0.92	Not Detected	2.0	Not Detected
Bromomethane	9.2	Not Detected	36	Not Detected
Chloroethane	3.7	Not Detected	9.6	Not Detected
Freon 11	0.92	Not Detected	5.1	Not Detected
Ethanol	3.7	4.3	6.9	8.0
Freon 113	0.92	Not Detected	7.0	Not Detected
1,1-Dichloroethene	0.92	1.5	3.6	5.8
Acetone	9.2	88	22	210
2-Propanol	3.7	Not Detected	9.0	Not Detected
Carbon Disulfide	3.7	Not Detected	11	Not Detected
3-Chloropropene	3.7	Not Detected	11	Not Detected
Methylene Chloride	9.2	Not Detected	32	Not Detected
Methyl tert-butyl ether	3.7	Not Detected	13	Not Detected
trans-1,2-Dichloroethene	0.92	2.5	3.6	9.8
Hexane	0.92	Not Detected	3.2	Not Detected
1,1-Dichloroethane	0.92	2.1	3.7	8.4
2-Butanone (Methyl Ethyl Ketone)	3.7	26	11	77
cis-1,2-Dichloroethene	0.92	160	3.6	660
Tetrahydrofuran	0.92	74	2.7	220
Chloroform	0.92	2.4	4.5	12
1,1,1-Trichloroethane	0.92	Not Detected	5.0	Not Detected
Cyclohexane	0.92	Not Detected	3.1	Not Detected
Carbon Tetrachloride	0.92	Not Detected	5.8	Not Detected
2,2,4-Trimethylpentane	0.92	Not Detected	4.3	Not Detected
Benzene	0.92	Not Detected	2.9	Not Detected
1,2-Dichloroethane	0.92	Not Detected	3.7	Not Detected
Heptane	0.92	Not Detected	3.7	Not Detected
Trichloroethene	0.92	65	4.9	350
1,2-Dichloropropane	0.92	Not Detected	4.2	Not Detected
1,4-Dioxane	3.7	Not Detected	13	Not Detected
Bromodichloromethane	0.92	Not Detected	6.1	Not Detected
cis-1,3-Dichloropropene	0.92	Not Detected	4.2	Not Detected
4-Methyl-2-pentanone	0.92	Not Detected	3.7	Not Detected
Toluene	0.92	1.5	3.4	5.6
trans-1,3-Dichloropropene	0.92	Not Detected	4.2	Not Detected
1,1,2-Trichloroethane	0.92	Not Detected	5.0	Not Detected
Tetrachloroethene	0.92	Not Detected	6.2	Not Detected
2-Hexanone	3.7	Not Detected	15	Not Detected



Air Toxics

Client Sample ID: Offsite intermediate #1

Lab ID#: 1707435-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17073015	Date of Collection: 7/18/17 1:07:00 PM		
Dil. Factor:	1.83	Date of Analysis: 7/30/17 03:08 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.92	Not Detected	7.8	Not Detected
1,2-Dibromoethane (EDB)	0.92	Not Detected	7.0	Not Detected
Chlorobenzene	0.92	Not Detected	4.2	Not Detected
Ethyl Benzene	0.92	Not Detected	4.0	Not Detected
m,p-Xylene	0.92	Not Detected	4.0	Not Detected
o-Xylene	0.92	Not Detected	4.0	Not Detected
Styrene	0.92	Not Detected	3.9	Not Detected
Bromoform	0.92	Not Detected	9.4	Not Detected
Cumene	0.92	Not Detected	4.5	Not Detected
1,1,2,2-Tetrachloroethane	0.92	Not Detected	6.3	Not Detected
Propylbenzene	0.92	Not Detected	4.5	Not Detected
4-Ethyltoluene	0.92	Not Detected	4.5	Not Detected
1,3,5-Trimethylbenzene	0.92	Not Detected	4.5	Not Detected
1,2,4-Trimethylbenzene	0.92	Not Detected	4.5	Not Detected
1,3-Dichlorobenzene	0.92	Not Detected	5.5	Not Detected
1,4-Dichlorobenzene	0.92	Not Detected	5.5	Not Detected
alpha-Chlorotoluene	0.92	Not Detected	4.7	Not Detected
1,2-Dichlorobenzene	0.92	Not Detected	5.5	Not Detected
1,2,4-Trichlorobenzene	3.7	Not Detected	27	Not Detected
Hexachlorobutadiene	3.7	Not Detected	39	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	93	70-130



Air Toxics

Client Sample ID: Offsite intermediate #2

Lab ID#: 1707435-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17073016	Date of Collection: 7/18/17 3:40:00 PM		
Dil. Factor:	1.80	Date of Analysis: 7/30/17 03:36 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.90	Not Detected	4.4	Not Detected
Freon 114	0.90	Not Detected	6.3	Not Detected
Chloromethane	9.0	Not Detected	18	Not Detected
Vinyl Chloride	0.90	2.9	2.3	7.5
1,3-Butadiene	0.90	Not Detected	2.0	Not Detected
Bromomethane	9.0	Not Detected	35	Not Detected
Chloroethane	3.6	Not Detected	9.5	Not Detected
Freon 11	0.90	Not Detected	5.0	Not Detected
Ethanol	3.6	6.1	6.8	11
Freon 113	0.90	Not Detected	6.9	Not Detected
1,1-Dichloroethene	0.90	1.4	3.6	5.6
Acetone	9.0	63	21	150
2-Propanol	3.6	Not Detected	8.8	Not Detected
Carbon Disulfide	3.6	Not Detected	11	Not Detected
3-Chloropropene	3.6	Not Detected	11	Not Detected
Methylene Chloride	9.0	Not Detected	31	Not Detected
Methyl tert-butyl ether	3.6	Not Detected	13	Not Detected
trans-1,2-Dichloroethene	0.90	3.4	3.6	13
Hexane	0.90	Not Detected	3.2	Not Detected
1,1-Dichloroethane	0.90	2.1	3.6	8.4
2-Butanone (Methyl Ethyl Ketone)	3.6	27	11	79
cis-1,2-Dichloroethene	0.90	250	3.6	1000
Tetrahydrofuran	0.90	79	2.6	230
Chloroform	0.90	3.2	4.4	16
1,1,1-Trichloroethane	0.90	Not Detected	4.9	Not Detected
Cyclohexane	0.90	Not Detected	3.1	Not Detected
Carbon Tetrachloride	0.90	Not Detected	5.7	Not Detected
2,2,4-Trimethylpentane	0.90	Not Detected	4.2	Not Detected
Benzene	0.90	Not Detected	2.9	Not Detected
1,2-Dichloroethane	0.90	Not Detected	3.6	Not Detected
Heptane	0.90	Not Detected	3.7	Not Detected
Trichloroethene	0.90	Not Detected	4.8	Not Detected
1,2-Dichloropropane	0.90	Not Detected	4.2	Not Detected
1,4-Dioxane	3.6	Not Detected	13	Not Detected
Bromodichloromethane	0.90	Not Detected	6.0	Not Detected
cis-1,3-Dichloropropene	0.90	Not Detected	4.1	Not Detected
4-Methyl-2-pentanone	0.90	Not Detected	3.7	Not Detected
Toluene	0.90	1.4	3.4	5.2
trans-1,3-Dichloropropene	0.90	Not Detected	4.1	Not Detected
1,1,2-Trichloroethane	0.90	Not Detected	4.9	Not Detected
Tetrachloroethene	0.90	Not Detected	6.1	Not Detected
2-Hexanone	3.6	Not Detected	15	Not Detected



Air Toxics

Client Sample ID: Offsite intermediate #2

Lab ID#: 1707435-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17073016	Date of Collection: 7/18/17 3:40:00 PM		
Dil. Factor:	1.80	Date of Analysis: 7/30/17 03:36 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.90	Not Detected	7.7	Not Detected
1,2-Dibromoethane (EDB)	0.90	Not Detected	6.9	Not Detected
Chlorobenzene	0.90	Not Detected	4.1	Not Detected
Ethyl Benzene	0.90	Not Detected	3.9	Not Detected
m,p-Xylene	0.90	Not Detected	3.9	Not Detected
o-Xylene	0.90	Not Detected	3.9	Not Detected
Styrene	0.90	Not Detected	3.8	Not Detected
Bromoform	0.90	Not Detected	9.3	Not Detected
Cumene	0.90	Not Detected	4.4	Not Detected
1,1,2,2-Tetrachloroethane	0.90	Not Detected	6.2	Not Detected
Propylbenzene	0.90	Not Detected	4.4	Not Detected
4-Ethyltoluene	0.90	Not Detected	4.4	Not Detected
1,3,5-Trimethylbenzene	0.90	Not Detected	4.4	Not Detected
1,2,4-Trimethylbenzene	0.90	Not Detected	4.4	Not Detected
1,3-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected
1,4-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected
alpha-Chlorotoluene	0.90	Not Detected	4.6	Not Detected
1,2-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected
1,2,4-Trichlorobenzene	3.6	Not Detected	27	Not Detected
Hexachlorobutadiene	3.6	Not Detected	38	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	96	70-130
4-Bromofluorobenzene	94	70-130



Air Toxics

Client Sample ID: Offsite inlet

Lab ID#: 1707435-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17073017	Date of Collection: 7/18/17 11:41:00 AM		
Dil. Factor:	1.64	Date of Analysis: 7/30/17 04:05 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.82	Not Detected	4.0	Not Detected
Freon 114	0.82	Not Detected	5.7	Not Detected
Chloromethane	8.2	Not Detected	17	Not Detected
Vinyl Chloride	0.82	2.7	2.1	6.9
1,3-Butadiene	0.82	Not Detected	1.8	Not Detected
Bromomethane	8.2	Not Detected	32	Not Detected
Chloroethane	3.3	Not Detected	8.6	Not Detected
Freon 11	0.82	Not Detected	4.6	Not Detected
Ethanol	3.3	4.4	6.2	8.4
Freon 113	0.82	Not Detected	6.3	Not Detected
1,1-Dichloroethene	0.82	1.5	3.2	5.9
Acetone	8.2	63	19	150
2-Propanol	3.3	Not Detected	8.1	Not Detected
Carbon Disulfide	3.3	Not Detected	10	Not Detected
3-Chloropropene	3.3	Not Detected	10	Not Detected
Methylene Chloride	8.2	Not Detected	28	Not Detected
Methyl tert-butyl ether	3.3	Not Detected	12	Not Detected
trans-1,2-Dichloroethene	0.82	2.7	3.2	11
Hexane	0.82	0.83	2.9	2.9
1,1-Dichloroethane	0.82	2.3	3.3	9.3
2-Butanone (Methyl Ethyl Ketone)	3.3	23	9.7	67
cis-1,2-Dichloroethene	0.82	200	3.2	790
Tetrahydrofuran	0.82	85	2.4	250
Chloroform	0.82	7.3	4.0	36
1,1,1-Trichloroethane	0.82	Not Detected	4.5	Not Detected
Cyclohexane	0.82	Not Detected	2.8	Not Detected
Carbon Tetrachloride	0.82	Not Detected	5.2	Not Detected
2,2,4-Trimethylpentane	0.82	Not Detected	3.8	Not Detected
Benzene	0.82	Not Detected	2.6	Not Detected
1,2-Dichloroethane	0.82	Not Detected	3.3	Not Detected
Heptane	0.82	1.0	3.4	4.3
Trichloroethene	0.82	9.3	4.4	50
1,2-Dichloropropane	0.82	Not Detected	3.8	Not Detected
1,4-Dioxane	3.3	Not Detected	12	Not Detected
Bromodichloromethane	0.82	Not Detected	5.5	Not Detected
cis-1,3-Dichloropropene	0.82	Not Detected	3.7	Not Detected
4-Methyl-2-pentanone	0.82	Not Detected	3.4	Not Detected
Toluene	0.82	1.5	3.1	5.5
trans-1,3-Dichloropropene	0.82	Not Detected	3.7	Not Detected
1,1,2-Trichloroethane	0.82	Not Detected	4.5	Not Detected
Tetrachloroethene	0.82	6.4	5.6	43
2-Hexanone	3.3	Not Detected	13	Not Detected



Air Toxics

Client Sample ID: Offsite inlet

Lab ID#: 1707435-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17073017	Date of Collection: 7/18/17 11:41:00 AM		
Dil. Factor:	1.64	Date of Analysis: 7/30/17 04:05 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.82	Not Detected	7.0	Not Detected
1,2-Dibromoethane (EDB)	0.82	Not Detected	6.3	Not Detected
Chlorobenzene	0.82	Not Detected	3.8	Not Detected
Ethyl Benzene	0.82	Not Detected	3.6	Not Detected
m,p-Xylene	0.82	Not Detected	3.6	Not Detected
o-Xylene	0.82	Not Detected	3.6	Not Detected
Styrene	0.82	Not Detected	3.5	Not Detected
Bromoform	0.82	Not Detected	8.5	Not Detected
Cumene	0.82	Not Detected	4.0	Not Detected
1,1,2,2-Tetrachloroethane	0.82	Not Detected	5.6	Not Detected
Propylbenzene	0.82	Not Detected	4.0	Not Detected
4-Ethyltoluene	0.82	Not Detected	4.0	Not Detected
1,3,5-Trimethylbenzene	0.82	Not Detected	4.0	Not Detected
1,2,4-Trimethylbenzene	0.82	Not Detected	4.0	Not Detected
1,3-Dichlorobenzene	0.82	Not Detected	4.9	Not Detected
1,4-Dichlorobenzene	0.82	Not Detected	4.9	Not Detected
alpha-Chlorotoluene	0.82	Not Detected	4.2	Not Detected
1,2-Dichlorobenzene	0.82	Not Detected	4.9	Not Detected
1,2,4-Trichlorobenzene	3.3	Not Detected	24	Not Detected
Hexachlorobutadiene	3.3	Not Detected	35	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	94	70-130
4-Bromofluorobenzene	93	70-130



Air Toxics

Client Sample ID: Offsite eff

Lab ID#: 1707435-12A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17073018	Date of Collection:	7/18/17 11:42:00 AM	
Dil. Factor:	1.75	Date of Analysis:	7/30/17 04:33 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.88	Not Detected	4.3	Not Detected
Freon 114	0.88	Not Detected	6.1	Not Detected
Chloromethane	8.8	Not Detected	18	Not Detected
Vinyl Chloride	0.88	2.9	2.2	7.5
1,3-Butadiene	0.88	Not Detected	1.9	Not Detected
Bromomethane	8.8	Not Detected	34	Not Detected
Chloroethane	3.5	Not Detected	9.2	Not Detected
Freon 11	0.88	Not Detected	4.9	Not Detected
Ethanol	3.5	Not Detected	6.6	Not Detected
Freon 113	0.88	Not Detected	6.7	Not Detected
1,1-Dichloroethene	0.88	1.6	3.5	6.3
Acetone	8.8	63	21	150
2-Propanol	3.5	Not Detected	8.6	Not Detected
Carbon Disulfide	3.5	Not Detected	11	Not Detected
3-Chloropropene	3.5	Not Detected	11	Not Detected
Methylene Chloride	8.8	Not Detected	30	Not Detected
Methyl tert-butyl ether	3.5	Not Detected	13	Not Detected
trans-1,2-Dichloroethene	0.88	2.8	3.5	11
Hexane	0.88	Not Detected	3.1	Not Detected
1,1-Dichloroethane	0.88	2.7	3.5	11
2-Butanone (Methyl Ethyl Ketone)	3.5	26	10	76
cis-1,2-Dichloroethene	0.88	210	3.5	850
Tetrahydrofuran	0.88	88	2.6	260
Chloroform	0.88	2.7	4.3	13
1,1,1-Trichloroethane	0.88	Not Detected	4.8	Not Detected
Cyclohexane	0.88	Not Detected	3.0	Not Detected
Carbon Tetrachloride	0.88	Not Detected	5.5	Not Detected
2,2,4-Trimethylpentane	0.88	Not Detected	4.1	Not Detected
Benzene	0.88	Not Detected	2.8	Not Detected
1,2-Dichloroethane	0.88	Not Detected	3.5	Not Detected
Heptane	0.88	Not Detected	3.6	Not Detected
Trichloroethene	0.88	Not Detected	4.7	Not Detected
1,2-Dichloropropane	0.88	Not Detected	4.0	Not Detected
1,4-Dioxane	3.5	Not Detected	13	Not Detected
Bromodichloromethane	0.88	Not Detected	5.9	Not Detected
cis-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected
4-Methyl-2-pentanone	0.88	Not Detected	3.6	Not Detected
Toluene	0.88	1.4	3.3	5.4
trans-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected
1,1,2-Trichloroethane	0.88	Not Detected	4.8	Not Detected
Tetrachloroethene	0.88	Not Detected	5.9	Not Detected
2-Hexanone	3.5	Not Detected	14	Not Detected



Air Toxics

Client Sample ID: Offsite eff

Lab ID#: 1707435-12A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17073018	Date of Collection: 7/18/17 11:42:00 AM		
Dil. Factor:	1.75	Date of Analysis: 7/30/17 04:33 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.88	Not Detected	7.4	Not Detected
1,2-Dibromoethane (EDB)	0.88	Not Detected	6.7	Not Detected
Chlorobenzene	0.88	Not Detected	4.0	Not Detected
Ethyl Benzene	0.88	Not Detected	3.8	Not Detected
m,p-Xylene	0.88	Not Detected	3.8	Not Detected
o-Xylene	0.88	Not Detected	3.8	Not Detected
Styrene	0.88	Not Detected	3.7	Not Detected
Bromoform	0.88	Not Detected	9.0	Not Detected
Cumene	0.88	Not Detected	4.3	Not Detected
1,1,2,2-Tetrachloroethane	0.88	Not Detected	6.0	Not Detected
Propylbenzene	0.88	Not Detected	4.3	Not Detected
4-Ethyltoluene	0.88	Not Detected	4.3	Not Detected
1,3,5-Trimethylbenzene	0.88	Not Detected	4.3	Not Detected
1,2,4-Trimethylbenzene	0.88	Not Detected	4.3	Not Detected
1,3-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected
1,4-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected
alpha-Chlorotoluene	0.88	Not Detected	4.5	Not Detected
1,2-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected
1,2,4-Trichlorobenzene	3.5	Not Detected	26	Not Detected
Hexachlorobutadiene	3.5	Not Detected	37	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	96	70-130
4-Bromofluorobenzene	94	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1707435-13A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17073006	Date of Collection: NA		
Dil. Factor:	1.00	Date of Analysis: 7/30/17 10:22 AM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	5.0	Not Detected	10	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	5.0	Not Detected	19	Not Detected
Chloroethane	2.0	Not Detected	5.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	5.0	Not Detected	12	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	2.0	Not Detected	6.2	Not Detected
3-Chloropropene	2.0	Not Detected	6.3	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
Methyl tert-butyl ether	2.0	Not Detected	7.2	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
2-Hexanone	2.0	Not Detected	8.2	Not Detected



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1707435-13A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17073006	Date of Collection:	NA	
Dil. Factor:	1.00	Date of Analysis:	7/30/17 10:22 AM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
Cumene	0.50	Not Detected	2.4	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
Propylbenzene	0.50	Not Detected	2.4	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	88	70-130



Air Toxics

Client Sample ID: CCV

Lab ID#: 1707435-14A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17073002	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/30/17 07:53 AM

Compound	%Recovery
Freon 12	105
Freon 114	104
Chloromethane	104
Vinyl Chloride	104
1,3-Butadiene	106
Bromomethane	106
Chloroethane	102
Freon 11	104
Ethanol	97
Freon 113	101
1,1-Dichloroethene	103
Acetone	91
2-Propanol	102
Carbon Disulfide	105
3-Chloropropene	101
Methylene Chloride	105
Methyl tert-butyl ether	104
trans-1,2-Dichloroethene	108
Hexane	103
1,1-Dichloroethane	106
2-Butanone (Methyl Ethyl Ketone)	101
cis-1,2-Dichloroethene	109
Tetrahydrofuran	99
Chloroform	106
1,1,1-Trichloroethane	105
Cyclohexane	105
Carbon Tetrachloride	102
2,2,4-Trimethylpentane	103
Benzene	104
1,2-Dichloroethane	105
Heptane	105
Trichloroethene	103
1,2-Dichloropropane	106
1,4-Dioxane	102
Bromodichloromethane	106
cis-1,3-Dichloropropene	104
4-Methyl-2-pentanone	99
Toluene	102
trans-1,3-Dichloropropene	108
1,1,2-Trichloroethane	104
Tetrachloroethene	98
2-Hexanone	102



Air Toxics

Client Sample ID: CCV

Lab ID#: 1707435-14A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17073002	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	7/30/17 07:53 AM

Compound	%Recovery
Dibromochloromethane	104
1,2-Dibromoethane (EDB)	105
Chlorobenzene	100
Ethyl Benzene	103
m,p-Xylene	104
o-Xylene	105
Styrene	117
Bromoform	103
Cumene	104
1,1,2,2-Tetrachloroethane	105
Propylbenzene	102
4-Ethyltoluene	104
1,3,5-Trimethylbenzene	109
1,2,4-Trimethylbenzene	105
1,3-Dichlorobenzene	100
1,4-Dichlorobenzene	100
alpha-Chlorotoluene	97
1,2-Dichlorobenzene	100
1,2,4-Trichlorobenzene	97
Hexachlorobutadiene	93

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	95	70-130



Air Toxics

Client Sample ID: LCS

Lab ID#: 1707435-15A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17073003	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	7/30/17 08:20 AM
Compound	%Recovery	Method	Limits
Freon 12	106	70-130	
Freon 114	110	70-130	
Chloromethane	104	70-130	
Vinyl Chloride	106	70-130	
1,3-Butadiene	105	70-130	
Bromomethane	108	70-130	
Chloroethane	105	70-130	
Freon 11	107	70-130	
Ethanol	102	70-130	
Freon 113	99	70-130	
1,1-Dichloroethene	103	70-130	
Acetone	87	70-130	
2-Propanol	106	70-130	
Carbon Disulfide	92	70-130	
3-Chloropropene	96	70-130	
Methylene Chloride	104	70-130	
Methyl tert-butyl ether	100	70-130	
trans-1,2-Dichloroethene	93	70-130	
Hexane	101	70-130	
1,1-Dichloroethane	105	70-130	
2-Butanone (Methyl Ethyl Ketone)	101	70-130	
cis-1,2-Dichloroethene	119	70-130	
Tetrahydrofuran	96	70-130	
Chloroform	105	70-130	
1,1,1-Trichloroethane	103	70-130	
Cyclohexane	104	70-130	
Carbon Tetrachloride	101	70-130	
2,2,4-Trimethylpentane	103	70-130	
Benzene	104	70-130	
1,2-Dichloroethane	106	70-130	
Heptane	104	70-130	
Trichloroethene	104	70-130	
1,2-Dichloropropane	106	70-130	
1,4-Dioxane	98	70-130	
Bromodichloromethane	109	70-130	
cis-1,3-Dichloropropene	98	70-130	
4-Methyl-2-pentanone	99	70-130	
Toluene	102	70-130	
trans-1,3-Dichloropropene	106	70-130	
1,1,2-Trichloroethane	104	70-130	
Tetrachloroethene	100	70-130	
2-Hexanone	101	70-130	



Air Toxics

Client Sample ID: LCS

Lab ID#: 1707435-15A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17073003	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	7/30/17 08:20 AM
Compound	%Recovery	Method	Limits
Dibromochloromethane	105	70-130	
1,2-Dibromoethane (EDB)	104	70-130	
Chlorobenzene	100	70-130	
Ethyl Benzene	103	70-130	
m,p-Xylene	103	70-130	
o-Xylene	106	70-130	
Styrene	116	70-130	
Bromoform	106	70-130	
Cumene	104	70-130	
1,1,2,2-Tetrachloroethane	105	70-130	
Propylbenzene	104	70-130	
4-Ethyltoluene	105	70-130	
1,3,5-Trimethylbenzene	108	70-130	
1,2,4-Trimethylbenzene	105	70-130	
1,3-Dichlorobenzene	102	70-130	
1,4-Dichlorobenzene	101	70-130	
alpha-Chlorotoluene	112	70-130	
1,2-Dichlorobenzene	103	70-130	
1,2,4-Trichlorobenzene	99	70-130	
Hexachlorobutadiene	95	70-130	

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method	Limits
Toluene-d8	101	70-130	
1,2-Dichloroethane-d4	101	70-130	
4-Bromofluorobenzene	98	70-130	



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1707435-15AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17073004	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	7/30/17 08:47 AM
Compound	%Recovery	Method	Limits
Freon 12	106	70-130	
Freon 114	108	70-130	
Chloromethane	102	70-130	
Vinyl Chloride	106	70-130	
1,3-Butadiene	101	70-130	
Bromomethane	104	70-130	
Chloroethane	104	70-130	
Freon 11	105	70-130	
Ethanol	100	70-130	
Freon 113	99	70-130	
1,1-Dichloroethene	102	70-130	
Acetone	87	70-130	
2-Propanol	104	70-130	
Carbon Disulfide	90	70-130	
3-Chloropropene	95	70-130	
Methylene Chloride	103	70-130	
Methyl tert-butyl ether	100	70-130	
trans-1,2-Dichloroethene	91	70-130	
Hexane	100	70-130	
1,1-Dichloroethane	104	70-130	
2-Butanone (Methyl Ethyl Ketone)	97	70-130	
cis-1,2-Dichloroethene	118	70-130	
Tetrahydrofuran	96	70-130	
Chloroform	104	70-130	
1,1,1-Trichloroethane	102	70-130	
Cyclohexane	104	70-130	
Carbon Tetrachloride	100	70-130	
2,2,4-Trimethylpentane	103	70-130	
Benzene	104	70-130	
1,2-Dichloroethane	106	70-130	
Heptane	103	70-130	
Trichloroethene	103	70-130	
1,2-Dichloropropane	104	70-130	
1,4-Dioxane	98	70-130	
Bromodichloromethane	107	70-130	
cis-1,3-Dichloropropene	97	70-130	
4-Methyl-2-pentanone	98	70-130	
Toluene	101	70-130	
trans-1,3-Dichloropropene	107	70-130	
1,1,2-Trichloroethane	103	70-130	
Tetrachloroethene	100	70-130	
2-Hexanone	104	70-130	



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1707435-15AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17073004	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	7/30/17 08:47 AM
Compound	%Recovery	Method	Limits
Dibromochloromethane	106	70-130	
1,2-Dibromoethane (EDB)	107	70-130	
Chlorobenzene	101	70-130	
Ethyl Benzene	104	70-130	
m,p-Xylene	104	70-130	
o-Xylene	107	70-130	
Styrene	118	70-130	
Bromoform	107	70-130	
Cumene	104	70-130	
1,1,2,2-Tetrachloroethane	106	70-130	
Propylbenzene	105	70-130	
4-Ethyltoluene	106	70-130	
1,3,5-Trimethylbenzene	110	70-130	
1,2,4-Trimethylbenzene	107	70-130	
1,3-Dichlorobenzene	103	70-130	
1,4-Dichlorobenzene	104	70-130	
alpha-Chlorotoluene	113	70-130	
1,2-Dichlorobenzene	105	70-130	
1,2,4-Trichlorobenzene	104	70-130	
Hexachlorobutadiene	99	70-130	

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method	Limits
Toluene-d8	100	70-130	
1,2-Dichloroethane-d4	101	70-130	
4-Bromofluorobenzene	97	70-130	

9/19/2017
Mr. Jim Hayward
EA Engineering
6712 Brooklawn Parkway

Syracuse NY 13211

Project Name: National Heatset
Project #: 1490716
Workorder #: 1709074

Dear Mr. Jim Hayward

The following report includes the data for the above referenced project for sample(s) received on 9/6/2017 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Ausha Scott
Project Manager

A Eurofins Lancaster Laboratories Company

WORK ORDER #: 1709074

Work Order Summary

CLIENT:	Mr. Jim Hayward EA Engineering 6712 Brooklawn Parkway Syracuse, NY 13211	BILL TO:	Accounts Payable EA Engineering 3 Washington Center Newburgh, NY 12550
PHONE:	315-431-4610	P.O. #	10991-2.00
FAX:	315-431-4280	PROJECT #	1490716 National Heatset
DATE RECEIVED:	09/06/2017	CONTACT:	Ausha Scott
DATE COMPLETED:	09/19/2017		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	SVE-Influent	TO-15	4.5 "Hg	5 psi
02A	SVE-Effluent	TO-15	6.9 "Hg	4.9 psi
03A	Lab Blank	TO-15	NA	NA
04A	CCV	TO-15	NA	NA
05A	LCS	TO-15	NA	NA
05AA	LCSD	TO-15	NA	NA

CERTIFIED BY:



DATE: 09/19/17

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)

Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.

Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

**LABORATORY NARRATIVE
EPA Method TO-15
EA Engineering
Workorder# 1709074**

Two 6 Liter Summa Canister samples were received on September 06, 2017. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

Dilution was performed on sample SVE-Influent due to the presence of high level target species.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

**Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN**

Client Sample ID: SVE-Influent

Lab ID#: 1709074-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	3.2	21	12	82
1,1,1-Trichloroethane	3.2	3.7	17	20
Trichloroethene	3.2	96	17	520
Tetrachloroethene	3.2	1000	21	7100

Client Sample ID: SVE-Effluent

Lab ID#: 1709074-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Ethanol	3.5	8.3	6.5	16
Acetone	8.6	16	20	38
2-Butanone (Methyl Ethyl Ketone)	3.5	4.2	10	12
cis-1,2-Dichloroethene	0.86	29	3.4	110
Tetrahydrofuran	0.86	1.8	2.6	5.3
1,1,1-Trichloroethane	0.86	1.7	4.7	9.3



Air Toxics

Client Sample ID: SVE-Influent

Lab ID#: 1709074-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3090825	Date of Collection:	8/29/17 1:51:00 PM	
Dil. Factor:	6.31	Date of Analysis:	9/9/17 12:25 AM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	3.2	Not Detected	16	Not Detected
Freon 114	3.2	Not Detected	22	Not Detected
Chloromethane	32	Not Detected	65	Not Detected
Vinyl Chloride	3.2	Not Detected	8.1	Not Detected
1,3-Butadiene	3.2	Not Detected	7.0	Not Detected
Bromomethane	32	Not Detected	120	Not Detected
Chloroethane	13	Not Detected	33	Not Detected
Freon 11	3.2	Not Detected	18	Not Detected
Ethanol	13	Not Detected	24	Not Detected
Freon 113	3.2	Not Detected	24	Not Detected
1,1-Dichloroethene	3.2	Not Detected	12	Not Detected
Acetone	32	Not Detected	75	Not Detected
2-Propanol	13	Not Detected	31	Not Detected
Carbon Disulfide	13	Not Detected	39	Not Detected
3-Chloropropene	13	Not Detected	40	Not Detected
Methylene Chloride	32	Not Detected	110	Not Detected
Methyl tert-butyl ether	13	Not Detected	45	Not Detected
trans-1,2-Dichloroethene	3.2	Not Detected	12	Not Detected
Hexane	3.2	Not Detected	11	Not Detected
1,1-Dichloroethane	3.2	Not Detected	13	Not Detected
2-Butanone (Methyl Ethyl Ketone)	13	Not Detected	37	Not Detected
cis-1,2-Dichloroethene	3.2	21	12	82
Tetrahydrofuran	3.2	Not Detected	9.3	Not Detected
Chloroform	3.2	Not Detected	15	Not Detected
1,1,1-Trichloroethane	3.2	3.7	17	20
Cyclohexane	3.2	Not Detected	11	Not Detected
Carbon Tetrachloride	3.2	Not Detected	20	Not Detected
2,2,4-Trimethylpentane	3.2	Not Detected	15	Not Detected
Benzene	3.2	Not Detected	10	Not Detected
1,2-Dichloroethane	3.2	Not Detected	13	Not Detected
Heptane	3.2	Not Detected	13	Not Detected
Trichloroethene	3.2	96	17	520
1,2-Dichloropropane	3.2	Not Detected	14	Not Detected
1,4-Dioxane	13	Not Detected	45	Not Detected
Bromodichloromethane	3.2	Not Detected	21	Not Detected
cis-1,3-Dichloropropene	3.2	Not Detected	14	Not Detected
4-Methyl-2-pentanone	3.2	Not Detected	13	Not Detected
Toluene	3.2	Not Detected	12	Not Detected
trans-1,3-Dichloropropene	3.2	Not Detected	14	Not Detected
1,1,2-Trichloroethane	3.2	Not Detected	17	Not Detected
Tetrachloroethene	3.2	1000	21	7100
2-Hexanone	13	Not Detected	52	Not Detected



Air Toxics

Client Sample ID: SVE-Influent

Lab ID#: 1709074-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3090825	Date of Collection: 8/29/17 1:51:00 PM		
Dil. Factor:	6.31	Date of Analysis: 9/9/17 12:25 AM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	3.2	Not Detected	27	Not Detected
1,2-Dibromoethane (EDB)	3.2	Not Detected	24	Not Detected
Chlorobenzene	3.2	Not Detected	14	Not Detected
Ethyl Benzene	3.2	Not Detected	14	Not Detected
m,p-Xylene	3.2	Not Detected	14	Not Detected
o-Xylene	3.2	Not Detected	14	Not Detected
Styrene	3.2	Not Detected	13	Not Detected
Bromoform	3.2	Not Detected	33	Not Detected
Cumene	3.2	Not Detected	16	Not Detected
1,1,2,2-Tetrachloroethane	3.2	Not Detected	22	Not Detected
Propylbenzene	3.2	Not Detected	16	Not Detected
4-Ethyltoluene	3.2	Not Detected	16	Not Detected
1,3,5-Trimethylbenzene	3.2	Not Detected	16	Not Detected
1,2,4-Trimethylbenzene	3.2	Not Detected	16	Not Detected
1,3-Dichlorobenzene	3.2	Not Detected	19	Not Detected
1,4-Dichlorobenzene	3.2	Not Detected	19	Not Detected
alpha-Chlorotoluene	3.2	Not Detected	16	Not Detected
1,2-Dichlorobenzene	3.2	Not Detected	19	Not Detected
1,2,4-Trichlorobenzene	13	Not Detected	94	Not Detected
Hexachlorobutadiene	13	Not Detected	130	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	86	70-130
4-Bromofluorobenzene	93	70-130



Air Toxics

Client Sample ID: SVE-Effluent

Lab ID#: 1709074-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3090826	Date of Collection:	8/29/17 1:51:00 PM	
Dil. Factor:	1.73	Date of Analysis:	9/9/17 12:51 AM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.86	Not Detected	4.3	Not Detected
Freon 114	0.86	Not Detected	6.0	Not Detected
Chloromethane	8.6	Not Detected	18	Not Detected
Vinyl Chloride	0.86	Not Detected	2.2	Not Detected
1,3-Butadiene	0.86	Not Detected	1.9	Not Detected
Bromomethane	8.6	Not Detected	34	Not Detected
Chloroethane	3.5	Not Detected	9.1	Not Detected
Freon 11	0.86	Not Detected	4.9	Not Detected
Ethanol	3.5	8.3	6.5	16
Freon 113	0.86	Not Detected	6.6	Not Detected
1,1-Dichloroethene	0.86	Not Detected	3.4	Not Detected
Acetone	8.6	16	20	38
2-Propanol	3.5	Not Detected	8.5	Not Detected
Carbon Disulfide	3.5	Not Detected	11	Not Detected
3-Chloropropene	3.5	Not Detected	11	Not Detected
Methylene Chloride	8.6	Not Detected	30	Not Detected
Methyl tert-butyl ether	3.5	Not Detected	12	Not Detected
trans-1,2-Dichloroethene	0.86	Not Detected	3.4	Not Detected
Hexane	0.86	Not Detected	3.0	Not Detected
1,1-Dichloroethane	0.86	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.5	4.2	10	12
cis-1,2-Dichloroethene	0.86	29	3.4	110
Tetrahydrofuran	0.86	1.8	2.6	5.3
Chloroform	0.86	Not Detected	4.2	Not Detected
1,1,1-Trichloroethane	0.86	1.7	4.7	9.3
Cyclohexane	0.86	Not Detected	3.0	Not Detected
Carbon Tetrachloride	0.86	Not Detected	5.4	Not Detected
2,2,4-Trimethylpentane	0.86	Not Detected	4.0	Not Detected
Benzene	0.86	Not Detected	2.8	Not Detected
1,2-Dichloroethane	0.86	Not Detected	3.5	Not Detected
Heptane	0.86	Not Detected	3.5	Not Detected
Trichloroethene	0.86	Not Detected	4.6	Not Detected
1,2-Dichloropropane	0.86	Not Detected	4.0	Not Detected
1,4-Dioxane	3.5	Not Detected	12	Not Detected
Bromodichloromethane	0.86	Not Detected	5.8	Not Detected
cis-1,3-Dichloropropene	0.86	Not Detected	3.9	Not Detected
4-Methyl-2-pentanone	0.86	Not Detected	3.5	Not Detected
Toluene	0.86	Not Detected	3.2	Not Detected
trans-1,3-Dichloropropene	0.86	Not Detected	3.9	Not Detected
1,1,2-Trichloroethane	0.86	Not Detected	4.7	Not Detected
Tetrachloroethene	0.86	Not Detected	5.9	Not Detected
2-Hexanone	3.5	Not Detected	14	Not Detected



Air Toxics

Client Sample ID: SVE-Effluent

Lab ID#: 1709074-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3090826	Date of Collection: 8/29/17 1:51:00 PM		
Dil. Factor:	1.73	Date of Analysis: 9/9/17 12:51 AM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.86	Not Detected	7.4	Not Detected
1,2-Dibromoethane (EDB)	0.86	Not Detected	6.6	Not Detected
Chlorobenzene	0.86	Not Detected	4.0	Not Detected
Ethyl Benzene	0.86	Not Detected	3.8	Not Detected
m,p-Xylene	0.86	Not Detected	3.8	Not Detected
o-Xylene	0.86	Not Detected	3.8	Not Detected
Styrene	0.86	Not Detected	3.7	Not Detected
Bromoform	0.86	Not Detected	8.9	Not Detected
Cumene	0.86	Not Detected	4.2	Not Detected
1,1,2,2-Tetrachloroethane	0.86	Not Detected	5.9	Not Detected
Propylbenzene	0.86	Not Detected	4.2	Not Detected
4-Ethyltoluene	0.86	Not Detected	4.2	Not Detected
1,3,5-Trimethylbenzene	0.86	Not Detected	4.2	Not Detected
1,2,4-Trimethylbenzene	0.86	Not Detected	4.2	Not Detected
1,3-Dichlorobenzene	0.86	Not Detected	5.2	Not Detected
1,4-Dichlorobenzene	0.86	Not Detected	5.2	Not Detected
alpha-Chlorotoluene	0.86	Not Detected	4.5	Not Detected
1,2-Dichlorobenzene	0.86	Not Detected	5.2	Not Detected
1,2,4-Trichlorobenzene	3.5	Not Detected	26	Not Detected
Hexachlorobutadiene	3.5	Not Detected	37	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	86	70-130
4-Bromofluorobenzene	98	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1709074-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3090807	Date of Collection: NA		
Dil. Factor:	1.00	Date of Analysis: 9/8/17 01:10 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	5.0	Not Detected	10	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	5.0	Not Detected	19	Not Detected
Chloroethane	2.0	Not Detected	5.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	5.0	Not Detected	12	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	2.0	Not Detected	6.2	Not Detected
3-Chloropropene	2.0	Not Detected	6.3	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
Methyl tert-butyl ether	2.0	Not Detected	7.2	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
2-Hexanone	2.0	Not Detected	8.2	Not Detected



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1709074-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3090807	Date of Collection: NA		
Dil. Factor:	1.00	Date of Analysis: 9/8/17 01:10 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
Cumene	0.50	Not Detected	2.4	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
Propylbenzene	0.50	Not Detected	2.4	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	88	70-130
4-Bromofluorobenzene	98	70-130



Air Toxics

Client Sample ID: CCV

Lab ID#: 1709074-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3090802	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 9/8/17 09:03 AM

Compound	%Recovery
Freon 12	88
Freon 114	99
Chloromethane	89
Vinyl Chloride	91
1,3-Butadiene	88
Bromomethane	97
Chloroethane	92
Freon 11	90
Ethanol	90
Freon 113	97
1,1-Dichloroethene	90
Acetone	86
2-Propanol	81
Carbon Disulfide	89
3-Chloropropene	88
Methylene Chloride	89
Methyl tert-butyl ether	79
trans-1,2-Dichloroethene	106
Hexane	87
1,1-Dichloroethane	94
2-Butanone (Methyl Ethyl Ketone)	92
cis-1,2-Dichloroethene	88
Tetrahydrofuran	85
Chloroform	95
1,1,1-Trichloroethane	90
Cyclohexane	90
Carbon Tetrachloride	93
2,2,4-Trimethylpentane	86
Benzene	105
1,2-Dichloroethane	95
Heptane	100
Trichloroethene	103
1,2-Dichloropropane	106
1,4-Dioxane	97
Bromodichloromethane	104
cis-1,3-Dichloropropene	103
4-Methyl-2-pentanone	89
Toluene	106
trans-1,3-Dichloropropene	94
1,1,2-Trichloroethane	106
Tetrachloroethene	105
2-Hexanone	95



Air Toxics

Client Sample ID: CCV

Lab ID#: 1709074-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3090802	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	9/8/17 09:03 AM

Compound	%Recovery
Dibromochloromethane	104
1,2-Dibromoethane (EDB)	104
Chlorobenzene	104
Ethyl Benzene	101
m,p-Xylene	102
o-Xylene	98
Styrene	107
Bromoform	105
Cumene	99
1,1,2,2-Tetrachloroethane	103
Propylbenzene	99
4-Ethyltoluene	106
1,3,5-Trimethylbenzene	105
1,2,4-Trimethylbenzene	97
1,3-Dichlorobenzene	105
1,4-Dichlorobenzene	105
alpha-Chlorotoluene	97
1,2-Dichlorobenzene	105
1,2,4-Trichlorobenzene	105
Hexachlorobutadiene	108

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	83	70-130
4-Bromofluorobenzene	102	70-130



Air Toxics

Client Sample ID: LCS

Lab ID#: 1709074-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3090803	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	9/8/17 09:28 AM
Compound	%Recovery	Method	Limits
Freon 12	82	70-130	
Freon 114	93	70-130	
Chloromethane	83	70-130	
Vinyl Chloride	85	70-130	
1,3-Butadiene	80	70-130	
Bromomethane	92	70-130	
Chloroethane	87	70-130	
Freon 11	83	70-130	
Ethanol	86	70-130	
Freon 113	91	70-130	
1,1-Dichloroethene	83	70-130	
Acetone	76	70-130	
2-Propanol	79	70-130	
Carbon Disulfide	71	70-130	
3-Chloropropene	80	70-130	
Methylene Chloride	82	70-130	
Methyl tert-butyl ether	74	70-130	
trans-1,2-Dichloroethene	84	70-130	
Hexane	79	70-130	
1,1-Dichloroethane	84	70-130	
2-Butanone (Methyl Ethyl Ketone)	81	70-130	
cis-1,2-Dichloroethene	86	70-130	
Tetrahydrofuran	76	70-130	
Chloroform	84	70-130	
1,1,1-Trichloroethane	84	70-130	
Cyclohexane	84	70-130	
Carbon Tetrachloride	88	70-130	
2,2,4-Trimethylpentane	81	70-130	
Benzene	95	70-130	
1,2-Dichloroethane	85	70-130	
Heptane	90	70-130	
Trichloroethene	94	70-130	
1,2-Dichloropropane	97	70-130	
1,4-Dioxane	91	70-130	
Bromodichloromethane	95	70-130	
cis-1,3-Dichloropropene	87	70-130	
4-Methyl-2-pentanone	89	70-130	
Toluene	96	70-130	
trans-1,3-Dichloropropene	85	70-130	
1,1,2-Trichloroethane	97	70-130	
Tetrachloroethene	97	70-130	
2-Hexanone	96	70-130	



Air Toxics

Client Sample ID: LCS

Lab ID#: 1709074-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3090803	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	9/8/17 09:28 AM

Compound	%Recovery	Method Limits
Dibromochloromethane	96	70-130
1,2-Dibromoethane (EDB)	95	70-130
Chlorobenzene	95	70-130
Ethyl Benzene	96	70-130
m,p-Xylene	96	70-130
o-Xylene	96	70-130
Styrene	107	70-130
Bromoform	104	70-130
Cumene	96	70-130
1,1,2,2-Tetrachloroethane	98	70-130
Propylbenzene	98	70-130
4-Ethyltoluene	101	70-130
1,3,5-Trimethylbenzene	103	70-130
1,2,4-Trimethylbenzene	96	70-130
1,3-Dichlorobenzene	102	70-130
1,4-Dichlorobenzene	101	70-130
alpha-Chlorotoluene	100	70-130
1,2-Dichlorobenzene	102	70-130
1,2,4-Trichlorobenzene	104	70-130
Hexachlorobutadiene	105	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	83	70-130
4-Bromofluorobenzene	101	70-130



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1709074-05AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3090804	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	9/8/17 10:58 AM
Compound	%Recovery	Method	Limits
Freon 12	83	70-130	
Freon 114	94	70-130	
Chloromethane	82	70-130	
Vinyl Chloride	85	70-130	
1,3-Butadiene	81	70-130	
Bromomethane	91	70-130	
Chloroethane	87	70-130	
Freon 11	84	70-130	
Ethanol	86	70-130	
Freon 113	90	70-130	
1,1-Dichloroethene	84	70-130	
Acetone	78	70-130	
2-Propanol	78	70-130	
Carbon Disulfide	72	70-130	
3-Chloropropene	78	70-130	
Methylene Chloride	82	70-130	
Methyl tert-butyl ether	75	70-130	
trans-1,2-Dichloroethene	83	70-130	
Hexane	79	70-130	
1,1-Dichloroethane	84	70-130	
2-Butanone (Methyl Ethyl Ketone)	80	70-130	
cis-1,2-Dichloroethene	85	70-130	
Tetrahydrofuran	75	70-130	
Chloroform	84	70-130	
1,1,1-Trichloroethane	84	70-130	
Cyclohexane	85	70-130	
Carbon Tetrachloride	87	70-130	
2,2,4-Trimethylpentane	80	70-130	
Benzene	92	70-130	
1,2-Dichloroethane	84	70-130	
Heptane	91	70-130	
Trichloroethene	93	70-130	
1,2-Dichloropropane	96	70-130	
1,4-Dioxane	91	70-130	
Bromodichloromethane	94	70-130	
cis-1,3-Dichloropropene	87	70-130	
4-Methyl-2-pentanone	88	70-130	
Toluene	95	70-130	
trans-1,3-Dichloropropene	86	70-130	
1,1,2-Trichloroethane	97	70-130	
Tetrachloroethene	96	70-130	
2-Hexanone	95	70-130	



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1709074-05AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3090804	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	9/8/17 10:58 AM

Compound	%Recovery	Method Limits
Dibromochloromethane	96	70-130
1,2-Dibromoethane (EDB)	94	70-130
Chlorobenzene	94	70-130
Ethyl Benzene	95	70-130
m,p-Xylene	95	70-130
o-Xylene	95	70-130
Styrene	107	70-130
Bromoform	102	70-130
Cumene	95	70-130
1,1,2,2-Tetrachloroethane	96	70-130
Propylbenzene	97	70-130
4-Ethyltoluene	99	70-130
1,3,5-Trimethylbenzene	102	70-130
1,2,4-Trimethylbenzene	95	70-130
1,3-Dichlorobenzene	102	70-130
1,4-Dichlorobenzene	100	70-130
alpha-Chlorotoluene	100	70-130
1,2-Dichlorobenzene	102	70-130
1,2,4-Trichlorobenzene	105	70-130
Hexachlorobutadiene	106	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	84	70-130
4-Bromofluorobenzene	102	70-130

10/5/2017
Mr. Jim Hayward
EA Engineering
6712 Brooklawn Parkway

Syracuse NY 13211

Project Name: National Heatset
Project #: 1490716
Workorder #: 1709457

Dear Mr. Jim Hayward

The following report includes the data for the above referenced project for sample(s) received on 9/22/2017 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Ausha Scott
Project Manager

A Eurofins Lancaster Laboratories Company

WORK ORDER #: 1709457

Work Order Summary

CLIENT:	Mr. Jim Hayward EA Engineering 6712 Brooklawn Parkway Syracuse, NY 13211	BILL TO:	Accounts Payable EA Engineering 3 Washington Center Newburgh, NY 12550
PHONE:	315-431-4610	P.O. #	10991-2.00
FAX:	315-431-4280	PROJECT #	1490716 National Heatset
DATE RECEIVED:	09/22/2017	CONTACT:	Ausha Scott
DATE COMPLETED:	10/05/2017		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	SVE Influent	TO-15	6.1 "Hg	4.9 psi
02A	SVE Effluent	TO-15	5.9 "Hg	5.1 psi
03A	Lab Blank	TO-15	NA	NA
04A	CCV	TO-15	NA	NA
05A	LCS	TO-15	NA	NA
05AA	LCSD	TO-15	NA	NA

CERTIFIED BY:



DATE: 10/05/17

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)

Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.

Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

**LABORATORY NARRATIVE
EPA Method TO-15
EA Engineering
Workorder# 1709457**

Two 6 Liter Summa Canister samples were received on September 22, 2017. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

Dilution was performed on sample SVE Influent due to the presence of high level target species.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

**Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN**

Client Sample ID: SVE Influent

Lab ID#: 1709457-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	4.2	24	16	96
Trichloroethene	4.2	85	22	460
Tetrachloroethene	4.2	1000	28	6900

Client Sample ID: SVE Effluent

Lab ID#: 1709457-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 11	0.84	0.89	4.7	5.0
trans-1,2-Dichloroethene	0.84	0.92	3.3	3.6
cis-1,2-Dichloroethene	0.84	36	3.3	140
Tetrahydrofuran	0.84	1.9	2.5	5.6
Chloroform	0.84	1.1	4.1	5.2
1,1,1-Trichloroethane	0.84	4.9	4.6	27



Air Toxics

Client Sample ID: SVE Influent

Lab ID#: 1709457-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p092619		Date of Collection:	9/21/17 3:30:00 PM
Dil. Factor:	8.37		Date of Analysis:	9/26/17 10:40 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	4.2	Not Detected	21	Not Detected
Freon 114	4.2	Not Detected	29	Not Detected
Chloromethane	42	Not Detected	86	Not Detected
Vinyl Chloride	4.2	Not Detected	11	Not Detected
1,3-Butadiene	4.2	Not Detected	9.2	Not Detected
Bromomethane	42	Not Detected	160	Not Detected
Chloroethane	17	Not Detected	44	Not Detected
Freon 11	4.2	Not Detected	24	Not Detected
Ethanol	17	Not Detected	32	Not Detected
Freon 113	4.2	Not Detected	32	Not Detected
1,1-Dichloroethene	4.2	Not Detected	16	Not Detected
Acetone	42	Not Detected	99	Not Detected
2-Propanol	17	Not Detected	41	Not Detected
Carbon Disulfide	17	Not Detected	52	Not Detected
3-Chloropropene	17	Not Detected	52	Not Detected
Methylene Chloride	42	Not Detected	140	Not Detected
Methyl tert-butyl ether	17	Not Detected	60	Not Detected
trans-1,2-Dichloroethene	4.2	Not Detected	16	Not Detected
Hexane	4.2	Not Detected	15	Not Detected
1,1-Dichloroethane	4.2	Not Detected	17	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	Not Detected	49	Not Detected
cis-1,2-Dichloroethene	4.2	24	16	96
Tetrahydrofuran	4.2	Not Detected	12	Not Detected
Chloroform	4.2	Not Detected	20	Not Detected
1,1,1-Trichloroethane	4.2	Not Detected	23	Not Detected
Cyclohexane	4.2	Not Detected	14	Not Detected
Carbon Tetrachloride	4.2	Not Detected	26	Not Detected
2,2,4-Trimethylpentane	4.2	Not Detected	20	Not Detected
Benzene	4.2	Not Detected	13	Not Detected
1,2-Dichloroethane	4.2	Not Detected	17	Not Detected
Heptane	4.2	Not Detected	17	Not Detected
Trichloroethene	4.2	85	22	460
1,2-Dichloropropane	4.2	Not Detected	19	Not Detected
1,4-Dioxane	17	Not Detected	60	Not Detected
Bromodichloromethane	4.2	Not Detected	28	Not Detected
cis-1,3-Dichloropropene	4.2	Not Detected	19	Not Detected
4-Methyl-2-pentanone	4.2	Not Detected	17	Not Detected
Toluene	4.2	Not Detected	16	Not Detected
trans-1,3-Dichloropropene	4.2	Not Detected	19	Not Detected
1,1,2-Trichloroethane	4.2	Not Detected	23	Not Detected
Tetrachloroethene	4.2	1000	28	6900
2-Hexanone	17	Not Detected	68	Not Detected



Air Toxics

Client Sample ID: SVE Influent

Lab ID#: 1709457-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p092619	Date of Collection: 9/21/17 3:30:00 PM		
Dil. Factor:	8.37	Date of Analysis: 9/26/17 10:40 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	4.2	Not Detected	36	Not Detected
1,2-Dibromoethane (EDB)	4.2	Not Detected	32	Not Detected
Chlorobenzene	4.2	Not Detected	19	Not Detected
Ethyl Benzene	4.2	Not Detected	18	Not Detected
m,p-Xylene	4.2	Not Detected	18	Not Detected
o-Xylene	4.2	Not Detected	18	Not Detected
Styrene	4.2	Not Detected	18	Not Detected
Bromoform	4.2	Not Detected	43	Not Detected
Cumene	4.2	Not Detected	20	Not Detected
1,1,2,2-Tetrachloroethane	4.2	Not Detected	29	Not Detected
Propylbenzene	4.2	Not Detected	20	Not Detected
4-Ethyltoluene	4.2	Not Detected	20	Not Detected
1,3,5-Trimethylbenzene	4.2	Not Detected	20	Not Detected
1,2,4-Trimethylbenzene	4.2	Not Detected	20	Not Detected
1,3-Dichlorobenzene	4.2	Not Detected	25	Not Detected
1,4-Dichlorobenzene	4.2	Not Detected	25	Not Detected
alpha-Chlorotoluene	4.2	Not Detected	22	Not Detected
1,2-Dichlorobenzene	4.2	Not Detected	25	Not Detected
1,2,4-Trichlorobenzene	17	Not Detected	120	Not Detected
Hexachlorobutadiene	17	Not Detected	180	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	97	70-130



Air Toxics

Client Sample ID: SVE Effluent

Lab ID#: 1709457-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p092615	Date of Collection:	9/21/17 5:10:00 PM	
Dil. Factor:	1.68	Date of Analysis:	9/26/17 08:05 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.84	Not Detected	4.2	Not Detected
Freon 114	0.84	Not Detected	5.9	Not Detected
Chloromethane	8.4	Not Detected	17	Not Detected
Vinyl Chloride	0.84	Not Detected	2.1	Not Detected
1,3-Butadiene	0.84	Not Detected	1.8	Not Detected
Bromomethane	8.4	Not Detected	33	Not Detected
Chloroethane	3.4	Not Detected	8.9	Not Detected
Freon 11	0.84	0.89	4.7	5.0
Ethanol	3.4	Not Detected	6.3	Not Detected
Freon 113	0.84	Not Detected	6.4	Not Detected
1,1-Dichloroethene	0.84	Not Detected	3.3	Not Detected
Acetone	8.4	Not Detected	20	Not Detected
2-Propanol	3.4	Not Detected	8.2	Not Detected
Carbon Disulfide	3.4	Not Detected	10	Not Detected
3-Chloropropene	3.4	Not Detected	10	Not Detected
Methylene Chloride	8.4	Not Detected	29	Not Detected
Methyl tert-butyl ether	3.4	Not Detected	12	Not Detected
trans-1,2-Dichloroethene	0.84	0.92	3.3	3.6
Hexane	0.84	Not Detected	3.0	Not Detected
1,1-Dichloroethane	0.84	Not Detected	3.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.4	Not Detected	9.9	Not Detected
cis-1,2-Dichloroethene	0.84	36	3.3	140
Tetrahydrofuran	0.84	1.9	2.5	5.6
Chloroform	0.84	1.1	4.1	5.2
1,1,1-Trichloroethane	0.84	4.9	4.6	27
Cyclohexane	0.84	Not Detected	2.9	Not Detected
Carbon Tetrachloride	0.84	Not Detected	5.3	Not Detected
2,2,4-Trimethylpentane	0.84	Not Detected	3.9	Not Detected
Benzene	0.84	Not Detected	2.7	Not Detected
1,2-Dichloroethane	0.84	Not Detected	3.4	Not Detected
Heptane	0.84	Not Detected	3.4	Not Detected
Trichloroethene	0.84	Not Detected	4.5	Not Detected
1,2-Dichloropropane	0.84	Not Detected	3.9	Not Detected
1,4-Dioxane	3.4	Not Detected	12	Not Detected
Bromodichloromethane	0.84	Not Detected	5.6	Not Detected
cis-1,3-Dichloropropene	0.84	Not Detected	3.8	Not Detected
4-Methyl-2-pentanone	0.84	Not Detected	3.4	Not Detected
Toluene	0.84	Not Detected	3.2	Not Detected
trans-1,3-Dichloropropene	0.84	Not Detected	3.8	Not Detected
1,1,2-Trichloroethane	0.84	Not Detected	4.6	Not Detected
Tetrachloroethene	0.84	Not Detected	5.7	Not Detected
2-Hexanone	3.4	Not Detected	14	Not Detected



Air Toxics

Client Sample ID: SVE Effluent

Lab ID#: 1709457-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p092615	Date of Collection:	9/21/17 5:10:00 PM	
Dil. Factor:	1.68	Date of Analysis:	9/26/17 08:05 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.84	Not Detected	7.2	Not Detected
1,2-Dibromoethane (EDB)	0.84	Not Detected	6.4	Not Detected
Chlorobenzene	0.84	Not Detected	3.9	Not Detected
Ethyl Benzene	0.84	Not Detected	3.6	Not Detected
m,p-Xylene	0.84	Not Detected	3.6	Not Detected
o-Xylene	0.84	Not Detected	3.6	Not Detected
Styrene	0.84	Not Detected	3.6	Not Detected
Bromoform	0.84	Not Detected	8.7	Not Detected
Cumene	0.84	Not Detected	4.1	Not Detected
1,1,2,2-Tetrachloroethane	0.84	Not Detected	5.8	Not Detected
Propylbenzene	0.84	Not Detected	4.1	Not Detected
4-Ethyltoluene	0.84	Not Detected	4.1	Not Detected
1,3,5-Trimethylbenzene	0.84	Not Detected	4.1	Not Detected
1,2,4-Trimethylbenzene	0.84	Not Detected	4.1	Not Detected
1,3-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected
1,4-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected
alpha-Chlorotoluene	0.84	Not Detected	4.3	Not Detected
1,2-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected
1,2,4-Trichlorobenzene	3.4	Not Detected	25	Not Detected
Hexachlorobutadiene	3.4	Not Detected	36	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	97	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1709457-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p092605	Date of Collection: NA		
Dil. Factor:	1.00	Date of Analysis: 9/26/17 01:26 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	5.0	Not Detected	10	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	5.0	Not Detected	19	Not Detected
Chloroethane	2.0	Not Detected	5.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	5.0	Not Detected	12	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	2.0	Not Detected	6.2	Not Detected
3-Chloropropene	2.0	Not Detected	6.3	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
Methyl tert-butyl ether	2.0	Not Detected	7.2	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
2-Hexanone	2.0	Not Detected	8.2	Not Detected



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1709457-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p092605	Date of Collection:	NA	
Dil. Factor:	1.00	Date of Analysis:	9/26/17 01:26 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
Cumene	0.50	Not Detected	2.4	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
Propylbenzene	0.50	Not Detected	2.4	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	99	70-130



Air Toxics

Client Sample ID: CCV

Lab ID#: 1709457-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p092602	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 9/26/17 11:40 AM

Compound	%Recovery
Freon 12	101
Freon 114	96
Chloromethane	122
Vinyl Chloride	122
1,3-Butadiene	110
Bromomethane	101
Chloroethane	102
Freon 11	98
Ethanol	116
Freon 113	97
1,1-Dichloroethene	83
Acetone	107
2-Propanol	111
Carbon Disulfide	96
3-Chloropropene	86
Methylene Chloride	119
Methyl tert-butyl ether	84
trans-1,2-Dichloroethene	90
Hexane	95
1,1-Dichloroethane	105
2-Butanone (Methyl Ethyl Ketone)	96
cis-1,2-Dichloroethene	87
Tetrahydrofuran	113
Chloroform	100
1,1,1-Trichloroethane	96
Cyclohexane	86
Carbon Tetrachloride	98
2,2,4-Trimethylpentane	101
Benzene	108
1,2-Dichloroethane	113
Heptane	99
Trichloroethene	98
1,2-Dichloropropane	112
1,4-Dioxane	111
Bromodichloromethane	108
cis-1,3-Dichloropropene	98
4-Methyl-2-pentanone	123
Toluene	104
trans-1,3-Dichloropropene	97
1,1,2-Trichloroethane	105
Tetrachloroethene	109
2-Hexanone	127



Air Toxics

Client Sample ID: CCV

Lab ID#: 1709457-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p092602	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	9/26/17 11:40 AM

Compound	%Recovery
Dibromochloromethane	103
1,2-Dibromoethane (EDB)	104
Chlorobenzene	101
Ethyl Benzene	96
m,p-Xylene	97
o-Xylene	94
Styrene	102
Bromoform	112
Cumene	98
1,1,2,2-Tetrachloroethane	105
Propylbenzene	100
4-Ethyltoluene	99
1,3,5-Trimethylbenzene	102
1,2,4-Trimethylbenzene	97
1,3-Dichlorobenzene	108
1,4-Dichlorobenzene	108
alpha-Chlorotoluene	98
1,2-Dichlorobenzene	109
1,2,4-Trichlorobenzene	114
Hexachlorobutadiene	127

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	107	70-130



Air Toxics

Client Sample ID: LCS

Lab ID#: 1709457-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p092603	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	9/26/17 12:05 PM
Compound	%Recovery	Method	Limits
Freon 12	105	70-130	
Freon 114	102	70-130	
Chloromethane	118	70-130	
Vinyl Chloride	125	70-130	
1,3-Butadiene	113	70-130	
Bromomethane	104	70-130	
Chloroethane	106	70-130	
Freon 11	102	70-130	
Ethanol	113	70-130	
Freon 113	97	70-130	
1,1-Dichloroethene	83	70-130	
Acetone	106	70-130	
2-Propanol	111	70-130	
Carbon Disulfide	85	70-130	
3-Chloropropene	84	70-130	
Methylene Chloride	120	70-130	
Methyl tert-butyl ether	83	70-130	
trans-1,2-Dichloroethene	77	70-130	
Hexane	97	70-130	
1,1-Dichloroethane	105	70-130	
2-Butanone (Methyl Ethyl Ketone)	93	70-130	
cis-1,2-Dichloroethene	98	70-130	
Tetrahydrofuran	111	70-130	
Chloroform	101	70-130	
1,1,1-Trichloroethane	98	70-130	
Cyclohexane	90	70-130	
Carbon Tetrachloride	100	70-130	
2,2,4-Trimethylpentane	105	70-130	
Benzene	108	70-130	
1,2-Dichloroethane	112	70-130	
Heptane	102	70-130	
Trichloroethene	101	70-130	
1,2-Dichloropropane	115	70-130	
1,4-Dioxane	99	70-130	
Bromodichloromethane	112	70-130	
cis-1,3-Dichloropropene	93	70-130	
4-Methyl-2-pentanone	110	70-130	
Toluene	104	70-130	
trans-1,3-Dichloropropene	100	70-130	
1,1,2-Trichloroethane	108	70-130	
Tetrachloroethene	111	70-130	
2-Hexanone	106	70-130	



Air Toxics

Client Sample ID: LCS

Lab ID#: 1709457-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p092603	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	9/26/17 12:05 PM

Compound	%Recovery	Method Limits
Dibromochloromethane	105	70-130
1,2-Dibromoethane (EDB)	105	70-130
Chlorobenzene	102	70-130
Ethyl Benzene	97	70-130
m,p-Xylene	98	70-130
o-Xylene	95	70-130
Styrene	100	70-130
Bromoform	116	70-130
Cumene	98	70-130
1,1,2,2-Tetrachloroethane	105	70-130
Propylbenzene	102	70-130
4-Ethyltoluene	98	70-130
1,3,5-Trimethylbenzene	99	70-130
1,2,4-Trimethylbenzene	94	70-130
1,3-Dichlorobenzene	108	70-130
1,4-Dichlorobenzene	107	70-130
alpha-Chlorotoluene	105	70-130
1,2-Dichlorobenzene	107	70-130
1,2,4-Trichlorobenzene	108	70-130
Hexachlorobutadiene	119	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	105	70-130



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1709457-05AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p092604	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	9/26/17 12:29 PM
Compound	%Recovery	Method	Limits
Freon 12	104	70-130	
Freon 114	102	70-130	
Chloromethane	122	70-130	
Vinyl Chloride	117	70-130	
1,3-Butadiene	116	70-130	
Bromomethane	103	70-130	
Chloroethane	106	70-130	
Freon 11	101	70-130	
Ethanol	112	70-130	
Freon 113	96	70-130	
1,1-Dichloroethene	84	70-130	
Acetone	106	70-130	
2-Propanol	112	70-130	
Carbon Disulfide	85	70-130	
3-Chloropropene	87	70-130	
Methylene Chloride	120	70-130	
Methyl tert-butyl ether	82	70-130	
trans-1,2-Dichloroethene	77	70-130	
Hexane	98	70-130	
1,1-Dichloroethane	105	70-130	
2-Butanone (Methyl Ethyl Ketone)	92	70-130	
cis-1,2-Dichloroethene	100	70-130	
Tetrahydrofuran	113	70-130	
Chloroform	101	70-130	
1,1,1-Trichloroethane	98	70-130	
Cyclohexane	89	70-130	
Carbon Tetrachloride	100	70-130	
2,2,4-Trimethylpentane	106	70-130	
Benzene	108	70-130	
1,2-Dichloroethane	109	70-130	
Heptane	100	70-130	
Trichloroethene	99	70-130	
1,2-Dichloropropane	113	70-130	
1,4-Dioxane	100	70-130	
Bromodichloromethane	112	70-130	
cis-1,3-Dichloropropene	95	70-130	
4-Methyl-2-pentanone	110	70-130	
Toluene	103	70-130	
trans-1,3-Dichloropropene	98	70-130	
1,1,2-Trichloroethane	106	70-130	
Tetrachloroethene	110	70-130	
2-Hexanone	106	70-130	



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1709457-05AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p092604	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	9/26/17 12:29 PM

Compound	%Recovery	Method Limits
Dibromochloromethane	104	70-130
1,2-Dibromoethane (EDB)	103	70-130
Chlorobenzene	100	70-130
Ethyl Benzene	97	70-130
m,p-Xylene	96	70-130
o-Xylene	95	70-130
Styrene	100	70-130
Bromoform	115	70-130
Cumene	97	70-130
1,1,2,2-Tetrachloroethane	103	70-130
Propylbenzene	101	70-130
4-Ethyltoluene	96	70-130
1,3,5-Trimethylbenzene	100	70-130
1,2,4-Trimethylbenzene	95	70-130
1,3-Dichlorobenzene	107	70-130
1,4-Dichlorobenzene	106	70-130
alpha-Chlorotoluene	104	70-130
1,2-Dichlorobenzene	107	70-130
1,2,4-Trichlorobenzene	109	70-130
Hexachlorobutadiene	120	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	105	70-130

Attachment C

Laboratory Analytical Data – Groundwater Samples

Project: NYSDEC National Heatset

Client PO: 1490716

Report To: EA Engineering, Science & Technology
6712 Brooklawn Pkwy.
Suite 104
Syracuse, NY 13211

Attn: Jim Hayward/E.Cummings

Received Date: 10/20/2017

Report Date: 11/10/2017

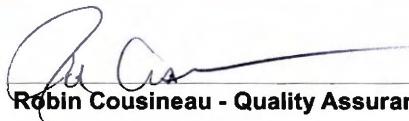
Deliverables: NYDOH-CatB

Lab ID: AD00698

Lab Project No: 7102003

This report is a true report of results obtained from our tests of this material. The report relates only to those samples received and analyzed by the laboratory. All results meet the requirements of the NELAC Institute standards. Laboratory reports may not be reproduced, except in full, without the written approval of the laboratory.

In lieu of a formal contract document, the total aggregate liability of Hampton-Clarke to all parties shall not exceed Hampton-Clarke's total fee for analytical services rendered.



Robin Cousineau - Quality Assurance Director

OR

Jean Revolus - Laboratory Director

NJ (07071)
PA (68-00463)

NY (ELAP11408)
KY (90124)

CT (PH-0671)





Table of Contents - 7102003

SDG Narrative.....	1
Reporting Limit Definitions.....	7
Data Package Summary Forms.....	9
Chain of Custody Forms.....	94
GC/MS Volatiles Data.....	103
QC Summary	104
Sample Data	142
Standards Data	314
Raw QC Data	357
Logbook Data	430

SDG Narrative

HC Case Narrative

Client: EA Engineering, Science & Technology
Project: NYSDEC National Heatset

HC Project: 7102003

Hampton-Clarke (HC) received the following samples on 10/20/2017:

<u>Client ID</u>	<u>HC Sample ID</u>	<u>Matrix</u>	<u>Analysis</u>
152140-DDC-06-PS	AD00698-001	Aqueous	VO (8260C)
152140-DDC-06-PD	AD00698-002	Aqueous	VO (8260C)
152140-DDC-05-PS	AD00698-003	Aqueous	VO (8260C)
152140-DDC-05-PD	AD00698-004	Aqueous	VO (8260C)
152140-MW-2D	AD00698-005	Aqueous	VO (8260C)
152140-MW-2S	AD00698-006	Aqueous	VO (8260C)
152140-MW-3D(OFFSITE)	AD00698-007	Aqueous	VO (8260C)
152140-MW-3S(OFFSITE)	AD00698-008	Aqueous	VO (8260C)
152140-MW-1D(ONSITE)	AD00698-009	Aqueous	VO (8260C)
152140-MW-1S(ONSITE)	AD00698-010	Aqueous	VO (8260C)
152140-MW-2A	AD00698-011	Aqueous	VO (8260C)
152140-MW-2AD	AD00698-012	Aqueous	VO (8260C)
152140-MW-3D(ONSITE)	AD00698-013	Aqueous	VO (8260C)
152140-MW-3S(ONSITE)	AD00698-014	Aqueous	VO (8260C)
152140-MW-5D	AD00698-015	Aqueous	VO (8260C)
152140-MW-5S	AD00698-016	Aqueous	VO (8260C)
152140-MW-6S	AD00698-017	Aqueous	VO (8260C)
152140-MW-14S	AD00698-018	Aqueous	VO (8260C)
152140-MW-14D	AD00698-019	Aqueous	VO (8260C)
152140-MW-15S	AD00698-020	Aqueous	VO (8260C)
152140-MW-15D	AD00698-021	Aqueous	VO (8260C)
152140-MW-15D MS	AD00698-022	Aqueous	VO (8260C)
152140-MW-15D MSD	AD00698-023	Aqueous	VO (8260C)
152140-DDC-2-PS	AD00698-024	Aqueous	VO (8260C)
152140-DDC-2-PD	AD00698-025	Aqueous	VO (8260C)
152140-DDC-4-PS	AD00698-026	Aqueous	VO (8260C)
152140-DDC-4-PD	AD00698-027	Aqueous	VO (8260C)
152140-FD-01	AD00698-028	Aqueous	VO (8260C)
152140-MW-1D(OFFSITE)	AD00698-029	Aqueous	VO (8260C)
152140-MW-1S(OFFSITE)	AD00698-030	Aqueous	VO (8260C)
152140-MW-1S(OFFSITE) MS	AD00698-031	Aqueous	VO (8260C)
152140-MW-1S(OFFSITE) MSD	AD00698-032	Aqueous	VO (8260C)
152140-DDC-07-PS	AD00698-033	Aqueous	VO (8260C)
152140-DDC-07-PD	AD00698-034	Aqueous	VO (8260C)
152140-DDC-08-PS	AD00698-035	Aqueous	VO (8260C)
152140-DDC-08-PD	AD00698-036	Aqueous	VO (8260C)
152140-DDC-09-PS	AD00698-037	Aqueous	VO (8260C)
152140-DDC-09-PD	AD00698-038	Aqueous	VO (8260C)
152140-DDC-10-PS	AD00698-039	Aqueous	VO (8260C)
152140-DDC-10-PD	AD00698-040	Aqueous	VO (8260C)
152140-FD-02	AD00698-041	Aqueous	VO (8260C)
TRIP BLANK	AD00698-042	Aqueous	VO (8260C)

This case narrative is in the form of an exception report. Method specific and/or QA/QC anomalies related to this report only are detailed below.

Volatile Organic Analysis:

The Method Blank Spike for batches 64948, 64949, and 64955 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

The MS/MSD RPD, Matrix Spike and/or Matrix Spike Duplicate for batches 64948, 64949, and 64955 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

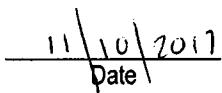
I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data has been authorized by the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



Robin Cousineau
Quality Assurance Director

Or

Jean Revolus
Laboratory Director



Date
11/10/2011

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-I

SAMPLE IDENTIFICATION AND
ANALYTICAL REQUIREMENT SUMMARY

NYSDEC Sample ID/Code	Laboratory Sample ID/Code	Analytical Requirements					
		VOA GC/MS (Method #)	BNA GC/MS (Method #)	VOA GC (Method #)	Pest PCBs (Method #)	Metals (Method #)	Other (Method #)
152140-DDC-06-PS	AD00698-001	8260C	-	-	-	-	-
152140-DDC-06-PD	AD00698-002	8260C	-	-	-	-	-
152140-DDC-05-PS	AD00698-003	8260C	-	-	-	-	-
152140-DDC-05-PD	AD00698-004	8260C	-	-	-	-	-
152140-MW-2D	AD00698-005	8260C	-	-	-	-	-
152140-MW-2S	AD00698-006	8260C	-	-	-	-	-
152140-MW- 3D(OFFSITE)	AD00698-007	8260C	-	-	-	-	-
152140-MW- 3S(OFFSITE)	AD00698-008	8260C	-	-	-	-	-
152140-MW- 1D(ONSITE)	AD00698-009	8260C	-	-	-	-	-
152140-MW- 1S(ONSITE)	AD00698-010	8260C	-	-	-	-	-
152140-MW-2A	AD00698-011	8260C	-	-	-	-	-
152140-MW-2AD	AD00698-012	8260C	-	-	-	-	-
152140-MW- 3D(ONSITE)	AD00698-013	8260C	-	-	-	-	-
152140-MW- 3S(ONSITE)	AD00698-014	8260C	-	-	-	-	-
152140-MW-5D	AD00698-015	8260C	-	-	-	-	-
152140-MW-5S	AD00698-016	8260C	-	-	-	-	-
152140-MW-6S	AD00698-017	8260C	-	-	-	-	-
152140-MW-14S	AD00698-018	8260C	-	-	-	-	-
152140-MW-14D	AD00698-019	8260C	-	-	-	-	-
152140-MW-15S	AD00698-020	8260C	-	-	-	-	-
152140-MW-15D	AD00698-021	8260C	-	-	-	-	-
152140-MW-15D MS	AD00698-022	8260C	-	-	-	-	-
152140-MW-15D MSD	AD00698-023	8260C	-	-	-	-	-
152140-DDC-2-PS	AD00698-024	8260C	-	-	-	-	-
152140-DDC-2-PD	AD00698-025	8260C	-	-	-	-	-
152140-DDC-4-PS	AD00698-026	8260C	-	-	-	-	-
152140-DDC-4-PD	AD00698-027	8260C	-	-	-	-	-
152140-FD-01	AD00698-028	8260C	-	-	-	-	-
152140-MW- 1D(OFFSITE)	AD00698-029	8260C	-	-	-	-	-
152140-MW- 1S(OFFSITE)	AD00698-030	8260C	-	-	-	-	-
152140-MW- 1S(OFFSITE) MS	AD00698-031	8260C	-	-	-	-	-
152140-MW- 1S(OFFSITE) MSD	AD00698-032	8260C	-	-	-	-	-
152140-DDC-07-PS	AD00698-033	8260C	-	-	-	-	-
152140-DDC-07-PD	AD00698-034	8260C	-	-	-	-	-
152140-DDC-08-PS	AD00698-035	8260C	-	-	-	-	-
152140-DDC-08-PD	AD00698-036	8260C	-	-	-	-	-
152140-DDC-09-PS	AD00698-037	8260C	-	-	-	-	-

152140-DDC-09-PD	AD00698-038	8260C	-	-	-	-	-
152140-DDC-10-PS	AD00698-039	8260C	-	-	-	-	-
152140-DDC-10-PD	AD00698-040	8260C	-	-	-	-	-
152140-FD-02	AD00698-041	8260C	-	-	-	-	-
TRIP BLANK	AD00698-042	8260C	-	-	-	-	-

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-IIb

**SAMPLE PREPARATION AND ANALYSIS SUMMARY
VOLATILE (VOA)
ANALYSES**

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
AD00698-001	Aqueous	10/17/2017	10/20/2017	N/A	10/23/2017
AD00698-002	Aqueous	10/17/2017	10/20/2017	N/A	10/20/2017
AD00698-003	Aqueous	10/17/2017	10/20/2017	N/A	10/20/2017
AD00698-004	Aqueous	10/17/2017	10/20/2017	N/A	10/20/2017
AD00698-005	Aqueous	10/18/2017	10/20/2017	N/A	10/20/2017
AD00698-006	Aqueous	10/18/2017	10/20/2017	N/A	10/20/2017
AD00698-007	Aqueous	10/17/2017	10/20/2017	N/A	10/23/2017
AD00698-008	Aqueous	10/17/2017	10/20/2017	N/A	10/20/2017
AD00698-009	Aqueous	10/16/2017	10/20/2017	N/A	10/20/2017
AD00698-010	Aqueous	10/16/2017	10/20/2017	N/A	10/20/2017
AD00698-011	Aqueous	10/16/2017	10/20/2017	N/A	10/23/2017
AD00698-012	Aqueous	10/16/2017	10/20/2017	N/A	10/20/2017
AD00698-013	Aqueous	10/16/2017	10/20/2017	N/A	10/20/2017
AD00698-014	Aqueous	10/16/2017	10/20/2017	N/A	10/20/2017
AD00698-015	Aqueous	10/16/2017	10/20/2017	N/A	10/20/2017
AD00698-016	Aqueous	10/16/2017	10/20/2017	N/A	10/20/2017
AD00698-017	Aqueous	10/16/2017	10/20/2017	N/A	10/20/2017
AD00698-018	Aqueous	10/16/2017	10/20/2017	N/A	10/20/2017
AD00698-019	Aqueous	10/16/2017	10/20/2017	N/A	10/21/2017
AD00698-020	Aqueous	10/17/2017	10/20/2017	N/A	10/21/2017
AD00698-021	Aqueous	10/17/2017	10/20/2017	N/A	10/20/2017
AD00698-022	Aqueous	10/17/2017	10/20/2017	N/A	10/20/2017
AD00698-023	Aqueous	10/17/2017	10/20/2017	N/A	10/20/2017
AD00698-024	Aqueous	10/17/2017	10/20/2017	N/A	10/21/2017
AD00698-025	Aqueous	10/16/2017	10/20/2017	N/A	10/21/2017
AD00698-026	Aqueous	10/17/2017	10/20/2017	N/A	10/21/2017
AD00698-027	Aqueous	10/17/2017	10/20/2017	N/A	10/21/2017
AD00698-028	Aqueous	10/17/2017	10/20/2017	N/A	10/21/2017
AD00698-029	Aqueous	10/17/2017	10/20/2017	N/A	10/23/2017
AD00698-030	Aqueous	10/17/2017	10/20/2017	N/A	10/21/2017
AD00698-031	Aqueous	10/17/2017	10/20/2017	N/A	10/21/2017
AD00698-032	Aqueous	10/17/2017	10/20/2017	N/A	10/21/2017
AD00698-033	Aqueous	10/17/2017	10/20/2017	N/A	10/21/2017
AD00698-034	Aqueous	10/17/2017	10/20/2017	N/A	10/21/2017
AD00698-035	Aqueous	10/17/2017	10/20/2017	N/A	10/23/2017
AD00698-036	Aqueous	10/17/2017	10/20/2017	N/A	10/23/2017
AD00698-037	Aqueous	10/17/2017	10/20/2017	N/A	10/23/2017
AD00698-038	Aqueous	10/17/2017	10/20/2017	N/A	10/23/2017
AD00698-039	Aqueous	10/17/2017	10/20/2017	N/A	10/23/2017
AD00698-040	Aqueous	10/18/2017	10/20/2017	N/A	10/23/2017
AD00698-041	Aqueous	10/18/2017	10/20/2017	N/A	10/23/2017
AD00698-042	Aqueous	10/18/2017	10/20/2017	N/A	10/23/2017

Reporting Limit Definitions

HC Reporting Limit Definitions/Data Qualifiers

REPORTING DEFINITIONS

DF = Dilution Factor

MDL = Method Detection Limit

RL* = Reporting Limit

ND = Not Detected

RT = Retention Time

NA = Not Applicable

**Samples with elevated Reporting Limits (RLs) as a result of a dilution may not achieve client reporting limits in some cases. The elevated RLs are unavoidable consequences of sample dilution required to quantitate target analytes that exceed the calibration range of the instrument.*

DATA QUALIFIERS

- A-** Indicates that the Tentatively Identified Compound (TIC) is suspected to be an aldol-condensation product. These compounds are by-products of acetone and methylene chloride used in the extraction process.
- B-** Indicates analyte was present in the Method Blank and sample.
- d-** For Pesticide and PCB analysis, the concentration between primary and secondary columns is greater than 40%. The lower concentration is generally reported.
- E-** Indicates the concentration exceeded the upper calibration range of the instrument.
- J-** Indicates the value is estimated because it is either a Tentatively Identified Compound (TIC) or the reported concentration is greater than the MDL but less than the RL. For samples results between the MDL and RL there is a possibility of false positives or misidentification at the quantitation levels. Additionally, the acceptance criteria for QC samples may not be met.
- R-** Retention Time is out.
- Y-** Indicates a contaminant found in the blank at less than 10% of the concentration of a contaminant found in the sample.

Data Package Summary Forms

HC Report of Analysis

Client: EA Engineering, Science & Technology

HC Project #: 7102003

Project: NYSDEC National Heatset

Sample ID: 152140-DDC-06-PS

Collection Date: 10/17/2017

Lab#: AD00698-001

Receipt Date: 10/20/2017

Matrix: Aqueous

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	13
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND

Sample ID: 152140-DDC-06-PS**Lab#:** AD00698-001**Matrix:** Aqueous**Collection Date:** 10/17/2017**Receipt Date:** 10/20/2017

Vinyl chloride

1 ug/l

1.0

ND

Xylenes (Total)

1 ug/l

1.0

ND

Sample ID: 152140-DDC-06-PD
 Lab#: AD00698-002
 Matrix: Aqueous

Collection Date: 10/17/2017
 Receipt Date: 10/20/2017

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	2.6
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	3.9
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: 152140-DDC-05-PS
 Lab#: AD00698-003
 Matrix: Aqueous

Collection Date: 10/17/2017
 Receipt Date: 10/20/2017

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chlormethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: 152140-DDC-05-PD

Lab#: AD00698-004

Matrix: Aqueous

Collection Date: 10/17/2017

Receipt Date: 10/20/2017

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	9.2
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	4.5
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: 152140-MW-2D
Lab#: AD00698-005
Matrix: Aqueous

Collection Date: 10/18/2017
Receipt Date: 10/20/2017

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	1.2
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: 152140-MW-2S
 Lab#: AD00698-006
 Matrix: Aqueous

Collection Date: 10/18/2017
 Receipt Date: 10/20/2017

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	1.9
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	6.9
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: 152140-MW-3D(0FFSITE)

Collection Date: 10/17/2017

Lab#: AD00698-007

Receipt Date: 10/20/2017

Matrix: Aqueous

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	1.2
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	5.3
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	7.3
Toluene	1	ug/l	1.0	1.5
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: 152140-MW-3S(0FFSITE)
 Lab#: AD00698-008
 Matrix: Aqueous

Collection Date: 10/17/2017
 Receipt Date: 10/20/2017

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: 152140-MW-1D(ONSITE)

Collection Date: 10/16/2017

Lab#: AD00698-009

Receipt Date: 10/20/2017

Matrix: Aqueous

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-Influoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	5.9
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	1.1
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: 152140-MW-1S(ONSITE)

Collection Date: 10/16/2017

Lab#: AD00698-010

Receipt Date: 10/20/2017

Matrix: Aqueous

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	1.1
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: 152140-MW-2A

Collection Date: 10/16/2017

Lab#: AD00698-011

Receipt Date: 10/20/2017

Matrix: Aqueous

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	3.4
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: 152140-MW-2AD

Lab#: AD00698-012

Matrix: Aqueous

Collection Date: 10/16/2017

Receipt Date: 10/20/2017

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: 152140-MW-3D(ONSITE)
 Lab#: AD00698-013
 Matrix: Aqueous

Collection Date: 10/16/2017
 Receipt Date: 10/20/2017

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	6.2
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: 152140-MW-3S(ONSITE)

Collection Date: 10/16/2017

Lab#: AD00698-014

Receipt Date: 10/20/2017

Matrix: Aqueous

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	27
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: 152140-MW-5D

Lab#: AD00698-015

Matrix: Aqueous

Collection Date: 10/16/2017

Receipt Date: 10/20/2017

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	1.2
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	1.6
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: 152140-MW-5S
 Lab#: AD00698-016
 Matrix: Aqueous

Collection Date: 10/16/2017
 Receipt Date: 10/20/2017

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	1.4
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	2.5
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	1.1
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: 152140-MW-6S

Lab#: AD00698-017

Matrix: Aqueous

Collection Date: 10/16/2017

Receipt Date: 10/20/2017

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	22
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: 152140-MW-14S

Lab#: AD00698-018

Matrix: Aqueous

Collection Date: 10/16/2017

Receipt Date: 10/20/2017

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	1.9
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: 152140-MW-14D
 Lab#: AD00698-019
 Matrix: Aqueous

Collection Date: 10/16/2017
 Receipt Date: 10/20/2017

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	19
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: 152140-MW-15S
 Lab#: AD00698-020
 Matrix: Aqueous

Collection Date: 10/17/2017
 Receipt Date: 10/20/2017

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	2.0
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: 152140-MW-15D

Collection Date: 10/17/2017

Lab#: AD00698-021

Receipt Date: 10/20/2017

Matrix: Aqueous

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	6.2
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: 152140-MW-15D MS
 Lab#: AD00698-022
 Matrix: Aqueous

Collection Date: 10/17/2017
 Receipt Date: 10/20/2017

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	18
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	16
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	19
1,1,2-Trichloroethane	1	ug/l	1.0	16
1,1-Dichloroethane	1	ug/l	1.0	19
1,1-Dichloroethene	1	ug/l	1.0	16
1,2,4-Trichlorobenzene	1	ug/l	1.0	17
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	13
1,2-Dibromoethane	1	ug/l	1.0	16
1,2-Dichlorobenzene	1	ug/l	1.0	17
1,2-Dichloroethane	1	ug/l	0.50	19
1,2-Dichloropropane	1	ug/l	1.0	19
1,3-Dichlorobenzene	1	ug/l	1.0	17
1,4-Dichlorobenzene	1	ug/l	1.0	17
2-Butanone	1	ug/l	1.0	17
2-Hexanone	1	ug/l	1.0	18
4-Methyl-2-pentanone	1	ug/l	1.0	17
Acetone	1	ug/l	5.0	86
Benzene	1	ug/l	0.50	19
Bromodichloromethane	1	ug/l	1.0	18
Bromoform	1	ug/l	1.0	14
Bromomethane	1	ug/l	1.0	15
Carbon disulfide	1	ug/l	1.0	25
Carbon tetrachloride	1	ug/l	1.0	19
Chlorobenzene	1	ug/l	1.0	17
Chloroethane	1	ug/l	1.0	12
Chloroform	1	ug/l	1.0	19
Chloromethane	1	ug/l	1.0	12
cis-1,2-Dichloroethene	1	ug/l	1.0	19
cis-1,3-Dichloropropene	1	ug/l	1.0	16
Cyclohexane	1	ug/l	1.0	20
Dibromochloromethane	1	ug/l	1.0	16
Dichlorodifluoromethane	1	ug/l	1.0	9.3
Ethylbenzene	1	ug/l	1.0	19
Isopropylbenzene	1	ug/l	1.0	16
m&p-Xylenes	1	ug/l	1.0	35
Methyl Acetate	1	ug/l	1.0	17
Methylcyclohexane	1	ug/l	1.0	21
Methylene chloride	1	ug/l	1.0	18
Methyl-t-butyl ether	1	ug/l	0.50	18
o-Xylene	1	ug/l	1.0	18
Styrene	1	ug/l	1.0	18
Tetrachloroethene	1	ug/l	1.0	23
Toluene	1	ug/l	1.0	17
trans-1,2-Dichloroethene	1	ug/l	1.0	19
trans-1,3-Dichloropropene	1	ug/l	1.0	15
Trichloroethene	1	ug/l	1.0	20
Trichlorofluoromethane	1	ug/l	1.0	16
Vinyl chloride	1	ug/l	1.0	14
Xylenes (Total)	1	ug/l	1.0	53

Sample ID: 152140-MW-15D MSD
 Lab#: AD00698-023
 Matrix: Aqueous

Collection Date: 10/17/2017
 Receipt Date: 10/20/2017

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	19
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	16
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	20
1,1,2-Trichloroethane	1	ug/l	1.0	17
1,1-Dichloroethane	1	ug/l	1.0	19
1,1-Dichloroethene	1	ug/l	1.0	18
1,2,4-Trichlorobenzene	1	ug/l	1.0	17
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	15
1,2-Dibromoethane	1	ug/l	1.0	17
1,2-Dichlorobenzene	1	ug/l	1.0	17
1,2-Dichloroethane	1	ug/l	0.50	20
1,2-Dichloropropane	1	ug/l	1.0	20
1,3-Dichlorobenzene	1	ug/l	1.0	17
1,4-Dichlorobenzene	1	ug/l	1.0	17
2-Butanone	1	ug/l	1.0	21
2-Hexanone	1	ug/l	1.0	19
4-Methyl-2-pentanone	1	ug/l	1.0	18
Acetone	1	ug/l	5.0	93
Benzene	1	ug/l	0.50	20
Bromodichloromethane	1	ug/l	1.0	18
Bromoform	1	ug/l	1.0	15
Bromomethane	1	ug/l	1.0	14
Carbon disulfide	1	ug/l	1.0	26
Carbon tetrachloride	1	ug/l	1.0	20
Chlorobenzene	1	ug/l	1.0	18
Chloroethane	1	ug/l	1.0	15
Chloroform	1	ug/l	1.0	19
Chloromethane	1	ug/l	1.0	13
cis-1,2-Dichloroethene	1	ug/l	1.0	20
cis-1,3-Dichloropropene	1	ug/l	1.0	17
Cyclohexane	1	ug/l	1.0	21
Dibromochloromethane	1	ug/l	1.0	16
Dichlorodifluoromethane	1	ug/l	1.0	9.8
Ethylbenzene	1	ug/l	1.0	18
Isopropylbenzene	1	ug/l	1.0	18
m&p-Xylenes	1	ug/l	1.0	36
Methyl Acetate	1	ug/l	1.0	19
Methylcyclohexane	1	ug/l	1.0	21
Methylene chloride	1	ug/l	1.0	18
Methyl-t-butyl ether	1	ug/l	0.50	19
o-Xylene	1	ug/l	1.0	18
Styrene	1	ug/l	1.0	18
Tetrachloroethene	1	ug/l	1.0	24
Toluene	1	ug/l	1.0	18
trans-1,2-Dichloroethene	1	ug/l	1.0	20
trans-1,3-Dichloropropene	1	ug/l	1.0	16
Trichloroethene	1	ug/l	1.0	21
Trichlorofluoromethane	1	ug/l	1.0	17
Vinyl chloride	1	ug/l	1.0	14
Xylenes (Total)	1	ug/l	1.0	54

Sample ID: 152140-DDC-2-PS
 Lab#: AD00698-024
 Matrix: Aqueous

Collection Date: 10/17/2017
 Receipt Date: 10/20/2017

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: 152140-DDC-2-PD
 Lab#: AD00698-025
 Matrix: Aqueous

Collection Date: 10/16/2017
 Receipt Date: 10/20/2017

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	3.6
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: 152140-DDC-4-PS

Collection Date: 10/17/2017

Lab#: AD00698-026

Receipt Date: 10/20/2017

Matrix: Aqueous

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	1.1
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: 152140-DDC-4-PD

Collection Date: 10/17/2017

Lab#: AD00698-027

Receipt Date: 10/20/2017

Matrix: Aqueous

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	1.4
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: 152140-FD-01

Lab#: AD00698-028

Matrix: Aqueous

Collection Date: 10/17/2017

Receipt Date: 10/20/2017

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	2.0
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: 152140-MW-1D(OFFSITE)

Collection Date: 10/17/2017

Lab#: AD00698-029

Receipt Date: 10/20/2017

Matrix: Aqueous

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	1.5
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	21
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	91
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	16
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: 152140-MW-1S(OFFSITE)

Collection Date: 10/17/2017

Lab#: AD00698-030

Receipt Date: 10/20/2017

Matrix: Aqueous

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: 152140-MW-1S(OFFSITE) MS
 Lab#: AD00698-031
 Matrix: Aqueous

Collection Date: 10/17/2017
 Receipt Date: 10/20/2017

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	18
1,1,2-Tetrachloroethane	1	ug/l	1.0	15
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	19
1,1,2-Trichloroethane	1	ug/l	1.0	15
1,1-Dichloroethane	1	ug/l	1.0	18
1,1-Dichloroethene	1	ug/l	1.0	18
1,2,4-Trichlorobenzene	1	ug/l	1.0	13
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	11
1,2-Dibromoethane	1	ug/l	1.0	15
1,2-Dichlorobenzene	1	ug/l	1.0	15
1,2-Dichloroethane	1	ug/l	0.50	19
1,2-Dichloropropane	1	ug/l	1.0	18
1,3-Dichlorobenzene	1	ug/l	1.0	15
1,4-Dichlorobenzene	1	ug/l	1.0	15
2-Butanone	1	ug/l	1.0	15
2-Hexanone	1	ug/l	1.0	16
4-Methyl-2-pentanone	1	ug/l	1.0	16
Acetone	1	ug/l	5.0	82
Benzene	1	ug/l	0.50	19
Bromodichloromethane	1	ug/l	1.0	18
Bromoform	1	ug/l	1.0	13
Bromomethane	1	ug/l	1.0	16
Carbon disulfide	1	ug/l	1.0	26
Carbon tetrachloride	1	ug/l	1.0	19
Chlorobenzene	1	ug/l	1.0	17
Chloroethane	1	ug/l	1.0	14
Chloroform	1	ug/l	1.0	18
Chloromethane	1	ug/l	1.0	13
cis-1,2-Dichloroethene	1	ug/l	1.0	18
cis-1,3-Dichloropropene	1	ug/l	1.0	15
Cyclohexane	1	ug/l	1.0	19
Dibromochloromethane	1	ug/l	1.0	16
Dichlorodifluoromethane	1	ug/l	1.0	9.1
Ethylbenzene	1	ug/l	1.0	16
Isopropylbenzene	1	ug/l	1.0	16
m&p-Xylenes	1	ug/l	1.0	32
Methyl Acetate	1	ug/l	1.0	14
Methylcyclohexane	1	ug/l	1.0	18
Methylene chloride	1	ug/l	1.0	17
Methyl-t-butyl ether	1	ug/l	0.50	16
o-Xylene	1	ug/l	1.0	17
Styrene	1	ug/l	1.0	17
Tetrachloroethene	1	ug/l	1.0	18
Toluene	1	ug/l	1.0	17
trans-1,2-Dichloroethene	1	ug/l	1.0	19
trans-1,3-Dichloropropene	1	ug/l	1.0	14
Trichloroethene	1	ug/l	1.0	19
Trichlorofluoromethane	1	ug/l	1.0	17
Vinyl chloride	1	ug/l	1.0	15
Xylenes (Total)	1	ug/l	1.0	49

Sample ID: 152140-MW-1S(OFFSITE) MSD
 Lab#: AD00698-032
 Matrix: Aqueous

Collection Date: 10/17/2017
 Receipt Date: 10/20/2017

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	18
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	14
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	18
1,1,2-Trichloroethane	1	ug/l	1.0	16
1,1-Dichloroethane	1	ug/l	1.0	18
1,1-Dichloroethene	1	ug/l	1.0	17
1,2,4-Trichlorobenzene	1	ug/l	1.0	13
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	11
1,2-Dibromoethane	1	ug/l	1.0	16
1,2-Dichlorobenzene	1	ug/l	1.0	15
1,2-Dichloroethane	1	ug/l	0.50	20
1,2-Dichloropropane	1	ug/l	1.0	18
1,3-Dichlorobenzene	1	ug/l	1.0	14
1,4-Dichlorobenzene	1	ug/l	1.0	15
2-Butanone	1	ug/l	1.0	10
2-Hexanone	1	ug/l	1.0	17
4-Methyl-2-pentanone	1	ug/l	1.0	16
Acetone	1	ug/l	5.0	88
Benzene	1	ug/l	0.50	19
Bromodichloromethane	1	ug/l	1.0	18
Bromoform	1	ug/l	1.0	13
Bromomethane	1	ug/l	1.0	14
Carbon disulfide	1	ug/l	1.0	26
Carbon tetrachloride	1	ug/l	1.0	19
Chlorobenzene	1	ug/l	1.0	17
Chloroethane	1	ug/l	1.0	12
Chloroform	1	ug/l	1.0	18
Chloromethane	1	ug/l	1.0	12
cis-1,2-Dichloroethene	1	ug/l	1.0	18
cis-1,3-Dichloropropene	1	ug/l	1.0	14
Cyclohexane	1	ug/l	1.0	19
Dibromochloromethane	1	ug/l	1.0	16
Dichlorodifluoromethane	1	ug/l	1.0	8.8
Ethylbenzene	1	ug/l	1.0	15
Isopropylbenzene	1	ug/l	1.0	15
m&p-Xylenes	1	ug/l	1.0	30
Methyl Acetate	1	ug/l	1.0	15
Methylcyclohexane	1	ug/l	1.0	18
Methylene chloride	1	ug/l	1.0	17
Methyl-t-butyl ether	1	ug/l	0.50	17
o-Xylene	1	ug/l	1.0	16
Styrene	1	ug/l	1.0	16
Tetrachloroethene	1	ug/l	1.0	17
Toluene	1	ug/l	1.0	17
trans-1,2-Dichloroethene	1	ug/l	1.0	19
trans-1,3-Dichloropropene	1	ug/l	1.0	13
Trichloroethene	1	ug/l	1.0	19
Trichlorofluoromethane	1	ug/l	1.0	16
Vinyl chloride	1	ug/l	1.0	15
Xylenes (Total)	1	ug/l	1.0	46

Sample ID: 152140-DDC-07-PS

Collection Date: 10/17/2017

Lab#: AD00698-033

Receipt Date: 10/20/2017

Matrix: Aqueous

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	15
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: 152140-DDC-07-PD

Lab#: AD00698-034

Matrix: Aqueous

Collection Date: 10/17/2017

Receipt Date: 10/20/2017

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	24
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	6.8
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	4.9
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: 152140-DDC-08-PS
 Lab#: AD00698-035
 Matrix: Aqueous

Collection Date: 10/17/2017
 Receipt Date: 10/20/2017

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	16
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	1.4
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: 152140-DDC-08-PD
 Lab#: AD00698-036
 Matrix: Aqueous

Collection Date: 10/17/2017
 Receipt Date: 10/20/2017

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	15
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: 152140-DDC-09-PS

Collection Date: 10/17/2017

Lab#: AD00698-037

Receipt Date: 10/20/2017

Matrix: Aqueous

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	1.0
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	1.6
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	11
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: 152140-DDC-09-PD
Lab#: AD00698-038
Matrix: Aqueous

Collection Date: 10/17/2017
Receipt Date: 10/20/2017

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	1.3
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	2.9
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	3.0
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: 152140-DDC-10-PS

Collection Date: 10/17/2017

Lab#: AD00698-039

Receipt Date: 10/20/2017

Matrix: Aqueous

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	1.3
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	1.8
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	8.8
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: 152140-DDC-10-PD

Collection Date: 10/18/2017

Lab#: AD00698-040

Receipt Date: 10/20/2017

Matrix: Aqueous

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	2.6
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: 152140-FD-02

Collection Date: 10/18/2017

Lab#: AD00698-041

Receipt Date: 10/20/2017

Matrix: Aqueous

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	1.2
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	20
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	89
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	15
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: TRIP BLANK
Lab#: AD00698-042
Matrix: Aqueous

Collection Date: 10/16/2017
Receipt Date: 10/20/2017

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-001

Client Id: 152140-DDC-06-PS

Data File: 3M119001.D

Analysis Date: 10/23/17 09:19

Date Rec/Extracted: 10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	13
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

13

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-002

Client Id: 152140-DDC-06-PD

Data File: 3M118946.D

Analysis Date: 10/20/17 19:59

Date Rec/Extracted: 10/20/17-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	2.6
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	3.9
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

6.5

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of *a*-Chlordane and *y*-Chlordane.

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-003

Client Id: 152140-DDC-05-PS

Data File: 3M118947.D

Analysis Date: 10/20/17 20:15

Date Rec/Extracted: 10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-005

Client Id: 152140-MW-2D

Data File: 3M118949.D

Analysis Date: 10/20/17 20:49

Date Rec/Extracted: 10/20/17-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	1.2
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

1.2

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of *a*-Chlordane and *y*-Chlordane.

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-006

Client Id: 152140-MW-2S

Data File: 3M118950.D

Analysis Date: 10/20/17 21:06

Date Rec/Extracted: 10/20/17-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	1.9
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	6.9
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration**8.8**

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD00698-007

Client Id: 152140-MW-3D(0FFSITE)

Data File: 3M119019.D

Analysis Date: 10/23/17 14:22

Date Rec/Extracted: 10/20/17-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	1.2
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	5.3
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	7.3
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	1.5
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

15

ColumnID:(*) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

Chlordane (Total) is sum of *a*-Chlordane and *y*-Chlordane.

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-008

Client Id: 152140-MW-3S(OFFSITE)

Data File: 3M118951.D

Analysis Date: 10/20/17 21:22

Date Rec/Extracted: 10/20/17-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

0

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD00698-009

Client Id: 152140-MW-1D(ONSITE)

Data File: 3M118952.D

Analysis Date: 10/20/17 21:39

Date Rec/Extracted: 10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	5.9
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	1.1
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

7

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of *a*-Chlordane and *y*-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD00698-010

Client Id: 152140-MW-1S(ONSITE)

Data File: 3M118953.D

Analysis Date: 10/20/17 21:56

Date Rec/Extracted: 10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	1.1
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

1.1

ColumnID:(*) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-011

Client Id: 152140-MW-2A

Data File: 3M119005.D

Analysis Date: 10/23/17 10:27

Date Rec/Extracted: 10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	3.4
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

3.4

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-012

Client Id: 152140-MW-2AD

Data File: 3M118954.D

Analysis Date: 10/20/17 22:10

Date Rec/Extracted: 10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

0

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-013

Client Id: 152140-MW-3D(ONSITE)

Data File: 3M118955.D

Analysis Date: 10/20/17 22:26

Date Rec/Extracted: 10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	6.2
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration**6.2**

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-014

Client Id: 152140-MW-3S(ONSITE)

Data File: 3M118956.D

Analysis Date: 10/20/17 22:43

Date Rec/Extracted: 10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	27
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

27

ColumnID: (*) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of *a*-Chlordane and *y*-Chlordane.

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-015

Method: EPA 8260C

Client Id: 152140-MW-5D

Matrix: Aqueous

Data File: 3M118957.D

Initial Vol: 5ml

Analysis Date: 10/20/17 23:00

Final Vol: NA

Date Rec/Extracted: 10/20/17-NA

Dilution: 1.00

Column: DB-624 25M 0.200mm ID 1.12um film

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	1.2
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	1.6
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

2.8

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

R - Retention Time Out

B - Indicates the analyte was found in the blank as well as in the sample.

J - Indicates an estimated value when a compound is detected at less than the

E - Indicates the analyte concentration exceeds the calibration range of the
instrument.

specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses a

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-016

Method: EPA 8260C

Client Id: 152140-MW-5S

Matrix: Aqueous

Data File: 3M118958.D

Initial Vol: 5mL

Analysis Date: 10/20/17 23:19

Final Vol: NA

Date Rec/Extracted: 10/20/17-NA

Dilution: 1.00

Column: DB-624 25M 0.200mm ID 1.12um film

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	2.5
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	1.4	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	1.1
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

5

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

R - Retention Time Out

B - Indicates the analyte was found in the blank as well as in the sample.

J - Indicates an estimated value when a compound is detected at less than the

E - Indicates the analyte concentration exceeds the calibration range of the
instrument.

specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-017

Client Id: 152140-MW-6S

Data File: 3M118959.D

Analysis Date: 10/20/17 23:36

Date Rec/Extracted: 10/20/17-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	22
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration**22**

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of *a*-Chlordane and *y*-Chlordane.

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-018

Client Id: 152140-MW-14S

Data File: 3M118960.D

Analysis Date: 10/20/17 23:53

Date Rec/Extracted: 10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	1.9
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

1.9

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-019

Client Id: 152140-MW-14D

Data File: 3M118962.D

Analysis Date: 10/21/17 00:27

Date Rec/Extracted: 10/20/17-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	19
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

19

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD00698-020

Client Id: 152140-MW-15S

Data File: 3M118967.D

Analysis Date: 10/21/17 01:51

Date Rec/Extracted: 10/20/17-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	2.0
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

2

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-021

Client Id: 152140-MW-15D

Data File: 3M119027.D

Analysis Date: 10/23/17 16:36

Date Rec/Extracted: 10/20/17-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	6.2
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

6.2

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of *a*-Chlordane and *y*-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD00698-022(MS:AD00)

Method: EPA 8260C

Client Id: 152140-MW-15D MS

Matrix: Aqueous

Data File: 3M118942.D

Initial Vol: 5ml

Analysis Date: 10/20/17 18:51

Final Vol: NA

Date Rec/Extracted: 10/20/17-NA

Dilution: 1.00

Column:DB-624 25M 0.200mm ID 1.12um film

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	18	75-00-3	Chloroethane	1.0	12
79-34-5	1,1,2,2-Tetrachloroethane	1.0	16	67-66-3	Chloroform	1.0	19
76-13-1	1,1,2-Trichloro-1,2,2-triflu	1.0	19	74-87-3	Chloromethane	1.0	12
79-00-5	1,1,2-Trichloroethane	1.0	16	156-59-2	cis-1,2-Dichloroethene	1.0	19
75-34-3	1,1-Dichloroethane	1.0	19	10061-01-5	cis-1,3-Dichloropropene	1.0	16
75-35-4	1,1-Dichloroethene	1.0	16	110-82-7	Cyclohexane	1.0	20
120-82-1	1,2,4-Trichlorobenzene	1.0	17	124-48-1	Dibromochloromethane	1.0	16
96-12-8	1,2-Dibromo-3-Chloroprop	1.0	13	75-71-8	Dichlorodifluoromethane	1.0	9.3
106-93-4	1,2-Dibromoethane	1.0	16	100-41-4	Ethylbenzene	1.0	19
95-50-1	1,2-Dichlorobenzene	1.0	17	98-82-8	Isopropylbenzene	1.0	18
107-06-2	1,2-Dichloroethane	0.50	19	79601-23-1	m&p-Xylenes	1.0	35
78-87-5	1,2-Dichloropropane	1.0	19	79-20-9	Methyl Acetate	1.0	17
541-73-1	1,3-Dichlorobenzene	1.0	17	108-87-2	Methylcyclohexane	1.0	21
106-46-7	1,4-Dichlorobenzene	1.0	17	75-09-2	Methylene Chloride	1.0	18
78-93-3	2-Butanone	1.0	17	1634-04-4	Methyl-t-butyl ether	0.50	18
591-78-6	2-Hexanone	1.0	18	95-47-6	o-Xylene	1.0	18
108-10-1	4-Methyl-2-Pentanone	1.0	17	100-42-5	Styrene	1.0	18
67-64-1	Acetone	5.0	86	127-18-4	Tetrachloroethene	1.0	23
71-43-2	Benzene	0.50	19	108-88-3	Toluene	1.0	17
75-27-4	Bromodichloromethane	1.0	18	156-60-5	trans-1,2-Dichloroethene	1.0	19
75-25-2	Bromoform	1.0	14	10061-02-6	trans-1,3-Dichloropropene	1.0	15
74-83-9	Bromomethane	1.0	15	79-01-6	Trichloroethene	1.0	20
75-15-0	Carbon Disulfide	1.0	25	75-69-4	Trichlorofluoromethane	1.0	16
56-23-5	Carbon Tetrachloride	1.0	19	75-01-4	Vinyl Chloride	1.0	14
108-90-7	Chlorobenzene	1.0	17	1330-20-7	Xylenes (Total)	1.0	53

Worksheet #: 442070

Total Target Concentration

930

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

R - Retention Time Out

B - Indicates the analyte was found in the blank as well as in the sample.

J - Indicates an estimated value when a compound is detected at less than the

E - Indicates the analyte concentration exceeds the calibration range of the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

instrument.

Chlordane (Total) is sum of *a*-Chlordane and *y*-Chlordane.

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-023(MSD:AD)

Method: EPA 8260C

Client Id: 152140-MW-15D MSD

Matrix: Aqueous

Data File: 3M118943.D

Initial Vol: 5ml

Analysis Date: 10/20/17 19:08

Final Vol: NA

Date Rec/Extracted: 10/20/17-NA

Dilution: 1.00

Column:DB-624 25M 0.200mm ID 1.12um film

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	19	75-00-3	Chloroethane	1.0	15
79-34-5	1,1,2,2-Tetrachloroethane	1.0	16	67-66-3	Chloroform	1.0	19
76-13-1	1,1,2-Trichloro-1,2,2-triflu	1.0	20	74-87-3	Chloromethane	1.0	13
79-00-5	1,1,2-Trichloroethane	1.0	17	156-59-2	cis-1,2-Dichloroethene	1.0	20
75-34-3	1,1-Dichloroethane	1.0	19	10061-01-5	cis-1,3-Dichloropropene	1.0	17
75-35-4	1,1-Dichloroethene	1.0	18	110-82-7	Cyclohexane	1.0	21
120-82-1	1,2,4-Trichlorobenzene	1.0	17	124-48-1	Dibromochloromethane	1.0	16
96-12-8	1,2-Dibromo-3-Chloroprop	1.0	15	75-71-8	Dichlorodifluoromethane	1.0	9.8
106-93-4	1,2-Dibromoethane	1.0	17	100-41-4	Ethylbenzene	1.0	18
95-50-1	1,2-Dichlorobenzene	1.0	17	98-82-8	Isopropylbenzene	1.0	18
107-06-2	1,2-Dichloroethane	0.50	20	79601-23-1	m&p-Xylenes	1.0	36
78-87-5	1,2-Dichloropropane	1.0	20	79-20-9	Methyl Acetate	1.0	19
541-73-1	1,3-Dichlorobenzene	1.0	17	108-87-2	Methylcyclohexane	1.0	21
106-46-7	1,4-Dichlorobenzene	1.0	17	75-09-2	Methylene Chloride	1.0	18
78-93-3	2-Butanone	1.0	21	1634-04-4	Methyl-t-butyl ether	0.50	19
591-78-6	2-Hexanone	1.0	19	95-47-6	o-Xylene	1.0	18
108-10-1	4-Methyl-2-Pentanone	1.0	18	100-42-5	Styrene	1.0	18
67-64-1	Acetone	5.0	93	127-18-4	Tetrachloroethene	1.0	24
71-43-2	Benzene	0.50	20	108-88-3	Toluene	1.0	18
75-27-4	Bromodichloromethane	1.0	18	156-60-5	trans-1,2-Dichloroethene	1.0	20
75-25-2	Bromoform	1.0	15	10061-02-6	trans-1,3-Dichloropropene	1.0	16
74-83-9	Bromomethane	1.0	14	79-01-6	Trichloroethene	1.0	21
75-15-0	Carbon Disulfide	1.0	26	75-69-4	Trichlorofluoromethane	1.0	17
56-23-5	Carbon Tetrachloride	1.0	20	75-01-4	Vinyl Chloride	1.0	14
108-90-7	Chlorobenzene	1.0	18	1330-20-7	Xylenes (Total)	1.0	54

Worksheet #: 442070

Total Target Concentration

980

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

R - Retention Time Out

B - Indicates the analyte was found in the blank as well as in the sample.

J - Indicates an estimated value when a compound is detected at less than the

E - Indicates the analyte concentration exceeds the calibration range of the
instrument.

specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses a

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-024

Client Id: 152140-DDC-2-PS

Data File: 3M118968.D

Analysis Date: 10/21/17 02:08

Date Rec/Extracted: 10/20/17-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of *a*-Chlordane and *y*-Chlordane.

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-025

Method: EPA 8260C

Client Id: 152140-DDC-2-PD

Matrix: Aqueous

Data File: 3M118969.D

Initial Vol: 5ml

Analysis Date: 10/21/17 02:25

Final Vol: NA

Date Rec/Extracted: 10/20/17-NA

Dilution: 1.00

Column: DB-624 25M 0.200mm ID 1.12um film

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pantanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	3.6
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

3.6

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

R - Retention Time Out

B - Indicates the analyte was found in the blank as well as in the sample.

J - Indicates an estimated value when a compound is detected at less than the

E - Indicates the analyte concentration exceeds the calibration range of the
instrument.

specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD00698-026

Client Id: 152140-DDC-4-PS

Data File: 3M118970.D

Analysis Date: 10/21/17 02:41

Date Rec/Extracted: 10/20/17-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	1.1
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

1.1

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-027

Client Id: 152140-DDC-4-PD

Data File: 3M118971.D

Analysis Date: 10/21/17 02:58

Date Rec/Extracted: 10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	1.4
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

1.4

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and g-Chlordane.

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-028

Client Id: 152140-FD-01

Data File: 3M118972.D

Analysis Date: 10/21/17 03:15

Date Rec/Extracted: 10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	2.0
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

2

ColumnID:(*) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and g-Chlordane.

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-029

Client Id: 152140-MW-1D(OFFSITE)

Data File: 3M119006.D

Analysis Date: 10/23/17 10:43

Date Rec/Extracted: 10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	1.5
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	21
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	91
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	16
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

130

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD00698-030

Client Id: 152140-MW-1S(OFFSITE)

Data File: 3M118963.D

Analysis Date: 10/21/17 00:44

Date Rec/Extracted: 10/20/17-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

0

ColumnID: (*) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of *a*-Chlordane and *y*-Chlordane.

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-031(MS:AD00)

Method: EPA 8260C

Client Id: 152140-MW-1S(OFFSITE)

Matrix: Aqueous

Data File: 3M118964.D

Initial Vol: 5ml

Analysis Date: 10/21/17 01:01

Final Vol: NA

Date Rec/Extracted: 10/20/17-NA

Dilution: 1.00

Column:DB-624 25M 0.200mm ID 1.12um film

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	18	75-00-3	Chloroethane	1.0	14
79-34-5	1,1,2,2-Tetrachloroethane	1.0	15	67-66-3	Chloroform	1.0	18
76-13-1	1,1,2-Trichloro-1,2,2-triflu	1.0	19	74-87-3	Chloromethane	1.0	13
79-00-5	1,1,2-Trichloroethane	1.0	15	156-59-2	cis-1,2-Dichloroethene	1.0	18
75-34-3	1,1-Dichloroethane	1.0	18	10061-01-5	cis-1,3-Dichloropropene	1.0	15
75-35-4	1,1-Dichloroethene	1.0	18	110-82-7	Cyclohexane	1.0	19
120-82-1	1,2,4-Trichlorobenzene	1.0	13	124-48-1	Dibromochloromethane	1.0	16
96-12-8	1,2-Dibromo-3-Chloroprop	1.0	11	75-71-8	Dichlorodifluoromethane	1.0	9.1
106-93-4	1,2-Dibromoethane	1.0	15	100-41-4	Ethylbenzene	1.0	16
95-50-1	1,2-Dichlorobenzene	1.0	15	98-82-8	Isopropylbenzene	1.0	16
107-06-2	1,2-Dichloroethane	0.50	19	79601-23-1	m&p-Xylenes	1.0	32
78-87-5	1,2-Dichloropropane	1.0	18	79-20-9	Methyl Acetate	1.0	14
541-73-1	1,3-Dichlorobenzene	1.0	15	108-87-2	Methylcyclohexane	1.0	18
106-46-7	1,4-Dichlorobenzene	1.0	15	75-09-2	Methylene Chloride	1.0	17
78-93-3	2-Butanone	1.0	15	1634-04-4	Methyl-t-butyl ether	0.50	16
591-78-6	2-Hexanone	1.0	16	95-47-6	o-Xylene	1.0	17
108-10-1	4-Methyl-2-Pentanone	1.0	16	100-42-5	Styrene	1.0	17
67-64-1	Acetone	5.0	82	127-18-4	Tetrachloroethene	1.0	18
71-43-2	Benzene	0.50	19	108-88-3	Toluene	1.0	17
75-27-4	Bromodichloromethane	1.0	18	156-60-5	trans-1,2-Dichloroethene	1.0	19
75-25-2	Bromoform	1.0	13	10061-02-6	trans-1,3-Dichloropropene	1.0	14
74-83-9	Bromomethane	1.0	16	79-01-6	Trichloroethene	1.0	19
75-15-0	Carbon Disulfide	1.0	26	75-69-4	Trichlorofluoromethane	1.0	17
56-23-5	Carbon Tetrachloride	1.0	19	75-01-4	Vinyl Chloride	1.0	15
108-90-7	Chlorobenzene	1.0	17	1330-20-7	Xylenes (Total)	1.0	49

Worksheet #: 442070

Total Target Concentration

890

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

R - Retention Time Out

B - Indicates the analyte was found in the blank as well as in the sample.

J - Indicates an estimated value when a compound is detected at less than the

E - Indicates the analyte concentration exceeds the calibration range of the
instrument.

specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD00698-032(MSD:AD)

Method: EPA 8260C

Client Id: 152140-MW-1S(OFFSITE)

Matrix: Aqueous

Data File: 3M118965.D

Initial Vol: 5ml

Analysis Date: 10/21/17 01:17

Final Vol: NA

Date Rec/Extracted: 10/20/17-NA

Dilution: 1.00

Column:DB-624 25M 0.200mm ID 1.12um film

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	18	75-00-3	Chloroethane	1.0	12
79-34-5	1,1,2,2-Tetrachloroethane	1.0	14	67-66-3	Chloroform	1.0	18
76-13-1	1,1,2-Trichloro-1,2,2-triflu	1.0	18	74-87-3	Chloromethane	1.0	12
79-00-5	1,1,2-Trichloroethane	1.0	16	156-59-2	cis-1,2-Dichloroethene	1.0	18
75-34-3	1,1-Dichloroethane	1.0	18	10061-01-5	cis-1,3-Dichloropropene	1.0	14
75-35-4	1,1-Dichloroethene	1.0	17	110-82-7	Cyclohexane	1.0	19
120-82-1	1,2,4-Trichlorobenzene	1.0	13	124-48-1	Dibromochloromethane	1.0	16
96-12-8	1,2-Dibromo-3-Chloroprop	1.0	11	75-71-8	Dichlorodifluoromethane	1.0	8.8
106-93-4	1,2-Dibromoethane	1.0	16	100-41-4	Ethylbenzene	1.0	15
95-50-1	1,2-Dichlorobenzene	1.0	15	98-82-8	Isopropylbenzene	1.0	15
107-06-2	1,2-Dichloroethane	0.50	20	79601-23-1	m&p-Xylenes	1.0	30
78-87-5	1,2-Dichloropropane	1.0	18	79-20-9	Methyl Acetate	1.0	15
541-73-1	1,3-Dichlorobenzene	1.0	14	108-87-2	Methylcyclohexane	1.0	18
106-46-7	1,4-Dichlorobenzene	1.0	15	75-09-2	Methylene Chloride	1.0	17
78-93-3	2-Butanone	1.0	10	1634-04-4	Methyl-t-butyl ether	0.50	17
591-78-6	2-Hexanone	1.0	17	95-47-6	o-Xylene	1.0	16
108-10-1	4-Methyl-2-Pentanone	1.0	16	100-42-5	Styrene	1.0	16
67-64-1	Acetone	5.0	88	127-18-4	Tetrachloroethene	1.0	17
71-43-2	Benzene	0.50	19	108-88-3	Toluene	1.0	17
75-27-4	Bromodichloromethane	1.0	18	156-60-5	trans-1,2-Dichloroethene	1.0	19
75-25-2	Bromoform	1.0	13	10061-02-6	trans-1,3-Dichloropropene	1.0	13
74-83-9	Bromomethane	1.0	14	79-01-6	Trichloroethene	1.0	19
75-15-0	Carbon Disulfide	1.0	26	75-69-4	Trichlorofluoromethane	1.0	16
56-23-5	Carbon Tetrachloride	1.0	19	75-01-4	Vinyl Chloride	1.0	15
108-90-7	Chlorobenzene	1.0	17	1330-20-7	Xylenes (Total)	1.0	46

Worksheet #: 442070

Total Target Concentration

870

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

R - Retention Time Out

B - Indicates the analyte was found in the blank as well as in the sample.

J - Indicates an estimated value when a compound is detected at less than the

E - Indicates the analyte concentration exceeds the calibration range of the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-033

Client Id: 152140-DDC-07-PS

Data File: 3M118973.D

Analysis Date: 10/21/17 03:32

Date Rec/Extracted: 10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	15
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

15

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of *a*-Chlordane and *y*-Chlordane.

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-034

Client Id: 152140-DDC-07-PD

Data File: 3M118974.D

Analysis Date: 10/21/17 03:49

Date Rec/Extracted: 10/20/17-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	24
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	6.8
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	4.9
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

36

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD00698-035

Client Id: 152140-DDC-08-PS

Data File: 3M119018.D

Analysis Date: 10/23/17 14:05

Date Rec/Extracted: 10/20/17-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	16
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	1.4
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

17

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-036

Client Id: 152140-DDC-08-PD

Data File: 3M119007.D

Analysis Date: 10/23/17 11:00

Date Rec/Extracted: 10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	15
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442352

Total Target Concentration

15

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-037

Client Id: 152140-DDC-09-PS

Data File: 3M119013.D

Analysis Date: 10/23/17 12:41

Date Rec/Extracted: 10/20/17-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	1.6
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	11
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	1.0	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

14

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-038

Client Id: 152140-DDC-09-PD

Data File: 3M119014.D

Analysis Date: 10/23/17 12:58

Date Rec/Extracted: 10/20/17-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	2.9
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	1.3	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	3.0
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

7.2

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of *a*-Chlordane and *y*-Chlordane.

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-039

Client Id: 152140-DDC-10-PS

Data File: 3M119015.D

Analysis Date: 10/23/17 13:15

Date Rec/Extracted: 10/20/17-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	1.8
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	8.8
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	1.3	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

12

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-040

Client Id: 152140-DDC-10-PD

Data File: 3M119016.D

Analysis Date: 10/23/17 13:32

Date Rec/Extracted: 10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	2.6
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

2.6

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-041

Method: EPA 8260C

Client Id: 152140-FD-02

Matrix: Aqueous

Data File: 3M119017.D

Initial Vol: 5ml

Analysis Date: 10/23/17 13:48

Final Vol: NA

Date Rec/Extracted: 10/20/17-NA

Dilution: 1.00

Column:DB-624 25M 0.200mm ID 1.12um film

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	1.2
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	20
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	89
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	15
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

130

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

R - Retention Time Out

B - Indicates the analyte was found in the blank as well as in the sample.

J - Indicates an estimated value when a compound is detected at less than the

E - Indicates the analyte concentration exceeds the calibration range of the
instrument.

specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses a
Chlordane (Total) is sum of *a*-Chlordane and *y*-Chlordane.

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-042

Method: EPA 8260C

Client Id: TRIP BLANK

Matrix: Aqueous

Data File: 3M119000.D

Initial Vol: 5ml

Analysis Date: 10/23/17 09:03

Final Vol: NA

Date Rec/Extracted: 10/20/17-NA

Dilution: 1.00

Column:DB-624 25M 0.200mm ID 1.12um film

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

0

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

R - Retention Time Out

B - Indicates the analyte was found in the blank as well as in the sample.

J - Indicates an estimated value when a compound is detected at less than the

E - Indicates the analyte concentration exceeds the calibration range of the
instrument.

specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Chain of Custody Forms

HamptonClarke-Veritech Laboratories
 175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
 Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
 Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
 Ph (Service Center): 856-780-6057 Fax: 856-780-6056

HC-V **CHAIN OF CUSTODY**
 A Women-Owned Disadvantaged, Small Business Enterprise
 HAMPTONCLARKE-VERITECH
 LABORATORIES

Project (Lab Use Only)

Page ____ of ____

1/02/03

3) Reporting Requirements (Please Circle)

1a) Customer: EA Engineering	Customer Information	2a) Project: National Headset Printing Site	24 Hours (100%) 72 Hours (75%) 48 Hours (50%)	Data Summary Waste Rec - NJ / NY / PA CLP	Hazlett/CSV EQuIS 4/Flo / EZ / NYS EQuIS EPA Region 2 or 5 Excel - NY Regulatory Excel - PA Regulatory
Address: 6712 Brooklawn Parkway, Suite 104 Syracuse, NY 13211		2b) Project Mgr: Jim Hayward	1 Week (25%; TPH) 10 Days (10%) 2 Weeks	Full / Category B Category A Other:	Excel - NY Regulatory Excel - PA Regulatory PDF
1b) Email/Cell/Fax/Ph: ecummings@east.com		2c) Project Location (City/State): Babylon, NY			
1c) Send Invoice to: jhayward@east.com; ecummings@east.com		2d) Quote/PO # (If Applicable): 1490716	Other: Expedited TAT Not Always Available. Please Check with Lab.		

FOR LAB USE ONLY		Check If Contingent ==>		7) Analysis Request		<==== Check If Contingent	
Lab Sample #	4) Customer Sample ID	5) Matrix Codes	Sample Type	Composite (C)	Grab (G)	VOC 8260C	
Batch #		S - Soil A - Air					
WW - Waste Water OL - Oil OT - Other (Please specify under item 9, Comments)							

	6) Sample	Date	Time	Composite (C)	Grab (G)	VOC 8260C	# of Bottles	8)					9) Comments	
								None	MeOH	Er Core	NaOH	HCl	H2SO4	
009	152140-MW-1D(onsite)	GW	10/16/13	13225	1409	X	X							3
010	152140-MW-1S(onsite)	GW	10/16/13	13225	1409	X	X							3
011	152140-MW-2A	GW	10/16/13	1511		X	X							3
012	152140-MW-2AD	GW	10/16/13	1428		X	X							3
013	152140-MW-3D(onsite)	GW	10/16/13	1346		X	X							3
014	152140-MW-3S(onsite)	GW	10/16/13	1346		X	X							3
015	152140-MW-5D	GW	10/16/13	1528		X	X							3
016	152140-MW-5S	GW	10/16/13	1444		X	X							3
017	152140-MW-6S	GW	10/16/13	1245		X	X							3
018	152140-MW-14S	GW	10/16/13	1600		X	X							3

10) Relinquished by: Accepted by: Date Time

Comments, Notes, Special Requirements, HAZARDS

Note: Check if low-level groundwater methods required to meet current standards in NJ or PA.

BN or BNA (8270C SIM)
VOC (8260B SIM or 8011)Metals (ICP-MS 2010 8 or 6020)
Metals-Soil (ICP-MS 6020 for Be & Ag)

Note: Check if applicable:

Project-Specific Reporting Limits	Cooler Temperature
High Contaminant Concentrations	
NJ LSRP Project	

11) Sampler (print name):

Date:

Please note NUMBERED items. If not completed your analytical work may be delayed.

A fee of \$5/sample will be assessed for storage should sample not be analyzed for any analysis.

HamptonClarke-Veritech Laboratories

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07006

Ph: 800-428-9892 | 973-244-9770 | Fax: 973-244-1458

Service Center: 137-D Gaffier Drive, Mount Laurel, New Jersey 08054

Ph (Service Center): 856-780-6057 | Fax: 856-780-6056

NELAC/NJ #07071 | PA #88-00463 | NY #11408 | CT #PH-0871 | KY #90124

HC-V CHAIN OF CUSTODY RECORD
HAMPTON CLARKE VERITECH LABORATORIES

Project (Lab Use Only)

Page _____ of _____

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Deliv.
24 Hours (100%)	Data Summary	HazMat/CSV
48 Hours (75%)	Waste	EQuIS 4-FFB / EZ / NYS
72 Hours (50%)	Res - NJ / NY / PA	EQuIS EPA Region 2 or 5
4 Days (35% TPH)	CLP	Excel - NJ Regulatory
1 Week (25%; TPH)	Full / Category B	Excel - NY Regulatory
10 Days (10%)	Category A	EQuIS EPA Region 2 or 5
2 Weeks	Other: _____	Excel - PA Regulatory
Other: _____	PDF	Other: _____
Other: _____	Other: _____	Other: _____

1a) Customer: EA Engineering	Customer Information
Address:	6712 Brooklawn Parkway, Suite 104 Syracuse, NY 13211
1b) Email/Cell/Fax/Ph:	ecummings@eastest.com
1c) Send Invoice to:	northeastap@eastest.com
1d) Send Report to:	jhayward@eastest.com; ecummings@eastest.com
2a) Project:	National Headset Printing Site
2b) Project Mgr:	Jim Hayward
2c) Project Location (City/State):	Babylon, NY
2d) Quote/PO# (If Applicable):	14807/16

7) Analysis Request <== Check If Contingent
 8) # of Bottles
 9) Comments

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample	Check If Contingent ==>	Sample Type	Composite (C) Grab (G)	VOC 8260C	8)						
								None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3
633	152140-DDC-07-PS	GW	10/19/19 1849	X	X									
634	152140-DDC-07-PD	GW	10/19/19 1849	X	X									
635	152140-DDC-08-PS	GW	10/19/19 1839	X	X									
636	152140-DDC-08-PD	GW	10/19/19 1839	X	X									
637	152140-DDC-08-PS	GW	10/19/19 1840	X	X									
638	152140-DDC-09-PD	GW	10/19/19 1842	X	X									
639	152140-DDC-10-PS	GW	10/19/19 0859	X	X									
640	152140-DDC-10-PD	GW	10/19/19 0859	X	X									
641	152140-FD-02	GW	—	—	X									
642	152140-FD-02	DI	—	—	X									

Accepted by:		Date	Time	Comments, Notes, Special Requirements, HAZARDS									
Jay	Hayward	10/19/19	10:50	Note: Check if low-level groundwater methods required to meet current standards in NJ or PA: BN or BNA (8270C SIM) VOC (8260B SIM or 8011) Metals (ICP-MS 200.8 or 6020) Metals-Soil (ICP-MS 6020 for Be & Ag)									
Note: Check if applicable													
Project-Specific Reporting Limits													
High Contaminant Concentrations													
NJ LSRP Project													
11) Sampler (print name):													
Date:													

Please note NUMBERED items. If not completed your analytical work may be delayed.
 A fee of \$5/sample will be assessed for storage should sample not be analyzed.

10) Retriguished by:	Jay S. Hayward
Accepted by:	Jay S. Hayward
Date:	10/20/19
Time:	10:30
Note: Check if applicable	
Project-Specific Reporting Limits	
High Contaminant Concentrations	
NJ LSRP Project	
11) Sampler (print name):	
Date:	
Note: Check if applicable	

CONDITION UPON RECEIPT

Batch Number AD00698

Entered By: maxwell

Date Entered 10/20/2017 10:56:00 A

-
- 1 Yes Is there a corresponding COC included with the samples?
- 2 Yes Are the samples in a container such as a cooler or ice chest?
- 3 Yes Are the COC seals intact?
- 4 T0054 <--- Thermometer ID. Please specify the Temperature inside the container (in degC).
2.7
- 5 Yes Are the samples refrigerated (where required)/have they arrived on ice?
- 6 Yes Are the samples within the holding times for the parameters listed on the COC? IF no, list parameters and samples:
- 7 Yes Are all of the sample bottles intact? If no, specify sample numbers broken/leaking
- 8 Yes Are all of the sample labels or numbers legible? If no specify:
- 9 Yes Do the contents match the COC? If no, specify
- 10 Yes Is there enough sample sent for the analyses listed on the COC? If no, specify:
- 11 Yes Are samples preserved correctly?
- 12 Yes Was temperature blank present (Place comment below if not)? If not was temperature of samples verified?
- 13 NO Other comments ...Specify
- 14 NA Corrective actions (Specify item number and corrective action taken).

PRESERVATION DOCUMENT

Batch Number AD00698

Entered By: maxwell

Date Entered 10/20/2017 10:58:00 AM

Lab#:	Container Size	Container/Vial Check	Parameter	Preservative	Preservative Lot#	PH	pH Lot#
AD00698-001	40ML	G	VO	HCL	169353	1	HC693124
AD00698-002	40ML	G	VO	HCL	169353	1	HC693124
AD00698-003	40ML	G	VO	HCL	169353	1	HC693124
AD00698-004	40ML	G	VO	HCL	169353	1	HC693124
AD00698-005	40ML	G	VO	HCL	169353	1	HC693124
AD00698-006	40ML	G	VO	HCL	169353	1	HC693124
AD00698-007	40ML	G	VO	HCL	169353	1	HC693124
AD00698-008	40ML	G	VO	HCL	169353	1	HC693124
AD00698-009	40ML	G	VO	HCL	169353	1	HC693124
AD00698-010	40ML	G	VO	HCL	169353	1	HC693124
AD00698-011	40ML	G	VO	HCL	169353	1	HC693124
AD00698-012	40ML	G	VO	HCL	169353	1	HC693124
AD00698-013	40ML	G	VO	HCL	169353	1	HC693124
AD00698-014	40ML	G	VO	HCL	169353	1	HC693124
AD00698-015	40ML	G	VO	HCL	169353	1	HC693124
AD00698-016	40ML	G	VO	HCL	169353	1	HC693124
AD00698-017	40ML	G	VO	HCL	169353	1	HC693124
AD00698-018	40ML	G	VO	HCL	169353	1	HC693124
AD00698-019	40ML	G	VO	HCL	169353	1	HC693124
AD00698-020	40ML	G	VO	HCL	169353	1	HC693124
AD00698-021	40ML	G	VO	HCL	169353	1	HC693124
AD00698-022	40ML	G	VO	HCL	169353	1	HC693124
AD00698-023	40ML	G	VO	HCL	169353	1	HC693124
AD00698-024	40ML	G	VO	HCL	169353	1	HC693124
AD00698-025	40ML	G	VO	HCL	169353	1	HC693124
AD00698-026	40ML	G	VO	HCL	169353	1	HC693124
AD00698-027	40ML	G	VO	HCL	169353	1	HC693124
AD00698-028	40ML	G	VO	HCL	169353	1	HC693124
AD00698-029	40ML	G	VO	HCL	169353	1	HC693124
AD00698-030	40ML	G	VO	HCL	169353	1	HC693124
AD00698-031	40ML	G	VO	HCL	169353	1	HC693124
AD00698-032	40ML	G	VO	HCL	169353	1	HC693124
AD00698-033	40ML	G	VO	HCL	169353	1	HC693124
AD00698-034	40ML	G	VO	HCL	169353	1	HC693124
AD00698-035	40ML	G	VO	HCL	169353	1	HC693124
AD00698-036	40ML	G	VO	HCL	169353	1	HC693124
AD00698-037	40ML	G	VO	HCL	169353	1	HC693124
AD00698-038	40ML	G	VO	HCL	169353	1	HC693124
AD00698-039	40ML	G	VO	HCL	169353	1	HC693124
AD00698-040	40ML	G	VO	HCL	169353	1	HC693124
AD00698-041	40ML	G	VO	HCL	169353	1	HC693124
AD00698-042	40ML	G	VO	HCL	169353	1	HC693124

Internal Chain of Custody

7102003 0101

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis	Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis
AD00698-001	10/20/17 10:30	MAXW	0	M	Received	AD00698-013	10/20/17 10:30	MAXW	0	M	Received
AD00698-001	10/20/17 10:55	MAXW	0	M	Login	AD00698-013	10/20/17 10:55	MAXW	0	M	Login
AD00698-001	10/20/17 12:02	R31	1	A	NONE	AD00698-013	10/20/17 12:02	R31	1	A	NONE
AD00698-001	10/20/17 12:02	R31	2	A	NONE	AD00698-013	10/20/17 12:02	R31	2	A	NONE
AD00698-001	10/20/17 17:54	WP	2	A	VOA	AD00698-013	10/20/17 17:54	WP	2	A	VOA
AD00698-001	10/20/17 19:27	R31	2	A	NONE	AD00698-013	10/20/17 11:55	R31	3	A	PH/CHECK
AD00698-001	10/23/17 08:51	SG	2	A	VOA	AD00698-014	10/20/17 10:30	MAXW	0	M	Received
AD00698-001	10/20/17 11:55	R31	3	A	PH/CHECK	AD00698-014	10/20/17 10:55	MAXW	0	M	Login
AD00698-002	10/20/17 10:30	MAXW	0	M	Received	AD00698-014	10/20/17 12:02	R31	1	A	NONE
AD00698-002	10/20/17 10:55	MAXW	0	M	Login	AD00698-014	10/20/17 12:02	R31	2	A	NONE
AD00698-002	10/20/17 10:55	MAXW	0	M	Received	AD00698-014	10/20/17 12:02	R31	3	A	NONE
AD00698-002	10/20/17 12:02	R31	1	A	NONE	AD00698-014	10/20/17 17:54	WP	2	A	VOA
AD00698-002	10/20/17 12:02	R31	2	A	NONE	AD00698-014	10/20/17 11:55	R31	3	A	PH/CHECK
AD00698-002	10/20/17 17:54	WP	2	A	VOA	AD00698-015	10/20/17 10:30	MAXW	0	M	Received
AD00698-002	10/20/17 11:55	R31	3	A	PH/CHECK	AD00698-015	10/20/17 10:55	MAXW	0	M	Login
AD00698-003	10/20/17 10:30	MAXW	0	M	Received	AD00698-015	10/20/17 12:02	R31	1	A	NONE
AD00698-003	10/20/17 10:55	MAXW	0	M	Login	AD00698-015	10/23/17 13:38	WP	1	A	VOA
AD00698-003	10/20/17 12:02	R31	1	A	NONE	AD00698-015	10/20/17 12:02	R31	2	A	NONE
AD00698-003	10/20/17 12:02	R31	2	A	NONE	AD00698-015	10/20/17 17:54	WP	2	A	VOA
AD00698-003	10/20/17 17:54	WP	2	A	VOA	AD00698-015	10/20/17 11:55	R31	3	A	PH/CHECK
AD00698-003	10/20/17 11:55	R31	3	A	PH/CHECK	AD00698-016	10/20/17 10:30	MAXW	0	M	Received
AD00698-004	10/20/17 10:30	MAXW	0	M	Received	AD00698-016	10/20/17 10:55	MAXW	0	M	Login
AD00698-004	10/20/17 10:55	MAXW	0	M	Login	AD00698-016	10/20/17 12:02	R31	1	A	NONE
AD00698-004	10/20/17 12:02	R31	1	A	NONE	AD00698-016	10/20/17 12:02	R31	2	A	NONE
AD00698-004	10/20/17 12:02	R31	2	A	NONE	AD00698-016	10/20/17 17:54	WP	2	A	VOA
AD00698-004	10/20/17 17:54	WP	2	A	VOA	AD00698-016	10/20/17 11:55	R31	3	A	PH/CHECK
AD00698-004	10/20/17 11:55	R31	3	A	PH/CHECK	AD00698-017	10/20/17 10:30	MAXW	0	M	Received
AD00698-005	10/20/17 10:30	MAXW	0	M	Received	AD00698-017	10/20/17 10:55	MAXW	0	M	Login
AD00698-005	10/20/17 10:55	MAXW	0	M	Login	AD00698-017	10/20/17 12:02	R31	1	A	NONE
AD00698-005	10/20/17 12:02	R31	1	A	NONE	AD00698-017	10/20/17 12:02	R31	2	A	NONE
AD00698-005	10/20/17 12:02	R31	2	A	NONE	AD00698-017	10/20/17 17:54	WP	2	A	VOA
AD00698-005	10/20/17 17:54	R31	1	A	PH/CHECK	AD00698-017	10/20/17 11:55	R31	3	A	PH/CHECK
AD00698-005	10/20/17 11:55	WP	2	A	VOA	AD00698-018	10/20/17 10:30	MAXW	0	M	Received
AD00698-006	10/20/17 10:30	MAXW	0	M	Received	AD00698-018	10/20/17 10:55	MAXW	0	M	Login
AD00698-006	10/20/17 10:55	MAXW	0	M	Login	AD00698-018	10/20/17 12:02	R31	1	A	NONE
AD00698-006	10/20/17 11:55	R31	1	A	PH/CHECK	AD00698-018	10/20/17 12:02	R31	2	A	NONE
AD00698-006	10/20/17 12:02	R31	2	A	NONE	AD00698-018	10/23/17 13:38	WP	1	A	VOA
AD00698-006	10/20/17 12:02	R31	3	A	NONE	AD00698-018	10/20/17 12:02	R31	2	A	NONE
AD00698-006	10/20/17 17:54	WP	2	A	VOA	AD00698-018	10/20/17 17:54	R31	3	A	PH/CHECK
AD00698-006	10/20/17 11:55	R31	1	A	PH/CHECK	AD00698-019	10/20/17 10:30	MAXW	0	M	Received
AD00698-007	10/20/17 10:30	MAXW	0	M	Received	AD00698-019	10/20/17 10:55	MAXW	0	M	Login
AD00698-007	10/20/17 10:55	MAXW	0	M	Login	AD00698-019	10/20/17 12:02	R31	1	A	NONE
AD00698-007	10/20/17 12:02	R31	1	A	NONE	AD00698-019	10/20/17 12:02	R31	2	A	NONE
AD00698-007	10/23/17 13:38	WP	1	A	VOA	AD00698-019	10/20/17 17:54	WP	2	A	VOA
AD00698-007	10/20/17 12:02	R31	2	A	NONE	AD00698-019	10/20/17 11:55	R31	3	A	PH/CHECK
AD00698-007	10/20/17 17:54	WP	2	A	VOA	AD00698-020	10/20/17 10:30	MAXW	0	M	Received
AD00698-008	10/20/17 10:30	MAXW	0	M	Received	AD00698-020	10/20/17 10:55	MAXW	0	M	Login
AD00698-008	10/20/17 10:55	MAXW	0	M	Login	AD00698-020	10/20/17 12:02	R31	4	A	NONE
AD00698-008	10/20/17 12:02	R31	1	A	NONE	AD00698-020	10/20/17 17:54	WP	4	A	VOA
AD00698-008	10/20/17 12:02	R31	2	A	NONE	AD00698-020	10/20/17 12:02	R31	5	A	NONE
AD00698-008	10/20/17 17:54	WP	2	A	VOA	AD00698-020	10/23/17 13:38	WP	5	A	VOA
AD00698-008	10/20/17 11:55	R31	3	A	PH/CHECK	AD00698-020	10/20/17 11:55	R31	6	A	PH/CHECK
AD00698-009	10/20/17 10:30	MAXW	0	M	Received	AD00698-021	10/20/17 10:30	MAXW	0	M	Received
AD00698-009	10/20/17 10:55	MAXW	0	M	Login	AD00698-021	10/20/17 10:55	MAXW	0	M	Login
AD00698-009	10/20/17 12:02	R31	1	A	NONE	AD00698-021	10/20/17 12:02	R31	1	A	NONE
AD00698-009	10/20/17 12:02	R31	2	A	NONE	AD00698-021	10/23/17 13:38	WP	1	A	VOA
AD00698-009	10/20/17 17:54	WP	2	A	VOA	AD00698-021	10/20/17 12:02	R31	2	A	NONE
AD00698-009	10/20/17 11:55	R31	3	A	PH/CHECK	AD00698-021	10/20/17 17:54	WP	2	A	VOA
AD00698-009	10/20/17 12:02	R31	3	A	NONE	AD00698-021	10/20/17 11:55	R31	3	A	PH/CHECK
AD00698-009	10/20/17 12:02	R31	4	A	NONE	AD00698-022	10/20/17 10:30	MAXW	0	M	Received
AD00698-009	10/20/17 17:54	WP	4	A	VOA	AD00698-022	10/20/17 10:55	MAXW	0	M	Login
AD00698-010	10/20/17 10:30	MAXW	0	M	Received	AD00698-022	10/20/17 12:02	R31	4	A	NONE
AD00698-010	10/20/17 10:55	MAXW	0	M	Login	AD00698-022	10/20/17 12:02	R31	5	A	NONE
AD00698-010	10/20/17 12:02	R31	1	A	NONE	AD00698-022	10/20/17 17:54	WP	5	A	VOA
AD00698-010	10/20/17 12:02	R31	2	A	NONE	AD00698-022	10/20/17 11:55	R31	6	A	PH/CHECK
AD00698-011	10/20/17 11:55	SG	2	A	VOA	AD00698-021	10/20/17 10:30	MAXW	0	M	Received
AD00698-011	10/20/17 11:55	R31	3	A	PH/CHECK	AD00698-021	10/20/17 10:55	MAXW	0	M	Login
AD00698-011	10/20/17 10:30	MAXW	0	M	Received	AD00698-021	10/20/17 12:02	R31	1	A	NONE
AD00698-011	10/20/17 10:55	MAXW	0	M	Login	AD00698-021	10/20/17 12:02	R31	2	A	NONE
AD00698-011	10/20/17 12:02	R31	1	A	NONE	AD00698-021	10/20/17 17:54	WP	4	A	VOA
AD00698-011	10/23/17 08:51	SG	2	A	VOA	AD00698-021	10/20/17 11:55	R31	3	A	PH/CHECK
AD00698-011	10/20/17 11:55	R31	3	A	PH/CHECK	AD00698-023	10/20/17 10:30	MAXW	0	M	Received
AD00698-012	10/20/17 10:30	MAXW	0	M	Received	AD00698-023	10/20/17 10:55	MAXW	0	M	Login
AD00698-012	10/20/17 10:55	MAXW	0	M	Login	AD00698-023	10/20/17 12:02	R31	1	A	NONE
AD00698-012	10/20/17 12:02	R31	1	A	NONE	AD00698-023	10/20/17 12:02	R31	2	A	NONE
AD00698-012	10/20/17 12:02	R31	2	A	NONE	AD00698-023	10/20/17 17:54	WP	2	A	VOA
AD00698-012	10/20/17 17:54	WP	2	A	VOA	AD00698-023	10/20/17 11:55	R31	3	A	PH/CHECK
AD00698-012	10/20/17 11:55	R31	3	A	PH/CHECK	AD00698-024	10/20/17 10:30	MAXW	0	M	Received
AD00698-012	10/20/17 12:02	R31	1	A	NONE	AD00698-024	10/20/17 10:55	MAXW	0	M	Login
AD00698-012	10/20/17 12:02	R31	2	A	NONE	AD00698-024	10/20/17 12:02	R31	1	A	NONE
AD00698-012	10/20/17 17:54	WP	2	A	VOA	AD00698-024	10/20/17 12:02	R31	2	A	NONE
AD00698-012	10/20/17 11:55	R31	3	A	PH/CHECK	AD00698-024	10/20/17 17:54	WP	2	A	VOA
AD00698-012	10/20/17 12:02	R31	3	A	PH/CHECK	AD00698-024	10/20/17 11:55	R31	3	A	PH/CHECK

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

Internal Chain of Custody

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

7102003 0103

GC/MS Volatile Data

7102003 0104

**GC/MS Volatile Data
QC Summary**

FORM2

Surrogate Recovery

Method: EPA 8260C

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out	Column1	Column1	Column1	Column1	Column0	Column0
					Flag	S1 Recov	S2 Recov	S3 Recov	S4 Recov	S5 Recov	S6 Recov
3M118935.D	DAILY BLANK	A	10/20/17 16:53	1		101	100	93	93		
3M118999.D	DAILY BLANK	A	10/23/17 08:45	1		94	103	94	93		
3M119001.D	AD00698-001	A	10/23/17 09:19	1		101	102	91	95		
3M118946.D	AD00698-002	A	10/20/17 19:59	1		102	105	92	94		
3M118947.D	AD00698-003	A	10/20/17 20:15	1		103	101	90	94		
3M118948.D	AD00698-004	A	10/20/17 20:32	1		103	101	90	95		
3M118949.D	AD00698-005	A	10/20/17 20:49	1		102	100	93	97		
3M118950.D	AD00698-006	A	10/20/17 21:06	1		100	101	91	94		
3M119019.D	AD00698-007	A	10/23/17 14:22	1		107	107	92	95		
3M118951.D	AD00698-008	A	10/20/17 21:22	1		106	103	95	98		
3M118952.D	AD00698-009	A	10/20/17 21:39	1		102	101	94	94		
3M118953.D	AD00698-010	A	10/20/17 21:56	1		105	101	92	94		
3M119005.D	AD00698-011	A	10/23/17 10:27	1		104	104	93	96		
3M118954.D	AD00698-012	A	10/20/17 22:10	1		105	104	93	94		
3M118955.D	AD00698-013	A	10/20/17 22:26	1		106	102	94	97		
3M118956.D	AD00698-014	A	10/20/17 22:43	1		104	103	91	96		
3M118957.D	AD00698-015	A	10/20/17 23:00	1		102	103	91	95		
3M118958.D	AD00698-016	A	10/20/17 23:19	1		106	102	90	100		
3M118959.D	AD00698-017	A	10/20/17 23:36	1		103	104	93	96		
3M118960.D	AD00698-018	A	10/20/17 23:53	1		106	104	89	95		
3M118962.D	AD00698-019	A	10/21/17 00:27	1		104	101	92	95		
3M118967.D	AD00698-020	A	10/21/17 01:51	1		103	103	92	96		
3M119027.D	AD00698-021	A	10/23/17 16:36	1		103	106	90	94		
3M118942.D	AD00698-022(MS:AD00	A	10/20/17 18:51	1		103	98	91	97		
3M118943.D	AD00698-023(MSD:AD0	A	10/20/17 19:08	1		100	98	93	95		
3M118968.D	AD00698-024	A	10/21/17 02:08	1		103	103	91	98		
3M118969.D	AD00698-025	A	10/21/17 02:25	1		104	104	91	95		
3M118970.D	AD00698-026	A	10/21/17 02:41	1		105	101	93	95		
3M118971.D	AD00698-027	A	10/21/17 02:58	1		106	106	91	97		
3M118972.D	AD00698-028	A	10/21/17 03:15	1		103	103	92	96		
3M119006.D	AD00698-029	A	10/23/17 10:43	1		103	106	89	98		
3M118963.D	AD00698-030	A	10/21/17 00:44	1		105	102	94	96		
3M118964.D	AD00698-031(MS:AD00	A	10/21/17 01:01	1		101	99	93	93		
3M118965.D	AD00698-032(MSD:AD0	A	10/21/17 01:17	1		101	101	92	90		
3M118973.D	AD00698-033	A	10/21/17 03:32	1		103	105	92	96		
3M118974.D	AD00698-034	A	10/21/17 03:49	1		102	103	93	97		
3M119018.D	AD00698-035	A	10/23/17 14:05	1		103	102	92	99		
3M119013.D	AD00698-037	A	10/23/17 12:41	1		99	102	92	92		
3M119014.D	AD00698-038	A	10/23/17 12:58	1		100	103	90	97		
3M119015.D	AD00698-039	A	10/23/17 13:15	1		100	103	89	96		
3M119016.D	AD00698-040	A	10/23/17 13:32	1		103	105	90	96		
3M119017.D	AD00698-041	A	10/23/17 13:48	1		105	101	89	96		
3M119000.D	AD00698-042	A	10/23/17 09:03	1		100	103	91	95		
3M118941.D	MBS64948	A	10/20/17 18:34	1		101	97	92	90		
3M118944.D	AD00698-021	A	10/20/17 19:25	1		101	97	92	93		
3M118966.D	MBS64949	A	10/21/17 01:34	1		103	98	92	94		
3M119009.D	MBS64955	A	10/23/17 11:34	1		99	97	92	96		
3M119010.D	AD00698-001(MS)	A	10/23/17 11:51	1		102	99	92	93		
3M119011.D	AD00698-001(MSD)	A	10/23/17 12:07	1		101	100	93	93		

Flags: SD=Surrogate diluted out

*=Surrogate out

Method: EPA 8260C

Aqueous Laboratory Limits

Compound	Spike Amt	Limits
S1=Dibromofluoromethane	30	73-131
S2=1,2-Dichloroethane-d4	30	78-128
S3=Toluene-d8	30	79-111
S4=Bromofluorobenzene	30	82-112

FORM2

Surrogate Recovery

Method: EPA 8260C

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column1 S3 Recov	Column1 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
3M118999.D	DAILY BLANK	A	10/23/17 08:45	1		94	103	94	93		
3M119007.D	AD00698-036	A	10/23/17 11:00	1		104	103	91	94		
3M119001.D	AD00698-001	A	10/23/17 09:19	1		101	102	91	95		
3M119009.D	MBS64955	A	10/23/17 11:34	1		99	97	92	96		
3M119010.D	AD00698-001(MS)	A	10/23/17 11:51	1		102	99	92	93		
3M119011.D	AD00698-001(MSD)	A	10/23/17 12:07	1		101	100	93	93		

Flags: SD=Surrogate diluted out

*=Surrogate out

Method: EPA 8260C

Aqueous Laboratory Limits

Compound	Spike Amt	Limits
S1=Dibromofluoromethane	30	73-131
S2=1,2-Dichloroethane-d4	30	78-128
S3=Toluene-d8	30	79-111
S4=Bromofluorobenzene	30	82-112

Form3
Recovery Data Laboratory Limits
QC Batch: MBS64948

Data File		Sample ID:		Analysis Date									
Spike or Dup: 3M118941.D		MBS64948		10/20/2017 6:34:00 PM									
Non Spike(If applicable):													
Inst Blank(If applicable):													
Method: 8260C		Matrix: Aqueous		QC Type: MBS									
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit						
Chlorodifluoromethane	1	24.39	0	20	122	50	150						
Dichlorodifluoromethane	1	14.8716	0	20	74	50	150						
Chloromethane	1	17.8262	0	20	89	50	150						
Bromomethane	1	18.1066	0	20	91	50	150						
Vinyl Chloride	1	17.1397	0	20	86	50	150						
Chloroethane	1	20.6948	0	20	103	50	150						
Trichlorodifluoromethane	1	19.7459	0	20	99	50	150						
Ethyl ether	1	18.8877	0	20	94	50	150						
Furan	1	18.1896	0	20	91	50	150						
1,1,2-Trichloro-1,2,2-trifluoroethane	1	22.5936	0	20	113	50	150						
Methylene Chloride	1	21.1273	0	20	106	70	130						
Acrolein	1	86.5116	0	100	87	50	150						
Acrylonitrile	1	21.1676	0	20	106	50	150						
Iodomethane	1	27.0664	0	20	135	50	150						
Acetone	1	99.3282	0	100	99	50	150						
Carbon Disulfide	1	30.1747	0	20	151 *	50	150						
t-Butyl Alcohol	1	80.8556	0	100	81	50	150						
n-Hexane	1	22.1561	0	20	111	70	130						
Di-isopropyl-ether	1	21.9208	0	20	110	70	130						
1,1-Dichloroethene	1	20.0749	0	20	100	70	130						
Methyl Acetate	1	20.2298	0	20	101	50	150						
Methyl-t-butyl ether	1	21.1838	0	20	106	70	130						
1,1-Dichloroethane	1	20.2727	0	20	101	70	130						
trans-1,2-Dichloroethene	1	21.1595	0	20	106	70	130						
Ethyl-t-butyl ether	1	21.5067	0	20	108	70	130						
cis-1,2-Dichloroethene	1	20.7775	0	20	104	70	130						
Bromochloromethane	1	18.8484	0	20	94	70	130						
2,2-Dichloropropane	1	20.2809	0	20	101	70	130						
Ethyl acetate	1	22.9635	0	20	115	50	150						
1,4-Dioxane	1	1136.228	0	1000	114	50	150						
1,1-Dichloropropene	1	23.151	0	20	116	70	130						
Chloroform	1	21.2641	0	20	106	70	130						
Cyclohexane	1	22.0565	0	20	110	70	130						
1,2-Dichloroethane	1	21.6071	0	20	108	70	130						
2-Butanone	1	21.2464	0	20	106	50	150						
1,1,1-Trichloroethane	1	20.3996	0	20	102	70	130						
Carbon Tetrachloride	1	21.3705	0	20	107	50	150						
Vinyl Acetate	1	22.7083	0	20	114	50	150						
Bromodichloromethane	1	20.3439	0	20	102	70	130						
Methylcyclohexane	1	21.5733	0	20	108	70	130						
Dibromomethane	1	20.7595	0	20	104	70	130						
1,2-Dichloropropane	1	21.8659	0	20	109	70	130						
Trichloroethene	1	22.0855	0	20	110	70	130						
Benzene	1	21.5775	0	20	108	70	130						
tert-Amyl methyl ether	1	20.3998	0	20	102	70	130						
Iso-propylacetate	1	19.6972	0	20	98	70	130						
Methyl methacrylate	1	20.2749	0	20	101	70	130						
Dibromochloromethane	1	17.6592	0	20	88	70	130						
2-Chloroethylvinylether	1	17.7538	0	20	89	70	130						
cis-1,3-Dichloropropene	1	18.3181	0	20	92	70	130						
trans-1,3-Dichloropropene	1	17.3886	0	20	87	70	130						
Ethyl methacrylate	1	18.3058	0	20	92	70	130						
1,1,2-Trichloroethane	1	18.0188	0	20	90	70	130						
1,2-Dibromoethane	1	17.9639	0	20	90	70	130						
1,3-Dichloropropane	1	18.6815	0	20	93	70	130						
4-Methyl-2-Pentanone	1	18.511	0	20	93	50	150						
2-Hexanone	1	19.523	0	20	98	50	150						
Tetrachloroethene	1	19.6407	0	20	98	50	150						
Toluene	1	19.92	0	20	100	70	130						
1,1,1,2-Tetrachloroethane	1	18.418	0	20	92	70	130						
Chlorobenzene	1	19.3114	0	20	97	70	130						

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3

Recovery Data Laboratory Limits

QC Batch: MBS64948

n-Butyl acrylate	1	15.8781	0	20	79	70	130
n-Amyl acetate	1	17.9715	0	20	90	70	130
Bromoform	1	15.1186	0	20	76	70	130
Ethylbenzene	1	18.2546	0	20	91	70	130
1,1,2,2-Tetrachloroethane	1	17.521	0	20	88	70	130
Styrene	1	19.4936	0	20	97	70	130
m&p-Xylenes	1	36.3815	0	40	91	70	130
o-Xylene	1	19.069	0	20	95	70	130
trans-1,4-Dichloro-2-butene	1	16.3822	0	20	82	50	150
1,3-Dichlorobenzene	1	17.6859	0	20	88	70	130
1,4-Dichlorobenzene	1	16.6323	0	20	83	70	130
1,2-Dichlorobenzene	1	17.9475	0	20	90	70	130
Isopropylbenzene	1	18.4795	0	20	92	70	130
Cyclohexanone	1	73.7569	0	100	74	50	150
Camphene	1	15.884	0	20	79	70	130
1,2,3-Trichloropropane	1	16.4563	0	20	82	70	130
2-Chlorotoluene	1	18.6255	0	20	93	70	130
p-Ethyltoluene	1	17.01	0	20	85	70	130
4-Chlorotoluene	1	17.951	0	20	90	70	130
n-Propylbenzene	1	18.3687	0	20	92	70	130
Bromobenzene	1	17.9827	0	20	90	70	130
1,3,5-Trimethylbenzene	1	19.8119	0	20	99	70	130
Butyl methacrylate	1	17.2529	0	20	86	70	130
t-Butylbenzene	1	17.7415	0	20	89	70	130
1,2,4-Trimethylbenzene	1	17.6377	0	20	88	70	130
sec-Butylbenzene	1	17.6976	0	20	88	70	130
4-Isopropyltoluene	1	17.6752	0	20	88	70	130
n-Butylbenzene	1	16.591	0	20	83	70	130
p-Diethylbenzene	1	17.6847	0	20	88	70	130
1,2,4,5-Tetramethylbenzene	1	15.925	0	20	80	70	130
1,2-Dibromo-3-Chloropropane	1	13.1267	0	20	66	50	150
Camphor	1	161.8003	0	200	81	20	150
Hexachlorobutadiene	1	12.8036	0	20	64	50	150
1,2,4-Trichlorobenzene	1	15.2343	0	20	76	70	130
1,2,3-Trichlorobenzene	1	15.2251	0	20	76	70	130
Naphthalene	1	16.1034	0	20	81	50	150

Form3
Recovery Data Laboratory Limits
QC Batch: MBS64949

Data File		Sample ID:		Analysis Date									
Spike or Dup: 3M118966.D		MBS64949		10/21/2017 1:34:00 AM									
Non Spike(If applicable):													
Inst Blank(If applicable):													
Method: 8260C		Matrix: Aqueous		QC Type: MBS									
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit						
Chlorodifluoromethane	1	23.7004	0	20	119	50	150						
Dichlorodifluoromethane	1	14.1987	0	20	71	50	150						
Chloromethane	1	17.0001	0	20	85	50	150						
Bromomethane	1	18.1845	0	20	91	50	150						
Vinyl Chloride	1	18.4996	0	20	92	50	150						
Chloroethane	1	19.8549	0	20	99	50	150						
Trichlorofluoromethane	1	20.0004	0	20	100	50	150						
Ethyl ether	1	17.6441	0	20	88	50	150						
Furan	1	18.3667	0	20	92	50	150						
1,1,2-Trichloro-1,2,2-trifluoroethane	1	21.8444	0	20	109	50	150						
Methylene Chloride	1	19.831	0	20	99	70	130						
Acrolein	1	88.3535	0	100	88	50	150						
Acrylonitrile	1	19.0027	0	20	95	50	150						
Iodomethane	1	26.6676	0	20	133	50	150						
Acetone	1	94.1757	0	100	94	50	150						
Carbon Disulfide	1	30.8523	0	20	154 *	50	150						
t-Butyl Alcohol	1	69.763	0	100	70	50	150						
n-Hexane	1	18.8816	0	20	94	70	130						
Di-isopropyl-ether	1	21.355	0	20	107	70	130						
1,1-Dichloroethene	1	20.0481	0	20	100	70	130						
Methyl Acetate	1	19.0136	0	20	95	50	150						
Methyl-t-butyl ether	1	19.7337	0	20	99	70	130						
1,1-Dichloroethane	1	20.7994	0	20	104	70	130						
trans-1,2-Dichloroethene	1	21.9148	0	20	110	70	130						
Ethyl-t-butyl ether	1	19.1348	0	20	96	70	130						
cis-1,2-Dichloroethene	1	20.1437	0	20	101	70	130						
Bromochloromethane	1	18.1635	0	20	91	70	130						
2,2-Dichloropropane	1	15.5747	0	20	78	70	130						
Ethyl acetate	1	21.481	0	20	107	50	150						
1,4-Dioxane	1	1073.024	0	1000	107	50	150						
1,1-Dichloropropene	1	22.2834	0	20	111	70	130						
Chloroform	1	20.4451	0	20	102	70	130						
Cyclohexane	1	21.7992	0	20	109	70	130						
1,2-Dichloroethane	1	21.6663	0	20	108	70	130						
2-Butanone	1	18.674	0	20	93	50	150						
1,1,1-Trichloroethane	1	20.1006	0	20	101	70	130						
Carbon Tetrachloride	1	21.2107	0	20	106	50	150						
Vinyl Acetate	1	21.9216	0	20	110	50	150						
Bromodichloromethane	1	20.3391	0	20	102	70	130						
Methylcyclohexane	1	21.8265	0	20	109	70	130						
Dibromomethane	1	20.0724	0	20	100	70	130						
1,2-Dichloropropane	1	20.705	0	20	104	70	130						
Trichloroethene	1	21.8797	0	20	109	70	130						
Benzene	1	21.196	0	20	106	70	130						
tert-Amyl methyl ether	1	18.7834	0	20	94	70	130						
Iso-propylacetate	1	18.1108	0	20	91	70	130						
Methyl methacrylate	1	18.957	0	20	95	70	130						
Dibromochloromethane	1	18.1358	0	20	91	70	130						
2-Chloroethylvinylether	1	16.4733	0	20	82	70	130						
cis-1,3-Dichloropropene	1	17.4986	0	20	87	70	130						
trans-1,3-Dichloropropene	1	16.5938	0	20	83	70	130						
Ethyl methacrylate	1	17.7921	0	20	89	70	130						
1,1,2-Trichloroethane	1	17.8288	0	20	89	70	130						
1,2-Dibromoethane	1	17.6077	0	20	88	70	130						
1,3-Dichloropropane	1	18.5809	0	20	93	70	130						
4-Methyl-2-Pentanone	1	17.8435	0	20	89	50	150						
2-Hexanone	1	18.2179	0	20	91	50	150						
Tetrachloroethene	1	20.173	0	20	101	50	150						
Toluene	1	19.1342	0	20	96	70	130						
1,1,1,2-Tetrachloroethane	1	19.2741	0	20	96	70	130						
Chlorobenzene	1	19.2517	0	20	96	70	130						

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3

Recovery Data Laboratory Limits

QC Batch: MBS64949

n-Butyl acrylate	1	15.671	0	20	78	70	130
n-Amyl acetate	1	17.6456	0	20	88	70	130
Bromoform	1	16.1328	0	20	81	70	130
Ethylbenzene	1	19.4302	0	20	97	70	130
1,1,2,2-Tetrachloroethane	1	16.9454	0	20	85	70	130
Styrene	1	19.0236	0	20	95	70	130
m&p-Xylenes	1	36.6489	0	40	92	70	130
o-Xylene	1	19.4703	0	20	97	70	130
trans-1,4-Dichloro-2-butene	1	16.2728	0	20	81	50	150
1,3-Dichlorobenzene	1	18.0734	0	20	90	70	130
1,4-Dichlorobenzene	1	17.7339	0	20	89	70	130
1,2-Dichlorobenzene	1	18.3893	0	20	92	70	130
Isopropylbenzene	1	19.5349	0	20	98	70	130
Cyclohexanone	1	71.4784	0	100	71	50	150
Camphene	1	16.9272	0	20	85	70	130
1,2,3-Trichloropropane	1	15.909	0	20	80	70	130
2-Chlorotoluene	1	20.1483	0	20	101	70	130
p-Ethyltoluene	1	18.1462	0	20	91	70	130
4-Chlorotoluene	1	19.2251	0	20	96	70	130
n-Propylbenzene	1	19.3519	0	20	97	70	130
Bromobenzene	1	16.5611	0	20	83	70	130
1,3,5-Trimethylbenzene	1	21.3233	0	20	107	70	130
Butyl methacrylate	1	17.2578	0	20	86	70	130
t-Butylbenzene	1	19.1822	0	20	96	70	130
1,2,4-Trimethylbenzene	1	19.6474	0	20	98	70	130
sec-Butylbenzene	1	19.4774	0	20	97	70	130
4-Isopropyltoluene	1	19.5251	0	20	98	70	130
n-Butylbenzene	1	18.8893	0	20	94	70	130
p-Diethylbenzene	1	19.4959	0	20	97	70	130
1,2,4,5-Tetramethylbenzene	1	20.0164	0	20	100	70	130
1,2-Dibromo-3-Chloropropane	1	12.6767	0	20	63	50	150
Camphor	1	157.185	0	200	79	20	150
Hexachlorobutadiene	1	14.8082	0	20	74	50	150
1,2,4-Trichlorobenzene	1	18.3437	0	20	92	70	130
1,2,3-Trichlorobenzene	1	18.0827	0	20	90	70	130
Naphthalene	1	18.0165	0	20	90	50	150

Form3
Recovery Data Laboratory Limits
QC Batch: MBS64955

Data File		Sample ID:		Analysis Date									
Spike or Dup: 3M119009.D		MBS64955		10/23/2017 11:34:00 A									
Non Spike(If applicable):													
Inst Blank(If applicable):													
Method: 8260C		Matrix: Aqueous		QC Type: MBS									
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit						
Chlorodifluoromethane	1	25.7619	0	20	129	50	150						
Dichlorodifluoromethane	1	12.8901	0	20	64	50	150						
Chloromethane	1	18.163	0	20	91	50	150						
Bromomethane	1	15.8142	0	20	79	50	150						
Vinyl Chloride	1	17.8265	0	20	89	50	150						
Chloroethane	1	20.8096	0	20	104	50	150						
Trichlorodifluoromethane	1	20.4349	0	20	102	50	150						
Ethyl ether	1	20.3968	0	20	102	50	150						
Furan	1	18.148	0	20	91	50	150						
1,1,2-Trichloro-1,2,2-trifluoroethane	1	23.5836	0	20	118	50	150						
Methylene Chloride	1	21.9367	0	20	110	70	130						
Acrolein	1	81.4269	0	100	81	50	150						
Acrylonitrile	1	23.3859	0	20	117	50	150						
Iodomethane	1	29.1281	0	20	146	50	150						
Acetone	1	113.7067	0	100	114	50	150						
Carbon Disulfide	1	31.3471	0	20	157 *	50	150						
t-Butyl Alcohol	1	93.6259	0	100	94	50	150						
n-Hexane	1	22.6927	0	20	113	70	130						
Di-isopropyl-ether	1	24.9834	0	20	125	70	130						
1,1-Dichloroethene	1	20.6338	0	20	103	70	130						
Methyl Acetate	1	22.32	0	20	112	50	150						
Methyl-t-butyl ether	1	23.2715	0	20	116	70	130						
1,1-Dichloroethane	1	22.5862	0	20	113	70	130						
trans-1,2-Dichloroethene	1	22.869	0	20	114	70	130						
Ethyl-t-butyl ether	1	23.815	0	20	119	70	130						
cis-1,2-Dichloroethene	1	23.5505	0	20	118	70	130						
Bromochloromethane	1	21.3034	0	20	107	70	130						
2,2-Dichloropropane	1	21.8742	0	20	109	70	130						
Ethyl acetate	1	23.1784	0	20	116	50	150						
1,4-Dioxane	1	1336.475	0	1000	134	50	150						
1,1-Dichloropropene	1	23.8606	0	20	119	70	130						
Chloroform	1	22.3315	0	20	112	70	130						
Cyclohexane	1	25.0178	0	20	125	70	130						
1,2-Dichloroethane	1	23.3362	0	20	117	70	130						
2-Butanone	1	20.1832	0	20	101	50	150						
1,1,1-Trichloroethane	1	21.5249	0	20	108	70	130						
Carbon Tetrachloride	1	22.2062	0	20	111	50	150						
Vinyl Acetate	1	24.9436	0	20	125	50	150						
Bromodichloromethane	1	21.3985	0	20	107	70	130						
Methylcyclohexane	1	22.9443	0	20	115	70	130						
Dibromomethane	1	23.0238	0	20	115	70	130						
1,2-Dichloropropane	1	22.8545	0	20	114	70	130						
Trichloroethene	1	24.5984	0	20	123	70	130						
Benzene	1	23.9565	0	20	120	70	130						
tert-Amyl methyl ether	1	24.2302	0	20	121	70	130						
Iso-propylacetate	1	20.7635	0	20	104	70	130						
Methyl methacrylate	1	21.0012	0	20	105	70	130						
Dibromochloromethane	1	18.4147	0	20	92	70	130						
2-Chloroethylvinylether	1	20.5502	0	20	103	70	130						
cis-1,3-Dichloropropene	1	19.0332	0	20	95	70	130						
trans-1,3-Dichloropropene	1	18.8281	0	20	94	70	130						
Ethyl methacrylate	1	20.4816	0	20	102	70	130						
1,1,2-Trichloroethane	1	19.5874	0	20	98	70	130						
1,2-Dibromoethane	1	19.2206	0	20	96	70	130						
1,3-Dichloropropane	1	20.3906	0	20	102	70	130						
4-Methyl-2-Pentanone	1	22.1176	0	20	111	50	150						
2-Hexanone	1	21.2891	0	20	106	50	150						
Tetrachloroethene	1	20.8485	0	20	104	50	150						
Toluene	1	20.8145	0	20	104	70	130						
1,1,1,2-Tetrachloroethane	1	20.1966	0	20	101	70	130						
Chlorobenzene	1	20.4345	0	20	102	70	130						

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3

Recovery Data Laboratory Limits

QC Batch: MBS64955

n-Butyl acrylate	1	17.4421	0	20	87	70	130
n-Amyl acetate	1	20.6821	0	20	103	70	130
Bromoform	1	15.8151	0	20	79	70	130
Ethylbenzene	1	21.2331	0	20	106	70	130
1,1,2,2-Tetrachloroethane	1	17.8568	0	20	89	70	130
Styrene	1	20.7965	0	20	104	70	130
m&p-Xylenes	1	39.8676	0	40	100	70	130
o-Xylene	1	21.1719	0	20	106	70	130
trans-1,4-Dichloro-2-butene	1	16.9968	0	20	85	50	150
1,3-Dichlorobenzene	1	19.1155	0	20	96	70	130
1,4-Dichlorobenzene	1	19.4623	0	20	97	70	130
1,2-Dichlorobenzene	1	19.0748	0	20	95	70	130
Isopropylbenzene	1	19.6785	0	20	98	70	130
Cyclohexanone	1	142.4123	0	100	142	50	150
Camphepane	1	18.2491	0	20	91	70	130
1,2,3-Trichloropropane	1	18.4349	0	20	92	70	130
2-Chlorotoluene	1	20.6209	0	20	103	70	130
p-Ethyltoluene	1	19.5848	0	20	98	70	130
4-Chlorotoluene	1	20.5441	0	20	103	70	130
n-Propylbenzene	1	19.8281	0	20	99	70	130
Bromobenzene	1	18.4992	0	20	92	70	130
1,3,5-Trimethylbenzene	1	19.8341	0	20	99	70	130
Butyl methacrylate	1	18.3247	0	20	92	70	130
t-Butylbenzene	1	19.7037	0	20	99	70	130
1,2,4-Trimethylbenzene	1	19.9506	0	20	100	70	130
sec-Butylbenzene	1	19.1284	0	20	96	70	130
4-Isopropyltoluene	1	19.1132	0	20	96	70	130
n-Butylbenzene	1	18.5022	0	20	93	70	130
p-Diethylbenzene	1	19.1668	0	20	96	70	130
1,2,4,5-Tetramethylbenzene	1	19.3477	0	20	97	70	130
1,2-Dibromo-3-Chloropropane	1	14.7857	0	20	74	50	150
Camphor	1	181.5644	0	200	91	20	150
Hexachlorobutadiene	1	14.5861	0	20	73	50	150
1,2,4-Trichlorobenzene	1	18.0187	0	20	90	70	130
1,2,3-Trichlorobenzene	1	18.001	0	20	90	70	130
Naphthalene	1	19.0075	0	20	95	50	150

Form3
Recovery Data Laboratory Limits
QC Batch: MBS64948

Data File	Sample ID:	Analysis Date
Spike or Dup: 3M118942.D	AD00698-022(MS:AD00698-021	10/20/2017 6:51:00 PM
Non Spike(if applicable): 3M118944.D	AD00698-021	10/20/2017 7:25:00 PM
Inst Blank(if applicable):		

Method: 8260C		Matrix: Aqueous		QC Type: MS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	18.7888	0	20	94	50	150
Dichlorodifluoromethane	1	9.3296	0	20	47*	50	150
Chloromethane	1	11.8042	0	20	59	50	150
Bromomethane	1	14.9415	0	20	75	50	150
Vinyl Chloride	1	14.107	0	20	71	50	150
Chloroethane	1	11.8615	0	20	59	50	150
Trichlorodifluoromethane	1	16.4902	0	20	82	50	150
Ethyl ether	1	16.804	0	20	84	50	150
Furan	1	14.108	0	20	71	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	19.2162	0	20	96	50	150
Methylene Chloride	1	17.9604	0	20	90	70	130
Acrolein	1	76.0213	0	100	76	50	150
Acrylonitrile	1	17.7905	0	20	89	50	150
Iodomethane	1	22.9887	0	20	115	50	150
Acetone	1	86.2445	0	100	86	50	150
Carbon Disulfide	1	25.3162	0	20	127	50	150
t-Butyl Alcohol	1	73.773	0	100	74	50	150
n-Hexane	1	19.0952	0	20	95	70	130
Di-isopropyl-ether	1	20.3534	0	20	102	70	130
1,1-Dichloroethene	1	15.5421	0	20	78	70	130
Methyl Acetate	1	16.9422	0	20	85	50	150
Methyl-t-butyl ether	1	18.4241	0	20	92	70	130
1,1-Dichloroethane	1	18.6902	0	20	93	70	130
trans-1,2-Dichloroethene	1	18.6806	0	20	93	70	130
Ethyl-t-butyl ether	1	19.3148	0	20	97	70	130
cis-1,2-Dichloroethene	1	19.4385	0	20	97	70	130
Bromochloromethane	1	17.4959	0	20	87	70	130
2,2-Dichloropropane	1	18.4796	0	20	92	70	130
Ethyl acetate	1	21.5845	0	20	108	50	150
1,4-Dioxane	1	990.147	0	1000	99	50	150
1,1-Dichloropropene	1	20.0619	0	20	100	70	130
Chloroform	1	18.6709	0	20	93	70	130
Cyclohexane	1	20.4668	0	20	102	70	130
1,2-Dichloroethane	1	19.4439	0	20	97	70	130
2-Butanone	1	17.3504	0	20	87	50	150
1,1,1-Trichloroethane	1	17.7064	0	20	89	70	130
Carbon Tetrachloride	1	18.702	0	20	94	50	150
Vinyl Acetate	1	20.6998	0	20	103	50	150
Bromodichloromethane	1	17.8659	0	20	89	70	130
Methylcyclohexane	1	20.5277	0	20	103	70	130
Dibromomethane	1	18.7102	0	20	94	70	130
1,2-Dichloropropane	1	19.46	0	20	97	70	130
Trichloroethene	1	19.9426	0	20	100	70	130
Benzene	1	18.9138	0	20	95	70	130
tert-Amyl methyl ether	1	19.0529	0	20	95	70	130
Iso-propylacetate	1	16.5204	0	20	83	70	130
Methyl methacrylate	1	16.946	0	20	85	70	130
Dibromochloromethane	1	15.7456	0	20	79	70	130
2-Chloroethylvinylether	1	0	0	20	0*	70	130
cis-1,3-Dichloropropene	1	15.9268	0	20	80	70	130
trans-1,3-Dichloropropene	1	15.3831	0	20	77	70	130
Ethyl methacrylate	1	16.9511	0	20	85	70	130
1,1,2-Trichloroethane	1	16.2289	0	20	81	70	130
1,2-Dibromoethane	1	15.9656	0	20	80	70	130
1,3-Dichloropropane	1	16.1815	0	20	81	70	130
4-Methyl-2-Pentanone	1	16.65	0	20	83	50	150
2-Hexanone	1	17.9703	0	20	90	50	150
Tetrachloroethene	1	22.8582	6.2013	20	83	50	150
Toluene	1	16.8435	0	20	84	70	130
1,1,1,2-Tetrachloroethane	1	17.4884	0	20	87	70	130
Chlorobenzene	1	17.0734	0	20	85	70	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3

Recovery Data Laboratory Limits

QC Batch: MBS64948

n-Butyl acrylate	1	14.6717	0	20	73	70	130
n-Amyl acetate	1	17.3203	0	20	87	70	130
Bromoform	1	14.0802	0	20	70	70	130
Ethylbenzene	1	18.6869	0	20	93	70	130
1,1,2,2-Tetrachloroethane	1	16.3305	0	20	82	70	130
Styrene	1	18.2016	0	20	91	70	130
m&p-Xylenes	1	34.9794	0	40	87	70	130
o-Xylene	1	18.0777	0	20	90	70	130
trans-1,4-Dichloro-2-butene	1	14.4187	0	20	72	50	150
1,3-Dichlorobenzene	1	17.2429	0	20	86	70	130
1,4-Dichlorobenzene	1	17.0182	0	20	85	70	130
1,2-Dichlorobenzene	1	17.3453	0	20	87	70	130
Isopropylbenzene	1	18.4821	0	20	92	70	130
Cyclohexanone	1	73.1658	0	100	73	50	150
Camphepane	1	11.0805	0	20	55*	70	130
1,2,3-Trichloropropane	1	15.6918	0	20	78	70	130
2-Chlorotoluene	1	18.6589	0	20	93	70	130
p-Ethyltoluene	1	16.9734	0	20	85	70	130
4-Chlorotoluene	1	18.1498	0	20	91	70	130
n-Propylbenzene	1	18.7823	0	20	94	70	130
Bromobenzene	1	16.9998	0	20	85	70	130
1,3,5-Trimethylbenzene	1	17.9034	0	20	90	70	130
Butyl methacrylate	1	16.2658	0	20	81	70	130
t-Butylbenzene	1	19.14	0	20	96	70	130
1,2,4-Trimethylbenzene	1	18.7042	0	20	94	70	130
sec-Butylbenzene	1	18.9869	0	20	95	70	130
4-Isopropyltoluene	1	18.9719	0	20	95	70	130
n-Butylbenzene	1	18.3841	1.9573	20	82	70	130
p-Diethylbenzene	1	18.8215	0	20	94	70	130
1,2,4,5-Tetramethylbenzene	1	20.0912	0	20	100	70	130
1,2-Dibromo-3-Chloropropane	1	13.0561	0	20	65	50	150
Camphor	1	160.8176	0	200	80	20	150
Hexachlorobutadiene	1	15.7846	0	20	79	50	150
1,2,4-Trichlorobenzene	1	17.1904	0	20	86	70	130
1,2,3-Trichlorobenzene	1	17.8455	0	20	89	70	130
Naphthalene	1	18.6088	2.4468	20	81	50	150

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: MBS64948

Data File		Sample ID:		Analysis Date			
Spike or Dup: 3M118943.D		AD00698-023(MSD:AD00698-0)				10/20/2017 7:08:00 PM	
Non Spike(if applicable): 3M118944.D		AD00698-021				10/20/2017 7:25:00 PM	
Inst Blank(if applicable):							
Method: 8260C		Matrix: Aqueous		QC Type: MSD			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	19.57	0	20	98	50	150
Dichlorodifluoromethane	1	9.7978	0	20	49*	50	150
Chloromethane	1	13.0732	0	20	65	50	150
Bromomethane	1	14.2233	0	20	71	50	150
Vinyl Chloride	1	13.9668	0	20	70	50	150
Chloroethane	1	14.8953	0	20	74	50	150
Trichlorofluoromethane	1	16.6907	0	20	83	50	150
Ethyl ether	1	17.2855	0	20	86	50	150
Furan	1	14.8712	0	20	74	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	20.4948	0	20	102	50	150
Methylene Chloride	1	17.5733	0	20	88	70	130
Acrolein	1	79.9567	0	100	80	50	150
Acrylonitrile	1	18.4034	0	20	92	50	150
Iodomethane	1	24.0284	0	20	120	50	150
Acetone	1	93.3093	0	100	93	50	150
Carbon Disulfide	1	26.2278	0	20	131	50	150
t-Butyl Alcohol	1	73.9167	0	100	74	50	150
n-Hexane	1	19.7463	0	20	99	70	130
Di-isopropyl-ether	1	20.7185	0	20	104	70	130
1,1-Dichloroethene	1	17.9428	0	20	90	70	130
Methyl Acetate	1	19.2208	0	20	96	50	150
Methyl-t-butyl ether	1	18.9984	0	20	95	70	130
1,1-Dichloroethane	1	18.8672	0	20	94	70	130
trans-1,2-Dichloroethene	1	19.6988	0	20	98	70	130
Ethyl-t-butyl ether	1	19.6985	0	20	98	70	130
cis-1,2-Dichloroethene	1	19.6424	0	20	98	70	130
Bromochloromethane	1	17.3043	0	20	87	70	130
2,2-Dichloropropane	1	17.8614	0	20	89	70	130
Ethyl acetate	1	21.5142	0	20	108	50	150
1,4-Dioxane	1	1096.672	0	1000	110	50	150
1,1-Dichloropropene	1	20.8189	0	20	104	70	130
Chloroform	1	19.0242	0	20	95	70	130
Cyclohexane	1	20.8089	0	20	104	70	130
1,2-Dichloroethane	1	20.3851	0	20	102	70	130
2-Butanone	1	21.1427	0	20	106	50	150
1,1,1-Trichloroethane	1	18.6651	0	20	93	70	130
Carbon Tetrachloride	1	19.5613	0	20	98	50	150
Vinyl Acetate	1	20.997	0	20	105	50	150
Bromodichloromethane	1	18.3454	0	20	92	70	130
Methylcyclohexane	1	21.3403	0	20	107	70	130
Dibromomethane	1	19.049	0	20	95	70	130
1,2-Dichloropropane	1	19.9327	0	20	100	70	130
Trichloroethene	1	20.5712	0	20	103	70	130
Benzene	1	19.7396	0	20	99	70	130
tert-Amyl methyl ether	1	19.1547	0	20	96	70	130
Iso-propylacetate	1	18.4771	0	20	92	70	130
Methyl methacrylate	1	18.4127	0	20	92	70	130
Dibromochloromethane	1	16.3297	0	20	82	70	130
2-Chloroethylvinylether	1	0	0	20	0*	70	130
cis-1,3-Dichloropropene	1	16.703	0	20	84	70	130
trans-1,3-Dichloropropene	1	15.9967	0	20	80	70	130
Ethyl methacrylate	1	17.5243	0	20	88	70	130
1,1,2-Trichloroethane	1	16.9336	0	20	85	70	130
1,2-Dibromoethane	1	17.2813	0	20	86	70	130
1,3-Dichloropropane	1	17.8792	0	20	89	70	130
4-Methyl-2-Pentanone	1	18.2957	0	20	91	50	150
2-Hexanone	1	19.4424	0	20	97	50	150
Tetrachloroethene	1	23.9343	6.2013	20	89	50	150
Toluene	1	18.172	0	20	91	70	130
1,1,1,2-Tetrachloroethane	1	18.2767	0	20	91	70	130
Chlorobenzene	1	18.0676	0	20	90	70	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3

Recovery Data Laboratory Limits

QC Batch: MBS64948

n-Butyl acrylate	1	15.5149	0	20	78	70	130
n-Amyl acetate	1	16.7776	0	20	84	70	130
Bromoform	1	14.6481	0	20	73	70	130
Ethylbenzene	1	17.9698	0	20	90	70	130
1,1,2,2-Tetrachloroethane	1	16.4411	0	20	82	70	130
Styrene	1	18.1904	0	20	91	70	130
m&p-Xylenes	1	35.5319	0	40	89	70	130
o-Xylene	1	18.1512	0	20	91	70	130
trans-1,4-Dichloro-2-butene	1	14.5143	0	20	73	50	150
1,3-Dichlorobenzene	1	16.771	0	20	84	70	130
1,4-Dichlorobenzene	1	16.8623	0	20	84	70	130
1,2-Dichlorobenzene	1	17.1236	0	20	86	70	130
Isopropylbenzene	1	17.6639	0	20	88	70	130
Cyclohexanone	1	78.8238	0	100	79	50	150
Camphepane	1	8.0602	0	20	40 *	70	130
1,2,3-Trichloropropane	1	15.9306	0	20	80	70	130
2-Chlorotoluene	1	17.7743	0	20	89	70	130
p-Ethyltoluene	1	16.8672	0	20	84	70	130
4-Chlorotoluene	1	18.52	0	20	93	70	130
n-Propylbenzene	1	18.0006	0	20	90	70	130
Bromobenzene	1	17.0291	0	20	85	70	130
1,3,5-Trimethylbenzene	1	18.1715	0	20	91	70	130
Butyl methacrylate	1	17.0541	0	20	85	70	130
t-Butylbenzene	1	17.4014	0	20	87	70	130
1,2,4-Trimethylbenzene	1	17.6818	0	20	88	70	130
sec-Butylbenzene	1	17.3486	0	20	87	70	130
4-Isopropyltoluene	1	17.5253	0	20	88	70	130
n-Butylbenzene	1	17.1209	1.9573	20	76	70	130
p-Diethylbenzene	1	17.1185	0	20	86	70	130
1,2,4,5-Tetramethylbenzene	1	18.3198	0	20	92	70	130
1,2-Dibromo-3-Chloropropane	1	14.7586	0	20	74	50	150
Camphor	1	165.3775	0	200	83	20	150
Hexachlorobutadiene	1	13.7385	0	20	69	50	150
1,2,4-Trichlorobenzene	1	16.6187	0	20	83	70	130
1,2,3-Trichlorobenzene	1	17.5449	0	20	88	70	130
Naphthalene	1	18.1679	2.4468	20	79	50	150

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
RPD Data Laboratory Limits
QC Batch: MBS64948

Data File	Sample ID:	Analysis Date
Spike or Dup: 3M118943.D	AD00698-023(MSD:AD00698-0	10/20/2017 7:08:00 PM
Duplicate(if applicable): 3M118942.D	AD00698-022(MS:AD00698-021	10/20/2017 6:51:00 PM
Inst Blank(if applicable):		
Method: 8260C	Matrix: Aqueous	QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	19.57	18.7888	4.1	30
Dichlorodifluoromethane	1	9.7978	9.3296	4.9	30
Chloromethane	1	13.0732	11.8042	10	30
Bromomethane	1	14.2233	14.9415	4.9	30
Vinyl Chloride	1	13.9668	14.107	1	40
Chloroethane	1	14.8953	11.8615	23	30
Trichlorodifluoromethane	1	16.6907	16.4902	1.2	30
Ethyl ether	1	17.2855	16.804	2.8	30
Furan	1	14.8712	14.108	5.3	30
1,1,2-Trichloro-1,2,2-trifluoroethane	1	20.4948	19.2162	6.4	30
Methylene Chloride	1	17.5733	17.9604	2.2	30
Acrolein	1	79.9567	76.0213	5	30
Acrylonitrile	1	18.4034	17.7905	3.4	30
Iodomethane	1	24.0284	22.9887	4.4	30
Acetone	1	93.3093	86.2445	7.9	30
Carbon Disulfide	1	26.2278	25.3162	3.5	30
t-Butyl Alcohol	1	73.9167	73.773	0.19	30
n-Hexane	1	19.7463	19.0952	3.4	30
Di-isopropyl-ether	1	20.7185	20.3534	1.8	30
1,1-Dichloroethene	1	17.9428	15.5421	14	40
Methyl Acetate	1	19.2208	16.9422	13	30
Methyl-t-butyl ether	1	18.9984	18.4241	3.1	30
1,1-Dichloroethane	1	18.8672	18.6902	0.94	40
trans-1,2-Dichloroethene	1	19.6988	18.6806	5.3	30
Ethyl-t-butyl ether	1	19.6985	19.3148	2	30
cis-1,2-Dichloroethene	1	19.6424	19.4385	1	30
Bromochloromethane	1	17.3043	17.4959	1.1	30
2,2-Dichloropropane	1	17.8614	18.4796	3.4	30
Ethyl acetate	1	21.5142	21.5845	0.33	30
1,4-Dioxane	1	1096.672	990.147	10	30
1,1-Dichloropropene	1	20.8189	20.0619	3.7	30
Chloroform	1	19.0242	18.6709	1.9	40
Cyclohexane	1	20.8089	20.4668	1.7	30
1,2-Dichloroethane	1	20.3851	19.4439	4.7	40
2-Butanone	1	21.1427	17.3504	20	40
1,1,1-Trichloroethane	1	18.6651	17.7064	5.3	30
Carbon Tetrachloride	1	19.5613	18.702	4.5	40
Vinyl Acetate	1	20.997	20.6998	1.4	30
Bromodichloromethane	1	18.3454	17.8659	2.6	30
Methylcyclohexane	1	21.3403	20.5277	3.9	30
Dibromomethane	1	19.049	18.7102	1.8	30
1,2-Dichloropropane	1	19.9327	19.46	2.4	30
Trichloroethene	1	20.5712	19.9426	3.1	40
Benzene	1	19.7396	18.9138	4.3	40
tert-Amyl methyl ether	1	19.1547	19.0529	0.53	30
Iso-propylacetate	1	18.4771	16.5204	11	30
Methyl methacrylate	1	18.4127	16.946	8.3	30
Dibromochloromethane	1	16.3297	15.7456	3.6	30
2-Chloroethylvinylether	1	0	0	NA	30
cis-1,3-Dichloropropene	1	16.703	15.9268	4.8	30
trans-1,3-Dichloropropene	1	15.9967	15.3831	3.9	30
Ethyl methacrylate	1	17.5243	16.9511	3.3	30
1,1,2-Trichloroethane	1	16.9336	16.2289	4.2	30
1,2-Dibromoethane	1	17.2813	15.9656	7.9	30
1,3-Dichloropropane	1	17.8792	16.1815	10	30
4-Methyl-2-Pentanone	1	18.2957	16.65	9.4	30
2-Hexanone	1	19.4424	17.9703	7.9	30
Tetrachloroethene	1	23.9343	22.8582	4.6	40
Toluene	1	18.172	16.8435	7.6	40
1,1,1,2-Tetrachloroethane	1	18.2767	17.4884	4.4	30
Chlorobenzene	1	18.0676	17.0734	5.7	40
n-Butyl acrylate	1	15.5149	14.6717	5.6	30
n-Amyl acetate	1	16.7776	17.3203	3.2	30

Form3
RPD Data Laboratory Limits

QC Batch: MBS64948

Bromoform	1	14.6481	14.0802	4	30
Ethylbenzene	1	17.9698	18.6869	3.9	30
1,1,2,2-Tetrachloroethane	1	16.4411	16.3305	0.67	30
Styrene	1	18.1904	18.2016	0.06	30
m&p-Xylenes	1	35.5319	34.9794	1.6	30
o-Xylene	1	18.1512	18.0777	0.41	30
trans-1,4-Dichloro-2-butene	1	14.5143	14.4187	0.66	30
1,3-Dichlorobenzene	1	16.771	17.2429	2.8	30
1,4-Dichlorobenzene	1	16.8623	17.0182	0.92	40
1,2-Dichlorobenzene	1	17.1236	17.3453	1.3	40
Isopropylbenzene	1	17.6639	18.4821	4.5	30
Cyclohexanone	1	78.8238	73.1658	7.4	30
Camphene	1	8.0602	11.0805	32 *	30
1,2,3-Trichloropropane	1	15.9306	15.6918	1.5	30
2-Chlorotoluene	1	17.7743	18.6589	4.9	30
p-Ethyltoluene	1	16.8672	16.9734	0.63	30
4-Chlorotoluene	1	18.52	18.1498	2	30
n-Propylbenzene	1	18.0006	18.7823	4.3	40
Bromobenzene	1	17.0291	16.9998	0.17	30
1,3,5-Trimethylbenzene	1	18.1715	17.9034	1.5	30
Butyl methacrylate	1	17.0541	16.2658	4.7	30
t-Butylbenzene	1	17.4014	19.14	9.5	30
1,2,4-Trimethylbenzene	1	17.6818	18.7042	5.6	30
sec-Butylbenzene	1	17.3486	18.9869	9	40
4-Isopropyltoluene	1	17.5253	18.9719	7.9	30
n-Butylbenzene	1	17.1209	18.3841	7.1	30
p-Diethylbenzene	1	17.1185	18.8215	9.5	30
1,2,4,5-Tetramethylbenzene	1	18.3198	20.0912	9.2	30
1,2-Dibromo-3-Chloropropane	1	14.7586	13.0561	12	30
Camphor	1	165.3775	160.8176	2.8	30
Hexachlorobutadiene	1	13.7385	15.7846	14	30
1,2,4-Trichlorobenzene	1	16.6187	17.1904	3.4	30
1,2,3-Trichlorobenzene	1	17.5449	17.8455	1.7	30
Naphthalene	1	18.1679	18.6088	2.4	30

* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Form3
Recovery Data Laboratory Limits
QC Batch: MBS64949

Data File	Sample ID:	Analysis Date
Spike or Dup: 3M118964.D	AD00698-031(MS:AD00698-030	10/21/2017 1:01:00 AM
Non Spike(if applicable): 3M118963.D	AD00698-030	10/21/2017 12:44:00 A
Inst Blank(if applicable):		

Method: 8260C		Matrix: Aqueous		QC Type: MS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	20.4191	0	20	102	50	150
Dichlorodifluoromethane	1	9.073	0	20	45*	50	150
Chloromethane	1	13.0565	0	20	65	50	150
Bromomethane	1	15.9194	0	20	80	50	150
Vinyl Chloride	1	14.8899	0	20	74	50	150
Chloroethane	1	13.5623	0	20	68	50	150
Trichlorofluoromethane	1	17.113	0	20	86	50	150
Ethyl ether	1	16.0954	0	20	80	50	150
Furan	1	13.9783	0	20	70	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	18.9777	0	20	95	50	150
Methylene Chloride	1	17.2691	0	20	86	70	130
Acrolein	1	70.8821	0	100	71	50	150
Acrylonitrile	1	16.4123	0	20	82	50	150
Iodomethane	1	22.7065	0	20	114	50	150
Acetone	1	81.7976	0	100	82	50	150
Carbon Disulfide	1	25.5982	0	20	128	50	150
t-Butyl Alcohol	1	61.822	0	100	62	50	150
n-Hexane	1	15.3369	0	20	77	70	130
Di-isopropyl-ether	1	18.6435	0	20	93	70	130
1,1-Dichloroethene	1	17.9106	0	20	90	70	130
Methyl Acetate	1	14.1984	0	20	71	50	150
Methyl-t-butyl ether	1	16.4398	0	20	82	70	130
1,1-Dichloroethane	1	17.6213	0	20	88	70	130
trans-1,2-Dichloroethene	1	18.9057	0	20	95	70	130
Ethyl-t-butyl ether	1	16.6934	0	20	83	70	130
cis-1,2-Dichloroethene	1	17.7918	0	20	89	70	130
Bromochloromethane	1	17.3451	0	20	87	70	130
2,2-Dichloropropane	1	13.131	0	20	66*	70	130
Ethyl acetate	1	18.748	0	20	94	50	150
1,4-Dioxane	1	938.2686	0	1000	94	50	150
1,1-Dichloropropene	1	19.74	0	20	99	70	130
Chloroform	1	18.231	0	20	91	70	130
Cyclohexane	1	18.9846	0	20	95	70	130
1,2-Dichloroethane	1	19.1965	0	20	96	70	130
2-Butanone	1	15.2353	0	20	76	50	150
1,1,1-Trichloroethane	1	18.308	0	20	92	70	130
Carbon Tetrachloride	1	19.4331	0	20	97	50	150
Vinyl Acetate	1	18.1412	0	20	91	50	150
Bromodichloromethane	1	17.9012	0	20	90	70	130
Methylcyclohexane	1	18.3387	0	20	92	70	130
Dibromomethane	1	18.0173	0	20	90	70	130
1,2-Dichloropropane	1	18.4213	0	20	92	70	130
Trichloroethene	1	19.0308	0	20	95	70	130
Benzene	1	18.8341	0	20	94	70	130
tert-Amyl methyl ether	1	16.106	0	20	81	70	130
Iso-propylacetate	1	14.468	0	20	72	70	130
Methyl methacrylate	1	17.6525	0	20	88	70	130
Dibromochloromethane	1	15.8691	0	20	79	70	130
2-Chloroethylvinylether	1	0	0	20	0*	70	130
cis-1,3-Dichloropropene	1	14.5855	0	20	73	70	130
trans-1,3-Dichloropropene	1	13.9612	0	20	70	70	130
Ethyl methacrylate	1	15.9662	0	20	80	70	130
1,1,2-Trichloroethane	1	15.4287	0	20	77	70	130
1,2-Dibromoethane	1	15.4205	0	20	77	70	130
1,3-Dichloropropane	1	16.4323	0	20	82	70	130
4-Methyl-2-Pentanone	1	15.5361	0	20	78	50	150
2-Hexanone	1	16.183	0	20	81	50	150
Tetrachloroethene	1	17.6161	0	20	88	50	150
Toluene	1	16.9745	0	20	85	70	130
1,1,1,2-Tetrachloroethane	1	17.469	0	20	87	70	130
Chlorobenzene	1	16.941	0	20	85	70	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3

Recovery Data Laboratory Limits

QC Batch: MBS64949

n-Butyl acrylate	1	12.956	0	20	65*	70	130
n-Amyl acetate	1	13.3162	0	20	67*	70	130
Bromoform	1	13.0287	0	20	65*	70	130
Ethylbenzene	1	15.8375	0	20	79	70	130
1,1,2,2-Tetrachloroethane	1	14.9987	0	20	75	70	130
Styrene	1	16.5599	0	20	83	70	130
m&p-Xylenes	1	32.0942	0	40	80	70	130
o-Xylene	1	16.9741	0	20	85	70	130
trans-1,4-Dichloro-2-butene	1	11.8309	0	20	59	50	150
1,3-Dichlorobenzene	1	15.351	0	20	77	70	130
1,4-Dichlorobenzene	1	14.7449	0	20	74	70	130
1,2-Dichlorobenzene	1	15.3562	0	20	77	70	130
Isopropylbenzene	1	16.0108	0	20	80	70	130
Cyclohexanone	1	61.0097	0	100	61	50	150
Camphepane	1	2.9107	0	20	15*	70	130
1,2,3-Trichloropropane	1	14.3669	0	20	72	70	130
2-Chlorotoluene	1	16.9167	0	20	85	70	130
p-Ethyltoluene	1	15.6189	0	20	78	70	130
4-Chlorotoluene	1	15.2737	0	20	76	70	130
n-Propylbenzene	1	15.6343	0	20	78	70	130
Bromobenzene	1	14.6151	0	20	73	70	130
1,3,5-Trimethylbenzene	1	15.26	0	20	76	70	130
Butyl methacrylate	1	14.4985	0	20	72	70	130
t-Butylbenzene	1	15.4734	0	20	77	70	130
1,2,4-Trimethylbenzene	1	15.7897	0	20	79	70	130
sec-Butylbenzene	1	14.6774	0	20	73	70	130
4-Isopropyltoluene	1	14.2913	0	20	71	70	130
n-Butylbenzene	1	13.3788	0	20	67*	70	130
p-Diethylbenzene	1	13.78	0	20	69*	70	130
1,2,4,5-Tetramethylbenzene	1	13.3009	0	20	67*	70	130
1,2-Dibromo-3-Chloropropane	1	10.9859	0	20	55	50	150
Camphor	1	122.7289	0	200	61	20	150
Hexachlorobutadiene	1	10.5303	0	20	53	50	150
1,2,4-Trichlorobenzene	1	12.9417	0	20	65*	70	130
1,2,3-Trichlorobenzene	1	12.6106	0	20	63*	70	130
Naphthalene	1	13.018	0	20	65	50	150

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: MBS64949

Data File	Sample ID:	Analysis Date
Spike or Dup: 3M118965.D	AD00698-032(MSD:AD00698-0	10/21/2017 1:17:00 AM
Non Spike(If applicable): 3M118963.D	AD00698-030	10/21/2017 12:44:00 A
Inst Blank(If applicable):		

Method: 8260C Matrix: Aqueous QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	20.1611	0	20	101	50	150
Dichlorodifluoromethane	1	8.7514	0	20	44*	50	150
Chloromethane	1	11.6991	0	20	58	50	150
Bromomethane	1	14.2399	0	20	71	50	150
Vinyl Chloride	1	14.6471	0	20	73	50	150
Chloroethane	1	11.6361	0	20	58	50	150
Trichlorofluoromethane	1	16.1991	0	20	81	50	150
Ethyl ether	1	16.5754	0	20	83	50	150
Furan	1	13.6224	0	20	68	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	17.7349	0	20	89	50	150
Methylene Chloride	1	17.3723	0	20	87	70	130
Acrolein	1	71.8669	0	100	72	50	150
Acrylonitrile	1	17.7758	0	20	89	50	150
Iodomethane	1	22.8038	0	20	114	50	150
Acetone	1	88.3238	0	100	88	50	150
Carbon Disulfide	1	25.6122	0	20	128	50	150
t-Butyl Alcohol	1	60.3541	0	100	60	50	150
n-Hexane	1	15.0832	0	20	75	70	130
Di-isopropyl-ether	1	18.7945	0	20	94	70	130
1,1-Dichloroethene	1	16.8654	0	20	84	70	130
Methyl Acetate	1	14.7688	0	20	74	50	150
Methyl-t-butyl ether	1	16.8461	0	20	84	70	130
1,1-Dichloroethane	1	17.5582	0	20	88	70	130
trans-1,2-Dichloroethene	1	18.967	0	20	95	70	130
Ethyl-t-butyl ether	1	17.6353	0	20	88	70	130
cis-1,2-Dichloroethene	1	17.8276	0	20	89	70	130
Bromochloromethane	1	16.847	0	20	84	70	130
2,2-Dichloropropane	1	13.0017	0	20	65*	70	130
Ethyl acetate	1	21.3083	0	20	107	50	150
1,4-Dioxane	1	978.3271	0	1000	98	50	150
1,1-Dichloropropene	1	19.693	0	20	98	70	130
Chloroform	1	18.2964	0	20	91	70	130
Cyclohexane	1	18.7194	0	20	94	70	130
1,2-Dichloroethane	1	19.9459	0	20	100	70	130
2-Butanone	1	10.4538	0	20	52	50	150
1,1,1-Trichloroethane	1	17.6208	0	20	88	70	130
Carbon Tetrachloride	1	18.9747	0	20	95	50	150
Vinyl Acetate	1	18.4671	0	20	92	50	150
Bromodichloromethane	1	17.7532	0	20	89	70	130
Methylcyclohexane	1	18.2609	0	20	91	70	130
Dibromomethane	1	19.2757	0	20	96	70	130
1,2-Dichloropropane	1	17.8635	0	20	89	70	130
Trichloroethene	1	19.3141	0	20	97	70	130
Benzene	1	18.9313	0	20	95	70	130
tert-Amyl methyl ether	1	16.1517	0	20	81	70	130
Iso-propylacetate	1	15.3443	0	20	77	70	130
Methyl methacrylate	1	17.4813	0	20	87	70	130
Dibromochloromethane	1	15.8635	0	20	79	70	130
2-Chloroethylvinylether	1	0	0	20	0*	70	130
cis-1,3-Dichloropropene	1	14.0426	0	20	70	70	130
trans-1,3-Dichloropropene	1	13.4001	0	20	67*	70	130
Ethyl methacrylate	1	15.6583	0	20	78	70	130
1,1,2-Trichloroethane	1	15.5439	0	20	78	70	130
1,2-Dibromoethane	1	15.597	0	20	78	70	130
1,3-Dichloropropane	1	15.9404	0	20	80	70	130
4-Methyl-2-Pentanone	1	16.0921	0	20	80	50	150
2-Hexanone	1	16.7191	0	20	84	50	150
Tetrachloroethene	1	17.1111	0	20	86	50	150
Toluene	1	16.9857	0	20	85	70	130
1,1,1,2-Tetrachloroethane	1	17.1853	0	20	86	70	130
Chlorobenzene	1	17.0497	0	20	85	70	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3

Recovery Data Laboratory Limits

QC Batch: MBS64949

n-Butyl acrylate	1	12.5421	0	20	63*	70	130
n-Amyl acetate	1	13.3442	0	20	67*	70	130
Bromoform	1	13.3381	0	20	67*	70	130
Ethylbenzene	1	15.4845	0	20	77	70	130
1,1,2,2-Tetrachloroethane	1	13.8026	0	20	69*	70	130
Styrene	1	15.8598	0	20	79	70	130
m&p-Xylenes	1	30.4363	0	40	76	70	130
o-Xylene	1	15.9057	0	20	80	70	130
trans-1,4-Dichloro-2-butene	1	10.3082	0	20	52	50	150
1,3-Dichlorobenzene	1	14.3949	0	20	72	70	130
1,4-Dichlorobenzene	1	14.6327	0	20	73	70	130
1,2-Dichlorobenzene	1	14.8269	0	20	74	70	130
Isopropylbenzene	1	15.0206	0	20	75	70	130
Cyclohexanone	1	58.8474	0	100	59	50	150
Camphene	1	2.7753	0	20	14*	70	130
1,2,3-Trichloropropane	1	13.5997	0	20	68*	70	130
2-Chlorotoluene	1	15.8358	0	20	79	70	130
p-Ethyltoluene	1	13.7325	0	20	69*	70	130
4-Chlorotoluene	1	15.021	0	20	75	70	130
n-Propylbenzene	1	14.8096	0	20	74	70	130
Bromobenzene	1	14.3101	0	20	72	70	130
1,3,5-Trimethylbenzene	1	16.7967	0	20	84	70	130
Butyl methacrylate	1	14.4492	0	20	72	70	130
t-Butylbenzene	1	14.8071	0	20	74	70	130
1,2,4-Trimethylbenzene	1	15.2629	0	20	76	70	130
sec-Butylbenzene	1	13.6949	0	20	68*	70	130
4-Isopropyltoluene	1	14.1735	0	20	71	70	130
n-Butylbenzene	1	13.5059	0	20	68*	70	130
p-Diethylbenzene	1	13.9373	0	20	70	70	130
1,2,4,5-Tetramethylbenzene	1	14.103	0	20	71	70	130
1,2-Dibromo-3-Chloropropane	1	11.3421	0	20	57	50	150
Camphor	1	129.6398	0	200	65	20	150
Hexachlorobutadiene	1	10.7947	0	20	54	50	150
1,2,4-Trichlorobenzene	1	13.0902	0	20	65*	70	130
1,2,3-Trichlorobenzene	1	12.9744	0	20	65*	70	130
Naphthalene	1	14.5579	0	20	73	50	150

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
RPD Data Laboratory Limits
QC Batch: MBS64949

Data File	Sample ID:	Analysis Date
Spike or Dup: 3M118965.D	AD00698-032(MSD:AD00698-0	10/21/2017 1:17:00 AM
Duplicate(if applicable): 3M118964.D	AD00698-031(MS:AD00698-030	10/21/2017 1:01:00 AM
Inst Blank(if applicable):		

Method: 8260C	Matrix: Aqueous	QC Type: MSD
---------------	-----------------	--------------

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	20.1611	20.4191	1.3	30
Dichlorodifluoromethane	1	8.7514	9.073	3.6	30
Chloromethane	1	11.6991	13.0565	11	30
Bromomethane	1	14.2399	15.9194	11	30
Vinyl Chloride	1	14.6471	14.8899	1.6	40
Chloroethane	1	11.6361	13.5623	15	30
Trichlorodifluoromethane	1	16.1991	17.113	5.5	30
Ethyl ether	1	16.5754	16.0954	2.9	30
Furan	1	13.6224	13.9783	2.6	30
1,1,2-Trichloro-1,2,2-trifluoroethane	1	17.7349	18.9777	6.8	30
Methylene Chloride	1	17.3723	17.2691	0.6	30
Acrolein	1	71.8669	70.8821	1.4	30
Acrylonitrile	1	17.7758	16.4123	8	30
Iodomethane	1	22.8038	22.7065	0.43	30
Acetone	1	88.3238	81.7976	7.7	30
Carbon Disulfide	1	25.6122	25.5982	0.05	30
t-Butyl Alcohol	1	60.3541	61.822	2.4	30
n-Hexane	1	15.0832	15.3369	1.7	30
Di-isopropyl-ether	1	18.7945	18.6435	0.81	30
1,1-Dichloroethene	1	16.8654	17.9106	6	40
Methyl Acetate	1	14.7688	14.1984	3.9	30
Methyl-t-butyl ether	1	16.8461	16.4398	2.4	30
1,1-Dichloroethane	1	17.5582	17.6213	0.36	40
trans-1,2-Dichloroethene	1	18.967	18.9057	0.32	30
Ethyl-t-butyl ether	1	17.6353	16.6934	5.5	30
cis-1,2-Dichloroethene	1	17.8276	17.7918	0.2	30
Bromochloromethane	1	16.847	17.3451	2.9	30
2,2-Dichloropropane	1	13.0017	13.131	0.99	30
Ethyl acetate	1	21.3083	18.748	13	30
1,4-Dioxane	1	978.3271	938.2686	4.2	30
1,1-Dichloropropene	1	19.693	19.74	0.24	30
Chloroform	1	18.2964	18.231	0.36	40
Cyclohexane	1	18.7194	18.9846	1.4	30
1,2-Dichloroethane	1	19.9459	19.1965	3.8	40
2-Butanone	1	10.4538	15.2353	37	40
1,1,1-Trichloroethane	1	17.6208	18.308	3.8	30
Carbon Tetrachloride	1	18.9747	19.4331	2.4	40
Vinyl Acetate	1	18.4671	18.1412	1.8	30
Bromodichloromethane	1	17.7532	17.9012	0.83	30
Methylcyclohexane	1	18.2609	18.3387	0.43	30
Dibromomethane	1	19.2757	18.0173	6.7	30
1,2-Dichloropropane	1	17.8635	18.4213	3.1	30
Trichloroethene	1	19.3141	19.0308	1.5	40
Benzene	1	18.9313	18.8341	0.51	40
tert-Amyl methyl ether	1	16.1517	16.106	0.28	30
Iso-propylacetate	1	15.3443	14.468	5.9	30
Methyl methacrylate	1	17.4813	17.6525	0.97	30
Dibromochloromethane	1	15.8635	15.8691	0.04	30
2-Chloroethylvinylether	1	0	0	NA	30
cis-1,3-Dichloropropene	1	14.0426	14.5855	3.8	30
trans-1,3-Dichloropropene	1	13.4001	13.9612	4.1	30
Ethyl methacrylate	1	15.6583	15.9662	1.9	30
1,1,2-Trichloroethane	1	15.5439	15.4287	0.74	30
1,2-Dibromoethane	1	15.597	15.4205	1.1	30
1,3-Dichloropropane	1	15.9404	16.4323	3	30
4-Methyl-2-Pentanone	1	16.0921	15.5361	3.5	30
2-Hexanone	1	16.7191	16.183	3.3	30
Tetrachloroethene	1	17.1111	17.6161	2.9	40
Toluene	1	16.9857	16.9745	0.07	40
1,1,1,2-Tetrachloroethane	1	17.1853	17.469	1.6	30
Chlorobenzene	1	17.0497	16.941	0.64	40
n-Butyl acrylate	1	12.5421	12.956	3.2	30
n-Amyl acetate	1	13.3442	13.3162	0.21	30

Form3
RPD Data Laboratory Limits

QC Batch: MBS64949

Bromoform	1	13.3381	13.0287	2.3	30
Ethylbenzene	1	15.4845	15.8375	2.3	30
1,1,2,2-Tetrachloroethane	1	13.8026	14.9987	8.3	30
Styrene	1	15.8598	16.5599	4.3	30
m&p-Xylenes	1	30.4363	32.0942	5.3	30
o-Xylene	1	15.9057	16.9741	6.5	30
trans-1,4-Dichloro-2-butene	1	10.3082	11.8309	14	30
1,3-Dichlorobenzene	1	14.3949	15.351	6.4	30
1,4-Dichlorobenzene	1	14.6327	14.7449	0.76	40
1,2-Dichlorobenzene	1	14.8269	15.3562	3.5	40
Isopropylbenzene	1	15.0206	16.0108	6.4	30
Cyclohexanone	1	58.8474	61.0097	3.6	30
Camphene	1	2.7753	2.9107	4.8	30
1,2,3-Trichloropropane	1	13.5997	14.3669	5.5	30
2-Chlorotoluene	1	15.8358	16.9167	6.6	30
p-Ethyltoluene	1	13.7325	15.6189	13	30
4-Chlorotoluene	1	15.021	15.2737	1.7	30
n-Propylbenzene	1	14.8096	15.6343	5.4	40
Bromobenzene	1	14.3101	14.6151	2.1	30
1,3,5-Trimethylbenzene	1	16.7967	15.26	9.6	30
Butyl methacrylate	1	14.4492	14.4985	0.34	30
t-Butylbenzene	1	14.8071	15.4734	4.4	30
1,2,4-Trimethylbenzene	1	15.2629	15.7897	3.4	30
sec-Butylbenzene	1	13.6949	14.6774	6.9	40
4-Isopropyltoluene	1	14.1735	14.2913	0.83	30
n-Butylbenzene	1	13.5059	13.3788	0.95	30
p-Diethylbenzene	1	13.9373	13.78	1.1	30
1,2,4,5-Tetramethylbenzene	1	14.103	13.3009	5.9	30
1,2-Dibromo-3-Chloropropane	1	11.3421	10.9859	3.2	30
Camphor	1	129.6398	122.7289	5.5	30
Hexachlorobutadiene	1	10.7947	10.5303	2.5	30
1,2,4-Trichlorobenzene	1	13.0902	12.9417	1.1	30
1,2,3-Trichlorobenzene	1	12.9744	12.6106	2.8	30
Naphthalene	1	14.5579	13.018	11	30

* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Form3
Recovery Data Laboratory Limits
QC Batch: MBS64955

Data File	Sample ID:	Analysis Date
Spike or Dup: 3M119010.D	AD00698-001(MS)	10/23/2017 11:51:00 A
Non Spike(if applicable): 3M119001.D	AD00698-001	10/23/2017 9:19:00 AM
Inst Blank(if applicable):		

Method: 8260C		Matrix: Aqueous		QC Type: MS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	22.1291	0	20	111	50	150
Dichlorodifluoromethane	1	9.927	0	20	50	50	150
Chloromethane	1	15.8171	0	20	79	50	150
Bromomethane	1	17.2162	0	20	86	50	150
Vinyl Chloride	1	16.5891	0	20	83	50	150
Chloroethane	1	17.8183	0	20	89	50	150
Trichlorodifluoromethane	1	19.8539	0	20	99	50	150
Ethyl ether	1	20.9279	0	20	105	50	150
Furan	1	18.7108	0	20	94	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	23.9961	0	20	120	50	150
Methylene Chloride	1	22.5125	0	20	113	70	130
Acrolein	1	93.3964	0	100	93	50	150
Acrylonitrile	1	24.1341	0	20	121	50	150
Iodomethane	1	27.915	0	20	140	50	150
Acetone	1	114.1712	0	100	114	50	150
Carbon Disulfide	1	31.1263	0	20	156 *	50	150
t-Butyl Alcohol	1	96.0821	0	100	96	50	150
n-Hexane	1	23.2535	0	20	116	70	130
Di-isopropyl-ether	1	25.5924	0	20	128	70	130
1,1-Dichloroethene	1	21.0148	0	20	105	70	130
Methyl Acetate	1	22.1631	0	20	111	50	150
Methyl-t-butyl ether	1	23.6683	0	20	118	70	130
1,1-Dichloroethane	1	23.2569	0	20	116	70	130
trans-1,2-Dichloroethene	1	23.3034	0	20	117	70	130
Ethyl-t-butyl ether	1	25.2146	0	20	126	70	130
cis-1,2-Dichloroethene	1	34.8271	13.3129	20	108	70	130
Bromochloromethane	1	22.5033	0	20	113	70	130
2,2-Dichloropropane	1	22.0087	0	20	110	70	130
Ethyl acetate	1	30.6023	0	20	153 *	50	150
1,4-Dioxane	1	1332.851	0	1000	133	50	150
1,1-Dichloropropene	1	25.4729	0	20	127	70	130
Chloroform	1	23.6415	0	20	118	70	130
Cyclohexane	1	25.6027	0	20	128	70	130
1,2-Dichloroethane	1	24.3741	0	20	122	70	130
2-Butanone	1	15.9855	0	20	80	50	150
1,1,1-Trichloroethane	1	22.6349	0	20	113	70	130
Carbon Tetrachloride	1	23.1049	0	20	116	50	150
Vinyl Acetate	1	25.8146	0	20	129	50	150
Bromodichloromethane	1	22.1907	0	20	111	70	130
Methylcyclohexane	1	24.4984	0	20	122	70	130
Dibromomethane	1	23.3622	0	20	117	70	130
1,2-Dichloropropane	1	24.4694	0	20	122	70	130
Trichloroethene	1	24.4337	0	20	122	70	130
Benzene	1	24.7175	0	20	124	70	130
tert-Amyl methyl ether	1	24.6974	0	20	123	70	130
Iso-propylacetate	1	21.3714	0	20	107	70	130
Methyl methacrylate	1	22.1269	0	20	111	70	130
Dibromochloromethane	1	18.9004	0	20	95	70	130
2-Chloroethylvinylether	1	0	0	20	0 *	70	130
cis-1,3-Dichloropropene	1	20.0069	0	20	100	70	130
trans-1,3-Dichloropropene	1	19.5302	0	20	98	70	130
Ethyl methacrylate	1	19.9957	0	20	100	70	130
1,1,2-Trichloroethane	1	19.5066	0	20	98	70	130
1,2-Dibromoethane	1	19.1471	0	20	96	70	130
1,3-Dichloropropane	1	20.3224	0	20	102	70	130
4-Methyl-2-Pentanone	1	20.6355	0	20	103	50	150
2-Hexanone	1	22.1121	0	20	111	50	150
Tetrachloroethene	1	21.653	0	20	108	50	150
Toluene	1	21.5172	0	20	108	70	130
1,1,1,2-Tetrachloroethane	1	21.1248	0	20	106	70	130
Chlorobenzene	1	20.9193	0	20	105	70	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits

QC Batch: MBS64955

n-Butyl acrylate	1	17.2928	0	20	86	70	130
n-Amyl acetate	1	20.0813	0	20	100	70	130
Bromoform	1	16.0653	0	20	80	70	130
Ethylbenzene	1	20.3008	0	20	102	70	130
1,1,2,2-Tetrachloroethane	1	18.5964	0	20	93	70	130
Styrene	1	20.688	0	20	103	70	130
m&p-Xylenes	1	39.1931	0	40	98	70	130
o-Xylene	1	20.4026	0	20	102	70	130
trans-1,4-Dichloro-2-butene	1	16.093	0	20	80	50	150
1,3-Dichlorobenzene	1	18.9441	0	20	95	70	130
1,4-Dichlorobenzene	1	18.5696	0	20	93	70	130
1,2-Dichlorobenzene	1	18.8348	0	20	94	70	130
Isopropylbenzene	1	19.7813	0	20	99	70	130
Cyclohexanone	1	85.725	0	100	86	50	150
Camphene	1	7.7299	0	20	39*	70	130
1,2,3-Trichloropropane	1	18.2603	0	20	91	70	130
2-Chlorotoluene	1	20.8708	0	20	104	70	130
p-Ethyltoluene	1	18.3492	0	20	92	70	130
4-Chlorotoluene	1	19.5724	0	20	98	70	130
n-Propylbenzene	1	19.6357	0	20	98	70	130
Bromobenzene	1	19.0757	0	20	95	70	130
1,3,5-Trimethylbenzene	1	21.9803	0	20	110	70	130
Butyl methacrylate	1	18.8775	0	20	94	70	130
t-Butylbenzene	1	19.387	0	20	97	70	130
1,2,4-Trimethylbenzene	1	19.705	0	20	99	70	130
sec-Butylbenzene	1	19.07	0	20	95	70	130
4-Isopropyltoluene	1	19.5703	0	20	98	70	130
n-Butylbenzene	1	18.715	0	20	94	70	130
p-Diethylbenzene	1	19.2229	0	20	96	70	130
1,2,4,5-Tetramethylbenzene	1	19.3902	0	20	97	70	130
1,2-Dibromo-3-Chloropropane	1	14.4538	0	20	72	50	150
Camphor	1	183.5731	0	200	92	20	150
Hexachlorobutadiene	1	14.2231	0	20	71	50	150
1,2,4-Trichlorobenzene	1	17.5507	0	20	88	70	130
1,2,3-Trichlorobenzene	1	17.5749	0	20	88	70	130
Naphthalene	1	19.52	0	20	98	50	150

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: MBS64955

Data File	Sample ID:	Analysis Date
Spike or Dup: 3M119011.D	AD00698-001(MSD)	10/23/2017 12:07:00 P
Non Spike(if applicable): 3M119001.D	AD00698-001	10/23/2017 9:19:00 AM
Inst Blank(if applicable):		

Analyte:	Method: 8260C	Matrix: Aqueous	QC Type: MSD				
	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	18.0432	0	20	90	50	150
Dichlorodifluoromethane	1	7.8913	0	20	39*	50	150
Chloromethane	1	12.4922	0	20	62	50	150
Bromomethane	1	14.1602	0	20	71	50	150
Vinyl Chloride	1	13.4059	0	20	67	50	150
Chloroethane	1	15.2678	0	20	76	50	150
Trichlorofluoromethane	1	16.173	0	20	81	50	150
Ethyl ether	1	18.2905	0	20	91	50	150
Furan	1	17.0919	0	20	85	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	18.8578	0	20	94	50	150
Methylene Chloride	1	19.0416	0	20	95	70	130
Acrolein	1	81.3447	0	100	81	50	150
Acrylonitrile	1	20.2113	0	20	101	50	150
Iodomethane	1	24.3514	0	20	122	50	150
Acetone	1	93.916	0	100	94	50	150
Carbon Disulfide	1	25.1465	0	20	126	50	150
t-Butyl Alcohol	1	81.465	0	100	81	50	150
n-Hexane	1	18.4999	0	20	92	70	130
Di-isopropyl-ether	1	21.6771	0	20	108	70	130
1,1-Dichloroethene	1	16.3501	0	20	82	70	130
Methyl Acetate	1	18.2522	0	20	91	50	150
Methyl-t-butyl ether	1	20.3595	0	20	102	70	130
1,1-Dichloroethane	1	19.244	0	20	96	70	130
trans-1,2-Dichloroethene	1	20.3223	0	20	102	70	130
Ethyl-t-butyl ether	1	21.3326	0	20	107	70	130
cis-1,2-Dichloroethene	1	29.1239	13.3129	20	79	70	130
Bromochloromethane	1	17.8127	0	20	89	70	130
2,2-Dichloropropane	1	18.8249	0	20	94	70	130
Ethyl acetate	1	20.4271	0	20	102	50	150
1,4-Dioxane	1	1121.213	0	1000	112	50	150
1,1-Dichloropropene	1	21.1954	0	20	106	70	130
Chloroform	1	19.3547	0	20	97	70	130
Cyclohexane	1	21.1486	0	20	106	70	130
1,2-Dichloroethane	1	20.6441	0	20	103	70	130
2-Butanone	1	22.3176	0	20	112	50	150
1,1,1-Trichloroethane	1	18.9795	0	20	95	70	130
Carbon Tetrachloride	1	19.077	0	20	95	50	150
Vinyl Acetate	1	21.509	0	20	108	50	150
Bromodichloromethane	1	18.7941	0	20	94	70	130
Methylcyclohexane	1	21.1636	0	20	106	70	130
Dibromomethane	1	19.1682	0	20	96	70	130
1,2-Dichloropropane	1	20.6658	0	20	103	70	130
Trichloroethene	1	20.8476	0	20	104	70	130
Benzene	1	20.7605	0	20	104	70	130
tert-Amyl methyl ether	1	20.2971	0	20	101	70	130
Iso-propylacetate	1	18.3705	0	20	92	70	130
Methyl methacrylate	1	19.2527	0	20	96	70	130
Dibromochloromethane	1	16.6115	0	20	83	70	130
2-Chloroethylvinylether	1	0	0	20	0*	70	130
cis-1,3-Dichloropropene	1	16.7886	0	20	84	70	130
trans-1,3-Dichloropropene	1	16.8265	0	20	84	70	130
Ethyl methacrylate	1	18.0329	0	20	90	70	130
1,1,2-Trichloroethane	1	17.4668	0	20	87	70	130
1,2-Dibromoethane	1	17.3577	0	20	87	70	130
1,3-Dichloropropane	1	17.5014	0	20	88	70	130
4-Methyl-2-Pentanone	1	18.4436	0	20	92	50	150
2-Hexanone	1	19.3149	0	20	97	50	150
Tetrachloroethene	1	19.036	0	20	95	50	150
Toluene	1	18.3627	0	20	92	70	130
1,1,1,2-Tetrachloroethane	1	18.5655	0	20	93	70	130
Chlorobenzene	1	18.4716	0	20	92	70	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3

Recovery Data Laboratory Limits

QC Batch: MBS64955

n-Butyl acrylate	1	15.598	0	20	78	70	130
n-Amyl acetate	1	17.0694	0	20	85	70	130
Bromoform	1	14.0567	0	20	70	70	130
Ethylbenzene	1	17.6456	0	20	88	70	130
1,1,2,2-Tetrachloroethane	1	16.829	0	20	84	70	130
Styrene	1	18.3324	0	20	92	70	130
m&p-Xylenes	1	35.7233	0	40	89	70	130
o-Xylene	1	18.5319	0	20	93	70	130
trans-1,4-Dichloro-2-butene	1	13.5243	0	20	68	50	150
1,3-Dichlorobenzene	1	17.2747	0	20	86	70	130
1,4-Dichlorobenzene	1	17.264	0	20	86	70	130
1,2-Dichlorobenzene	1	17.7556	0	20	89	70	130
Isopropylbenzene	1	18.4628	0	20	92	70	130
Cyclohexanone	1	76.0792	0	100	76	50	150
Camphepane	1	5.2931	0	20	26*	70	130
1,2,3-Trichloropropane	1	16.4055	0	20	82	70	130
2-Chlorotoluene	1	18.638	0	20	93	70	130
p-Ethyltoluene	1	18.5911	0	20	93	70	130
4-Chlorotoluene	1	18.0226	0	20	90	70	130
n-Propylbenzene	1	18.4582	0	20	92	70	130
Bromobenzene	1	16.9958	0	20	85	70	130
1,3,5-Trimethylbenzene	1	18.8614	0	20	94	70	130
Butyl methacrylate	1	16.6604	0	20	83	70	130
t-Butylbenzene	1	18.334	0	20	92	70	130
1,2,4-Trimethylbenzene	1	18.8543	0	20	94	70	130
sec-Butylbenzene	1	18.6294	0	20	93	70	130
4-Isopropyltoluene	1	18.9636	0	20	95	70	130
n-Butylbenzene	1	18.2156	0	20	91	70	130
p-Diethylbenzene	1	18.5484	0	20	93	70	130
1,2,4,5-Tetramethylbenzene	1	19.4706	0	20	97	70	130
1,2-Dibromo-3-Chloropropane	1	13.4529	0	20	67	50	150
Camphor	1	171.5655	0	200	86	20	150
Hexachlorobutadiene	1	14.558	0	20	73	50	150
1,2,4-Trichlorobenzene	1	17.9439	0	20	90	70	130
1,2,3-Trichlorobenzene	1	17.3495	0	20	87	70	130
Naphthalene	1	18.8575	0	20	94	50	150

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
RPD Data Laboratory Limits
QC Batch: MBS64955

Data File	Sample ID:	Analysis Date
Spike or Dup: 3M119011.D	AD00698-001(MSD)	10/23/2017 12:07:00 P
Duplicate(if applicable): 3M119010.D	AD00698-001(MS)	10/23/2017 11:51:00 A
Inst Blank(if applicable):		

Method: 8260C

Matrix: Aqueous

QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	18.0432	22.1291	20	30
Dichlorodifluoromethane	1	7.8913	9.927	23	30
Chloromethane	1	12.4922	15.8171	23	30
Bromomethane	1	14.1602	17.2162	19	30
Vinyl Chloride	1	13.4059	16.5891	21	40
Chloroethane	1	15.2678	17.8183	15	30
Trichlorofluoromethane	1	16.173	19.8539	20	30
Ethyl ether	1	18.2905	20.9279	13	30
Furan	1	17.0919	18.7108	9	30
1,1,2-Trichloro-1,2,2-trifluoroethane	1	18.8578	23.9961	24	30
Methylene Chloride	1	19.0416	22.5125	17	30
Acrolein	1	81.3447	93.3964	14	30
Acrylonitrile	1	20.2113	24.1341	18	30
Iodomethane	1	24.3514	27.915	14	30
Acetone	1	93.916	114.1712	19	30
Carbon Disulfide	1	25.1465	31.1263	21	30
t-Butyl Alcohol	1	81.465	96.0821	16	30
n-Hexane	1	18.4999	23.2535	23	30
Di-isopropyl-ether	1	21.6771	25.5924	17	30
1,1-Dichloroethene	1	16.3501	21.0148	25	40
Methyl Acetate	1	18.2522	22.1631	19	30
Methyl-t-butyl ether	1	20.3595	23.6683	15	30
1,1-Dichloroethane	1	19.244	23.2569	19	40
trans-1,2-Dichloroethene	1	20.3223	23.3034	14	30
Ethyl-t-butyl ether	1	21.3326	25.2146	17	30
cis-1,2-Dichloroethene	1	29.1239	34.8271	18	30
Bromochloromethane	1	17.8127	22.5033	23	30
2,2-Dichloropropane	1	18.8249	22.0087	16	30
Ethyl acetate	1	20.4271	30.6023	40*	30
1,4-Dioxane	1	1121.213	1332.851	17	30
1,1-Dichloropropene	1	21.1954	25.4729	18	30
Chloroform	1	19.3547	23.6415	20	40
Cyclohexane	1	21.1486	25.6027	19	30
1,2-Dichloroethane	1	20.6441	24.3741	17	40
2-Butanone	1	22.3176	15.9855	33	40
1,1,1-Trichloroethane	1	18.9795	22.6349	18	30
Carbon Tetrachloride	1	19.077	23.1049	19	40
Vinyl Acetate	1	21.509	25.8146	18	30
Bromodichloromethane	1	18.7941	22.1907	17	30
Methylcyclohexane	1	21.1636	24.4984	15	30
Dibromomethane	1	19.1682	23.3622	20	30
1,2-Dichloropropane	1	20.6658	24.4694	17	30
Trichloroethene	1	20.8476	24.4337	16	40
Benzene	1	20.7605	24.7175	17	40
tert-Amyl methyl ether	1	20.2971	24.6974	20	30
Iso-propylacetate	1	18.3705	21.3714	15	30
Methyl methacrylate	1	19.2527	22.1269	14	30
Dibromochloromethane	1	16.6115	18.9004	13	30
2-Chloroethylvinylether	1	0	0	NA	30
cis-1,3-Dichloropropene	1	16.7886	20.0069	17	30
trans-1,3-Dichloropropene	1	16.8265	19.5302	15	30
Ethyl methacrylate	1	18.0329	19.9957	10	30
1,1,2-Trichloroethane	1	17.4668	19.5066	11	30
1,2-Dibromoethane	1	17.3577	19.1471	9.8	30
1,3-Dichloropropane	1	17.5014	20.3224	15	30
4-Methyl-2-Pentanone	1	18.4436	20.6355	11	30
2-Hexanone	1	19.3149	22.1121	14	30
Tetrachloroethene	1	19.036	21.653	13	40
Toluene	1	18.3627	21.5172	16	40
1,1,2-Tetrachloroethane	1	18.5655	21.1248	13	30
Chlorobenzene	1	18.4716	20.9193	12	40
n-Butyl acrylate	1	15.598	17.2928	10	30
n-Amyl acetate	1	17.0694	20.0813	16	30

Form3
RPD Data Laboratory Limits
QC Batch: MBS64955

Bromoform	1	14.0567	16.0653	13	30
Ethylbenzene	1	17.6456	20.3008	14	30
1,1,2,2-Tetrachloroethane	1	16.829	18.5964	10	30
Styrene	1	18.3324	20.688	12	30
m&p-Xylenes	1	35.7233	39.1931	9.3	30
o-Xylene	1	18.5319	20.4026	9.6	30
trans-1,4-Dichloro-2-butene	1	13.5243	16.093	17	30
1,3-Dichlorobenzene	1	17.2747	18.9441	9.2	30
1,4-Dichlorobenzene	1	17.264	18.5696	7.3	40
1,2-Dichlorobenzene	1	17.7556	18.8348	5.9	40
Isopropylbenzene	1	18.4628	19.7813	6.9	30
Cyclohexanone	1	76.0792	85.725	12	30
Camphene	1	5.2931	7.7299	37 *	30
1,2,3-Trichloropropane	1	16.4055	18.2603	11	30
2-Chlorotoluene	1	18.638	20.8708	11	30
p-Ethyltoluene	1	18.5911	18.3492	1.3	30
4-Chlorotoluene	1	18.0226	19.5724	8.2	30
n-Propylbenzene	1	18.4582	19.6357	6.2	40
Bromobenzene	1	16.9958	19.0757	12	30
1,3,5-Trimethylbenzene	1	18.8614	21.9803	15	30
Butyl methacrylate	1	16.6604	18.8775	12	30
t-Butylbenzene	1	18.334	19.387	5.6	30
1,2,4-Trimethylbenzene	1	18.8543	19.705	4.4	30
sec-Butylbenzene	1	18.6294	19.07	2.3	40
4-Isopropyltoluene	1	18.9636	19.5703	3.1	30
n-Butylbenzene	1	18.2156	18.715	2.7	30
p-Diethylbenzene	1	18.5484	19.2229	3.6	30
1,2,4,5-Tetramethylbenzene	1	19.4706	19.3902	0.41	30
1,2-Dibromo-3-Chloropropane	1	13.4529	14.4538	7.2	30
Camphor	1	171.5655	183.5731	6.8	30
Hexachlorobutadiene	1	14.558	14.2231	2.3	30
1,2,4-Trichlorobenzene	1	17.9439	17.5507	2.2	30
1,2,3-Trichlorobenzene	1	17.3495	17.5749	1.3	30
Naphthalene	1	18.8575	19.52	3.5	30

* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

FORM 4
Blank Summary

Blank Number: DAILY BLANK
 Blank Data File: 3M118935.D
 Matrix: Aqueous

Blank Analysis Date: 10/20/17 16:53
 Blank Extraction Date: NA
 (If Applicable)
 Method: EPA 8260C

Sample Number	Data File	Analysis Date
AD00698-002	3M118946.D	10/20/17 19:59
AD00698-003	3M118947.D	10/20/17 20:15
AD00698-004	3M118948.D	10/20/17 20:32
AD00698-005	3M118949.D	10/20/17 20:49
AD00698-006	3M118950.D	10/20/17 21:06
AD00698-008	3M118951.D	10/20/17 21:22
AD00698-009	3M118952.D	10/20/17 21:39
AD00698-010	3M118953.D	10/20/17 21:56
AD00698-012	3M118954.D	10/20/17 22:10
AD00698-013	3M118955.D	10/20/17 22:26
AD00698-014	3M118956.D	10/20/17 22:43
AD00698-015	3M118957.D	10/20/17 23:00
AD00698-016	3M118958.D	10/20/17 23:19
AD00698-017	3M118959.D	10/20/17 23:36
AD00698-018	3M118960.D	10/20/17 23:53
AD00698-019	3M118962.D	10/21/17 00:27
AD00698-020	3M118967.D	10/21/17 01:51
AD00698-022(MS:	3M118942.D	10/20/17 18:51
AD00698-023(MSD	3M118943.D	10/20/17 19:08
AD00698-024	3M118968.D	10/21/17 02:08
AD00698-025	3M118969.D	10/21/17 02:25
AD00698-026	3M118970.D	10/21/17 02:41
AD00698-027	3M118971.D	10/21/17 02:58
AD00698-028	3M118972.D	10/21/17 03:15
AD00698-030	3M118963.D	10/21/17 00:44
AD00698-031(MS:	3M118964.D	10/21/17 01:01
AD00698-032(MSD	3M118965.D	10/21/17 01:17
AD00698-033	3M118973.D	10/21/17 03:32
AD00698-034	3M118974.D	10/21/17 03:49
AD00698-021	3M118944.D	10/20/17 19:25
MBS64949	3M118966.D	10/21/17 01:34
MBS64948	3M118941.D	10/20/17 18:34

FORM 4
Blank Summary

Blank Number: DAILY BLANK
Blank Data File: 3M118999.D
Matrix: Aqueous

Blank Analysis Date: 10/23/17 08:45
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8260C

Sample Number	Data File	Analysis Date
AD00698-001	3M119001.D	10/23/17 09:19
AD00698-007	3M119019.D	10/23/17 14:22
AD00698-011	3M119005.D	10/23/17 10:27
AD00698-021	3M119027.D	10/23/17 16:36
AD00698-029	3M119006.D	10/23/17 10:43
AD00698-035	3M119018.D	10/23/17 14:05
AD00698-037	3M119013.D	10/23/17 12:41
AD00698-038	3M119014.D	10/23/17 12:58
AD00698-039	3M119015.D	10/23/17 13:15
AD00698-040	3M119016.D	10/23/17 13:32
AD00698-041	3M119017.D	10/23/17 13:48
AD00698-042	3M119000.D	10/23/17 09:03
MBS64955	3M119009.D	10/23/17 11:34
AD00698-001(MS)	3M119010.D	10/23/17 11:51
AD00698-001(MSD)	3M119011.D	10/23/17 12:07

FORM 4
Blank Summary

Blank Number: DAILY BLANK
Blank Data File: 3M118999.D
Matrix: Aqueous

Blank Analysis Date: 10/23/17 08:45
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8260C

Sample Number	Data File	Analysis Date
AD00698-036	3M119007.D	10/23/17 11:00
AD00698-001(MSD)	3M119011.D	10/23/17 12:07
AD00698-001(MS)	3M119010.D	10/23/17 11:51
MBS64955	3M119009.D	10/23/17 11:34
AD00698-001	3M119001.D	10/23/17 09:19

Form 5

Tune Name: BFB TUNE

Instrument: GCMS 3

Data File: 3M118064.D

Analysis Date: 10/05/17 06:58

Method: EPA 8260C

Tune Scan/Time Range: Average of 4.971 to 4.981 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	22.8	22116	PASS
75	95	30	60	60.0	58264	PASS
95	95	100	100	100.0	97124	PASS
96	95	5	9	7.1	6865	PASS
173	174	0.00	2	0.5	314	PASS
174	95	50	100	66.0	64140	PASS
175	174	5	9	8.4	5377	PASS
176	174	95	101	97.9	62796	PASS
177	176	5	9	6.4	4048	PASS

Data File	Sample Number	Analysis Date:
3M118065.D	BLK	10/05/17 07:08
3M118068.D	1 PPB	10/05/17 07:59
3M118069.D	CAL @ 1 PPB	10/05/17 08:16
3M118070.D	CAL @ 0.5 PPB	10/05/17 08:34
3M118071.D	1 PPB	10/05/17 08:50
3M118072.D	CAL @ 5 PPB	10/05/17 09:07
3M118073.D	CAL @ 10 PPB	10/05/17 09:24
3M118074.D	CAL @ 20 PPB	10/05/17 09:41
3M118075.D	CAL @ 500 PPB	10/05/17 09:58
3M118077.D	CAL @ 250 PPB	10/05/17 10:31
3M118079.D	CAL @ 100 PPB	10/05/17 11:05
3M118081.D	CAL @ 50 PPB	10/05/17 11:38
3M118084.D	ICV	10/05/17 12:29
3M118086.D	ICV	10/05/17 12:51

Form 5

Tune Name: BFB TUNE
 Instrument: GCMS 3

Data File: 3M118931.D
 Analysis Date: 10/20/17 15:53
 Method: EPA 8260C

Tune Scan/Time Range: Average of 4.917 to 4.996 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	21.5	8518	PASS
75	95	30	60	58.0	22973	PASS
95	95	100	100	100.0	39612	PASS
96	95	5	9	7.0	2789	PASS
173	174	0.00	2	1.1	312	PASS
174	95	50	100	70.5	27933	PASS
175	174	5	9	8.2	2301	PASS
176	174	95	101	98.0	27388	PASS
177	176	5	9	6.6	1804	PASS

Data File	Sample Number	Analysis Date:
3M118932.D	20 PPB	10/20/17 16:03
3M118933.D	CAL @ 20 PPB	10/20/17 16:20
3M118934.D	BLK	10/20/17 16:37
3M118935.D	DAILY BLANK	10/20/17 16:53
3M118936.D	AD00690-002	10/20/17 17:10
3M118937.D	AD00693-001	10/20/17 17:27
3M118938.D	AD00719-001	10/20/17 17:44
3M118939.D	STD	10/20/17 18:01
3M118941.D	MBS64948	10/20/17 18:34
3M118942.D	AD00698-022(MS:	10/20/17 18:51
3M118943.D	AD00698-023(MSD	10/20/17 19:08
3M118944.D	AD00698-021	10/20/17 19:25
3M118945.D	00500-001(500X)	10/20/17 19:42
3M118946.D	AD00698-002	10/20/17 19:59
3M118947.D	AD00698-003	10/20/17 20:15
3M118948.D	AD00698-004	10/20/17 20:32
3M118949.D	AD00698-005	10/20/17 20:49
3M118950.D	AD00698-006	10/20/17 21:06
3M118951.D	AD00698-008	10/20/17 21:22
3M118952.D	AD00698-009	10/20/17 21:39
3M118953.D	AD00698-010	10/20/17 21:56
3M118954.D	AD00698-012	10/20/17 22:10
3M118955.D	AD00698-013	10/20/17 22:26
3M118956.D	AD00698-014	10/20/17 22:43
3M118957.D	AD00698-015	10/20/17 23:00
3M118958.D	AD00698-016	10/20/17 23:19
3M118959.D	AD00698-017	10/20/17 23:36
3M118960.D	AD00698-018	10/20/17 23:53
3M118961.D	BLK	10/21/17 00:10
3M118962.D	AD00698-019	10/21/17 00:27
3M118963.D	AD00698-030	10/21/17 00:44
3M118964.D	AD00698-031(MS:	10/21/17 01:01
3M118965.D	AD00698-032(MSD	10/21/17 01:17
3M118966.D	MBS64949	10/21/17 01:34
3M118967.D	AD00698-020	10/21/17 01:51
3M118968.D	AD00698-024	10/21/17 02:08
3M118969.D	AD00698-025	10/21/17 02:25
3M118970.D	AD00698-026	10/21/17 02:41
3M118971.D	AD00698-027	10/21/17 02:58
3M118972.D	AD00698-028	10/21/17 03:15
3M118973.D	AD00698-033	10/21/17 03:32
3M118974.D	AD00698-034	10/21/17 03:49
3M118975.D	AD00698-035	10/21/17 04:06
3M118976.D	AD00698-007	10/21/17 04:22
3M118977.D	BLK	10/21/17 04:39
3M118978.D	AD00696-003	10/21/17 04:56
3M118979.D	AD00696-002	10/21/17 05:13
3M118980.D	AD00696-001	10/21/17 05:30
3M118981.D	MBS64950	10/21/17 05:47
3M118982.D	00710-001	10/21/17 06:03

Form 5

Tune Name: BFB TUNE
 Instrument: GCMS 3

Data File: 3M118992.D
 Analysis Date: 10/23/17 06:50
 Method: EPA 8260C

Tune Scan/Time Range: Average of 4.960 to 4.980 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/Fail
50	95	15	40	21.6	30176	PASS
75	95	30	60	55.4	77307	PASS
95	95	100	100	100.0	139653	PASS
96	95	5	9	7.0	9793	PASS
173	174	0.00	2	0.6	517	PASS
174	95	50	100	65.3	91171	PASS
175	174	5	9	7.8	7144	PASS
176	174	95	101	97.7	89109	PASS
177	176	5	9	7.1	6322	PASS

Data File	Sample Number	Analysis Date:
3M118995.D	CAL @ 20 PPB	10/23/17 07:36
3M118997.D	BLKDI	10/23/17 08:12
3M118998.D	DAILY BLANK	10/23/17 08:28
3M118999.D	DAILY BLANK	10/23/17 08:45
3M119000.D	AD00698-042	10/23/17 09:03
3M119001.D	AD00698-001	10/23/17 09:19
3M119002.D	00698-011(100X)	10/23/17 09:36
3M119003.D	00698-029(20X)	10/23/17 09:53
3M119004.D	00698-036(10X)	10/23/17 10:10
3M119005.D	AD00698-011	10/23/17 10:27
3M119006.D	AD00698-029	10/23/17 10:43
3M119007.D	AD00698-036	10/23/17 11:00
3M119008.D	MBS64954	10/23/17 11:17
3M119009.D	MBS64955	10/23/17 11:34
3M119010.D	AD00698-001(MS)	10/23/17 11:51
3M119011.D	AD00698-001(MSD)	10/23/17 12:07
3M119012.D	BLK	10/23/17 12:24
3M119013.D	AD00698-037	10/23/17 12:41
3M119014.D	AD00698-038	10/23/17 12:58
3M119015.D	AD00698-039	10/23/17 13:15
3M119016.D	AD00698-040	10/23/17 13:32
3M119017.D	AD00698-041	10/23/17 13:48
3M119018.D	AD00698-035	10/23/17 14:05
3M119019.D	AD00698-007	10/23/17 14:22
3M119020.D	AD00672-001(T)	10/23/17 14:39
3M119021.D	AD00672-003(T)	10/23/17 14:55
3M119022.D	AD00701-001(T)	10/23/17 15:12
3M119023.D	BLK	10/23/17 15:29
3M119024.D	AD00631-006	10/23/17 15:46
3M119025.D	AD00686-001	10/23/17 16:02
3M119026.D	AD00686-005	10/23/17 16:19
3M119027.D	AD00698-021	10/23/17 16:36
3M119028.D	AD00631-011	10/23/17 16:53
3M119029.D	00698-018	10/23/17 17:09
3M119030.D	00698-020	10/23/17 17:26

FORM8

Internal Standard Areas
 Evaluation Std Data File: 3M118074.D
 Analysis Date/Time: 10/05/17 09:41

Method: EPA 8260C

Lab File ID: CAL @ 20 PPB

Data File	Sample	I1	I2	I3	I4	I5	I6	I7
Area	RT	Area	RT	Area	RT	Area	RT	Area
3M118065.D	BLK	640570	4.96	456022	6.78	188348	8.22	
3M118068.D	1 PPB	440308	4.95	318307	6.78	133033	8.22	
3M118069.D	CAL @ 1 PPB	304351	4.95	219542	6.79	85924	8.22	
3M118070.D	CAL @ 0.5 PPB	209830	4.95	201965	6.78	80011	8.23	
3M118071.D	1 PPB	313340	4.95	224542	6.78	92045	8.23	
3M118072.D	CAL @ 5 PPB	324107	4.95	232151	6.79	99559	8.23	
3M118073.D	CAL @ 10 PPB	323666	4.95	244411	6.78	104482	8.22	
3M118074.D	CAL @ 20 PPB	340941	4.95	252162	6.78	103565	8.23	
3M118075.D	CAL @ 50 PPB	372533	4.95	270438	6.78	100328	8.23	
3M118077.D	CAL @ 250 PPB	397376	4.95	295977	6.78	118503	8.23	
3M118079.D	CAL @ 100 PPB	405608	4.95	304782	6.78	119222	8.23	
3M118081.D	CAL @ 50 PPB	369396	4.95	280327	6.78	118527	8.23	
3M118084.D	ICV	374452	4.95	278494	6.79	117199	8.23	
3M118086.D	ICV	389984	4.95	289496	6.78	120835	8.23	

11 =	Fluorobenzene	14 =	6258270 Internal Standard concentration = 40 $\mu\text{g/L}$ (in final extract)
12 =	Chlorobenzene-d5	15 =	6248260 Internal Standard concentration = 30 $\mu\text{g/L}$
13 =	1,4-Dichlorobenzene-d4	16 =	524 Internal Standard concentration =SupL

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8
Internal Standard Areas
Evaluation Std Data File: 3M118933.D **Method: EPA 8260C**
Analysis Date/Time: 10/20/17 16:20
Lab File ID: CAL @ 20 PPB

Data File	Sample	I1	I2	I3	I4	I5	I6	I7
Area	RT	Area	RT	Area	RT	Area	RT	Area
3M118932.D	20 PPB	358043	4.95	302209	6.78	133503	8.22	
3M118934.D	BLK	354350	4.95	300639	6.78	131092	8.23	
3M118935.D	DAILY BLANK	366907	4.95	300858	6.78	129677	8.23	
3M118936.D	ADD00690-002	344426	4.95	290201	6.78	117307	8.23	
3M118937.D	ADD00693-001	363331	4.95	300110	6.78	124866	8.22	
3M118938.D	ADD00719-001	344246	4.95	278243	6.78	115806	8.23	
3M118939.D	STD	378500	4.95	320414	6.78	131937	8.22	
3M118941.D	MBS64948	365081	4.95	309966	6.78	137001	8.22	
3M118942.D	ADD00698-022/MSD:AD	382906	4.95	327301	6.78	134805	8.22	
3M118943.D	ADD00698-023/MSD:A	374017	4.95	312059	6.78	134999	8.22	
3M118944.D	ADD00698-021	319100	4.95	268459	6.78	112314	8.22	
3M118945.D	00500-001(50X)	320933	4.95	263456	6.78	114017	8.22	
3M118946.D	ADD00698-002	358314	4.95	303432	6.78	123053	8.22	
3M118947.D	ADD00698-003	379893	4.95	317319	6.78	133453	8.22	
3M118948.D	ADD00698-004	344010	4.95	291966	6.78	118092	8.22	
3M118949.D	ADD00698-005	352497	4.95	289707	6.78	120232	8.22	
3M118950.D	ADD00698-006	338220	4.95	281250	6.78	123091	8.22	
3M118951.D	ADD00698-008	338723	4.95	276843	6.78	115328	8.22	
3M118952.D	ADD00698-009	372715	4.95	300001	6.78	130185	8.22	
3M118953.D	ADD00698-010	357638	4.95	299694	6.78	124723	8.22	
3M118954.D	ADD00698-012	330453	4.95	277848	6.78	117630	8.22	
3M118955.D	ADD00698-013	346725	4.95	282247	6.78	118684	8.22	
3M118956.D	ADD00698-014	288591	4.95	243069	6.78	101252	8.22	
3M118957.D	ADD00698-015	330636	4.95	277282	6.78	111597	8.22	
3M118958.D	ADD00698-016	344287	4.95	285180	6.78	116104	8.22	
3M118959.D	ADD00698-017	333097	4.95	274468	6.78	113776	8.22	
3M118960.D	ADD00698-018	320338	4.95	273520	6.78	114784	8.22	
3M118961.D	BLK	318495	4.95	268590	6.78	110550	8.22	
3M118962.D	ADD00698-019	341982	4.95	287131	6.78	119779	8.22	
3M118963.D	ADD00698-030	323514	4.95	266634	6.78	111146	8.22	
3M118964.D	ADD00698-031/MSD:AD	341096	4.95	285154	6.78	126598	8.22	
3M118965.D	ADD00698-032/MSD:A	342936	4.95	294796	6.78	133505	8.21	

11 = Fluorobenzene	14 = 625/8270 Internal Standard concentration = 40 mg/L (in final extract)
12 = Chlorobenzene-45	15 = 624/8260 Internal Standard concentration = 300ug/L
13 = 1,4-Dichlorobenzene-44	16 = 524 Internal Standard concentration = supL

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Retention Times:

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

FORM8

Internal Standard Areas
Evaluation Std Data File: 3M118933.D **Method: EPA 8260C**
Analysis Date/Time: 10/20/17 16:20
Lab File ID: CAL @ 20 PPB

I1	I2	I3	I4	I5	I6	I7
Area	RT	Area	RT	Area	RT	Area
385109	4.95	318495	6.78	136912	8.22	
192554-77/0218		159248-6366990		68456-273824		
4.45-5.45	6.28-7.28		7.72-8.72			

Data File **Sample**

3M118966.D	MB564949	375236	4.95	312847	6.78	137321	8.22
3M118967.D	AD00698-020	347416	4.95	289730	6.78	119531	8.22
3M118968.D	AD00698-024	363400	4.95	299271	6.78	123868	8.22
3M118969.D	AD00698-025	338100	4.95	279946	6.78	117834	8.22
3M118970.D	AD00698-026	354079	4.95	293112	6.78	123791	8.22
3M118971.D	AD00698-027	321919	4.95	273344	6.78	109168	8.22
3M118972.D	AD00698-028	343122	4.95	290004	6.78	116547	8.22
3M118973.D	AD00698-033	321915	4.95	273012	6.78	11203	8.21
3M118974.D	AD00698-034	330039	4.95	268004	6.78	111097	8.21
3M118975.D	AD00698-035	344279	4.94	285543	6.78	119294	8.21
3M118976.D	AD00698-007	339855	4.95	280210	6.78	115705	8.21
3M118977.D	BLK	323391	4.95	267401	6.78	113255	8.21
3M118981.D	MB564950	339207	4.94	285288	6.78	124790	8.21
3M118982.D	00710-001	404946	4.94	327655	6.78	151155	8.22

11 =	Fluorobenzene	14 =		17 =		
12 =	Chlorobenzene-d5	15 =				
13 =	1,4-Dichlorobenzene-d4	16 =				

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Retention Times:

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria
R - Indicates the compound failed the internal standard retention time criteria.

6358270 Internal Standard concentration = 40 $\mu\text{g/L}$ (in final extract)
6248260 Internal Standard concentration = 30 $\mu\text{g/L}$
524 Internal Standard concentration = supL

FORM8
Internal Standard Areas
Evaluation Std Data File: 3M118995.D **Method: EPA 8260C**
Analysis Date/Time: 10/23/17 07:36
Lab File ID: CAL @ 20 PPB

I1	I2	I3	I4	I5	I6	I7
Area	RT	Area	RT	Area	RT	Area
424920	4.94	364201	6.77	152199	8.21	
Eval File Area/Rt:						
Eval File Area Limit:						
Eval File RT Limit:						
4.44-5.44	6.27-7.27	7.71-8.71				

Data File	Sample	3M118997.D	BLKDI	393143	4.95	326418	6.79	139555	8.23
3M118998.D	DAILY BLANK			399697	4.93	326653	6.77	142176	8.21
3M118999.D	DAILY BLANK			374927	4.95	310383	6.78	132329	8.22
3M119000.D	ADD00698-042			363329	4.94	309064	6.78	125489	8.21
3M119001.D	ADD00698-001			349820	4.95	300623	6.78	124621	8.22
3M119002.D	00698-011(100X)			358646	4.95	306203	6.79	125264	8.23
3M119003.D	00698-029(20X)			341430	4.94	293961	6.78	121564	8.21
3M119004.D	00698-036(10X)			349581	4.95	286634	6.78	126450	8.23
3M119005.D	ADD00698-011			263668	4.95	225934	6.78	93668	8.22
3M119006.D	ADD00698-029			339055	4.95	294357	6.78	116695	8.22
3M119007.D	ADD00698-036			345715	4.95	296883	6.78	121797	8.22
3M119008.D	MB564954			371340	4.94	322576	6.78	141747	8.22
3M119009.D	MB564955			372390	4.95	323105	6.78	140282	8.22
3M119010.D	ADD00698-001(MSD)			334382	4.95	292044	6.78	130290	8.22
3M119011.D	ADD00698-001(MSD)			387517	4.95	327852	6.78	142090	8.22
3M119012.D	BLK			387537	4.95	333337	6.78	139238	8.22
3M119013.D	ADD00698-037			358892	4.95	303179	6.78	131294	8.22
3M119014.D	ADD00698-038			357358	4.95	309668	6.78	128198	8.23
3M119015.D	ADD00698-039			370609	4.95	317054	6.78	128711	8.22
3M119016.D	ADD00698-040			345522	4.95	297510	6.78	120049	8.22
3M119017.D	ADD00698-041			367337	4.95	315668	6.78	128635	8.22
3M119018.D	ADD00698-035			368481	4.95	315391	6.78	124206	8.23
3M119019.D	ADD00698-007			339619	4.95	294258	6.78	121059	8.23
3M119020.D	ADD00672-001(T)			322258	4.96	281348	6.79	115560	8.23
3M119021.D	ADD00672-003(T)			347988	4.95	308851	6.78	130525	8.23
3M119022.D	ADD00701-001(T)			401424	4.95	350919	6.78	148087	8.23
3M119023.D	BLK			381661	4.95	324551	6.79	138524	8.23
3M119024.D	ADD00631-006			381066	4.95	323227	6.78	139269	8.23
3M119025.D	ADD00686-001			355094	4.95	306874	6.78	130905	8.23
3M119026.D	ADD00686-005			367272	4.95	316020	6.78	131552	8.23
3M119027.D	ADD00698-021			274477	4.95	237665	6.78	99311	8.23
3M119028.D	ADD00631-011			357008	4.95	306008	6.78	123183	8.23

11 = Fluorobenzene	14 = 6358270 Internal Standard concentration = 40 µg/L (in final extract)
12 = Chlorobenzene-d5	15 = 6248260 Internal Standard concentration = 30 µg/L
13 = 1,4-Dichlorobenzene-d4	16 = 524 Internal Standard concentration = 5 µg/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times:

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

7102003 0141

FORM 8

Evaluation Std Data File: 3M118995

Method: EPA 8260C

Analysis Date/Time: 10/23/17 07:36

Lab File ID: CAL@20 PPE

	I1	I2	I3	I4	I5	I6	I7
Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/Rt:	424920	4.94	364201	6.77	152199	8.21	
Eval File Area Limit:	212460-849840		182100-728402		76100-304398		
Eval File Rt Limit:	4.44-5.44		6.27-7.27		7.71-8.71		

Data File	Sample						
3M119029.D	00698-018	361207	4.95	313322	6.79	128351	8.23
3M119030.D	00698-020	374499	4.95	317282	6.78	135670	8.23

11 = Fluorobenzene
12 = Chlorobenzene-d5
13 = 1,4-Dichlorobenzene-d4

14 =
15 =
16 =

17 =

62.58270 Internal Standard concentration = 40 ng/L (in final extract)
 62.483260 Internal Standard concentration = 30ug/L
 52.4 Internal Standard concentration =5ug/L

Internal Standard Areas

Inner limit = $\pm 100\%$ of internal standard area from daily cal or mid pt

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.
R - indicates the compound failed criteria

Flags:

A - indicates the command failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

7102003 0142

**GC/MS Volatile Data
Sample Data**

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-001

Client Id: 152140-DDC-06-PS

Data File: 3M119001.D

Analysis Date: 10/23/17 09:19

Date Rec/Extracted: 10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	13
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

13

ColumnID:(*) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of *a*-Chlordane and *y*-Chlordane.

7102003 0144

SampleID : AD00698-001 Operator : SG Qt Meth : 3M_A1006
 Data File: 3M119001.D Sam Mult : 1 Vial# : 9 Qt On : 10/23/17 09:32
 Acq On : 10/23/17 09:19 Misc : A,5ML!2 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-23-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.946	96	349820	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.778	117	300623	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	124621	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.525	111	102407	30.25	ug/l	0.00
Spiked Amount	30.000			Recovery	=	100.83%
39) 1,2-Dichloroethane-d4	4.742	67	81602	30.60	ug/l	-0.01
Spiked Amount	30.000			Recovery	=	102.00%
66) Toluene-d8	5.901	98	367706	27.45	ug/l	0.00
Spiked Amount	30.000			Recovery	=	91.50%
76) Bromofluorobenzene	7.487	174	124835	28.38	ug/l	0.00
Spiked Amount	30.000			Recovery	=	94.60%
Target Compounds						
30) cis-1,2-Dichloroethene	4.213	61	69464	13.3129	ug/l	75

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

lh

Abundance

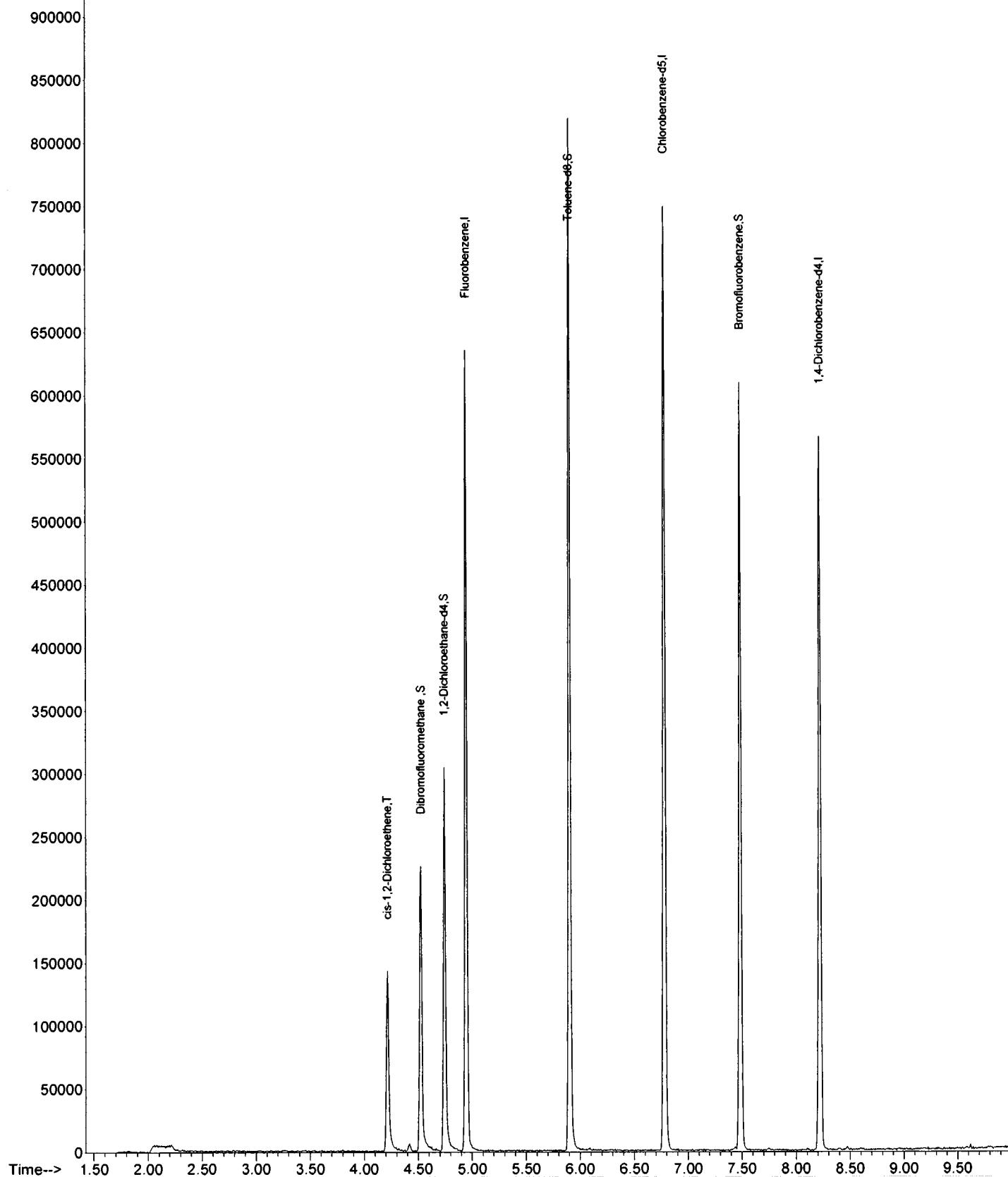
TIC: 3M119001.D\data.ms

Quant QT Reviewed

SampleID : AD00698-001
Data File: 3M119001.D
Acq On : 10/23/17 09:19

Operator : SG
Sam Mult : 1 Vial# : 9
Misc : A,5ML:2

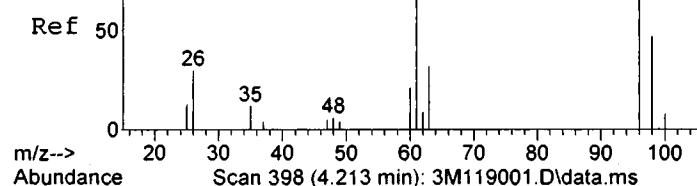
Qt Meth : 3M_A1005.M
Qt On : 10/23/17 09:32
Qt Upd On: 10/16/17 14:36



Abundance

#536: Ethene, 1,2-dichloro-, (Z)-

7102003 0146



#30

cis-1,2-Dichloroethene

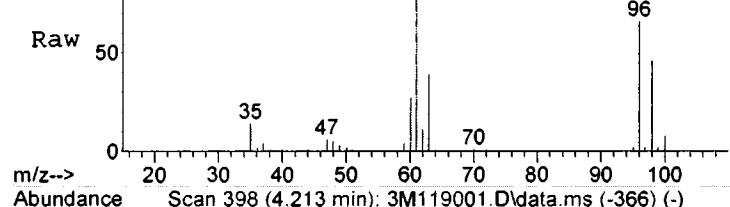
Concen: 13.31 ug/l

RT: 4.213 min Scan# 398

Delta R.T. -0.006 min

Lab File: 3M119001.D

Acq: 23 Oct 2017 9:19



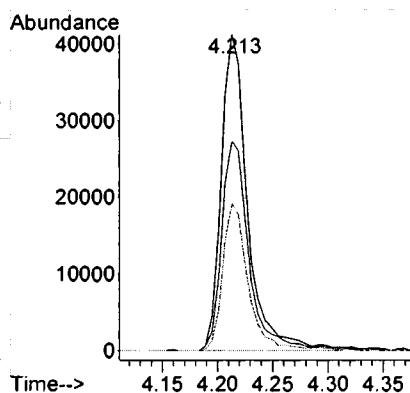
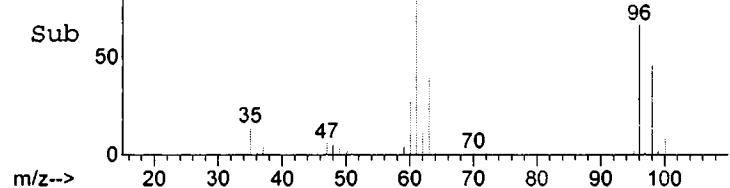
Tgt Ion: 61 Resp: 69464

Ion Ratio Lower Upper

61 100

96 66.3 8.8 88.8

98 46.4 0.0 72.8



Form1

ORGANICS VOLATILE REPORT

Sample Number: AD00698-002

Client Id: 152140-DDC-06-PD

Data File: 3M118946.D

Analysis Date: 10/20/17 19:59

Date Rec/Extracted: 10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	2.6
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	3.9
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

6.5

ColumnID:(*) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

7102003 0148

SampleID : AD00698-002 Operator : WP Qt Meth : 3M_A1005
 Data File: 3M118946.D Sam Mult : 1 Vial# : 16 Qt On : 10/23/17 12:38
 Acq On : 10/20/17 19:59 Misc : A,5ML!2 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<hr/>						
Internal Standards						
4) Fluorobenzene	4.952	96	358314	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.784	117	303432	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	123053	30.00	ug/l	0.00
<hr/>						
System Monitoring Compounds						
37) Dibromofluoromethane	4.526	111	105680	30.47	ug/l	0.00
Spiked Amount	30.000			Recovery	=	101.57%
39) 1,2-Dichloroethane-d4	4.748	67	85708	31.38	ug/l	0.00
Spiked Amount	30.000			Recovery	=	104.60%
66) Toluene-d8	5.907	98	371915	27.50	ug/l	0.00
Spiked Amount	30.000			Recovery	=	91.67%
76) Bromofluorobenzene	7.487	174	122677	28.24	ug/l	0.00
Spiked Amount	30.000			Recovery	=	94.13%
<hr/>						
Target Compounds					Qvalue	
30) cis-1,2-Dichloroethene	4.219	61	20943	3.9186	ug/l	77
36) Chloroform	4.424	83	15409	2.5950	ug/l	89

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

lk

Abundance

950000

900000

850000

800000

750000

700000

650000

600000

550000

500000

450000

400000

350000

300000

250000

200000

150000

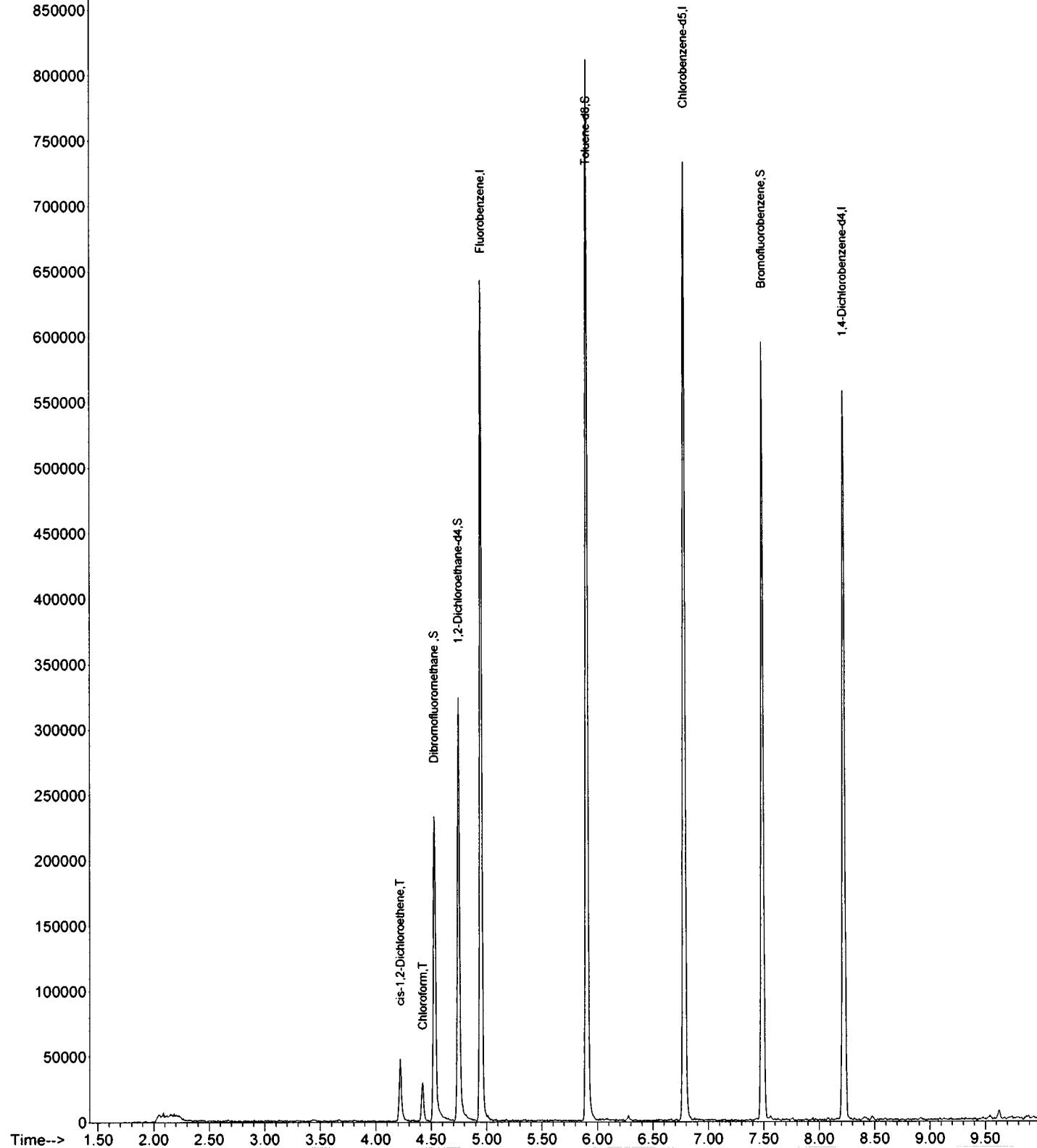
100000

50000

0

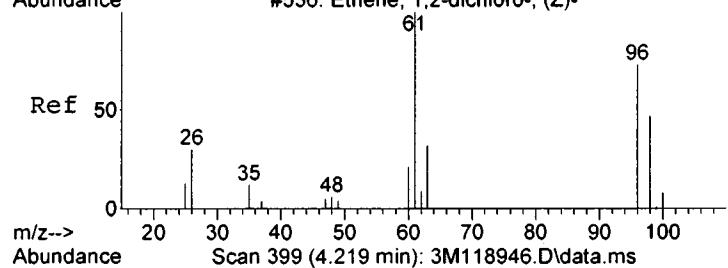
TIC: 3M118946.D\data.ms

Quant QT Reviewed

SampleID : AD00698-002
Data File: 3M118946.D
Acq On : 10/20/17 19:59Operator : WP
Sam Mult : 1 Vial# : 16
Misc : A.5ML12Qt Meth : 3M_A1005.M
Qt On : 10/23/17 12:38
Qt Upd On: 10/16/17 14:36

Abundance

#536: Ethene, 1,2-dichloro-, (Z)-



#30

cis-1,2-Dichloroethene

7102003 0150

Concen: 3.92 ug/l

RT: 4.219 min Scan# 399

Delta R.T. -0.000 min

Lab File: 3M118946.D

Acq: 20 Oct 2017 19:59

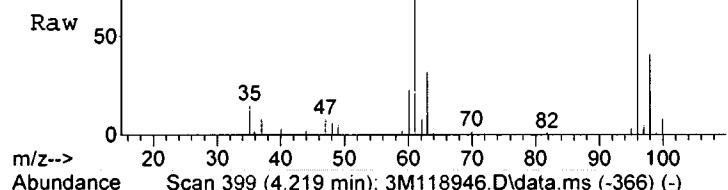
Tgt Ion: 61 Resp: 20943

Ion Ratio Lower Upper

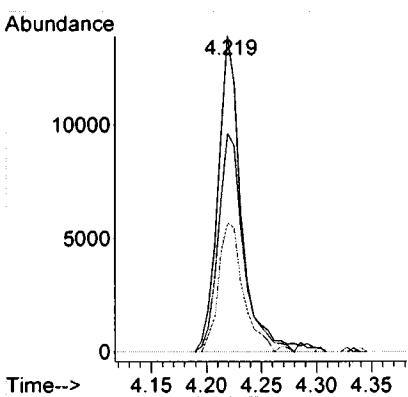
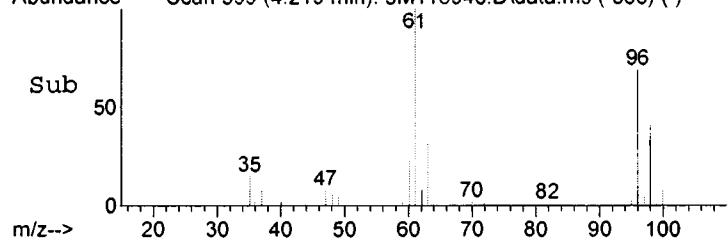
61 100

96 69.1 8.8 88.8

98 40.7 0.0 72.8

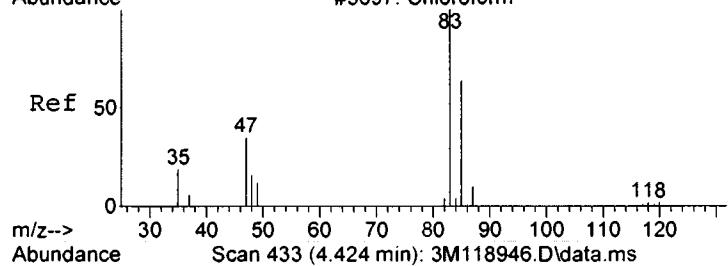


Abundance



Abundance

#3697: Chloroform



#36

Chloroform

Concen: 2.60 ug/l

RT: 4.424 min Scan# 433

Delta R.T. -0.000 min

Lab File: 3M118946.D

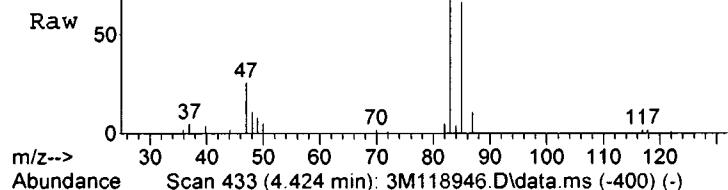
Acq: 20 Oct 2017 19:59

Tgt Ion: 83 Resp: 15409

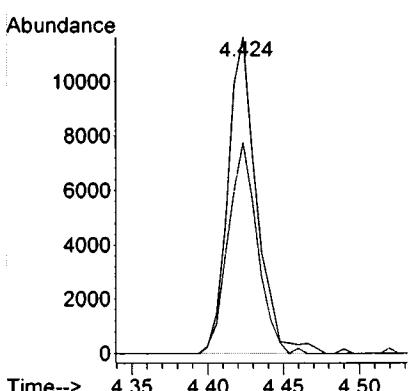
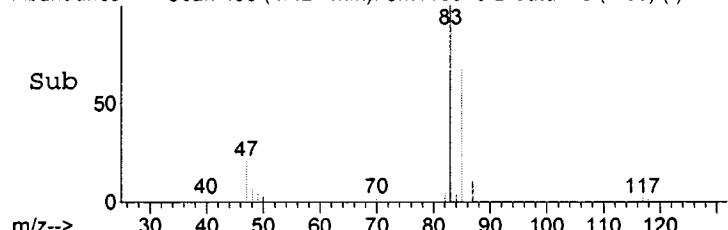
Ion Ratio Lower Upper

83 100

85 66.6 36.0 116.0



Abundance



Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-003

Client Id: 152140-DDC-05-PS

Data File: 3M118947.D

Analysis Date: 10/20/17 20:15

Date Rec/Extracted: 10/20/17-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

7102003 0152

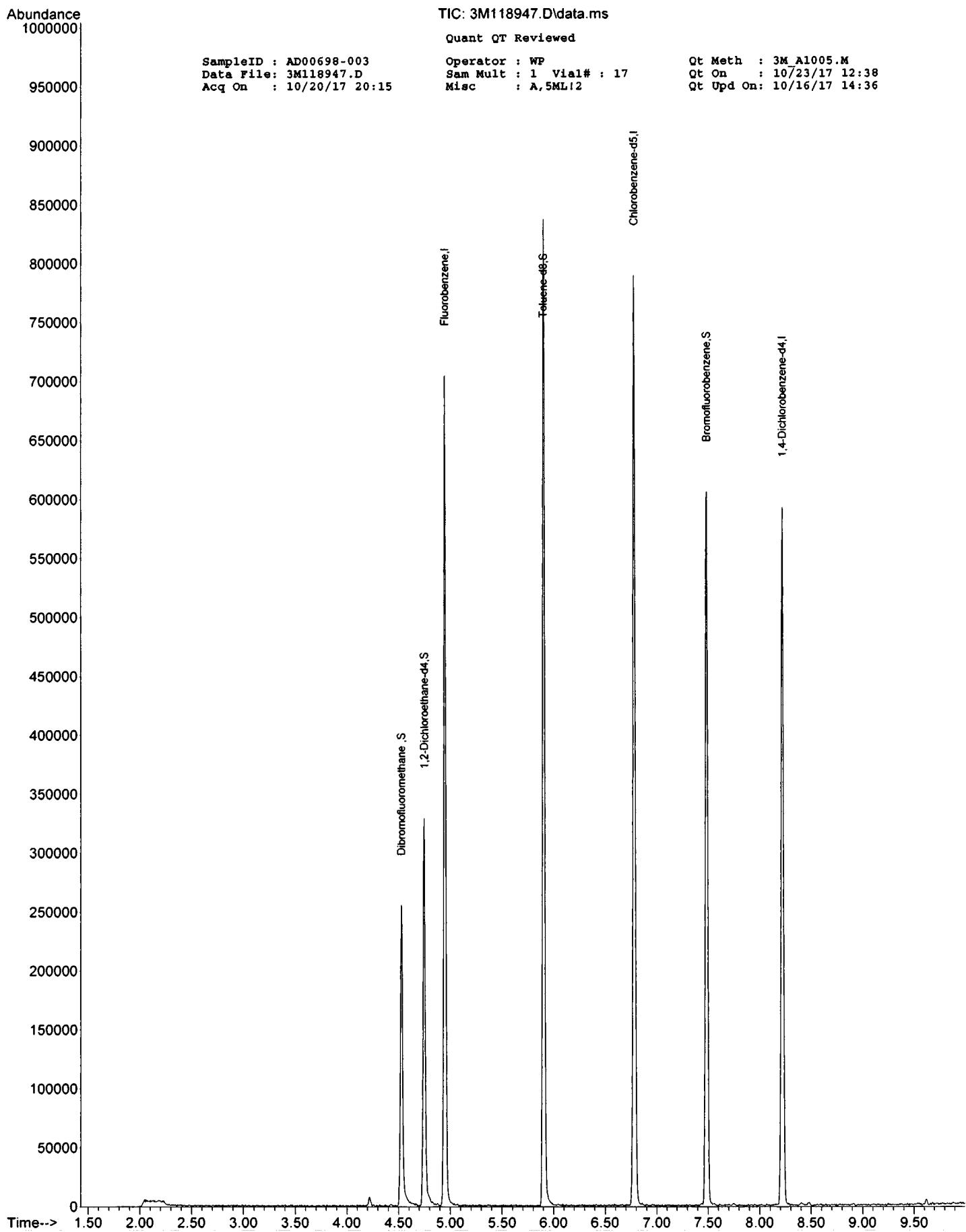
SampleID : AD00698-003 Operator : WP Qt Meth : 3M_A1005IM
 Data File: 3M118947.D Sam Mult : 1 Vial# : 17 Qt On : 10/23/17 12:38
 Acq On : 10/20/17 20:15 Misc : A,5ML!2 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<hr/>						
Internal Standards						
4) Fluorobenzene	4.947	96	379893	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.779	117	317319	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.221	152	133453	30.00	ug/l	0.00
<hr/>						
System Monitoring Compounds						
37) Dibromofluoromethane	4.526	111	113690	30.92	ug/l	0.00
Spiked Amount	30.000			Recovery	=	103.07%
39) 1,2-Dichloroethane-d4	4.749	67	87356	30.17	ug/l	0.00
Spiked Amount	30.000			Recovery	=	100.57%
66) Toluene-d8	5.902	98	382840	27.07	ug/l	0.00
Spiked Amount	30.000			Recovery	=	90.23%
76) Bromofluorobenzene	7.488	174	132517	28.13	ug/l	0.00
Spiked Amount	30.000			Recovery	=	93.77%
<hr/>						
Target Compounds					Qvalue	
<hr/>						

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

1
6



Form1

ORGANICS VOLATILE REPORT

Sample Number: AD00698-004

Client Id: 152140-DDC-05-PD

Data File: 3M118948.D

Analysis Date: 10/20/17 20:32

Date Rec/Extracted: 10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	9.2
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	4.5
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

14

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses

Chlordane (Total) is sum of *a*-Chlordane and *y*-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD00698-004

Client Id: 152140-DDC-05-PD

Data File: 3M118948.D

Analysis Date: 10/20/17 20:32

Date Rec/Extracted: 10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	9.2
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	4.5
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

14

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

SampleID : AD00698-004
 Data File: 3M118948.D
 Acq On : 10/20/17 20:32

Operator : WP
 Sam Mult : 1 Vial# : 18
 Misc : A,5ML!2

Qt Meth : 3M A1005.M
 Qt On : 10/23/17 12:38
 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.947	96	344010	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.779	117	291966	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.221	152	118092	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.526	111	102801	30.87	ug/l	0.00
Spiked Amount	30.000			Recovery	=	102.90%
39) 1,2-Dichloroethane-d4	4.749	67	79312	30.25	ug/l	0.00
Spiked Amount	30.000			Recovery	=	100.83%
66) Toluene-d8	5.902	98	350561	26.94	ug/l	0.00
Spiked Amount	30.000			Recovery	=	89.80%
76) Bromofluorobenzene	7.488	174	118201	28.35	ug/l	0.00
Spiked Amount	30.000			Recovery	=	94.50%
Target Compounds						
30) cis-1,2-Dichloroethene	4.220	61	47342	9.2264	ug/l	72
65) Tetrachloroethene	6.274	164	8457	4.5000	ug/l	99

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



Abundance

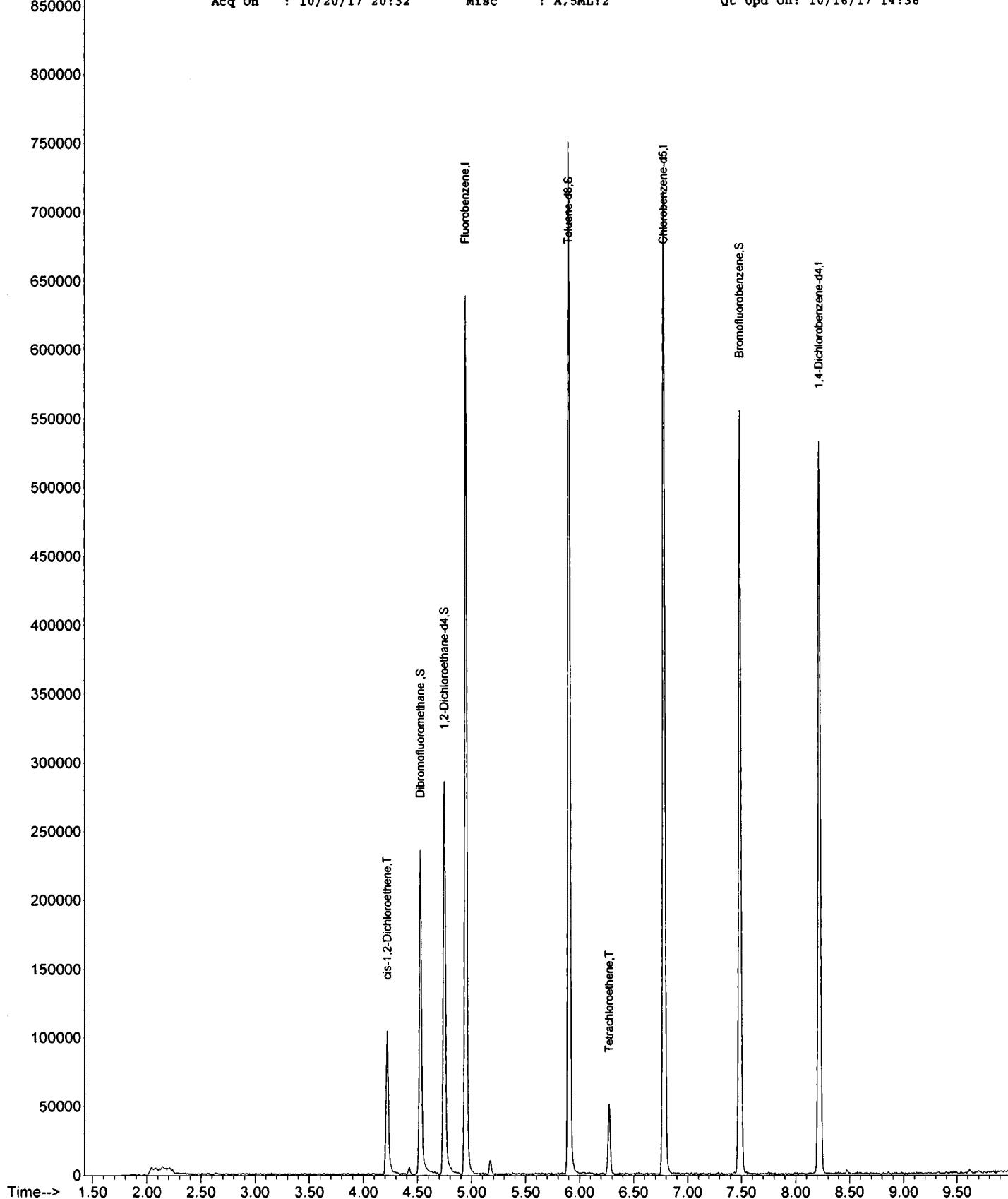
TIC: 3M118948.D\data.ms

Quant QT Reviewed

SampleID : AD00698-004
Data File: 3M118948.D
Acq On : 10/20/17 20:32

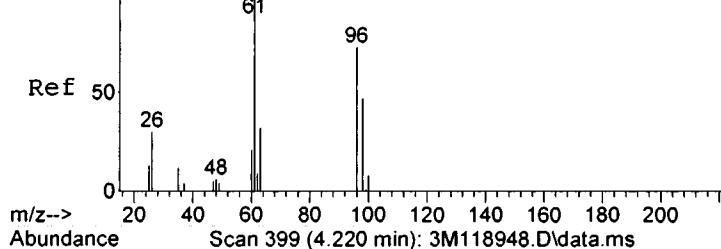
Operator : WP
Sam Mult : 1 Vial# : 18
Misc : A,5ML12

Qt Meth : 3M_A1005.M
Qt On : 10/23/17 12:38
Qt Upd On: 10/16/17 14:36



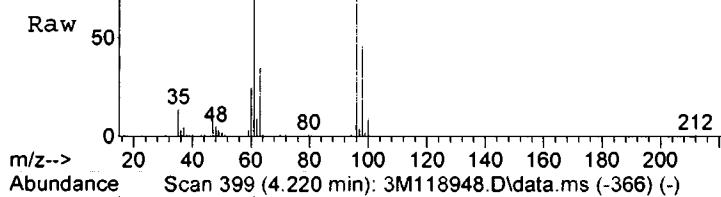
Abundance

#536: Ethene, 1,2-dichloro-, (Z)-

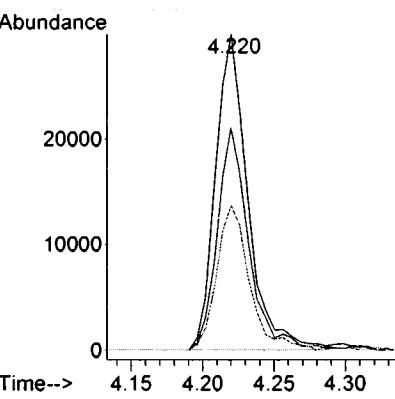
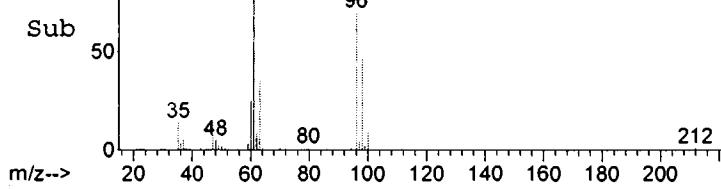


#30
cis-1,2-Dichloroethene
Concen: 9.23 ug/l
RT: 4.220 min Scan# 399
Delta R.T. 0.001 min
Lab File: 3M118948.D
Acq: 20 Oct 2017 20:32

7102003 0158

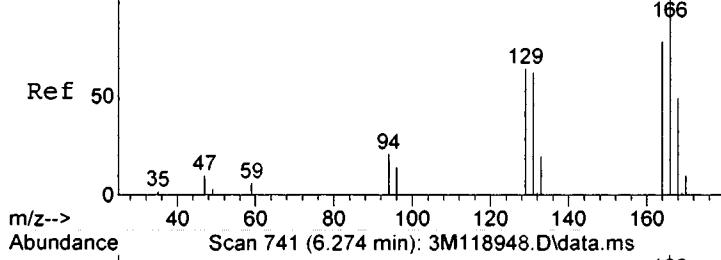


Tgt Ion: 61 Resp: 47342
Ion Ratio Lower Upper
61 100
96 70.4 8.8 88.8
98 45.7 0.0 72.8

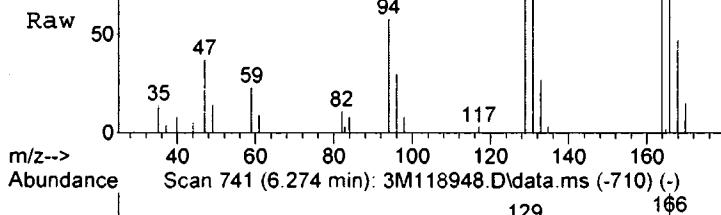


Abundance

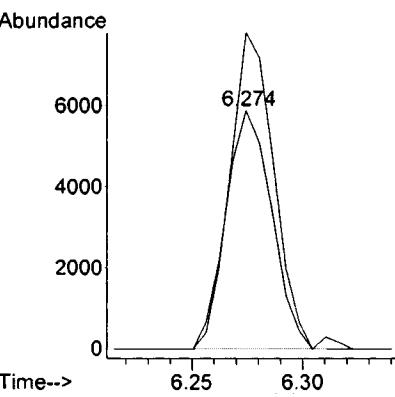
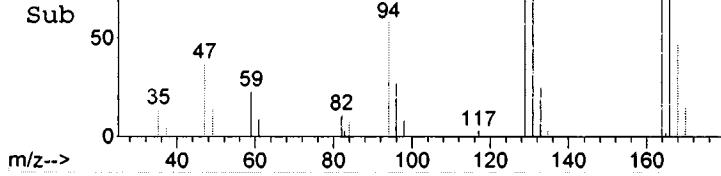
#18146: Ethene, tetrachloro-



#65
Tetrachloroethene
Concen: 4.50 ug/l
RT: 6.274 min Scan# 741
Delta R.T. -0.011 min
Lab File: 3M118948.D
Acq: 20 Oct 2017 20:32



Tgt Ion: 164 Resp: 8457
Ion Ratio Lower Upper
164 100
166 132.7 61.8 201.8



Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-005

Client Id: 152140-MW-2D

Data File: 3M118949.D

Analysis Date: 10/20/17 20:49

Date Rec/Extracted: 10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	1.2
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

1.2

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of *a*-Chlordane and *y*-Chlordane.

7102003 0160

SampleID : AD00698-005
 Data File: 3M118949.D
 Acq On : 10/20/17 20:49

Operator : WP
 Sam Mult : 1 Vial# : 19
 Misc : A,5ML!2

Qt Meth : 3M_A1005
 Qt On : 10/23/17 12:38
 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.946	96	352497	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.784	117	289707	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.219	152	120232	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.525	111	104627	30.67	ug/l	0.00
Spiked Amount	30.000			Recovery	=	102.23%
39) 1,2-Dichloroethane-d4	4.747	67	80955	30.13	ug/l	0.00
Spiked Amount	30.000			Recovery	=	100.43%
66) Toluene-d8	5.907	98	359612	27.85	ug/l	0.00
Spiked Amount	30.000			Recovery	=	92.83%
76) Bromofluorobenzene	7.486	174	122985	28.98	ug/l	0.00
Spiked Amount	30.000			Recovery	=	96.60%
Target Compounds						
30) cis-1,2-Dichloroethene	4.219	61	6327	1.2034	ug/l	84

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

16

Abundance

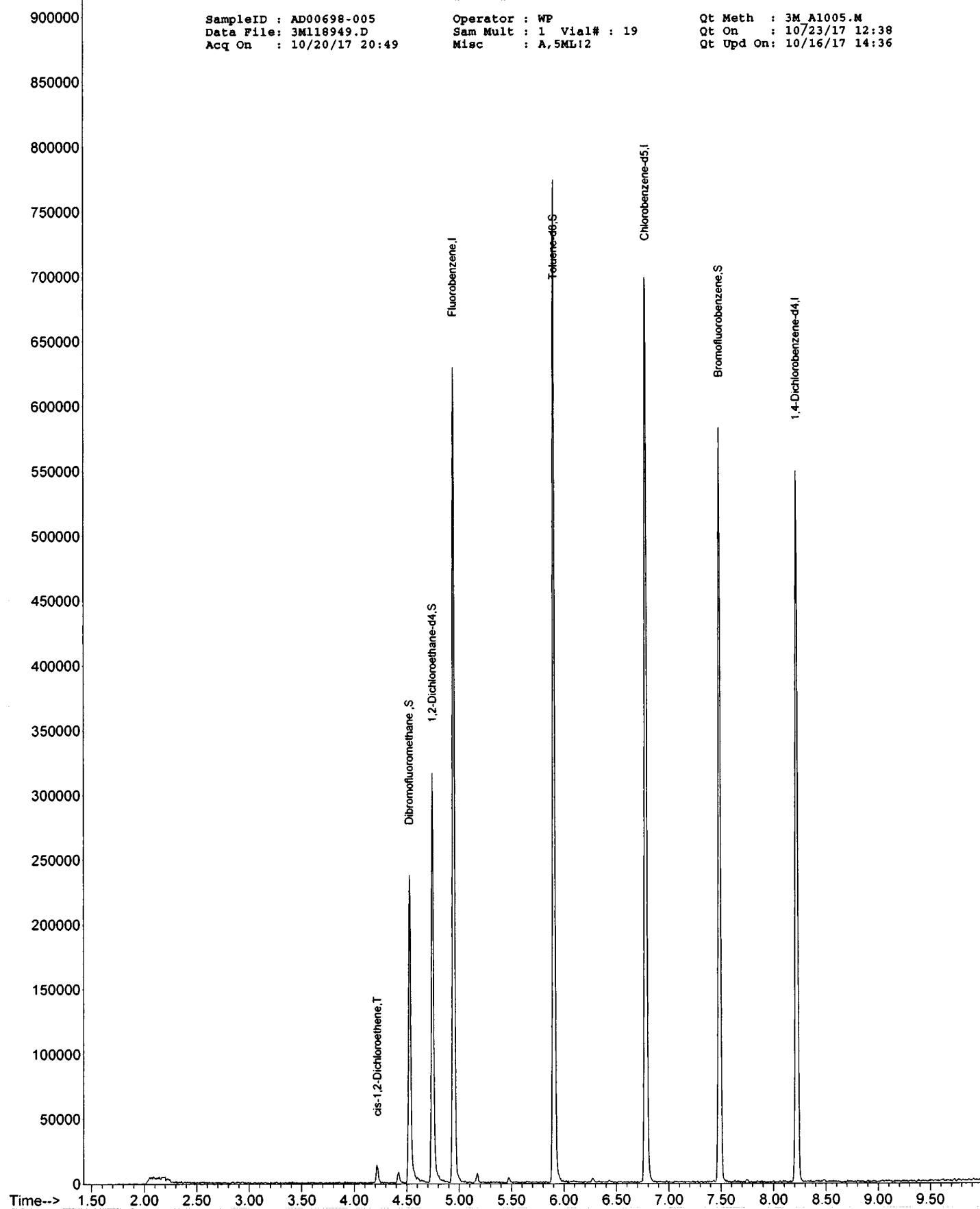
TIC: 3M118949.D\data.ms

Quant QT Reviewed

SampleID : AD00698-005
Data File: 3M118949.D
Acq On : 10/20/17 20:49

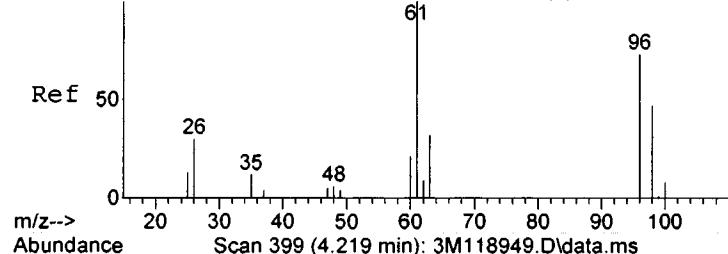
Operator : WP
Sam Mult : 1 Vial# : 19
Misc : A,5ML12

Qt Meth : 3M_A1005.M
Qt On : 10/23/17 12:38
Qt Upd On: 10/16/17 14:36



Abundance

#536: Ethene, 1,2-dichloro-, (Z)-



#30

cis-1,2-Dichloroethene

7102003 0162

Concen: 1.20 ug/l

RT: 4.219 min Scan# 399

Delta R.T. -0.001 min

Lab File: 3M118949.D

Acq: 20 Oct 2017 20:49

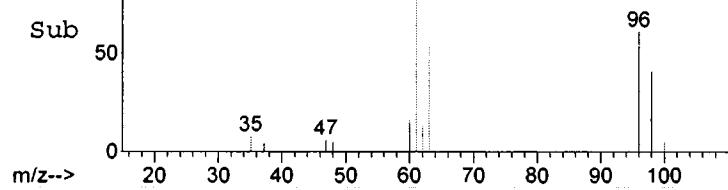
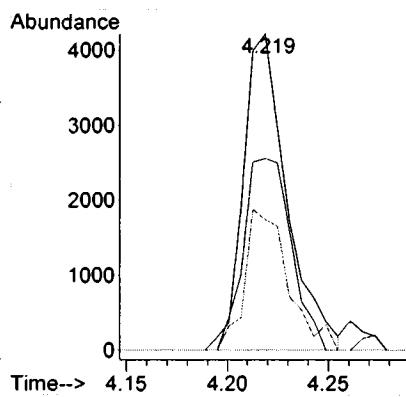
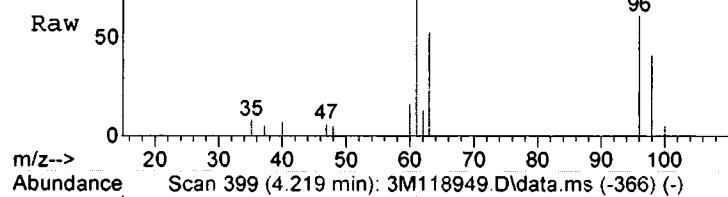
Tgt Ion: 61 Resp: 6327

Ion Ratio Lower Upper

61 100

96 60.7 8.8 88.8

98 41.3 0.0 72.8



Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-006

Client Id: 152140-MW-2S

Data File: 3M118950.D

Analysis Date: 10/20/17 21:06

Date Rec/Extracted: 10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	1.9
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	6.9
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

8.8

ColumnID: (*) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of *a*-Chlordane and *y*-Chlordane.

7102003 0164

SampleID : AD00698-006
 Data File: 3M118950.D
 Acq On : 10/20/17 21:06

Operator : WP
 Sam Mult : 1 Vial# : 20
 Misc : A,SML!2

Qt Meth : 3M_A1006.Q1
 Qt On : 10/23/17 12:38
 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.946	96	338220	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.784	117	281250	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	123091	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.526	111	98618	30.13	ug/l	0.00
Spiked Amount	30.000		Recovery	=	100.43%	
39) 1,2-Dichloroethane-d4	4.748	67	78028	30.27	ug/l	0.00
Spiked Amount	30.000		Recovery	=	100.90%	
66) Toluene-d8	5.901	98	342907	27.36	ug/l	0.00
Spiked Amount	30.000		Recovery	=	91.20%	
76) Bromofluorobenzene	7.487	174	122730	28.25	ug/l	0.00
Spiked Amount	30.000		Recovery	=	94.17%	
Target Compounds						
30) cis-1,2-Dichloroethene	4.219	61	34972	6.9323	ug/l	73
36) Chloroform	4.424	83	10485	1.8707	ug/l	77

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

6

Abundance

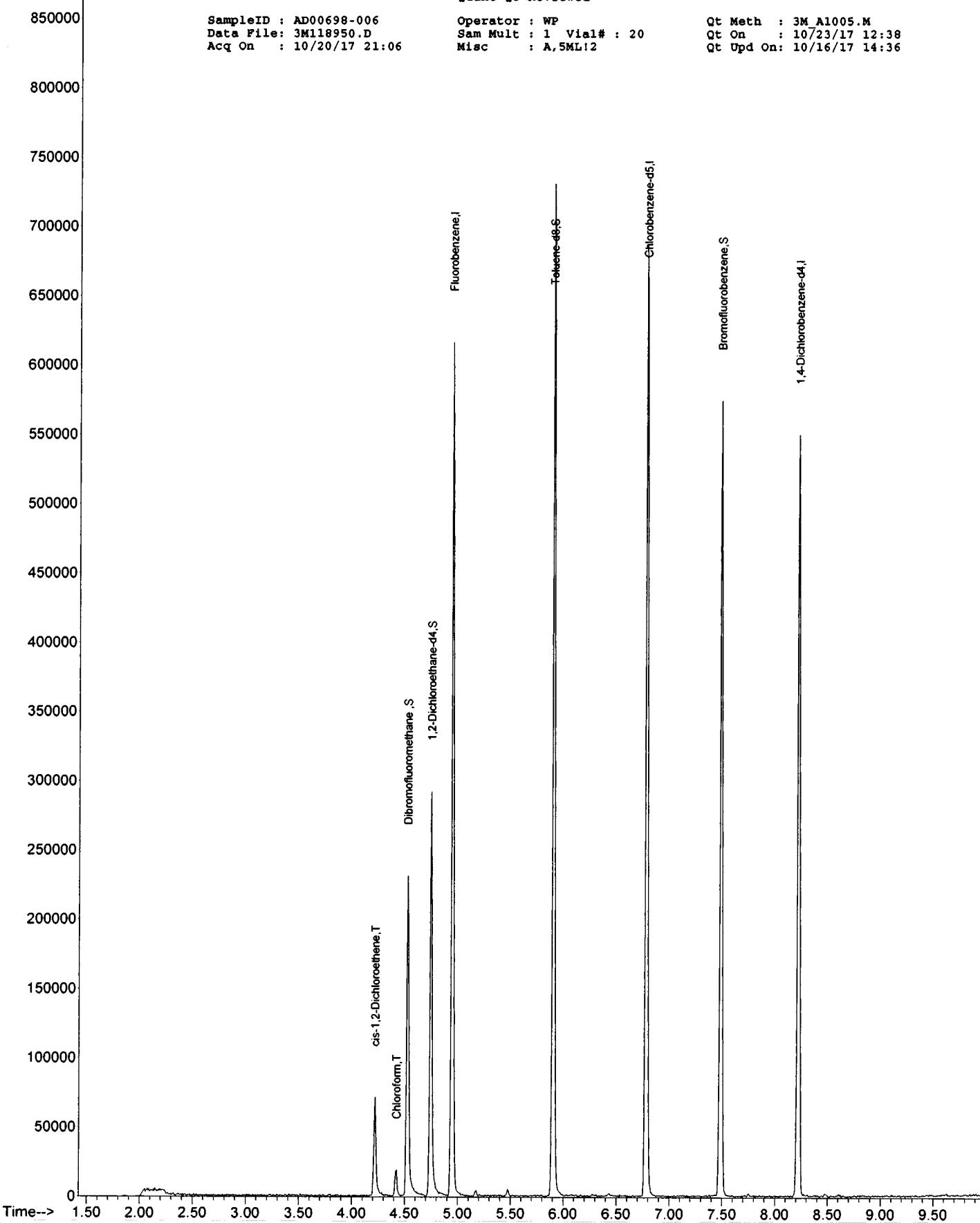
TIC: 3M118950.D\data.ms

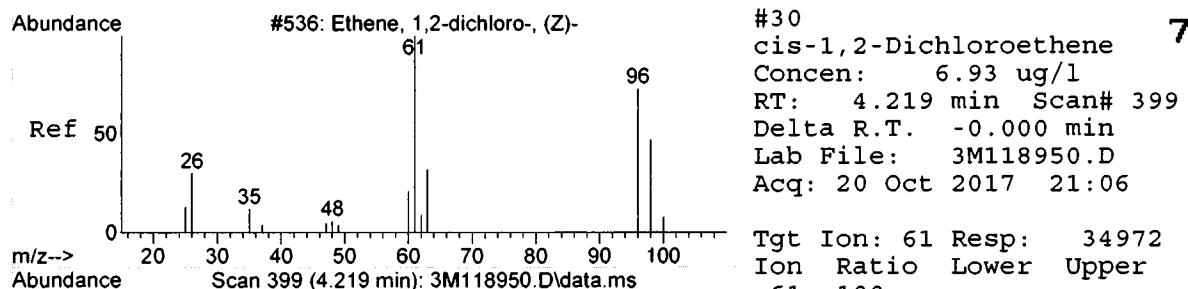
Quant QT Reviewed

SampleID : AD00698-006
Data File: 3M118950.D
Acq On : 10/20/17 21:06

Operator : WP
Sam Mult : 1 Vial# : 20
Misc : A,5ML!2

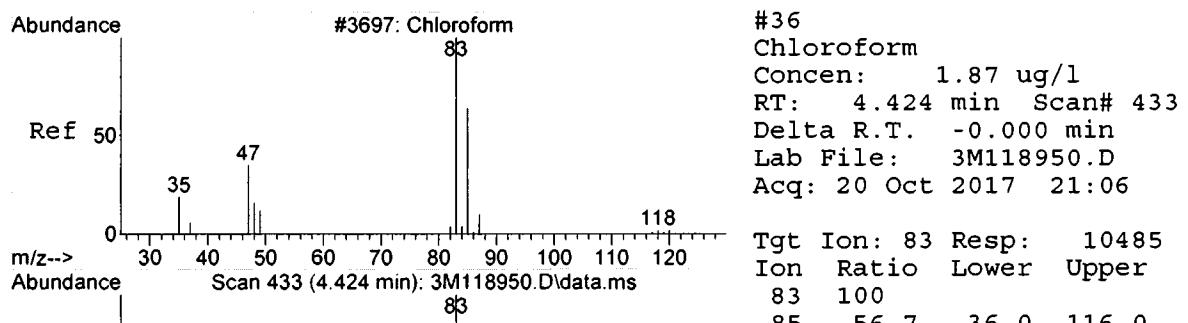
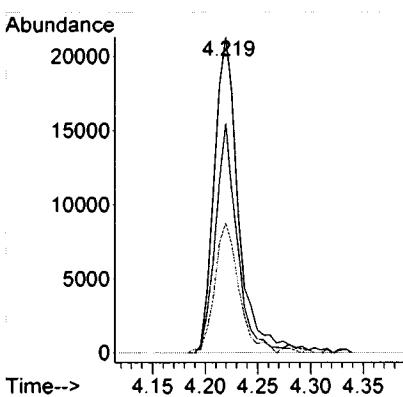
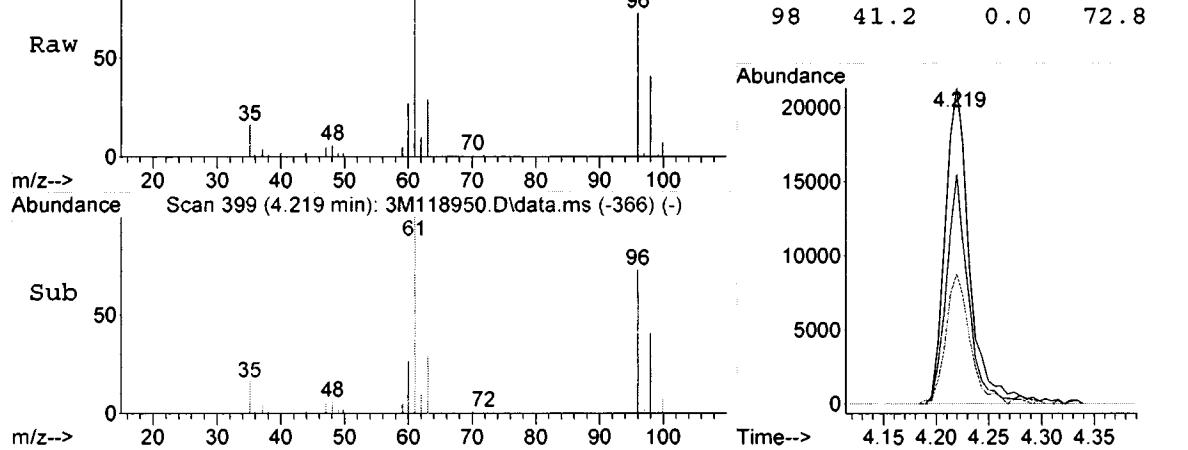
Qt Meth : 3M_A1005.M
Qt On : 10/23/17 12:38
Qt Upd On: 10/16/17 14:36



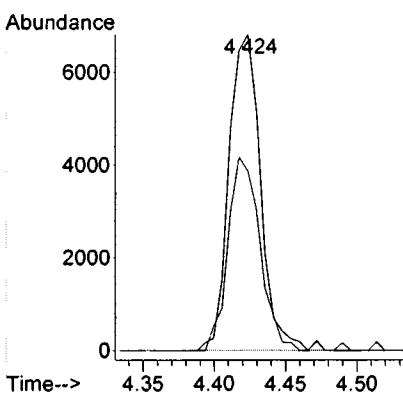
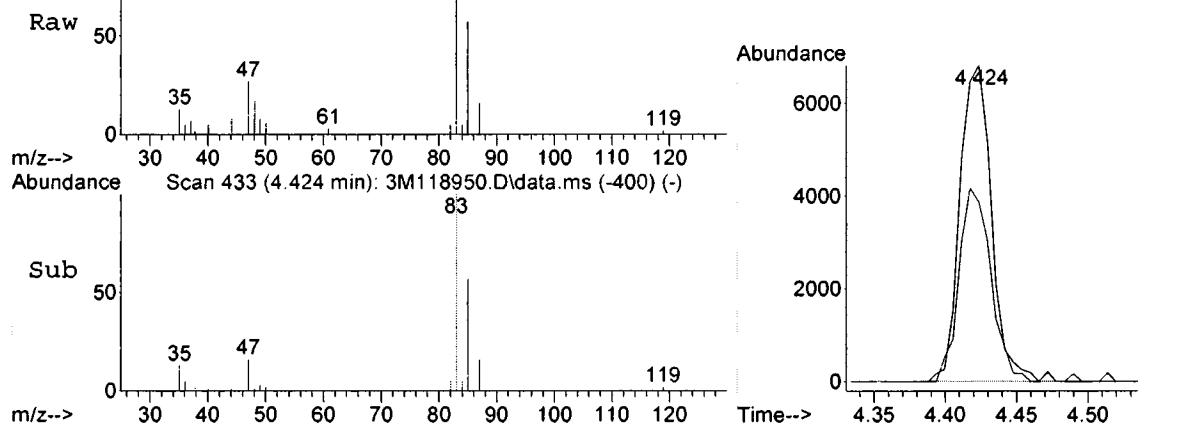


#30
cis-1,2-Dichloroethene
Concen: 6.93 ug/l
RT: 4.219 min Scan# 399
Delta R.T. -0.000 min
Lab File: 3M118950.D
Acq: 20 Oct 2017 21:06

7102003 0166



#36
Chloroform
Concen: 1.87 ug/l
RT: 4.424 min Scan# 433
Delta R.T. -0.000 min
Lab File: 3M118950.D
Acq: 20 Oct 2017 21:06



Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-007

Method: EPA 8260C

Client Id: 152140-MW-3D(OFFSITE)

Matrix: Aqueous

Data File: 3M119019.D

Initial Vol: 5ml

Analysis Date: 10/23/17 14:22

Final Vol: NA

Date Rec/Extracted: 10/20/17-NA

Dilution: 1.00

Column: DB-624 25M 0.200mm ID 1.12um film

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	1.2
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	5.3
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	7.3
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	1.5
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

15

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

R - Retention Time Out

B - Indicates the analyte was found in the blank as well as in the sample.

J - Indicates an estimated value when a compound is detected at less than the

E - Indicates the analyte concentration exceeds the calibration range of the
instrument.

specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of *a*-Chlordane and *y*-Chlordane.

SampleID : AD00698-007
 Data File: 3M119019.D
 Acq On : 10/23/17 14:22

Operator : SG
 Sam Mult : 1 Vial# : 24
 Misc : A,5ML!1

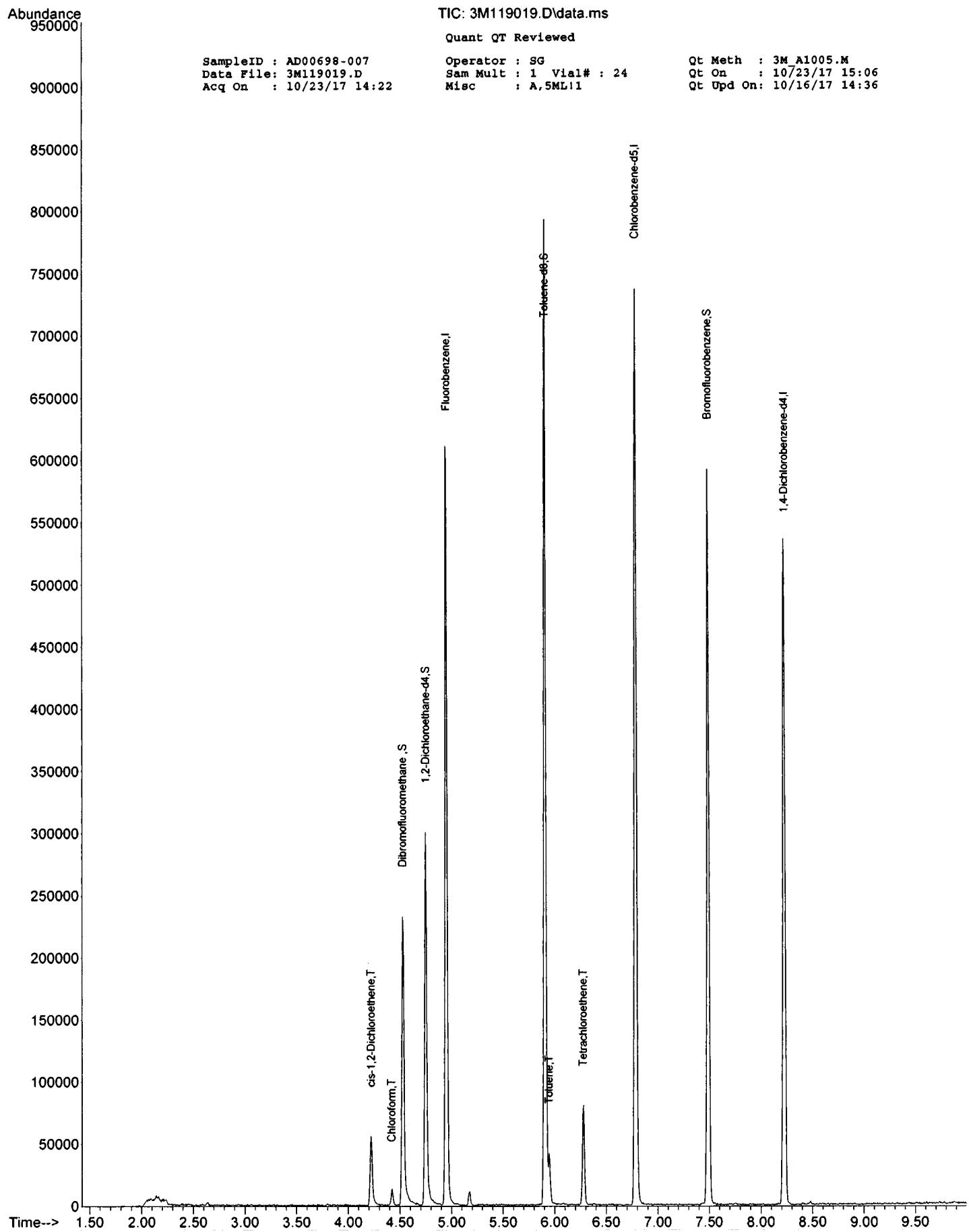
Qt Meth : 3M_A1005.M
 Qt On : 10/23/17 15:06
 Qt Upd On: 10/16/17 14:36

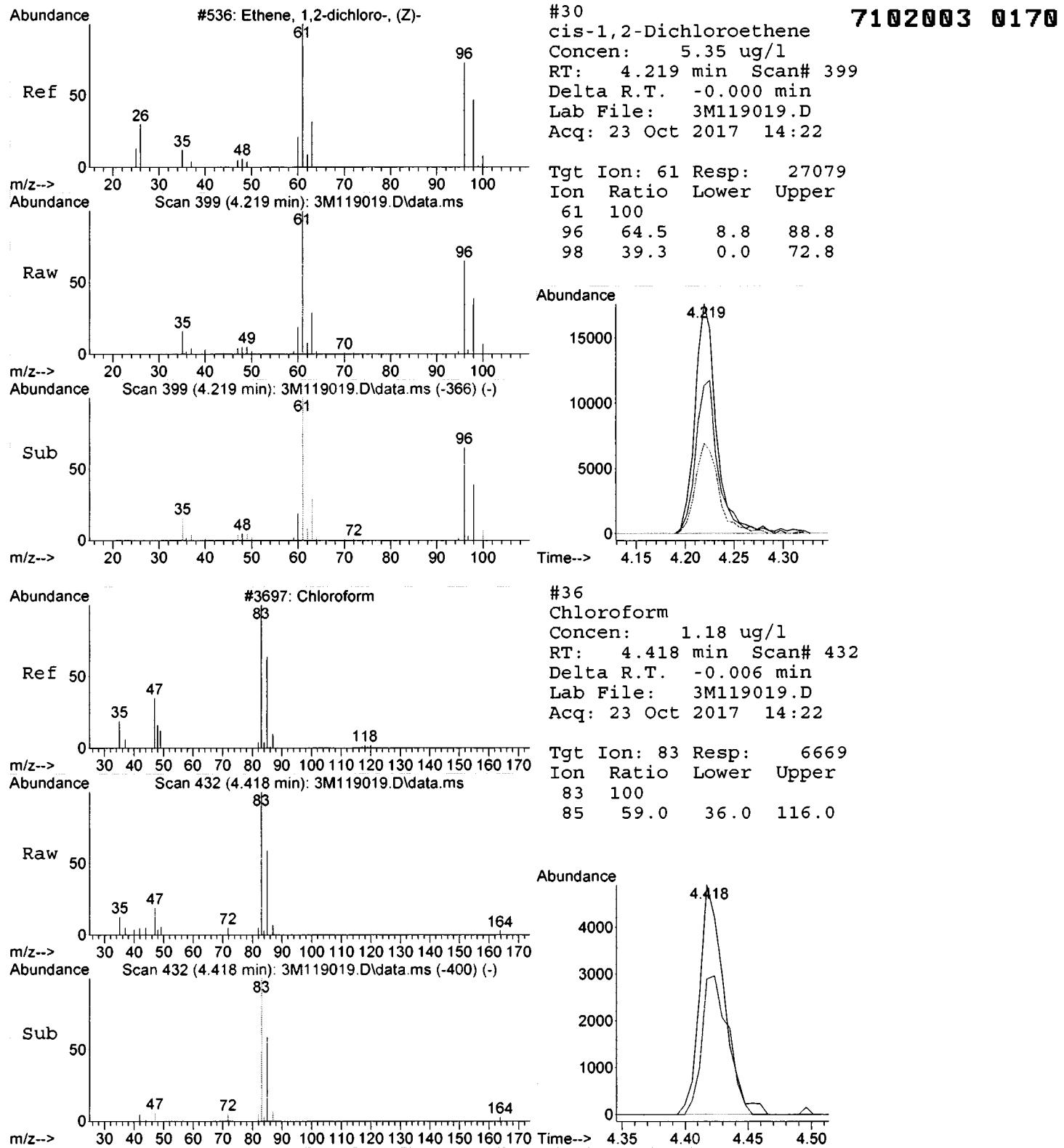
Data Path : G:\GcMsData\2017\GCMS_3\Data\10-23-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

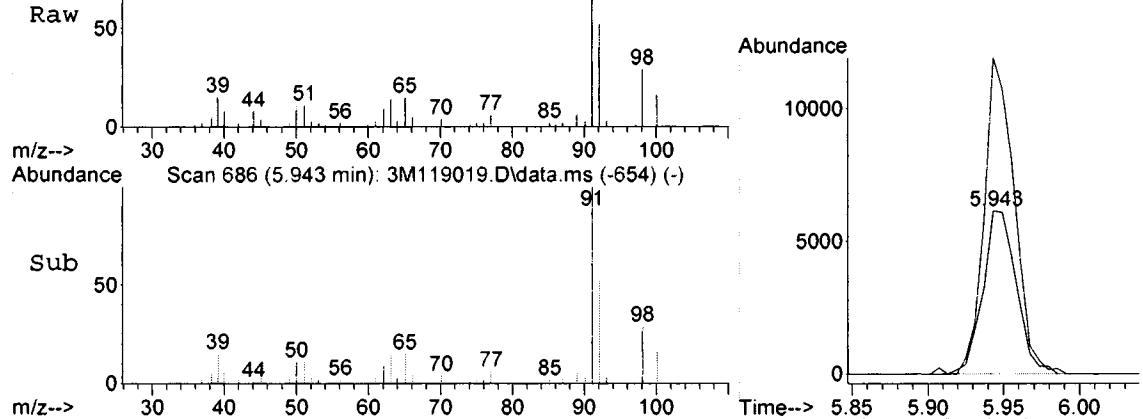
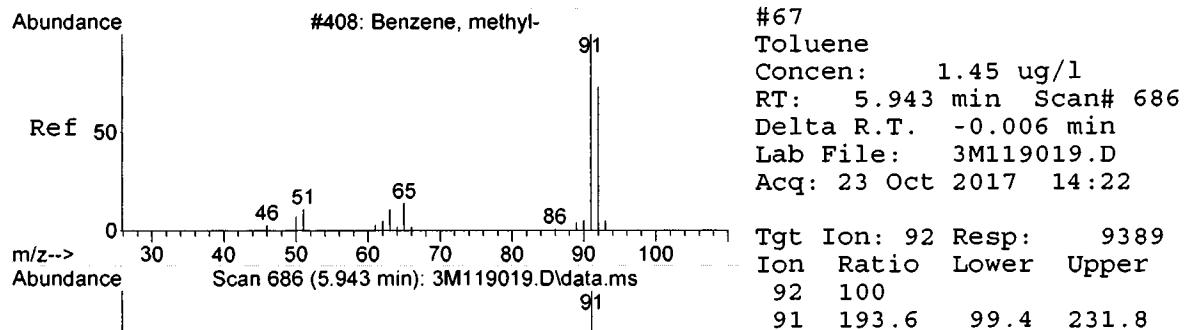
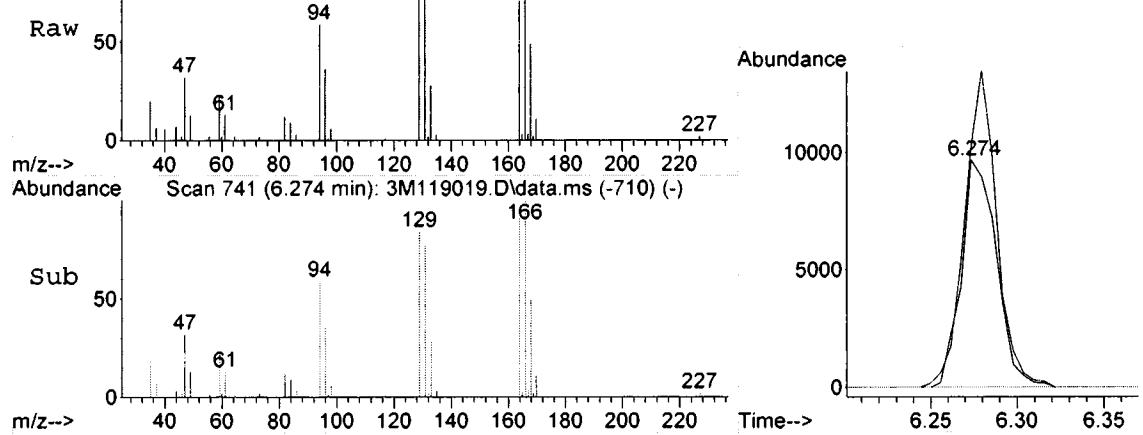
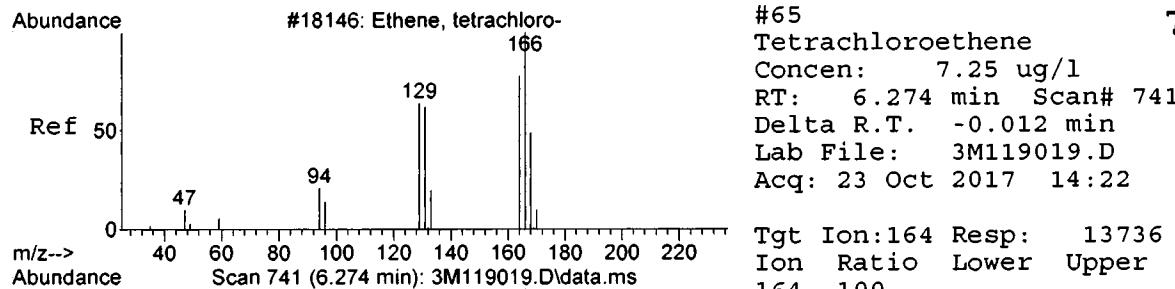
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.952	96	339619	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.784	117	294258	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.226	152	121059	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.526	111	105615	32.13	ug/l	0.00
Spiked Amount	30.000			Recovery	=	107.10%
39) 1,2-Dichloroethane-d4	4.748	67	83176	32.13	ug/l	0.00
Spiked Amount	30.000			Recovery	=	107.10%
66) Toluene-d8	5.907	98	360792	27.51	ug/l	0.00
Spiked Amount	30.000			Recovery	=	91.70%
76) Bromofluorobenzene	7.487	174	121240	28.37	ug/l	0.00
Spiked Amount	30.000			Recovery	=	94.57%
Target Compounds						
30) cis-1,2-Dichloroethene	4.219	61	27079	5.3456	ug/l	82
36) Chloroform	4.418	83	6669	1.1849	ug/l	80
65) Tetrachloroethene	6.274	164	13736	7.2521	ug/l	78
67) Toluene	5.943	92	9389	1.4506	ug/l	79

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

6







Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-008

Client Id: 152140-MW-3S(OFFSITE)

Data File: 3M118951.D

Analysis Date: 10/20/17 21:22

Date Rec/Extracted: 10/20/17-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

0

ColumnID: (*) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

7102003 0173

SampleID : AD00690-Q08
 Data File: 3M118951.D
 Acq On : 10/20/17 21:22

Operator : WP
 Sam Mult : 1 Vial# : 21
 Misc : A,5ML!2

Qt Meth : 3M_A1005.M
 Qt On : 10/23/17 12:38
 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.947	96	338723	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.779	117	276843	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	115328	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.526	111	104342	31.83	ug/l	0.00
Spiked Amount	30.000		Recovery	=	106.10%	
39) 1,2-Dichloroethane-d4	4.748	67	79608	30.83	ug/l	0.00
Spiked Amount	30.000		Recovery	=	102.77%	
66) Toluene-d8	5.902	98	349989	28.37	ug/l	0.00
Spiked Amount	30.000		Recovery	=	94.57%	
76) Bromofluorobenzene	7.487	174	120257	29.54	ug/l	0.00
Spiked Amount	30.000		Recovery	=	98.47%	
Target Compounds						
					Qvalue	

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

lk

Abundance

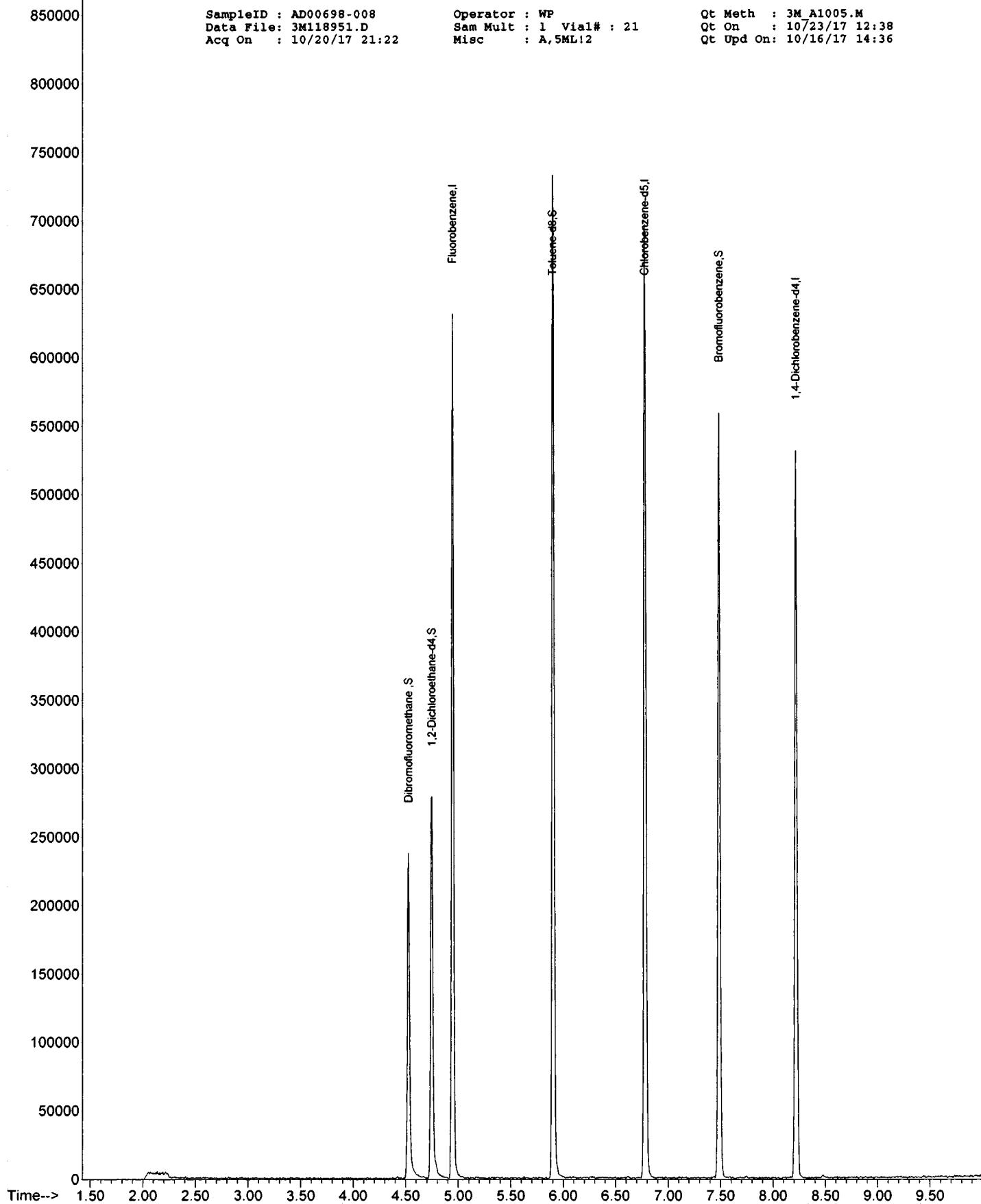
TIC: 3M118951.D\data.ms

Quant QT Reviewed

SampleID : AD00698-008
Data File: 3M118951.D
Acq On : 10/20/17 21:22

Operator : WP
Sam Mult : 1 vial# : 21
Misc : A,5ML12

Qt Meth : 3M_A1005.M
Qt On : 10/23/17 12:38
Qt Upd On: 10/16/17 14:36



Form1

ORGANICS VOLATILE REPORT

Sample Number: AD00698-009

Client Id: 152140-MW-1D(ONSITE)

Data File: 3M118952.D

Analysis Date: 10/20/17 21:39

Date Rec/Extracted: 10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	5.9
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	1.1
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

7

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

7102003 0176

SampleID : AD00698-009
 Data File: 3M118952.D
 Acq On : 10/20/17 21:39

Operator : WP
 Sam Mult : 1 Vial# : 22
 Misc : A,5ML!2

Qt Meth : 3M_A1005M
 Qt On : 10/23/17 12:38
 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.945	96	372715	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.778	117	300001	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.219	152	130185	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.525	111	110076	30.51	ug/l	0.00
Spiked Amount	30.000		Recovery	=	101.70%	
39) 1,2-Dichloroethane-d4	4.747	67	85985	30.27	ug/l	0.00
Spiked Amount	30.000		Recovery	=	100.90%	
66) Toluene-d8	5.901	98	375129	28.06	ug/l	0.00
Spiked Amount	30.000		Recovery	=	93.53%	
76) Bromofluorobenzene	7.486	174	129482	28.18	ug/l	0.00
Spiked Amount	30.000		Recovery	=	93.93%	
Target Compounds						
49) Trichloroethene	5.174	130	3076	1.0853	ug/l	69
65) Tetrachloroethene	6.279	164	11314	5.8590	ug/l	89

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

6

Abundance

950000

900000

850000

800000

750000

700000

650000

600000

550000

500000

450000

400000

350000

300000

250000

200000

150000

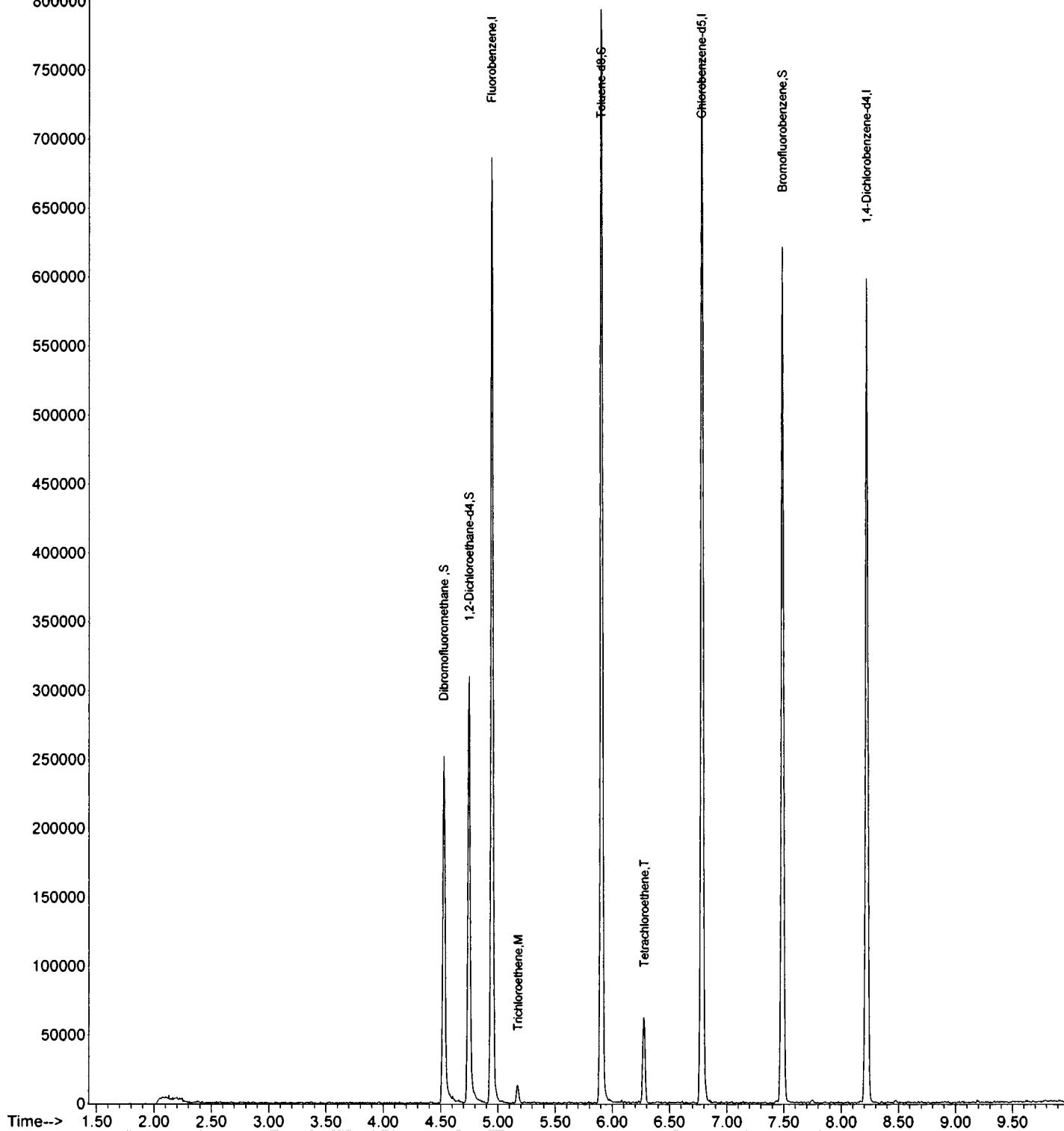
100000

50000

0

TIC: 3M118952.D\data.ms

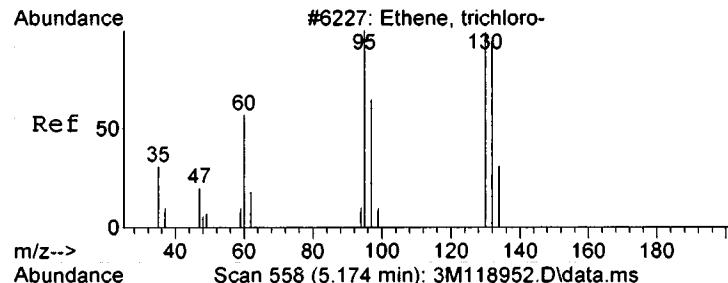
Quant QT Reviewed

SampleID : AD00698-009
Data File: 3M118952.D
Acq On : 10/20/17 21:39Operator : WP
Sam Mult : 1 Vial# : 22
Misc : A,5ML12Qt Meth : 3M_A1005.M
Qt On : 10/23/17 12:38
Qt Upd On: 10/16/17 14:36

Abundance

#6227: Ethene, trichloro-

7102003 0178

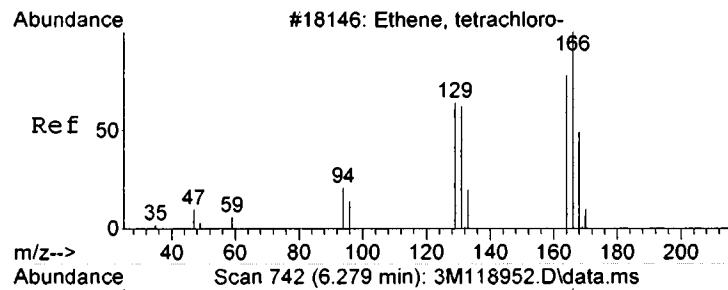
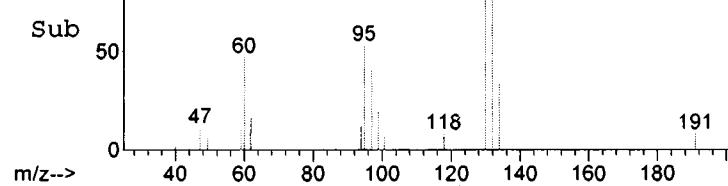
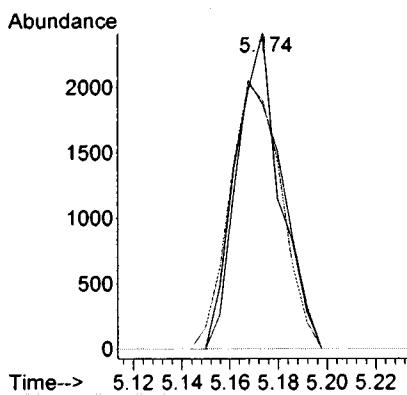
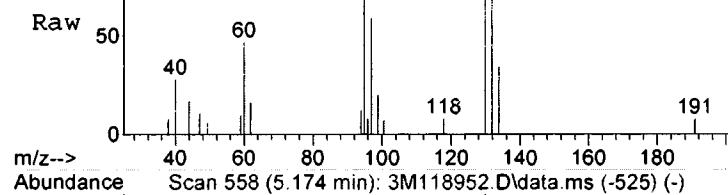


#49

Trichloroethene

Concen: 1.09 ug/l
 RT: 5.174 min Scan# 558
 Delta R.T. -0.001 min
 Lab File: 3M118952.D
 Acq: 20 Oct 2017 21:39

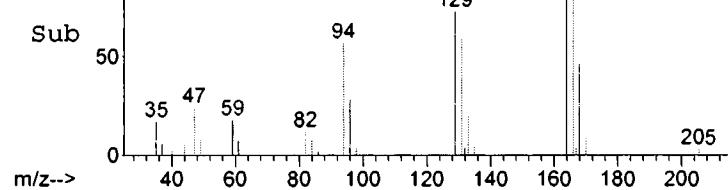
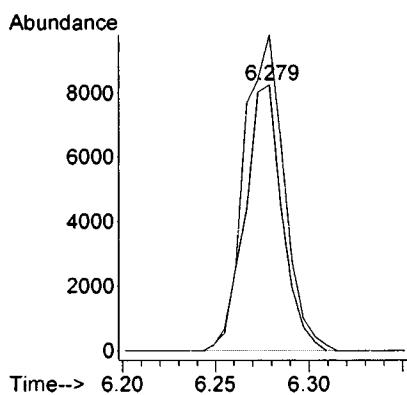
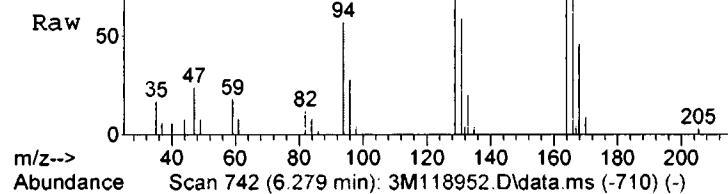
Tgt	Ion:130	Resp:	3076
Ion	Ratio	Lower	Upper
130	100		
132	77.5	40.0	200.0
95	78.8	40.0	160.0



#65

Tetrachloroethene
 Concen: 5.86 ug/l
 RT: 6.279 min Scan# 742
 Delta R.T. -0.007 min
 Lab File: 3M118952.D
 Acq: 20 Oct 2017 21:39

Tgt	Ion:164	Resp:	11314
Ion	Ratio	Lower	Upper
164	100		
166	118.8	61.8	201.8



Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-010

Client Id: 152140-MW-1S(ONSITE)

Data File: 3M118953.D

Analysis Date: 10/20/17 21:56

Date Rec/Extracted: 10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	1.1
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

1.1

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

7102003 0180

SampleID : AD00698-010
 Data File: 3M118953.D
 Acq On : 10/20/17 21:56

Operator : WP
 Sam Mult : 1 Vial# : 23
 Misc : A,5ML!2

Qt Meth : 3M_A1005.M
 Qt On : 10/23/17 12:38
 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.946	96	357638	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.778	117	299694	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	124723	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.526	111	109243	31.56	ug/l	0.00
Spiked Amount	30.000			Recovery	=	105.20%
39) 1,2-Dichloroethane-d4	4.748	67	82880	30.40	ug/l	0.00
Spiked Amount	30.000			Recovery	=	101.33%
66) Toluene-d8	5.901	98	367087	27.48	ug/l	0.00
Spiked Amount	30.000			Recovery	=	91.60%
76) Bromofluorobenzene	7.487	174	124538	28.29	ug/l	0.00
Spiked Amount	30.000			Recovery	=	94.30%
Target Compounds						
49) Trichloroethene	5.168	130	3011	1.1072	ug/l	90

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

6

Abundance

950000
900000
850000
800000
750000
700000
650000
600000
550000
500000
450000
400000
350000
300000
250000
200000
150000
100000
50000
0

TIC: 3M118953.D\data.ms

Quant QT Reviewed

SampleID : AD00698-010
Data File: 3M118953.D
Acq On : 10/20/17 21:56

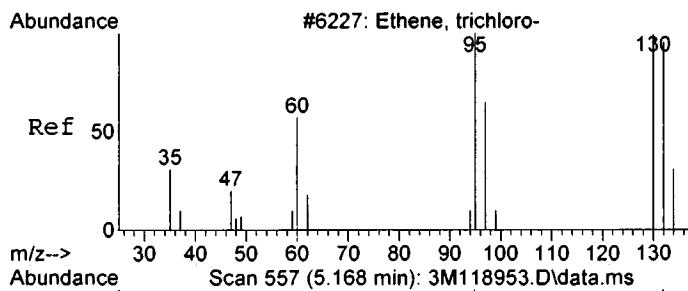
Operator : WP
Sam Mult : 1 Vial# : 23
Misc : A,5ML12

Qt Meth : 3M_A1005.M
Qt On : 10/23/17 12:38
Qt Upd On: 10/16/17 14:36

Time--> 1.50 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 6.00 6.50 7.00 7.50 8.00 8.50 9.00 9.50

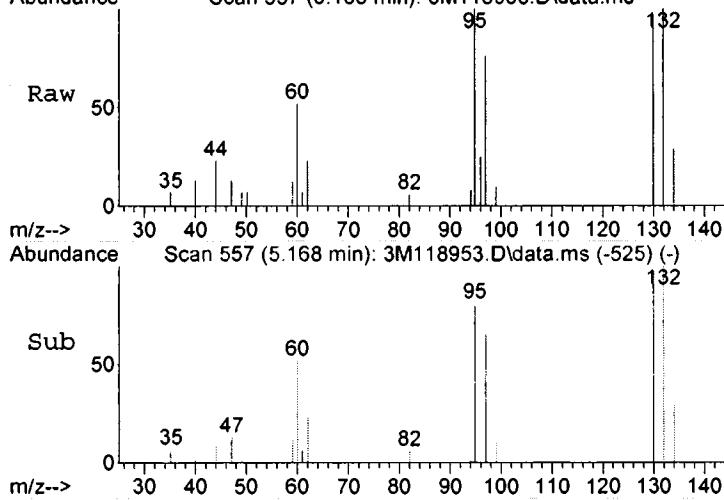
Page: 1

3M_A1005.M Tue Oct 31 12:17:00 2017 RPT1

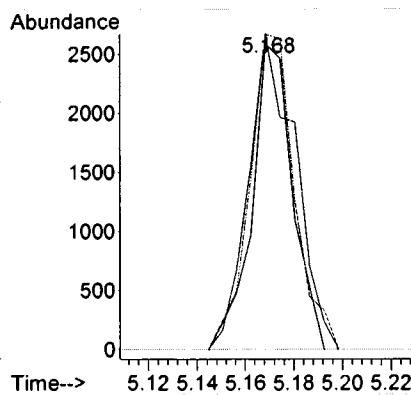


#49
Trichloroethene
Concen: 1.11 ug/l
RT: 5.168 min Scan# 557
Delta R.T. -0.006 min
Lab File: 3M118953.D
Acq: 20 Oct 2017 21:56

7102003 0182



Tgt	Ion:130	Ion Ratio	Resp:	3011
			Lower	Upper
	130	100		
	132	103.3	40.0	200.0
	95	103.1	40.0	160.0



Form1

ORGANICS VOLATILE REPORT

Sample Number: AD00698-011

Client Id: 152140-MW-2A

Data File: 3M119005.D

Analysis Date: 10/23/17 10:27

Date Rec/Extracted: 10/20/17-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	3.4
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

3.4

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

7102003 0184

SampleID : AD00698-011 Operator : SG Qt Meth : 3M_A1005.M
 Data File: 3M119005.D Sam Mult : 1 Vial# : 13 Qt On : 10/23/17 15:06
 Acq On : 10/23/17 10:27 Misc : A,5ML!2 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-23-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.947	96	263668	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.779	117	225934	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	93668	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.526	111	79840	31.28	ug/l	0.00
Spiked Amount	30.000			Recovery	=	104.27%
39) 1,2-Dichloroethane-d4	4.742	67	62755	31.22	ug/l	-0.01
Spiked Amount	30.000			Recovery	=	104.07%
66) Toluene-d8	5.902	98	280387	27.85	ug/l	0.00
Spiked Amount	30.000			Recovery	=	92.83%
76) Bromofluorobenzene	7.487	174	95089	28.76	ug/l	0.00
Spiked Amount	30.000			Recovery	=	95.87%
Target Compounds						
65) Tetrachloroethene	6.274	164	4886	3.3597	ug/l	Qvalue 100

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

Abundance

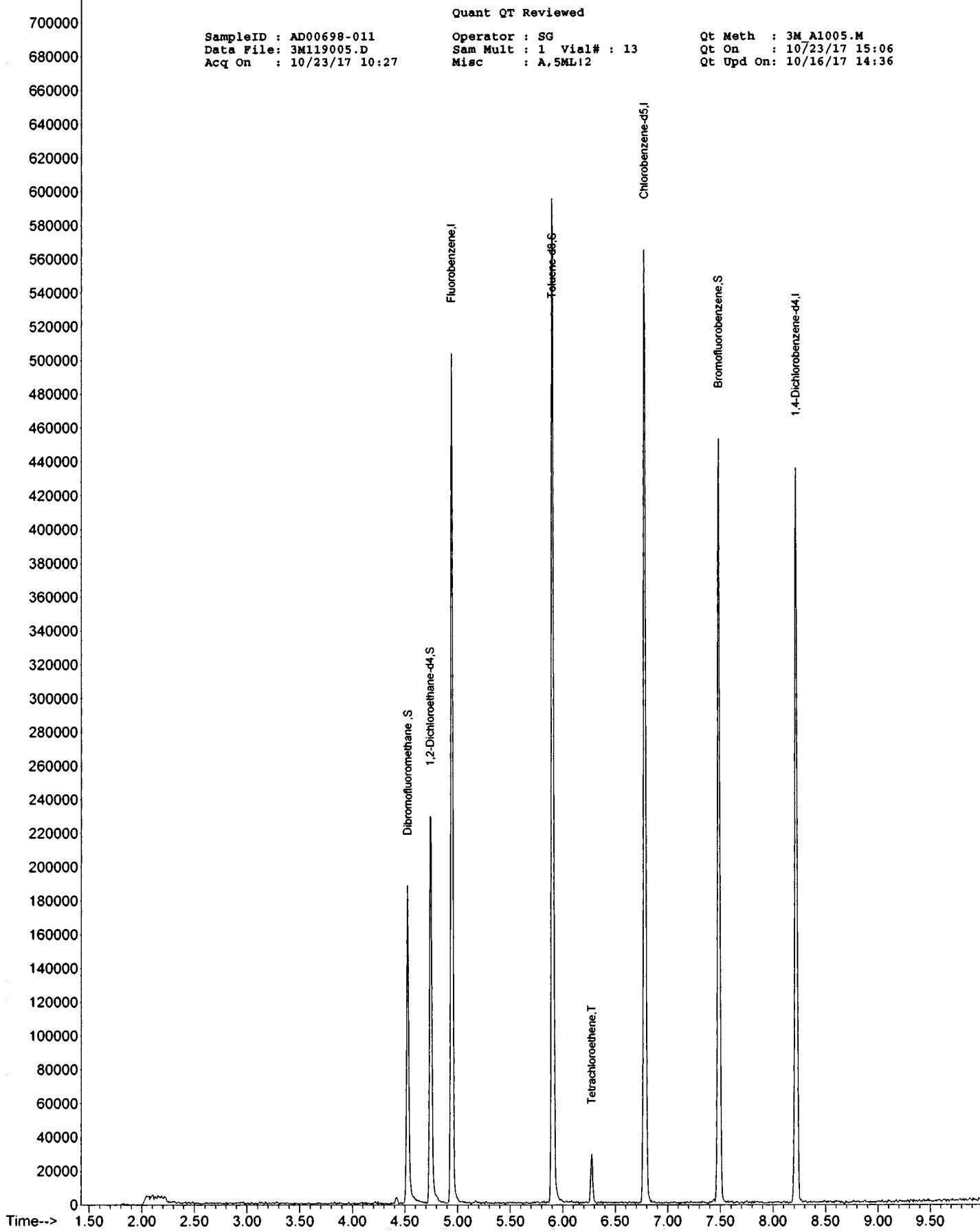
TIC: 3M119005.D\data.ms

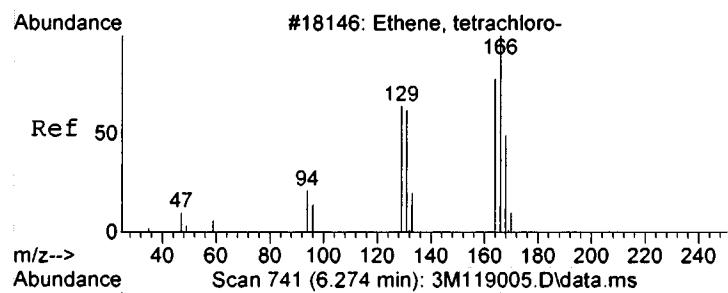
Quant QT Reviewed

SampleID : AD00698-011
 Data File: 3M119005.D
 Acq On : 10/23/17 10:27

Operator : SG
 Sam Mult : 1 Vial# : 13
 Misc : A,5ML12

Qt Meth : 3M_A1005.M
 Qt On : 10/23/17 15:06
 Qt Upd On: 10/16/17 14:36

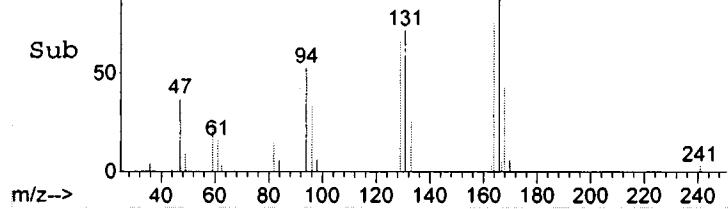
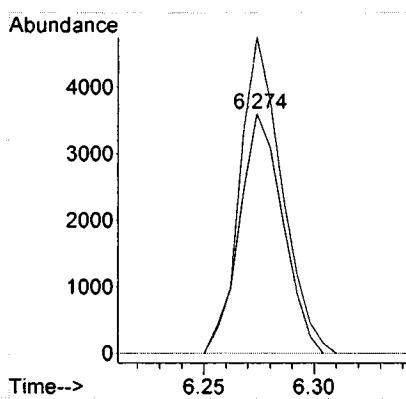
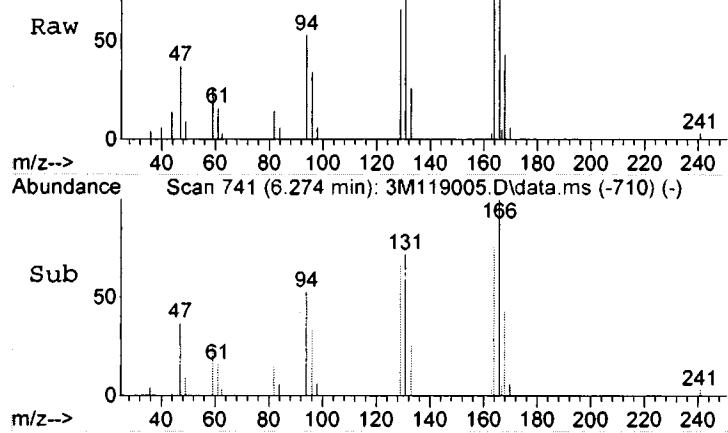




#65
Tetrachloroethene
Concen: 3.36 ug/l
RT: 6.274 min Scan# 741
Delta R.T. -0.012 min
Lab File: 3M119005.D
Acq: 23 Oct 2017 10:27

7102003 0186

Tgt Ion:164 Resp: 4886
Ion Ratio Lower Upper
164 100
166 131.6 61.8 201.8



Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-012

Client Id: 152140-MW-2AD

Data File: 3M118954.D

Analysis Date: 10/20/17 22:10

Date Rec/Extracted: 10/20/17-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

0

ColumnID:(*) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

SampleID : AD00698-012
 Data File: 3M118954.D
 Acq On : 10/20/17 22:10

Operator : WP
 Sam Mult : 1 Vial# : 24
 Misc : A,5ML!2

Qt Meth : 3M_A1005 M
 Qt On : 10/23/17 12:38
 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.946	96	330453	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.779	117	277848	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	117630	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.526	111	101002	31.58	ug/l	0.00
Spiked Amount	30.000			Recovery	=	105.27%
39) 1,2-Dichloroethane-d4	4.748	67	78546	31.18	ug/l	0.00
Spiked Amount	30.000			Recovery	=	103.93%
66) Toluene-d8	5.902	98	344405	27.81	ug/l	0.00
Spiked Amount	30.000			Recovery	=	92.70%
76) Bromofluorobenzene	7.487	174	117300	28.25	ug/l	0.00
Spiked Amount	30.000			Recovery	=	94.17%

Target Compounds

Qvalue

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



Abundance

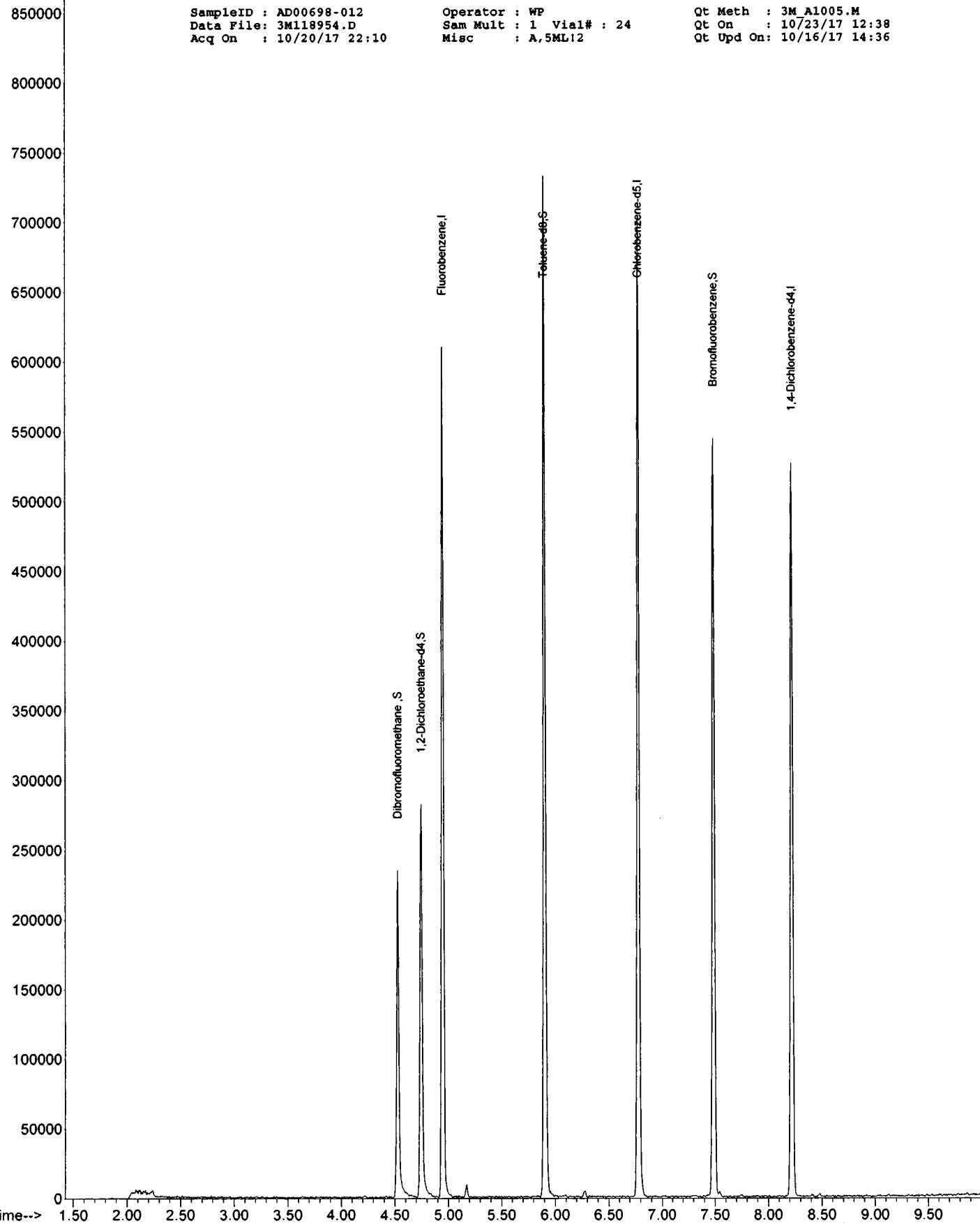
TIC: 3M118954.D\data.ms

Quant QT Reviewed

SampleID : AD00698-012
Data File: 3M118954.D
Acq On : 10/20/17 22:10

Operator : WP
Sam Mult : 1 Vial# : 24
Misc : A,5ML12

Qt Meth : 3M_A1005.M
Qt On : 10/23/17 12:38
Qt Upd On: 10/16/17 14:36



Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-013

Client Id: 152140-MW-3D(ONSITE)

Data File: 3M118955.D

Analysis Date: 10/20/17 22:26

Date Rec/Extracted: 10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	6.2
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration**6.2**

ColumnID:(*) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

7102003 0191

SampleID : AD00698-013
 Data File: 3M118955.D
 Acq On : 10/20/17 22:26

Operator : WP
 Sam Mult : 1 Vial# : 25
 Misc : A,SML!2

Qt Meth : 3M_A1005.M
 Qt On : 10/23/17 12:38
 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.947	96	346725	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.779	117	282247	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.221	152	118684	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.527	111	106471	31.73	ug/l	0.00
Spiked Amount	30.000			Recovery	=	105.77%
39) 1,2-Dichloroethane-d4	4.743	67	81069	30.67	ug/l	-0.01
Spiked Amount	30.000			Recovery	=	102.23%
66) Toluene-d8	5.902	98	355569	28.27	ug/l	0.00
Spiked Amount	30.000			Recovery	=	94.23%
76) Bromofluorobenzene	7.488	174	122435	29.22	ug/l	0.00
Spiked Amount	30.000			Recovery	=	97.40%
Target Compounds						
65) Tetrachloroethene	6.275	164	11204	6.1670	ug/l	99

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

Abundance

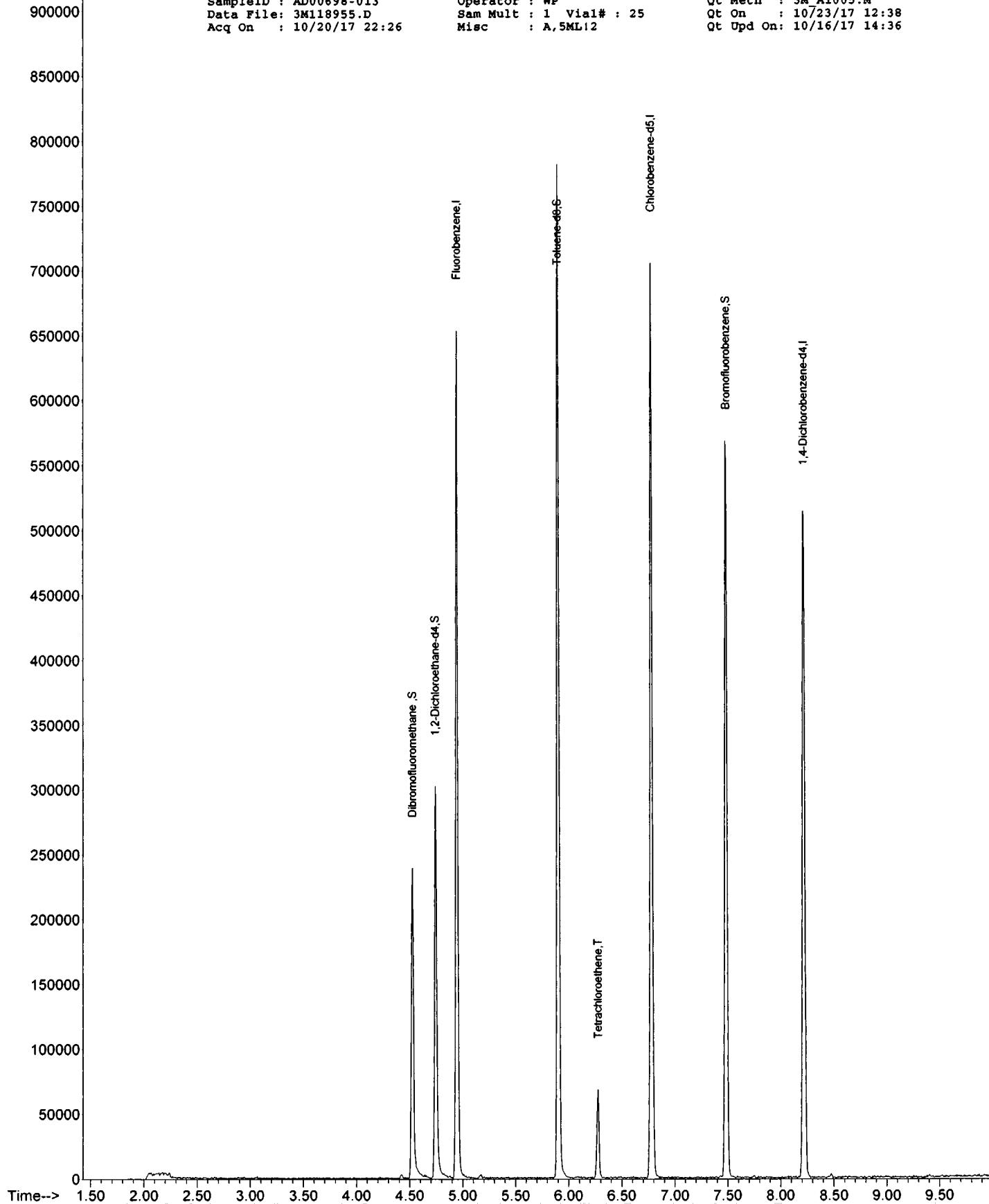
TIC: 3M118955.D\data.ms

Quant QT Reviewed

SampleID : AD00698-013
Data File: 3M118955.D
Acq On : 10/20/17 22:26

Operator : WP
Sam Mult : 1 Vial# : 25
Misc : A,5ML12

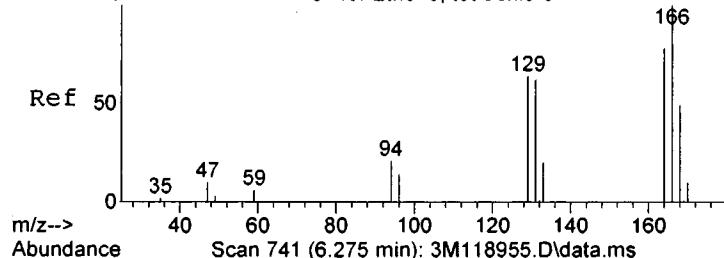
Qt Meth : 3M_A1005.M
Qt On : 10/23/17 12:38
Qt Upd On: 10/16/17 14:36



Abundance

#18146: Ethene, tetrachloro-

7102003 0193



#65

Tetrachloroethene

Concen: 6.17 ug/l

RT: 6.275 min Scan# 741

Delta R.T. -0.011 min

Lab File: 3M118955.D

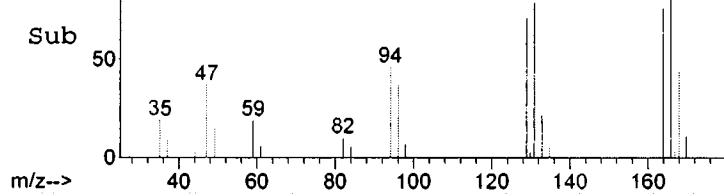
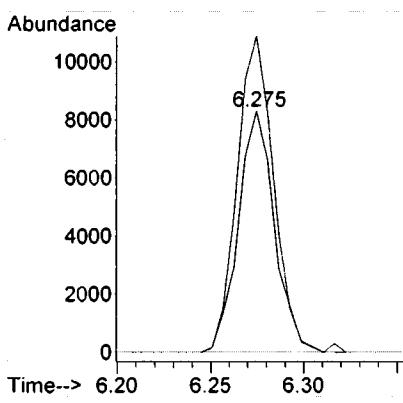
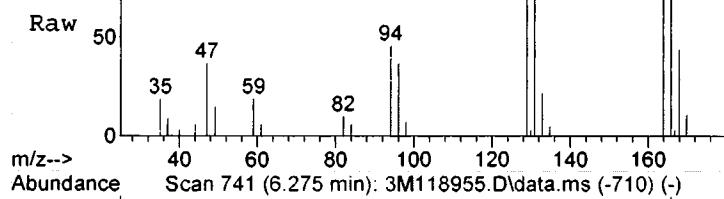
Acq: 20 Oct 2017 22:26

Tgt Ion:164 Resp: 11204

Ion Ratio Lower Upper

164 100

166 131.2 61.8 201.8



Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-014

Client Id: 152140-MW-3S(ONSITE)

Data File: 3M118956.D

Analysis Date: 10/20/17 22:43

Date Rec/Extracted: 10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	27
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

27

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

7102003 0195

SampleID : AD00698-014
 Data File: 3M118956.D
 Acq On : 10/20/17 22:43

Operator : WP
 Sam Mult : 1 Vial# : 26
 Misc : A,5ML!2

Qt Meth : 3M_A1005.M
 Qt On : 10/23/17 12:38
 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.946	96	288591	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.778	117	243069	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	101252	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.525	111	87476	31.32	ug/l	0.00
Spiked Amount	30.000		Recovery	=	104.40%	
39) 1,2-Dichloroethane-d4	4.748	67	68124	30.97	ug/l	0.00
Spiked Amount	30.000		Recovery	=	103.23%	
66) Toluene-d8	5.901	98	294267	27.17	ug/l	0.00
Spiked Amount	30.000		Recovery	=	90.57%	
76) Bromofluorobenzene	7.487	174	103365	28.92	ug/l	0.00
Spiked Amount	30.000		Recovery	=	96.40%	
Target Compounds						
65) Tetrachloroethene	6.273	164	42973	27.4660	ug/l	95

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

1
6

Abundance

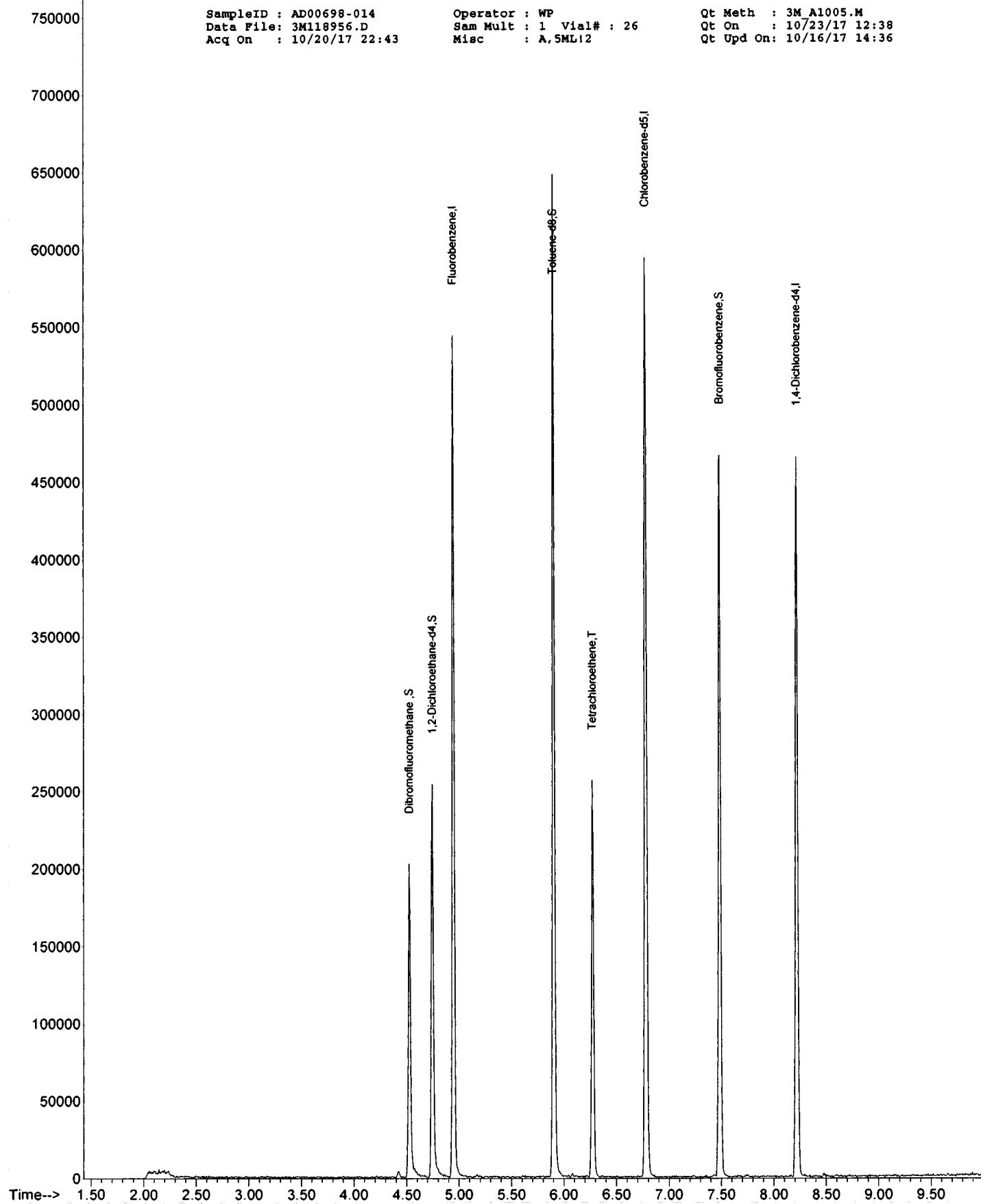
TIC: 3M118956.D\data.ms

Quant QT Reviewed

SampleID : AD00698-014
Data File: 3M118956.D
Acq On : 10/20/17 22:43

Operator : WP
Sam Mult : 1 Vial# : 26
Misc : A,5ML12

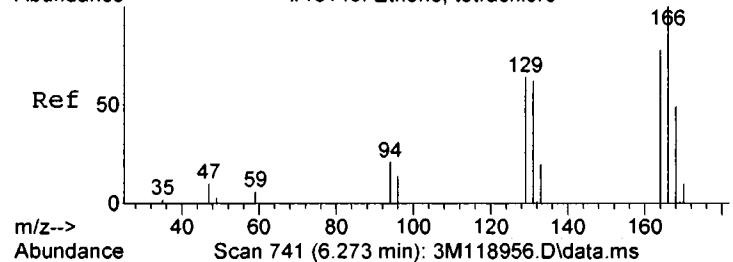
Qt Meth : 3M_A1005.M
Qt On : 10/23/17 12:38
Qt Upd On: 10/16/17 14:36



Abundance

#18146: Ethene, tetrachloro-

7102003 0197



#65

Tetrachloroethene

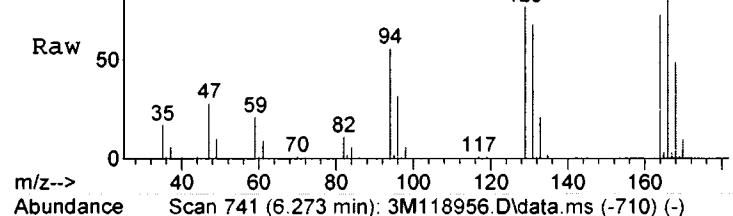
Concen: 27.47 ug/l

RT: 6.273 min Scan# 741

Delta R.T. -0.013 min

Lab File: 3M118956.D

Acq: 20 Oct 2017 22:43

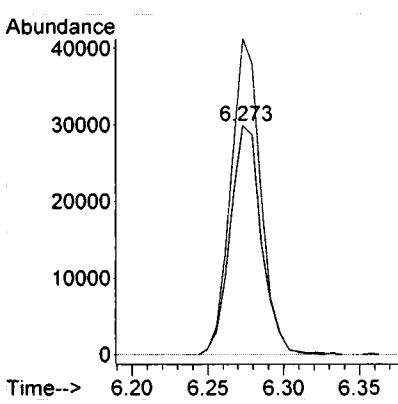
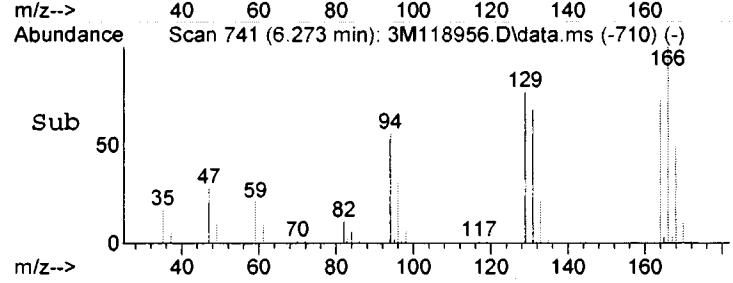


Tgt Ion:164 Resp: 42973

Ion Ratio Lower Upper

164 100

166 137.9 61.8 201.8



Form1

ORGANICS VOLATILE REPORT

Sample Number: AD00698-015

Client Id: 152140-MW-5D

Data File: 3M118957.D

Analysis Date: 10/20/17 23:00

Date Rec/Extracted: 10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	1.2
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	1.6
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

2.8

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

7102003 0199

SampleID : AD00698-015
 Data File: 3M118957.D
 Acq On : 10/20/17 23:00

Operator : WP
 Sam Mult : 1 Vial# : 27
 Misc : A,5ML!2

Qt Meth : 3M_A1005.M
 Qt On : 10/23/17 12:38
 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.946	96	330636	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.778	117	277282	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	111597	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.526	111	97906	30.59	ug/l	0.00
Spiked Amount	30.000			Recovery	=	101.97%
39) 1,2-Dichloroethane-d4	4.742	67	77962	30.93	ug/l	-0.01
Spiked Amount	30.000			Recovery	=	103.10%
66) Toluene-d8	5.901	98	337618	27.32	ug/l	0.00
Spiked Amount	30.000			Recovery	=	91.07%
76) Bromofluorobenzene	7.487	174	112111	28.46	ug/l	0.00
Spiked Amount	30.000			Recovery	=	94.87%
Target Compounds						
49) Trichloroethene	5.168	130	4074	1.6204	ug/l	80
65) Tetrachloroethene	6.274	164	2077	1.1637	ug/l	100

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

Abundance

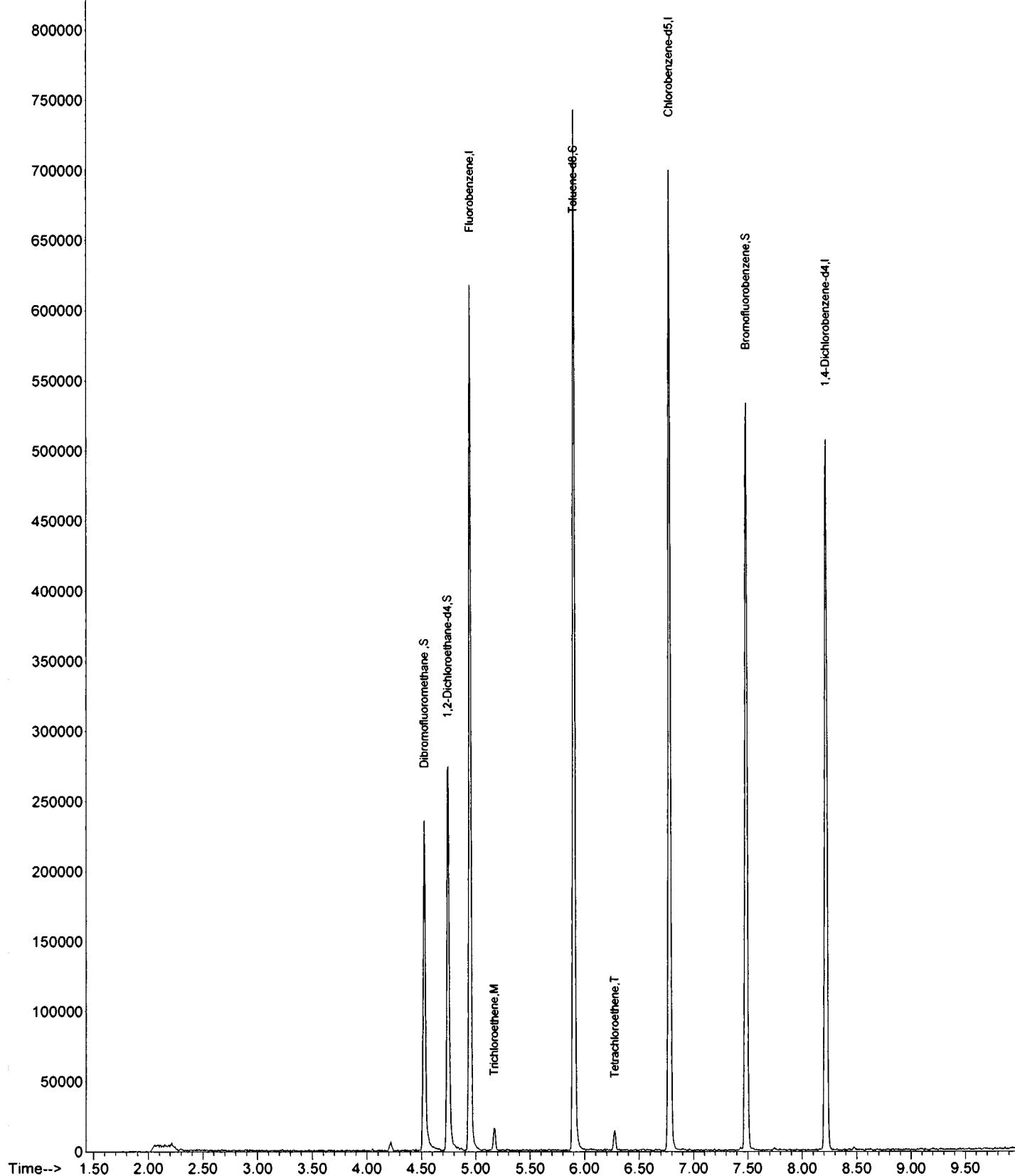
TIC: 3M118957.D\data.ms

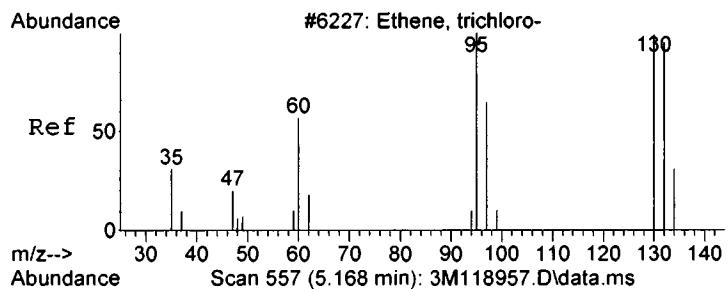
Quant QT Reviewed

SampleID : AD00698-015
Data File: 3M118957.D
Acq On : 10/20/17 23:00

Operator : WP
Sam Mult : 1 Vial# : 27
Misc : A,5ML!2

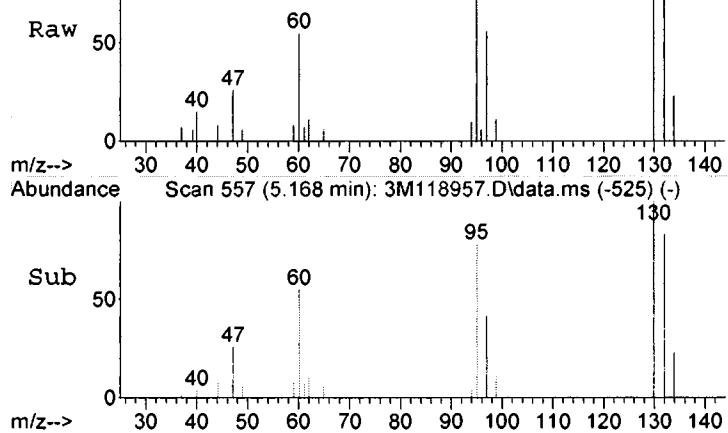
Qt Meth : 3M_A1005.M
Qt On : 10/23/17 12:38
Qt Upd On: 10/16/17 14:36



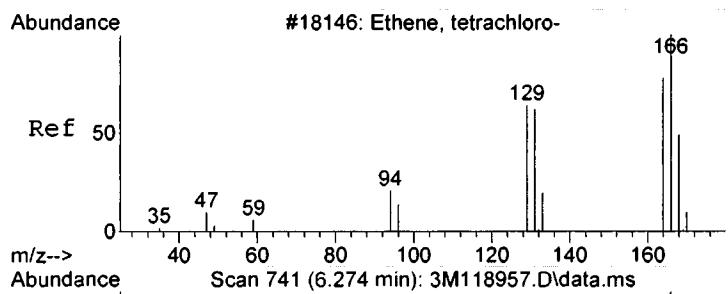
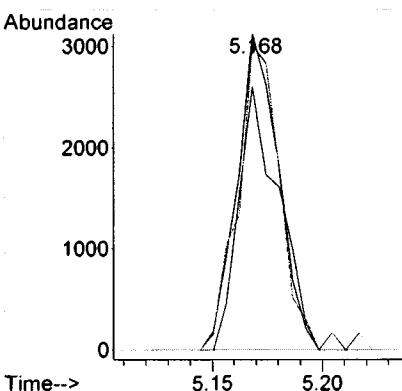


#49
Trichloroethene
Concen: 1.62 ug/l
RT: 5.168 min Scan# 557
Delta R.T. -0.006 min
Lab File: 3M118957.D
Acq: 20 Oct 2017 23:00

7102003 0201

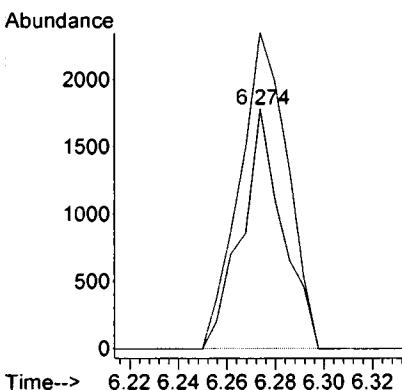
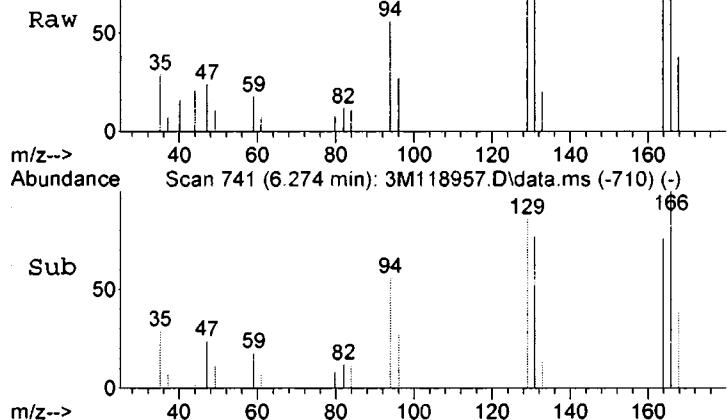


Tgt Ion:130 Resp: 4074
Ion Ratio Lower Upper
130 100
132 83.3 40.0 200.0
95 96.3 40.0 160.0



#65
Tetrachloroethene
Concen: 1.16 ug/l
RT: 6.274 min Scan# 741
Delta R.T. -0.012 min
Lab File: 3M118957.D
Acq: 20 Oct 2017 23:00

Tgt Ion:164 Resp: 2077
Ion Ratio Lower Upper
164 100
166 131.9 61.8 201.8



Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-016

Client Id: 152140-MW-5S

Data File: 3M118958.D

Analysis Date: 10/20/17 23:19

Date Rec/Extracted: 10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5mL

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	2.5
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	1.4	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	1.1
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

5

ColumnID: (*) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of *a*-Chlordane and *y*-Chlordane.

7102003 0203

SampleID : AD00698-016
 Data File: 3M118958.D
 Acq On : 10/20/17 23:19

Operator : WP
 Sam Mult : 1 Vial# : 28
 Misc : A,5ML!2

Qt Meth : 3M_A1005.M
 Qt On : 10/23/17 12:38
 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.946	96	344287	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.778	117	285180	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	116104	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.526	111	106163	31.86	ug/l	0.00
Spiked Amount	30.000			Recovery	=	106.20%
39) 1,2-Dichloroethane-d4	4.742	67	80294	30.60	ug/l	-0.01
Spiked Amount	30.000			Recovery	=	102.00%
66) Toluene-d8	5.901	98	344446	27.10	ug/l	0.00
Spiked Amount	30.000			Recovery	=	90.33%
76) Bromofluorobenzene	7.487	174	123520	30.14	ug/l	0.00
Spiked Amount	30.000			Recovery	=	100.47%
Target Compounds						
30) cis-1,2-Dichloroethene	4.219	61	12827	2.4978	ug/l	82
65) Tetrachloroethene	6.274	164	2104	1.1462	ug/l	89
82) 1,4-Dichlorobenzene	8.232	146	5655	1.3875	ug/l	81

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

Abundance

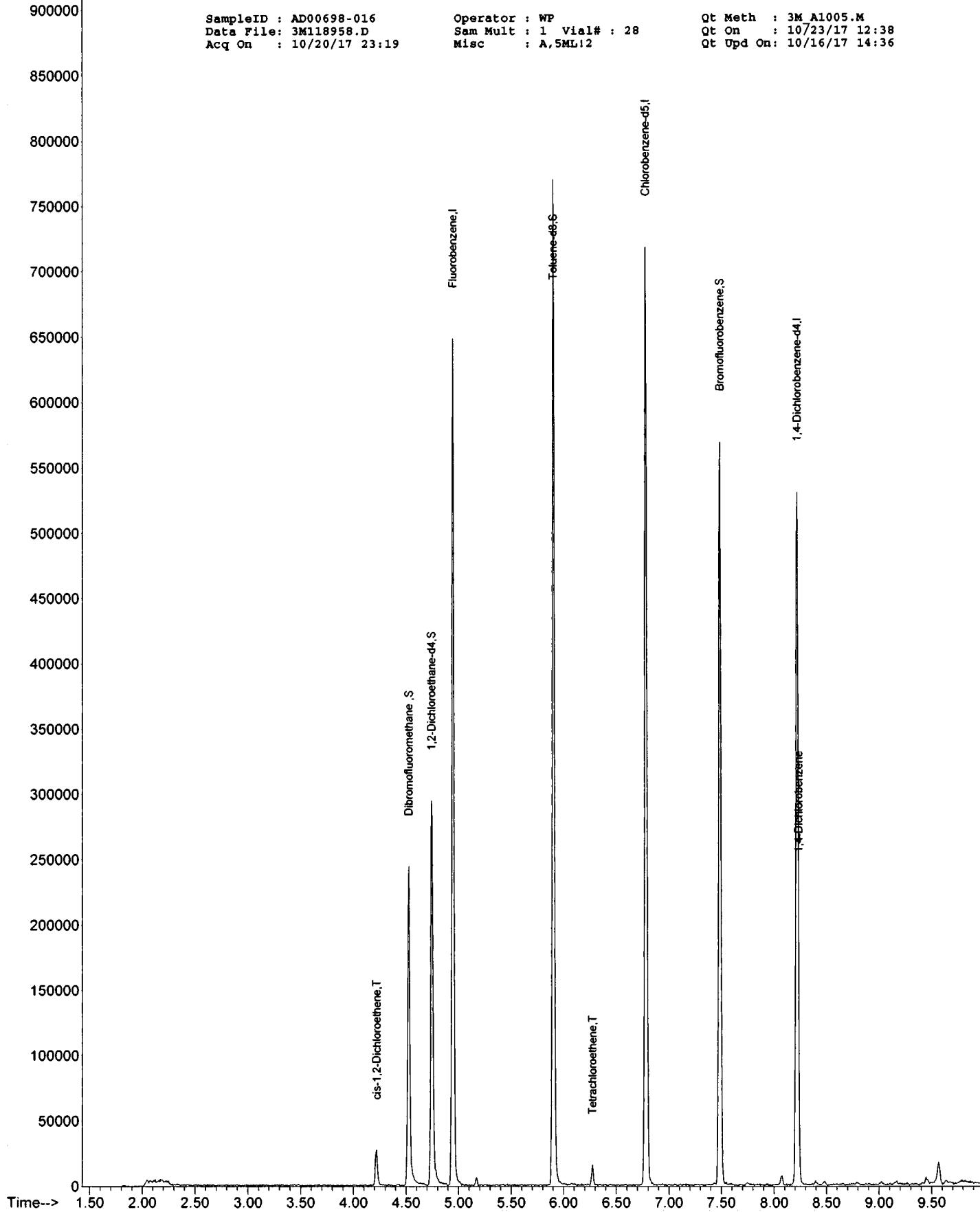
TIC: 3M118958.D\data.ms

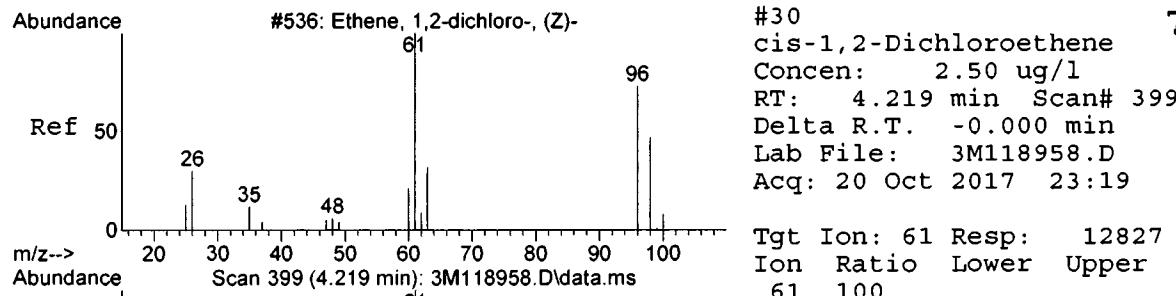
Quant QT Reviewed

SampleID : AD00698-016
 Data File: 3M118958.D
 Acq On : 10/20/17 23:19

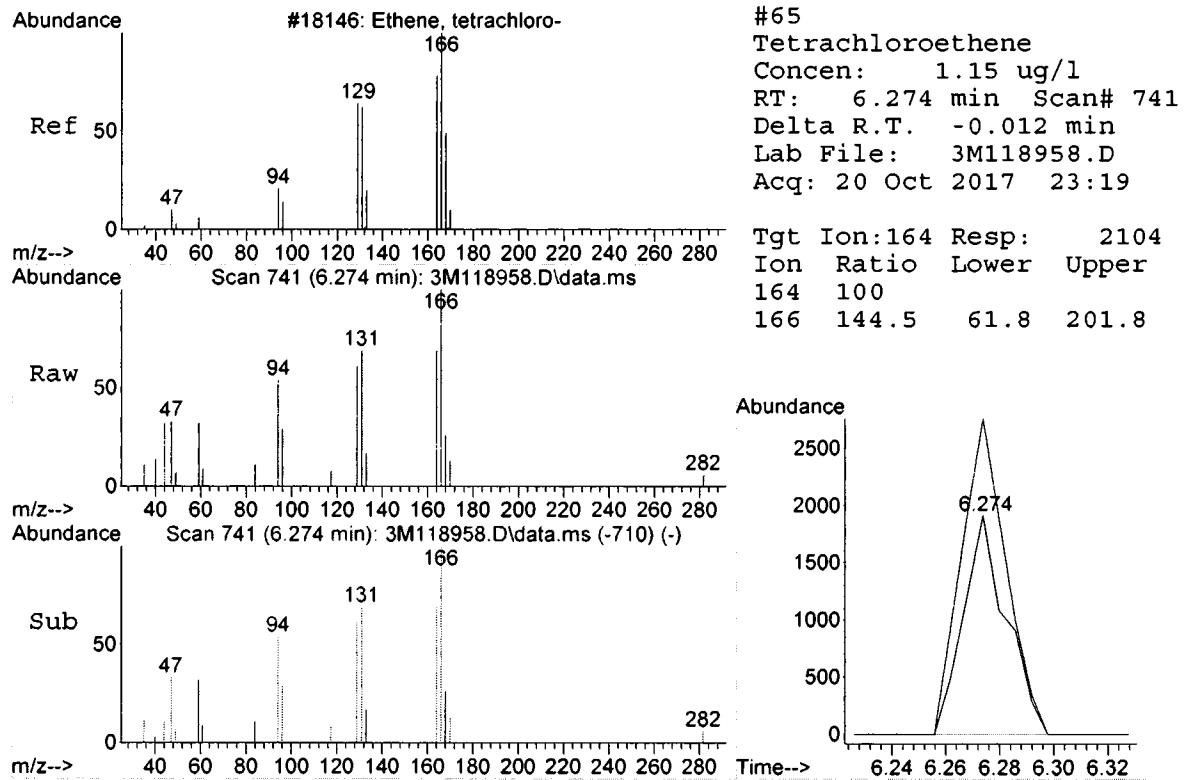
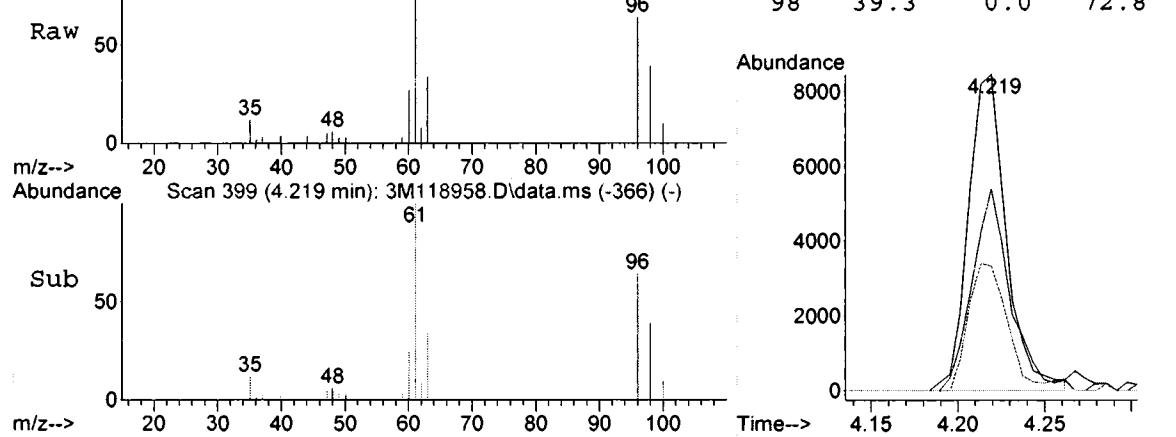
Operator : WP
 Sam Mult : 1 Vial# : 28
 Misc : A,5ML12

Qt Meth : 3M_A1005.M
 Qt On : 10/23/17 12:38
 Qt Upd On: 10/16/17 14:36





#30
cis-1,2-Dichloroethene
Concen: 2.50 ug/l
RT: 4.219 min Scan# 399
Delta R.T. -0.000 min
Lab File: 3M118958.D
Acq: 20 Oct 2017 23:19



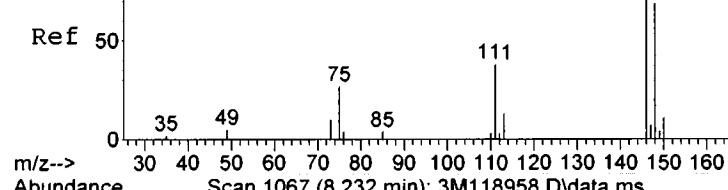
#65
Tetrachloroethene
Concen: 1.15 ug/l
RT: 6.274 min Scan# 741
Delta R.T. -0.012 min
Lab File: 3M118958.D
Acq: 20 Oct 2017 23:19

Tgt Ion: 164 Resp: 2104
Ion Ratio Lower Upper
164 100
166 144.5 61.8 201.8

Abundance

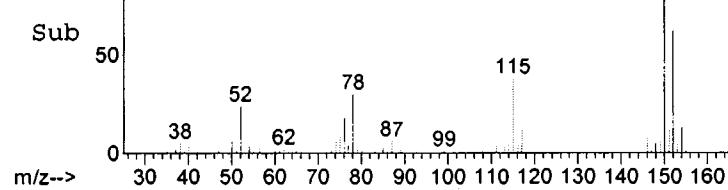
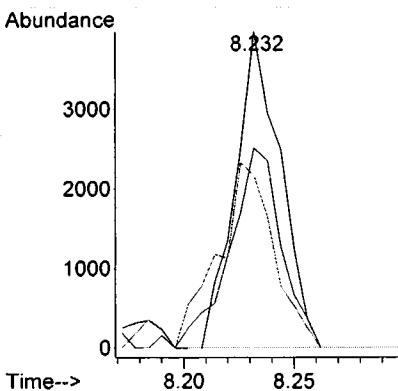
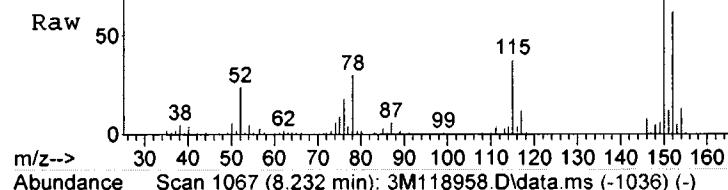
#11154: Benzene, 1,4-dichloro-

7102003 0206



#82
1, 4-Dichlorobenzene
Concen: 1.39 ug/l
RT: 8.232 min Scan# 1067
Delta R.T. -0.012 min
Lab File: 3M118958.D
Acq: 20 Oct 2017 23:19

Tgt	Ion:146	Resp:	5655
Ion	Ratio	Lower	Upper
146	100		
148	73.0	25.4	105.4
111	72.1	10.4	90.4



Form1
ORGANICS VOLATILE REPORT

Sample Number:AD00698-017

Client Id:152140-MW-6S

Data File:3M118959.D

Analysis Date:10/20/17 23:36

Date Rec/Extracted:10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix:Aqueous

Initial Vol:5ml

Final Vol:NA

Dilution:1.00

Solids:0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	22
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

22

ColumnID:(*) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of *a*-Chlordane and *y*-Chlordane.

7102003 0208

SampleID : AD00698-017
 Data File: 3M118959.D
 Acq On : 10/20/17 23:36

Operator : WP
 Sam Mult : 1 Vial# : 29
 Misc : A,5ML!2

Qt Meth : 3M_A1006
 Qt On : 10/23/17 12:38
 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.946	96	333097	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.784	117	274468	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	113776	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.525	111	99543	30.88	ug/l	0.00
Spiked Amount	30.000			Recovery	=	102.93%
39) 1,2-Dichloroethane-d4	4.748	67	79059	31.14	ug/l	0.00
Spiked Amount	30.000			Recovery	=	103.80%
66) Toluene-d8	5.907	98	342508	28.00	ug/l	0.00
Spiked Amount	30.000			Recovery	=	93.33%
76) Bromofluorobenzene	7.487	174	115787	28.83	ug/l	0.00
Spiked Amount	30.000			Recovery	=	96.10%
Target Compounds						
65) Tetrachloroethene	6.279	164	38828	21.9777	ug/l	97

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

Abundance

850000

800000

750000

700000

650000

600000

550000

500000

450000

400000

350000

300000

250000

200000

150000

100000

50000

0

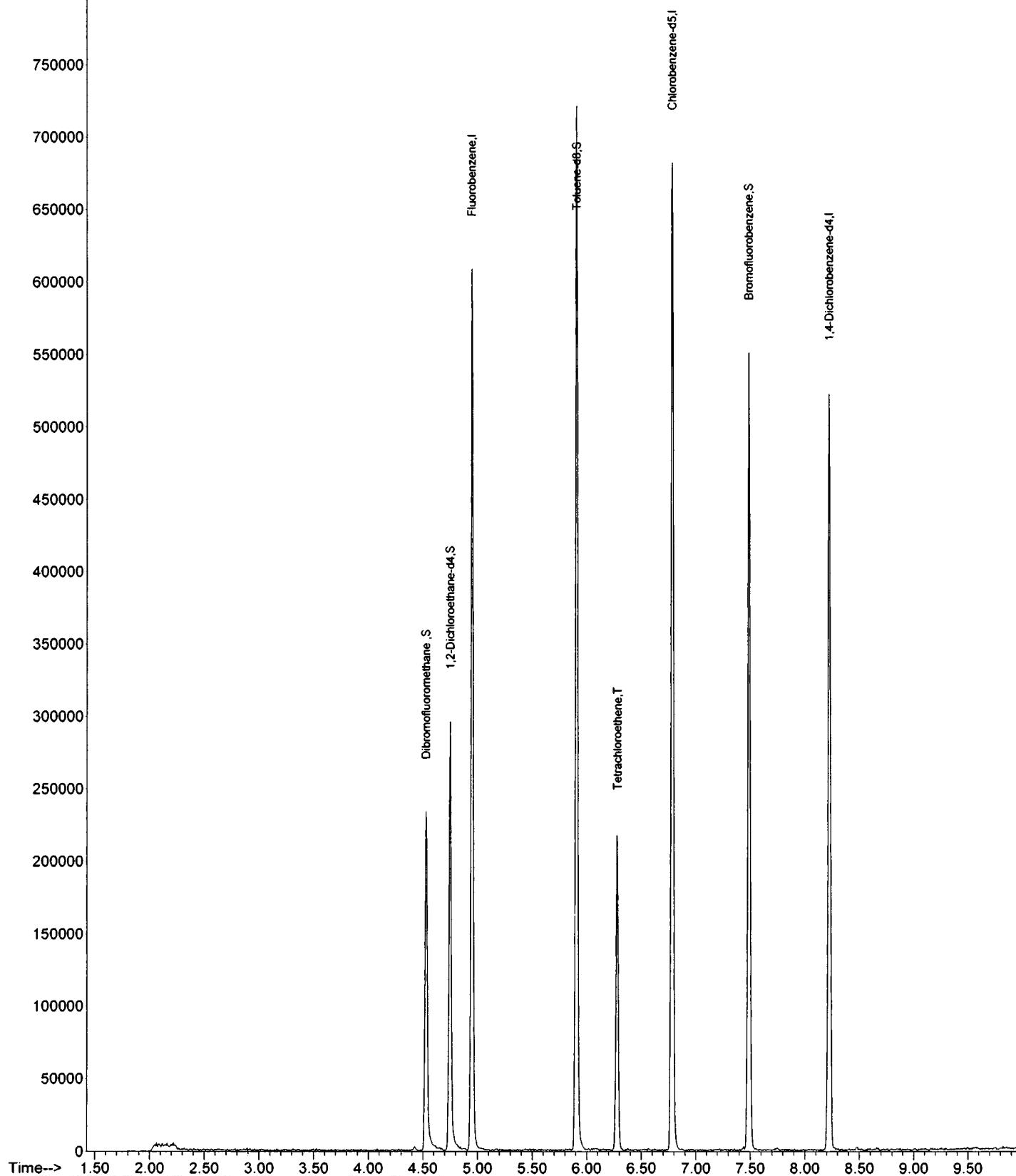
TIC: 3M118959.D\data.ms

Quant QT Reviewed

SampleID : AD00698-017
Data File: 3M118959.D
Acq On : 10/20/17 23:36

Operator : WP
Sam Mult : 1 Vial# : 29
Misc : A,5ML12

Qt Meth : 3M_A1005.M
Qt On : 10/23/17 12:38
Qt Upd On: 10/16/17 14:36



Abundance

#18146: Ethene, tetrachloro-

7102003 0210

m/z-->
Abundance

Scan 742 (6.279 min): 3M118959.D\data.ms

#65

Tetrachloroethene

Concen: 21.98 ug/l

RT: 6.279 min Scan# 742

Delta R.T. -0.007 min

Lab File: 3M118959.D

Acq: 20 Oct 2017 23:36

Tgt Ion:164 Resp: 38828

Ion Ratio Lower Upper

164 100

166 128.6 61.8 201.8

Raw
m/z-->
Abundance

Abundance

30000

20000

10000

0

6.279

Time-->

6.20 6.25 6.30 6.35

Sub
m/z-->
Abundance

Scan 742 (6.279 min): 3M118959.D\data.ms (-710) (-)

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-018

Client Id: 152140-MW-14S

Data File: 3M118960.D

Analysis Date: 10/20/17 23:53

Date Rec/Extracted: 10/20/17-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	1.9
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

1.9

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

7102003 0212

SampleID : AD00698-018
 Data File: 3M118960.D
 Acq On : 10/20/17 23:53

Operator : WP
 Sam Mult : 1 Vial# : 30
 Misc : A,5ML!2

Qt Meth : 3M_A1005.M
 Qt On : 10/23/17 12:38
 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.946	96	320338	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.778	117	273520	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	114784	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.526	111	98630	31.81	ug/l	0.00
Spiked Amount	30.000			Recovery	=	106.03%
39) 1,2-Dichloroethane-d4	4.748	67	76138	31.18	ug/l	0.00
Spiked Amount	30.000			Recovery	=	103.93%
66) Toluene-d8	5.901	98	327197	26.84	ug/l	0.00
Spiked Amount	30.000			Recovery	=	89.47%
76) Bromofluorobenzene	7.487	174	116014	28.63	ug/l	0.00
Spiked Amount	30.000			Recovery	=	95.43%
Target Compounds						
65) Tetrachloroethene	6.274	164	3390	1.9255	ug/l	92

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

Abundance

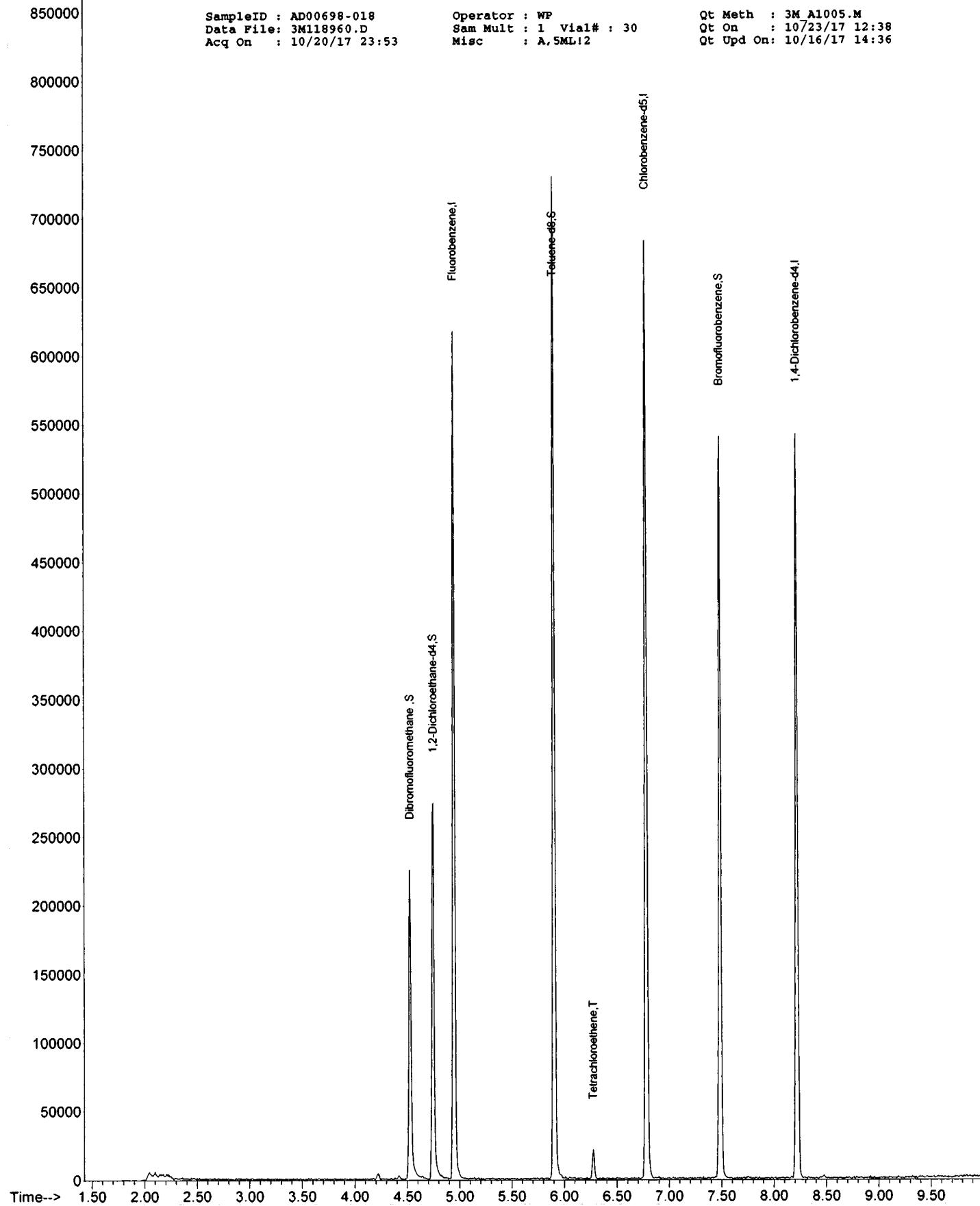
TIC: 3M118960.D\data.ms

Quant QT Reviewed

SampleID : AD00698-018
Data File: 3M118960.D
Acq On : 10/20/17 23:53

Operator : WP
Sam Mult : 1 Vial# : 30
Misc : A.5ML!2

Qt Meth : 3M_A1005.M
Qt On : 10/23/17 12:38
Qt Upd On: 10/16/17 14:36



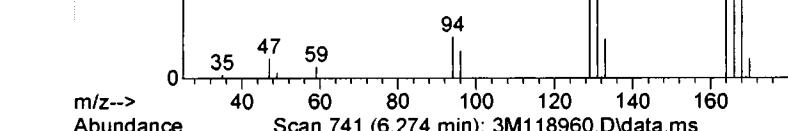
Abundance

#18146: Ethene, tetrachloro-

7102003 0214

Ref 50

m/z-->



#65

Tetrachloroethene

Concen: 1.93 ug/l

RT: 6.274 min Scan# 741

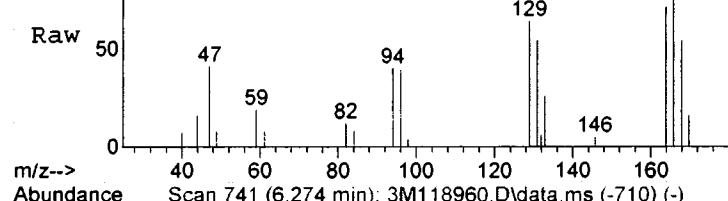
Delta R.T. -0.012 min

Lab File: 3M118960.D

Acq: 20 Oct 2017 23:53

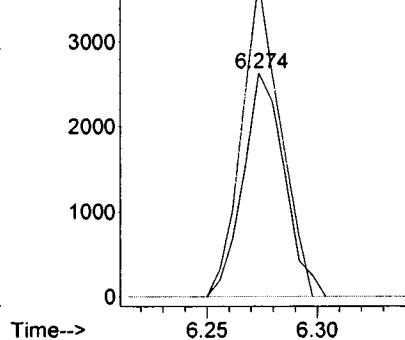
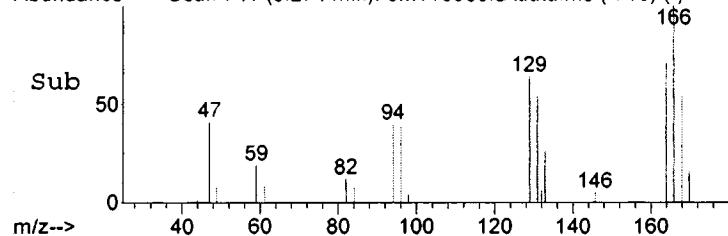
Abundance

m/z-->



Abundance

m/z-->



Form1
ORGANICS VOLATILE REPORT

Sample Number:AD00698-019

Client Id:152140-MW-14D

Data File:3M118962.D

Analysis Date:10/21/17 00:27

Date Rec/Extracted:10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method:EPA 8260C

Matrix:Aqueous

Initial Vol:5ml

Final Vol:NA

Dilution:1.00

Solids:0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	19
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

19

ColumnID:(*) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

7102003 0216

SampleID : AD00698-019
 Data File: 3M118962.D
 Acq On : 10/21/17 00:27

Operator : WP
 Sam Mult : 1 Vial# : 32
 Misc : A,5ML!2

Qt Meth : 3M A1003 M1003
 Qt On : 10/23/17 12:38
 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<hr/>						
Internal Standards						
4) Fluorobenzene	4.946	96	341982	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.778	117	287131	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.219	152	119779	30.00	ug/l	0.00
<hr/>						
System Monitoring Compounds						
37) Dibromofluoromethane	4.525	111	102996	31.12	ug/l	0.00
Spiked Amount	30.000		Recovery	=	103.73%	
39) 1,2-Dichloroethane-d4	4.741	67	79133	30.36	ug/l	-0.01
Spiked Amount	30.000		Recovery	=	101.20%	
66) Toluene-d8	5.901	98	351612	27.48	ug/l	0.00
Spiked Amount	30.000		Recovery	=	91.60%	
76) Bromofluorobenzene	7.487	174	120189	28.43	ug/l	0.00
Spiked Amount	30.000		Recovery	=	94.77%	
<hr/>						
Target Compounds				Qvalue		
65) Tetrachloroethene	6.273	164	35687	19.3090	ug/l	98

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

lk

Abundance

900000

850000

800000

750000

700000

650000

600000

550000

500000

450000

400000

350000

300000

250000

200000

150000

100000

50000

0

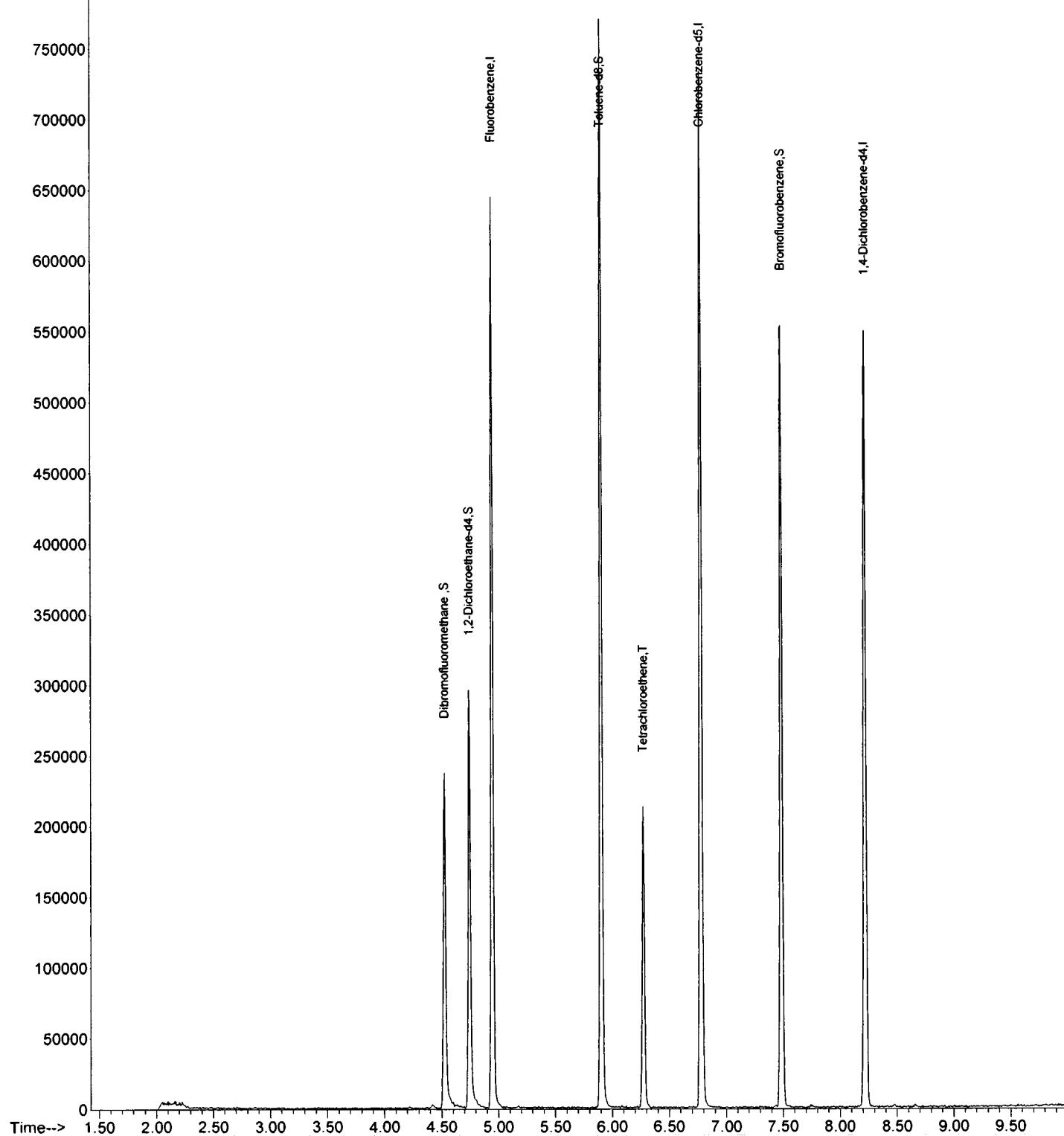
TIC: 3M118962.D\data.ms

Quant QT Reviewed

SampleID : AD00698-019
Data File: 3M118962.D
Acq On : 10/21/17 00:27

Operator : WP
Sam Mult : 1 Vial# : 32
Misc : A,5ML12

Qt Meth : 3M_A1005.M
Qt On : 10/23/17 12:38
Qt Upd On: 10/16/17 14:36



Abundance

#18146: Ethene, tetrachloro-

7102003 0218

Ref 50

m/z--> Abundance

Scan 741 (6.273 min): 3M118962.D\data.ms

166

129

94

47

59

35

#65

Tetrachloroethene

Concen: 19.31 ug/l

RT: 6.273 min Scan# 741

Delta R.T. -0.013 min

Lab File: 3M118962.D

Acq: 21 Oct 2017 00:27

Tgt Ion:164 Resp: 35687

Ion Ratio Lower Upper

164 100

166 134.7 61.8 201.8

Raw 50

m/z--> Abundance

Scan 741 (6.273 min): 3M118962.D\data.ms (-710) (-)

166

129

94

47

59

35

70

82

117

117

129

166

Abundance

30000

20000

10000

0

6.273

Time-->

6.20

6.25

6.30

6.35

Sub 50

m/z--> Abundance

Scan 741 (6.273 min): 3M118962.D\data.ms (-710) (-)

166

129

94

47

59

35

70

82

117

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-020

Client Id: 152140-MW-15S

Data File: 3M118967.D

Analysis Date: 10/21/17 01:51

Date Rec/Extracted: 10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	2.0
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

2

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

7102003 0220

SampleID : AD00698-020
 Data File: 3M118967.D
 Acq On : 10/21/17 01:51

Operator : WP
 Sam Mult : 1 Vial# : 37
 Misc : A,5ML!4

Qt Meth : 3M_A1005.M
 Qt On : 10/23/17 12:39
 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.946	96	347416	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.778	117	289730	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	119531	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.525	111	103915	30.90	ug/l	0.00
Spiked Amount	30.000			Recovery	=	103.00%
39) 1,2-Dichloroethane-d4	4.742	67	81622	30.82	ug/l	-0.01
Spiked Amount	30.000			Recovery	=	102.73%
66) Toluene-d8	5.901	98	355990	27.57	ug/l	0.00
Spiked Amount	30.000			Recovery	=	91.90%
76) Bromofluorobenzene	7.487	174	121856	28.88	ug/l	0.00
Spiked Amount	30.000			Recovery	=	96.27%
Target Compounds						
65) Tetrachloroethene	6.273	164	3653	1.9588	ug/l	73

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

6

Abundance

950000
900000
850000
800000
750000
700000
650000
600000
550000
500000
450000
400000
350000
300000
250000
200000
150000
100000
50000
0

TIC: 3M118967.D\data.ms

Quant QT Reviewed

SampleID : AD00698-020
Data File: 3M118967.D
Acq On : 10/21/17 01:51

Operator : WP
Sam Mult : 1 Vial# : 37
Misc : A,5ML!4

Qt Meth : 3M_A1005.M
Qt On : 10/23/17 12:39
Qt Upd On: 10/16/17 14:36

Time--> 1.50 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 6.00 6.50 7.00 7.50 8.00 8.50 9.00 9.50

Chlorobenzene-d5.I

Tetkene-d8.S

Fluorobenzene.I

Bromofluorobenzene.S

1,4-Dichlorobenzene-d4.I

Dibromofluoromethane.S

1,2-Dichloroethane-d4.S

Tetrachloroethene.T

Abundance

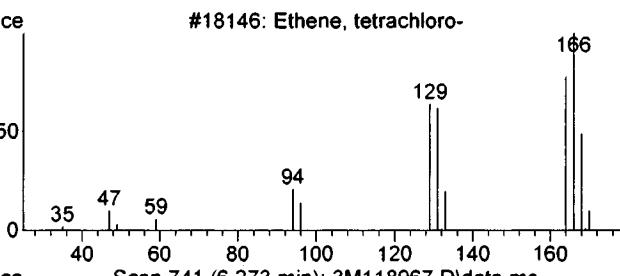
#18146: Ethene, tetrachloro-

7102003 0222

Ref 50

m/z-->

m/z--> Abundance



#65

Tetrachloroethene

Concen: 1.96 ug/l

RT: 6.273 min Scan# 741

Delta R.T. -0.013 min

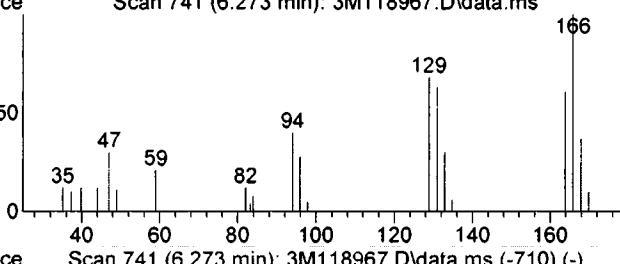
Lab File: 3M118967.D

Acq: 21 Oct 2017 1:51

Raw 50

m/z-->

m/z--> Abundance



Tgt Ion:164 Resp: 3653

Ion Ratio Lower Upper

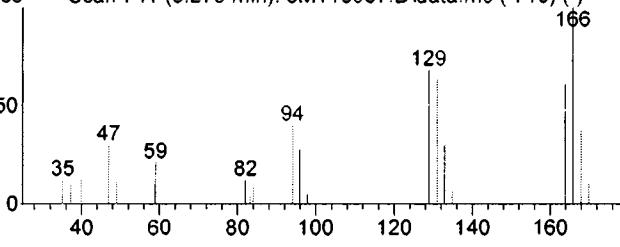
164 100

166 163.8 61.8 201.8

Sub 50

m/z-->

m/z--> Abundance



Abundance

4000

3000

2000

1000

0

Time-->

6.25 6.273 6.30

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-021

Client Id: 152140-MW-15D

Data File: 3M119027.D

Analysis Date: 10/23/17 16:36

Date Rec/Extracted: 10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	6.2
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

6.2

ColumnID:(*) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

7102003 0224

SampleID : AD00698-021
 Data File: 3M119027.D
 Acq On : 10/23/17 16:36

Operator : SG
 Sam Mult : 1 Vial# : 31
 Misc : A,5ML!1

Qt Meth : 3M_A1005.M
 Qt On : 10/23/17 18:23
 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-23-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.953	96	274477	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.785	117	237665	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.226	152	99311	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.532	111	82468	31.04	ug/l	0.00
Spiked Amount	30.000		Recovery	=	103.47%	
39) 1,2-Dichloroethane-d4	4.748	67	66501	31.78	ug/l	0.00
Spiked Amount	30.000		Recovery	=	105.93%	
66) Toluene-d8	5.908	98	286831	27.08	ug/l	0.00
Spiked Amount	30.000		Recovery	=	90.27%	
76) Bromofluorobenzene	7.494	174	98703	28.16	ug/l	0.00
Spiked Amount	30.000		Recovery	=	93.87%	
Target Compounds						
65) Tetrachloroethene	6.280	164	9492	6.2047	ug/l	97

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

h

Abundance

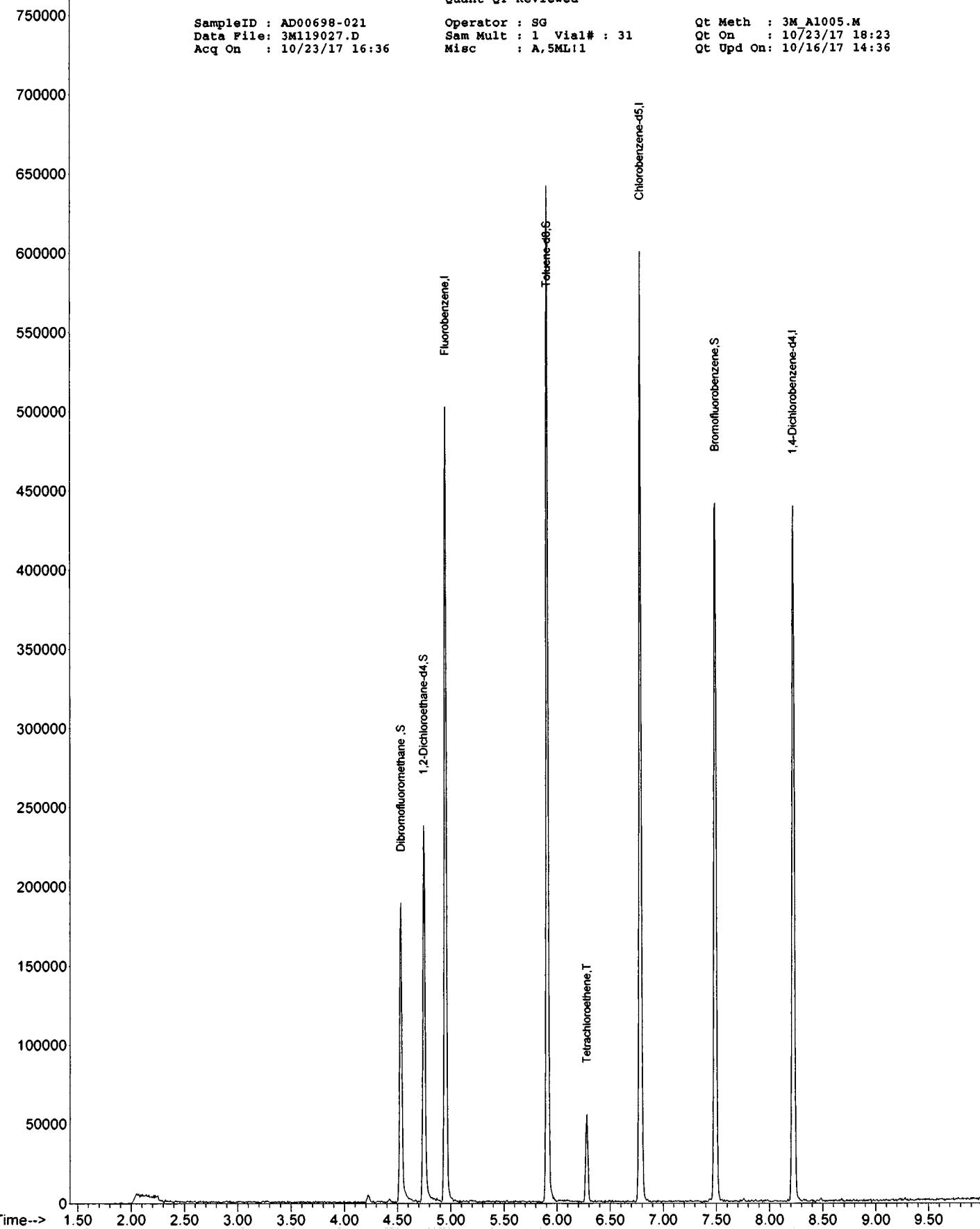
TIC: 3M119027.D\data.ms

Quant QT Reviewed

SampleID : AD00698-021
Data File: 3M119027.D
Acq On : 10/23/17 16:36

Operator : SG
Sam Mult : 1 Vial# : 31
Misc : A,5ML:1

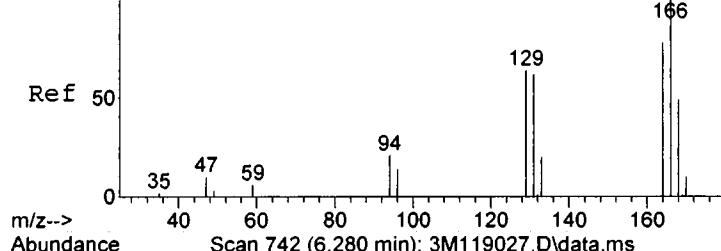
Qt Meth : 3M_A1005.M
Qt On : 10/23/17 18:23
Qt Upd On: 10/16/17 14:36



Abundance

#18146: Ethene, tetrachloro-

7102003 0226



#65

Tetrachloroethene

Concen: 6.20 ug/l

RT: 6.280 min Scan# 742

Delta R.T. -0.006 min

Lab File: 3M119027.D

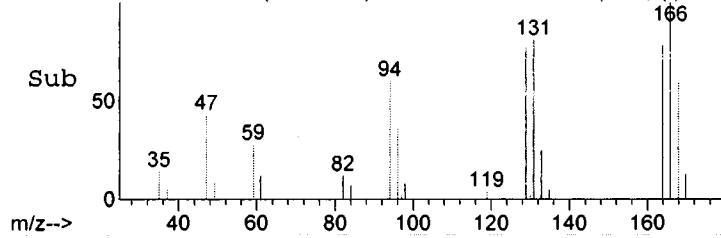
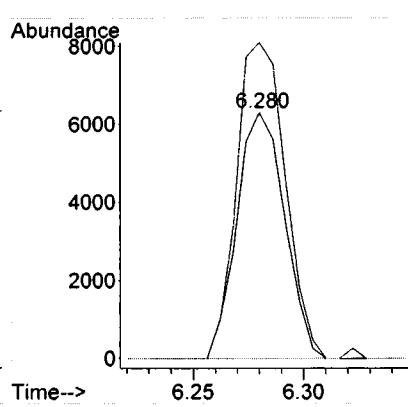
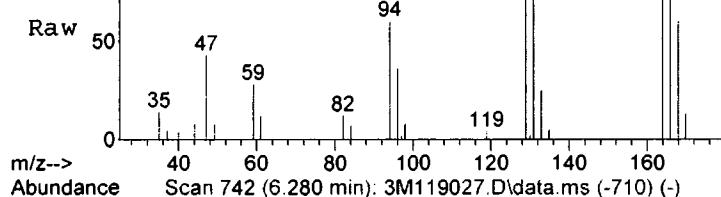
Acq: 23 Oct 2017 16:36

Tgt Ion:164 Resp: 9492

Ion Ratio Lower Upper

164 100

166 128.5 61.8 201.8



Form1
ORGANICS VOLATILE REPORT

Sample Number:AD00698-022(MS:AD00

Client Id:152140-MW-15D MS

Data File:3M118942.D

Analysis Date:10/20/17 18:51

Date Rec/Extracted:10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix:Aqueous

Initial Vol:5ml

Final Vol:NA

Dilution:1.00

Solids:0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	18	75-00-3	Chloroethane	1.0	12
79-34-5	1,1,2,2-Tetrachloroethane	1.0	16	67-66-3	Chloroform	1.0	19
76-13-1	1,1,2-Trichloro-1,2,2-triflu	1.0	19	74-87-3	Chloromethane	1.0	12
79-00-5	1,1,2-Trichloroethane	1.0	16	156-59-2	cis-1,2-Dichloroethene	1.0	19
75-34-3	1,1-Dichloroethane	1.0	19	10061-01-5	cis-1,3-Dichloropropene	1.0	16
75-35-4	1,1-Dichloroethene	1.0	16	110-82-7	Cyclohexane	1.0	20
120-82-1	1,2,4-Trichlorobenzene	1.0	17	124-48-1	Dibromochloromethane	1.0	16
96-12-8	1,2-Dibromo-3-Chloroprop	1.0	13	75-71-8	Dichlorodifluoromethane	1.0	9.3
106-93-4	1,2-Dibromoethane	1.0	16	100-41-4	Ethylbenzene	1.0	19
95-50-1	1,2-Dichlorobenzene	1.0	17	98-82-8	Isopropylbenzene	1.0	18
107-06-2	1,2-Dichloroethane	0.50	19	79601-23-1	m&p-Xylenes	1.0	35
78-87-5	1,2-Dichloropropane	1.0	19	79-20-9	Methyl Acetate	1.0	17
541-73-1	1,3-Dichlorobenzene	1.0	17	108-87-2	Methylcyclohexane	1.0	21
106-46-7	1,4-Dichlorobenzene	1.0	17	75-09-2	Methylene Chloride	1.0	18
78-93-3	2-Butanone	1.0	17	1634-04-4	Methyl-t-butyl ether	0.50	18
591-78-6	2-Hexanone	1.0	18	95-47-6	o-Xylene	1.0	18
108-10-1	4-Methyl-2-Pentanone	1.0	17	100-42-5	Styrene	1.0	18
67-64-1	Acetone	5.0	86	127-18-4	Tetrachloroethene	1.0	23
71-43-2	Benzene	0.50	19	108-88-3	Toluene	1.0	17
75-27-4	Bromodichloromethane	1.0	18	156-60-5	trans-1,2-Dichloroethene	1.0	19
75-25-2	Bromoform	1.0	14	10061-02-6	trans-1,3-Dichloropropene	1.0	15
74-83-9	Bromomethane	1.0	15	79-01-6	Trichloroethene	1.0	20
75-15-0	Carbon Disulfide	1.0	25	75-69-4	Trichlorofluoromethane	1.0	16
56-23-5	Carbon Tetrachloride	1.0	19	75-01-4	Vinyl Chloride	1.0	14
108-90-7	Chlorobenzene	1.0	17	1330-20-7	Xylenes (Total)	1.0	53

Worksheet #: 442070

Total Target Concentration

930

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of *a*-Chlordane and *y*-Chlordane.

SampleID : AD00698-022 (MS:AD00) Operator : WP Qt Meth : 3M_A1005.M
 Data File: 3M118942.D Sam Mult : 1 Vial# : 10 Qt On : 10/20/17 19:40
 Acq On : 10/20/17 18:51 Misc : A,5ML!2 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

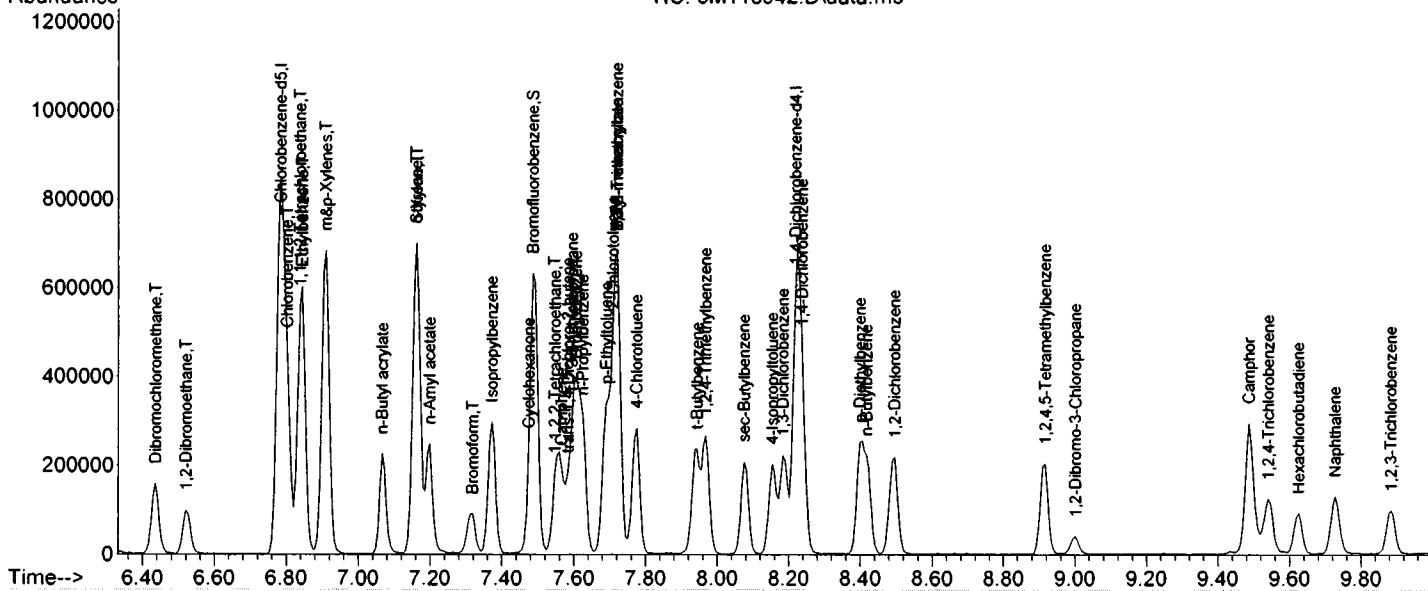
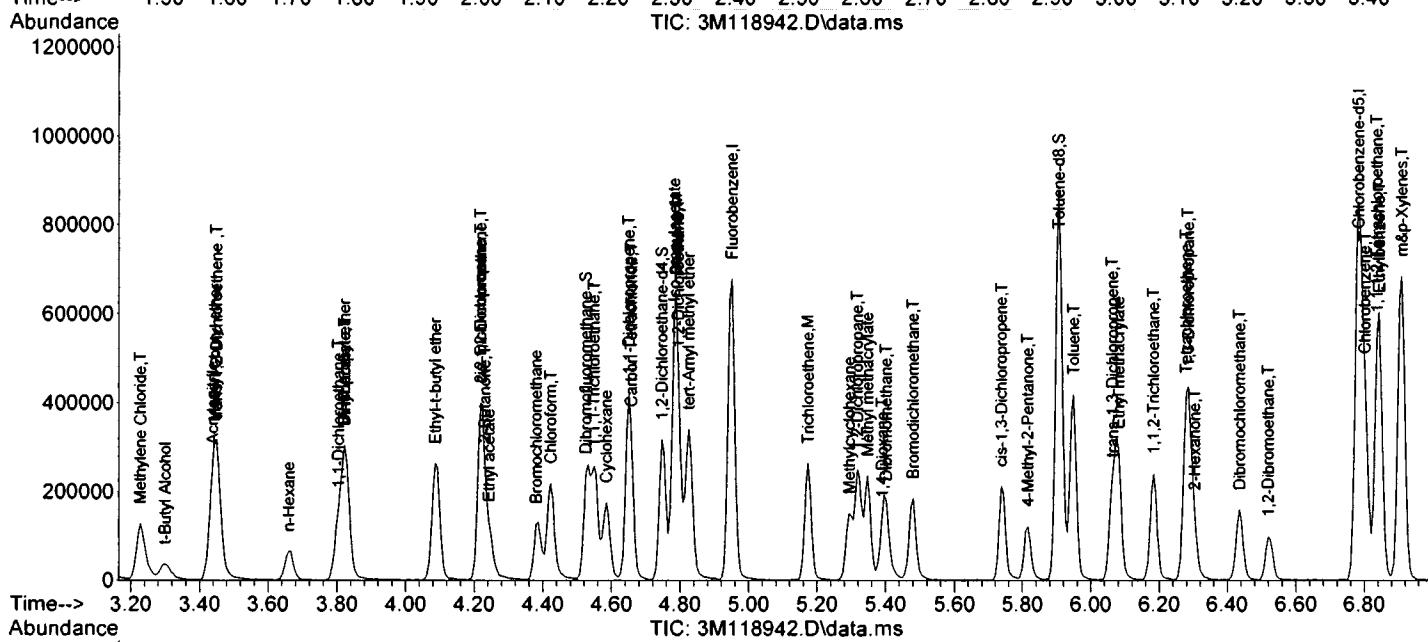
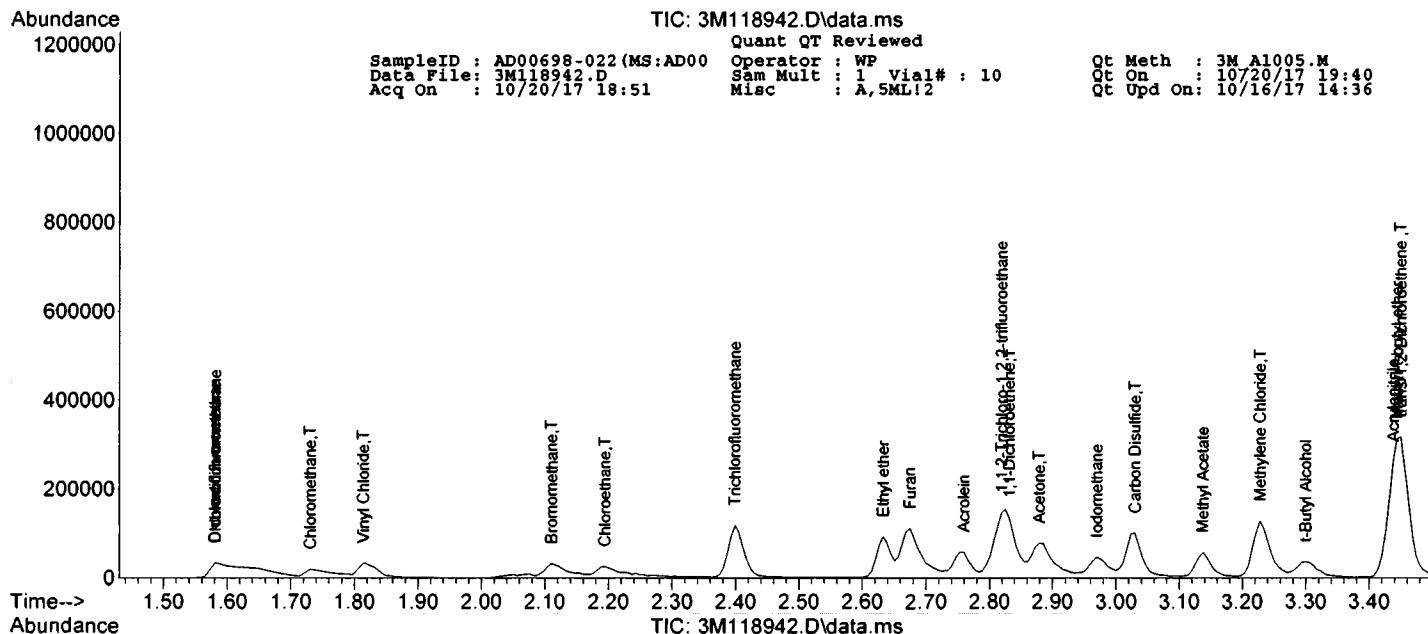
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.952	96	382906	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.784	117	327301	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	134805	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.525	111	114628	30.93	ug/l	0.00
Spiked Amount	30.000			Recovery	=	103.10%
39) 1,2-Dichloroethane-d4	4.747	67	86006	29.47	ug/l	0.00
Spiked Amount	30.000			Recovery	=	98.23%
66) Toluene-d8	5.907	98	398585	27.33	ug/l	0.00
Spiked Amount	30.000			Recovery	=	91.10%
76) Bromofluorobenzene	7.487	174	138652	29.14	ug/l	0.00
Spiked Amount	30.000			Recovery	=	97.13%
Target Compounds						
5) Chlorodifluoromethane	1.581	51	89501	18.7888	ug/l	64
6) Dichlorodifluoromethane	1.581	85	27781	9.3296	ug/l	88
7) Chloromethane	1.731	50	36027	11.8042	ug/l	88
8) Bromomethane	2.110	94	18472	14.9415	ug/l	86
9) Vinyl Chloride	1.814	62	34138	14.1070	ug/l	98
10) Chloroethane	2.195	64	17907	11.8615	ug/l	97
11) Trichlorofluoromethane	2.399	101	80801	16.4902	ug/l	86
12) Ethyl ether	2.633	59	47337	16.8040	ug/l	81
13) Furan	2.675	39	84094	14.1080	ug/l	76
14) 1,1,2-Trichloro-1,2,2-...	2.819	101	37439	19.2162	ug/l	91
15) Methylene Chloride	3.228	84	58462	17.9604	ug/l	81
16) Acrolein	2.759	56	38427	76.0213	ug/l	92
17) Acrylonitrile	3.438	53	19177	17.7905	ug/l	98
18) Iodomethane	2.969	142	53767	22.9887	ug/l	98
19) Acetone	2.879	43	94138	86.2445	ug/l	99
20) Carbon Disulfide	3.030	76	113540	25.3162	ug/l	100
21) t-Butyl Alcohol	3.300	59	24446	73.7730	ug/l	82
22) n-Hexane	3.660	57	24346	19.0952	ug/l	87
23) Di-isopropyl-ether	3.822	45	160606	20.3534	ug/l	95
24) 1,1-Dichloroethene	2.831	61	67468	15.5421	ug/l	98
25) Methyl Acetate	3.138	43	61474	16.9422	ug/l	100
26) Methyl-t-butyl ether	3.444	73	143130	18.4241	ug/l	65
27) 1,1-Dichloroethane	3.804	63	95366	18.6902	ug/l	95
28) trans-1,2-Dichloroethene	3.450	96	52396	18.6806	ug/l	93
29) Ethyl-t-butyl ether	4.087	59	175761	19.3148	ug/l	95
30) cis-1,2-Dichloroethene	4.219	61	111019	19.4385	ug/l	86
31) Bromochloromethane	4.381	49	44527	17.4959	ug/l	94
32) 2,2-Dichloropropane	4.219	77	79189	18.4796	ug/l	95
33) Ethyl acetate	4.243	43	64820m	21.5845	ug/l	
34) 1,4-Dioxane	5.390	88	36923	990.1470	ug/l	88
35) 1,1-Dichloropropene	4.651	75	77978	20.0619	ug/l	96
36) Chloroform	4.423	83	118475	18.6709	ug/l	89
38) Cyclohexane	4.585	56	50241	20.4668	ug/l	96
40) 1,2-Dichloroethane	4.796	62	119255	19.4439	ug/l	92
41) 2-Butanone	4.231	43	26476m	17.3504	ug/l	
42) 1,1,1-Trichloroethane	4.549	97	94262	17.7064	ug/l	97
43) Carbon Tetrachloride	4.657	117	71995	18.7020	ug/l	95
44) Vinyl Acetate	3.822	43	115116	20.6998	ug/l	100
45) Bromodichloromethane	5.480	83	85618	17.8659	ug/l	96
46) Methylcyclohexane	5.294	83	36688	20.5277	ug/l	98
47) Dibromomethane	5.402	174	44492	18.7102	ug/l	90
48) 1,2-Dichloropropane	5.318	63	52827	19.4600	ug/l	96
49) Trichloroethene	5.174	130	58065	19.9426	ug/l	86
50) Benzene	4.790	78	197678	18.9138	ug/l	100
51) tert-Amyl methyl ether	4.826	73	144641	19.0529	ug/l	85
53) Iso-propylacetate	4.784	43	115298	16.5204	ug/l	92
54) Methyl methacrylate	5.348	41	69337	16.9460	ug/l	68
55) Dibromochloromethane	6.435	129	63057	15.7456	ug/l	92
57) cis-1,3-Dichloropropene	5.739	75	80290	15.9268	ug/l	96
58) trans-1,3-Dichloropropene	6.063	75	77994	15.3831	ug/l	99
59) Ethyl methacrylate	6.081	41	69580	16.9511	ug/l	53
60) 1,1,2-Trichloroethane	6.183	97	53747	16.2289	ug/l	96
61) 1,2-Dibromoethane	6.520	107	55975	15.9656	ug/l	89
62) 1,3-Dichloropropane	6.285	76	95154	16.1815	ug/l	97
63) 4-Methyl-2-Pentanone	5.817	43	58592	16.6500	ug/l	78
64) 2-Hexanone	6.303	43	44173	17.9703	ug/l	87
65) Tetrachloroethene	6.279	164	48157	22.8582	ug/l	92
67) Toluene	5.949	92	121264	16.8435	ug/l	100
68) 1,1,1,2-Tetrachloroethane	6.838	133	52637	17.4884	ug/l	76

SampleID : AD00698-022 (MS:AD00) Operator : WP Qt Meth : 3M A1005.M
 Data File: 3M118942.D Sam Mult : 1 Vial# : 10 Qt On : 10/20/17 19:40
 Acq On : 10/20/17 18:51 Misc : A,5ML!2 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
69)	Chlorobenzene	6.802	112	133164	17.0734	ug/l	94
71)	n-Butyl acrylate	7.066	55	109630	14.6717	ug/l	95
72)	n-Amyl acetate	7.198	43	100569	17.3203	ug/l	79
73)	Bromoform	7.318	173	35576	14.0802	ug/l	89
74)	Ethylbenzene	6.844	106	44336	18.6869	ug/l	88
75)	1,1,2,2-Tetrachloroethane	7.547	83	61273	16.3305	ug/l	89
77)	Styrene	7.162	104	134481	18.2016	ug/l	85
78)	m&p-Xylenes	6.910	106	139725	34.9794	ug/l	96
79)	o-Xylene	7.162	106	71855	18.0777	ug/l	90
80)	trans-1,4-Dichloro-2-b...	7.583	53	28218	14.4187	ug/l	89
81)	1,3-Dichlorobenzene	8.183	146	77738	17.2429	ug/l	95
82)	1,4-Dichlorobenzene	8.238	146	80535	17.0182	ug/l	98
83)	1,2-Dichlorobenzene	8.496	146	76861	17.3453	ug/l	95
84)	Isopropylbenzene	7.373	105	153105	18.4821	ug/l	97
85)	Cyclohexanone	7.475	55	11443	73.1658	ug/l	83
86)	Camphene	7.565	93	30361	11.0805	ug/l	92
87)	1,2,3-Trichloropropane	7.595	75	81527	15.6918	ug/l	98
88)	2-Chlorotoluene	7.709	91	98939	18.6589	ug/l	96
89)	p-Ethyltoluene	7.691	105	150361	16.9734	ug/l	78
90)	4-Chlorotoluene	7.775	91	103920	18.1498	ug/l	96
91)	n-Propylbenzene	7.625	91	163541	18.7823	ug/l	97
92)	Bromobenzene	7.607	77	140495	16.9998	ug/l	89
93)	1,3,5-Trimethylbenzene	7.721	105	104344	17.9034	ug/l	88
94)	Butyl methacrylate	7.721	41	78960	16.2658	ug/l	99
95)	t-Butylbenzene	7.943	119	103143	19.1400	ug/l	94
96)	1,2,4-Trimethylbenzene	7.967	105	130743	18.7042	ug/l	95
97)	sec-Butylbenzene	8.075	105	117208	18.9869	ug/l	99
98)	4-Isopropyltoluene	8.153	119	97481	18.9719	ug/l	99
99)	n-Butylbenzene	8.418	91	115599	18.3841	ug/l	96
100)	p-Diethylbenzene	8.400	119	64753	18.8215	ug/l	93
101)	1,2,4,5-Tetramethylben...	8.916	119	101322	20.0912	ug/l	97
102)	1,2-Dibromo-3-Chloropr...	9.000	157	9072	13.0561	ug/l	99
103)	Camphor	9.487	95	68928	160.8176	ug/l	95
104)	Hexachlorobutadiene	9.625	225	17851	15.7846	ug/l	98
105)	1,2,4-Trichlorobenzene	9.541	180	32421	17.1904	ug/l	96
106)	1,2,3-Trichlorobenzene	9.883	180	29096	17.8455	ug/l	96
107)	Naphthalene	9.727	128	93984	18.6088	ug/l	100

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



Form1
ORGANICS VOLATILE REPORT

Sample Number:AD00698-023(MSD:AD)

Method: EPA 8260C

Client Id: 152140-MW-15D MSD

Matrix: Aqueous

Data File: 3M118943.D

Initial Vol: 5ml

Analysis Date: 10/20/17 19:08

Final Vol: NA

Date Rec/Extracted: 10/20/17-NA

Dilution: 1.00

Column:DB-624 25M 0.200mm ID 1.12um film

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	19	75-00-3	Chloroethane	1.0	15
79-34-5	1,1,2,2-Tetrachloroethane	1.0	16	67-66-3	Chloroform	1.0	19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	20	74-87-3	Chloromethane	1.0	13
79-00-5	1,1,2-Trichloroethane	1.0	17	156-59-2	cis-1,2-Dichloroethene	1.0	20
75-34-3	1,1-Dichloroethane	1.0	19	10061-01-5	cis-1,3-Dichloropropene	1.0	17
75-35-4	1,1-Dichloroethene	1.0	18	110-82-7	Cyclohexane	1.0	21
120-82-1	1,2,4-Trichlorobenzene	1.0	17	124-48-1	Dibromochloromethane	1.0	16
96-12-8	1,2-Dibromo-3-Chloropropene	1.0	15	75-71-8	Dichlorodifluoromethane	1.0	9.8
106-93-4	1,2-Dibromoethane	1.0	17	100-41-4	Ethylbenzene	1.0	18
95-50-1	1,2-Dichlorobenzene	1.0	17	98-82-8	Isopropylbenzene	1.0	18
107-06-2	1,2-Dichloroethane	0.50	20	79601-23-1	m&p-Xylenes	1.0	36
78-87-5	1,2-Dichloropropane	1.0	20	79-20-9	Methyl Acetate	1.0	19
541-73-1	1,3-Dichlorobenzene	1.0	17	108-87-2	Methylcyclohexane	1.0	21
106-46-7	1,4-Dichlorobenzene	1.0	17	75-09-2	Methylene Chloride	1.0	18
78-93-3	2-Butanone	1.0	21	1634-04-4	Methyl-t-butyl ether	0.50	19
591-78-6	2-Hexanone	1.0	19	95-47-6	o-Xylene	1.0	18
108-10-1	4-Methyl-2-Pentanone	1.0	18	100-42-5	Styrene	1.0	18
67-64-1	Acetone	5.0	93	127-18-4	Tetrachloroethene	1.0	24
71-43-2	Benzene	0.50	20	108-88-3	Toluene	1.0	18
75-27-4	Bromodichloromethane	1.0	18	156-60-5	trans-1,2-Dichloroethene	1.0	20
75-25-2	Bromoform	1.0	15	10061-02-6	trans-1,3-Dichloropropene	1.0	16
74-83-9	Bromomethane	1.0	14	79-01-6	Trichloroethene	1.0	21
75-15-0	Carbon Disulfide	1.0	26	75-69-4	Trichlorofluoromethane	1.0	17
56-23-5	Carbon Tetrachloride	1.0	20	75-01-4	Vinyl Chloride	1.0	14
108-90-7	Chlorobenzene	1.0	18	1330-20-7	Xylenes (Total)	1.0	54

Worksheet #: 442070

Total Target Concentration

980

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

R - Retention Time Out

B - Indicates the analyte was found in the blank as well as in the sample.

J - Indicates an estimated value when a compound is detected at less than the

E - Indicates the analyte concentration exceeds the calibration range of the

specified detection limit.

instrument.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of *a*-Chlordane and *y*-Chlordane.

7102003 0232

SampleID : AD00698-023 (MSD:AD0) Operator : WP Qt Meth : 3M_A1005
 Data File: 3M118943.D Sam Mult : 1 Vial# : 11 Qt On : 10/20/17 19:40
 Acq On : 10/20/17 19:08 Misc : A.5ML!2 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

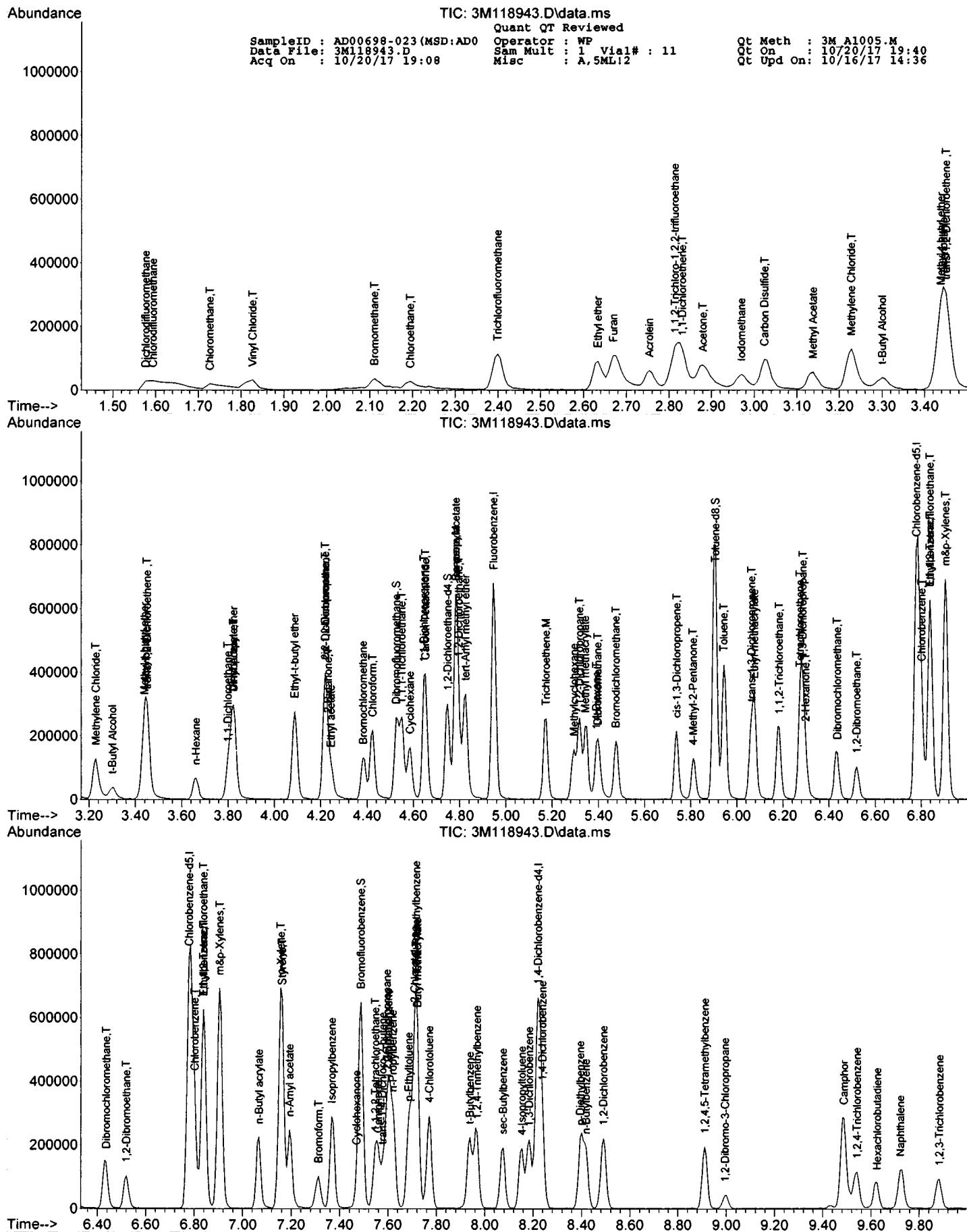
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.946	96	374017	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.778	117	312059	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	134999	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.526	111	108688	30.02	ug/l	0.00
Spiked Amount	30.000		Recovery	=	100.07%	
39) 1,2-Dichloroethane-d4	4.748	67	83676	29.35	ug/l	0.00
Spiked Amount	30.000		Recovery	=	97.83%	
66) Toluene-d8	5.907	98	388915	27.97	ug/l	0.00
Spiked Amount	30.000		Recovery	=	93.23%	
76) Bromofluorobenzene	7.487	174	136409	28.62	ug/l	0.00
Spiked Amount	30.000		Recovery	=	95.40%	
Target Compounds						
5) Chlorodifluoromethane	1.593	51	91058	19.5700	ug/l	63
6) Dichlorodifluoromethane	1.577	85	28498	9.7978	ug/l	83
7) Chloromethane	1.727	50	38974	13.0732	ug/l	79
8) Bromomethane	2.111	94	17176	14.2233	ug/l	57
9) Vinyl Chloride	1.827	62	33014	13.9668	ug/l	87
10) Chloroethane	2.195	64	21965	14.8953	ug/l	97
11) Trichlorofluoromethane	2.399	101	79885	16.6907	ug/l	92
12) Ethyl ether	2.634	59	47563	17.2855	ug/l	84
13) Furan	2.670	39	86585	14.8712	ug/l	79
14) 1,1,2-Trichloro-1,2,2-...	2.814	101	39003	20.4948	ug/l	89
15) Methylene Chloride	3.228	84	55874	17.5733	ug/l	82
16) Acrolein	2.754	56	39478	79.9567	ug/l	92
17) Acrylonitrile	3.445	53	19377	18.4034	ug/l	83
18) Iodomethane	2.970	142	54894	24.0284	ug/l	98
19) Acetone	2.880	43	99485	93.3093	ug/l	89
20) Carbon Disulfide	3.024	76	114898	26.2278	ug/l	100
21) t-Butyl Alcohol	3.300	59	23925	73.9167	ug/l	85
22) n-Hexane	3.661	57	24593	19.7463	ug/l	83
23) Di-isopropyl-ether	3.823	45	159692	20.7185	ug/l	91
24) 1,1-Dichloroethene	2.832	61	76081	17.9428	ug/l	96
25) Methyl Acetate	3.138	43	68123	19.2208	ug/l	100
26) Methyl-t-butyl ether	3.439	73	144165	18.9984	ug/l	65
27) 1,1-Dichloroethane	3.799	63	94034	18.8672	ug/l	94
28) trans-1,2-Dichloroethene	3.451	96	53969	19.6988	ug/l	90
29) Ethyl-t-butyl ether	4.087	59	175091	19.6985	ug/l	96
30) cis-1,2-Dichloroethene	4.219	61	109579	19.6424	ug/l	83
31) Bromochloromethane	4.382	49	43017	17.3043	ug/l	92
32) 2,2-Dichloropropane	4.219	77	74763	17.8614	ug/l	94
33) Ethyl acetate	4.243	43	63109m	21.5142	ug/l	
34) 1,4-Dioxane	5.391	88	39946	1096.6721	ug/l	94
35) 1,1-Dichloropropene	4.646	75	79042	20.8189	ug/l	97
36) Chloroform	4.424	83	117915	19.0242	ug/l	86
38) Cyclohexane	4.586	56	49895	20.8089	ug/l	99
40) 1,2-Dichloroethane	4.796	62	122052	20.3851	ug/l	92
41) 2-Butanone	4.231	43	31514m	21.1427	ug/l	
42) 1,1,1-Trichloroethane	4.550	97	97059	18.6651	ug/l	97
43) Carbon Tetrachloride	4.652	117	73555	19.5613	ug/l	93
44) Vinyl Acetate	3.823	43	114058	20.9970	ug/l	100
45) Bromodichloromethane	5.475	83	85875	18.3454	ug/l	96
46) Methylcyclohexane	5.295	83	37255	21.3403	ug/l	100
47) Dibromomethane	5.397	174	44246	19.0490	ug/l	91
48) 1,2-Dichloropropane	5.319	63	52854	19.9327	ug/l	95
49) Trichloroethene	5.175	130	58505	20.5712	ug/l	88
50) Benzene	4.784	78	201520	19.7396	ug/l	100
51) tert-Amyl methyl ether	4.826	73	142038	19.1547	ug/l	86
53) Iso-propylacetate	4.784	43	122949	18.4771	ug/l	93
54) Methyl methacrylate	5.343	41	71830	18.4127	ug/l	72
55) Dibromochloromethane	6.436	129	62351	16.3297	ug/l	95
57) cis-1,3-Dichloropropene	5.739	75	80282	16.7030	ug/l	93
58) trans-1,3-Dichloropropene	6.064	75	77328	15.9967	ug/l	99
59) Ethyl methacrylate	6.076	41	68583m	17.5243	ug/l	
60) 1,1,2-Trichloroethane	6.184	97	53469	16.9336	ug/l	93
61) 1,2-Dibromoethane	6.520	107	57766	17.2813	ug/l	97
62) 1,3-Dichloropropane	6.286	76	100241	17.8792	ug/l	98
63) 4-Methyl-2-Pentanone	5.811	43	61385	18.2957	ug/l	84
64) 2-Hexanone	6.298	43	45566	19.4424	ug/l	71
65) Tetrachloroethene	6.274	164	48076	23.9343	ug/l	94
67) Toluene	5.943	92	124736	18.1720	ug/l	100
68) 1,1,1,2-Tetrachloroethane	6.838	133	52448	18.2767	ug/l	76

SampleID : AD00698-023 (MSD:AD0) Operator : WP Qt Meth : 3M_A1005.M
 Data File: 3M118943.D Sam Mult : 1 Vial# : 11 Qt On : 10/20/17 19:40
 Acq On : 10/20/17 19:08 Misc : A,5ML!2 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
69) Chlorobenzene	6.802	112	134356	18.0676	ug/l	98
71) n-Butyl acrylate	7.067	55	116097	15.5149	ug/l	94
72) n-Amyl acetate	7.193	43	97558	16.7776	ug/l	76
73) Bromoform	7.313	173	37064	14.6481	ug/l	94
74) Ethylbenzene	6.838	106	42696	17.9698	ug/l	94
75) 1,1,2,2-Tetrachloroethane	7.547	83	61777	16.4411	ug/l	91
77) Styrene	7.163	104	134592	18.1904	ug/l	87
78) m&p-Xylenes	6.905	106	142136	35.5319	ug/l	95
79) o-Xylene	7.157	106	72251	18.1512	ug/l	95
80) trans-1,4-Dichloro-2-b...	7.577	53	28446	14.5143	ug/l	89
81) 1,3-Dichlorobenzene	8.184	146	75719	16.7710	ug/l	94
82) 1,4-Dichlorobenzene	8.238	146	79912	16.8623	ug/l	95
83) 1,2-Dichlorobenzene	8.490	146	75988	17.1236	ug/l	96
84) Isopropylbenzene	7.367	105	146537	17.6639	ug/l	96
85) Cyclohexanone	7.469	55	12352	78.8238	ug/l	82
86) Camphene	7.559	93	22117	8.0602	ug/l	93
87) 1,2,3-Trichloropropane	7.595	75	82887	15.9306	ug/l	99
88) 2-Chlorotoluene	7.710	91	94384	17.7743	ug/l	99
89) p-Ethyltoluene	7.685	105	149635	16.8672	ug/l	81
90) 4-Chlorotoluene	7.770	91	106192	18.5200	ug/l	95
91) n-Propylbenzene	7.619	91	156960	18.0006	ug/l	100
92) Bromobenzene	7.601	77	140940	17.0291	ug/l	89
93) 1,3,5-Trimethylbenzene	7.716	105	106059	18.1715	ug/l	95
94) Butyl methacrylate	7.722	41	82906	17.0541	ug/l	96
95) t-Butylbenzene	7.938	119	93909	17.4014	ug/l	95
96) 1,2,4-Trimethylbenzene	7.968	105	123774	17.6818	ug/l	95
97) sec-Butylbenzene	8.076	105	107249	17.3486	ug/l	99
98) 4-Isopropyltoluene	8.154	119	90178	17.5253	ug/l	98
99) n-Butylbenzene	8.418	91	107811	17.1209	ug/l	93
100) p-Diethylbenzene	8.394	119	58979	17.1185	ug/l	94
101) 1,2,4,5-Tetramethylben...	8.911	119	92522	18.3198	ug/l	95
102) 1,2-Dibromo-3-Chloropr...	8.995	157	10279	14.7586	ug/l	85
103) Camphor	9.488	95	70985	165.3775	ug/l	96
104) Hexachlorobutadiene	9.626	225	15572	13.7385	ug/l	90
105) 1,2,4-Trichlorobenzene	9.542	180	31388	16.6187	ug/l	97
106) 1,2,3-Trichlorobenzene	9.884	180	28647	17.5449	ug/l	95
107) Naphthalene	9.722	128	91889	18.1679	ug/l	100

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



Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-024

Client Id: 152140-DDC-2-PS

Data File: 3M118968.D

Analysis Date: 10/21/17 02:08

Date Rec/Extracted: 10/20/17-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

0

ColumnID: (*) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

SampleID : AD00698-024
 Data File: 3M118968.D
 Acq On : 10/21/17 02:08

Operator : WP
 Sam Mult : 1 Vial# : 38
 Misc : A,SML!2

Qt Meth : 3M_A1005.M
 Qt On : 10/23/17 12:39
 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.946	96	363400	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.779	117	299271	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	123868	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.520	111	108163	30.75	ug/l	-0.01
Spiked Amount	30.000			Recovery	=	102.50%
39) 1,2-Dichloroethane-d4	4.742	67	85594	30.90	ug/l	-0.01
Spiked Amount	30.000			Recovery	=	103.00%
66) Toluene-d8	5.902	98	362616	27.19	ug/l	0.00
Spiked Amount	30.000			Recovery	=	90.63%
76) Bromofluorobenzene	7.481	174	128305	29.34	ug/l	-0.01
Spiked Amount	30.000			Recovery	=	97.80%

Target Compounds	Qvalue
------------------	--------

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

Abundance

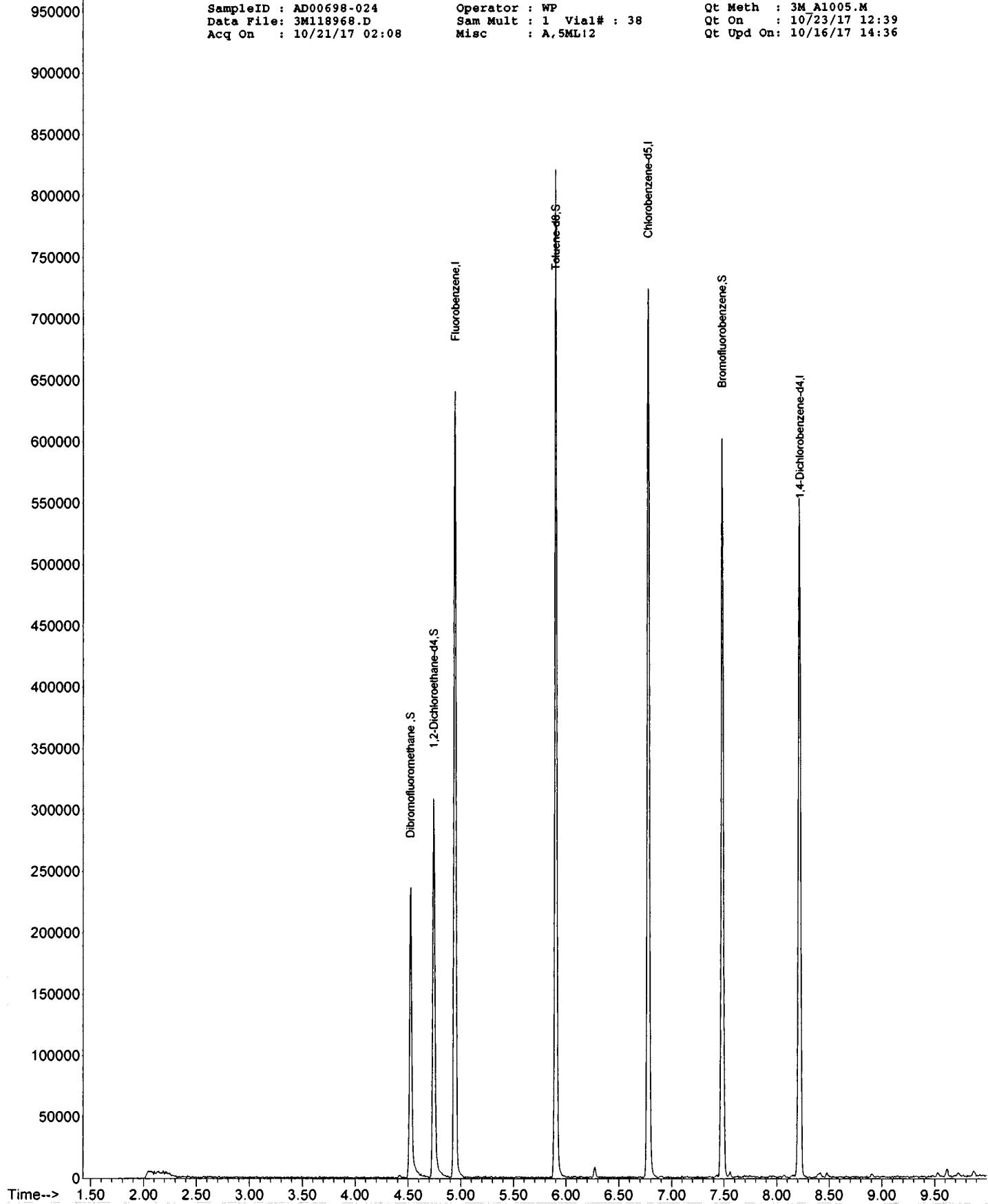
TIC: 3M118968.D\data.ms

Quant QT Reviewed

SampleID : AD00698-024
Data File: 3M118968.D
Acq On : 10/21/17 02:08

Operator : WP
Sam Mult : 1 Vial# : 38
Misc : A,5ML12

Qt Meth : 3M_A1005.M
Qt On : 10/23/17 12:39
Qt Upd On: 10/16/17 14:36



Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-025

Client Id: 152140-DDC-2-PD

Data File: 3M118969.D

Analysis Date: 10/21/17 02:25

Date Rec/Extracted: 10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	3.6
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

3.6

ColumnID:(*) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

7102003 0239

SampleID : AD00698-025
 Data File: 3M118969.D
 Acq On : 10/21/17 02:25

Operator : WP
 Sam Mult : 1 Vial# : 39
 Misc : A,5ML!2

Qt Meth : 3M_A1005.M
 Qt On : 10/23/17 12:39
 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.945	96	338100	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.777	117	279946	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.219	152	117834	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.525	111	101794	31.11	ug/l	0.00
Spiked Amount 30.000			Recovery	=	103.70%	
39) 1,2-Dichloroethane-d4	4.741	67	80288	31.15	ug/l	-0.01
Spiked Amount 30.000			Recovery	=	103.83%	
66) Toluene-d8	5.900	98	340720	27.31	ug/l	0.00
Spiked Amount 30.000			Recovery	=	91.03%	
76) Bromofluorobenzene	7.486	174	118085	28.39	ug/l	0.00
Spiked Amount 30.000			Recovery	=	94.63%	
Target Compounds						
65) Tetrachloroethene	6.267	164	6536	3.6272	ug/l	65

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

h

Abundance

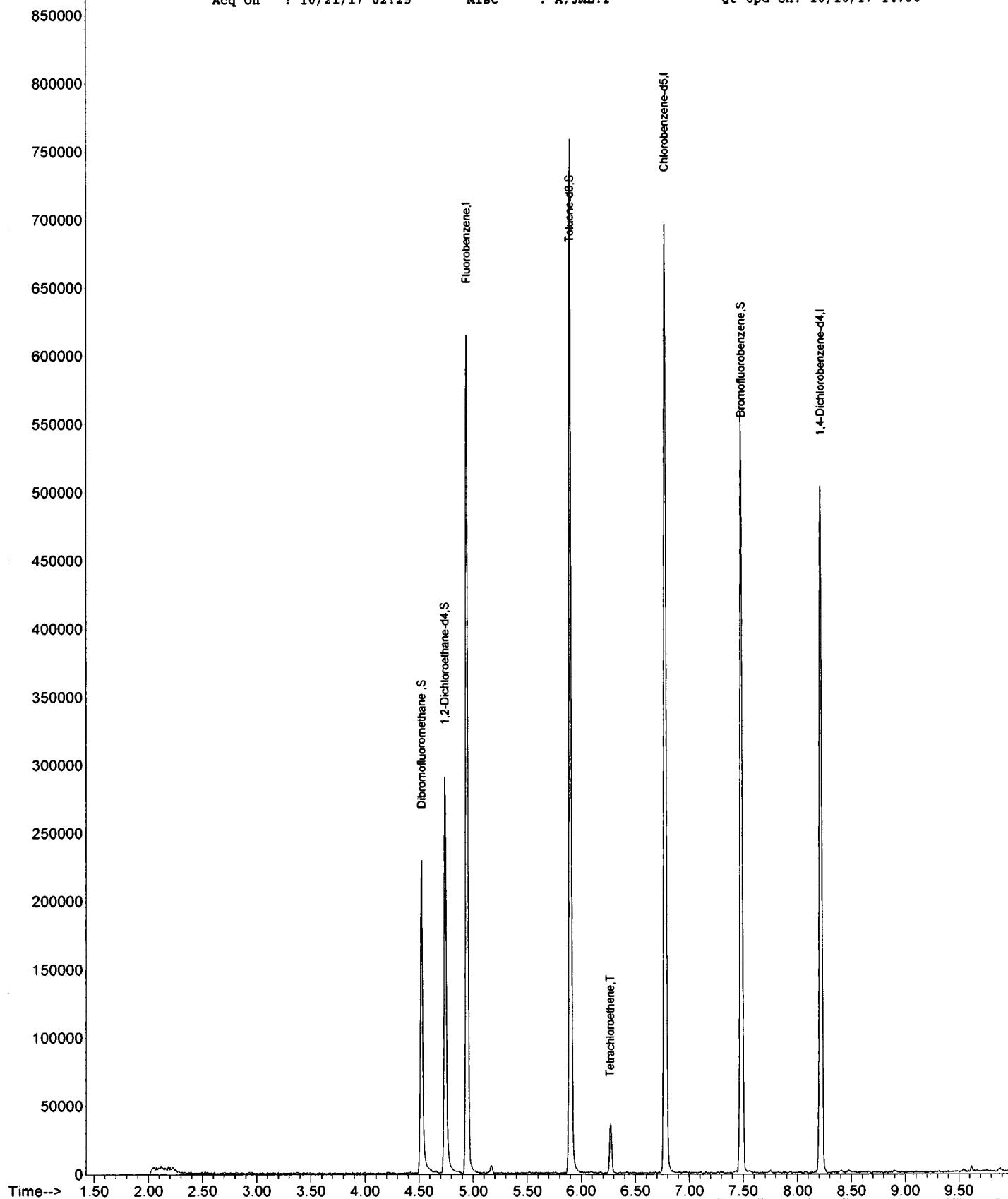
TIC: 3M118969.D\data.ms

Quant QT Reviewed

SampleID : AD00698-025
Data File: 3M118969.D
Acq On : 10/21/17 02:25

Operator : WP
Sam Mult : 1 Vial# : 39
Misc : A,5ML!2

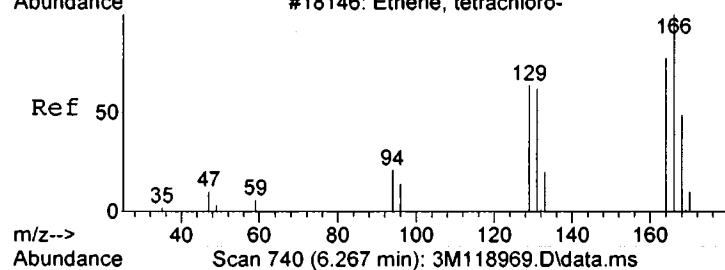
Qt Meth : 3M_A1005.M
Qt On : 10/23/17 12:39
Qt Upd On: 10/16/17 14:36



Abundance

#18146: Ethene, tetrachloro-

7102003 0241



#65

Tetrachloroethene

Concen: 3.63 ug/l

RT: 6.267 min Scan# 740

Delta R.T. -0.019 min

Lab File: 3M118969.D

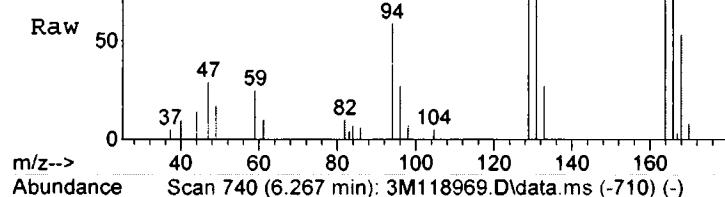
Acq: 21 Oct 2017 2:25

Tgt Ion:164 Resp: 6536

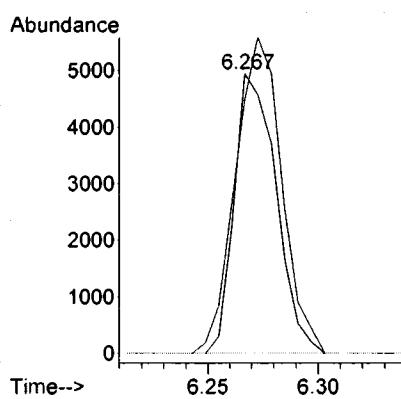
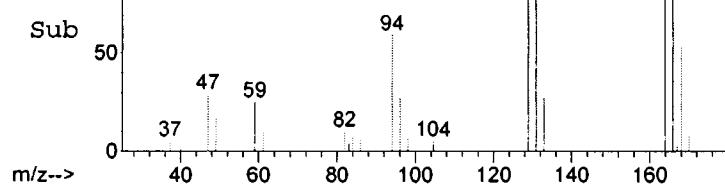
Ion Ratio Lower Upper

164 100

166 90.5 61.8 201.8



Abundance



Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-026

Client Id: 152140-DDC-4-PS

Data File: 3M118970.D

Analysis Date: 10/21/17 02:41

Date Rec/Extracted: 10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	1.1
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

1.1

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

7102003 0243

SampleID : AD00698-026
 Data File: 3M118970.D
 Acq On : 10/21/17 02:41

Operator : WP
 Sam Mult : 1 Vial# : 40
 Misc : A,5ML!2

Qt Meth : 3M_A1005.M
 Qt On : 10/23/17 12:39
 Qt Upd On: 10/16/17 14:36

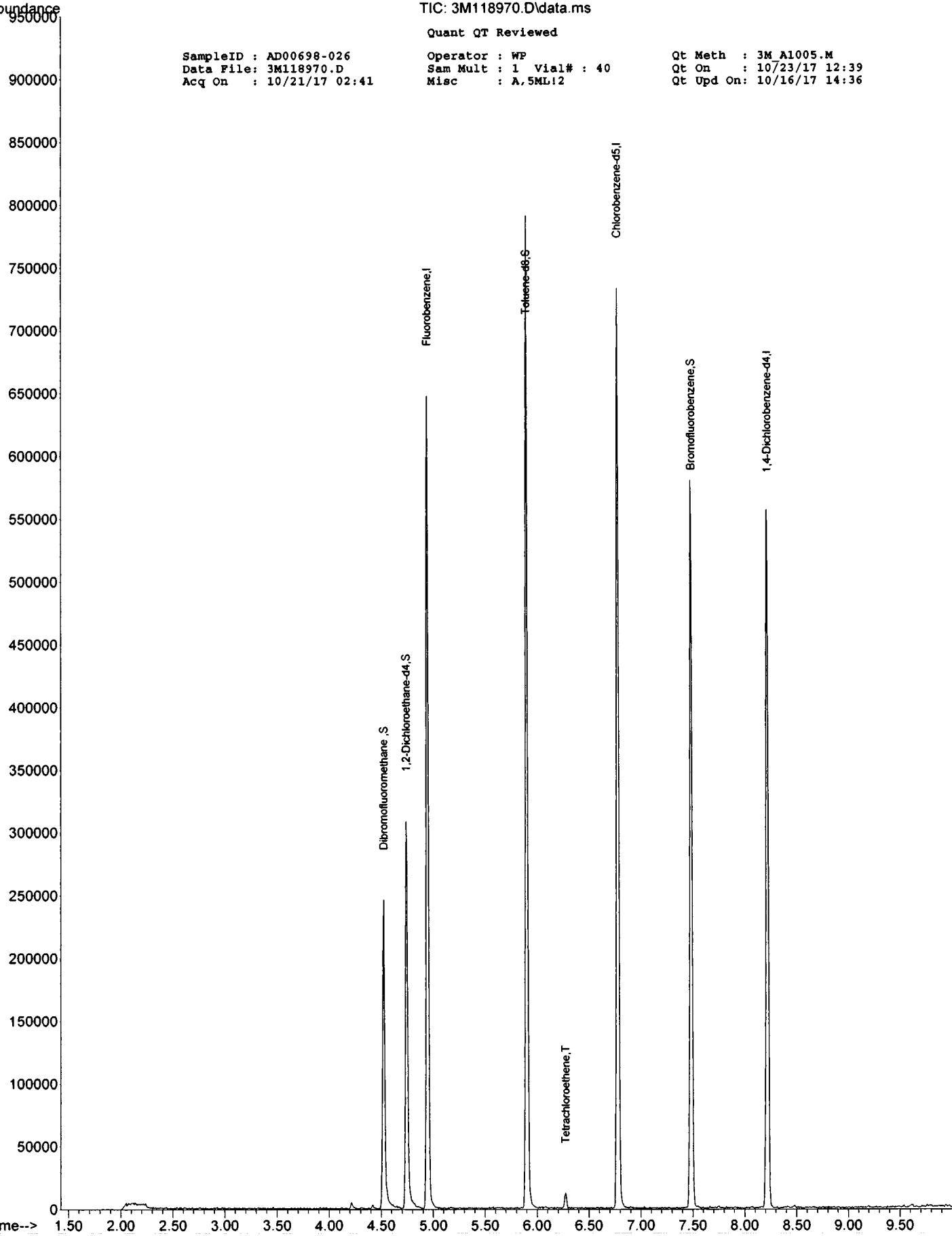
Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.946	96	354079	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.778	117	293112	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	123791	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.525	111	108118	31.55	ug/l	0.00
Spiked Amount	30.000			Recovery	=	105.17%
39) 1,2-Dichloroethane-d4	4.742	67	81793	30.30	ug/l	-0.01
Spiked Amount	30.000			Recovery	=	101.00%
66) Toluene-d8	5.901	98	363277	27.81	ug/l	0.00
Spiked Amount	30.000			Recovery	=	92.70%
76) Bromofluorobenzene	7.487	174	124982	28.60	ug/l	0.00
Spiked Amount	30.000			Recovery	=	95.33%
Target Compounds						
65) Tetrachloroethene	6.273	164	2141	1.1348	ug/l	95

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

U

Abundance



Abundance

#18146: Ethene, tetrachloro-

7102003 0245

Ref 50

m/z--> Abundance

Scan 741 (6.273 min): 3M118970.D\data.ms

166

129

94

47

59

35

#65

Tetrachloroethene

Concen: 1.13 ug/l

RT: 6.273 min Scan# 741

Delta R.T. -0.013 min

Lab File: 3M118970.D

Acq: 21 Oct 2017 2:41

Tgt Ion:164 Resp: 2141

Ion Ratio Lower Upper

164 100

166 137.1 61.8 201.8

Raw 50

m/z--> Abundance

Scan 741 (6.273 min): 3M118970.D\data.ms (-710) (-)

166

129

94

44

59

82

Sub 50

m/z-->

Scan 741 (6.273 min): 3M118970.D\data.ms (-710) (-)

166

129

94

37

47

59

82

Abundance

2000

1500

1000

500

0

Time-->

6.22

6.24

6.26

6.273

6.28

6.30

6.32

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-027

Client Id: 152140-DDC-4-PD

Data File: 3M118971.D

Analysis Date: 10/21/17 02:58

Date Rec/Extracted: 10/20/17-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pantanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	1.4
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

1.4

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

7102003 0247

SampleID : AD00698-027
 Data File: 3M118971.D
 Acq On : 10/21/17 02:58

Operator : WP
 Sam Mult : 1 Vial# : 41
 Misc : A,5ML!2

Qt Meth : 3M_A1005.M
 Qt On : 10/23/17 12:39
 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.946	96	321919	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.778	117	273344	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	109168	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.526	111	98738	31.69	ug/l	0.00
Spiked Amount	30.000			Recovery	=	105.63%
39) 1,2-Dichloroethane-d4	4.742	67	78249	31.89	ug/l	-0.01
Spiked Amount	30.000			Recovery	=	106.30%
66) Toluene-d8	5.901	98	333300	27.36	ug/l	0.00
Spiked Amount	30.000			Recovery	=	91.20%
76) Bromofluorobenzene	7.487	174	112156	29.10	ug/l	0.00
Spiked Amount	30.000			Recovery	=	97.00%
Target Compounds						
65) Tetrachloroethene	6.274	164	2407	1.3680	ug/l	98

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

1
K

Abundance

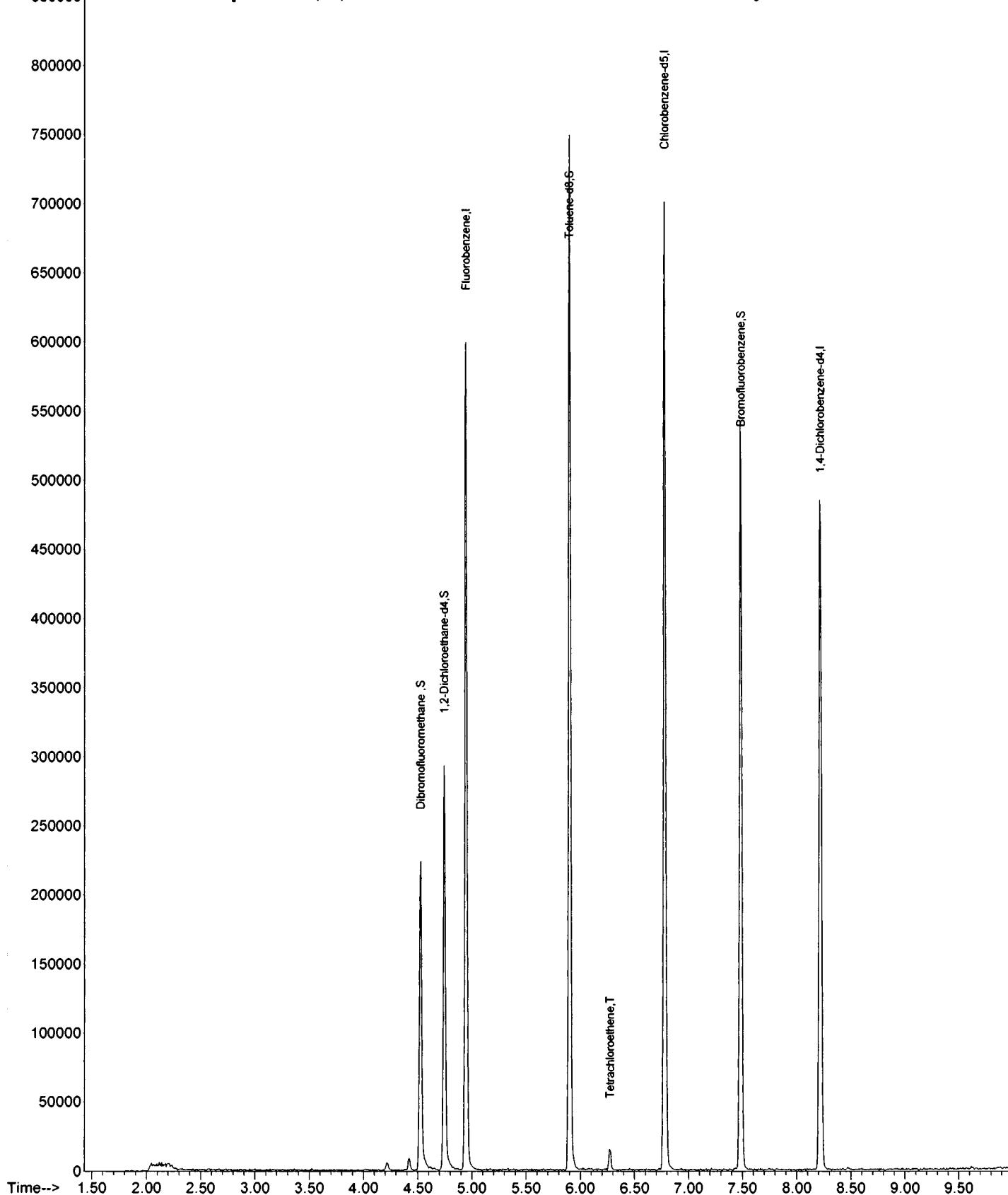
TIC: 3M118971.D\data.ms

Quant QT Reviewed

SampleID : AD00698-027
Data File: 3M118971.D
Acq On : 10/21/17 02:58

Operator : WP
Sam Mult : 1 Vial# : 41
Misc : A,5ML12

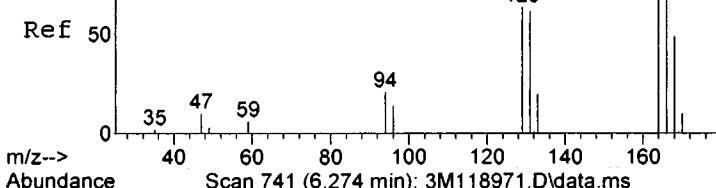
Qt Meth : 3M_A1005.M
Qt On : 10/23/17 12:39
Qt Upd On: 10/16/17 14:36



Abundance

#18146: Ethene, tetrachloro-

7102003 0249



#65

Tetrachloroethene

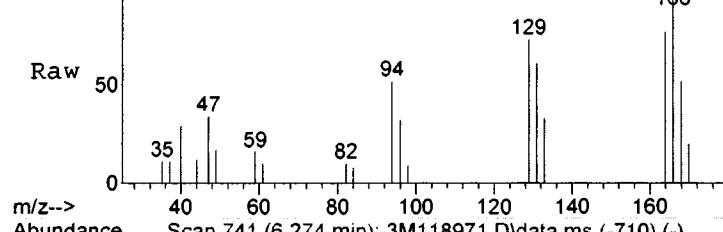
Concen: 1.37 ug/l

RT: 6.274 min Scan# 741

Delta R.T. -0.012 min

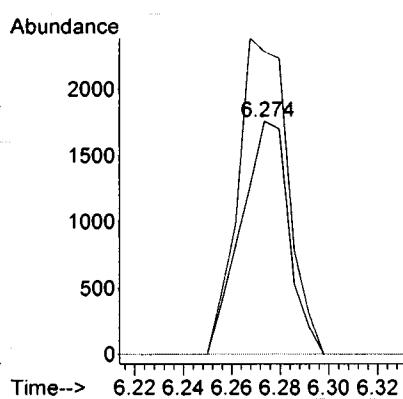
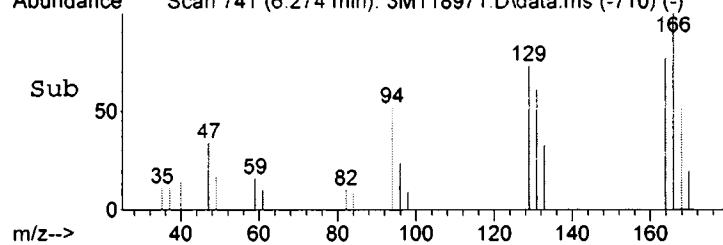
Lab File: 3M118971.D

Acq: 21 Oct 2017 2:58



Tgt Ion:164 Resp: 2407

Ion Ratio Lower Upper

164 100
166 129.8 61.8 201.8

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-028

Client Id: 152140-FD-01

Data File: 3M118972.D

Analysis Date: 10/21/17 03:15

Date Rec/Extracted: 10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	2.0
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

2

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of *a*-Chlordane and *y*-Chlordane.

7102003 0251

SampleID : AD00698-028
 Data File: 3M118972.D
 Acq On : 10/21/17 03:15

Operator : WP
 Sam Mult : 1 Vial# : 42
 Misc : A,5ML!2

Qt Meth : 3M_A1005 M
 Qt On : 10/23/17 12:39
 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.946	96	343122	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.778	117	290004	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.219	152	116547	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.525	111	102633	30.90	ug/l	0.00
Spiked Amount	30.000			Recovery	=	103.00%
39) 1,2-Dichloroethane-d4	4.741	67	80897	30.93	ug/l	-0.01
Spiked Amount	30.000			Recovery	=	103.10%
66) Toluene-d8	5.901	98	355187	27.48	ug/l	0.00
Spiked Amount	30.000			Recovery	=	91.60%
76) Bromofluorobenzene	7.486	174	118888	28.90	ug/l	0.00
Spiked Amount	30.000			Recovery	=	96.33%
Target Compounds						
65) Tetrachloroethene	6.273	164	3771	2.0201	ug/l	76

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

Abundance

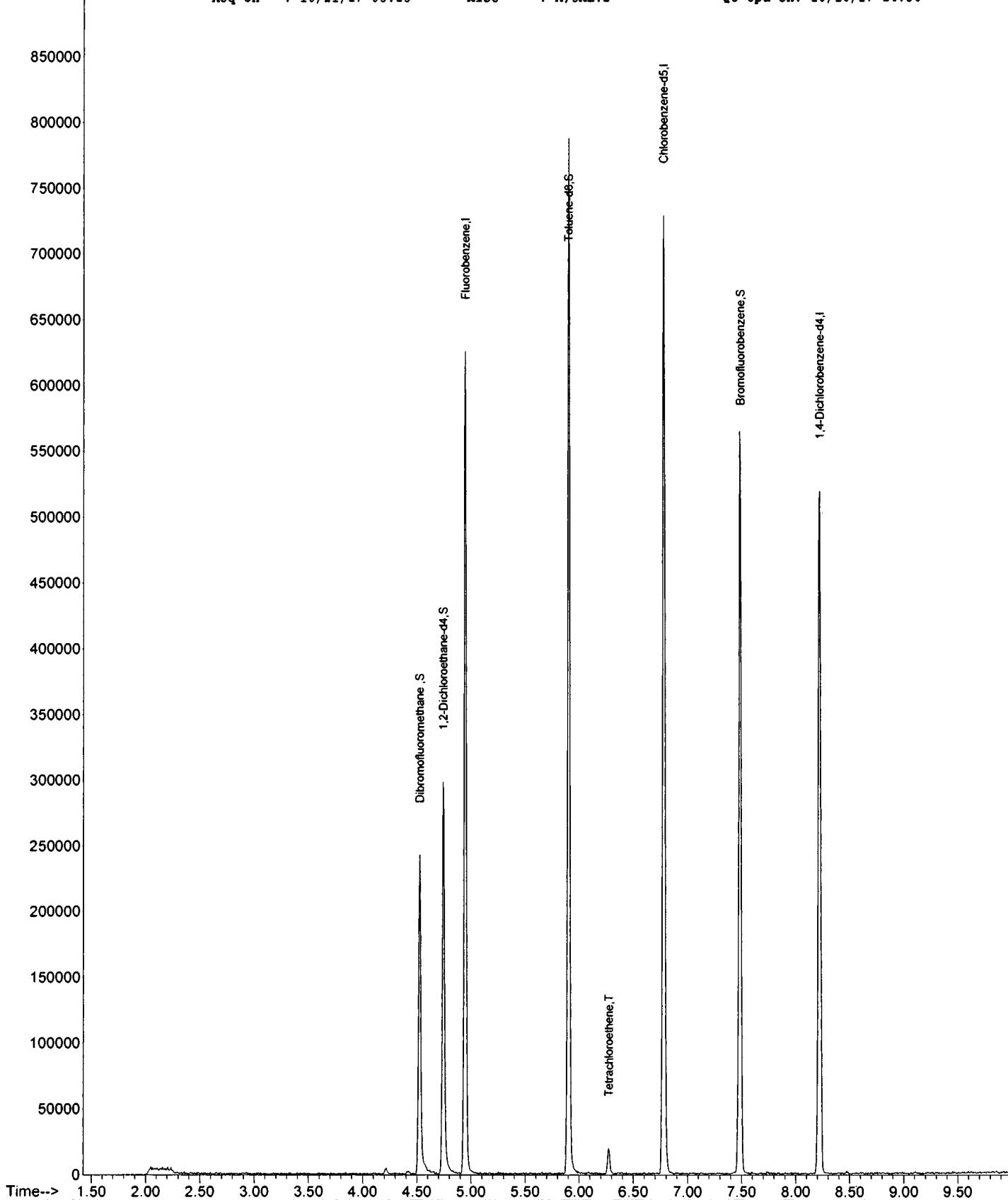
TIC: 3M118972.D\data.ms

Quant QT Reviewed

SampleID : AD00698-028
Data File: 3M118972.D
Acq On : 10/21/17 03:15

Operator : WP
Sam Mult : 1 Vial# : 42
Misc : A, SML12

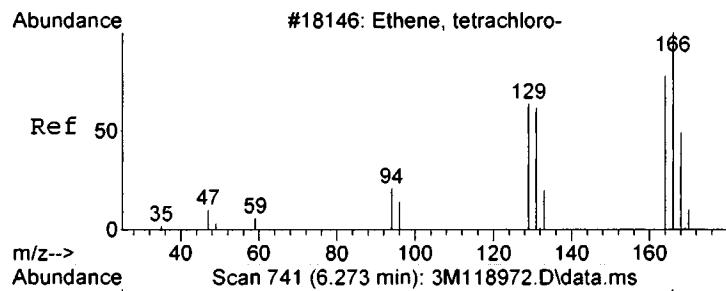
Qt Meth : 3M_A1005.M
Qt On : 10/23/17 12:39
Qt Upd On: 10/16/17 14:36



Abundance

#18146: Ethene, tetrachloro-

7102003 0253



#65

Tetrachloroethene

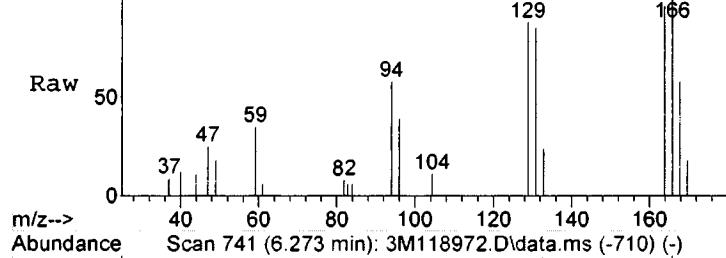
Concen: 2.02 ug/l

RT: 6.273 min Scan# 741

Delta R.T. -0.013 min

Lab File: 3M118972.D

Acq: 21 Oct 2017 3:15

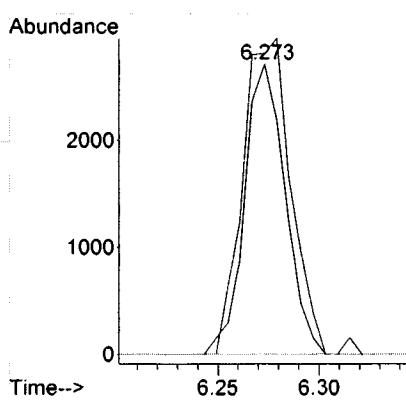
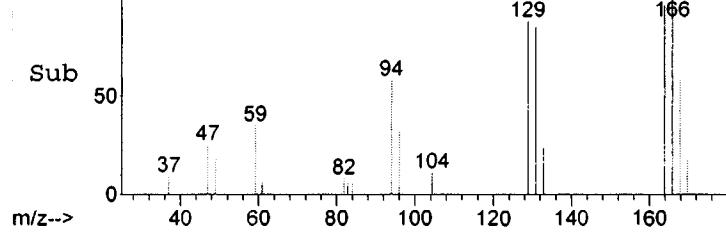


Tgt Ion:164 Resp: 3771

Ion Ratio Lower Upper

164 100

166 103.7 61.8 201.8



Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-029

Client Id: 152140-MW-1D(OFFSITE)

Data File: 3M119006.D

Analysis Date: 10/23/17 10:43

Date Rec/Extracted: 10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	1.5
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	21
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	91
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	16
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

130

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

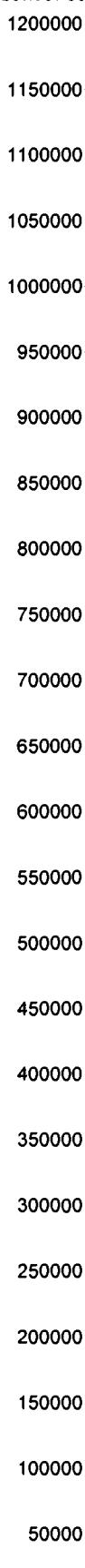
SampleID : AD00698-029 Operator : SG Qt Meth : 3M_A1006.M
 Data File: 3M119006.D Sam Mult : 1 Vial# : 14 Qt On : 10/23/17 15:06
 Acq On : 10/23/17 10:43 Misc : A,5ML!2 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-23-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.946	96	339055	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.778	117	294357	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	116695	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.526	111	101889	31.05	ug/l	0.00
Spiked Amount	30.000			Recovery	=	103.50%
39) 1,2-Dichloroethane-d4	4.742	67	81897	31.69	ug/l	-0.01
Spiked Amount	30.000			Recovery	=	105.63%
66) Toluene-d8	5.901	98	351281	26.78	ug/l	0.00
Spiked Amount	30.000			Recovery	=	89.27%
76) Bromofluorobenzene	7.487	174	120501	29.25	ug/l	0.00
Spiked Amount	30.000			Recovery	=	97.50%
Target Compounds						
30) cis-1,2-Dichloroethene	4.214	61	107842	21.3243	ug/l	79
36) Chloroform	4.418	83	8264	1.4708	ug/l	97
49) Trichloroethene	5.169	130	40611	15.7519	ug/l	87
65) Tetrachloroethene	6.274	164	173030	91.3222	ug/l	98

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

Abundance



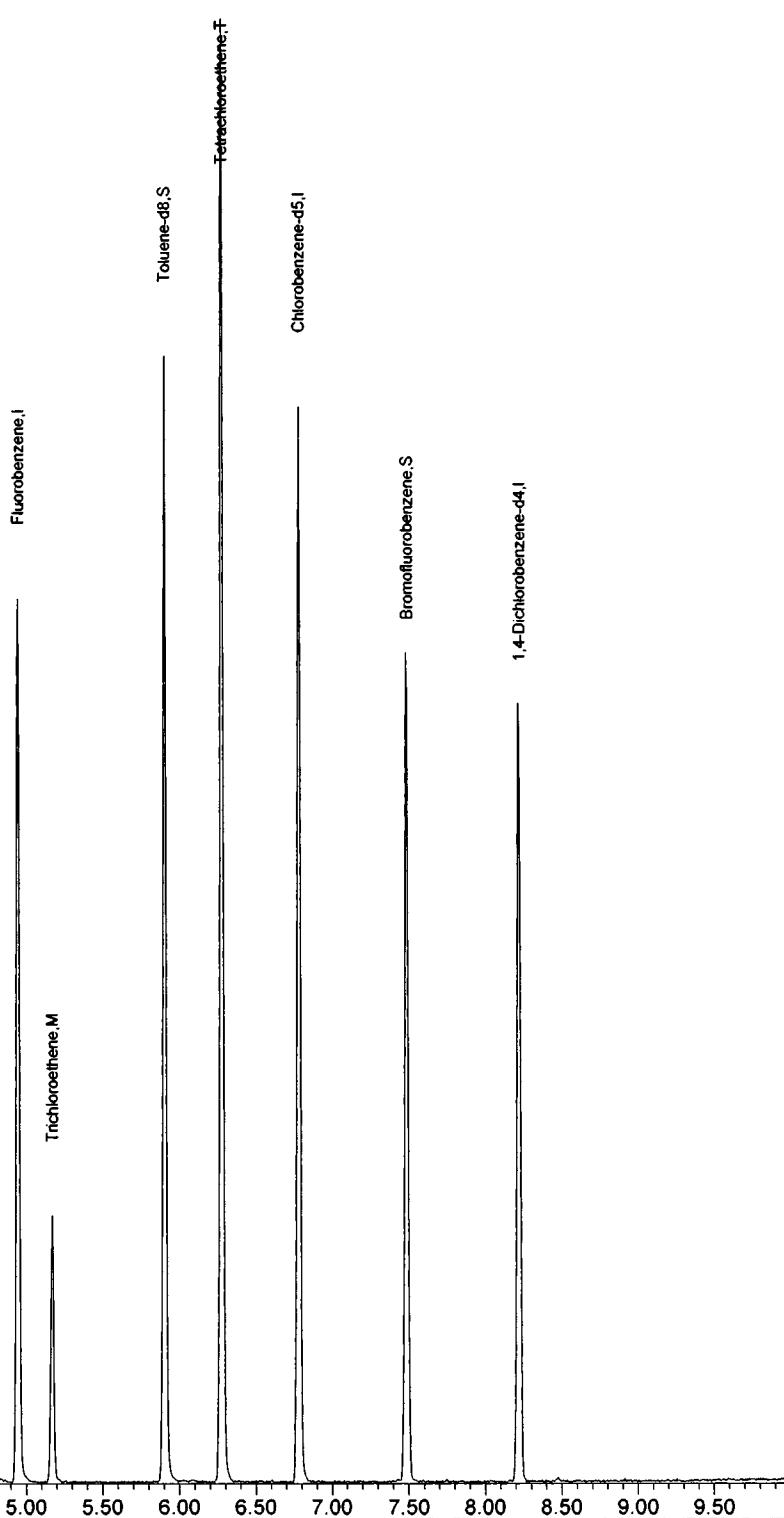
TIC: 3M119006.D\data.ms

Quant QT Reviewed

SampleID : AD00698-029
 Data File: 3M119006.D
 Acq On : 10/23/17 10:43

Operator : SG
 Sam Mult : 1 Vial# : 14
 Misc : A,5ML12

Qt Meth : 3M_A1005.M
 Qt On : 10/23/17 15:06
 Qt Upd On: 10/16/17 14:36



Abundance

#536: Ethene, 1,2-dichloro-, (Z)-

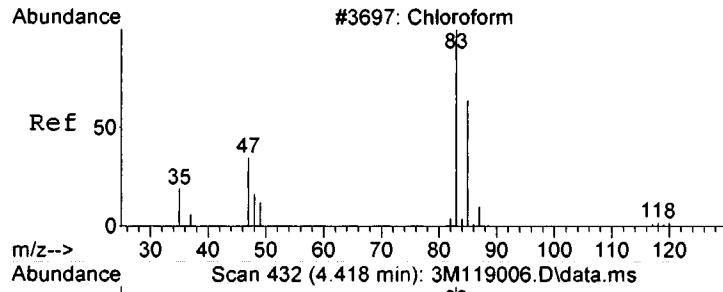
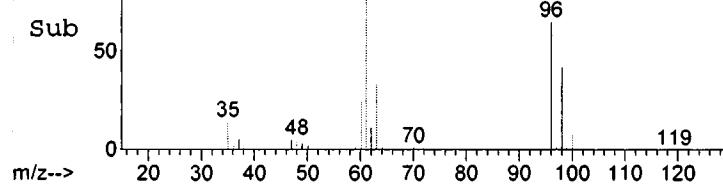
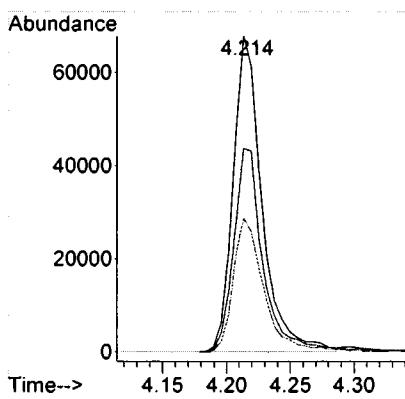
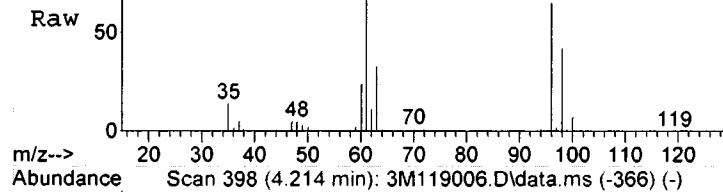
#30

7102003 0257

cis-1,2-Dichloroethene
 Concen: 21.32 ug/l
 RT: 4.214 min Scan# 398
 Delta R.T. -0.006 min
 Lab File: 3M119006.D
 Acq: 23 Oct 2017 10:43

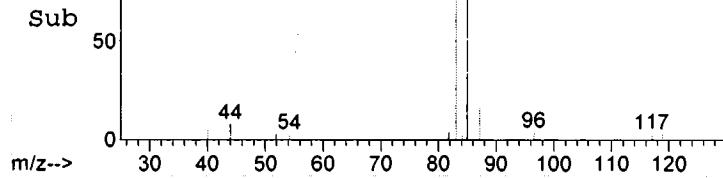
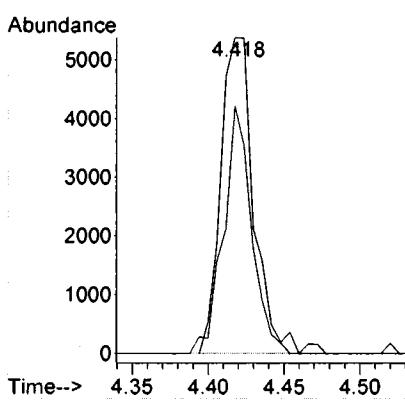
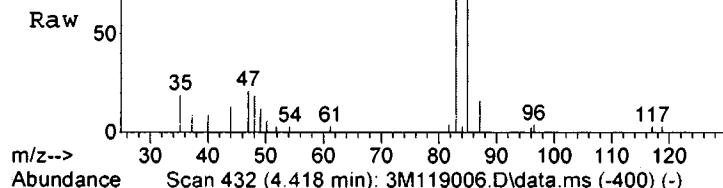


Tgt	Ion:	61	Resp:	107842
	Ion Ratio		Lower	Upper
61	100			
96	64.6	8.8	88.8	
98	42.3	0.0	72.8	



#36
 Chloroform
 Concen: 1.47 ug/l
 RT: 4.418 min Scan# 432
 Delta R.T. -0.006 min
 Lab File: 3M119006.D
 Acq: 23 Oct 2017 10:43

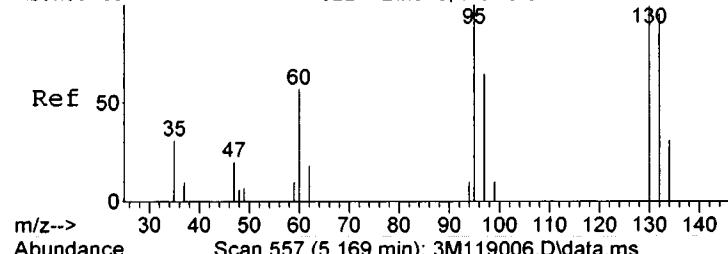
Tgt	Ion:	83	Resp:	8264
	Ion Ratio		Lower	Upper
83	100			
85	78.3	36.0	116.0	



Abundance

#6227: Ethene, trichloro-

7102003 0258



#49

Trichloroethene

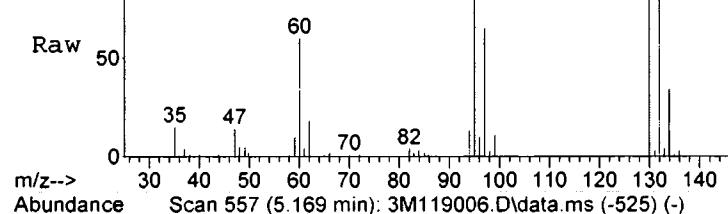
Concen: 15.75 ug/l

RT: 5.169 min Scan# 557

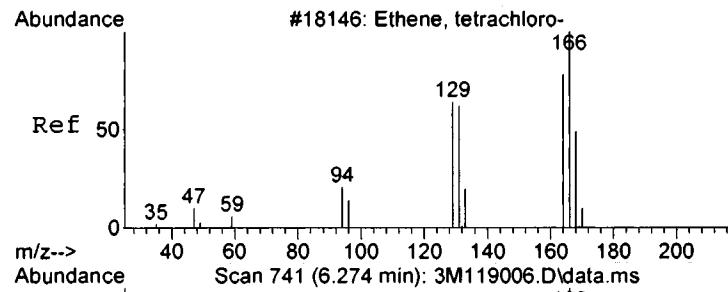
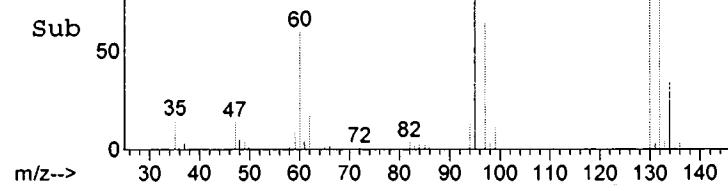
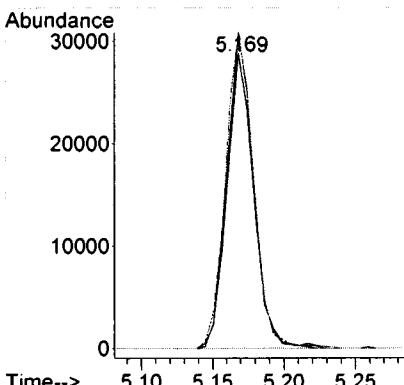
Delta R.T. -0.006 min

Lab File: 3M119006.D

Acq: 23 Oct 2017 10:43



Tgt	Ion:130	Resp:	40611
Ion	Ratio	Lower	Upper
130	100		
132	93.3	40.0	200.0
95	99.6	40.0	160.0



#65

Tetrachloroethene

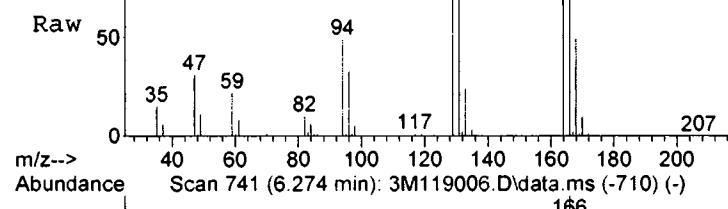
Concen: 91.32 ug/l

RT: 6.274 min Scan# 741

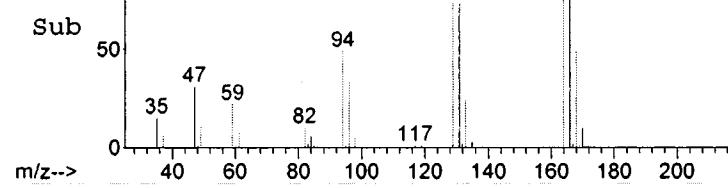
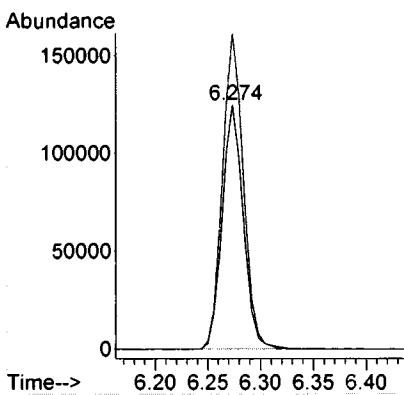
Delta R.T. -0.012 min

Lab File: 3M119006.D

Acq: 23 Oct 2017 10:43



Tgt	Ion:164	Resp:	173030
Ion	Ratio	Lower	Upper
164	100		
166	129.4	61.8	201.8



Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-030

Client Id: 152140-MW-1S(OFFSITE)

Data File: 3M118963.D

Analysis Date: 10/21/17 00:44

Date Rec/Extracted: 10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of *a*-Chlordane and *y*-Chlordane.

7102003 0260

SampleID : AD00698-030
 Data File: 3M118963.D
 Acq On : 10/21/17 00:44

Operator : WP
 Sam Mult : 1 Vial# : 33
 Misc : A, SML!2

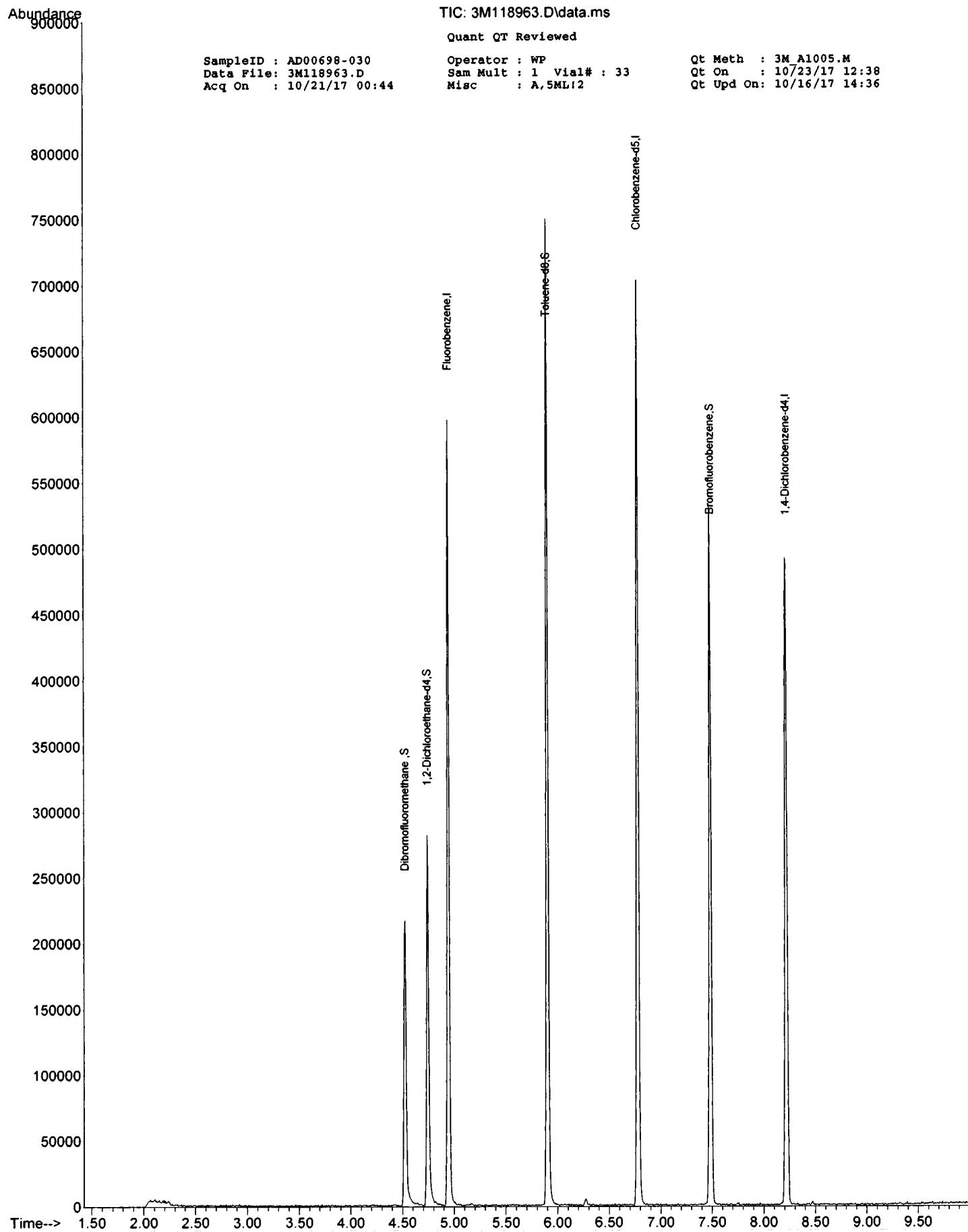
Qt Meth : 3M_A1005.M
 Qt On : 10/23/17 12:38
 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.946	96	323514	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.778	117	266634	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	111146	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.526	111	98398	31.42	ug/l	0.00
Spiked Amount	30.000		Recovery	=	104.73%	
39) 1,2-Dichloroethane-d4	4.742	67	75105	30.46	ug/l	-0.01
Spiked Amount	30.000		Recovery	=	101.53%	
66) Toluene-d8	5.901	98	334089	28.12	ug/l	0.00
Spiked Amount	30.000		Recovery	=	93.73%	
76) Bromofluorobenzene	7.487	174	113440	28.91	ug/l	0.00
Spiked Amount	30.000		Recovery	=	96.37%	
Target Compounds						
					Qvalue	

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

C



Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-031(MS:AD00

Client Id: 152140-MW-1S(OFFSITE)

Data File: 3M118964.D

Analysis Date: 10/21/17 01:01

Date Rec/Extracted: 10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	18	75-00-3	Chloroethane	1.0	14
79-34-5	1,1,2,2-Tetrachloroethane	1.0	15	67-66-3	Chloroform	1.0	18
76-13-1	1,1,2-Trichloro-1,2,2-triflu	1.0	19	74-87-3	Chloromethane	1.0	13
79-00-5	1,1,2-Trichloroethane	1.0	15	156-59-2	cis-1,2-Dichloroethene	1.0	18
75-34-3	1,1-Dichloroethane	1.0	18	10061-01-5	cis-1,3-Dichloropropene	1.0	15
75-35-4	1,1-Dichloroethene	1.0	18	110-82-7	Cyclohexane	1.0	19
120-82-1	1,2,4-Trichlorobenzene	1.0	13	124-48-1	Dibromochloromethane	1.0	16
96-12-8	1,2-Dibromo-3-Chloroprop	1.0	11	75-71-8	Dichlorodifluoromethane	1.0	9.1
106-93-4	1,2-Dibromoethane	1.0	15	100-41-4	Ethylbenzene	1.0	16
95-50-1	1,2-Dichlorobenzene	1.0	15	98-82-8	Isopropylbenzene	1.0	16
107-06-2	1,2-Dichloroethane	0.50	19	79601-23-1	m&p-Xylenes	1.0	32
78-87-5	1,2-Dichloropropane	1.0	18	79-20-9	Methyl Acetate	1.0	14
541-73-1	1,3-Dichlorobenzene	1.0	15	108-87-2	Methylcyclohexane	1.0	18
106-46-7	1,4-Dichlorobenzene	1.0	15	75-09-2	Methylene Chloride	1.0	17
78-93-3	2-Butanone	1.0	15	1634-04-4	Methyl-t-butyl ether	0.50	16
591-78-6	2-Hexanone	1.0	16	95-47-6	o-Xylene	1.0	17
108-10-1	4-Methyl-2-Pentanone	1.0	16	100-42-5	Styrene	1.0	17
67-64-1	Acetone	5.0	82	127-18-4	Tetrachloroethene	1.0	18
71-43-2	Benzene	0.50	19	108-88-3	Toluene	1.0	17
75-27-4	Bromodichloromethane	1.0	18	156-60-5	trans-1,2-Dichloroethene	1.0	19
75-25-2	Bromoform	1.0	13	10061-02-6	trans-1,3-Dichloropropene	1.0	14
74-83-9	Bromomethane	1.0	16	79-01-6	Trichloroethene	1.0	19
75-15-0	Carbon Disulfide	1.0	26	75-69-4	Trichlorofluoromethane	1.0	17
56-23-5	Carbon Tetrachloride	1.0	19	75-01-4	Vinyl Chloride	1.0	15
108-90-7	Chlorobenzene	1.0	17	1330-20-7	Xylenes (Total)	1.0	49

Worksheet #: 442070

Total Target Concentration

890

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

7102003 0263

SampleID : AD00698-031(MS:AD00) Operator : WP
 Data File: 3M118964.D Sam Mult : 1 Vial# : 34
 Acq On : 10/21/17 01:01 Misc : A,5ML!2

Qt Meth : 3M_A1006 Qt On : 10/23/17 12:39
 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

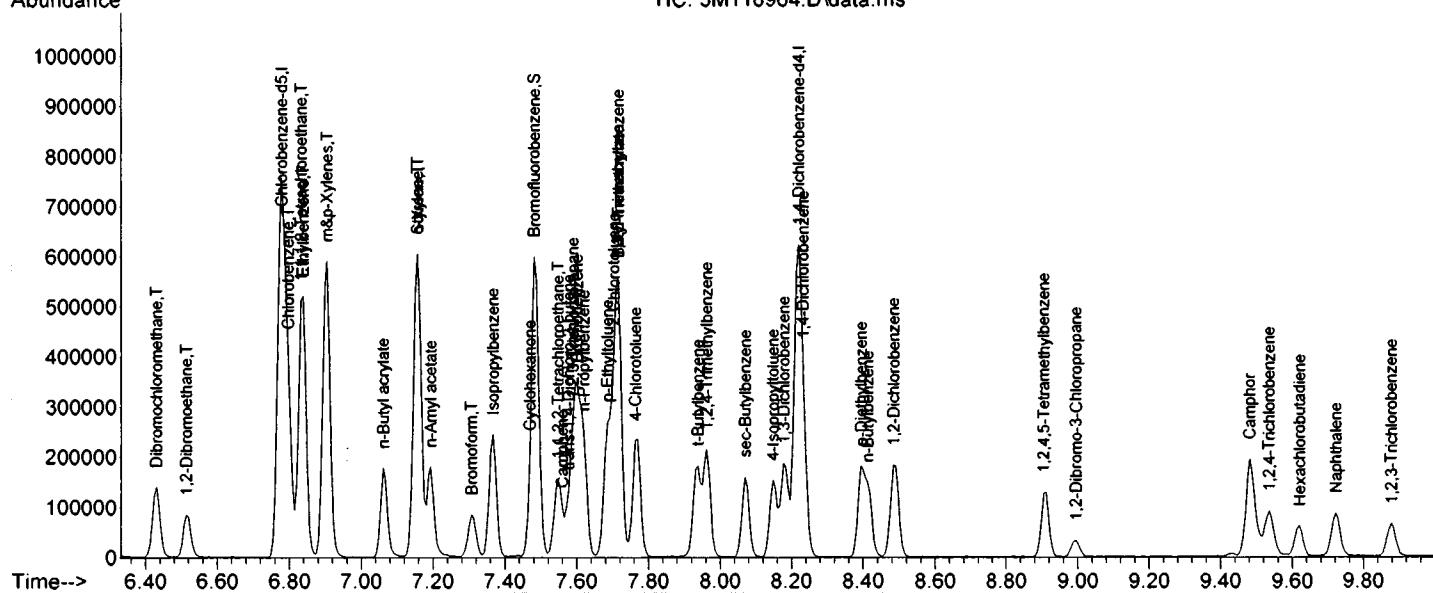
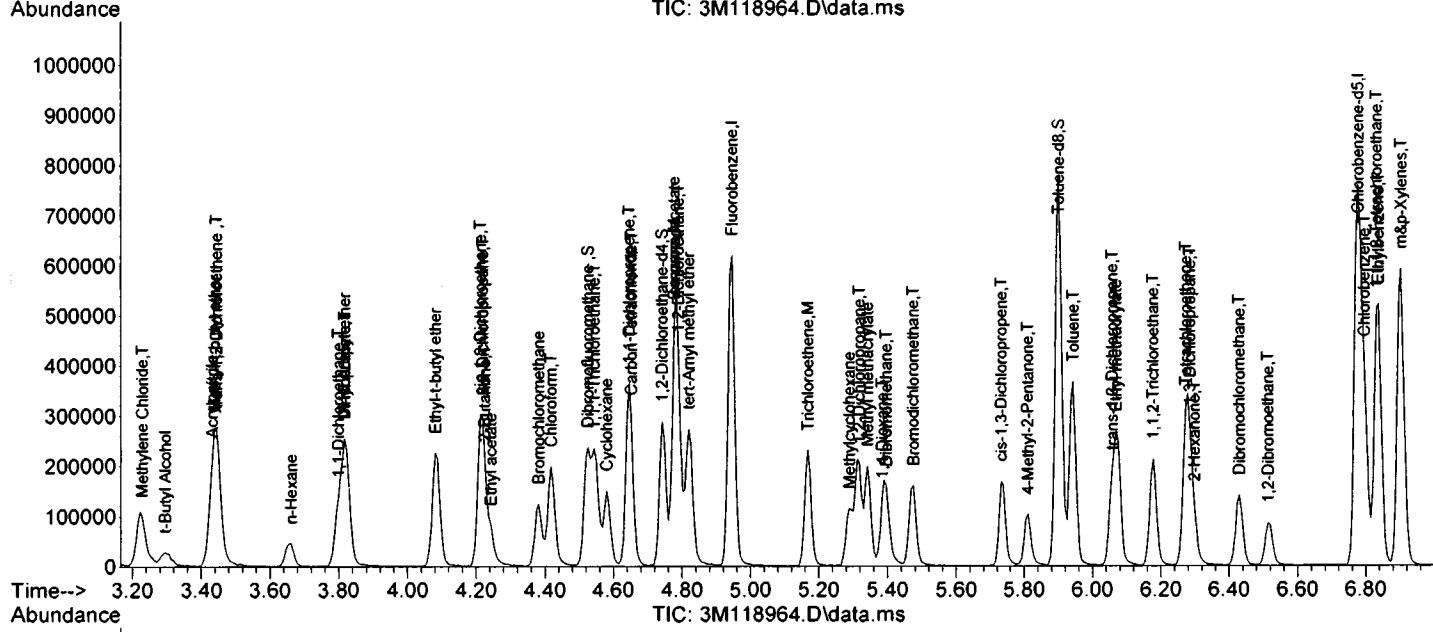
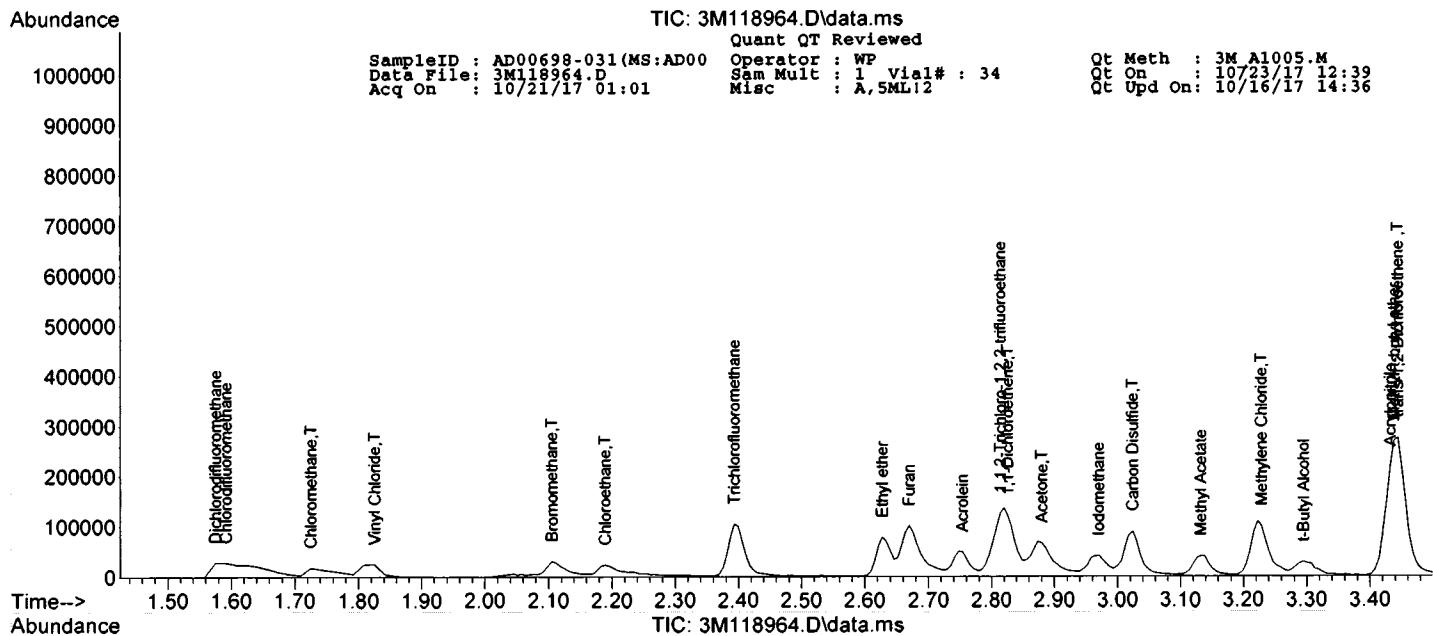
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.946	96	341096	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.779	117	285154	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	126598	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.526	111	99572	30.16	ug/l	0.00
Spiked Amount	30.000		Recovery	=	100.53%	
39) 1,2-Dichloroethane-d4	4.742	67	77397	29.77	ug/l	-0.01
Spiked Amount	30.000		Recovery	=	99.23%	
66) Toluene-d8	5.902	98	352963	27.77	ug/l	0.00
Spiked Amount	30.000		Recovery	=	92.57%	
76) Bromofluorobenzene	7.481	174	125317	28.04	ug/l	-0.01
Spiked Amount	30.000		Recovery	=	93.47%	
Target Compounds						
5) Chlorodifluoromethane	1.592	51	86646	20.4191	ug/l	58
6) Dichlorodifluoromethane	1.575	85	24067	9.0730	ug/l	98
7) Chloromethane	1.725	50	35498	13.0565	ug/l	90
8) Bromomethane	2.105	94	17532	15.9194	ug/l	96
9) Vinyl Chloride	1.825	62	32098	14.8899	ug/l	97
10) Chloroethane	2.189	64	18239	13.5623	ug/l	99
11) Trichlorofluoromethane	2.393	101	74697	17.1130	ug/l	84
12) Ethyl ether	2.628	59	40390	16.0954	ug/l	77
13) Furan	2.670	39	74223	13.9783	ug/l	80
14) 1,1,2-Trichloro-1,2,2-...	2.814	101	32937	18.9777	ug/l	93
15) Methylene Chloride	3.228	84	50074	17.2691	ug/l	81
16) Acrolein	2.754	56	31917	70.8821	ug/l	97
17) Acrylonitrile	3.433	53	15760	16.4123	ug/l	97
18) Iodomethane	2.970	142	47308	22.7065	ug/l	100
19) Acetone	2.880	43	79535	81.7976	ug/l	95
20) Carbon Disulfide	3.024	76	102269	25.5982	ug/l	100
21) t-Butyl Alcohol	3.294	59	18251	61.8220	ug/l	82
22) n-Hexane	3.661	57	17414	15.3369	ug/l	92
23) Di-isopropyl-ether	3.817	45	131050	18.6435	ug/l	93
24) 1,1-Dichloroethene	2.826	61	69260	17.9106	ug/l	97
25) Methyl Acetate	3.132	43	45893	14.1984	ug/l	100
26) Methyl-t-butyl ether	3.439	73	113769	16.4398	ug/l	68
27) 1,1-Dichloroethane	3.799	63	80094	17.6213	ug/l	99
28) trans-1,2-Dichloroethene	3.445	96	47237	18.9057	ug/l	91
29) Ethyl-t-butyl ether	4.081	59	135320	16.6934	ug/l	94
30) cis-1,2-Dichloroethene	4.214	61	90519	17.7918	ug/l	84
31) Bromochloromethane	4.382	49	39323	17.3451	ug/l	95
32) 2,2-Dichloropropane	4.220	77	50125	13.1310	ug/l	96
33) Ethyl acetate	4.244	43	50154m	18.7480	ug/l	
34) 1,4-Dioxane	5.385	88	31168	938.2686	ug/l	88
35) 1,1-Dichloropropene	4.646	75	68349	19.7400	ug/l	96
36) Chloroform	4.418	83	103052	18.2310	ug/l	91
38) Cyclohexane	4.580	56	41514	18.9846	ug/l	98
40) 1,2-Dichloroethane	4.790	62	104898	19.1965	ug/l	95
41) 2-Butanone	4.226	43	20710m	15.2353	ug/l	
42) 1,1,1-Trichloroethane	4.544	97	86822	18.3080	ug/l	92
43) Carbon Tetrachloride	4.652	117	66641	19.4331	ug/l	96
44) Vinyl Acetate	3.817	43	89871	18.1412	ug/l	100
45) Bromodichloromethane	5.475	83	76420	17.9012	ug/l	94
46) Methylcyclohexane	5.289	83	29197	18.3387	ug/l	96
47) Dibromomethane	5.397	174	38166	18.0173	ug/l	97
48) 1,2-Dichloropropane	5.319	63	44547	18.4213	ug/l	99
49) Trichloroethene	5.169	130	49360	19.0308	ug/l	84
50) Benzene	4.778	78	175351	18.8341	ug/l	100
51) tert-Amyl methyl ether	4.820	73	108919	16.1060	ug/l	85
53) Iso-propylacetate	4.778	43	87972	14.4680	ug/l	88
54) Methyl methacrylate	5.343	41	62927	17.6525	ug/l	80
55) Dibromo-chloromethane	6.430	129	55368	15.8691	ug/l	97
57) cis-1,3-Dichloropropene	5.733	75	64060	14.5855	ug/l	90
58) trans-1,3-Dichloropropene	6.058	75	61670	13.9612	ug/l	96
59) Ethyl methacrylate	6.070	41	57098	15.9662	ug/l	51
60) 1,1,2-Trichloroethane	6.178	97	44517	15.4287	ug/l	93
61) 1,2-Dibromoethane	6.514	107	47102	15.4205	ug/l	99
62) 1,3-Dichloropropane	6.286	76	84186	16.4323	ug/l	96
63) 4-Methyl-2-Pentanone	5.811	43	47632	15.5361	ug/l	84
64) 2-Hexanone	6.298	43	34657	16.1830	ug/l	80
65) Tetrachloroethene	6.274	164	32334	17.6161	ug/l	92
67) Toluene	5.944	92	106470	16.9745	ug/l	91
68) 1,1,1,2-Tetrachloroethane	6.833	133	45808	17.4690	ug/l	76

SampleID : AD00698-031(MS:AD00) Operator : WP Qt Meth : 3M_A1005.M
 Data File: 3M118964.D Sam Mult : 1 Vial# : 34 Qt On : 10/23/17 12:39
 Acq On : 10/21/17 01:01 Misc : A,5ML!2 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
69) Chlorobenzene	6.797	112	115117	16.9410	ug/l	93
71) n-Butyl acrylate	7.061	55	90916	12.9560	ug/l	94
72) n-Amyl acetate	7.193	43	72612	13.3162	ug/l	77
73) Bromoform	7.307	173	30915	13.0287	ug/l	90
74) Ethylbenzene	6.839	106	35288	15.8375	ug/l	98
75) 1,1,2,2-Tetrachloroethane	7.547	83	52850	14.9987	ug/l	92
77) Styrene	7.157	104	114903	16.5599	ug/l	84
78) m&p-Xylenes	6.905	106	120395	32.0942	ug/l	99
79) o-Xylene	7.157	106	63361	16.9741	ug/l	83
80) trans-1,4-Dichloro-2-b...	7.577	53	21744	11.8309	ug/l	93
81) 1,3-Dichlorobenzene	8.178	146	64995	15.3510	ug/l	94
82) 1,4-Dichlorobenzene	8.232	146	65529	14.7449	ug/l	99
83) 1,2-Dichlorobenzene	8.485	146	63904	15.3562	ug/l	96
84) Isopropylbenzene	7.367	105	124558	16.0108	ug/l	96
85) Cyclohexanone	7.469	55	8951	61.0097	ug/l	84
86) Camphene	7.559	93	7490	2.9107	ug/l	86
87) 1,2,3-Trichloropropane	7.589	75	70099	14.3669	ug/l	97
88) 2-Chlorotoluene	7.704	91	84240	16.9167	ug/l	97
89) p-Ethyltoluene	7.686	105	129938	15.6189	ug/l	74
90) 4-Chlorotoluene	7.764	91	82128	15.2737	ug/l	96
91) n-Propylbenzene	7.620	91	127843	15.6343	ug/l	98
92) Bromobenzene	7.601	77	113433	14.6151	ug/l	93
93) 1,3,5-Trimethylbenzene	7.716	105	83523	15.2600	ug/l	84
94) Butyl methacrylate	7.716	41	66096	14.4985	ug/l	94
95) t-Butylbenzene	7.938	119	78308	15.4734	ug/l	94
96) 1,2,4-Trimethylbenzene	7.962	105	103651	15.7897	ug/l	95
97) sec-Butylbenzene	8.070	105	85089	14.6774	ug/l	99
98) 4-Isopropyltoluene	8.148	119	68961	14.2913	ug/l	97
99) n-Butylbenzene	8.412	91	79004	13.3788	ug/l	92
100) p-Diethylbenzene	8.394	119	44522m	13.7800	ug/l	
101) 1,2,4,5-Tetramethylben...	8.905	119	62994	13.3009	ug/l	99
102) 1,2-Dibromo-3-Chloropr...	8.995	157	7161	10.9859	ug/l	98
103) Camphor	9.482	95	49397	122.7289	ug/l	98
104) Hexachlorobutadiene	9.620	225	11207	10.5303	ug/l	96
105) 1,2,4-Trichlorobenzene	9.536	180	22922	12.9417	ug/l	97
106) 1,2,3-Trichlorobenzene	9.878	180	19309	12.6106	ug/l	96
107) Naphthalene	9.722	128	61745	13.0180	ug/l	100

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



Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-032(MSD:AD)

Method: EPA 8260C

Client Id: 152140-MW-1S(OFFSITE)

Matrix: Aqueous

Data File: 3M118965.D

Initial Vol: 5ml

Analysis Date: 10/21/17 01:17

Final Vol: NA

Date Rec/Extracted: 10/20/17-NA

Dilution: 1.00

Column:DB-624 25M 0.200mm ID 1.12um film

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	18	75-00-3	Chloroethane	1.0	12
79-34-5	1,1,2,2-Tetrachloroethane	1.0	14	67-66-3	Chloroform	1.0	18
76-13-1	1,1,2-Trichloro-1,2,2-triflu	1.0	18	74-87-3	Chloromethane	1.0	12
79-00-5	1,1,2-Trichloroethane	1.0	16	156-59-2	cis-1,2-Dichloroethene	1.0	18
75-34-3	1,1-Dichloroethane	1.0	18	10061-01-5	cis-1,3-Dichloropropene	1.0	14
75-35-4	1,1-Dichloroethene	1.0	17	110-82-7	Cyclohexane	1.0	19
120-82-1	1,2,4-Trichlorobenzene	1.0	13	124-48-1	Dibromochloromethane	1.0	16
96-12-8	1,2-Dibromo-3-Chloroprop	1.0	11	75-71-8	Dichlorodifluoromethane	1.0	8.8
106-93-4	1,2-Dibromoethane	1.0	16	100-41-4	Ethylbenzene	1.0	15
95-50-1	1,2-Dichlorobenzene	1.0	15	98-82-8	Isopropylbenzene	1.0	15
107-06-2	1,2-Dichloroethane	0.50	20	79601-23-1	m&p-Xylenes	1.0	30
78-87-5	1,2-Dichloropropane	1.0	18	79-20-9	Methyl Acetate	1.0	15
541-73-1	1,3-Dichlorobenzene	1.0	14	108-87-2	Methylcyclohexane	1.0	18
106-46-7	1,4-Dichlorobenzene	1.0	15	75-09-2	Methylene Chloride	1.0	17
78-93-3	2-Butanone	1.0	10	1634-04-4	Methyl-t-butyl ether	0.50	17
591-78-6	2-Hexanone	1.0	17	95-47-6	o-Xylene	1.0	16
108-10-1	4-Methyl-2-Pentanone	1.0	16	100-42-5	Styrene	1.0	16
67-64-1	Acetone	5.0	88	127-18-4	Tetrachloroethene	1.0	17
71-43-2	Benzene	0.50	19	108-88-3	Toluene	1.0	17
75-27-4	Bromodichloromethane	1.0	18	156-60-5	trans-1,2-Dichloroethene	1.0	19
75-25-2	Bromoform	1.0	13	10061-02-6	trans-1,3-Dichloropropene	1.0	13
74-83-9	Bromomethane	1.0	14	79-01-6	Trichloroethene	1.0	19
75-15-0	Carbon Disulfide	1.0	26	75-69-4	Trichlorofluoromethane	1.0	16
56-23-5	Carbon Tetrachloride	1.0	19	75-01-4	Vinyl Chloride	1.0	15
108-90-7	Chlorobenzene	1.0	17	1330-20-7	Xylenes (Total)	1.0	46

Worksheet #: 442070

Total Target Concentration 870

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

R - Retention Time Out

B - Indicates the analyte was found in the blank as well as in the sample.

J - Indicates an estimated value when a compound is detected at less than the

E - Indicates the analyte concentration exceeds the calibration range of the
instrument.

specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

SampleID : AD00698-032 (MSD:AD0) Operator : WP Qt Meth : 3M A1005.M
 Data File: 3M118965.D Sam Mult : 1 Vial# : 35 Qt On : 10/23/17 12:39
 Acq On : 10/21/17 01:17 Misc : A,5ML!1 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

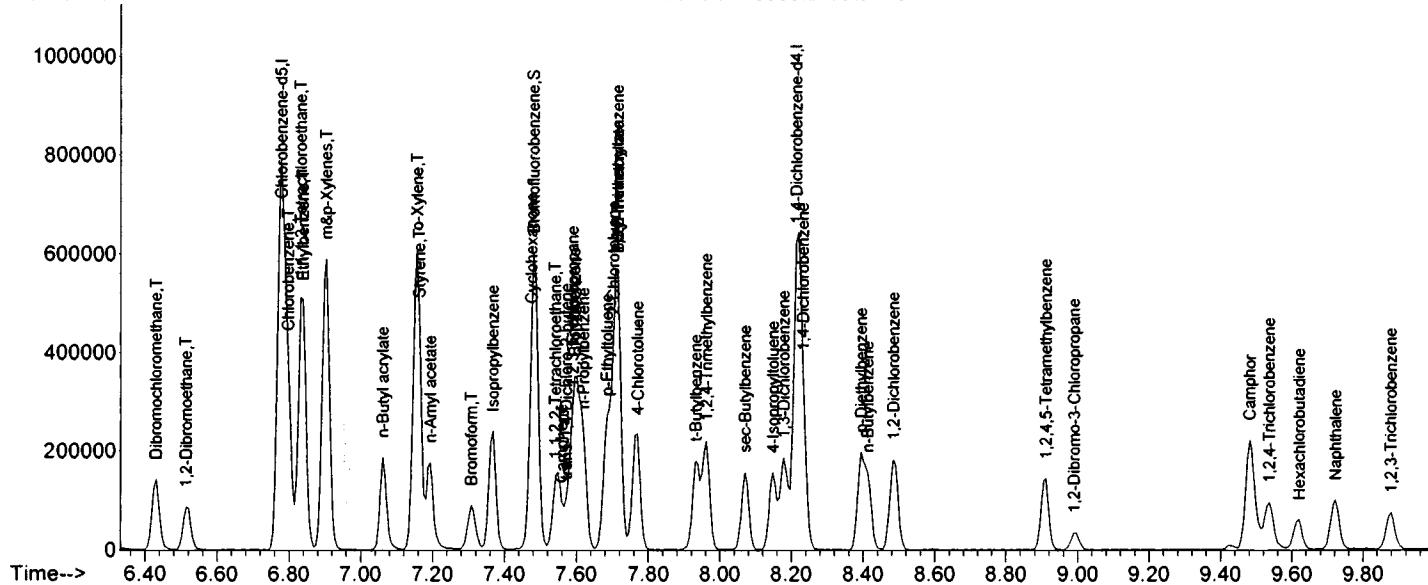
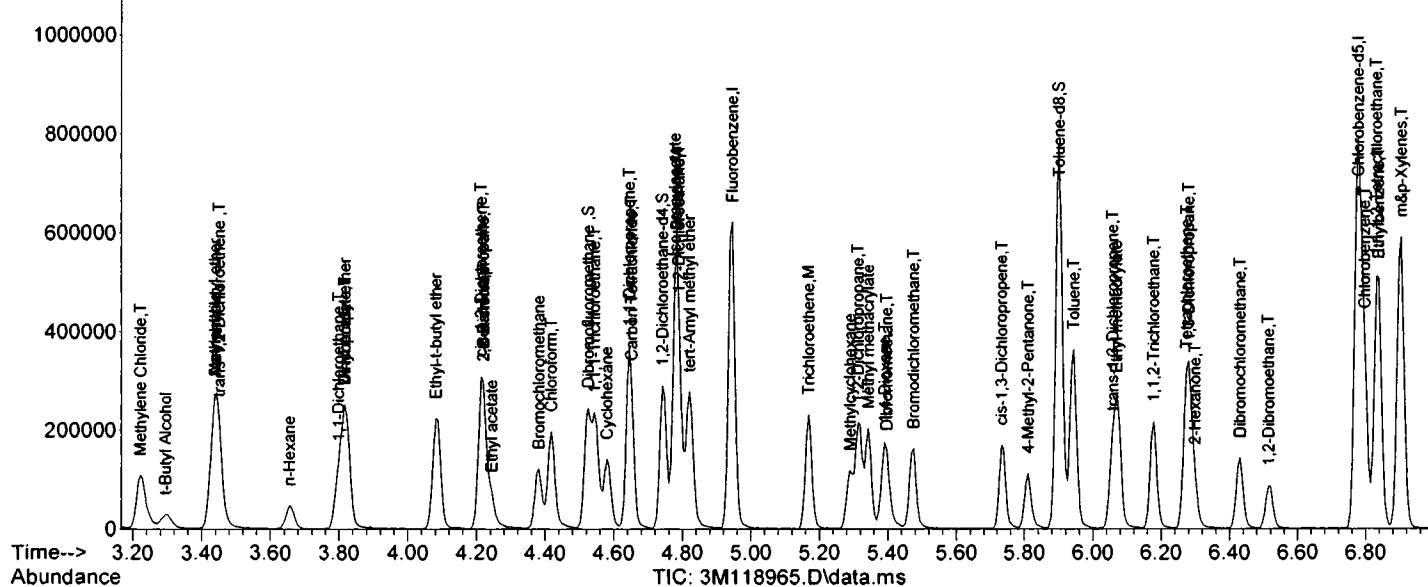
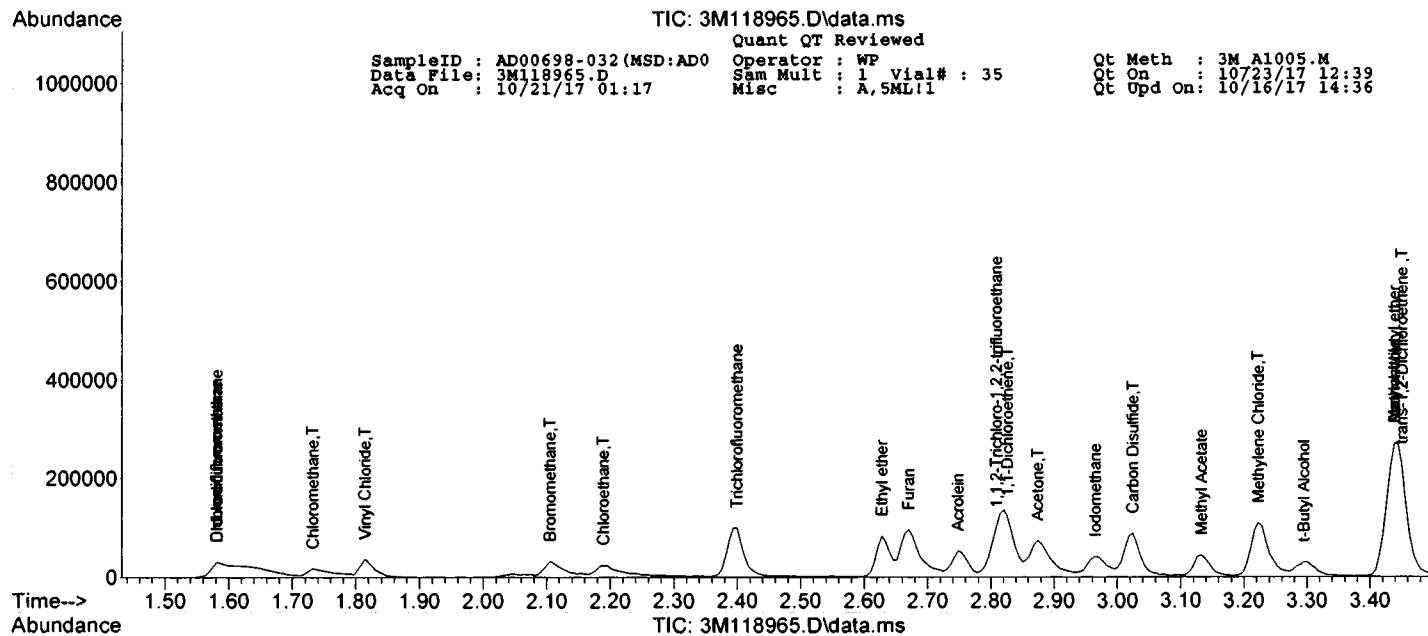
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.947	96	342936	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.779	117	294796	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.214	152	133505	30.00	ug/l	-0.01
System Monitoring Compounds						
37) Dibromofluoromethane	4.526	111	100845	30.38	ug/l	0.00
Spiked Amount	30.000		Recovery	=	101.27%	
39) 1,2-Dichloroethane-d4	4.742	67	79361	30.36	ug/l	-0.01
Spiked Amount	30.000		Recovery	=	101.20%	
66) Toluene-d8	5.902	98	362738	27.61	ug/l	0.00
Spiked Amount	30.000		Recovery	=	92.03%	
76) Bromofluorobenzene	7.482	174	127222	27.00	ug/l	-0.01
Spiked Amount	30.000		Recovery	=	90.00%	
Target Compounds						
5) Chlorodifluoromethane	1.581	51	86013	20.1611	ug/l	58
6) Dichlorodifluoromethane	1.581	85	23339	8.7514	ug/l	86
7) Chloromethane	1.731	50	31979	11.6991	ug/l	96
8) Bromomethane	2.105	94	15767	14.2399	ug/l	82
9) Vinyl Chloride	1.815	62	31745	14.6471	ug/l	91
10) Chloroethane	2.189	64	15733	11.6361	ug/l	94
11) Trichlorofluoromethane	2.400	101	71089	16.1991	ug/l	84
12) Ethyl ether	2.628	59	41819	16.5754	ug/l	81
13) Furan	2.670	39	72723	13.6224	ug/l	82
14) 1,1,2-Trichloro-1,2,2-...	2.808	101	30946	17.7349	ug/l	92
15) Methylene Chloride	3.223	84	50645	17.3723	ug/l	88
16) Acrolein	2.748	56	32535	71.8669	ug/l	92
17) Acrylonitrile	3.439	53	17161	17.7758	ug/l	96
18) Iodomethane	2.964	142	47767	22.8038	ug/l	86
19) Acetone	2.874	43	86344	88.3238	ug/l	91
20) Carbon Disulfide	3.024	76	102877	25.6122	ug/l	100
21) t-Butyl Alcohol	3.295	59	17914	60.3541	ug/l	92
22) n-Hexane	3.655	57	17218	15.0832	ug/l	85
23) Di-isopropyl-ether	3.817	45	132824	18.7945	ug/l	90
24) 1,1-Dichloroethene	2.826	61	65570	16.8654	ug/l	95
25) Methyl Acetate	3.133	43	47994	14.7688	ug/l	100
26) Methyl-t-butyl ether	3.439	73	117210	16.8461	ug/l	67
27) 1,1-Dichloroethane	3.799	63	80238	17.5582	ug/l	97
28) trans-1,2-Dichloroethene	3.451	96	47646	18.9670	ug/l	89
29) Ethyl-t-butyl ether	4.082	59	143726	17.6353	ug/l	94
30) cis-1,2-Dichloroethene	4.214	61	91190	17.8276	ug/l	80
31) Bromochloromethane	4.382	49	38400	16.8470	ug/l	91
32) 2,2-Dichloropropane	4.220	77	49899	13.0017	ug/l	96
33) Ethyl acetate	4.244	43	57311m	21.3083	ug/l	
34) 1,4-Dioxane	5.391	88	32674	978.3271	ug/l	92
35) 1,1-Dichloropropene	4.646	75	68554	19.6930	ug/l	97
36) Chloroform	4.418	83	103980	18.2964	ug/l	89
38) Cyclohexane	4.580	56	41155	18.7194	ug/l	97
40) 1,2-Dichloroethane	4.790	62	109529	19.9459	ug/l	92
41) 2-Butanone	4.220	43	14287m	10.4538	ug/l	
42) 1,1,1-Trichloroethane	4.544	97	84014	17.6208	ug/l	100
43) Carbon Tetrachloride	4.652	117	65420	18.9747	ug/l	96
44) Vinyl Acetate	3.817	43	91979	18.4671	ug/l	100
45) Bromodichloromethane	5.475	83	76197	17.7532	ug/l	89
46) Methylcyclohexane	5.289	83	29230	18.2609	ug/l	96
47) Dibromomethane	5.397	174	41052	19.2757	ug/l	92
48) 1,2-Dichloropropane	5.313	63	43431	17.8635	ug/l	94
49) Trichloroethene	5.169	130	50365	19.3141	ug/l	84
50) Benzene	4.784	78	177207	18.9313	ug/l	100
51) tert-Amyl methyl ether	4.820	73	109817	16.1517	ug/l	86
53) Iso-propylacetate	4.778	43	96455	15.3443	ug/l	93
54) Methyl methacrylate	5.343	41	64424	17.4813	ug/l	79
55) Dibromochloromethane	6.430	129	57220	15.8635	ug/l	97
57) cis-1,3-Dichloropropene	5.734	75	63761	14.0426	ug/l	91
58) trans-1,3-Dichloropropene	6.058	75	61193	13.4001	ug/l	99
59) Ethyl methacrylate	6.070	41	57890	15.6583	ug/l	50
60) 1,1,2-Trichloroethane	6.178	97	46366	15.5439	ug/l	94
61) 1,2-Dibromoethane	6.514	107	49252	15.5970	ug/l	95
62) 1,3-Dichloropropane	6.280	76	84427	15.9404	ug/l	99
63) 4-Methyl-2-Pentanone	5.812	43	51005	16.0921	ug/l	88
64) 2-Hexanone	6.298	43	37016	16.7191	ug/l	80
65) Tetrachloroethene	6.274	164	32469	17.1111	ug/l	98
67) Toluene	5.944	92	110143	16.9857	ug/l	90
68) 1,1,1,2-Tetrachloroethane	6.833	133	46588	17.1853	ug/l	80

SampleID : AD00698-032 (MSD:AD0) Operator : WP Qt Meth : 3M A1005.M
 Data File: 3M118965.D Sam Mult : 1 Vial# : 35 Qt On : 10/23/17 12:39
 Acq On : 10/21/17 01:17 Misc : A,5ML!1 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
69) Chlorobenzene	6.797	112	119773	17.0497	ug/l	97
71) n-Butyl acrylate	7.061	55	92813	12.5421	ug/l	95
72) n-Amyl acetate	7.193	43	76735	13.3442	ug/l	82
73) Bromoform	7.307	173	33376	13.3381	ug/l	92
74) Ethylbenzene	6.839	106	36384	15.4845	ug/l	94
75) 1,1,2,2-Tetrachloroethane	7.542	83	51289	13.8026	ug/l	96
77) Styrene	7.163	104	116049	15.8598	ug/l	99
78) m&p-Xylenes	6.905	106	120405	30.4363	ug/l	95
79) o-Xylene	7.157	106	62612	15.9057	ug/l	78
80) trans-1,4-Dichloro-2-b...	7.572	53	19979	10.3082	ug/l	86
81) 1,3-Dichlorobenzene	8.178	146	64272	14.3949	ug/l	94
82) 1,4-Dichlorobenzene	8.232	146	68578	14.6327	ug/l	97
83) 1,2-Dichlorobenzene	8.485	146	65068	14.8269	ug/l	96
84) Isopropylbenzene	7.367	105	123230	15.0206	ug/l	97
85) Cyclohexanone	7.476	55	9103	58.8474	ug/l	93
86) Camphene	7.560	93	7531	2.7753	ug/l	97
87) 1,2,3-Trichloropropane	7.590	75	69976	13.5997	ug/l	98
88) 2-Chlorotoluene	7.704	91	83160	15.8358	ug/l	96
89) p-Ethyltoluene	7.686	105	120478	13.7325	ug/l	77
90) 4-Chlorotoluene	7.770	91	85176	15.0210	ug/l	97
91) n-Propylbenzene	7.620	91	127706	14.8096	ug/l	97
92) Bromobenzene	7.596	77	117125	14.3101	ug/l	92
93) 1,3,5-Trimethylbenzene	7.716	105	96950	16.7967	ug/l	97
94) Butyl methacrylate	7.716	41	69465	14.4492	ug/l	96
95) t-Butylbenzene	7.932	119	79024	14.8071	ug/l	93
96) 1,2,4-Trimethylbenzene	7.962	105	105659	15.2629	ug/l	97
97) sec-Butylbenzene	8.070	105	83725	13.6949	ug/l	99
98) 4-Isopropyltoluene	8.148	119	72124	14.1735	ug/l	98
99) n-Butylbenzene	8.413	91	84106	13.5059	ug/l	95
100) p-Diethylbenzene	8.395	119	47487m	13.9373	ug/l	
101) 1,2,4,5-Tetramethylben...	8.911	119	70437	14.1030	ug/l	97
102) 1,2-Dibromo-3-Chloropr...	8.989	157	7798	11.3421	ug/l	94
103) Camphor	9.482	95	55026	129.6398	ug/l	97
104) Hexachlorobutadiene	9.620	225	12114	10.7947	ug/l	98
105) 1,2,4-Trichlorobenzene	9.536	180	24450	13.0902	ug/l	96
106) 1,2,3-Trichlorobenzene	9.878	180	20950	12.9744	ug/l	96
107) Naphthalene	9.722	128	72816	14.5579	ug/l	100

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



Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-033

Client Id: 152140-DDC-07-PS

Data File: 3M118973.D

Analysis Date: 10/21/17 03:32

Date Rec/Extracted: 10/20/17-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	15
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

15

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of *a*-Chlordane and *y*-Chlordane.

SampleID : AD00698-033
 Data File: 3M118973.D
 Acq On : 10/21/17 03:32

Operator : WP
 Sam Mult : 1 Vial# : 43
 Misc : A,5ML!2

Qt Meth : 3M_A1005.M
 Qt On : 10/23/17 12:39
 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.947	96	321915	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.779	117	273012	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.214	152	112203	30.00	ug/l	-0.01
System Monitoring Compounds						
37) Dibromofluoromethane	4.520	111	96549	30.99	ug/l	-0.01
Spiked Amount 30.000				Recovery	=	103.30%
39) 1,2-Dichloroethane-d4	4.742	67	77240	31.48	ug/l	-0.01
Spiked Amount 30.000				Recovery	=	104.93%
66) Toluene-d8	5.902	98	334915	27.53	ug/l	0.00
Spiked Amount 30.000				Recovery	=	91.77%
76) Bromofluorobenzene	7.482	174	114077	28.80	ug/l	-0.01
Spiked Amount 30.000				Recovery	=	96.00%
Target Compounds						
30) cis-1,2-Dichloroethene	4.214	61	69671	14.5100	ug/l	77

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

K

Abundance

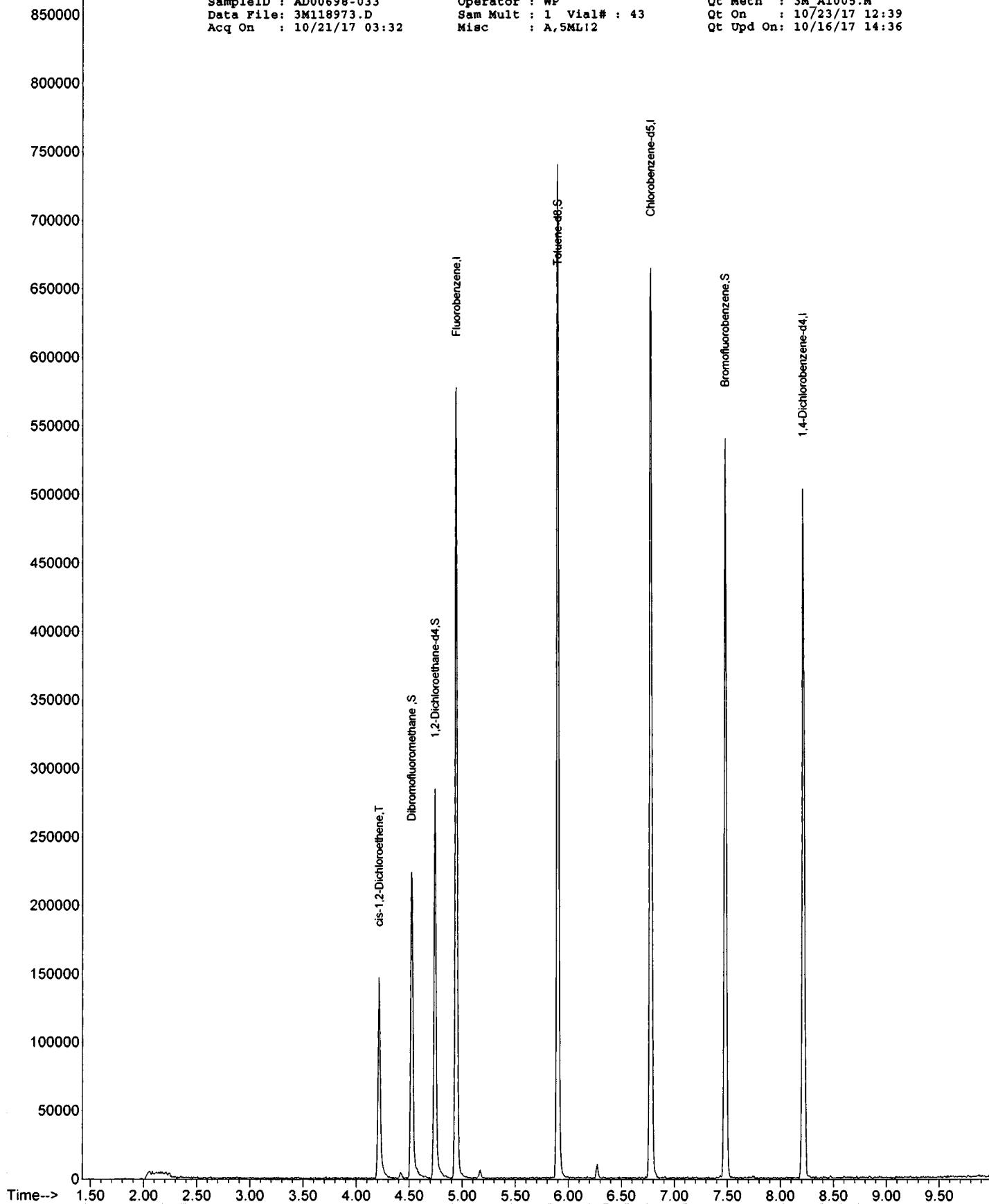
TIC: 3M118973.D\data.ms

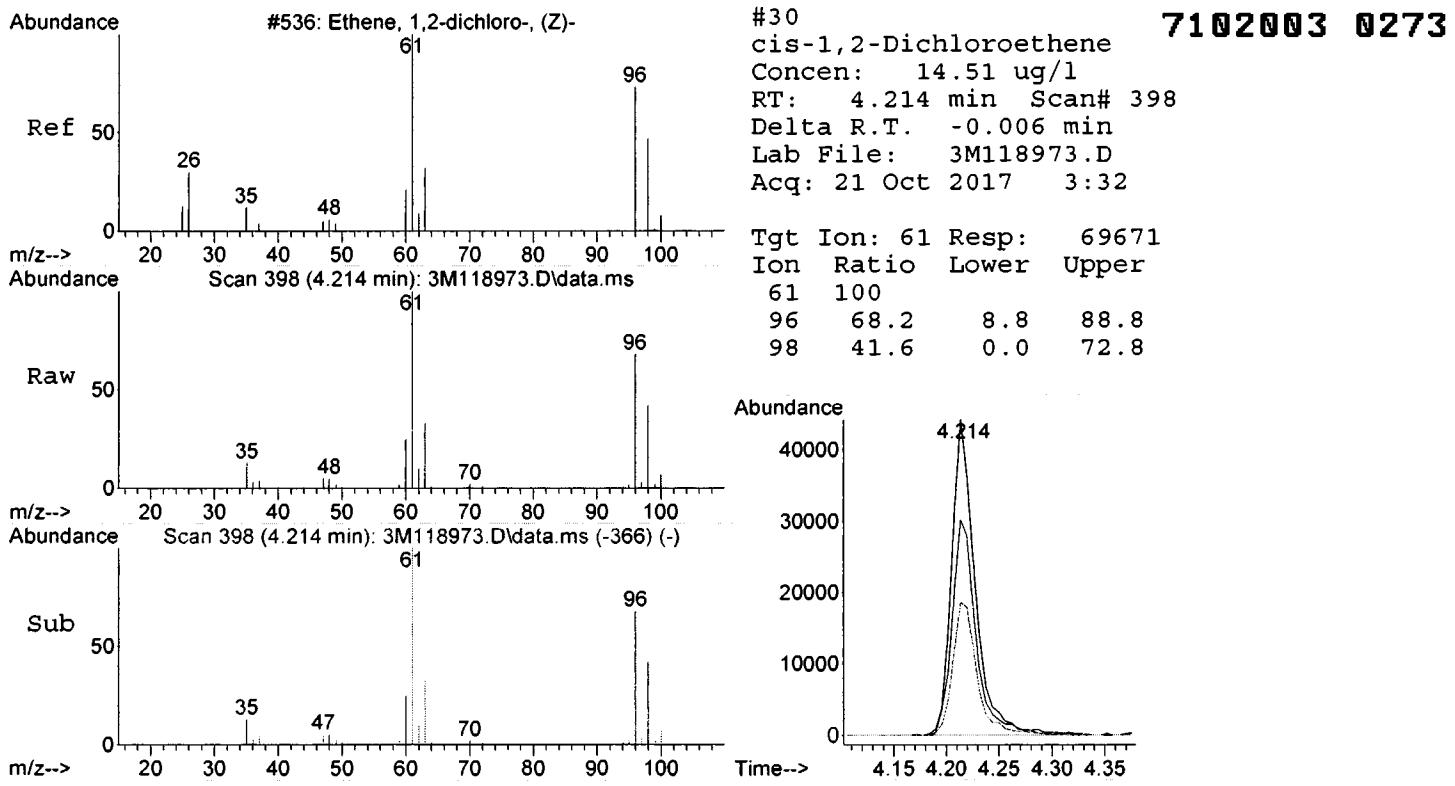
Quant QT Reviewed

SampleID : AD00698-033
Data File: 3M118973.D
Acq On : 10/21/17 03:32

Operator : WP
Sam Mult : 1 Vial# : 43
Misc : A.5ML12

Qt Meth : 3M_A1005.M
Qt On : 10/23/17 12:39
Qt Upd On: 10/16/17 14:36





Form1

ORGANICS VOLATILE REPORT

Sample Number: AD00698-034

Client Id: 152140-DDC-07-PD

Data File: 3M118974.D

Analysis Date: 10/21/17 03:49

Date Rec/Extracted: 10/20/17-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	24
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	6.8
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	4.9
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

36

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

7102003 0275

SampleID : AD00698-034
 Data File: 3M118974.D
 Acq On : 10/21/17 03:49

Operator : WP
 Sam Mult : 1 Vial# : 44
 Misc : A,5ML!2

Qt Meth : 3M_A1006
 Qt On : 10/23/17 12:39
 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.947	96	330039	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.779	117	268004	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.215	152	111097	30.00	ug/l	-0.01
System Monitoring Compounds						
37) Dibromofluoromethane	4.526	111	98153	30.73	ug/l	0.00
Spiked Amount 30.000				Recovery	=	102.43%
39) 1,2-Dichloroethane-d4	4.743	67	78071	31.03	ug/l	-0.01
Spiked Amount 30.000				Recovery	=	103.43%
66) Toluene-d8	5.902	98	333622	27.93	ug/l	0.00
Spiked Amount 30.000				Recovery	=	93.10%
76) Bromofluorobenzene	7.482	174	114598	29.22	ug/l	-0.01
Spiked Amount 30.000				Recovery	=	97.40%
Target Compounds						
30) cis-1,2-Dichloroethene	4.214	61	119941	24.3647	ug/l	77
49) Trichloroethene	5.169	130	12372	4.9298	ug/l	90
65) Tetrachloroethene	6.274	164	11674	6.7672	ug/l	84

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

Abundance

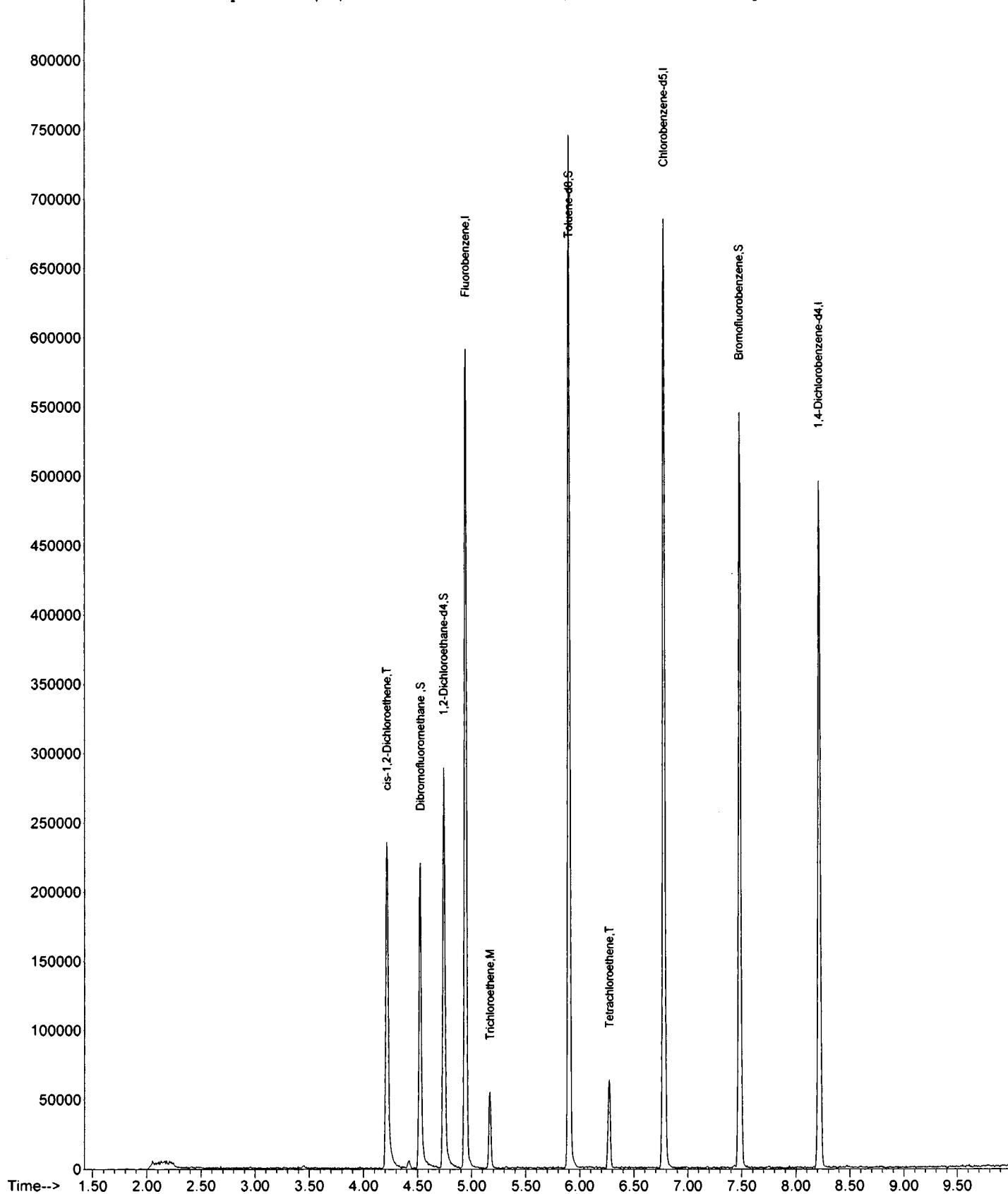
TIC: 3M118974.D\data.ms

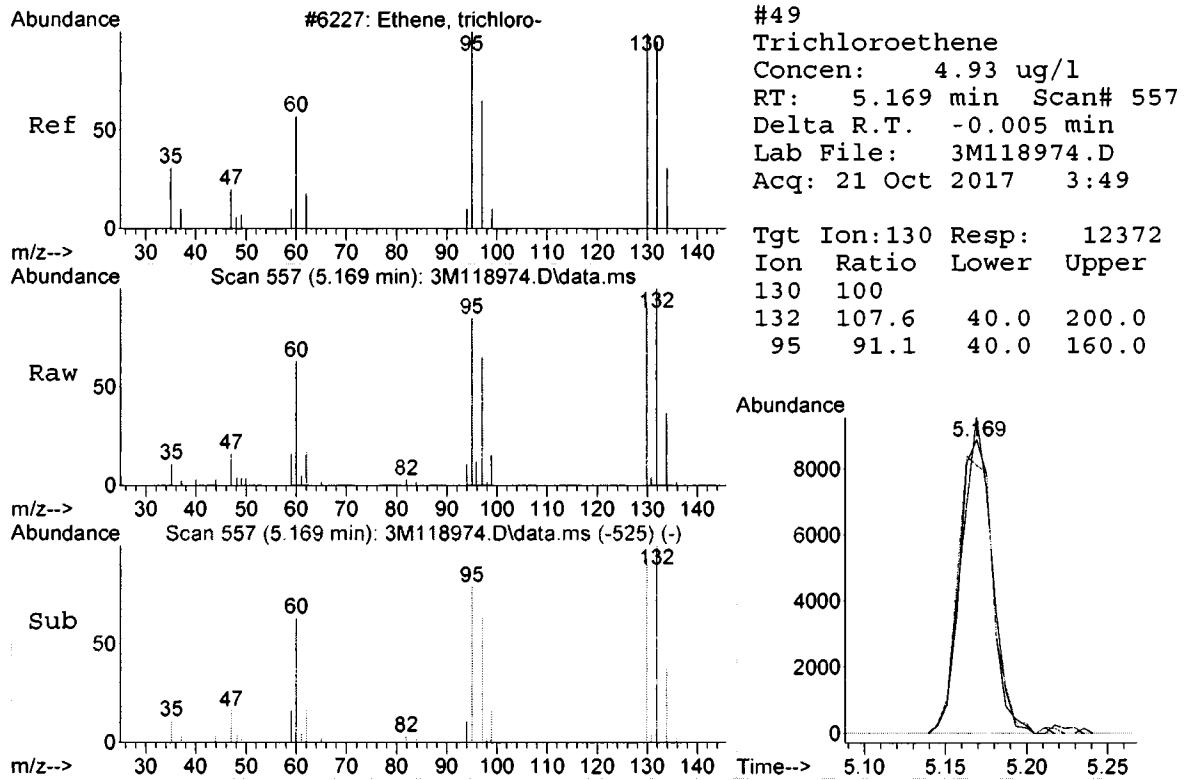
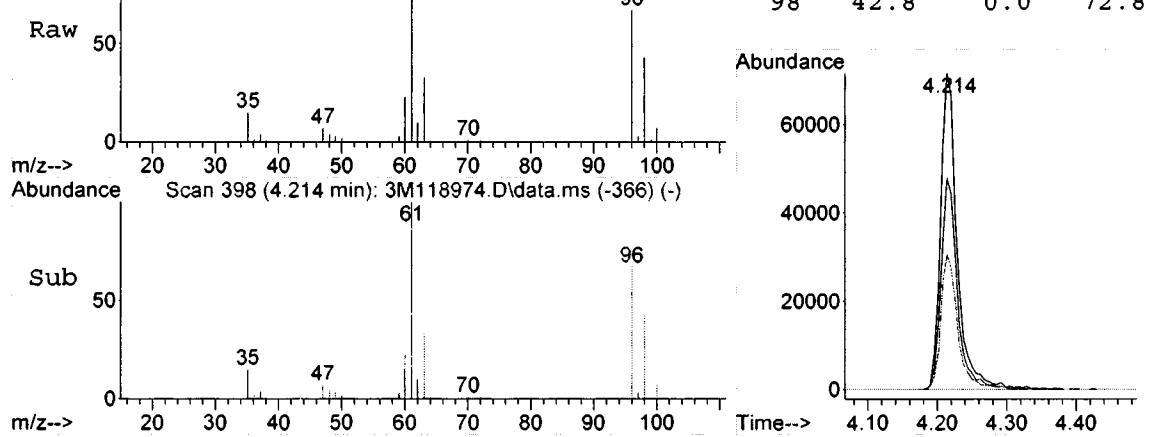
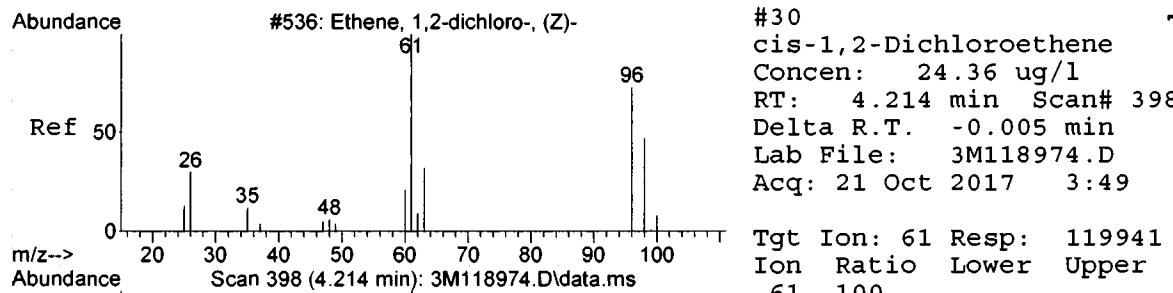
Quant QT Reviewed

SampleID : AD00698-034
Data File: 3M118974.D
Acq On : 10/21/17 03:49

Operator : WP
Sam Mult : 1 Vial# : 44
Misc : A, SML12

Qt Meth : 3M_A1005.M
Qt On : 10/23/17 12:39
Qt Upd On: 10/16/17 14:36

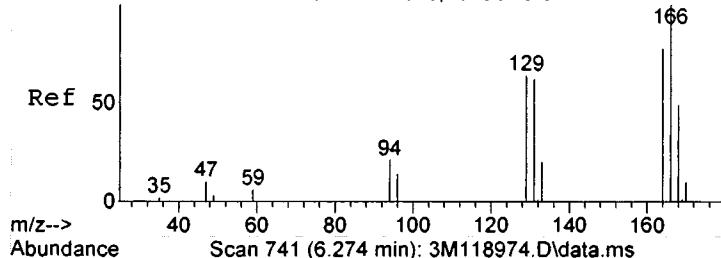




Abundance

#18146: Ethene, tetrachloro-

7102003 0278



#65

Tetrachloroethene

Concen: 6.77 ug/l

RT: 6.274 min Scan# 741

Delta R.T. -0.011 min

Lab File: 3M118974.D

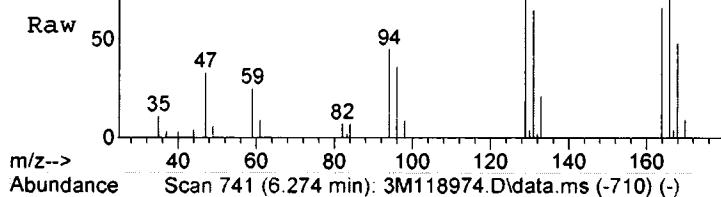
Acq: 21 Oct 2017 3:49

Tgt Ion:164 Resp: 11674

Ion Ratio Lower Upper

164 100

166 150.9 61.8 201.8



Abundance

10000

8000

6000

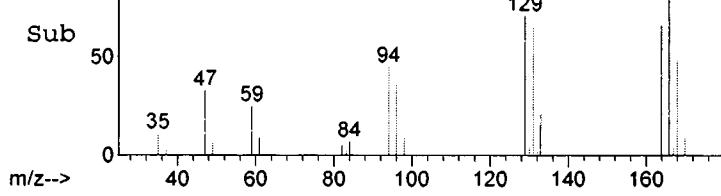
4000

2000

0

Time-->

6.25 6.274 6.30



Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-035

Client Id: 152140-DDC-08-PS

Data File: 3M119018.D

Analysis Date: 10/23/17 14:05

Date Rec/Extracted: 10/20/17-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	16
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	1.4
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

17

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

7102003 0280

SampleID : AD00698-035
 Data File: 3M119018.D
 Acq On : 10/23/17 14:05

Operator : SG
 Sam Mult : 1 Vial# : 23
 Misc : A,5ML!1

Qt Meth : 3M_A1005.M
 Qt On : 10/23/17 15:06
 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-23-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.946	96	368481	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.784	117	315391	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.225	152	124206	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.525	111	110402	30.96	ug/l	0.00
Spiked Amount	30.000			Recovery	=	103.20%
39) 1,2-Dichloroethane-d4	4.747	67	86067	30.64	ug/l	0.00
Spiked Amount	30.000			Recovery	=	102.13%
66) Toluene-d8	5.907	98	387120	27.54	ug/l	0.00
Spiked Amount	30.000			Recovery	=	91.80%
76) Bromofluorobenzene	7.493	174	130559	29.78	ug/l	0.00
Spiked Amount	30.000			Recovery	=	99.27%
Target Compounds						
30) cis-1,2-Dichloroethene	4.219	61	89256	16.2398	ug/l	77
65) Tetrachloroethene	6.279	164	2773	1.3659	ug/l	99

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

Abundance

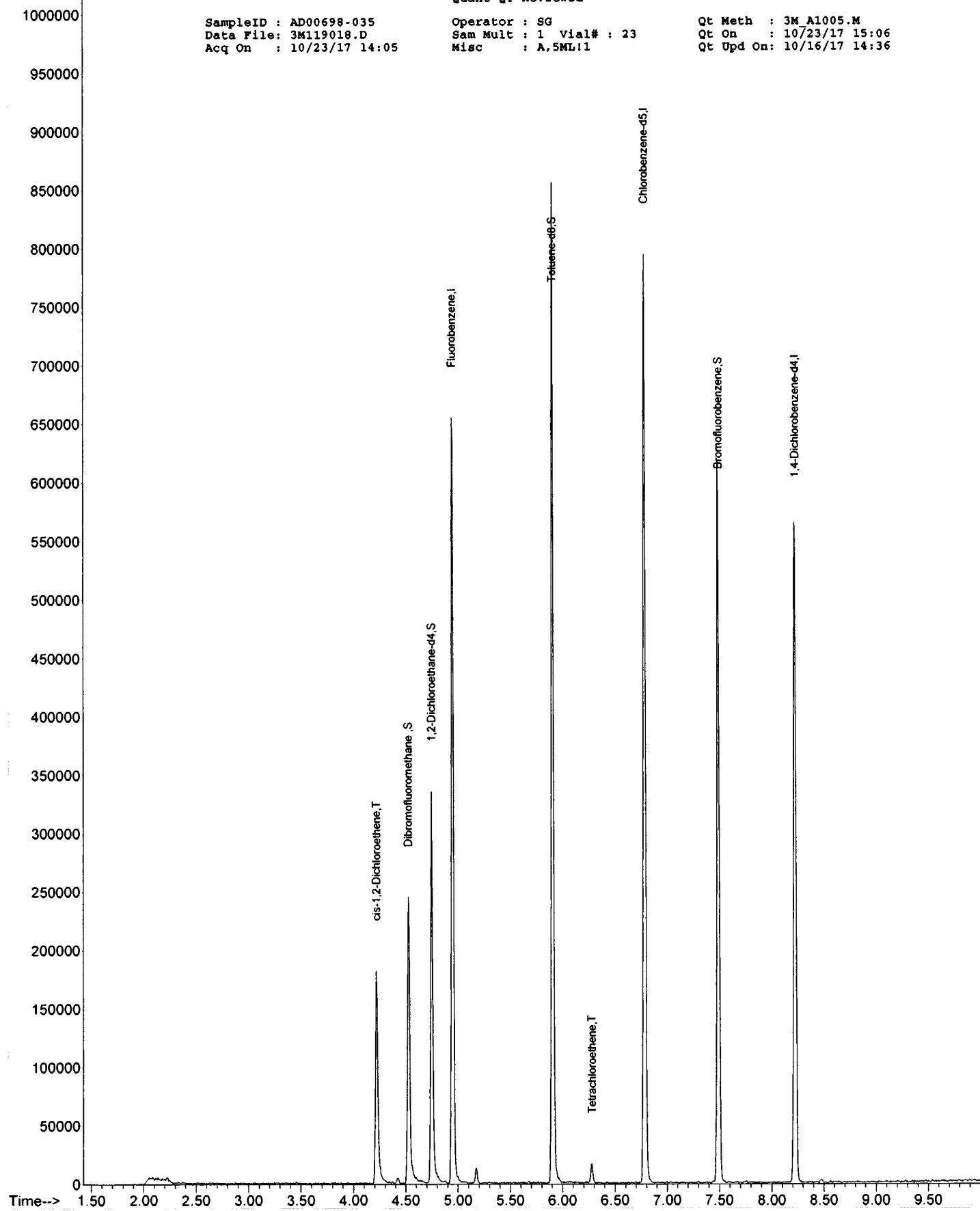
TIC: 3M119018.D\data.ms

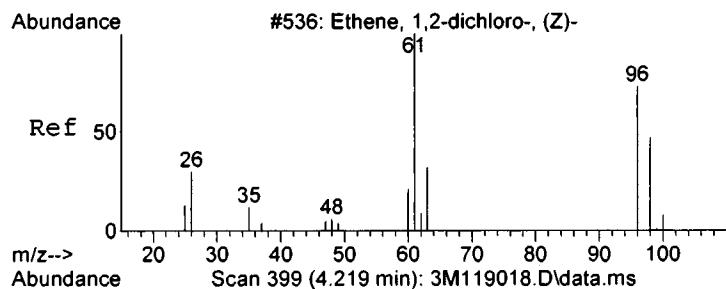
Quant QT Reviewed

SampleID : AD00698-035
Data File: 3M119018.D
Acq On : 10/23/17 14:05

Operator : SG
Sam Mult : 1 Vial# : 23
Misc : A,5ML:1

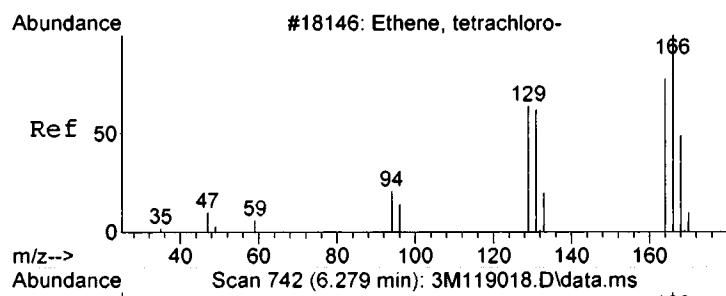
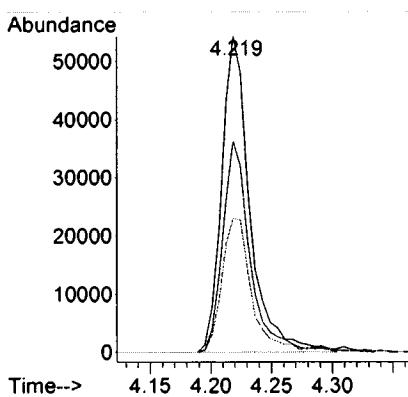
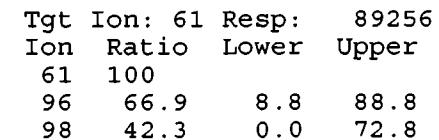
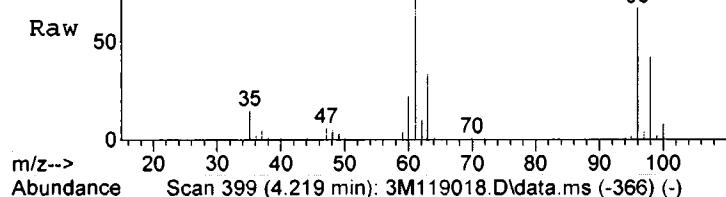
Qt Meth : 3M_A1005.M
Qt On : 10/23/17 15:06
Qt Upd On: 10/16/17 14:36





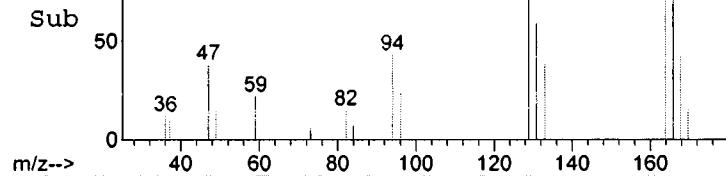
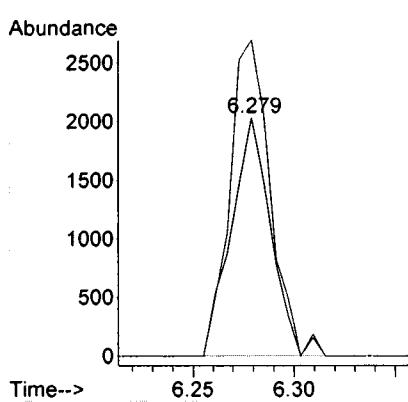
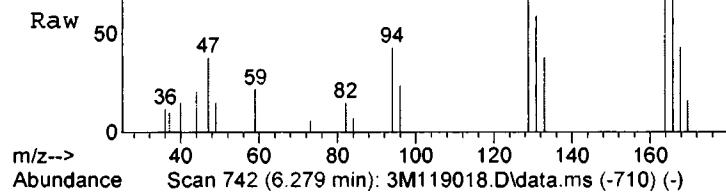
#30
cis-1,2-Dichloroethene
Concen: 16.24 ug/l
RT: 4.219 min Scan# 399
Delta R.T. -0.001 min
Lab File: 3M119018.D
Acq: 23 Oct 2017 14:05

7102003 0282



#65
Tetrachloroethene
Concen: 1.37 ug/l
RT: 6.279 min Scan# 742
Delta R.T. -0.007 min
Lab File: 3M119018.D
Acq: 23 Oct 2017 14:05

Tgt	Ion:164	Resp:	2773
Ion	Ratio	Lower	Upper
164	100		
166	132.5	61.8	201.8



Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-036

Client Id: 152140-DDC-08-PD

Data File: 3M119007.D

Analysis Date: 10/23/17 11:00

Date Rec/Extracted: 10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	15
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442352

Total Target Concentration**15**

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

7102003 0284

SampleID : AD00698-036
 Data File: 3M119007.D
 Acq On : 10/23/17 11:00

Operator : SG
 Sam Mult : 1 Vial# : 15
 Misc : A,SML12

Qt Meth : 3M_A1005.M
 Qt On : 10/23/17 15:06
 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-23-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.946	96	345715	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.778	117	296883	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.219	152	121797	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.525	111	104812	31.32	ug/l	0.00
Spiked Amount	30.000			Recovery	=	104.40%
39) 1,2-Dichloroethane-d4	4.741	67	81303	30.85	ug/l	-0.01
Spiked Amount	30.000			Recovery	=	102.83%
66) Toluene-d8	5.901	98	360006	27.21	ug/l	0.00
Spiked Amount	30.000			Recovery	=	90.70%
76) Bromofluorobenzene	7.487	174	121613	28.29	ug/l	0.00
Spiked Amount	30.000			Recovery	=	94.30%
Target Compounds						
30) cis-1,2-Dichloroethene	4.213	61	77133	14.9582	ug/l	80

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

6

Abundance

950000
900000
850000
800000
750000
700000
650000
600000
550000
500000
450000
400000
350000
300000
250000
200000
150000
100000
50000
0

TIC: 3M119007.D\data.ms

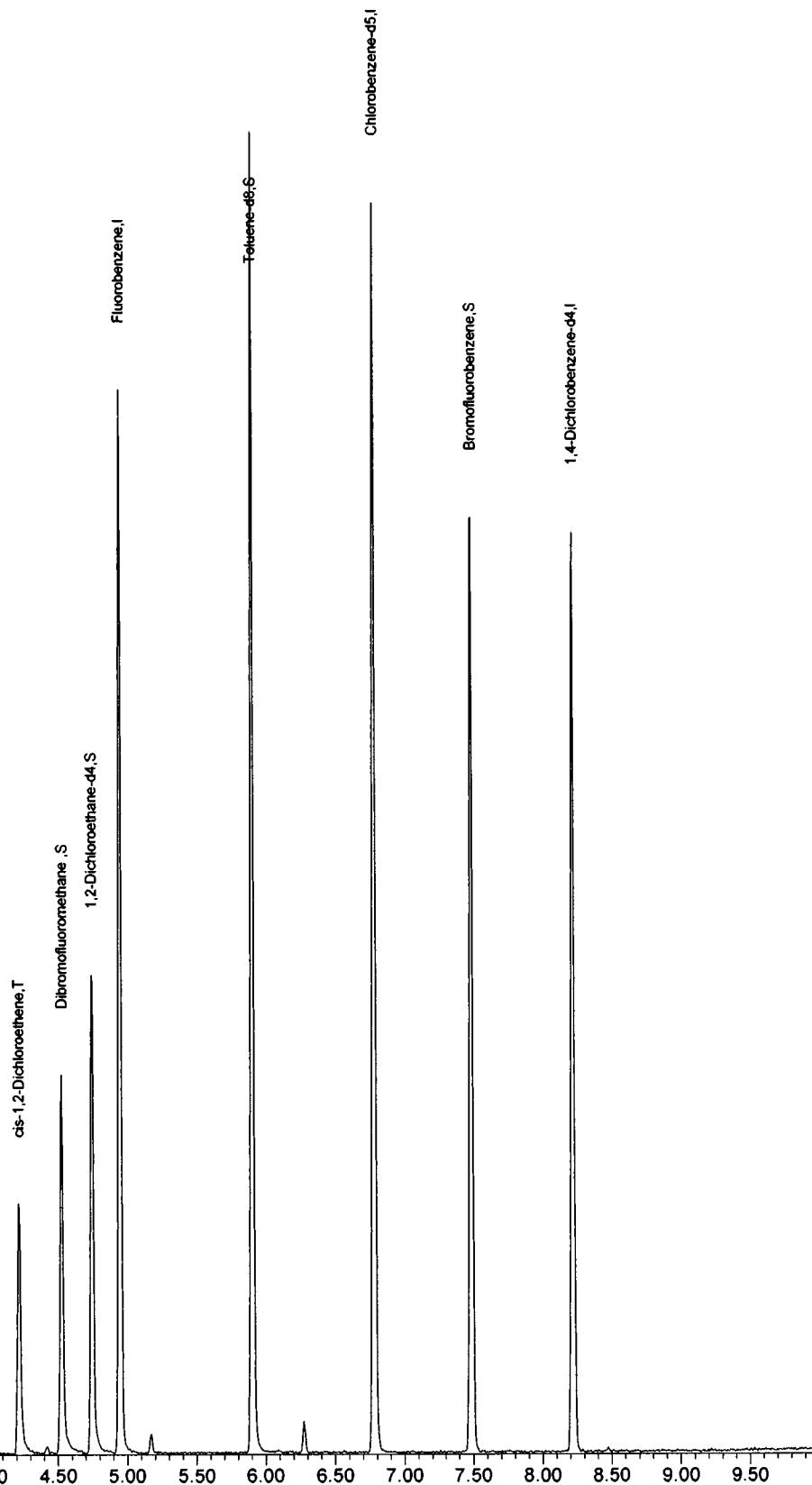
Quant QT Reviewed

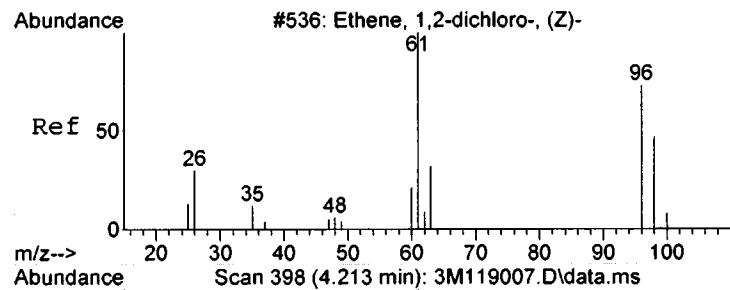
SampleID : AD00698-036
Data File: 3M119007.D
Acq On : 10/23/17 11:00

Operator : SG
Sam Mult : 1 Vial# : 15
Misc : A,5ML12

Qt Meth : 3M_A1005.M
Qt On : 10/23/17 15:06
Qt Upd On: 10/16/17 14:36

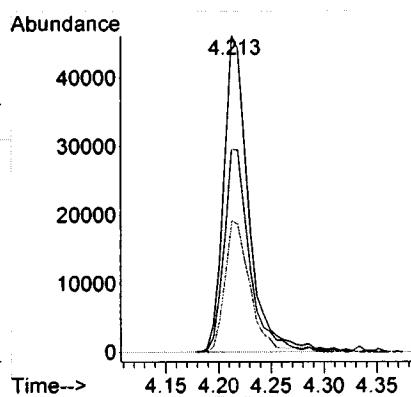
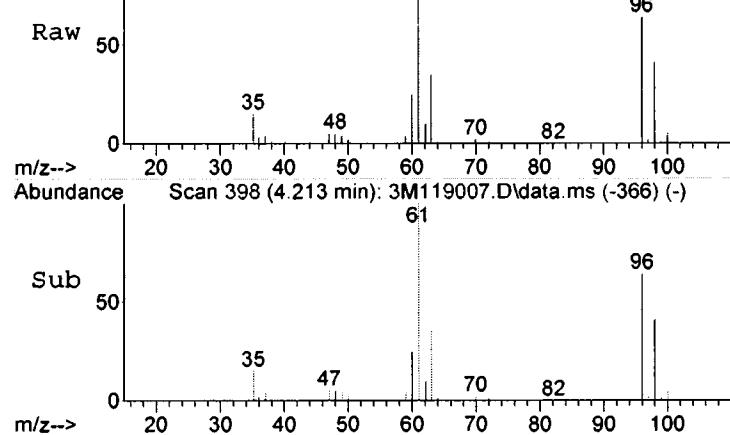
Time--> 1.50 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 6.00 6.50 7.00 7.50 8.00 8.50 9.00 9.50





#30
cis-1,2-Dichloroethene
Concen: 14.96 ug/l
RT: 4.213 min Scan# 398
Delta R.T. -0.007 min
Lab File: 3M119007.D
Acq: 23 Oct 2017 11:00

Tgt	Ion:	61	Resp:	77133
Ion	Ratio		Lower	Upper
61	100			
96	64.1		8.8	88.8
98	41.5		0.0	72.8



Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-037

Client Id: 152140-DDC-09-PS

Data File: 3M119013.D

Analysis Date: 10/23/17 12:41

Date Rec/Extracted: 10/20/17-NA

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	1.6
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	11
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	1.0	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

14

ColumnID: (*) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of *a*-Chlordane and *y*-Chlordane.

SampleID : ADC0698-037
 Data File: 3M119013.D
 Acq On : 10/23/17 12:41

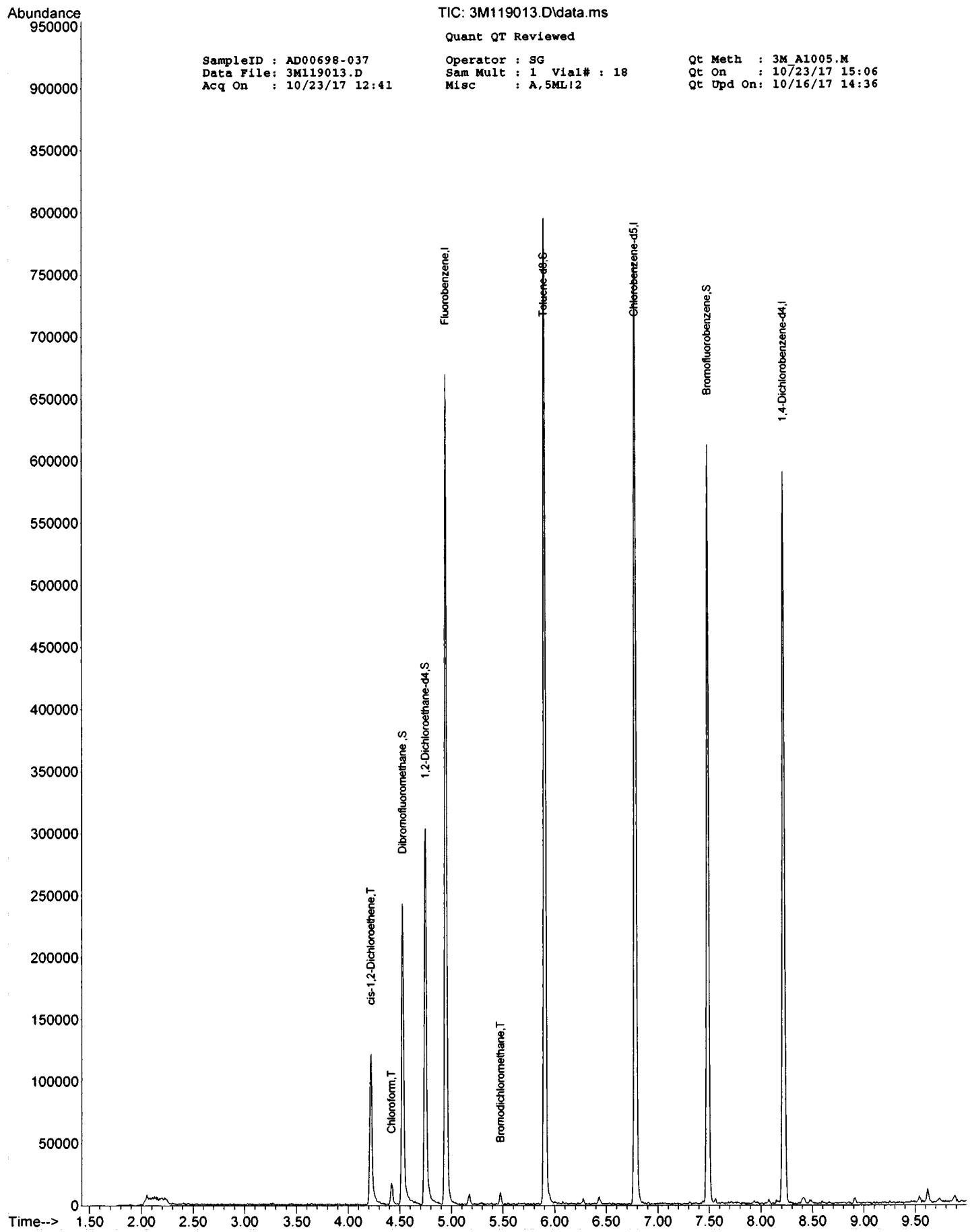
Operator : SG
 Sam Mult : 1 Vial# : 18
 Misc : A.5ML!2

Qt Meth : 3M_A1005M
 Qt On : 10/23/17 15:06
 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-23-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

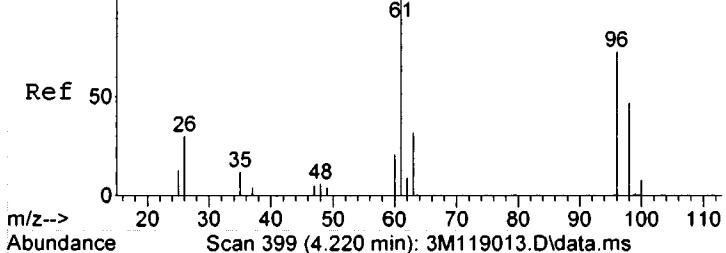
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.947	96	358892	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.779	117	303179	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	131294	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.526	111	103238	29.72	ug/l	0.00
Spiked Amount	30.000		Recovery	=	99.07%	
39) 1,2-Dichloroethane-d4	4.748	67	83323	30.46	ug/l	0.00
Spiked Amount	30.000		Recovery	=	101.53%	
66) Toluene-d8	5.902	98	373464	27.64	ug/l	0.00
Spiked Amount	30.000		Recovery	=	92.13%	
76) Bromofluorobenzene	7.487	174	127606	27.53	ug/l	0.00
Spiked Amount	30.000		Recovery	=	91.77%	
Target Compounds						
30) cis-1,2-Dichloroethene	4.220	61	60013	11.2109	ug/l	80
36) Chloroform	4.418	83	9378	1.5768	ug/l	90
45) Bromodichloromethane	5.475	83	4546	1.0121	ug/l	79

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



Abundance

#536: Ethene, 1,2-dichloro-, (Z)-



#30

cis-1,2-Dichloroethene

7102003 0290

Concen: 11.21 ug/l

RT: 4.220 min Scan# 399

Delta R.T. 0.000 min

Lab File: 3M119013.D

Acq: 23 Oct 2017 12:41

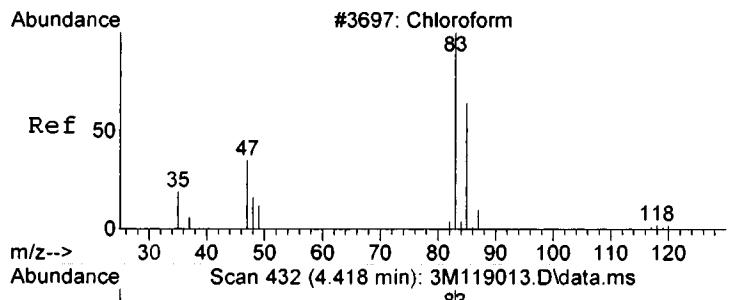
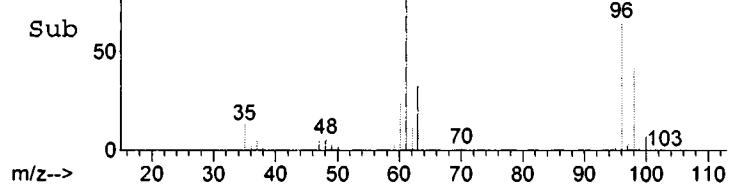
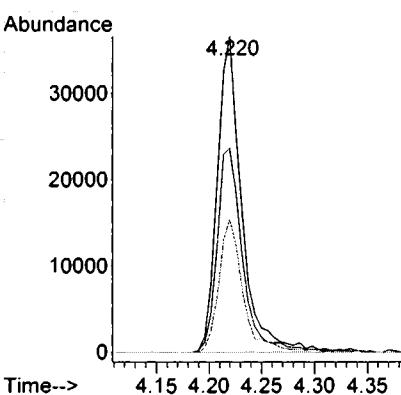
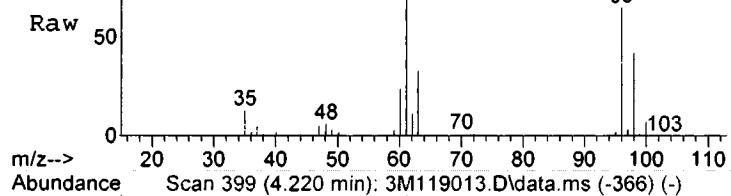
Tgt Ion: 61 Resp: 60013

Ion Ratio Lower Upper

61 100

96 64.7 8.8 88.8

98 42.0 0.0 72.8



#36

Chloroform

Concen: 1.58 ug/l

RT: 4.418 min Scan# 432

Delta R.T. -0.006 min

Lab File: 3M119013.D

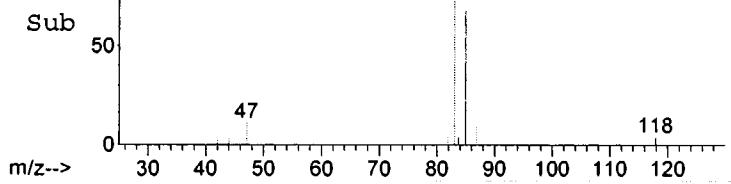
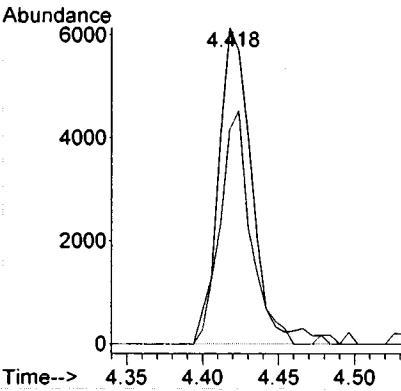
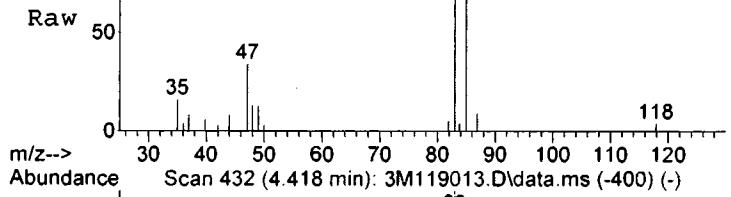
Acq: 23 Oct 2017 12:41

Tgt Ion: 83 Resp: 9378

Ion Ratio Lower Upper

83 100

85 67.8 36.0 116.0



Abundance

#17356: Methane, bromodichloro-

7102003 0291

Ref 50

47

35

83

0

m/z-->

Scan 608 (5.475 min): 3M119013.D\data.ms

#45

Bromodichloromethane

Concen: 1.01 ug/l

RT: 5.475 min Scan# 608

Delta R.T. -0.006 min

Lab File: 3M119013.D

Acq: 23 Oct 2017 12:41

Abundance

Tgt Ion: 83 Resp: 4546

Ion Ratio Lower Upper

83 100

85 52.0 28.9 108.9

Raw 50

47

83

0

m/z-->

Scan 608 (5.475 min): 3M119013.D\data.ms (-576) (-)

Abundance

5.475

3000

2000

1000

0

Time--> 5.44 5.46 5.48 5.50 5.52

Sub 50

47

83

0

m/z-->

129

Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-038

Client Id: 152140-DDC-09-PD

Data File: 3M119014.D

Analysis Date: 10/23/17 12:58

Date Rec/Extracted: 10/20/17-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	2.9
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	1.3	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	3.0
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

7.2

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of *a*-Chlordane and *y*-Chlordane.

SampleID : AD00698-038
 Data File: 3M119014.D
 Acq On : 10/23/17 12:58

Operator : SG
 Sam Mult : 1 Vial# : 19
 Misc : A,5ML!2

Qt Meth : 3M_A1005.M
 Qt On : 10/23/17 15:06
 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-23-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.951	96	357358	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.783	117	309668	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.225	152	128198	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.525	111	103874	30.03	ug/l	0.00
Spiked Amount 30.000				Recovery	=	100.10%
39) 1,2-Dichloroethane-d4	4.747	67	83999	30.84	ug/l	0.00
Spiked Amount 30.000				Recovery	=	102.80%
66) Toluene-d8	5.906	98	370554	26.85	ug/l	0.00
Spiked Amount 30.000				Recovery	=	89.50%
76) Bromofluorobenzene	7.492	174	131653	29.09	ug/l	0.00
Spiked Amount 30.000				Recovery	=	96.97%
Target Compounds						
36) Chloroform	4.423	83	16971	2.8657	ug/l	74
45) Bromodichloromethane	5.480	83	5739	1.2832	ug/l	88
49) Trichloroethene	5.173	130	8190	3.0140	ug/l	84

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

|
ke

Abundance

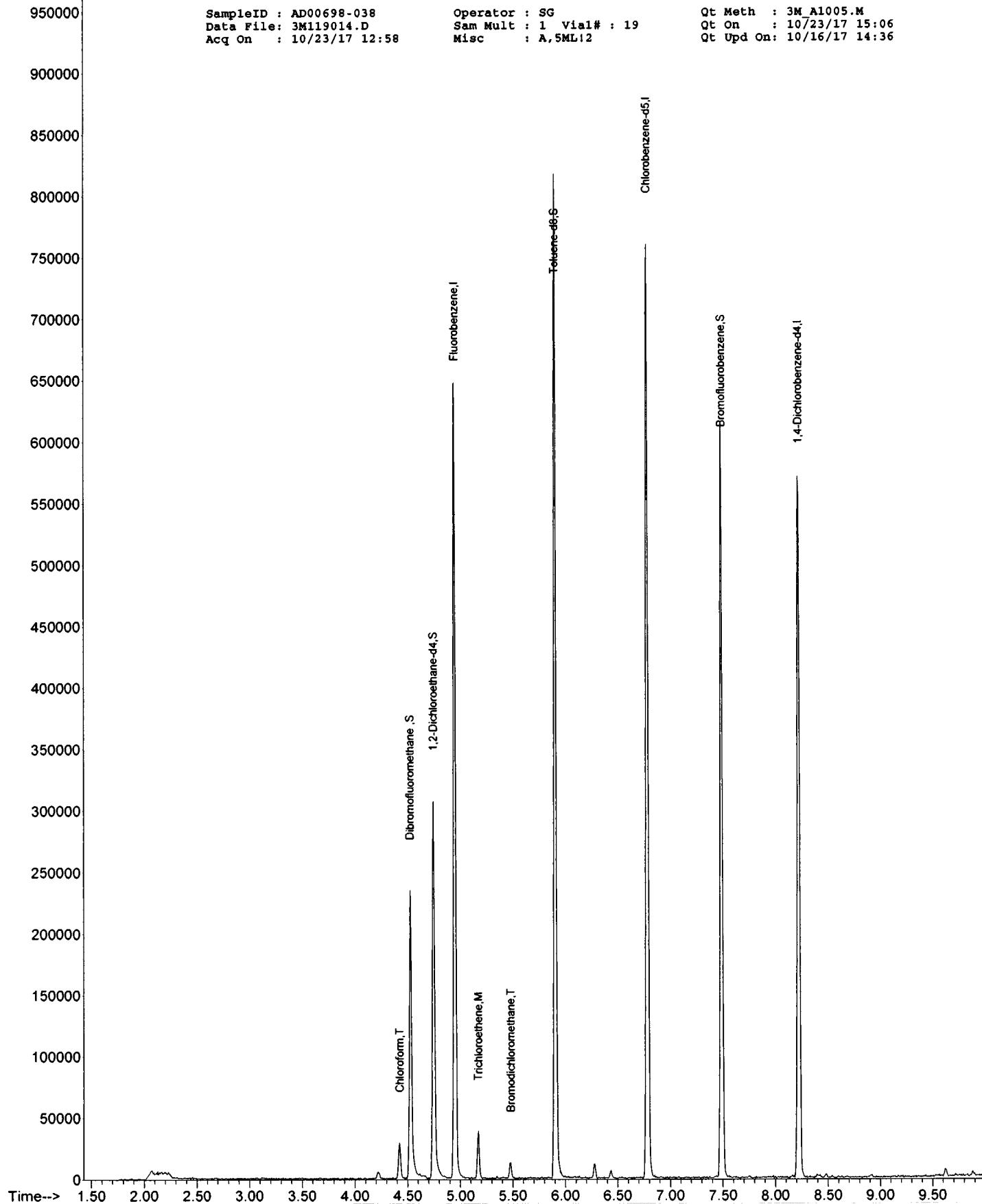
TIC: 3M119014.D\data.ms

Quant QT Reviewed

SampleID : AD00698-038
 Data File: 3M119014.D
 Acq On : 10/23/17 12:58

Operator : SG
 Sam Mult : 1 vial# : 19
 Misc : A,5ML12

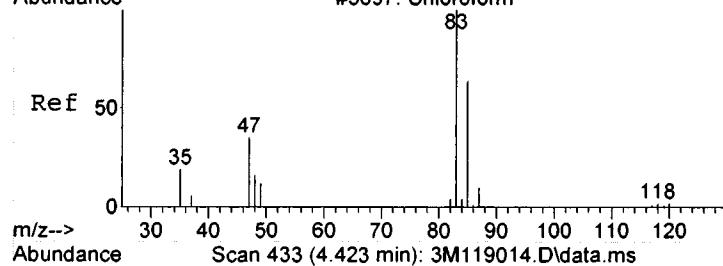
Qt Meth : 3M_A1005.M
 Qt On : 10/23/17 15:06
 Qt Upd On: 10/16/17 14:36



Abundance

#3697: Chloroform

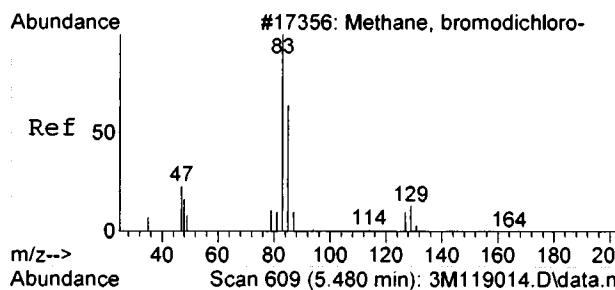
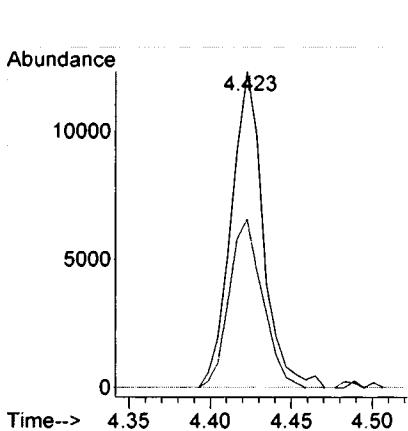
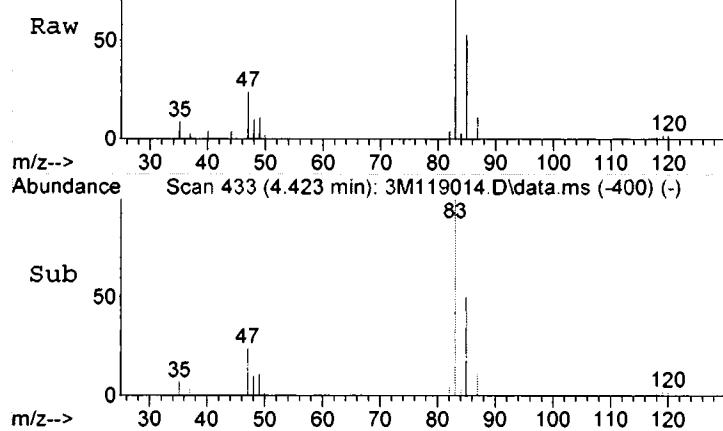
7102003 0295



#36

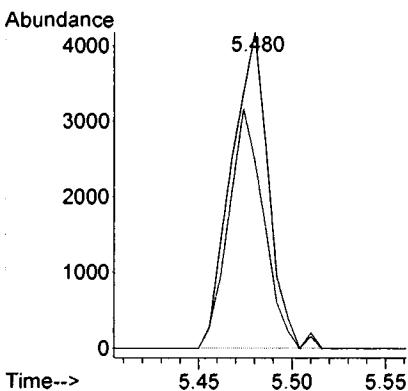
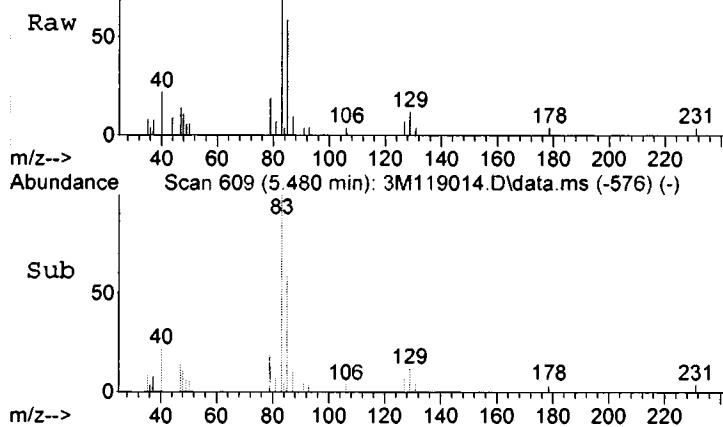
Chloroform

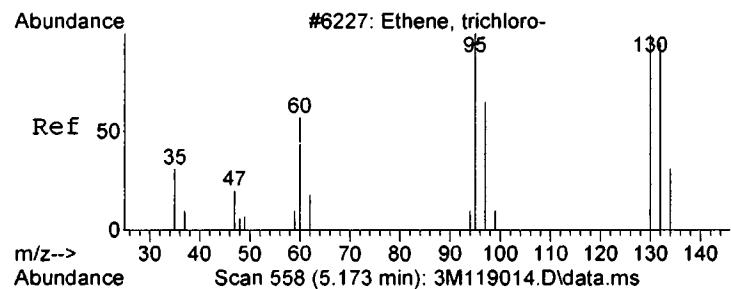
Concen: 2.87 ug/l
 RT: 4.423 min Scan# 433
 Delta R.T. -0.001 min
 Lab File: 3M119014.D
 Acq: 23 Oct 2017 12:58



#45
 Bromodichloromethane
 Concen: 1.28 ug/l
 RT: 5.480 min Scan# 609
 Delta R.T. -0.001 min
 Lab File: 3M119014.D
 Acq: 23 Oct 2017 12:58

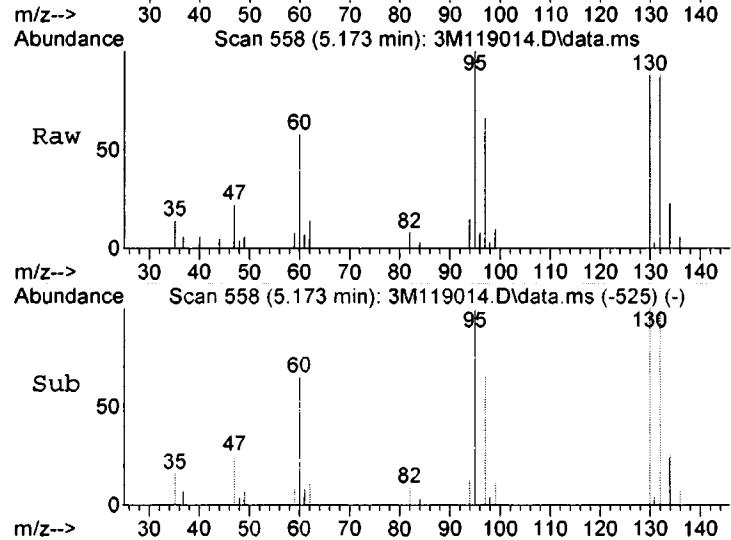
Tgt Ion: 83 Resp: 5739
 Ion Ratio Lower Upper
 83 100
 85 59.3 28.9 108.9



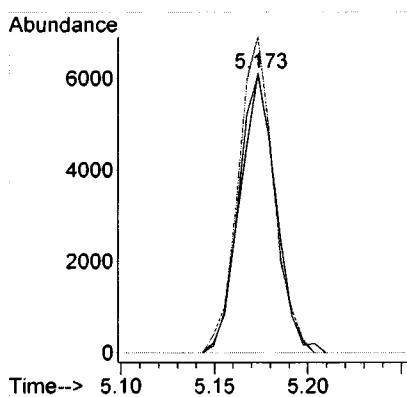


#49
Trichloroethene
Concen: 3.01 ug/l
RT: 5.173 min Scan# 558
Delta R.T. -0.001 min
Lab File: 3M119014.D
Acq: 23 Oct 2017 12:58

7102003 0296



Tgt	Ion:130	Resp:	8190
Ion	Ratio	Lower	Upper
130	100		
132	99.3	40.0	200.0
95	113.0	40.0	160.0



Form1

ORGANICS VOLATILE REPORT

Sample Number: AD00698-039

Client Id: 152140-DDC-10-PS

Data File: 3M119015.D

Analysis Date: 10/23/17 13:15

Date Rec/Extracted: 10/20/17-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	1.8
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	8.8
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	1.3	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

12

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

SampleID : AD00698-039
 Data File: 3M119015.D
 Acq On : 10/23/17 13:15

Operator : SG
 Sam Mult : 1 Vial# : 20
 Misc : A,5ML!2

Qt Meth : 3M_A1005.M
 Qt On : 10/23/17 15:06
 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-23-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.946	96	370609	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.784	117	317054	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	128711	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.526	111	107255	29.90	ug/l	0.00
Spiked Amount	30.000			Recovery	=	99.67%
39) 1,2-Dichloroethane-d4	4.748	67	87579	31.00	ug/l	0.00
Spiked Amount	30.000			Recovery	=	103.33%
66) Toluene-d8	5.907	98	378623	26.80	ug/l	0.00
Spiked Amount	30.000			Recovery	=	89.33%
76) Bromofluorobenzene	7.487	174	130457	28.71	ug/l	0.00
Spiked Amount	30.000			Recovery	=	95.70%
Target Compounds						
30) cis-1,2-Dichloroethene	4.219	61	48680	8.8063	ug/l	73
36) Chloroform	4.423	83	11204	1.8243	ug/l	84
45) Bromodichloromethane	5.475	83	6200	1.3367	ug/l	92

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

h

Abundance

950000

900000

850000

800000

750000

700000

650000

600000

550000

500000

450000

400000

350000

300000

250000

200000

150000

100000

50000

0

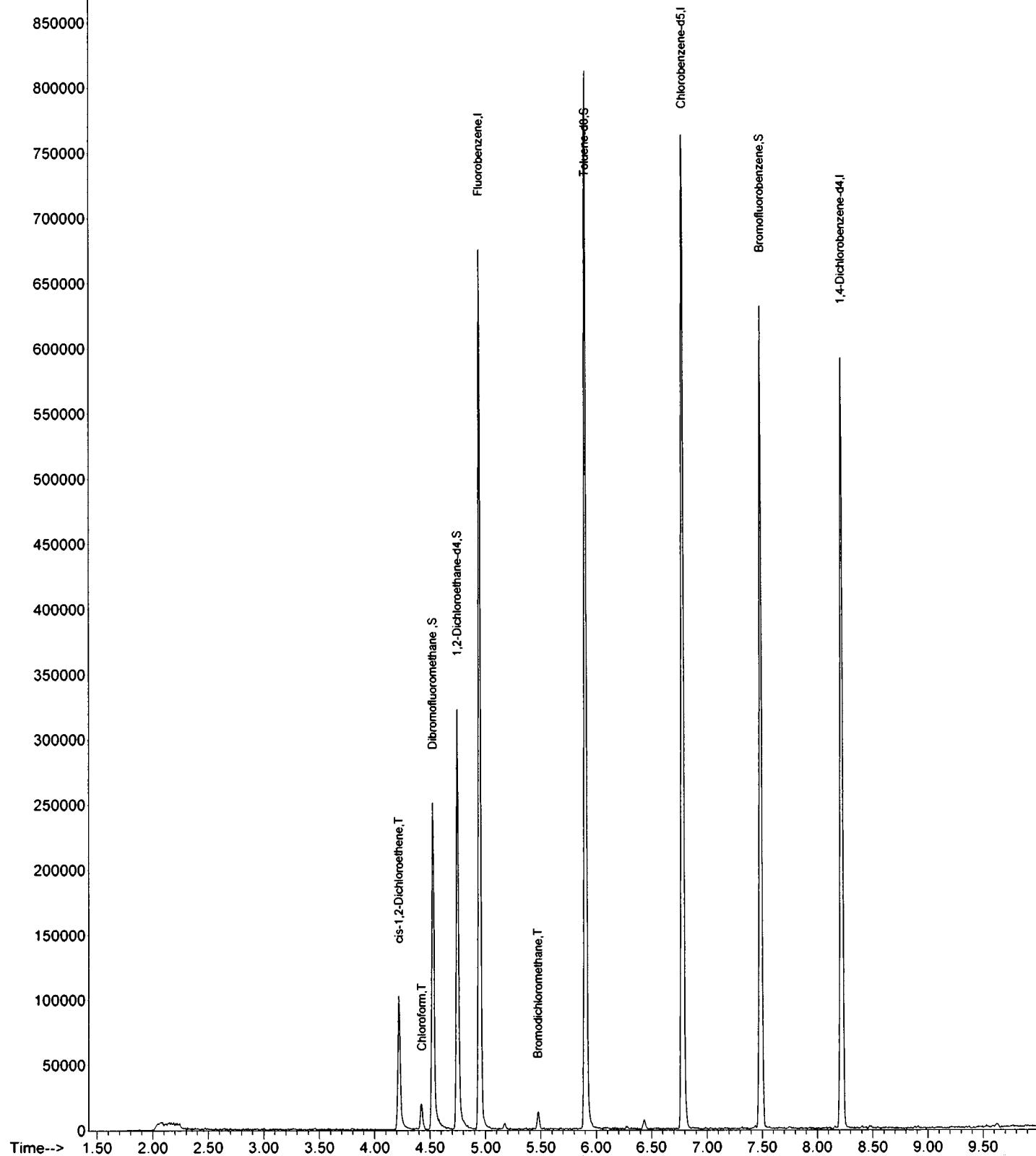
TIC: 3M119015.D\data.ms

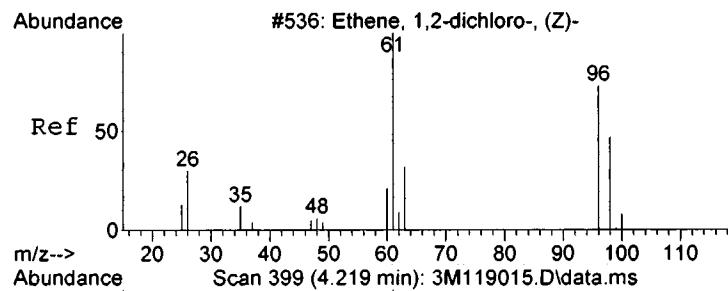
Quant QT Reviewed

SampleID : AD00698-039
Data File: 3M119015.D
Acq On : 10/23/17 13:15

Operator : SG
Sam Mult : 1 Vial# : 20
Misc : A,5ML12

Qt Meth : 3M_A1005.M
Qt On : 10/23/17 15:06
Qt Upd On: 10/16/17 14:36

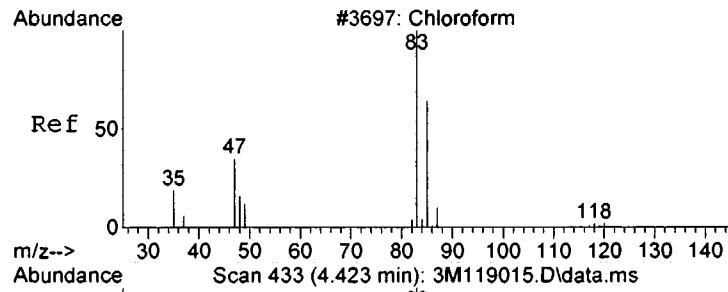
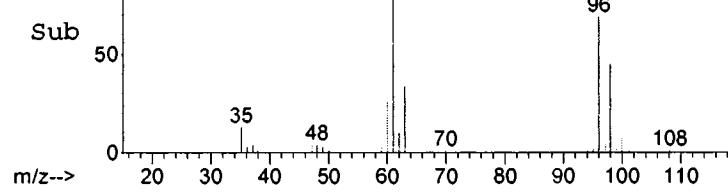
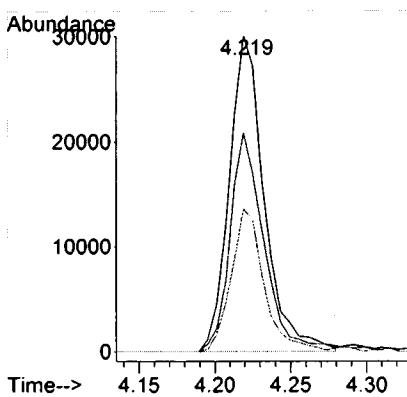
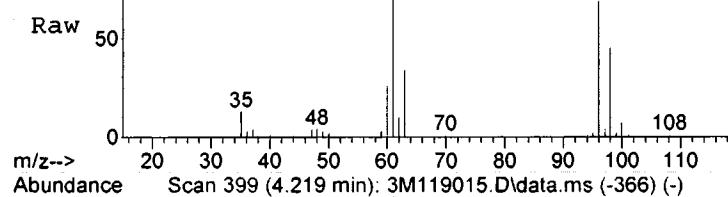




#30
cis-1,2-Dichloroethene
Concen: 8.81 ug/l
RT: 4.219 min Scan# 399
Delta R.T. -0.000 min
Lab File: 3M119015.D
Acq: 23 Oct 2017 13:15

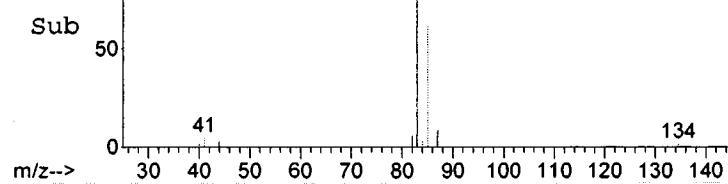
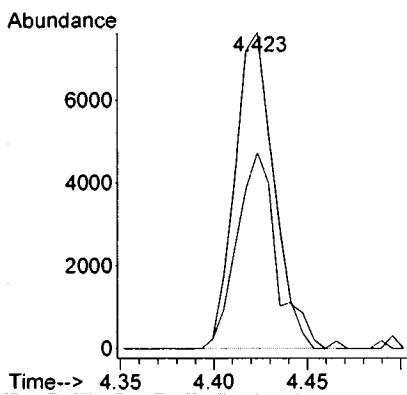
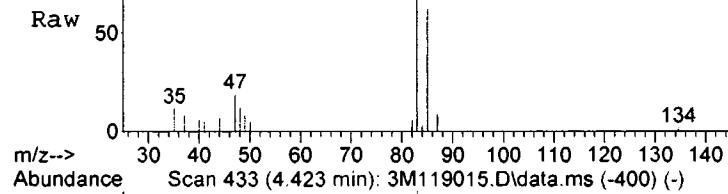
7102003 0300

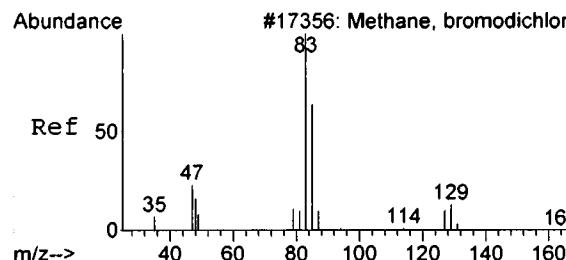
Tgt Ion: 61 Resp: 48680
Ion Ratio Lower Upper
61 100
96 69.3 8.8 88.8
98 45.2 0.0 72.8



#36
Chloroform
Concen: 1.82 ug/l
RT: 4.423 min Scan# 433
Delta R.T. -0.000 min
Lab File: 3M119015.D
Acq: 23 Oct 2017 13:15

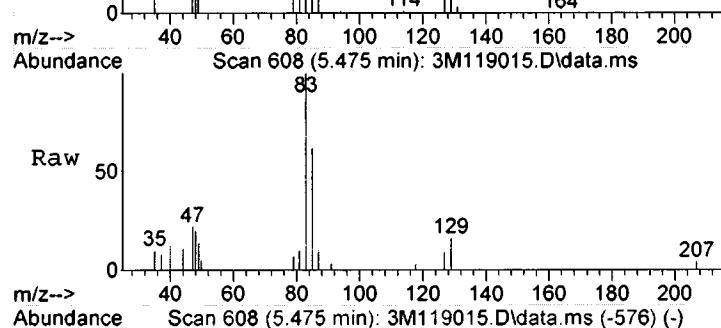
Tgt Ion: 83 Resp: 11204
Ion Ratio Lower Upper
83 100
85 62.0 36.0 116.0



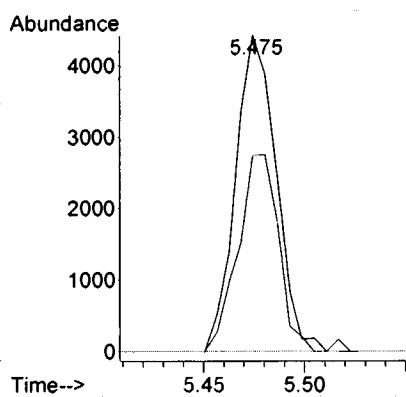
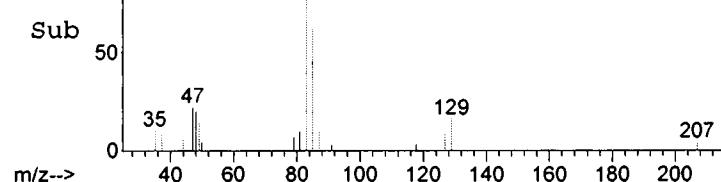


#45
Bromodichloromethane
Concen: 1.34 ug/l
RT: 5.475 min Scan# 608
Delta R.T. -0.006 min
Lab File: 3M119015.D
Acq: 23 Oct 2017 13:15

7102003 0301



Tgt	Ion:	83	Resp:	6200
Ion	Ratio	83	100	
85	62.1	28.9	108.9	



Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-040

Client Id: 152140-DDC-10-PD

Data File: 3M119016.D

Analysis Date: 10/23/17 13:32

Date Rec/Extracted: 10/20/17-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	2.6
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

2.6

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of *α*-Chlordane and *γ*-Chlordane.

7102003 0303

SampleID : AD00698-040
 Data File: 3M119016.D
 Acq On : 10/23/17 13:32

Operator : SG
 Sam Mult : 1 Vial# : 21
 Misc : A,5ML!2

Qt Meth : 3M_A1005
 Qt On : 10/23/17 15:06
 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-23-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.947	96	345522	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.785	117	297510	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	120049	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.526	111	103662	31.00	ug/l	0.00
Spiked Amount	30.000			Recovery	=	103.33%
39) 1,2-Dichloroethane-d4	4.748	67	83196	31.59	ug/l	0.00
Spiked Amount	30.000			Recovery	=	105.30%
66) Toluene-d8	5.908	98	357236	26.94	ug/l	0.00
Spiked Amount	30.000			Recovery	=	89.80%
76) Bromofluorobenzene	7.494	174	121605	28.70	ug/l	0.00
Spiked Amount	30.000			Recovery	=	95.67%
Target Compounds						
49) Trichloroethene	5.175	130	6953	2.6464	ug/l	85

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

Abundance

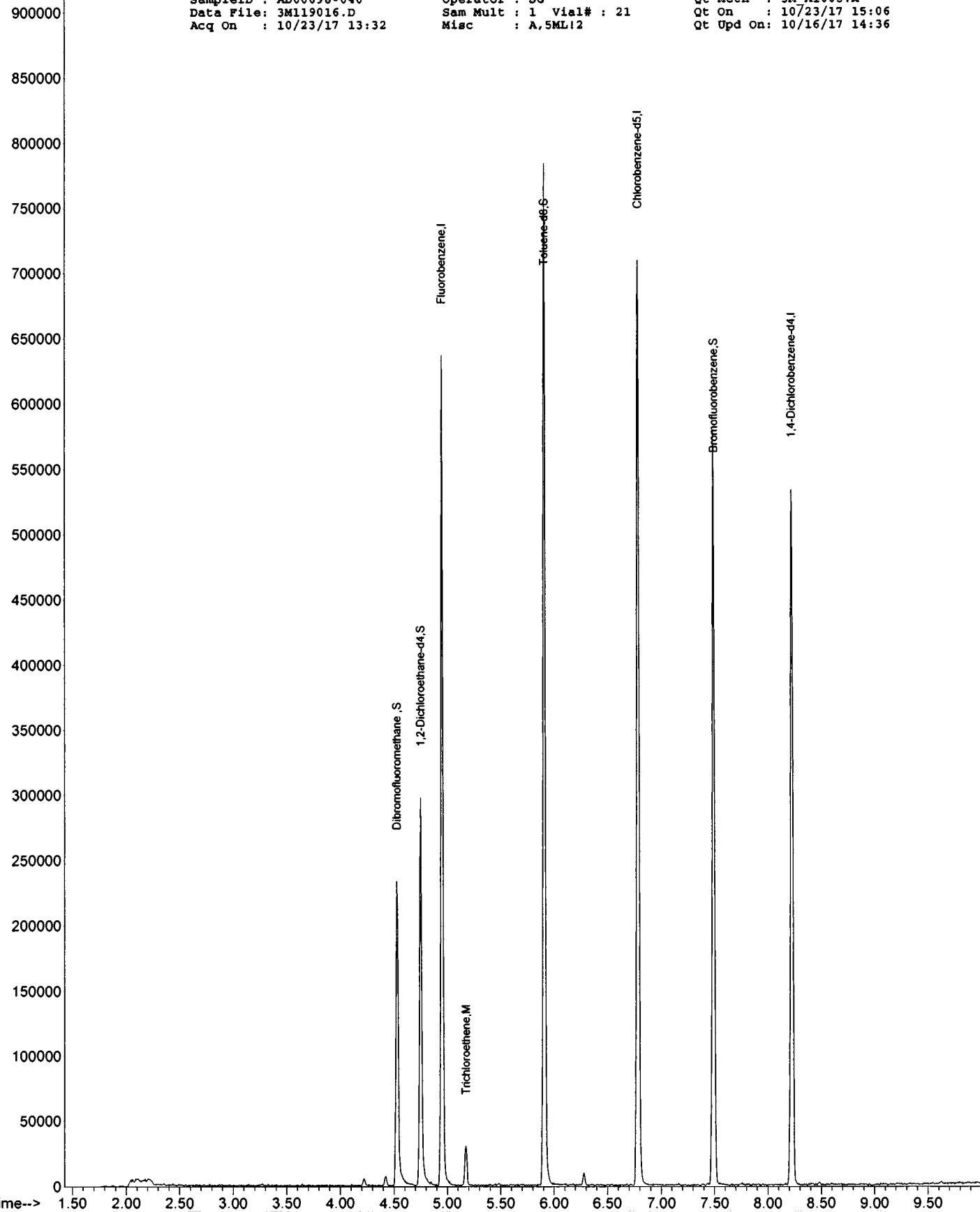
TIC: 3M119016.D\data.ms

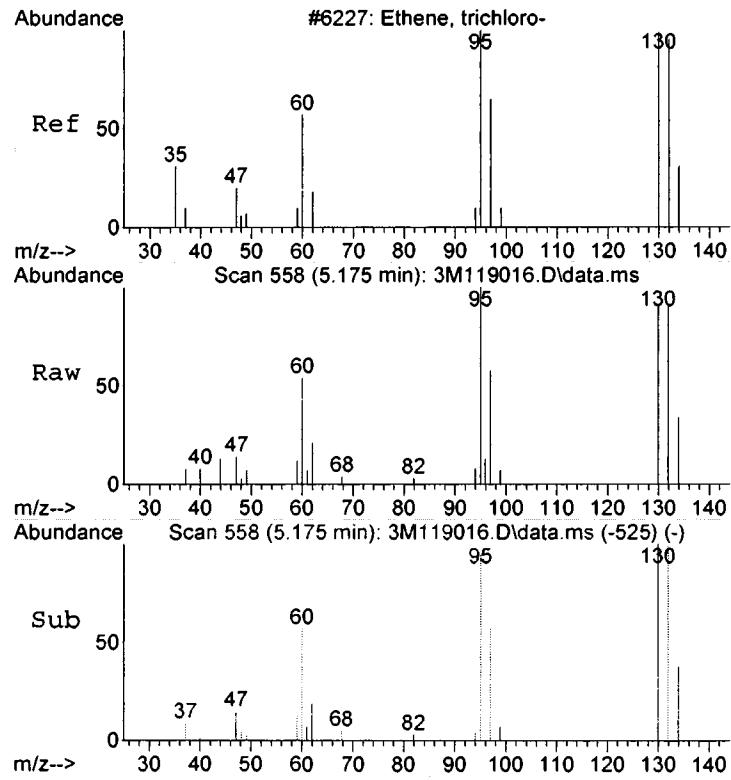
Quant QT Reviewed

SampleID : AD00698-040
Data File: 3M119016.D
Acq On : 10/23/17 13:32

Operator : SG
Sam Mult : 1 vial# : 21
Misc : A,5ML!2

Qt Meth : 3M_A1005.M
Qt On : 10/23/17 15:06
Qt Upd On: 10/16/17 14:36

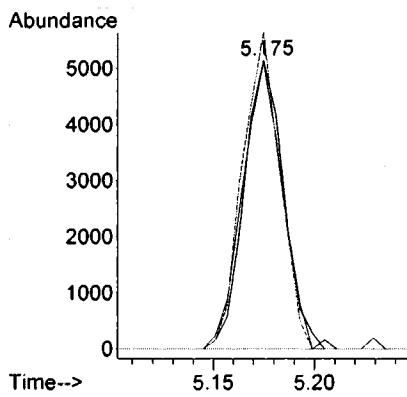




#49
Trichloroethene
Concen: 2.65 ug/l
RT: 5.175 min Scan# 558
Delta R.T. 0.000 min
Lab File: 3M119016.D
Acq: 23 Oct 2017 13:32

7102003 0305

Tgt	Ion:130	Resp:	6953
	Ratio	Lower	Upper
130	100		
132	99.3	40.0	200.0
95	109.6	40.0	160.0



Form1

ORGANICS VOLATILE REPORT

Sample Number: AD00698-041

Client Id: 152140-FD-02

Data File: 3M119017.D

Analysis Date: 10/23/17 13:48

Date Rec/Extracted: 10/20/17-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	1.2
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	20
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	89
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	15
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

130

ColumnID: (*) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

7102003 0307

SampleID : AD00698-041
 Data File: 3M119017.D
 Acq On : 10/23/17 13:48

Operator : SG
 Sam Mult : 1 Vial# : 22
 Misc : A,5ML!2

Qt Meth : 3M_A1005.M
 Qt On : 10/23/17 15:06
 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-23-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.946	96	367337	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.784	117	315668	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	128635	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.525	111	112153	31.54	ug/l	0.00
Spiked Amount	30.000			Recovery	=	105.13%
39) 1,2-Dichloroethane-d4	4.748	67	85139	30.41	ug/l	0.00
Spiked Amount	30.000			Recovery	=	101.37%
66) Toluene-d8	5.907	98	376482	26.76	ug/l	0.00
Spiked Amount	30.000			Recovery	=	89.20%
76) Bromofluorobenzene	7.487	174	131434	28.94	ug/l	0.00
Spiked Amount	30.000			Recovery	=	96.47%
Target Compounds						
30) cis-1,2-Dichloroethene	4.219	61	109649	20.0123	ug/l	77
36) Chloroform	4.417	83	7561	1.2421	ug/l	90
49) Trichloroethene	5.174	130	40919	14.6494	ug/l	86
65) Tetrachloroethene	6.279	164	179923	88.5494	ug/l	100

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

Abundance

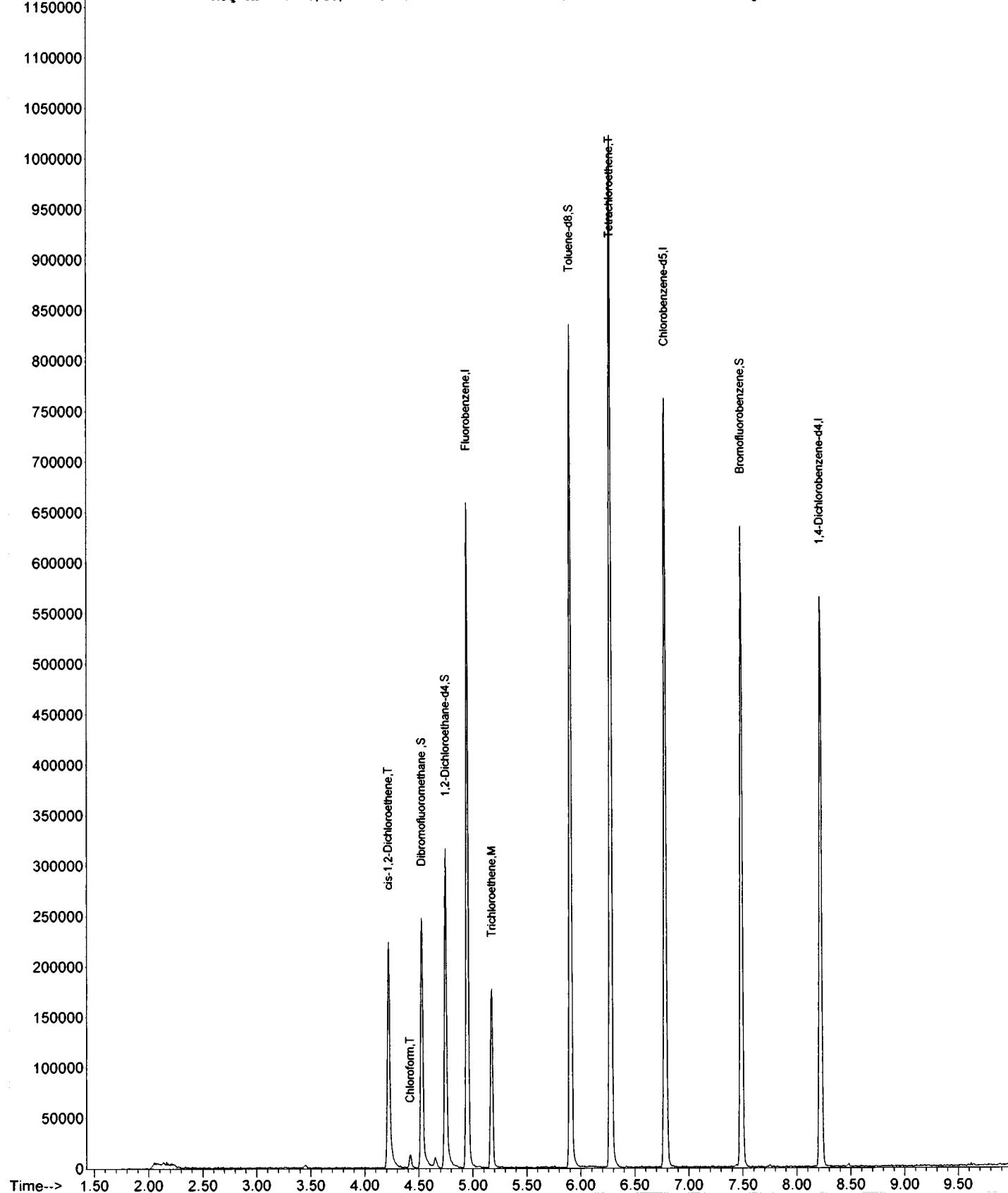
TIC: 3M119017.D\data.ms

Quant QT Reviewed

SampleID : AD00698-041
 Data File: 3M119017.D
 Acq On : 10/23/17 13:48

Operator : SG
 Sam Mult : 1 Vial# : 22
 Misc : A,5ML!2

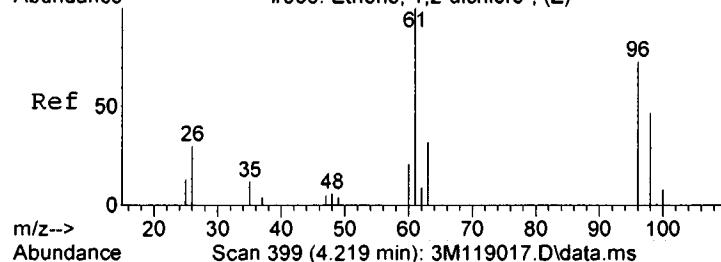
Qt Meth : 3M_A1005.M
 Qt On : 10/23/17 15:06
 Qt Upd On: 10/16/17 14:36



Abundance

#536: Ethene, 1,2-dichloro-, (Z)-

7102003 0309



#30

cis-1,2-Dichloroethene

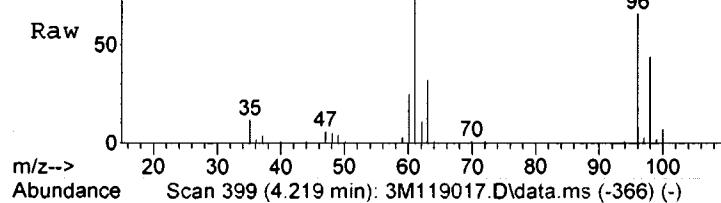
Concen: 20.01 ug/l

RT: 4.219 min Scan# 399

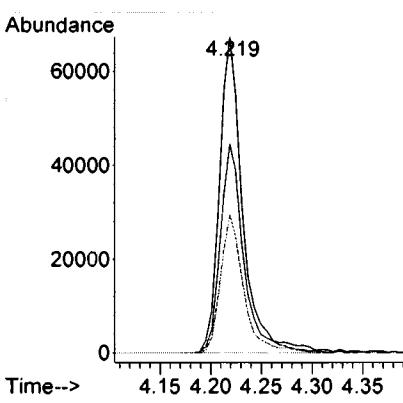
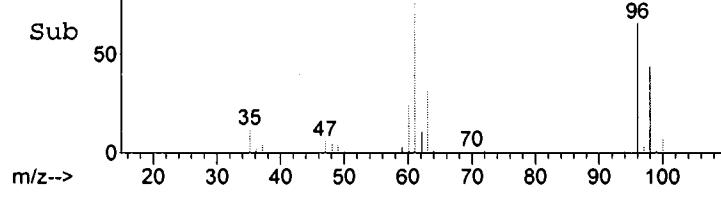
Delta R.T. -0.000 min

Lab File: 3M119017.D

Acq: 23 Oct 2017 13:48



Tgt	Ion:	61	Resp:	109649
Ion	Ratio		Lower	Upper
61	100			
96	66.1		8.8	88.8
98	43.7		0.0	72.8



Abundance

#3697: Chloroform

#36

Chloroform

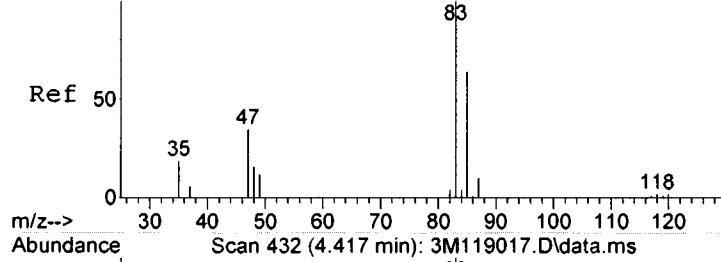
Concen: 1.24 ug/l

RT: 4.417 min Scan# 432

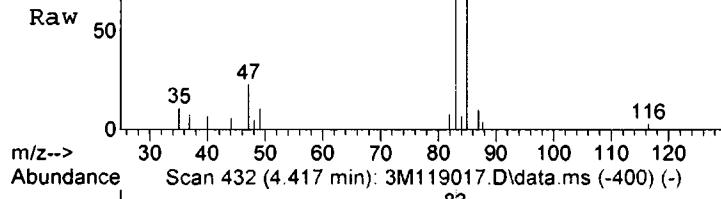
Delta R.T. -0.006 min

Lab File: 3M119017.D

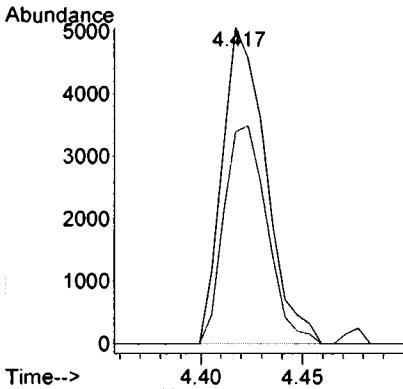
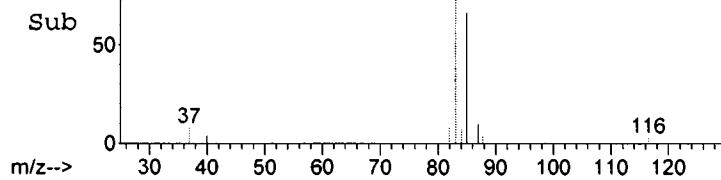
Acq: 23 Oct 2017 13:48

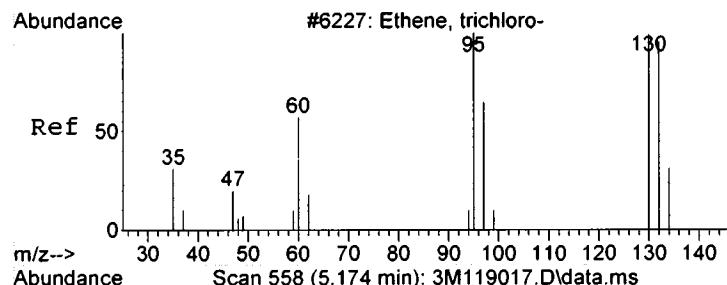


Tgt	Ion:	83	Resp:	7561
Ion	Ratio		Lower	Upper
83	100			
85	67.0		36.0	116.0



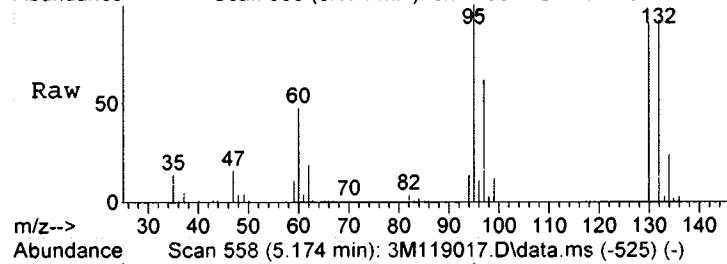
Abundance



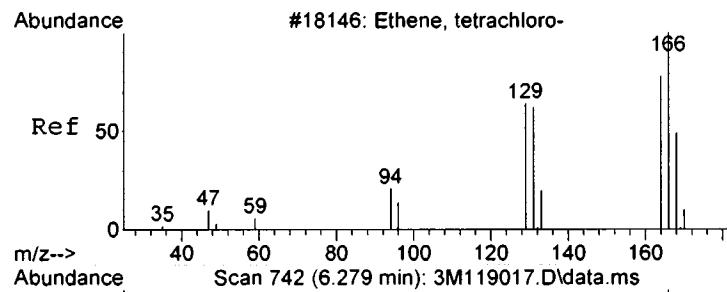
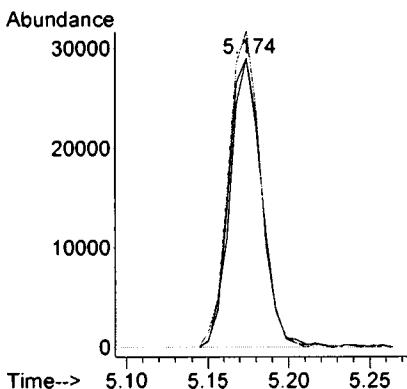
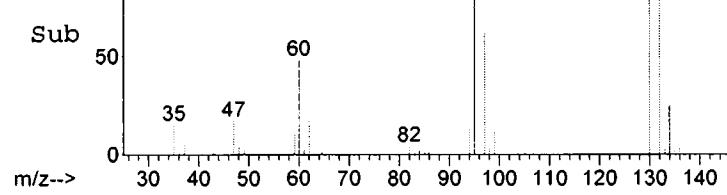


#49
Trichloroethene
Concen: 14.65 ug/l
RT: 5.174 min Scan# 558
Delta R.T. -0.000 min
Lab File: 3M119017.D
Acq: 23 Oct 2017 13:48

7102003 0310

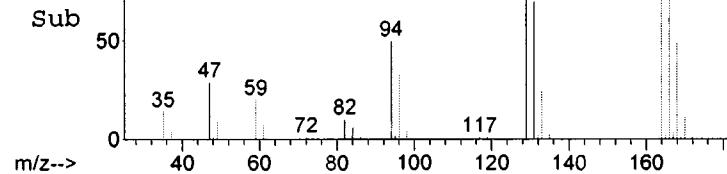
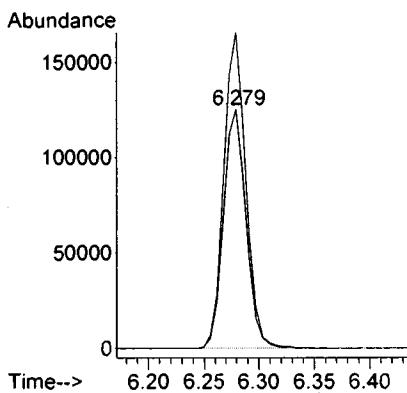
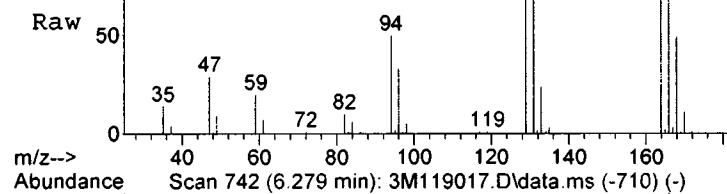


Tgt Ion:130 Resp: 40919
Ion Ratio Lower Upper
130 100
132 100.1 40.0 200.0
95 109.4 40.0 160.0



#65
Tetrachloroethene
Concen: 88.55 ug/l
RT: 6.279 min Scan# 742
Delta R.T. -0.006 min
Lab File: 3M119017.D
Acq: 23 Oct 2017 13:48

Tgt Ion:164 Resp: 179923
Ion Ratio Lower Upper
164 100
166 132.4 61.8 201.8



Form1
ORGANICS VOLATILE REPORT

Sample Number: AD00698-042

Client Id: TRIP BLANK

Data File: 3M119000.D

Analysis Date: 10/23/17 09:03

Date Rec/Extracted: 10/20/17-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 442070

Total Target Concentration

0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

7102003 0312

SampleID : AD00698-042
 Data File: 3M119000.D
 Acq On : 10/23/17 09:03

Operator : SG
 Sam Mult : 1 Vial# : 8
 Misc : A,5ML!2

Qt Meth : 3M_A1006
 Qt On : 10/23/17 09:17
 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-23-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.941	96	363329	30.00	ug/l	-0.01
52) Chlorobenzene-d5	6.773	117	309064	30.00	ug/l	-0.01
70) 1,4-Dichlorobenzene-d4	8.215	152	125489	30.00	ug/l	-0.01
System Monitoring Compounds						
37) Dibromofluoromethane	4.521	111	105578	30.02	ug/l	-0.01
Spiked Amount 30.000			Recovery	=	100.07%	
39) 1,2-Dichloroethane-d4	4.743	67	85548	30.89	ug/l	-0.01
Spiked Amount 30.000			Recovery	=	102.97%	
66) Toluene-d8	5.902	98	375894	27.29	ug/l	0.00
Spiked Amount 30.000			Recovery	=	90.97%	
76) Bromofluorobenzene	7.482	174	126551	28.57	ug/l	-0.01
Spiked Amount 30.000			Recovery	=	95.23%	

Target Compounds	Qvalue
<hr/>	

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

Abundance

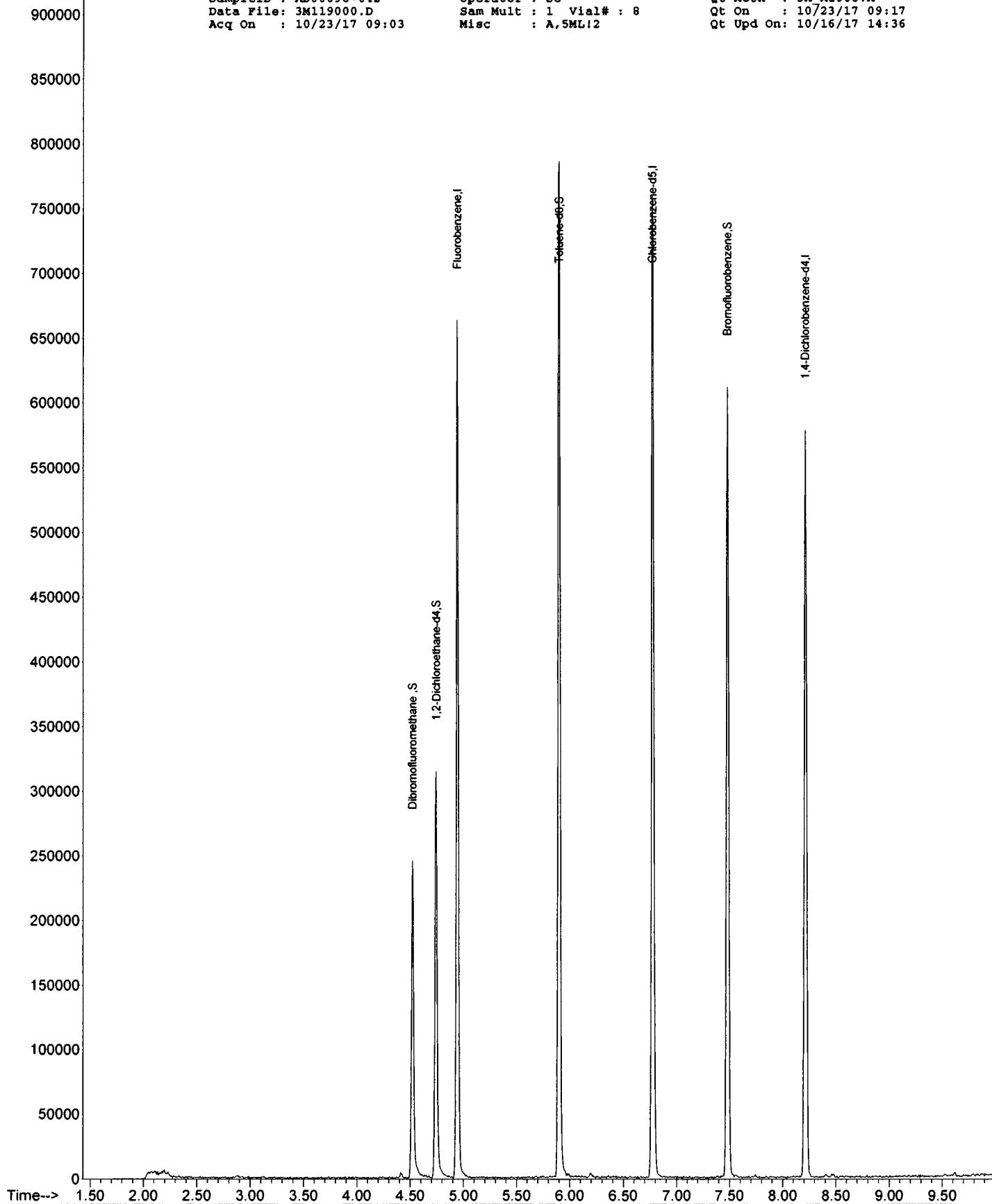
TIC: 3M119000.D\data.ms

Quant QT Reviewed

SampleID : AD00698-042
Data File: 3M119000.D
Acq On : 10/23/17 09:03

Operator : SG
Sam Mult : 1 Vial# : 8
Misc : A,5ML12

Qt Meth : 3M_A1005.M
Qt On : 10/23/17 09:17
Qt Upd On: 10/16/17 14:36



7102003 0314

**GC/MS Volatile Data
Standards Data**

Form 6
Initial Calibration

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Calibration Level Concentrations																		
								Lv1	Lv2	Lv3	Lv4	Lv5	Lv6	Lv7	Lv8	Lv9										
1	3M118074.D	CAL @ 20 PPB	10/05/17 09:41	2	3M118072.D	CAL @ 5 PPB	10/05/17 09:07																			
3	3M118073.D	CAL @ 10 PPB	10/05/17 09:24	4	3M118081.D	CAL @ 50 PPB	10/05/17 11:38																			
5	3M118079.D	CAL @ 100 PPB	10/05/17 11:05	6	3M118077.D	CAL @ 250 PPB	10/05/17 10:31																			
7	3M118075.D	CAL @ 500 PPB	10/05/17 09:58	8	3M118069.D	CAL @ 1 PPB	10/05/17 08:16																			
9	3M118070.D	CAL @ 0.5 PPB	10/05/17 08:34																							
Chlorodifluoromethane	Col Mr Fit: RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd	Lv1	Lv2	Lv3	Lv4	Lv5							
Dichlorodifluoromethane	1	0 Avg	0.4069	0.2833	0.3657	0.3640	0.3677	0.3796	0.3656	0.4525	—	0.373	1.59	1.00	13	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
Chloromethane	1	0 Avg	0.2455	0.2140	0.2752	0.2236	0.2316	0.2430	0.2568	0.1763	—	0.233	1.57	0.99	1.00	13	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromomethane	1	0 Avg	0.1095	0.0999	0.1198	0.0841	0.0650	—	—	—	0.239	1.72	0.99	1.00	9.5	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
Vinyl Chloride	1	0 Avg	0.1853	0.1963	0.2123	0.1727	0.1780	0.1865	0.1900	0.1952	—	0.190	1.82	1.00	6.4	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
Chloroethane	1	0 Avg	0.1384	0.1147	0.1373	0.1204	0.1115	0.1104	0.0729	0.1403	—	0.118	2.19	0.949	0.998	19	0.10 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Trichlorofluoromethan	1	0 Avg	0.4139	0.3968	0.4373	0.3541	0.3536	0.3457	0.3267	0.4427	—	0.384	2.39	0.99	1.00	12	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl ether	1	0 Avg	0.2242	0.2021	0.2433	0.2419	0.2333	0.2272	0.2168	0.1766	—	0.221	2.63	0.99	1.00	10	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Furan	1	0 Avg	0.4792	0.4330	0.4966	0.4848	0.5030	0.5019	0.4812	0.3561	—	0.467	2.67	1.00	1.00	11	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,2-Trichloro-1,2,2-tr	1	0 Avg	0.1633	0.1430	0.1719	0.1521	0.1474	0.1503	0.1434	0.1494	—	0.153	2.81	1.00	6.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
Methylene Chloride	1	0 Avg	0.2507	0.2354	0.2802	0.2543	0.2556	0.2529	0.2536	0.2566	—	0.253	2.33	1.00	4.8	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
Acetoin	1	0 Avg	0.0392	0.0344	0.0406	0.0429	0.0420	0.0430	0.0418	0.0327	—	0.0396	2.75	1.00	10	0.10	100.0	25.00	50.00	250.0	500.0	1.00	250.0	500.0	1.00	
Acrylonitrile	1	0 Qua	0.0849	0.0694	0.0870	0.0896	0.0845	0.0837	0.0838	0.0344	—	0.0772	3.44	1.00	24	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
Iodomethane	1	0 Avg	0.1962	0.1718	0.2035	0.1922	0.1850	0.1904	0.1874	0.1390	—	0.183	2.97	1.00	11	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
Acetone	1	0 Avg	0.0878	0.0795	0.0918	0.0898	0.0865	0.0836	0.0818	0.0831	—	0.0855	2.87	1.00	4.9	0.10 a	100.0	25.00	50.00	250.0	500.0	1.250	250.0	500.0	1.00	
Carbon Disulfide	1	0 Avg	0.3566	0.2955	0.3769	0.3535	0.3587	0.3831	0.3817	0.3046	—	0.351	3.02	1.00	9.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
t-Butyl Alcohol	1	0 Qua	0.0165	0.0165	0.0190	0.0264	0.0253	0.0259	0.0253	0.0058	—	0.0201	3.30	1.00	36	0.10	100.0	25.00	50.00	250.0	500.0	1.250	250.0	500.0	1.00	
n-Hexane	1	0 Qua	0.0894	0.0860	0.0997	0.0924	0.0970	0.1032	0.1034	0.0409	—	0.0890	3.66	1.00	23	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
Di-isopropyl-ether	1	0 Avg	0.6359	0.5529	0.6626	0.6858	0.6677	0.6447	0.5785	0.5174	—	0.618	3.82	0.997	1.00	9.9	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1-Dichlorethene	1	0 Avg	0.3704	0.2813	0.3937	0.3436	0.3369	0.3359	0.3419	0.3169	—	0.340	2.83	1.00	9.8	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
Methyl Acetate	1	0 Avg	0.2767	0.2499	0.2795	0.3081	0.2953	0.2939	0.2751	—	0.284	3.13	1.00	1.00	6.3	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
Methyl-t-butyl ether	1	0 Avg	0.6220	0.5356	0.6282	0.7034	0.6574	0.6121	0.5222	0.4995	0.6970	0.609	3.44	0.992	1.00	12	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1-Dichloroethane	1	0 Avg	0.4092	0.3768	0.4339	0.4150	0.3982	0.3967	0.3745	0.3934	—	0.400	3.81	0.999	1.00	4.9	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
trans-1,2-Dichlorethane	1	0 Avg	0.2300	0.2113	0.2451	0.2285	0.2229	0.2164	0.1962	0.2073	—	0.220	3.45	0.998	1.00	6.9	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl-t-butyl ether	1	0 Avg	0.7212	0.6458	0.7369	0.8120	0.8046	0.7506	0.6596	0.5725	—	0.7134	4.09	0.995	1.00	12	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,2-Dichloroethene	1	0 Avg	0.4687	0.4192	0.4697	0.4696	0.4498	0.4378	0.4113	0.4534	—	0.447	4.22	0.99	1.00	5.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromochloromethane	1	0 Avg	0.1915	0.1735	0.2198	0.1861	0.1889	0.1911	0.2425	0.2014	—	0.199	4.39	0.989	1.00	11	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2,2-Dichloropropane	1	0 Avg	0.3645	0.3626	0.3882	0.3484	0.3482	0.3420	0.2962	0.3255	—	0.3364	4.22	0.995	1.00	7.5	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl acetate	1	0 Avg	0.2597	0.2321	0.1982	0.2662	0.2606	0.2463	0.2450	0.1737	—	0.235	4.24	1.00	1.00	14	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,4-Dioxane	1	0 Avg	0.0030	0.0024	0.0029	0.0032	0.0031	0.0030	0.0029	0.0024	—	0.0029	2.54	0.999	1.00	10	0.10	1000	250.0	500.0	2500.0	5000.0	1250	2500.0	5000.0	1.00
1,1-Dichloropropene	1	0 Avg	0.3366	0.2927	0.3383	0.3261	0.3128	0.2961	0.2603	0.2730	—	0.305	4.65	0.995	1.00	9.5	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chloroform	1	0 Avg	0.5229	0.4976	0.5707	0.4989	0.4724	0.4609	0.4239	0.5295	—	0.497	4.42	0.998	1.00	9.1	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dibromoformethan	1	0 Avg	0.2935	0.3094	0.3101	0.2900	0.2757	0.2609	0.2533	0.3108	0.3091	0.290	4.53	-1	-1	7.7	0.20	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	
Cyclohexane	1	0 Avg	0.1987	0.1443	0.2012	0.1963	0.2027	0.2084	0.1985	0.1882	—	0.192	4.59	0.999	1.00	11	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dichloroethane-d4	1	0 Avg	0.2356	0.2345	0.2422	0.2306	0.2116	0.2056	0.1899	0.2461	0.2506	0.229	4.75	-1	-1	9.7	0.20	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	
1,2-Dichloroethane	1	0 Qua	0.5693	0.5565	0.6188	0.5206	0.4666	0.4019	0.3341	0.6247	0.8158	0.545	4.80	0.988	1.00	26	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2-Butanone	1	0 Avg	0.1074	0.1055	0.1289	0.1274	0.1278	0.1105	0.1215	—	0.120	4.23	0.995	1.00	8.4	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
1,1,1-Trichloroethane	1	0 Avg	0.4510	0.3985	0.4776	0.4246	0.4052	0.3963	0.3497	0.4335	—	0.417	4.56	0.996	1.00	9.3	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Carbon Tetrachloride	1	0 Avg	0.3402	0.3075	0.3488	0.3045	0.2942	0.2706	0.2228	0.3238	—	0.302	4.66	0.989	1.00	13	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Vinyl Acetate	1	0 Avg																								

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Calibration Level Concentrations																	
								Lv1	Lv2	Lv3	Lv4	Lv5	Lv6	Lv7	Lv8	Lv9									
1	3M118074.D	CAL @ 20 PPB	10/05/17 09:41	2	3M118072.D	CAL @ 5 PPB	10/05/17 09:07																		
3	3M118073.D	CAL @ 10 PPB	10/05/17 09:24	4	3M118081.D	CAL @ 50 PPB	10/05/17 11:38																		
5	3M118079.D	CAL @ 100 PPB	10/05/17 11:05	6	3M118077.D	CAL @ 250 PPB	10/05/17 10:31																		
7	3M118075.D	CAL @ 500 PPB	10/05/17 09:58	8	3M118069.D	CAL @ 1 PPB	10/05/17 08:34																		
9	3M118070.D	CAL @ 0.5 PPB	10/05/17 08:34																						
Compound	Col Mr Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Cor1	Cor2	%Rsd	Lv1	Lv2	Lv3	Lv4	Lv5	Lv6	Lv7	Lv8	Lv9	
Methylcyclohexane	1	0 Avg	0.1468	0.1202	0.1509	0.1423	0.1518	0.1505	0.1458	0.1114	0.1405	3.0	1.00	11	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
Dibromomethane	1	0 Avg	0.2016	0.1907	0.2094	0.2003	0.1809	0.1702	0.1522	0.1847	0.1865	5.40	0.996	1.00	10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
1,2-Dichloropropane	1	0 Avg	0.2206	0.2107	0.2201	0.2194	0.2175	0.2154	0.2018	0.1956	0.2135	3.52	0.999	1.00	4.4	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Trichloroethene	1	0 Avg	0.2435	0.2216	0.2460	0.2383	0.2402	0.2273	0.2076	0.2001	0.2285	5.17	0.998	1.00	7.5	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Benzene	1	0 Avg	0.8354	0.8045	0.8774	0.8374	0.7923	0.7278	0.5828	0.7413	0.8194	4.79	0.986	1.00	19	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
tert- Amyl methyl ether	1	0 Avg	0.5962	0.4993	0.5936	0.7286	0.6863	0.6209	0.5130	0.5200	0.5954	8.3	0.988	1.00	14	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
Iso-propylacetate	1	0 Avg	0.6528	0.5529	0.6587	0.7401	0.7078	0.6738	0.5818	0.5493	0.6404	7.8	0.994	1.00	11	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methyl methacrylate	1	0 Avg	0.3682	0.2628	0.3815	0.4360	0.4275	0.4189	0.4045	0.3004	0.3755	5.35	1.00	1.00	17	0.50	a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
Dibromoethane	1	0 Avg	0.3937	0.3556	0.3897	0.3897	0.3813	0.3726	0.3468	0.3067	0.3676	6.44	0.999	1.00	8.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2-Chlorobutylvinylether	1	0 Avg	0.2049	0.1736	0.1953	0.2277	0.2290	0.2367	0.2439	0.1432	0.2065	5.64	1.00	16	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00			
cis-1,3-Dichloropropen	1	0 Avg	0.4844	0.3669	0.4541	0.5230	0.5474	0.5334	0.5081	0.3015	0.4625	7.5	0.999	1.00	18	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
trans-1,3-Dichloropropen	1	0 Avg	0.4862	0.3584	0.4580	0.5363	0.5368	0.5271	0.4845	0.3301	0.4656	6.07	0.998	1.00	17	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl methacrylate	1	0 Avg	0.4000	0.3435	0.3769	0.4169	0.4108	0.3999	0.3657	0.2958	0.3766	6.08	0.998	1.00	11	0.50	a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1,1,2-Trichloroethane	1	0 Avg	0.3109	0.3024	0.3248	0.3104	0.2971	0.2954	0.2793	0.3078	0.304	6.19	0.999	1.00	4.4	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dibromoethane	1	0 Avg	0.3275	0.3014	0.3359	0.3378	0.3275	0.3320	0.3211	0.2873	0.321	6.53	1.00	5.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
1,3-Dichloropropane	1	0 Avg	0.5710	0.5432	0.5834	0.5629	0.5413	0.5010	0.4461	0.5625	0.539	6.29	0.996	1.00	8.4	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
4-Methyl-2-Pentanone	1	0 Avg	0.3204	0.2806	0.3171	0.3571	0.3588	0.3609	0.3726	0.2126	0.323	5.82	1.00	1.00	17	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2-Hexanone	1	0 Avg	0.2377	0.1847	0.2265	0.2486	0.2465	0.2448	0.2416	0.1716	0.225	6.30	1.00	1.00	13	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Tetrachloroethene	1	0 Avg	0.2220	0.1967	0.2167	0.1922	0.1950	0.1758	0.1467	0.1993	0.193	6.29	0.990	1.00	12	0.20	a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
Toluene-d8	1	0 Avg	1.3303	1.3404	1.3190	1.3226	1.3136	1.3435	1.3761	1.3448	1.3421	5.91	-1	-1	1.4	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	
Toluene	1	0 Avg	0.7073	0.6442	0.7215	0.6874	0.6749	0.6517	0.5861	0.6358	0.6605	5.95	0.997	1.00	7.1	0.40	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,2-Tetrachloroeth	1	0 Avg	0.3128	0.2832	0.3093	0.2983	0.2809	0.2474	0.1934	0.2809	0.2766	6.84	0.981	1.00	14	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
Chlorobenzene	1	0 Avg	0.7398	0.7223	0.7693	0.7402	0.7156	0.7024	0.6192	0.7100	0.7156	6.81	0.996	1.00	6.2	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
n-Butyl acrylate	1	0 Avg	1.7367	1.2516	1.5865	1.8821	1.9720	1.9110	1.8966	1.0662	1.667	7.07	1.00	1.00	20	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromofom	1	0 Avg	0.5764	0.4396	0.5545	0.5736	0.6002	0.6073	0.6116	0.5348	0.5627	7.32	1.00	1.00	15	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethylbenzene	1	0 Avg	0.5531	0.4929	0.5848	0.5455	0.5744	0.4737	0.3523	0.6469	0.5286	8.84	0.969	1.00	17	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,2-Tetrachloroeth	1	0 Avg	0.8703	0.7820	0.8330	0.8682	0.8476	0.8525	0.8508	—	0.835	7.55	1.00	5.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
Bromofluorobenzene	1	0 Avg	1.0418	1.0100	1.0210	1.0019	0.9524	1.0682	1.1989	0.8030	1.0544	16.4	7.17	0.984	1.00	12	0.30	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
Styrene	1	0 Avg	0.8406	1.5428	1.7863	1.7637	1.8293	1.6187	1.2947	1.4775	0.885	6.91	0.985	1.00	18	0.10	40.00	10.00	20.00	100.0	200.0	500.0	1000.0	2.00	
m&p-Xylenes	1	0 Avg	0.9443	0.7768	0.9348	0.8969	0.9287	0.8072	0.6511	0.8267	0.889	6.91	0.985	1.00	18	0.10	40.00	10.00	20.00	100.0	200.0	500.0	1000.0	2.00	
o-Xylene	1	0 Avg	1.0077	0.7596	0.9566	0.9307	0.9732	0.8683	0.7071	0.8641	0.885	7.16	0.987	1.00	12	0.30	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
trans-1,4-Dichloro-2-b	1	0 Avg	0.4648	0.4014	0.4047	0.4402	0.4739	0.4432	0.4315	0.4242	0.436	7.58	1.00	1.00	5.9	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
1,3-Dichlorobenzene	1	0 Avg	1.0840	0.9067	1.0456	0.9668	1.0574	0.9667	0.9005	1.0984	1.008	8.19	0.998	1.00	7.8	0.60	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,4-Dichlorobenzene	1	0 Avg	1.1138	0.9412	1.0819	0.9965	1.0905	0.9967	0.9259	1.2782	1.058	2.4	0.998	1.00	11	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dichlorobenzene	1	0 Avg	1.0705	0.8938	1.0378	0.9921	1.0576	0.9782	0.9259	0.9329	0.986	8.50	0.999	1.00	6.6	0.40	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Isopropylbenzene	1	0 Avg	2.0469	1.5365	1.8464	1.8782	2.0941	1.8914	1.7646	1.6898	1.847	7.37	0.998	1.00	9.9	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Cyclohexanone	1	0 Qua	0.0624	0.0336	0.0599	0.0358	0.0375	0.0377	0.0425	0.0671	0.0471	7.48	0.996	0.999	29	100.0	25.00	50.00	250.0	500.0	125.0	250.0	500.0	1.00	
Camphene	1	0 Avg	0.6859	0.5227	0.5995	0.6319	0.7479	0.6141	0.5386	0.5373	0.610	7.57	0.992	0.999	13	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
1,2,3-Trichloropropane	1	0 Avg	1.1821	1.1141	1.1928	1.2517	1.1559</td																		

7102003 0317

Compound	Col	Mr	Fit:	Data File:			Cal Identifier:			Analysis Date/Time			Level #:	Data File:			Cal Identifier:			Analysis Date/Time					
				RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9		AvgRf	RT	Corr1	Corr2	%Rsd	Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7
p-Ethyltoluene	1	0	Avg	2.1824	1.6275	2.0156	2.0664	2.3270	2.0237	1.8330	1.6954	—	1.977.69	0.996	1.00	12	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
4-Chlorotoluene	3	0	Avg	1.3780	1.1214	1.3775	1.3002	1.3815	1.2016	1.0262	1.4070	—	1.277.78	0.991	1.00	11	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
n-Propylbenzene	5	0	Avg	2.0456	1.6555	1.9889	1.9373	2.0048	1.7950	1.6152	1.6710	—	1.947.63	0.996	0.999	9.2	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromobenzene	7	0	Avg	1.5976	1.2361	1.2795	1.3045	1.3634	1.0161	—	1.2817	—	1.307.73	0.982	0.999	13	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,3,5-Trimethylbenzene	9	0	Avg	1.1974	1.0266	1.1768	1.2016	1.2268	1.0416	0.9208	0.8505	—	1.087.73	0.994	1.00	13	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
Butyl methacrylate	1	0	Avg	1.3363	1.0118	1.2230	1.2086	1.3976	1.2348	1.1530	1.0306	—	1.207.74	0.998	1.00	11	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
t-Butylbenzene	2	0	Avg	1.7660	1.3090	1.6586	1.6240	1.7849	1.5759	1.4160	1.3099	—	1.567.97	0.996	1.00	12	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,4-Trimethylbenzen	3	0	Avg	1.5196	1.1630	1.2901	1.3318	1.5839	1.4280	1.3514	1.3222	—	1.378.08	0.998	1.00	9.7	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
sec-Butylbenzene	4	0	Avg	1.2848	0.9366	1.1339	1.1593	1.3643	1.1988	1.1074	0.9622	—	1.148.16	0.997	0.999	13	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
4-Isopropyltoluene	5	0	Avg	1.5531	1.1474	1.3597	1.3758	1.6178	1.4168	1.3050	1.4189	—	1.408.42	0.997	0.999	10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
n-Butylbenzene	6	0	Avg	0.8401	0.6352	0.7235	0.7670	0.9216	0.8112	0.7422	0.6839	—	0.768.41	0.996	0.999	12	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
D-Diethylbenzene	7	0	Avg	1.2144	0.8181	1.0260	1.2185	1.3897	1.3116	1.2101	0.7897	—	1.128.92	0.998	1.00	20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,4,5-Tetramethylb	8	0	Avg	1.0	0.9109	0.1335	0.1525	0.1666	0.1734	0.1944	0.0837	—	0.1449.01	0.997	1.00	25	0.05	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1,2-Dibromo-3-Chloro	9	0	Avg	1.1363	0.1090	0.1335	0.1525	0.1666	0.1734	0.1944	0.0837	—	—	—	—	—	—	—	—	—	—	—	—	—	
Camphor	10	0	Avg	0.0806	0.0523	0.0724	0.0952	0.0983	0.0953	0.0962	0.0457	0.0453	0.07589.49	1.00	1.00	30	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Hexachlorobutadiene	11	0	Qua	0.2415	0.2131	0.1929	0.2566	0.2748	0.2201	0.2044	0.1141	—	0.2159.63	0.995	0.998	23	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,4-Trichlorobenzen	12	0	Avg	0.4423	0.3374	0.3854	0.4159	0.4644	0.4257	0.4125	0.4737	—	0.4209.55	0.999	1.00	10	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1,2,3-Trichlorobenzen	13	0	Avg	0.3651	0.2880	0.3429	0.3764	0.4253	0.3814	0.3650	0.3582	—	0.3639.88	0.999	1.00	11	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Naphthalene	14	0	Avg	1.1165	0.7896	1.0225	1.2599	1.3132	1.3190	1.2726	0.8980	—	1.129.73	1.00	1.00	18	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	

Flags

a - failed the min rf criteria

b - failed the min Corr 1 criteria

c - failed the min Corr 2 criteria

d - failed the min Corr 1 & Corr 2 criteria

e - failed the min Corr 1 & Corr 2 & min RF criteria

SampleID : CAL @ 20 PPB Operator : SG Qt Meth : 3M_A1005.M
 Data File: 3M118074.D Sam Mult : 1 Vial# : 11 Qt On : 10/05/17 10:41
 Acq On : 10/ 5/17 09:41 Misc : A,5ML Qt Upd On: 10/05/17 08:06

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-05-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.952	96	340941	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.784	117	252162	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.226	152	103565	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.532	111	100094	31.54	ug/l	0.00
Spiked Amount 30.000				Recovery	= 105.13%	
39) 1,2-Dichloroethane-d4	4.754	67	80328	33.25	ug/l	0.00
Spiked Amount 30.000				Recovery	= 110.83%	
66) Toluene-d8	5.907	98	335450	30.21	ug/l	0.00
Spiked Amount 30.000				Recovery	= 100.70%	
76) Bromofluorobenzene	7.493	174	107901	28.64	ug/l	0.00
Spiked Amount 30.000				Recovery	= 95.47%	
Target Compounds						
5) Chlorodifluoromethane	1.592	51	92491m	24.8594	ug/l	Qvalue
6) Dichlorodifluoromethane	1.575	85	55819m	53.9173	ug/l	
7) Chloromethane	1.725	50	55096m	30.2883	ug/l	
8) Bromomethane	2.111	94	24890	23.4307	ug/l	91
9) Vinyl Chloride	1.825	62	42134	20.7392	ug/l	94
10) Chloroethane	2.189	64	31464m	26.9548	ug/l	
11) Trichlorofluoromethane	2.393	101	94093	25.3802	ug/l	93
12) Ethyl ether	2.628	59	50960	21.7318	ug/l	81
13) Furan	2.670	39	108922m	26.2163	ug/l	
14) 1,1,2-Trichloro-1,2,2-...	2.814	101	37119	23.9460	ug/l	91
15) Methylene Chloride	3.228	84	56990	19.6712	ug/l	87
16) Acrolein	2.748	56	44547	100.0867	ug/l	100
17) Acrylonitrile	3.439	53	19310m	21.8871	ug/l	
18) Iodomethane	2.970	142	44611m	18.0865	ug/l	
19) Acetone	2.874	43	99790	106.9143	ug/l	96
20) Carbon Disulfide	3.024	76	81059m	16.1366	ug/l	
21) t-Butyl Alcohol	3.300	59	18821	66.0000	ug/l	82
22) n-Hexane	3.661	57	20325	21.5846	ug/l	79
23) Di-isopropyl-ether	3.823	45	144537	20.3963	ug/l	91
24) 1,1-Dichloroethene	2.826	61	84203m	23.7337	ug/l	
25) Methyl Acetate	3.132	43	62909	19.6674	ug/l	100
26) Methyl-t-butyl ether	3.439	73	141393	19.9897	ug/l	65
27) 1,1-Dichloroethane	3.805	63	93013	20.9044	ug/l	100
28) trans-1,2-Dichloroethene	3.451	96	52290	21.7765	ug/l	92
29) Ethyl-t-butyl ether	4.087	59	163937	19.4422	ug/l	95
30) cis-1,2-Dichloroethene	4.220	61	106553	21.7532	ug/l	82
31) Bromochloromethane	4.388	49	43543	20.1148	ug/l	96
32) 2,2-Dichloropropane	4.220	77	82853	23.9253	ug/l	97
33) Ethyl acetate	4.244	43	59033m	22.8332	ug/l	
34) 1,4-Dioxane	5.397	88	34411	1001.1731	ug/l	85
35) 1,1-Dichloropropene	4.652	75	76510	23.6097	ug/l	98
36) Chloroform	4.424	83	118871	21.9109	ug/l	81
38) Cyclohexane	4.586	56	45175	23.9695	ug/l	97
40) 1,2-Dichloroethane	4.796	62	129417	23.4765	ug/l	94
41) 2-Butanone	4.226	43	24420m	16.0106	ug/l	
42) 1,1,1-Trichloroethane	4.556	97	102517	22.7852	ug/l	94
43) Carbon Tetrachloride	4.658	117	77346	23.7045	ug/l	91
44) Vinyl Acetate	3.823	43	103380	21.1287	ug/l	100
45) Bromodichloromethane	5.481	83	91691	21.4862	ug/l	97
46) Methylcyclohexane	5.301	83	33388	23.8205	ug/l	96
47) Dibromomethane	5.403	174	45833	21.6413	ug/l	90
48) 1,2-Dichloropropane	5.325	63	50152	20.9697	ug/l	93
49) Trichloroethene	5.175	130	55358	21.4415	ug/l	84
50) Benzene	4.790	78	189892	22.0696	ug/l	100
51) tert-Amyl methyl ether	4.826	73	135527	19.0573	ug/l	89
53) Iso-propylacetate	4.784	43	109750	20.4818	ug/l	92
54) Methyl methacrylate	5.349	41	61913	19.3749	ug/l	65
55) Dibromochloromethane	6.436	129	66184	21.6697	ug/l	96
56) 2-Chloroethylvinylether	5.637	63	34454	19.5531	ug/l	81
57) cis-1,3-Dichloropropene	5.745	75	81442	19.6402	ug/l	95
58) trans-1,3-Dichloropropene	6.070	75	81750	20.1188	ug/l	99
59) Ethyl methacrylate	6.082	41	67259	22.0615	ug/l	# 50
60) 1,1,2-Trichloroethane	6.190	97	52273	20.3895	ug/l	94
61) 1,2-Dibromoethane	6.526	107	55056	20.5157	ug/l	88
62) 1,3-Dichloropropane	6.292	76	96000	22.5776	ug/l	98
63) 4-Methyl-2-Pentanone	5.817	43	53861	19.9118	ug/l	92
64) 2-Hexanone	6.304	43	39970	20.7841	ug/l	87
65) Tetrachloroethene	6.286	164	37329	24.4227	ug/l	98
67) Toluene	5.949	92	118904	22.1127	ug/l	92

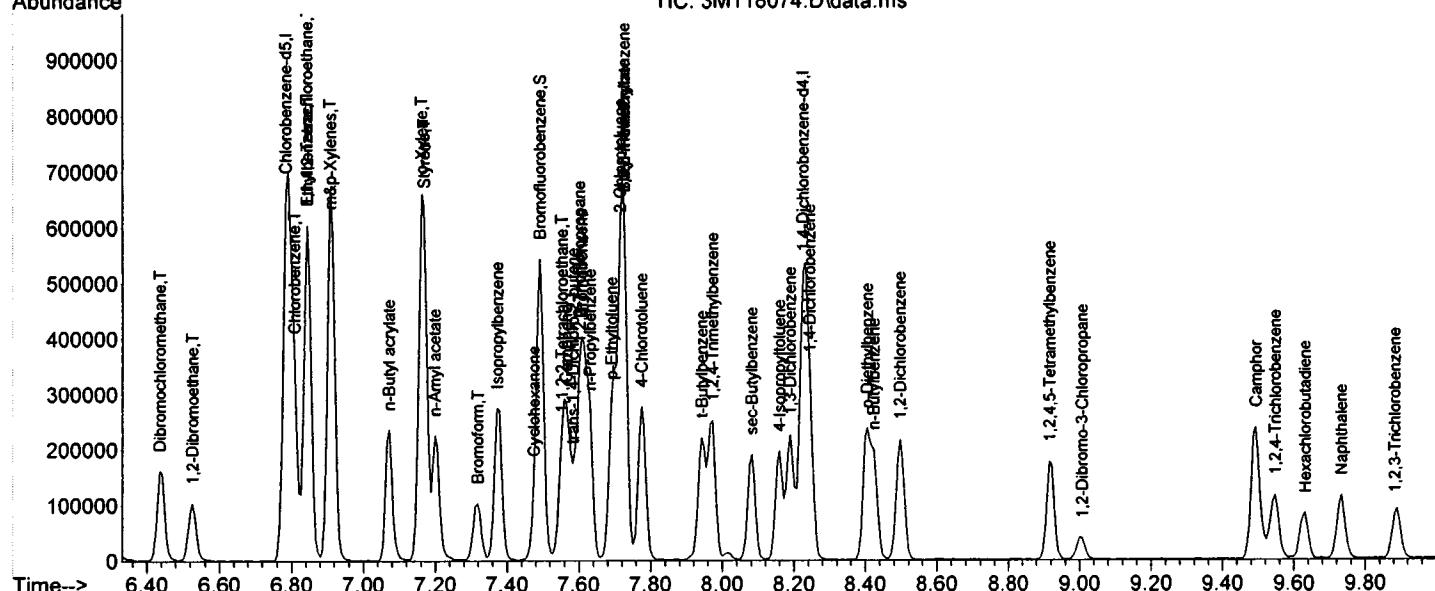
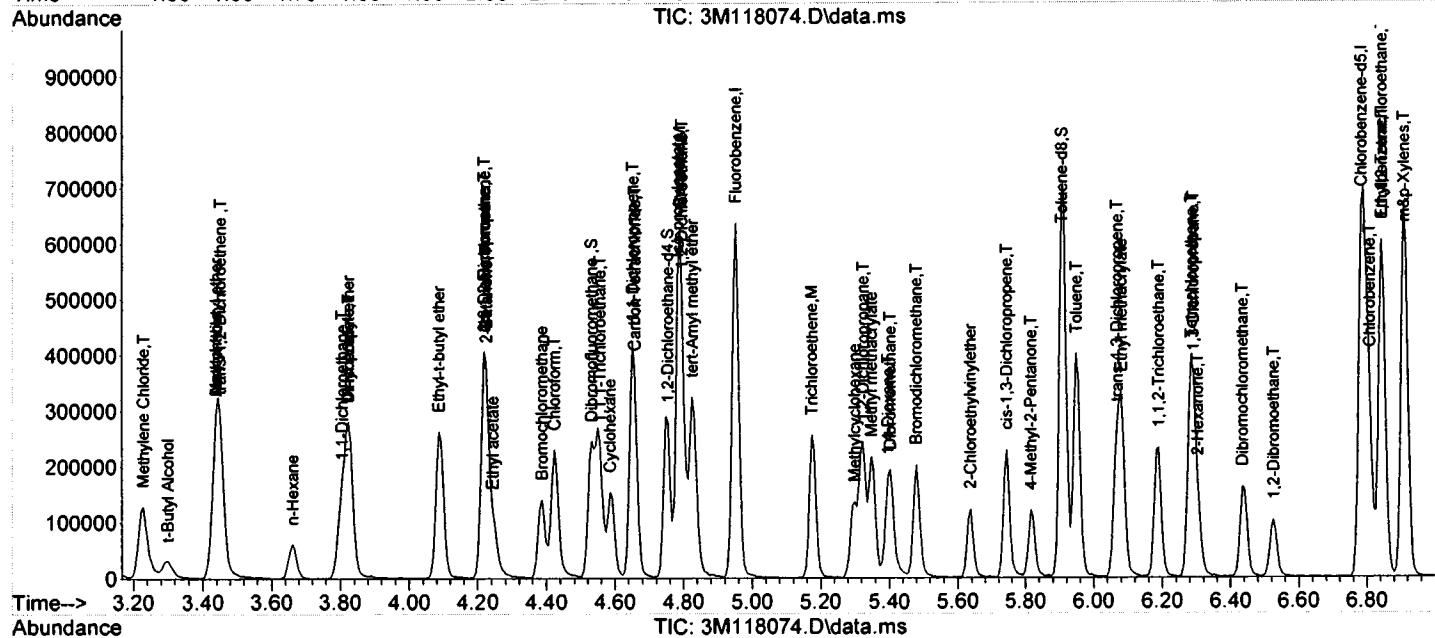
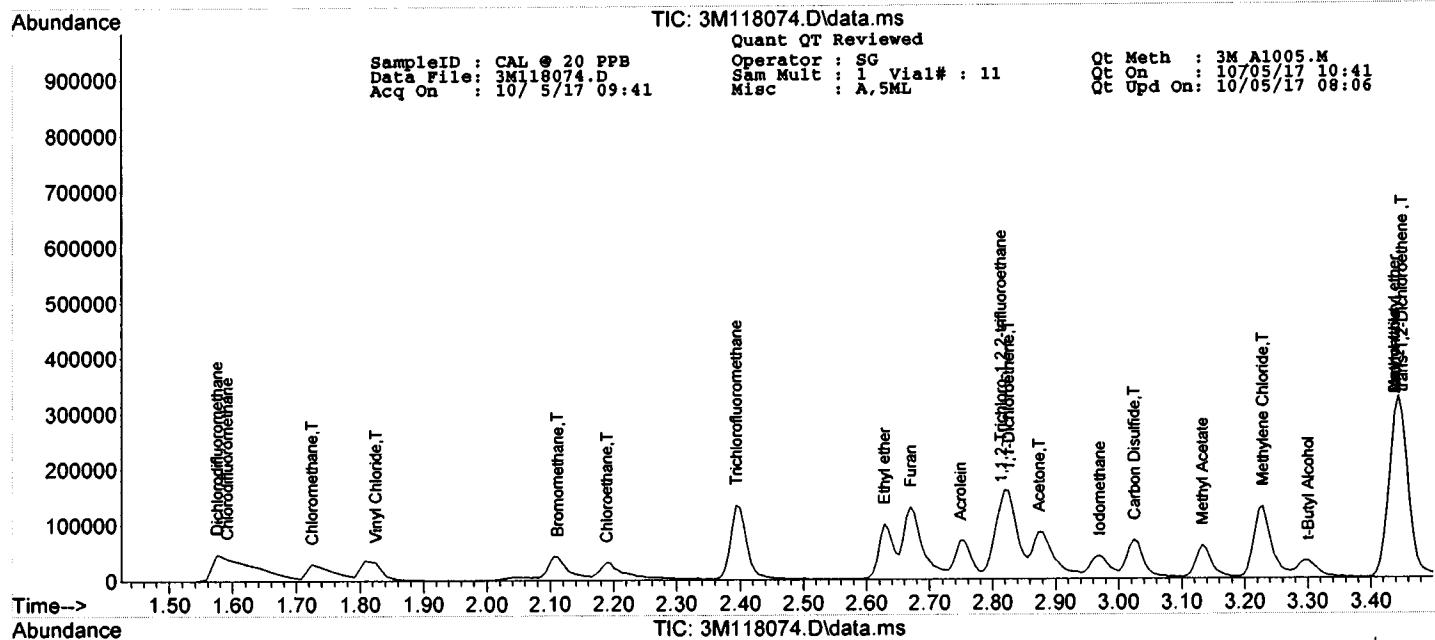
Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB Operator : SG Qt Meth : 3M_A1005.M
 Data File: 3M118074.D Sam Mult : 1 Vial# : 11 Qt On : 10/05/17 10:41
 Acq On : 10/ 5/17 09:41 Misc : A,5ML Qt Upd On: 10/05/17 08:06

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-05-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1,1,1,2-Tetrachloroethane	6.845	133	52591	23.0185	ug/l	84
69) Chlorobenzene	6.809	112	124374	20.3624	ug/l	96
71) n-Butyl acrylate	7.073	55	119912	20.0564	ug/l	94
72) n-Amyl acetate	7.199	43	93928	19.9584	ug/l	82
73) Bromoform	7.319	173	39797	18.1747	ug/l	94
74) Ethylbenzene	6.845	106	38192	21.8366	ug/l	97
75) 1,1,2,2-Tetrachloroethane	7.553	83	60074	17.9839	ug/l	91
77) Styrene	7.169	104	127086	21.3730	ug/l	80
78) m&p-Xylenes	6.911	106	130400	43.1462	ug/l	94
79) o-Xylene	7.163	106	69575	22.2299	ug/l	98
80) trans-1,4-Dichloro-2-b...	7.583	53	32092	23.4474	ug/l	96
81) 1,3-Dichlorobenzene	8.190	146	74849	20.3210	ug/l	94
82) 1,4-Dichlorobenzene	8.244	146	76906	19.6771	ug/l	99
83) 1,2-Dichlorobenzene	8.496	146	73916	19.2929	ug/l	95
84) Isopropylbenzene	7.373	105	141327	21.7765	ug/l	97
85) Cyclohexanone	7.475	55	21570	114.3974	ug/l	93
86) Camphene	7.565	93	47361	23.4527	ug/l	90
87) 1,2,3-Trichloropropane	7.601	75	81617	19.4158	ug/l	100
88) 2-Chlorotoluene	7.716	91	98792	24.8178	ug/l	94
89) p-Ethyltoluene	7.692	105	150681	21.2573	ug/l	79
90) 4-Chlorotoluene	7.776	91	95144	21.9267	ug/l	98
91) n-Propylbenzene	7.631	91	149544	22.7497	ug/l	96
92) Bromobenzene	7.607	77	141241	21.8497	ug/l	89
93) 1,3,5-Trimethylbenzene	7.728	105	110305	25.7955	ug/l	96
94) Butyl methacrylate	7.728	41	82673	22.3887	ug/l	97
95) t-Butylbenzene	7.944	119	92267	21.1628	ug/l	98
96) 1,2,4-Trimethylbenzene	7.974	105	121933	21.5734	ug/l	90
97) sec-Butylbenzene	8.082	105	104919	21.3825	ug/l	99
98) 4-Isopropyltoluene	8.160	119	88711	20.3976	ug/l	99
99) n-Butylbenzene	8.424	91	107234	22.3347	ug/l	93
100) p-Diethylbenzene	8.406	119	58008	21.7172	ug/l	94
101) 1,2,4,5-Tetramethylben...	8.917	119	83848	20.6280	ug/l	98
102) 1,2-Dibromo-3-Chloropr...	9.007	157	9416	13.7135	ug/l	92
103) Camphor	9.494	95	55708	176.8592	ug/l	91
104) Hexachlorobutadiene	9.632	225	16679	15.3156	ug/l	94
105) 1,2,4-Trichlorobenzene	9.548	180	30539	17.4872	ug/l	97
106) 1,2,3-Trichlorobenzene	9.884	180	25213	15.2414	ug/l	96
107) Naphthalene	9.734	128	77089	15.0190	ug/l	100

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



SampleID : CAL @ 5 PPB
 Data File: 3M118072.D
 Acq On : 10/ 5/17 09:07

Operator : SG
 Sam Mult : 1 Vial# : 9
 Misc : A,5ML

Qt Meth : 3M_A1005.M
 Qt On : 10/05/17 11:08
 Qt Upd On: 10/05/17 08:06

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-05-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.947	96	324107	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.785	117	232151	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.227	152	99559	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.527	111	100294	33.25	ug/l	0.00
Spiked Amount	30.000			Recovery	=	110.83%
39) 1,2-Dichloroethane-d4	4.749	67	76015	33.10	ug/l	0.00
Spiked Amount	30.000			Recovery	=	110.33%
66) Toluene-d8	5.908	98	311176	30.44	ug/l	0.00
Spiked Amount	30.000			Recovery	=	101.47%
76) Bromofluorobenzene	7.494	174	100558	27.77	ug/l	0.00
Spiked Amount	30.000			Recovery	=	92.57%
Target Compounds						
5) Chlorodifluoromethane	1.581	51	15308	4.3281	ug/l	79
6) Dichlorodifluoromethane	1.581	85	11562m	11.7482	ug/l	
7) Chloromethane	1.731	50	11129	6.4358	ug/l	85
8) Bromomethane	2.106	94	5401m	5.3484	ug/l	
9) Vinyl Chloride	1.815	62	10608	5.4927	ug/l	99
10) Chloroethane	2.190	64	6198	5.5855	ug/l	51
11) Trichlorofluoromethane	2.394	101	21436	6.0824	ug/l	83
12) Ethyl ether	2.628	59	10921	4.8991	ug/l	78
13) Furan	2.670	39	23393m	5.9229	ug/l	
14) 1,1,2-Trichloro-1,2,2-...	2.815	101	7727	5.2437	ug/l	91
15) Methylene Chloride	3.229	84	12716	4.6171	ug/l	78
16) Acrolein	2.755	56	9300	21.9802	ug/l	96
17) Acrylonitrile	3.439	53	3752	4.4736	ug/l	97
18) Iodomethane	2.965	142	9282m	3.9586	ug/l	
19) Acetone	2.875	43	21481m	24.2100	ug/l	
20) Carbon Disulfide	3.025	76	15966	3.3435	ug/l	100
21) t-Butyl Alcohol	3.307	59	4463	16.4634	ug/l	98
22) n-Hexane	3.662	57	4649	5.1935	ug/l	96
23) Di-isopropyl-ether	3.824	45	29870	4.4340	ug/l	86
24) 1,1-Dichloroethene	2.827	61	15195	4.5054	ug/l	95
25) Methyl Acetate	3.133	43	13500	4.4398	ug/l	100
26) Methyl-t-butyl ether	3.439	73	28936	4.3034	ug/l	65
27) 1,1-Dichloroethane	3.806	63	20358	4.8131	ug/l	97
28) trans-1,2-Dichloroethene	3.451	96	11415	5.0008	ug/l	90
29) Ethyl-t-butyl ether	4.088	59	34889	4.3526	ug/l	95
30) cis-1,2-Dichloroethene	4.220	61	22646	4.8634	ug/l	96
31) Bromochloromethane	4.382	49	9373	4.5548	ug/l	90
32) 2,2-Dichloropropane	4.220	77	16346	4.9654	ug/l	97
33) Ethyl acetate	4.244	43	12542m	5.1030	ug/l	
34) 1,4-Dioxane	5.392	88	6681	204.4769	ug/l	80
35) 1,1-Dichloropropene	4.653	75	15812	5.1327	ug/l	96
36) Chloroform	4.425	83	26882	5.2124	ug/l	77
38) Cyclohexane	4.587	56	7799	4.3530	ug/l	95
40) 1,2-Dichloroethane	4.797	62	30065	5.7371	ug/l	90
41) 2-Butanone	4.226	43	5703m	3.9333	ug/l	
42) 1,1,1-Trichloroethane	4.551	97	21530	5.0337	ug/l	87
43) Carbon Tetrachloride	4.653	117	16612	5.3556	ug/l	83
44) Vinyl Acetate	3.818	43	22127	4.7572	ug/l	100
45) Bromodichloromethane	5.476	83	19002	4.6841	ug/l	87
46) Methylcyclohexane	5.296	83	6497	4.8760	ug/l	89
47) Dibromomethane	5.404	174	10305	5.1185	ug/l	93
48) 1,2-Dichloropropane	5.320	63	11386	5.0080	ug/l	93
49) Trichloroethene	5.175	130	11971	4.8775	ug/l	91
50) Benzene	4.785	78	43460	5.3134	ug/l	100
51) tert-Amyl methyl ether	4.827	73	26974	3.9900	ug/l	85
53) Iso-propylacetate	4.785	43	21396	4.3372	ug/l	88
54) Methyl methacrylate	5.350	41	10171	3.4572	ug/l #	39
55) Dibromochloromethane	6.437	129	13762	4.8943	ug/l	91
56) 2-Chloroethylvinylether	5.632	63	6717	4.1406	ug/l	84
57) cis-1,3-Dichloropropene	5.740	75	14199	3.7193	ug/l	99
58) trans-1,3-Dichloropropene	6.064	75	13868	3.7071	ug/l	94
59) Ethyl methacrylate	6.082	41	13293	4.7361	ug/l	57
60) 1,1,2-Trichloroethane	6.185	97	11701	4.9575	ug/l	88
61) 1,2-Dibromoethane	6.527	107	11662	4.7202	ug/l	97
62) 1,3-Dichloropropane	6.287	76	21021	5.3699	ug/l	93
63) 4-Methyl-2-Pentanone	5.812	43	10857	4.3597	ug/l	79
64) 2-Hexanone	6.305	43	7149	4.0379	ug/l	95
65) Tetrachloroethene	6.281	164	7612	5.4095	ug/l	93
67) Toluene	5.950	92	23768	4.8012	ug/l	91

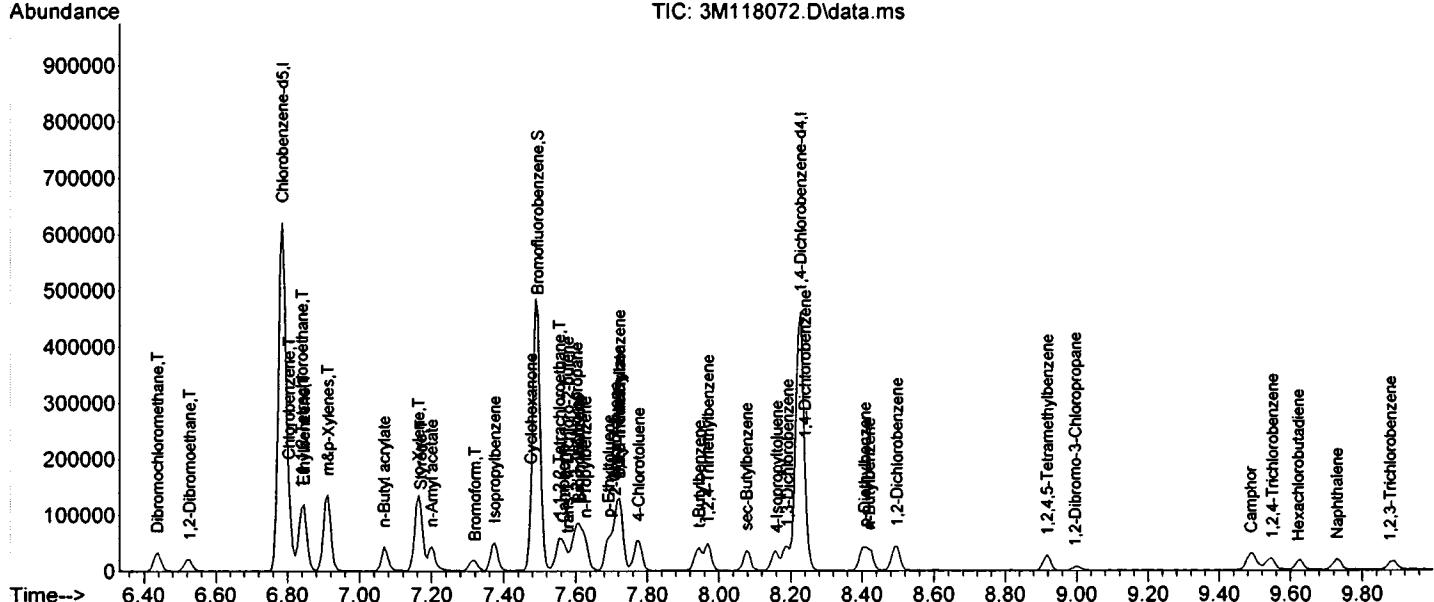
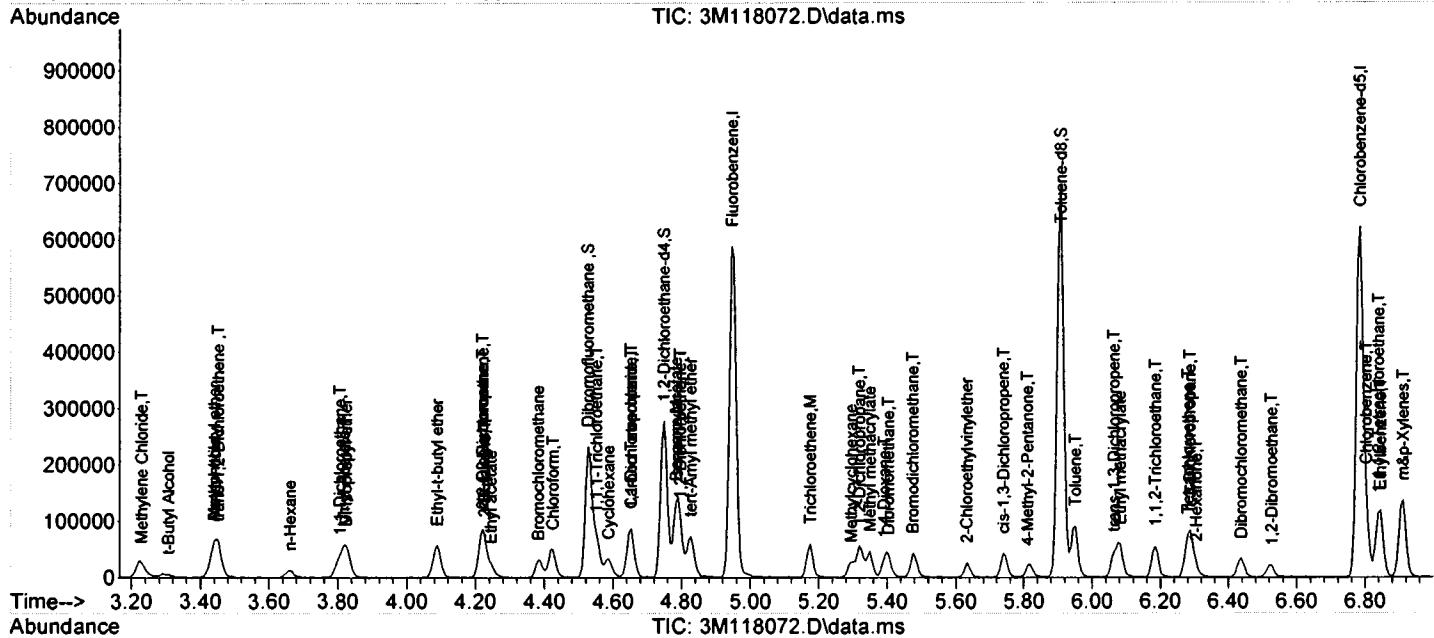
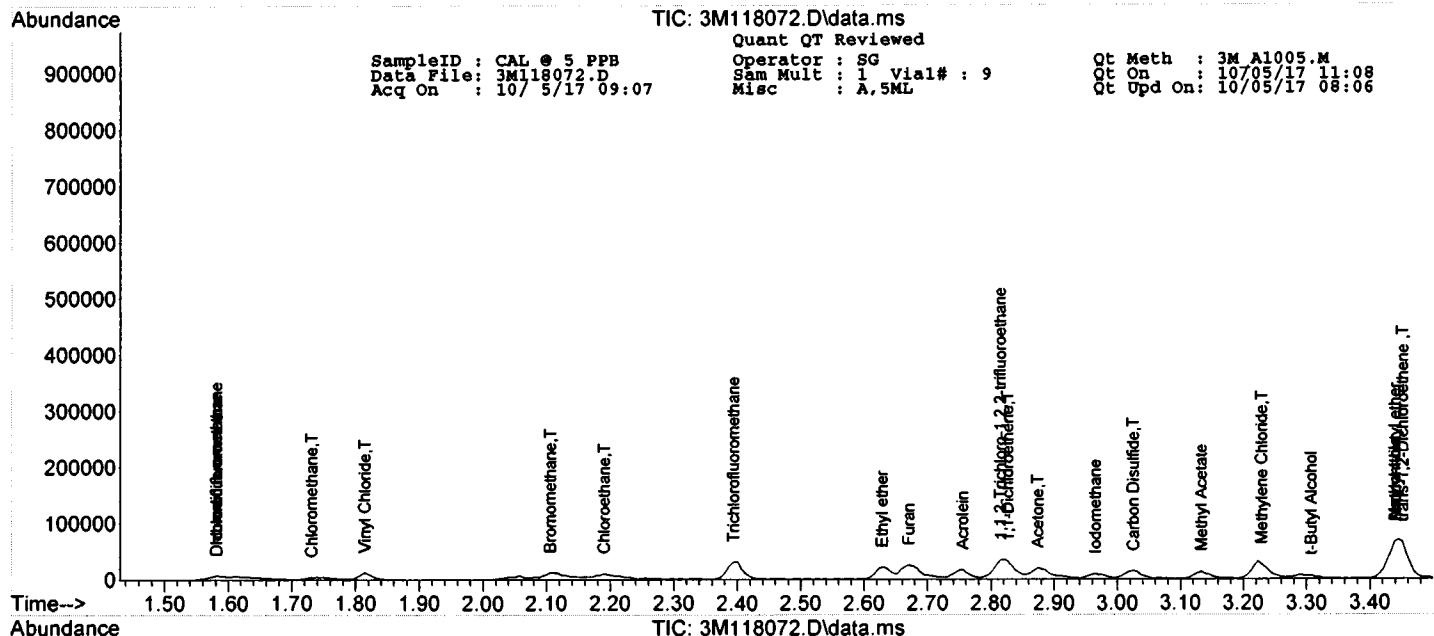
Quantitation Report (QT Reviewed)

SampleID : CAL @ 5 PPB Operator : SG Qt Meth : 3M A1005.M
 Data File: 3M118072.D Sam Mult : 1 Vial# : 9 Qt On : 10/05/17 11:08
 Acq On : 10/ 5/17 09:07 Misc : A,5ML Qt Upd On: 10/05/17 08:06

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-05-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1,1,1,2-Tetrachloroethane	6.839	133	10958	5.2096	ug/l	90
69) Chlorobenzene	6.803	112	27949	4.9702	ug/l	92
71) n-Butyl acrylate	7.068	55	20768	3.6134	ug/l	93
72) n-Amyl acetate	7.200	43	18188	4.0202	ug/l	77
73) Bromoform	7.320	173	7295	3.4656	ug/l	95
74) Ethylbenzene	6.845	106	8180	4.8652	ug/l	88
75) 1,1,2,2-Tetrachloroethane	7.554	83	12230	3.8085	ug/l	93
77) Styrene	7.170	104	25600	4.4786	ug/l	87
78) m&p-Xylenes	6.911	106	25780	8.8732	ug/l	83
79) o-Xylene	7.164	106	12605	4.1895	ug/l	90
80) trans-1,4-Dichloro-2-b...	7.578	53	6661	5.0626	ug/l	94
81) 1,3-Dichlorobenzene	8.191	146	15046	4.2492	ug/l	94
82) 1,4-Dichlorobenzene	8.239	146	15618	4.1568	ug/l	94
83) 1,2-Dichlorobenzene	8.497	146	14832	4.0271	ug/l	98
84) Isopropylbenzene	7.374	105	25496	4.0866	ug/l	98
85) Cyclohexanone	7.476	55	2789	15.3868	ug/l	94
86) Camphene	7.566	93	8674	4.4681	ug/l	92
87) 1,2,3-Trichloropropane	7.602	75	18488	4.5751	ug/l	96
88) 2-Chlorotoluene	7.710	91	19680	5.1428	ug/l	97
89) p-Ethyltoluene	7.692	105	27006	3.9632	ug/l	79
90) 4-Chlorotoluene	7.776	91	18608	4.4609	ug/l	97
91) n-Propylbenzene	7.626	91	28956	4.5822	ug/l	100
92) Bromobenzene	7.608	77	27470	4.4205	ug/l	93
93) 1,3,5-Trimethylbenzene	7.722	105	20512	4.9899	ug/l	88
94) Butyl methacrylate	7.722	41	17035	4.7989	ug/l	86
95) t-Butylbenzene	7.945	119	16790	4.0060	ug/l	98
96) 1,2,4-Trimethylbenzene	7.969	105	21721	3.9977	ug/l	98
97) sec-Butylbenzene	8.077	105	19299	4.0914	ug/l	96
98) 4-Isopropyltoluene	8.161	119	15542	3.7174	ug/l	98
99) n-Butylbenzene	8.419	91	19039	4.1250	ug/l	95
100) p-Diethylbenzene	8.407	119	10540	4.1048	ug/l #	2
101) 1,2,4,5-Tetramethylben...	8.918	119	13575	3.4741	ug/l	100
102) 1,2-Dibromo-3-Chloropr...	8.996	157	1809	2.7406	ug/l	96
103) Camphor	9.488	95	8680	28.6657	ug/l	87
104) Hexachlorobutadiene	9.621	225	3536	3.3776	ug/l	95
105) 1,2,4-Trichlorobenzene	9.548	180	5599	3.3351	ug/l	95
106) 1,2,3-Trichlorobenzene	9.879	180	4780	3.0058	ug/l	91
107) Naphthalene	9.729	128	13103	2.6555	ug/l	100

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



SampleID : CAL @ 10 PPB Operator : SG Qt Meth : 3M_A1005.M
 Data File: 3M118073.D Sam Mult : 1 Vial# : 10 Qt On : 10/05/17 11:16
 Acq On : 10/ 5/17 09:24 Misc : A,5ML Qt Upd On: 10/05/17 08:06

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-05-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.946	96	323666	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.784	117	244411	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	104482	30.00	ug/l	-0.01
System Monitoring Compounds						
37) Dibromofluoromethane	4.525	111	100374	33.32	ug/l	0.00
Spiked Amount 30.000				Recovery	=	111.07%
39) 1,2-Dichloroethane-d4	4.747	67	78738	34.34	ug/l	0.00
Spiked Amount 30.000				Recovery	=	114.47%
66) Toluene-d8	5.907	98	322385	29.96	ug/l	0.00
Spiked Amount 30.000				Recovery	=	99.87%
76) Bromofluorobenzene	7.487	174	106682	28.07	ug/l	-0.01
Spiked Amount 30.000				Recovery	=	93.57%
Target Compounds						
5) Chlorodifluoromethane	1.581	51	39458m	11.1714	ug/l	
6) Dichlorodifluoromethane	1.581	85	29699m	30.2183	ug/l	
7) Chloromethane	1.731	50	27192m	15.7463	ug/l	
8) Bromomethane	2.110	94	12932	12.8235	ug/l	58
9) Vinyl Chloride	1.814	62	22915	11.8812	ug/l	94
10) Chloroethane	2.189	64	14817m	13.3710	ug/l	
11) Trichlorofluoromethane	2.399	101	47182	13.4059	ug/l	89
12) Ethyl ether	2.633	59	26251m	11.7922	ug/l	
13) Furan	2.669	39	53579m	13.5841	ug/l	
14) 1,1,2-Trichloro-1,2,2-...	2.807	101	18555	12.6090	ug/l	92
15) Methylene Chloride	3.228	84	30234	10.9928	ug/l	88
16) Acrolein	2.753	56	21923m	51.8848	ug/l	
17) Acrylonitrile	3.438	53	9389	11.2101	ug/l	96
18) Iodomethane	2.975	142	21963m	9.3796	ug/l	
19) Acetone	2.879	43	49550	55.9209	ug/l	99
20) Carbon Disulfide	3.023	76	40673	8.5290	ug/l	100
21) t-Butyl Alcohol	3.300	59	10265	37.9177	ug/l	85
22) n-Hexane	3.666	57	10760	12.0367	ug/l	85
23) Di-isopropyl-ether	3.822	45	71493	10.6272	ug/l	94
24) 1,1-Dichloroethene	2.825	61	42484m	12.6138	ug/l	
25) Methyl Acetate	3.132	43	30156	9.9309	ug/l	100
26) Methyl-t-butyl ether	3.438	73	67782	10.0943	ug/l	66
27) 1,1-Dichloroethane	3.798	63	46821	11.0845	ug/l	97
28) trans-1,2-Dichloroethene	3.450	96	26443	11.6001	ug/l	86
29) Ethyl-t-butyl ether	4.087	59	79513	9.9332	ug/l	94
30) cis-1,2-Dichloroethene	4.219	61	50678	10.8983	ug/l	87
31) Bromochloromethane	4.381	49	23724	11.5443	ug/l	94
32) 2,2-Dichloropropane	4.219	77	38655	11.7581	ug/l	99
33) Ethyl acetate	4.243	43	21390m	8.7149	ug/l	
34) 1,4-Dioxane	5.390	88	15968	489.3781	ug/l	86
35) 1,1-Dichloropropene	4.645	75	36508	11.8670	ug/l	93
36) Chloroform	4.423	83	61576	11.9558	ug/l	79
38) Cyclohexane	4.585	56	21707	12.1323	ug/l	97
40) 1,2-Dichloroethane	4.796	62	66770	12.7587	ug/l	94
41) 2-Butanone	4.231	43	13907m	9.6046	ug/l	
42) 1,1,1-Trichloroethane	4.549	97	51529	12.0640	ug/l	95
43) Carbon Tetrachloride	4.651	117	37641	12.1517	ug/l	99
44) Vinyl Acetate	3.822	43	48898	10.5271	ug/l	100
45) Bromodichloromethane	5.474	83	44964	11.0989	ug/l	99
46) Methylcyclohexane	5.294	83	16286	12.2393	ug/l	95
47) Dibromomethane	5.402	174	22601	11.2412	ug/l	85
48) 1,2-Dichloropropane	5.318	63	23755	10.4626	ug/l	84
49) Trichloroethene	5.174	130	26550	10.8323	ug/l	89
50) Benzene	4.784	78	94663	11.5891	ug/l	100
51) tert-Amyl methyl ether	4.826	73	64050	9.4872	ug/l	87
53) Iso-propylacetate	4.784	43	53671	10.3339	ug/l	89
54) Methyl methacrylate	5.348	41	31087	10.0368	ug/l	68
55) Dibromochloromethane	6.435	129	31751	10.7255	ug/l	93
56) 2-Chloroethylvinylether	5.631	63	15912	9.3167	ug/l	87
57) cis-1,3-Dichloropropene	5.739	75	37003	9.2065	ug/l	92
58) trans-1,3-Dichloropropene	6.063	75	37319	9.4755	ug/l	95
59) Ethyl methacrylate	6.075	41	30710	10.3926	ug/l	# 46
60) 1,1,2-Trichloroethane	6.183	97	26465	10.6502	ug/l	94
61) 1,2-Dibromoethane	6.520	107	27373	10.5235	ug/l	97
62) 1,3-Dichloropropane	6.285	76	47537	11.5345	ug/l	99
63) 4-Methyl-2-Pentanone	5.811	43	25840	9.8557	ug/l	69
64) 2-Hexanone	6.303	43	18458	9.9024	ug/l	85
65) Tetrachloroethene	6.273	164	17661	11.9212	ug/l	90
67) Toluene	5.949	92	58785	11.2790	ug/l	99

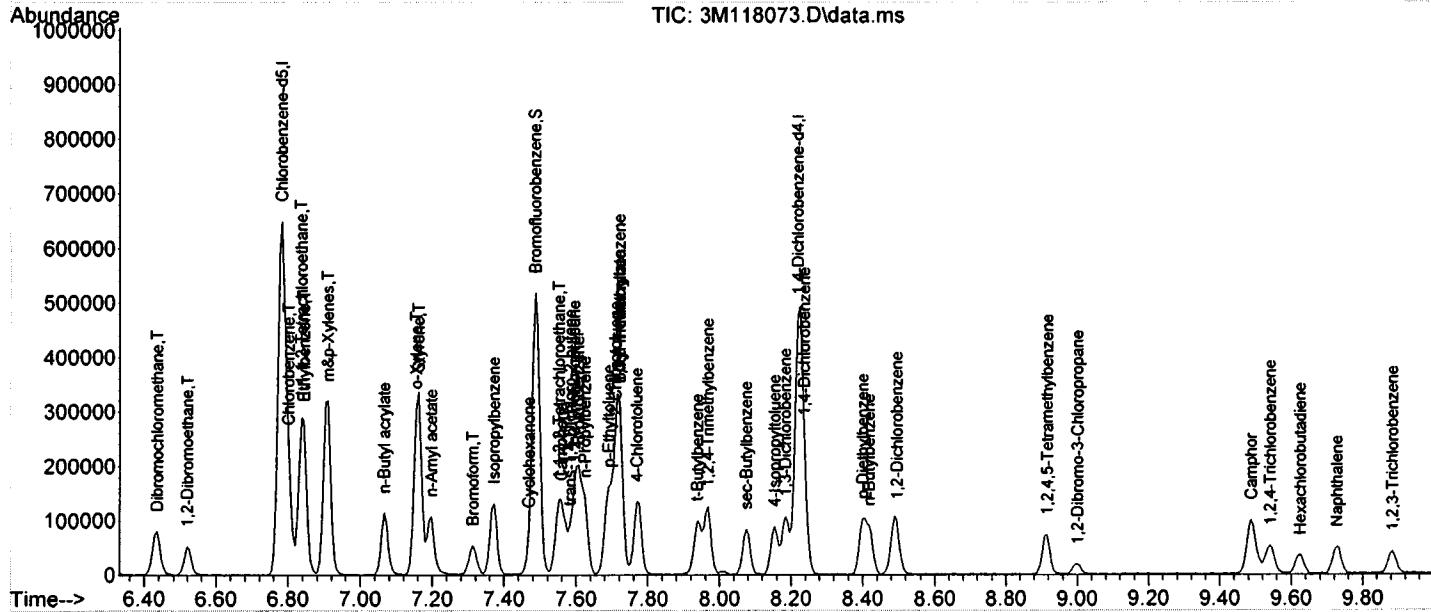
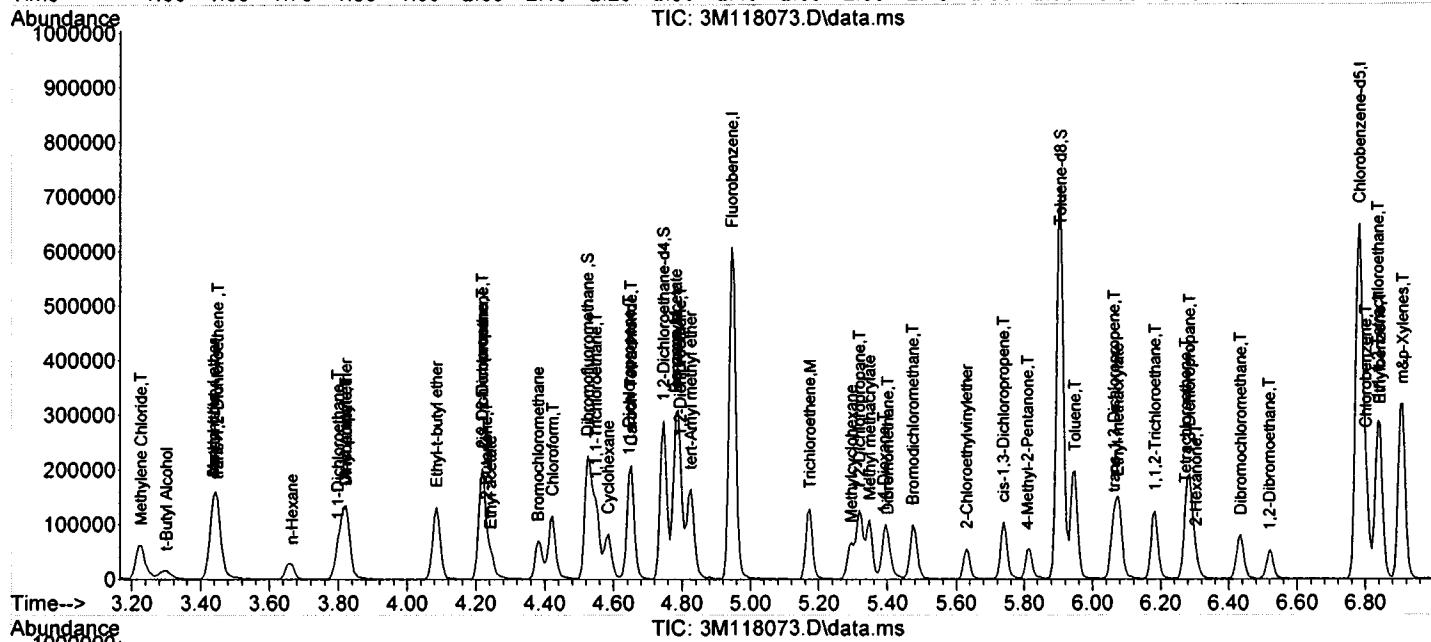
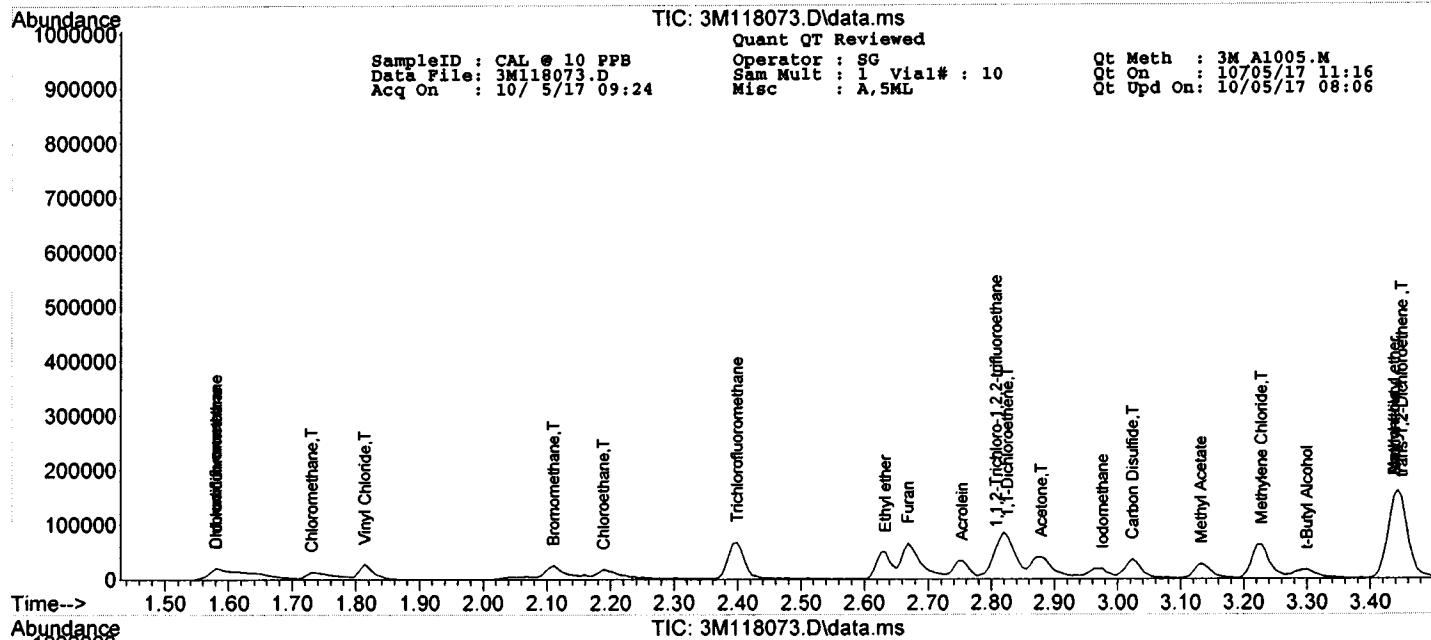
Quantitation Report (QT Reviewed)

SampleID : CAL @ 10 PPB Operator : SG Qt Meth : 3M_A1005.M
 Data File: 3M118073.D Sam Mult : 1 Vial# : 10 Qt On : 10/05/17 11:16
 Acq On : 10/ 5/17 09:24 Misc : A,5ML Qt Upd On: 10/05/17 08:06

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-05-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
68) 1,1,1,2-Tetrachloroethane	6.838	133	25200	11.3796	ug/l	77
69) Chlorobenzene	6.802	112	62675	10.5865	ug/l	97
71) n-Butyl acrylate	7.066	55	55256	9.1610	ug/l	96
72) n-Amyl acetate	7.198	43	43211	9.1012	ug/l	77
73) Bromoform	7.312	173	19314	8.7430	ug/l	95
74) Ethylbenzene	6.844	106	20368	11.5434	ug/l	94
75) 1,1,2,2-Tetrachloroethane	7.553	83	28573	8.4786	ug/l	86
77) Styrene	7.162	104	62212	10.3708	ug/l	77
78) m&p-Xylenes	6.910	106	65119	21.3572	ug/l	97
79) o-Xylene	7.156	106	33630	10.6508	ug/l	87
80) trans-1,4-Dichloro-2-b...	7.583	53	14097	10.2093	ug/l	97
81) 1,3-Dichlorobenzene	8.184	146	36417	9.8002	ug/l	93
82) 1,4-Dichlorobenzene	8.238	146	37682	9.5566	ug/l	98
83) 1,2-Dichlorobenzene	8.496	146	36145	9.3514	ug/l	96
84) Isopropylbenzene	7.373	105	64307	9.8218	ug/l	95
85) Cyclohexanone	7.469	55	10431	54.8357	ug/l	94
86) Camphene	7.559	93	20881	10.2493	ug/l	88
87) 1,2,3-Trichloropropane	7.595	75	39694	9.3599	ug/l	98
88) 2-Chlorotoluene	7.709	91	47136	11.7372	ug/l	98
89) p-Ethyltoluene	7.691	105	70201	9.8167	ug/l	77
90) 4-Chlorotoluene	7.769	91	47976	10.9594	ug/l	98
91) n-Propylbenzene	7.625	91	71556	10.7901	ug/l	100
92) Bromobenzene	7.607	77	69270	10.6219	ug/l	89
93) 1,3,5-Trimethylbenzene	7.721	105	44564	10.3301	ug/l	83
94) Butyl methacrylate	7.721	41	40988	11.0025	ug/l	93
95) t-Butylbenzene	7.937	119	42595	9.6841	ug/l	94
96) 1,2,4-Trimethylbenzene	7.967	105	57767	10.1309	ug/l	94
97) sec-Butylbenzene	8.075	105	44931	9.0766	ug/l	99
98) 4-Isopropyltoluene	8.153	119	39493	9.0010	ug/l	99
99) n-Butylbenzene	8.418	91	47356	9.7767	ug/l	94
100) p-Diethylbenzene	8.400	119	25199	9.3513	ug/l #	2
101) 1,2,4,5-Tetramethylben...	8.916	119	35734	8.7140	ug/l	97
102) 1,2-Dibromo-3-Chloropr...	9.000	157	4652	6.7157	ug/l	94
103) Camphor	9.487	95	25243	79.4370	ug/l	99
104) Hexachlorobutadiene	9.625	225	6720	6.1165	ug/l	91
105) 1,2,4-Trichlorobenzene	9.541	180	13425	7.6200	ug/l	95
106) 1,2,3-Trichlorobenzene	9.883	180	11943	7.1563	ug/l	97
107) Naphthalene	9.727	128	35614	6.8777	ug/l	100

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



SampleID : CAL @ 50 PPB
 Data File: 3M118081.D
 Acq On : 10/ 5/17 11:38

Operator : SG
 Sam Mult : 1 Vial# : 18
 Misc : A,5ML

Qt Meth : 3M_A1005.M
 Qt On : 10/05/17 11:58
 Qt Upd On: 10/05/17 08:06

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-05-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.952	96	369396	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.784	117	280327	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.226	152	118527	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.525	111	107125	31.16	ug/l	0.00
Spiked Amount 30.000			Recovery	= 103.87%		
39) 1,2-Dichloroethane-d4	4.748	67	85195	32.55	ug/l	0.00
Spiked Amount 30.000			Recovery	= 108.50%		
66) Toluene-d8	5.907	98	370781	30.04	ug/l	0.00
Spiked Amount 30.000			Recovery	= 100.13%		
76) Bromofluorobenzene	7.493	174	118643	27.52	ug/l	0.00
Spiked Amount 30.000			Recovery	= 91.73%		
Target Compounds						
5) Chlorodifluoromethane	1.626	51	224123m	55.5987	ug/l	
6) Dichlorodifluoromethane	1.576	85	137718m	122.7789	ug/l	
7) Chloromethane	1.726	50	149186m	75.6955	ug/l	
8) Bromomethane	2.105	94	51793m	45.0005	ug/l	
9) Vinyl Chloride	1.809	62	106366	48.3224	ug/l	99
10) Chloroethane	2.189	64	74143m	58.6244	ug/l	
11) Trichlorofluoromethane	2.399	101	218018	54.2771	ug/l	
12) Ethyl ether	2.633	59	148933	58.6197	ug/l	84
13) Furan	2.669	39	298519m	66.3154	ug/l	
14) 1,1,2-Trichloro-1,2,2-...	2.813	101	93665	55.7700	ug/l	90
15) Methylene Chloride	3.228	84	156509	49.8607	ug/l	83
16) Acrolein	2.753	56	132298	274.3459	ug/l	92
17) Acrylonitrile	3.438	53	55193	57.7401	ug/l	99
18) Iodomethane	2.970	142	118385	44.2992	ug/l	98
19) Acetone	2.879	43	276569	273.4886	ug/l	93
20) Carbon Disulfide	3.024	76	217650	39.9905	ug/l	100
21) t-Butyl Alcohol	3.300	59	81527	263.8698	ug/l	77
22) n-Hexane	3.660	57	56904	55.7755	ug/l	85
23) Di-isopropyl-ether	3.823	45	422240	54.9945	ug/l	93
24) 1,1-Dichloroethene	2.831	61	211551	55.0352	ug/l	94
25) Methyl Acetate	3.132	43	189732	54.7472	ug/l	100
26) Methyl-t-butyl ether	3.438	73	433060	56.5086	ug/l	62
27) 1,1-Dichloroethane	3.805	63	255527	53.0052	ug/l	98
28) trans-1,2-Dichloroethene	3.450	96	140709	54.0851	ug/l	95
29) Ethyl-t-butyl ether	4.087	59	499957	54.7254	ug/l	95
30) cis-1,2-Dichloroethene	4.219	61	289137	54.4813	ug/l	88
31) Bromochloromethane	4.381	49	114599m	48.8613	ug/l	
32) 2,2-Dichloropropane	4.219	77	214513	57.1729	ug/l	96
33) Ethyl acetate	4.243	43	163924m	58.5195	ug/l	
34) 1,4-Dioxane	5.396	88	100972	2711.4393	ug/l	87
35) 1,1-Dichloropropene	4.645	75	200804	57.1914	ug/l	96
36) Chloroform	4.423	83	307176	52.2588	ug/l	83
38) Cyclohexane	4.585	56	120860	59.1875	ug/l	98
40) 1,2-Dichloroethane	4.796	62	320556	53.6703	ug/l	96
41) 2-Butanone	4.231	43	78484m	47.4932	ug/l	
42) 1,1,1-Trichloroethane	4.549	97	261458	53.6346	ug/l	96
43) Carbon Tetrachloride	4.657	117	187482	53.0322	ug/l	94
44) Vinyl Acetate	3.823	43	292327	55.1433	ug/l	100
45) Bromodichloromethane	5.480	83	241744	52.2848	ug/l	92
46) Methylcyclohexane	5.294	83	87646	57.7138	ug/l	97
47) Dibromomethane	5.402	174	123364	53.7626	ug/l	89
48) 1,2-Dichloropropane	5.318	63	135088	52.1324	ug/l	97
49) Trichloroethene	5.174	130	146763	52.4661	ug/l	86
50) Benzene	4.784	78	515608	55.3089	ug/l	100
51) tert-Amyl methyl ether	4.826	73	448570	58.2173	ug/l	80
53) Iso-propylacetate	4.784	43	345791	58.0487	ug/l	94
54) Methyl methacrylate	5.348	41	203717	57.3455	ug/l	75
55) Dibromochloromethane	6.436	129	182113	53.6359	ug/l	93
56) 2-Chloroethylvinylether	5.631	63	106390	54.3115	ug/l	84
57) cis-1,3-Dichloropropene	5.739	75	243108	52.7366	ug/l	92
58) trans-1,3-Dichloropropene	6.063	75	250582	55.4726	ug/l	100
59) Ethyl methacrylate	6.081	41	194783	57.4712	ug/l	50
60) 1,1,2-Trichloroethane	6.183	97	145057	50.8958	ug/l	93
61) 1,2-Dibromoethane	6.526	107	157836	52.9056	ug/l	88
62) 1,3-Dichloropropane	6.291	76	263036	55.6464	ug/l	99
63) 4-Methyl-2-Pentanone	5.817	43	166867	55.4908	ug/l	80
64) 2-Hexanone	6.303	43	116186	54.3456	ug/l	80
65) Tetrachloroethene	6.279	164	89820	52.8609	ug/l	99
67) Toluene	5.949	92	321167	53.7268	ug/l	97

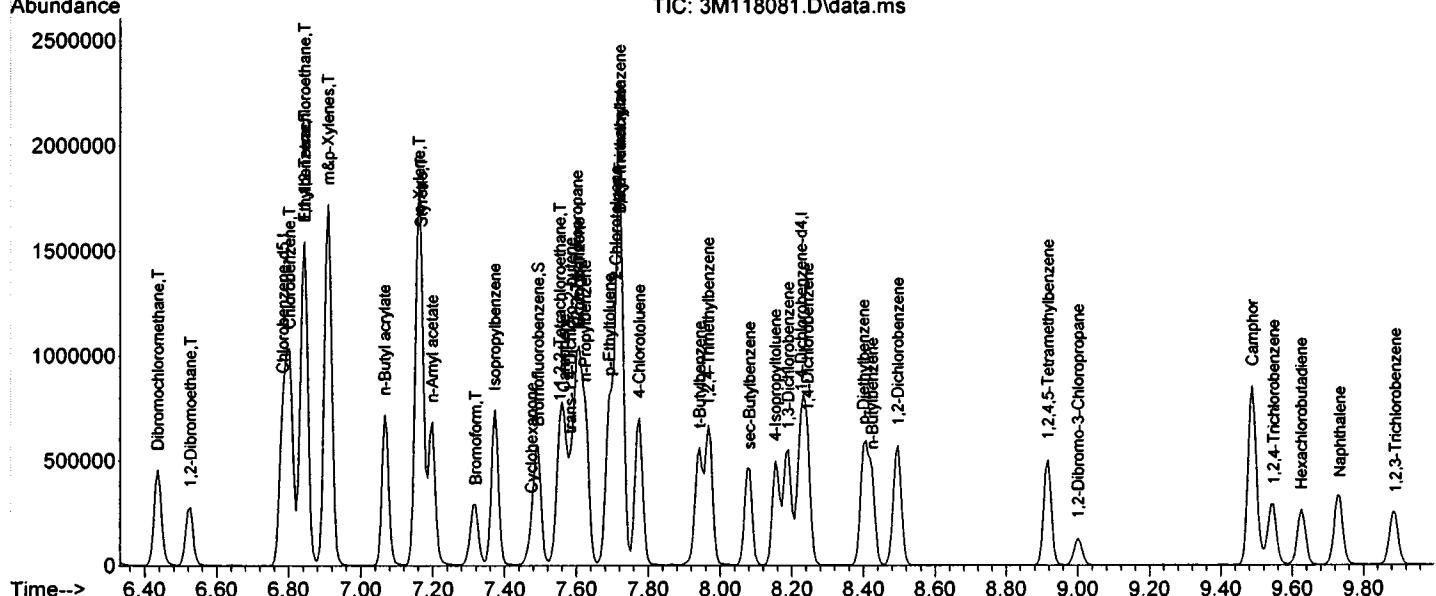
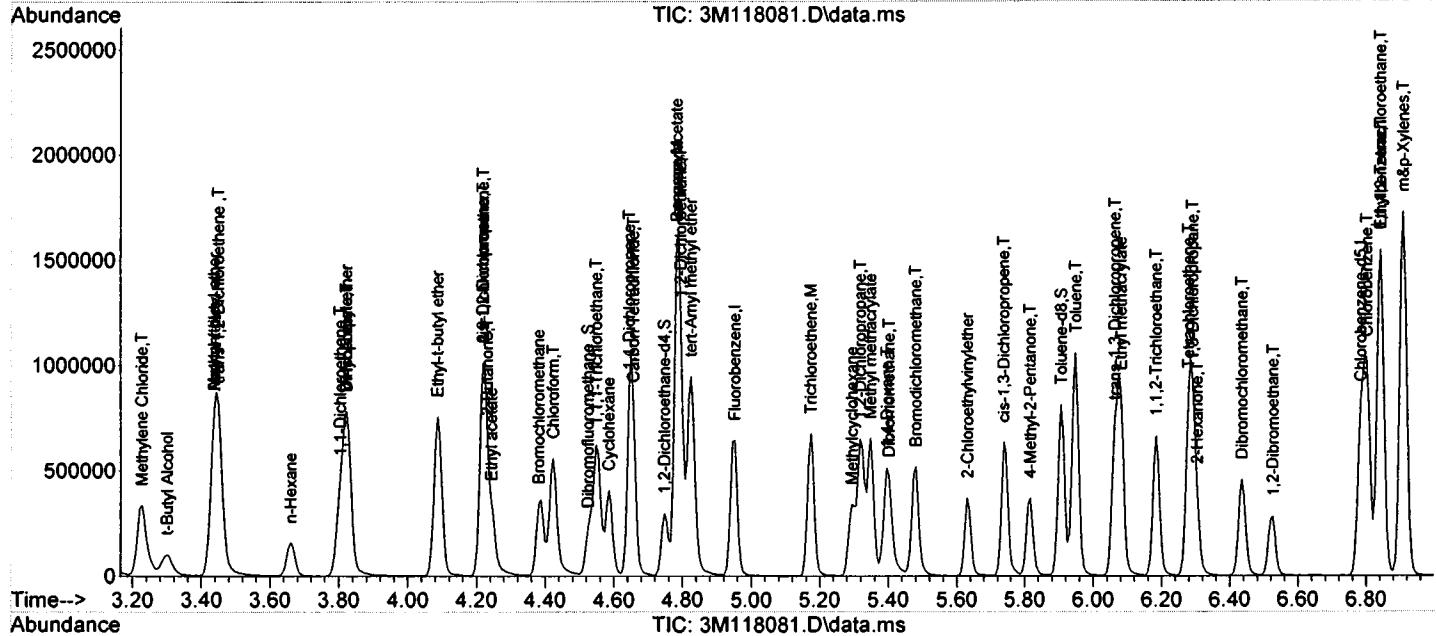
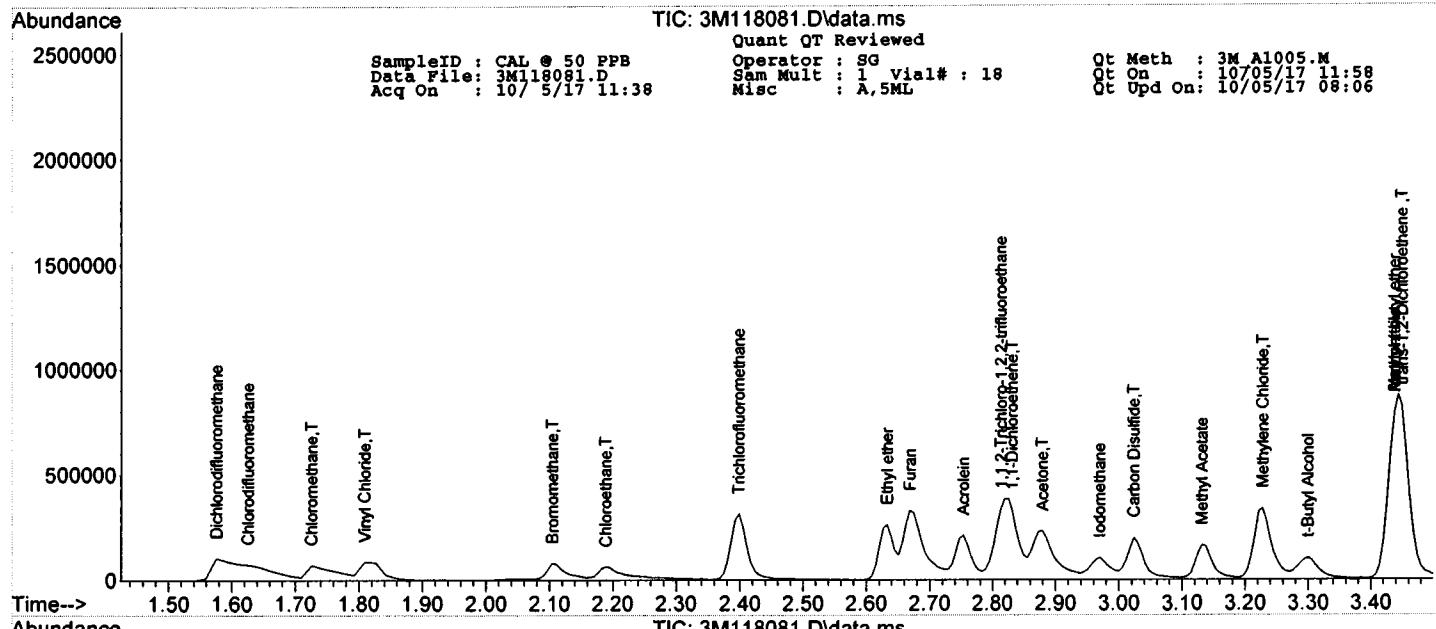
Quantitation Report (QT Reviewed)

SampleID : CAL @ 50 PPB Operator : SG Qt Meth : 3M_A1005.M
 Data File: 3M18081.D Sam Mult : 1 Vial# : 18 Qt On : 10/05/17 11:58
 Acq On : 10/ 5/17 11:38 Misc : A,5ML Qt Upd On: 10/05/17 08:06

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-05-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1,1,1,2-Tetrachloroethane	6.844	133	139614	54.9679	ug/l	79
69) Chlorobenzene	6.802	112	345866	50.9357	ug/l	99
71) n-Butyl acrylate	7.066	55	371804	54.3377	ug/l	93
72) n-Amyl acetate	7.198	43	279711	51.9321	ug/l	79
73) Bromoform	7.319	173	113325	45.2208	ug/l	99
74) Ethylbenzene	6.844	106	107768	53.8391	ug/l	91
75) 1,1,2,2-Tetrachloroethane	7.553	83	164571	43.0474	ug/l	96
77) Styrene	7.168	104	348424	51.2001	ug/l	93
78) m&p-Xylenes	6.910	106	354362	102.4490	ug/l	97
79) o-Xylene	7.162	106	183855	51.3281	ug/l	90
80) trans-1,4-Dichloro-2-b...	7.583	53	86973	55.5236	ug/l	78
81) 1,3-Dichlorobenzene	8.190	146	191001	45.3096	ug/l	97
82) 1,4-Dichlorobenzene	8.244	146	196869	44.0122	ug/l	97
83) 1,2-Dichlorobenzene	8.496	146	195998	44.6999	ug/l	97
84) Isopropylbenzene	7.373	105	371044	49.9556	ug/l	97
85) Cyclohexanone	7.475	55	35378	163.9438	ug/l	92
86) Camphene	7.565	93	124831	54.0119	ug/l	91
87) 1,2,3-Trichloropropane	7.601	75	235646	48.9813	ug/l	97
88) 2-Chlorotoluene	7.709	91	242360	53.1983	ug/l	97
89) p-Ethyltoluene	7.691	105	408224	50.3203	ug/l	74
90) 4-Chlorotoluene	7.775	91	256852	51.7215	ug/l	96
91) n-Propylbenzene	7.625	91	377535	50.1833	ug/l	99
92) Bromobenzene	7.607	77	382718	51.7320	ug/l	87
93) 1,3,5-Trimethylbenzene	7.721	105	257703	52.6580	ug/l	86
94) Butyl methacrylate	7.721	41	237378	56.1695	ug/l	98
95) t-Butylbenzene	7.943	119	238358	47.7697	ug/l	97
96) 1,2,4-Trimethylbenzene	7.967	105	320828	49.5981	ug/l	94
97) sec-Butylbenzene	8.081	105	263105	46.8522	ug/l	100
98) 4-Isopropyltoluene	8.154	119	229017	46.0113	ug/l	98
99) n-Butylbenzene	8.424	91	271788	49.4622	ug/l	93
100) p-Diethylbenzene	8.400	119	151521	49.5661	ug/l	93
101) 1,2,4,5-Tetramethylben...	8.916	119	240723	51.7462	ug/l	98
102) 1,2-Dibromo-3-Chloropr...	9.001	157	30143	38.3588	ug/l	86
103) Camphor	9.487	95	188157	521.9468	ug/l	94
104) Hexachlorobutadiene	9.625	225	50692	40.6723	ug/l	94
105) 1,2,4-Trichlorobenzene	9.547	180	82167	41.1111	ug/l	98
106) 1,2,3-Trichlorobenzene	9.890	180	74364	39.2790	ug/l	97
107) Naphthalene	9.733	128	248902	42.3715	ug/l	100

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



SampleID : CAL @ 100 PPB
 Data File: 3M118079.D
 Acq On : 10/ 5/17 11:05

Operator : SG
 Sam Mult : 1 Vial# : 16
 Misc : A,5ML

Qt Meth : 3M_A1005.M
 Qt On : 10/05/17 11:21
 Qt Upd On: 10/05/17 08:06

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-05-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.953	96	405608	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.785	117	304782	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.226	152	119222	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.532	111	111859	29.63	ug/l	0.00
Spiked Amount 30.000			Recovery	=	98.77%	
39) 1,2-Dichloroethane-d4	4.748	67	85854	29.88	ug/l	0.00
Spiked Amount 30.000			Recovery	=	99.60%	
66) Toluene-d8	5.908	98	400383	29.84	ug/l	0.00
Spiked Amount 30.000			Recovery	=	99.47%	
76) Bromofluorobenzene	7.493	174	125472	28.93	ug/l	0.00
Spiked Amount 30.000			Recovery	=	96.43%	
Target Compounds						
5) Chlorodifluoromethane	1.580	51	497186m	112.3266	ug/l	
6) Dichlorodifluoromethane	1.580	85	313165m	254.2681	ug/l	
7) Chloromethane	1.730	50	307563m	142.1222	ug/l	
8) Bromomethane	2.099	94	87982m	69.6188	ug/l	
9) Vinyl Chloride	1.814	62	240744	99.6063	ug/l	96
10) Chloroethane	2.183	64	150828	108.6116	ug/l	96
11) Trichlorofluoromethane	2.394	101	478192	108.4207	ug/l	90
12) Ethyl ether	2.628	59	315529	113.1039	ug/l	79
13) Furan	2.670	39	680063m	137.5869	ug/l	
14) 1,1,2-Trichloro-1,2,2-...	2.814	101	199354	108.1021	ug/l	89
15) Methylene Chloride	3.223	84	343913	99.7823	ug/l	88
16) Acrolein	2.748	56	284281	536.8818	ug/l	96
17) Acrylonitrile	3.439	53	114252	108.8537	ug/l	95
18) Iodomethane	2.970	142	250133	85.2425	ug/l	100
19) Acetone	2.874	43	584780	526.6401	ug/l	91
20) Carbon Disulfide	3.024	76	485045	81.1644	ug/l	100
21) t-Butyl Alcohol	3.301	59	171444	505.3545	ug/l	78
22) n-Hexane	3.661	57	131209	117.1252	ug/l	85
23) Di-isopropyl-ether	3.823	45	902819	107.0894	ug/l	90
24) 1,1-Dichloroethene	2.826	61	455514	107.9227	ug/l	97
25) Methyl Acetate	3.132	43	399379	104.9523	ug/l	100
26) Methyl-t-butyl ether	3.439	73	888905	105.6349	ug/l	64
27) 1,1-Dichloroethane	3.799	63	538432	101.7181	ug/l	100
28) trans-1,2-Dichloroethene	3.451	96	301373	105.4983	ug/l	93
29) Ethyl-t-butyl ether	4.088	59	1087958	108.4562	ug/l	95
30) cis-1,2-Dichloroethene	4.220	61	608214	104.3725	ug/l	84
31) Bromochloromethane	4.382	49	255411	99.1766	ug/l	90
32) 2,2-Dichloropropane	4.220	77	470820	114.2818	ug/l	96
33) Ethyl acetate	4.244	43	352365m	114.5610	ug/l	
34) 1,4-Dioxane	5.391	88	213667	5225.4302	ug/l	82
35) 1,1-Dichloropropene	4.646	75	423001	109.7199	ug/l	97
36) Chloroform	4.424	83	638777	98.9707	ug/l	89
38) Cyclohexane	4.586	56	274056	122.2286	ug/l	98
40) 1,2-Dichloroethane	4.796	62	630860	96.1941	ug/l	97
41) 2-Butanone	4.232	43	172894m	95.2831	ug/l	
42) 1,1,1-Trichloroethane	4.550	97	547929	102.3654	ug/l	98
43) Carbon Tetrachloride	4.658	117	397855	102.4922	ug/l	94
44) Vinyl Acetate	3.823	43	615636	105.7629	ug/l	100
45) Bromodichloromethane	5.481	83	511441	100.7398	ug/l	94
46) Methylcyclohexane	5.295	83	205304	123.1205	ug/l	97
47) Dibromomethane	5.403	174	244655	97.1027	ug/l	93
48) 1,2-Dichloropropane	5.319	63	294137	103.3775	ug/l	94
49) Trichloroethene	5.175	130	324798	105.7453	ug/l	86
50) Benzene	4.784	78	1071279	104.6558	ug/l	100
51) tert-Amyl methyl ether	4.826	73	927949	109.6811	ug/l	79
53) Iso-propylacetate	4.784	43	719097	111.0303	ug/l	95
54) Methyl methacrylate	5.349	41	434341	112.4549	ug/l	74
55) Dibromochloromethane	6.436	129	387473	104.9619	ug/l	97
56) 2-Chloroethylvinylether	5.631	63	232683	109.2525	ug/l	87
57) cis-1,3-Dichloropropene	5.739	75	535825	106.9082	ug/l	93
58) trans-1,3-Dichloropropene	6.064	75	545381	111.0464	ug/l	100
59) Ethyl methacrylate	6.082	41	417378	113.2672	ug/l	51
60) 1,1,2-Trichloroethane	6.184	97	301870	97.4178	ug/l	92
61) 1,2-Dibromoethane	6.520	107	332775	102.5939	ug/l	93
62) 1,3-Dichloropropane	6.292	76	549964	107.0118	ug/l	97
63) 4-Methyl-2-Pentanone	5.812	43	364614	111.5217	ug/l	86
64) 2-Hexanone	6.304	43	250496	107.7674	ug/l	82
65) Tetrachloroethene	6.280	164	198181	107.2751	ug/l	95
67) Toluene	5.950	92	685671	105.4998	ug/l	99

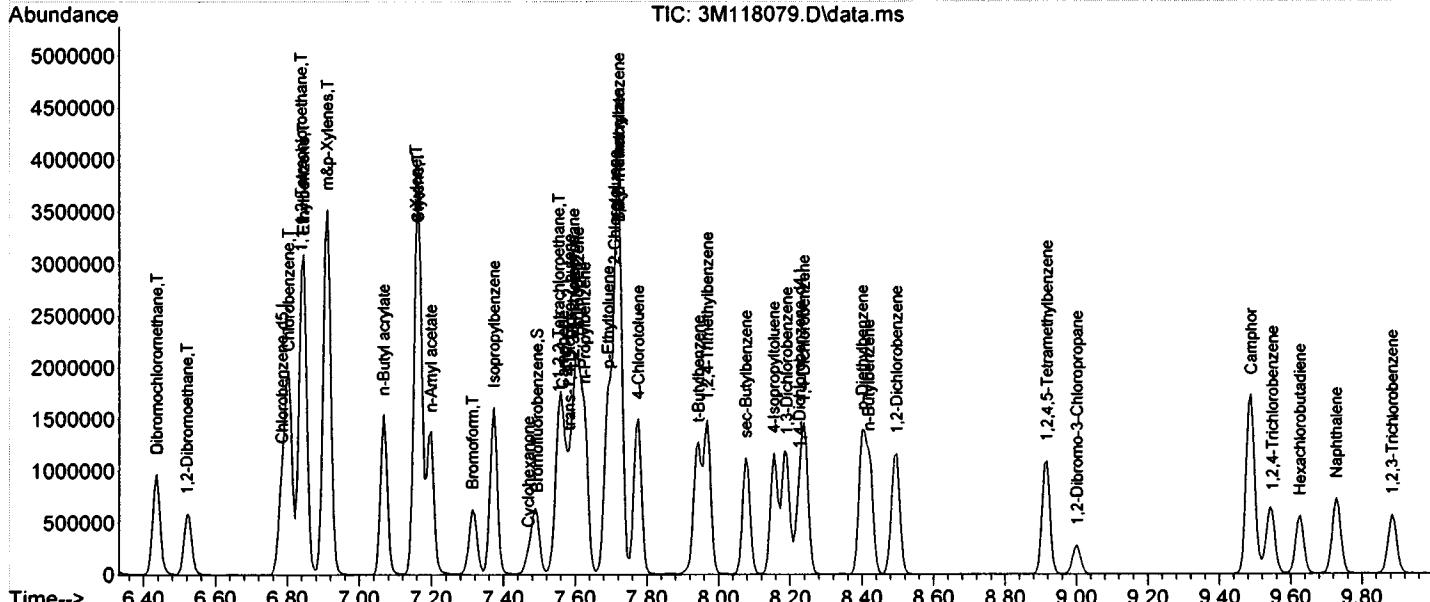
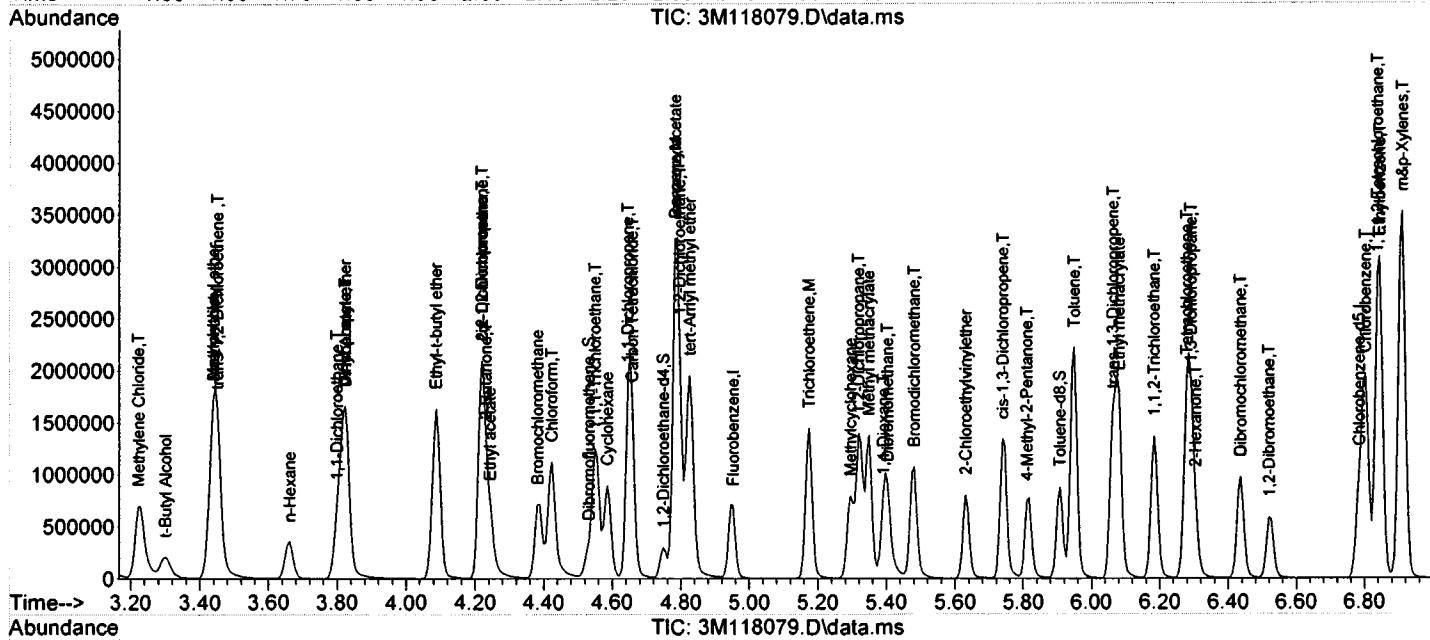
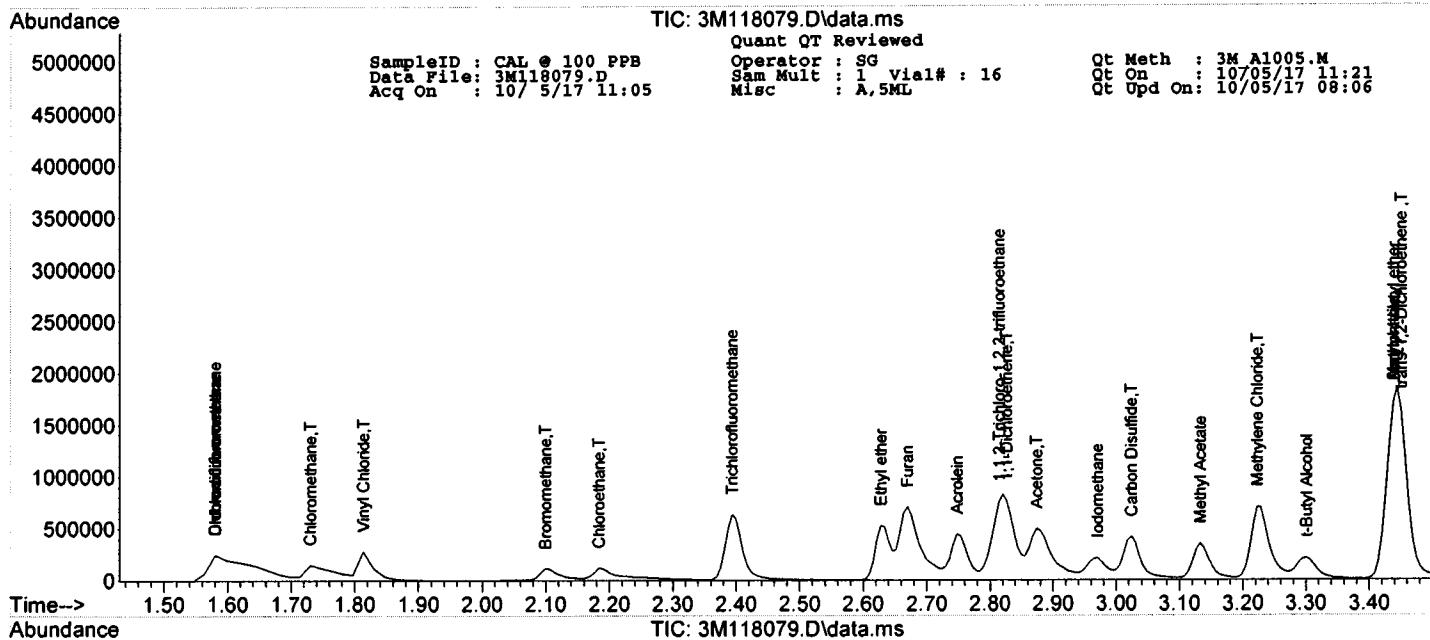
Quantitation Report (QT Reviewed)

SampleID : CAL @ 100 PPB Operator : SG Qt Meth : 3M_A1005.M
 Data File: 3M118079.D Sam Mult : 1 Vial# : 16 Qt On : 10/05/17 11:21
 Acq On : 10/ 5/17 11:05 Misc : A,5ML Qt Upd On: 10/05/17 08:06

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-05-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1,1,1,2-Tetrachloroethane	6.839	133	285455	103.3698	ug/l	83
69) Chlorobenzene	6.803	112	727094	98.4874	ug/l	94
71) n-Butyl acrylate	7.067	55	783709	113.8682	ug/l	94
72) n-Amyl acetate	7.199	43	590936	109.0757	ug/l	80
73) Bromoform	7.313	173	238543	94.6325	ug/l	98
74) Ethylbenzene	6.845	106	228288	113.3840	ug/l	86
75) 1,1,2,2-Tetrachloroethane	7.554	83	345054	89.7309	ug/l	94
77) Styrene	7.163	104	726996	106.2077	ug/l	84
78) m&p-Xylenes	6.911	106	738170	212.1671	ug/l	96
79) o-Xylene	7.157	106	386780	107.3506	ug/l	88
80) trans-1,4-Dichloro-2-b...	7.584	53	188338	119.5342	ug/l	68
81) 1,3-Dichlorobenzene	8.190	146	420230	99.1065	ug/l	95
82) 1,4-Dichlorobenzene	8.238	146	433388	96.3238	ug/l	97
83) 1,2-Dichlorobenzene	8.497	146	420305	95.2972	ug/l	97
84) Isopropylbenzene	7.373	105	832239	111.3955	ug/l	97
85) Cyclohexanone	7.469	55	74688	344.0911	ug/l	96
86) Camphene	7.566	93	297224	127.8533	ug/l	92
87) 1,2,3-Trichloropropane	7.596	75	497467	102.8005	ug/l	94
88) 2-Chlorotoluene	7.710	91	500501	109.2200	ug/l	96
89) p-Ethyltoluene	7.692	105	924791	113.3311	ug/l	75
90) 4-Chlorotoluene	7.776	91	549047	109.9153	ug/l	96
91) n-Propylbenzene	7.626	91	856088	113.1309	ug/l	98
92) Bromobenzene	7.608	77	796750	107.0690	ug/l	87
93) 1,3,5-Trimethylbenzene	7.722	105	541832	110.0704	ug/l	84
94) Butyl methacrylate	7.722	41	487576	114.7000	ug/l	97
95) t-Butylbenzene	7.944	119	555445	110.6687	ug/l	96
96) 1,2,4-Trimethylbenzene	7.968	105	709342	109.0208	ug/l	96
97) sec-Butylbenzene	8.076	105	629480	111.4406	ug/l	99
98) 4-Isopropyltoluene	8.154	119	542216	108.3003	ug/l	98
99) n-Butylbenzene	8.419	91	642950	116.3271	ug/l	93
100) p-Diethylbenzene	8.401	119	366277	119.1193	ug/l	94
101) 1,2,4,5-Tetramethylben...	8.917	119	552293	118.0297	ug/l	98
102) 1,2-Dibromo-3-Chloropr...	9.001	157	66220	83.7776	ug/l	93
103) Camphor	9.488	95	390930	1078.1165	ug/l	95
104) Hexachlorobutadiene	9.626	225	109218	87.1194	ug/l	95
105) 1,2,4-Trichlorobenzene	9.548	180	184570	91.8088	ug/l	98
106) 1,2,3-Trichlorobenzene	9.884	180	169048	88.7704	ug/l	98
107) Naphthalene	9.728	128	521897	88.3266	ug/l	100

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



SampleID : CAL @ 250 PPB Operator : SG Qt Meth : 3M_A1005.M
 Data File: 3M118077.D Sam Mult : 1 Vial# : 14 Qt On : 10/05/17 11:20
 Acq On : 10/ 5/17 10:31 Misc : A,5ML Qt Upd On: 10/05/17 08:06

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-05-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
4) Fluorobenzene	4.946	96	397376	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.785	117	295977	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.226	152	118503	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromoform	4.526	111	103713	28.04	ug/l	0.00
Spiked Amount 30.000			Recovery	= 93.47%		
39) 1,2-Dichloroethane-d4	4.748	67	81731	29.03	ug/l	0.00
Spiked Amount 30.000			Recovery	= 96.77%		
66) Toluene-d8	5.907	98	397661	30.51	ug/l	0.00
Spiked Amount 30.000			Recovery	= 101.70%		
76) Bromofluorobenzene	7.493	174	126592	29.37	ug/l	0.00
Spiked Amount 30.000			Recovery	= 97.90%		
Target Compounds						
5) Chlorodifluoromethane	1.575	51	1257303m	289.9404	ug/l	
6) Dichlorodifluoromethane	1.575	85	804810m	666.9864	ug/l	
7) Chloromethane	1.725	50	780117m	367.9530	ug/l	
8) Bromomethane	2.093	94	112578m	90.9266	ug/l	
9) Vinyl Chloride	1.809	62	617617	260.8288	ug/l	98
10) Chloroethane	2.177	64	365809m	268.8769	ug/l	
11) Trichlorofluoromethane	2.387	101	1144914	264.9644	ug/l	88
12) Ethyl ether	2.628	59	752525	275.3366	ug/l	79
13) Furan	2.664	39	1662226m	343.2598	ug/l	
14) 1,1,2-Trichloro-1,2,2-...	2.808	101	497858	275.5623	ug/l	90
15) Methylene Chloride	3.222	84	846598	250.7188	ug/l	86
16) Acrolein	2.748	56	711965	1372.4432	ug/l	96
17) Acrylonitrile	3.433	53	277283	269.6543	ug/l	98
18) Iodomethane	2.964	142	630656	219.3727	ug/l	96
19) Acetone	2.874	43	1384131	1272.3408	ug/l	91
20) Carbon Disulfide	3.018	76	1268782	216.7083	ug/l	100
21) t-Butyl Alcohol	3.300	59	428996	1290.7199	ug/l	84
22) n-Hexane	3.655	57	342011	311.6245	ug/l	87
23) Di-isopropyl-ether	3.823	45	2135185	258.5153	ug/l	92
24) 1,1-Dichloroethene	2.826	61	1112432	269.0230	ug/l	99
25) Methyl Acetate	3.132	43	978208	262.3874	ug/l	100
26) Methyl-t-butyl ether	3.439	73	2027156	245.8918	ug/l	64
27) 1,1-Dichloroethane	3.799	63	1313948	253.3672	ug/l	97
28) trans-1,2-Dichloroethene	3.451	96	716664	256.0718	ug/l	92
29) Ethyl-t-butyl ether	4.087	59	2485669	252.9242	ug/l	96
30) cis-1,2-Dichloroethene	4.220	61	1449745	253.9371	ug/l	87
31) Bromochloromethane	4.382	49	632828	250.8189	ug/l	89
32) 2,2-Dichloropropane	4.220	77	1132670	280.6275	ug/l	95
33) Ethyl acetate	4.244	43	815877m	270.7531	ug/l	
34) 1,4-Dioxane	5.391	88	509531	12719.2086	ug/l	77
35) 1,1-Dichloropropene	4.646	75	980692	259.6460	ug/l	97
36) Chloroform	4.424	83	1526463	241.4063	ug/l	87
38) Cyclohexane	4.586	56	690410	314.3007	ug/l	100
40) 1,2-Dichloroethane	4.796	62	1331121	207.1753	ug/l	96
41) 2-Butanone	4.232	43	420743m	236.6779	ug/l	
42) 1,1,1-Trichloroethane	4.550	97	1312582	250.2997	ug/l	99
43) Carbon Tetrachloride	4.658	117	896381	235.7021	ug/l	95
44) Vinyl Acetate	3.823	43	1468846	257.5671	ug/l	100
45) Bromodichloromethane	5.481	83	1207911	242.8542	ug/l	98
46) Methylcyclohexane	5.295	83	498523	305.1569	ug/l	99
47) Dibromomethane	5.403	174	563804	228.4076	ug/l	92
48) 1,2-Dichloropropane	5.319	63	713287	255.8854	ug/l	92
49) Trichloroethene	5.175	130	752899	250.2013	ug/l	87
50) Benzene	4.784	78	2410189	240.3349	ug/l	100
51) tert-Amyl methyl ether	4.826	73	2056188	248.0706	ug/l	80
53) Iso-propylacetate	4.784	43	1662105	264.2676	ug/l	94
54) Methyl methacrylate	5.349	41	1033247	275.4754	ug/l	76
55) Dibromochloromethane	6.436	129	919087	256.3764	ug/l	92
56) 2-Chloroethylvinylether	5.631	63	583945	282.3384	ug/l	86
57) cis-1,3-Dichloropropene	5.739	75	1315630	270.3045	ug/l	94
58) trans-1,3-Dichloropropene	6.064	75	1300144	272.6009	ug/l	98
59) Ethyl methacrylate	6.082	41	986372	275.6428	ug/l	54
60) 1,1,2-Trichloroethane	6.184	97	728626	242.1333	ug/l	92
61) 1,2-Dibromoethane	6.520	107	819007	260.0099	ug/l	93
62) 1,3-Dichloropropane	6.286	76	1235795	247.6141	ug/l	100
63) 4-Methyl-2-Pentanone	5.817	43	890266	280.3995	ug/l	80
64) 2-Hexanone	6.304	43	603918	267.5444	ug/l	81
65) Tetrachloroethene	6.280	164	433643	241.7133	ug/l	95
67) Toluene	5.950	92	1607472	254.6892	ug/l	99

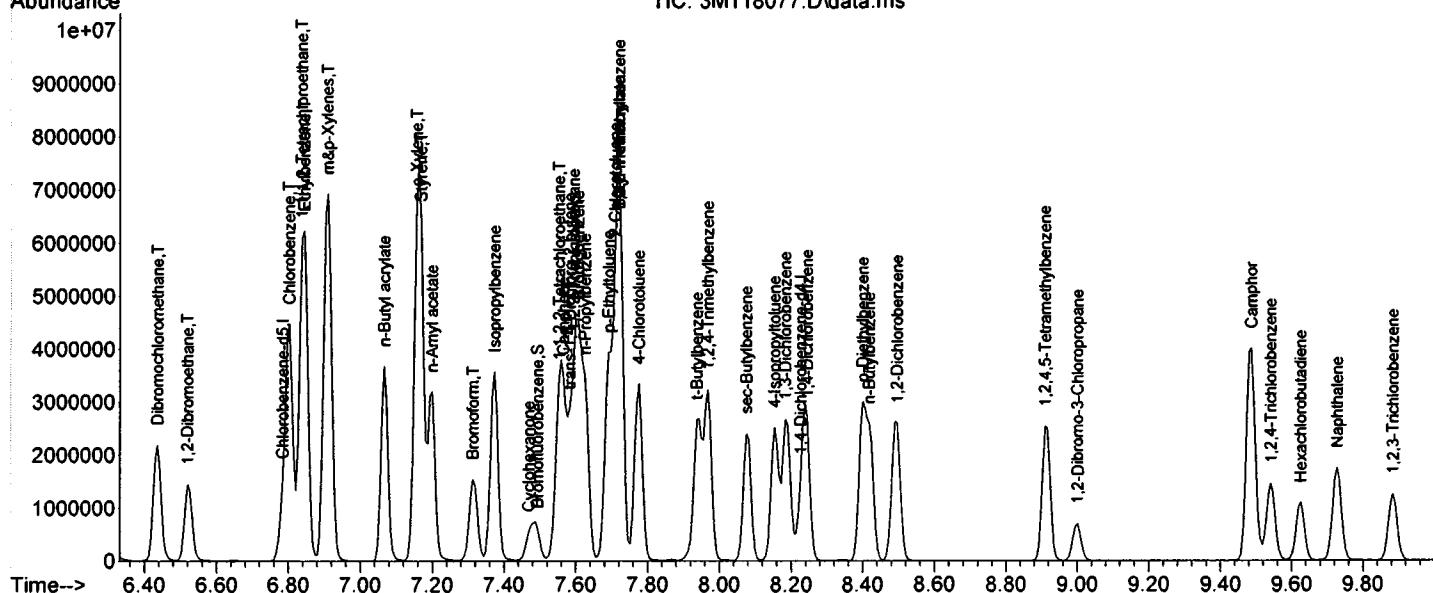
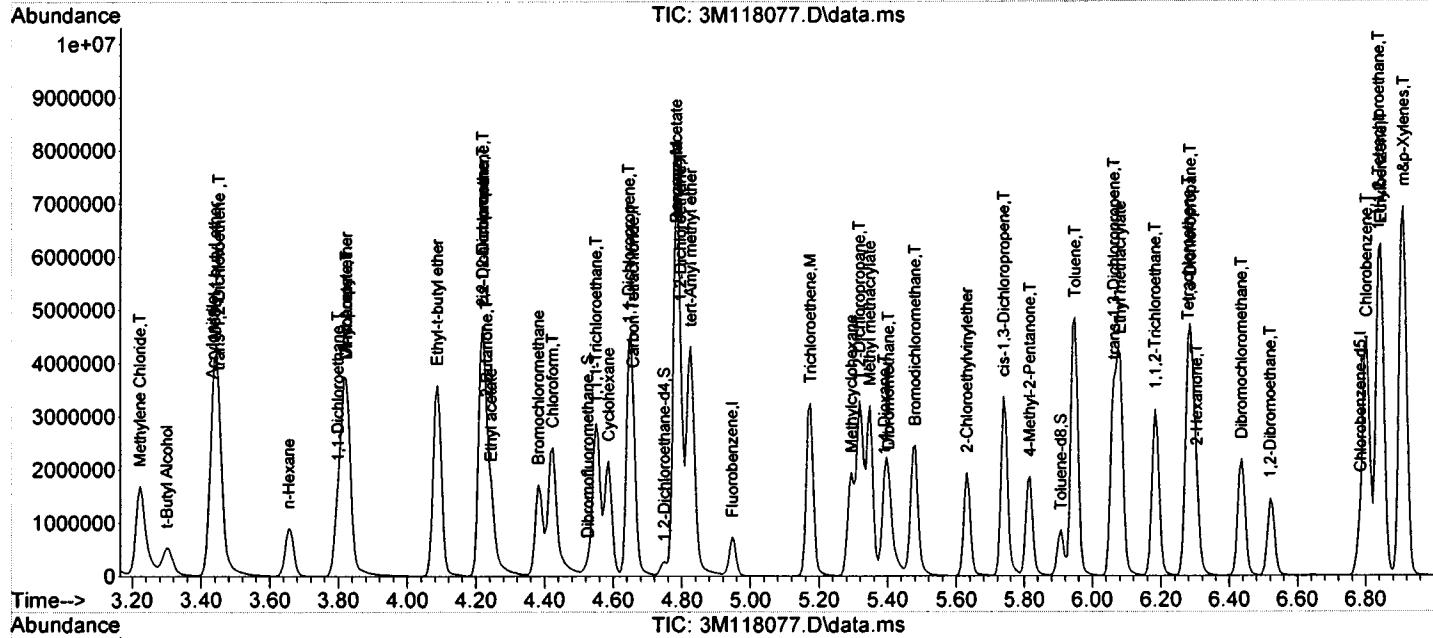
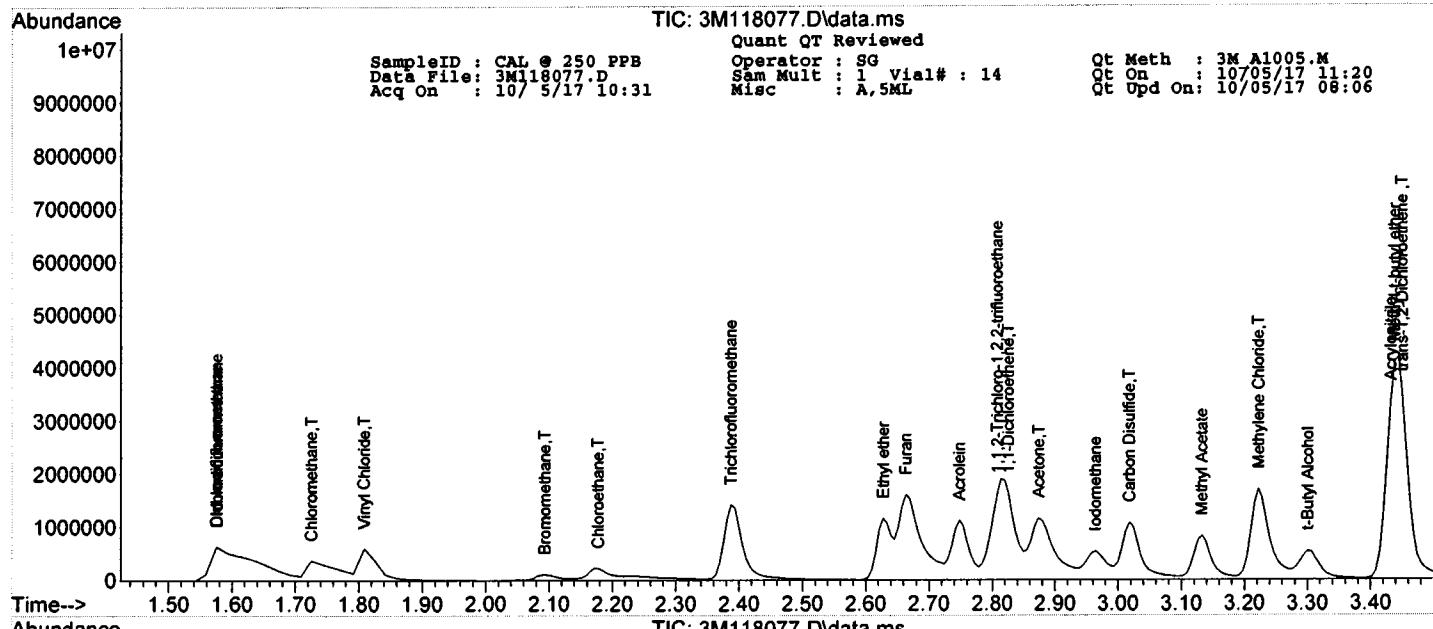
Quantitation Report (QT Reviewed)

SampleID : CAL @ 250 PPB Operator : SG Qt Meth : 3M_A1005.M
 Data File: 3M118077.D Sam Mult : 1 Vial# : 14 Qt On : 10/05/17 11:20
 Acq On : 10/ 5/17 10:31 Misc : A,5ML Qt Upd On: 10/05/17 08:06

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-05-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1,1,1,2-Tetrachloroethane	6.839	133	610378	227.6074	ug/l	86
69) Chlorobenzene	6.803	112	1732544	241.6605	ug/l	96
71) n-Butyl acrylate	7.067	55	1887173	275.8586	ug/l	93
72) n-Amyl acetate	7.199	43	1399344	259.8597	ug/l	80
73) Bromoform	7.313	173	599729	239.3623	ug/l	96
74) Ethylbenzene	6.845	106	467849	233.7768	ug/l	84
75) 1,1,2,2-Tetrachloroethane	7.553	83	837102	219.0081	ug/l	95
77) Styrene	7.169	104	1598580	234.9554	ug/l	94
78) m&p-Xylenes	6.911	106	1594443	461.0602	ug/l	87
79) o-Xylene	7.157	106	857502	239.4434	ug/l	82
80) trans-1,4-Dichloro-2-b...	7.583	53	437748	279.5153	ug/l	62
81) 1,3-Dichlorobenzene	8.184	146	954727	226.5278	ug/l	95
82) 1,4-Dichlorobenzene	8.244	146	984294	220.0942	ug/l	98
83) 1,2-Dichlorobenzene	8.496	146	966047	220.3642	ug/l	96
84) Isopropylbenzene	7.373	105	1867890	251.5347	ug/l	95
85) Cyclohexanone	7.469	55	186222	863.1389	ug/l	93
86) Camphene	7.565	93	606520	262.4824	ug/l	94
87) 1,2,3-Trichloropropane	7.595	75	1141565	237.3334	ug/l	92
88) 2-Chlorotoluene	7.710	91	1016417	223.1497	ug/l	97
89) p-Ethyltoluene	7.692	105	1998485	246.3958	ug/l	82
90) 4-Chlorotoluene	7.776	91	1186607	238.9916	ug/l	96
91) n-Propylbenzene	7.625	91	1827585	242.9784	ug/l	97
92) Bromobenzene	7.607	77	1772663	239.6596	ug/l	85
93) 1,3,5-Trimethylbenzene	7.722	105	1003453	205.0832	ug/l	93
94) Butyl methacrylate	7.722	41	1028633	243.4494	ug/l	97
95) t-Butylbenzene	7.938	119	1219433	244.4380	ug/l	96
96) 1,2,4-Trimethylbenzene	7.968	105	1556267	240.6384	ug/l	94
97) sec-Butylbenzene	8.076	105	1410191	251.1693	ug/l	100
98) 4-Isopropyltoluene	8.154	119	1183903	237.9034	ug/l	97
99) n-Butylbenzene	8.418	91	1399192	254.6878	ug/l	94
100) p-Diethylbenzene	8.400	119	801167	262.1336	ug/l	93
101) 1,2,4,5-Tetramethylben...	8.911	119	1295323	278.5012	ug/l	95
102) 1,2-Dibromo-3-Chloropr...	9.001	157	171271	217.9966	ug/l	93
103) Camphor	9.488	95	941616	2612.5680	ug/l	94
104) Hexachlorobutadiene	9.626	225	217365	174.4365	ug/l	93
105) 1,2,4-Trichlorobenzene	9.542	180	420478	210.4231	ug/l	98
106) 1,2,3-Trichlorobenzene	9.884	180	376685	199.0048	ug/l	97
107) Naphthalene	9.728	128	1302576	221.7873	ug/l	100

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



SampleID : CAL @ 500 PPB Operator : SG Qt Meth : 3M_A1005.M
 Data File: 3M118075.D Sam Mult : 1 Vial# : 12 Qt On : 10/05/17 11:19
 Acq On : 10/ 5/17 09:58 Misc : A,5ML Qt Upd On: 10/05/17 08:06

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-05-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.945	96	372533	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.784	117	270438	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.225	152	100328	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.525	111	94374	27.22	ug/l	0.00
Spiked Amount 30.000			Recovery	= 90.73%		
39) 1,2-Dichloroethane-d4	4.747	67	70773	26.81	ug/l	0.00
Spiked Amount 30.000			Recovery	= 89.37%		
66) Toluene-d8	5.907	98	372163	31.26	ug/l	0.00
Spiked Amount 30.000			Recovery	= 104.20%		
76) Bromofluorobenzene	7.492	174	120290	32.96	ug/l	0.00
Spiked Amount 30.000			Recovery	= 109.87%		
Target Compounds						
5) Chlorodifluoromethane	1.579	51	2270463m	558.4960	ug/l	Qvalue
6) Dichlorodifluoromethane	1.579	85	1594459m	1409.5285	ug/l	
7) Chloromethane	1.729	50	1389862m	699.2640	ug/l	
8) Bromomethane	2.080	94	77652m	66.9001	ug/l	
9) Vinyl Chloride	1.813	62	1179824	531.4842	ug/l	93
10) Chloroethane	2.152	64	452762m	354.9816	ug/l	
11) Trichlorofluoromethane	2.374	101	2028871	500.8480	ug/l	89
12) Ethyl ether	2.627	59	1346082	525.3533	ug/l	78
13) Furan	2.657	39	2987968m	658.1815	ug/l	
14) 1,1,2-Trichloro-1,2,2-...	2.801	101	890773	525.9182	ug/l	89
15) Methylene Chloride	3.215	84	1570455	496.1031	ug/l	86
16) Acrolein	2.747	56	1297627	2668.2252	ug/l	98
17) Acrylonitrile	3.432	53	520755	540.1998	ug/l	95
18) Iodomethane	2.957	142	1163881	431.8526	ug/l	96
19) Acetone	2.879	43	2540027	2490.5857	ug/l	89
20) Carbon Disulfide	3.011	76	2370345	431.8541	ug/l	100
21) t-Butyl Alcohol	3.312	59	786986	2525.7051	ug/l	84
22) n-Hexane	3.654	57	642510	624.4652	ug/l	86
23) Di-isopropyl-ether	3.822	45	3591843	463.8793	ug/l	92
24) 1,1-Dichloroethene	2.819	61	2123203m	547.7020	ug/l	
25) Methyl Acetate	3.131	43	1825316	522.2599	ug/l	100
26) Methyl-t-butyl ether	3.438	73	3242642	419.5587	ug/l	65
27) 1,1-Dichloroethane	3.798	63	2325256	478.2774	ug/l	95
28) trans-1,2-Dichloroethene	3.444	96	1218751	464.5132	ug/l	98
29) Ethyl-t-butyl ether	4.086	59	4095574	444.5276	ug/l	96
30) cis-1,2-Dichloroethene	4.219	61	2553708	477.1365	ug/l	93
31) Bromochloromethane	4.381	49	1505987	636.6967	ug/l	90
32) 2,2-Dichloropropane	4.219	77	1839154	486.0510	ug/l	94
33) Ethyl acetate	4.243	43	1521733m	538.6717	ug/l	
34) 1,4-Dioxane	5.396	88	902576	24033.1195	ug/l	79
35) 1,1-Dichloropropene	4.645	75	1616203	456.4381	ug/l	97
36) Chloroform	4.423	83	2632498	444.0862	ug/l	92
38) Cyclohexane	4.585	56	1232526	598.5098	ug/l	99
40) 1,2-Dichloroethane	4.795	62	2074406	344.3905	ug/l	97
41) 2-Butanone	4.231	43	686613m	411.9929	ug/l	
42) 1,1,1-Trichloroethane	4.549	97	2171291	441.6607	ug/l	97
43) Carbon Tetrachloride	4.657	117	1383853	388.1483	ug/l	95
44) Vinyl Acetate	3.822	43	2511747	469.8150	ug/l	100
45) Bromodichloromethane	5.480	83	2074582	444.9161	ug/l	98
46) Methylcyclohexane	5.294	83	905646	591.3346	ug/l	98
47) Dibromomethane	5.402	174	945337	408.5130	ug/l	94
48) 1,2-Dichloropropane	5.318	63	1253306	479.5957	ug/l	91
49) Trichloroethene	5.174	130	1289157	456.9782	ug/l	83
50) Benzene	4.783	78	3618555	384.8910	ug/l	100
51) tert-Amyl methyl ether	4.825	73	3185584	409.9570	ug/l	84
53) Iso-propylacetate	4.783	43	2622556	456.3526	ug/l	94
54) Methyl methacrylate	5.348	41	1823591	532.1039	ug/l	75
55) Dibromochloromethane	6.435	129	1563444	477.3028	ug/l	93
56) 2-Chloroethylvinylether	5.630	63	1058808	560.2805	ug/l	87
57) cis-1,3-Dichloropropene	5.738	75	2290532	515.0462	ug/l	96
58) trans-1,3-Dichloropropene	6.063	75	2184033	501.1703	ug/l	94
59) Ethyl methacrylate	6.081	41	1648743	504.2537	ug/l	55
60) 1,1,2-Trichloroethane	6.183	97	1259120	457.9386	ug/l	92
61) 1,2-Dibromoethane	6.525	107	1447363	502.8866	ug/l	92
62) 1,3-Dichloropropane	6.291	76	2010922	440.9754	ug/l	97
63) 4-Methyl-2-Pentanone	5.816	43	1679526	578.9411	ug/l	79
64) 2-Hexanone	6.303	43	1089139	528.0698	ug/l	79
65) Tetrachloroethene	6.279	164	661512	403.5489	ug/l	93
67) Toluene	5.949	92	2641788	458.0947	ug/l	90

Quantitation Report (QT Reviewed)

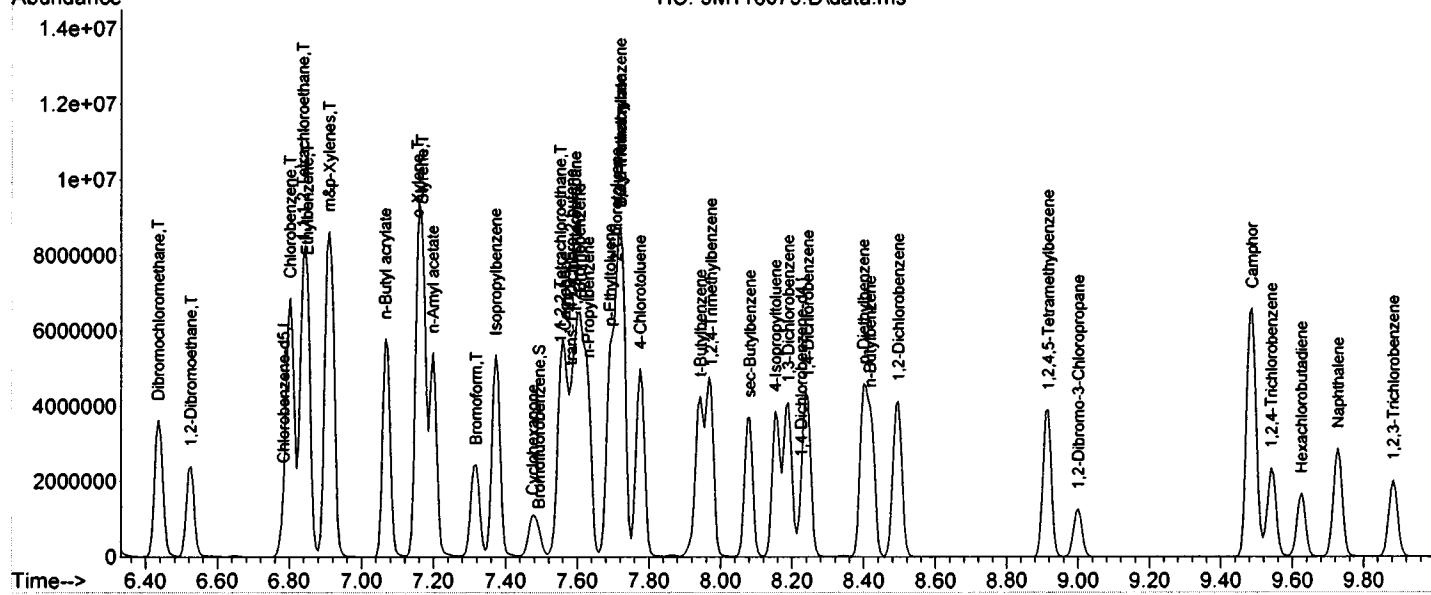
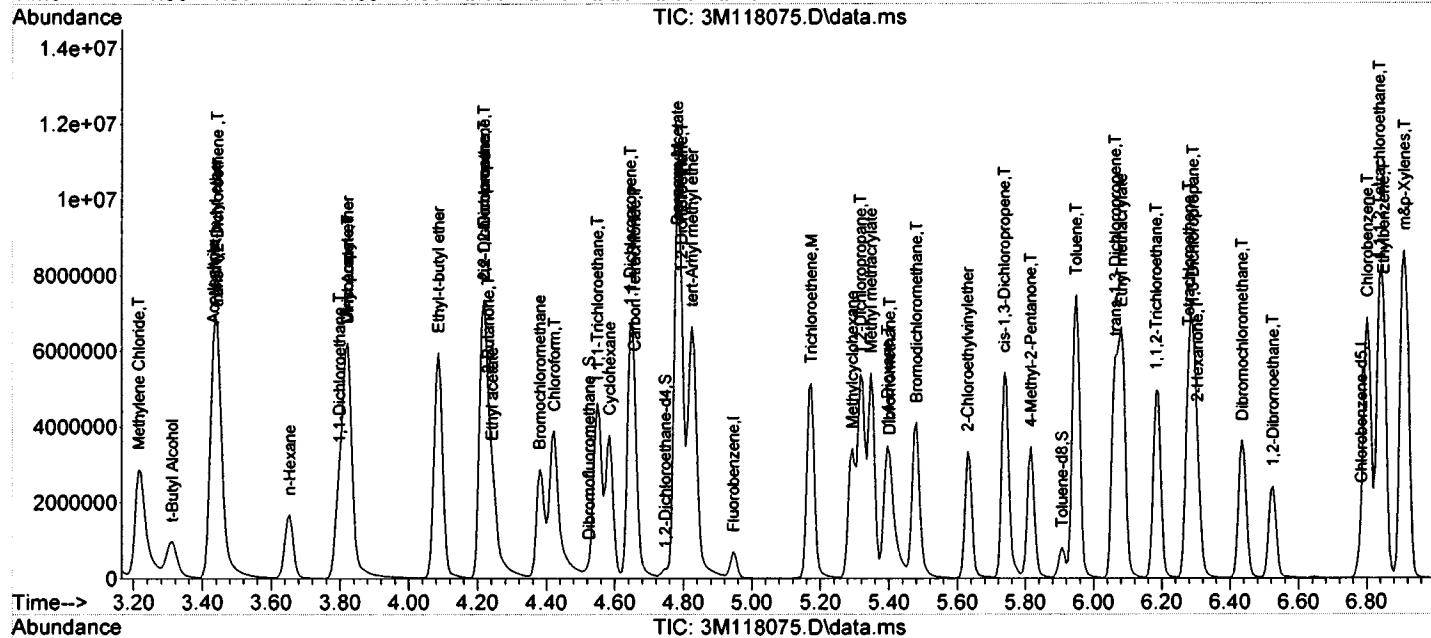
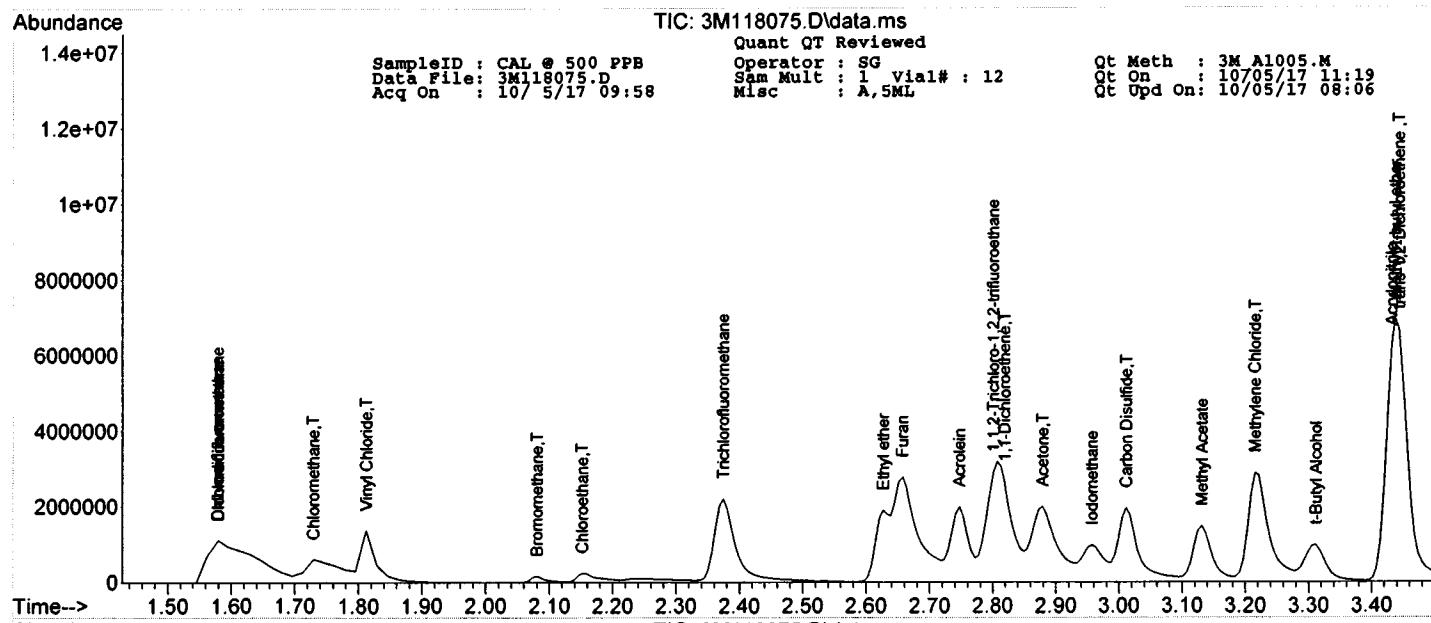
SampleID : CAL @ 500 PPB Operator : SG Qt Meth : 3M_A1005.M
 Data File: 3M118075.D Sam Mult : 1 Vial# : 12 Qt On : 10/05/17 11:19
 Acq On : 10/ 5/17 09:58 Misc : A,5ML Qt Upd On: 10/05/17 08:06

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-05-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1,1,1,2-Tetrachloroethane	6.838	133	871854	355.8127	ug/l	88
69) Chlorobenzene	6.802	112	2791075	426.0721	ug/l	92
71) n-Butyl acrylate	7.066	55	3171519	547.5822	ug/l	94
72) n-Amyl acetate	7.198	43	2320420	508.9655	ug/l	76
73) Bromoform	7.318	173	1022710	482.1258	ug/l	95
74) Ethylbenzene	6.850	106	589172	347.7323	ug/l	82
75) 1,1,2,2-Tetrachloroethane	7.553	83	1425555	440.5275	ug/l	93
77) Styrene	7.168	104	2164947	375.8422	ug/l	86
78) m&p-Xylenes	6.910	106	2177764	743.8179	ug/l	89
79) o-Xylene	7.156	106	1182397	389.9763	ug/l	76
80) trans-1,4-Dichloro-2-b...	7.583	53	721596	544.2302	ug/l	58
81) 1,3-Dichlorobenzene	8.189	146	1505816	422.0087	ug/l	96
82) 1,4-Dichlorobenzene	8.243	146	1548319	408.9323	ug/l	98
83) 1,2-Dichlorobenzene	8.496	146	1548251	417.1492	ug/l	98
84) Isopropylbenzene	7.372	105	2950643	469.3215	ug/l	94
85) Cyclohexanone	7.474	55	355983	1948.8848	ug/l	94
86) Camphene	7.565	93	900677	460.3958	ug/l	91
87) 1,2,3-Trichloropropane	7.595	75	1803862	442.9643	ug/l	88
88) 2-Chlorotoluene	7.709	91	1293099	335.3231	ug/l	97
89) p-Ethyltoluene	7.691	105	3065106	446.3598	ug/l	77
90) 4-Chlorotoluene	7.775	91	1716053	408.2382	ug/l	97
91) n-Propylbenzene	7.631	91	2817420	442.4344	ug/l	96
92) Bromobenzene	7.607	77	2700916	431.3075	ug/l	82
93) 1,3,5-Trimethylbenzene	7.721	105	1242683m	299.9858	ug/l	
94) Butyl methacrylate	7.721	41	1539788	430.4438	ug/l	93
95) t-Butylbenzene	7.943	119	1928026	456.4896	ug/l	95
96) 1,2,4-Trimethylbenzene	7.973	105	2367771	432.4418	ug/l	92
97) sec-Butylbenzene	8.081	105	2259764	475.3996	ug/l	99
98) 4-Isopropyltoluene	8.153	119	1851859	439.5412	ug/l	98
99) n-Butylbenzene	8.418	91	2182177	469.1676	ug/l	94
100) p-Diethylbenzene	8.399	119	1241073	479.6277	ug/l	95
101) 1,2,4,5-Tetramethylben...	8.916	119	2023555	513.8911	ug/l	93
102) 1,2-Dibromo-3-Chloropr...	9.000	157	325139	488.8124	ug/l	92
103) Camphor	9.487	95	1609065	5273.2037	ug/l	95
104) Hexachlorobutadiene	9.625	225	341796	323.9827	ug/l	95
105) 1,2,4-Trichlorobenzene	9.541	180	689861	407.7734	ug/l	98
106) 1,2,3-Trichlorobenzene	9.883	180	610484	380.9488	ug/l	97
107) Naphthalene	9.727	128	2127993	427.9677	ug/l	100

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

7102003 0338



SampleID : CAL @ 1 PPB
 Data File: 3M118069.D
 Acq On : 10/ 5/17 08:16

Operator : SG
 Sam Mult : 1 Vial# : 6
 Misc : A,5ML

Qt Meth : 3M_A1005.M
 Qt On : 10/05/17 08:26
 Qt Upd On: 10/05/17 08:06

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-05-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
4) Fluorobenzene	4.947	96	304351	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.785	117	219542	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.221	152	85924	30.00	ug/l	-0.01
System Monitoring Compounds						
37) Dibromofluoromethane	4.527	111	94618	33.40	ug/l	0.00
Spiked Amount 30.000			Recovery	= 111.33%		
39) 1,2-Dichloroethane-d4	4.743	67	74900	34.73	ug/l	-0.01
Spiked Amount 30.000			Recovery	= 115.77%		
66) Toluene-d8	5.908	98	295248	30.54	ug/l	0.00
Spiked Amount 30.000			Recovery	= 101.80%		
76) Bromofluorobenzene	7.488	174	93056	29.77	ug/l	-0.01
Spiked Amount 30.000			Recovery	= 99.23%		
Target Compounds						
5) Chlorodifluoromethane	1.576	51	4591	1.3823	ug/l	81
6) Dichlorodifluoromethane	1.576	85	1789m	1.9358	ug/l	
7) Chloromethane	1.726	50	2874	1.7699	ug/l	# 31
8) Bromomethane	2.118	94	1041	1.0978	ug/l	70
9) Vinyl Chloride	1.809	62	1981	1.0923	ug/l	86
10) Chloroethane	2.190	64	1424	1.3666	ug/l	86
11) Trichlorofluoromethane	2.394	101	4492	1.3573	ug/l	66
12) Ethyl ether	2.628	59	1792	0.8561	ug/l	70
13) Furan	2.658	39	3613	0.9742	ug/l	85
14) 1,1,2-Trichloro-1,2,2-...	2.809	101	1516	1.0956	ug/l	80
15) Methylene Chloride	3.223	84	2604	1.0069	ug/l	67
16) Acrolein	2.754	56	1660	4.1780	ug/l	68
17) Acrylonitrile	3.451	53	349	0.4431	ug/l	83
18) Iodomethane	2.959	142	1411	0.6408	ug/l	89
19) Acetone	2.893	43	4220	5.0648	ug/l	89
20) Carbon Disulfide	3.025	76	3091	0.6893	ug/l	100
21) t-Butyl Alcohol	3.283	59	296	1.1628	ug/l	50
22) n-Hexane	3.650	57	415	0.4937	ug/l	# 1
23) Di-isopropyl-ether	3.818	45	5250	0.8299	ug/l	98
24) 1,1-Dichloroethene	2.821	61	3215m	1.0151	ug/l	
25) Methyl Acetate	3.133	43	2791	0.9775	ug/l	100
26) Methyl-t-butyl ether	3.439	73	5068	0.8026	ug/l	73
27) 1,1-Dichloroethane	3.800	63	3992	1.0051	ug/l	97
28) trans-1,2-Dichloroethene	3.451	96	2104	0.9816	ug/l	78
29) Ethyl-t-butyl ether	4.082	59	5808	0.7716	ug/l	94
30) cis-1,2-Dichloroethene	4.220	61	4600	1.0520	ug/l	91
31) Bromochloromethane	4.388	49	2044	1.0577	ug/l	75
32) 2,2-Dichloropropane	4.220	77	3303	1.0685	ug/l	91
33) Ethyl acetate	4.238	43	1763m	0.7639	ug/l	
34) 1,4-Dioxane	5.392	88	1261	41.0990	ug/l	39
35) 1,1-Dichloropropene	4.647	75	2770	0.9575	ug/l	89
36) Chloroform	4.418	83	5372	1.1092	ug/l	74
38) Cyclohexane	4.581	56	1910	1.1353	ug/l	86
40) 1,2-Dichloroethane	4.791	62	6338	1.2880	ug/l	69
41) 2-Butanone	4.226	43	1233m	0.9056	ug/l	
42) 1,1,1-Trichloroethane	4.551	97	4398	1.0950	ug/l	87
43) Carbon Tetrachloride	4.647	117	3285	1.1278	ug/l	86
44) Vinyl Acetate	3.824	43	3954	0.9053	ug/l	100
45) Bromodichloromethane	5.476	83	3672	0.9639	ug/l	78
46) Methylcyclohexane	5.289	83	1131	0.9039	ug/l	85
47) Dibromomethane	5.404	174	1874	0.9912	ug/l	74
48) 1,2-Dichloropropane	5.325	63	1985	0.9298	ug/l	69
49) Trichloroethene	5.175	130	2030	0.8808	ug/l	75
50) Benzene	4.785	78	7521	0.9792	ug/l	100
51) tert-Amyl methyl ether	4.821	73	5276	0.8311	ug/l	84
53) Iso-propylacetate	4.785	43	4020	0.8617	ug/l	90
54) Methyl methacrylate	5.349	41	2199	0.7904	ug/l	61
55) Dibromochloromethane	6.437	129	2245	0.8443	ug/l	75
56) 2-Chloroethylvinylether	5.626	63	1048	0.6831	ug/l	77
57) cis-1,3-Dichloropropene	5.740	75	2207	0.6113	ug/l	93
58) trans-1,3-Dichloropropene	6.058	75	2416	0.6829	ug/l	100
59) Ethyl methacrylate	6.076	41	2165	0.8157	ug/l	60
60) 1,1,2-Trichloroethane	6.178	97	2253	1.0094	ug/l	89
61) 1,2-Dibromoethane	6.515	107	2103	0.9001	ug/l	62
62) 1,3-Dichloropropane	6.287	76	4117	1.1121	ug/l	80
63) 4-Methyl-2-Pentanone	5.818	43	1556	0.6607	ug/l	50
64) 2-Hexanone	6.299	43	1256	0.7501	ug/l	67
65) Tetrachloroethene	6.275	164	1459	1.0964	ug/l	82
67) Toluene	5.944	92	4653	0.9939	ug/l	84

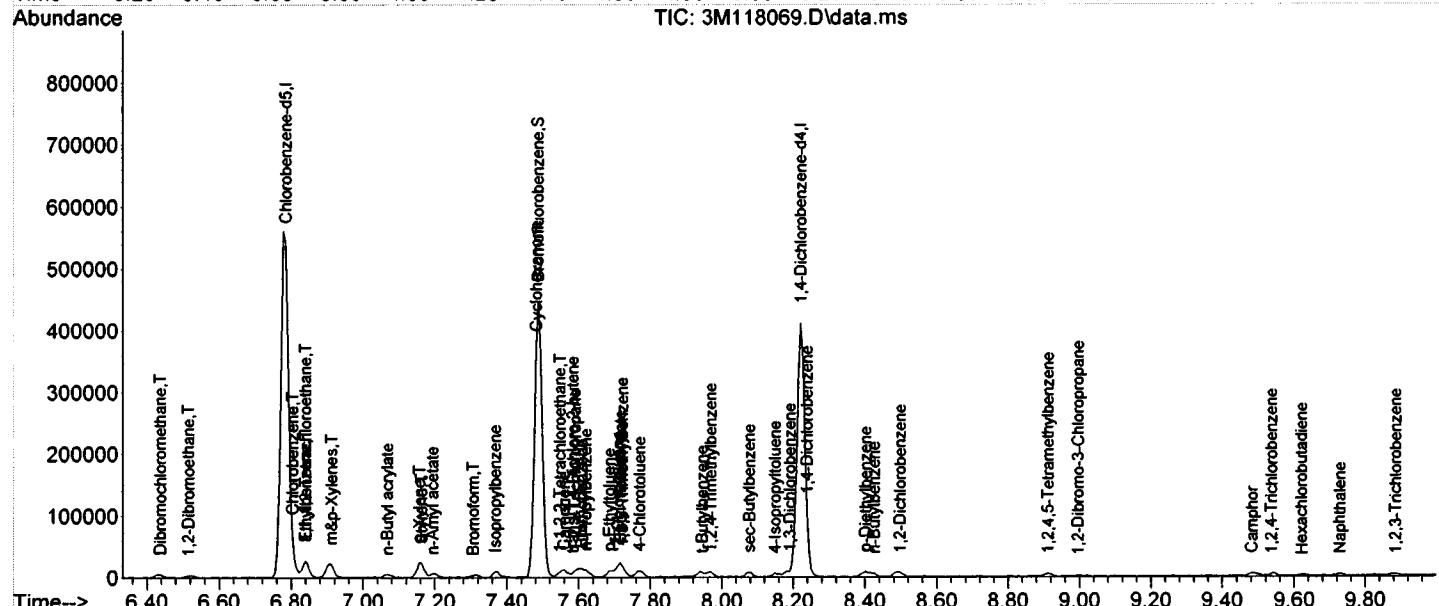
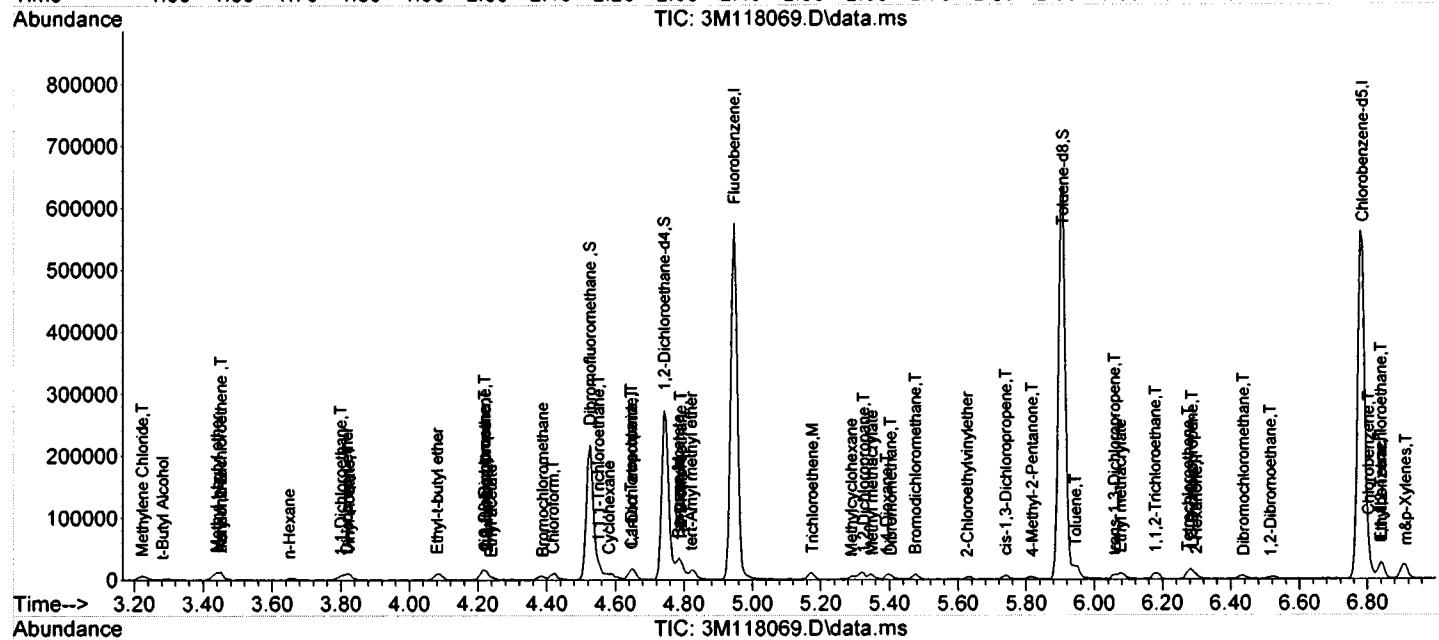
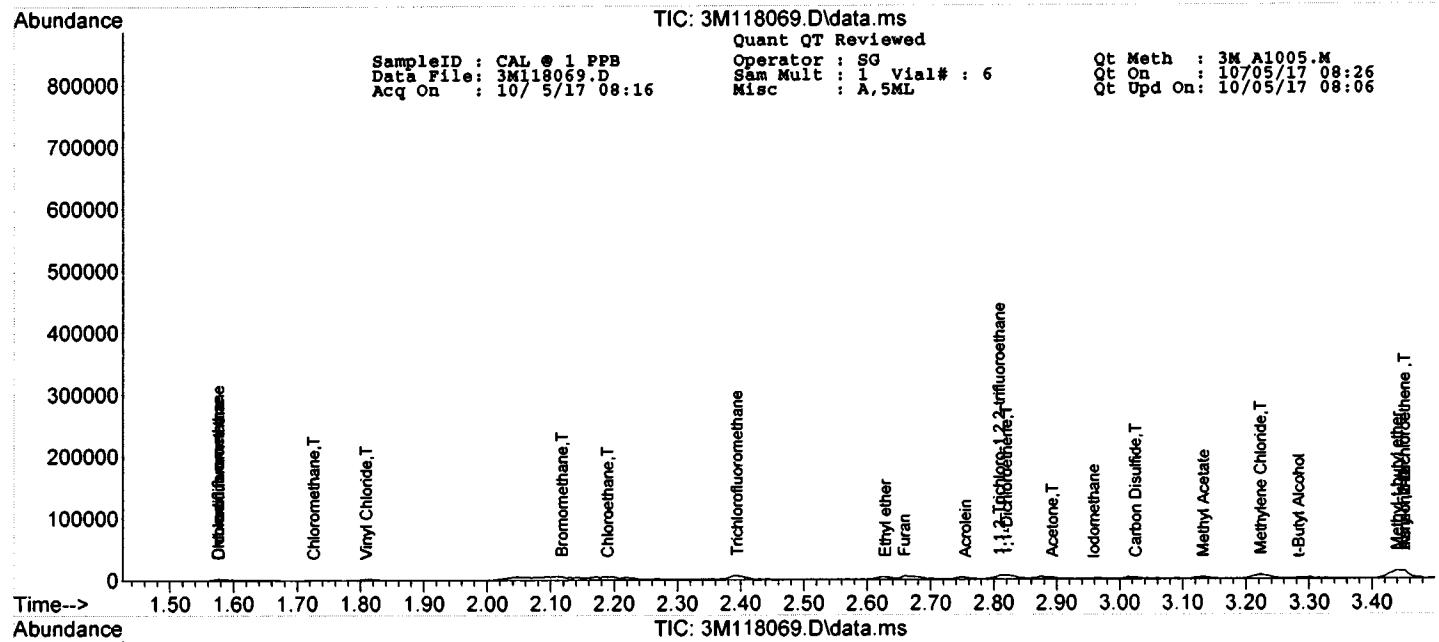
Quantitation Report (QT Reviewed)

SampleID : CAL @ 1 PPB Operator : SG Qt Meth : 3M A1005.M
 Data File: 3M118069.D Sam Mult : 1 Vial# : 6 Qt On : 10/05/17 08:26
 Acq On : 10/ 5/17 08:16 Misc : A,5ML Qt Upd On: 10/05/17 08:06

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-05-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1,1,1,2-Tetrachloroethane	6.839	133	2056	1.0336	ug/l	69
69) Chlorobenzene	6.803	112	5196	0.9771	ug/l	93
71) n-Butyl acrylate	7.067	55	3054	0.6157	ug/l	92
72) n-Amyl acetate	7.194	43	2671	0.6841	ug/l	60
73) Bromoform	7.308	173	1532	0.8433	ug/l	82
74) Ethylbenzene	6.839	106	1853	1.2770	ug/l	91
75) 1,1,2,2-Tetrachloroethane	7.548	83	2437	0.8793	ug/l	92
77) Styrene	7.164	104	4232	0.8579	ug/l	79
78) m&p-Xylenes	6.911	106	4736	1.8888	ug/l	84
79) o-Xylene	7.158	106	2475	0.9531	ug/l	92
80) trans-1,4-Dichloro-2-b...	7.584	53	1215	1.0700	ug/l	68
81) 1,3-Dichlorobenzene	8.191	146	3146	1.0295	ug/l #	70
82) 1,4-Dichlorobenzene	8.239	146	3661	1.1290	ug/l	82
83) 1,2-Dichlorobenzene	8.497	146	2672	0.8406	ug/l	97
84) Isopropylbenzene	7.368	105	4840	0.8989	ug/l	93
85) Cyclohexanone	7.482	55	962	6.1495	ug/l #	34
86) Camphene	7.560	93	1539	0.9186	ug/l	91
87) 1,2,3-Trichloropropane	7.590	75	3249	0.9316	ug/l	98
88) 2-Chlorotoluene	7.710	91	3383	1.0243	ug/l	86
89) p-Ethyltoluene	7.686	105	4856	0.8257	ug/l	69
90) 4-Chlorotoluene	7.770	91	4030	1.1194	ug/l	98
91) n-Propylbenzene	7.620	91	5543	1.0164	ug/l	97
92) Bromobenzene	7.608	77	4786	0.8924	ug/l	90
93) 1,3,5-Trimethylbenzene	7.722	105	3671	1.0347	ug/l	84
94) Butyl methacrylate	7.716	41	2436	0.7951	ug/l	83
95) t-Butylbenzene	7.944	119	2952	0.8161	ug/l	94
96) 1,2,4-Trimethylbenzene	7.969	105	3752	0.8001	ug/l	89
97) sec-Butylbenzene	8.077	105	3787	0.9302	ug/l	99
98) 4-Isopropyltoluene	8.149	119	2756	0.7638	ug/l	98
99) n-Butylbenzene	8.425	91	4064	1.0202	ug/l	85
100) p-Diethylbenzene	8.401	119	1959	0.8840	ug/l #	2
101) 1,2,4,5-Tetramethylben...	8.912	119	2262	0.6707	ug/l	88
102) 1,2-Dibromo-3-Chloropr...	8.996	157	240	0.4213	ug/l	89
103) Camphor	9.482	95	1309	5.0090	ug/l	86
104) Hexachlorobutadiene	9.620	225	327	0.3619	ug/l	75
105) 1,2,4-Trichlorobenzene	9.536	180	1357	0.9366	ug/l	81
106) 1,2,3-Trichlorobenzene	9.885	180	1026	0.7476	ug/l #	84
107) Naphthalene	9.729	128	2572	0.6040	ug/l	100

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



SampleID : CAL @ 0.5 PPB
 Data File: 3M118070.D
 Acq On : 10/ 5/17 08:34

Operator : SG
 Sam Mult : 1 Vial# : 7
 Misc : A,5ML

Qt Meth : 3M_A1005.M
 Qt On : 10/05/17 10:51
 Qt Upd On: 10/05/17 08:06

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-05-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.946	96	279830	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.785	117	201965	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.226	152	80011	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.526	111	86517	33.22	ug/l	0.00
Spiked Amount 30.000				Recovery	=	110.73%
39) 1,2-Dichloroethane-d4	4.748	67	72933	36.79	ug/l	0.00
Spiked Amount 30.000				Recovery	=	122.63%
66) Toluene-d8	5.908	98	271068	30.48	ug/l	0.00
Spiked Amount 30.000				Recovery	=	101.60%
76) Bromofluorobenzene	7.487	174	84367	28.99	ug/l	-0.01
Spiked Amount 30.000				Recovery	=	96.63%
Target Compounds						
					Qvalue	
5) Chlorodifluoromethane	0.000		0	N.D.	d	
6) Dichlorodifluoromethane	0.000		0	N.D.	d	
7) Chloromethane	0.000		0	N.D.	d	
8) Bromomethane	0.000		0	N.D.	d	
9) Vinyl Chloride	0.000		0	N.D.	d	
10) Chloroethane	0.000		0	N.D.	d	
11) Trichlorofluoromethane	0.000		0	N.D.	d	
12) Ethyl ether	0.000		0	N.D.	d	
13) Furan	0.000		0	N.D.	d	
14) 1,1,2-Trichloro-1,2,2-...	0.000		0	N.D.	d	
15) Methylene Chloride	0.000		0	N.D.	d	
16) Acrolein	0.000		0	N.D.	d	
17) Acrylonitrile	0.000		0	N.D.	d	
18) Iodomethane	0.000		0	N.D.	d	
19) Acetone	0.000		0	N.D.	d	
20) Carbon Disulfide	0.000		0	N.D.	d	
21) t-Butyl Alcohol	0.000		0	N.D.	d	
22) n-Hexane	0.000		0	N.D.	d	
23) Di-isopropyl-ether	0.000		0	N.D.	d	
24) 1,1-Dichloroethene	0.000		0	N.D.	d	
25) Methyl Acetate	0.000		0	N.D.	d	
26) Methyl-t-butyl ether	3.433	73	3251	0.5600	ug/l	69
27) 1,1-Dichloroethane	0.000		0	N.D.	d	
28) trans-1,2-Dichloroethene	0.000		0	N.D.	d	
29) Ethyl-t-butyl ether	0.000		0	N.D.	d	
30) cis-1,2-Dichloroethene	0.000		0	N.D.	d	
31) Bromochloromethane	0.000		0	N.D.	d	
32) 2,2-Dichloropropane	0.000		0	N.D.	d	
33) Ethyl acetate	0.000		0	N.D.	d	
34) 1,4-Dioxane	0.000		0	N.D.	d	
35) 1,1-Dichloropropene	0.000		0	N.D.	d	
36) Chloroform	0.000		0	N.D.	d	
38) Cyclohexane	0.000		0	N.D.	d	
40) 1,2-Dichloroethane	4.790	62	3805	0.8410	ug/l	95
41) 2-Butanone	0.000		0	N.D.	d	
42) 1,1,1-Trichloroethane	0.000		0	N.D.	d	
43) Carbon Tetrachloride	0.000		0	N.D.	d	
44) Vinyl Acetate	0.000		0	N.D.	d	
45) Bromodichloromethane	0.000		0	N.D.	d	
46) Methylcyclohexane	0.000		0	N.D.	d	
47) Dibromomethane	0.000		0	N.D.	d	
48) 1,2-Dichloropropane	0.000		0	N.D.	d	
49) Trichloroethene	0.000		0	N.D.	d	
50) Benzene	4.784	78	5459	0.7730	ug/l	100
51) tert-Amyl methyl ether	0.000		0	N.D.	d	
53) Iso-propylacetate	0.000		0	N.D.	d	
54) Methyl methacrylate	0.000		0	N.D.	d	
55) Dibromochloromethane	0.000		0	N.D.	d	
56) 2-Chloroethylvinylether	0.000		0	N.D.	d	
57) cis-1,3-Dichloropropene	0.000		0	N.D.	d	
58) trans-1,3-Dichloropropene	0.000		0	N.D.	d	
59) Ethyl methacrylate	0.000		0	N.D.	d	
60) 1,1,2-Trichloroethane	0.000		0	N.D.	d	
61) 1,2-Dibromoethane	0.000		0	N.D.	d	
62) 1,3-Dichloropropane	0.000		0	N.D.	d	
63) 4-Methyl-2-Pentanone	0.000		0	N.D.	d	
64) 2-Hexanone	0.000		0	N.D.	d	
65) Tetrachloroethene	0.000		0	N.D.	d	
67) Toluene	0.000		0	N.D.	d	

Quantitation Report (QT Reviewed)

SampleID : CAL @ 0.5 PPB Operator : SG Qt Meth : 3M_A1005.M
 Data File: 3M118070.D Sam Mult : 1 Vial# : 7 Qt On : 10/05/17 10:51
 Acq On : 10/ 5/17 08:34 Misc : A,5ML Qt Upd On: 10/05/17 08:06

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-05-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.	d	
69) Chlorobenzene	0.000		0	N.D.	d	
71) n-Butyl acrylate	0.000		0	N.D.	d	
72) n-Amyl acetate	0.000		0	N.D.	d	
73) Bromoform	0.000		0	N.D.	d	
74) Ethylbenzene	0.000		0	N.D.	d	
75) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.	d	
77) Styrene	0.000		0	N.D.	d	
78) m&p-Xylenes	6.905	106	3290	1.4090	ug/l	91
79) o-Xylene	0.000		0	N.D.	d	
80) trans-1,4-Dichloro-2-b...	0.000		0	N.D.	d	
81) 1,3-Dichlorobenzene	0.000		0	N.D.	d	
82) 1,4-Dichlorobenzene	0.000		0	N.D.	d	
83) 1,2-Dichlorobenzene	0.000		0	N.D.	d	
84) Isopropylbenzene	0.000		0	N.D.	d	
85) Cyclohexanone	0.000		0	N.D.	d	
86) Camphene	0.000		0	N.D.	d	
87) 1,2,3-Trichloropropane	0.000		0	N.D.	d	
88) 2-Chlorotoluene	0.000		0	N.D.	d	
89) p-Ethyltoluene	0.000		0	N.D.	d	
90) 4-Chlorotoluene	0.000		0	N.D.	d	
91) n-Propylbenzene	0.000		0	N.D.	d	
92) Bromobenzene	0.000		0	N.D.	d	
93) 1,3,5-Trimethylbenzene	0.000		0	N.D.	d	
94) Butyl methacrylate	0.000		0	N.D.	d	
95) t-Butylbenzene	0.000		0	N.D.	d	
96) 1,2,4-Trimethylbenzene	0.000		0	N.D.	d	
97) sec-Butylbenzene	0.000		0	N.D.	d	
98) 4-Isopropyltoluene	0.000		0	N.D.	d	
99) n-Butylbenzene	0.000		0	N.D.	d	
100) p-Diethylbenzene	0.000		0	N.D.	d	
101) 1,2,4,5-Tetramethylben...	0.000		0	N.D.	d	
102) 1,2-Dibromo-3-Chloropr...	0.000		0	N.D.		
103) Camphor	9.476	95	605	2.4862	ug/l	83
104) Hexachlorobutadiene	0.000		0	N.D.	d	
105) 1,2,4-Trichlorobenzene	0.000		0	N.D.	d	
106) 1,2,3-Trichlorobenzene	0.000		0	N.D.	d	
107) Naphthalene	0.000		0	N.D.	d	

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

Abundance

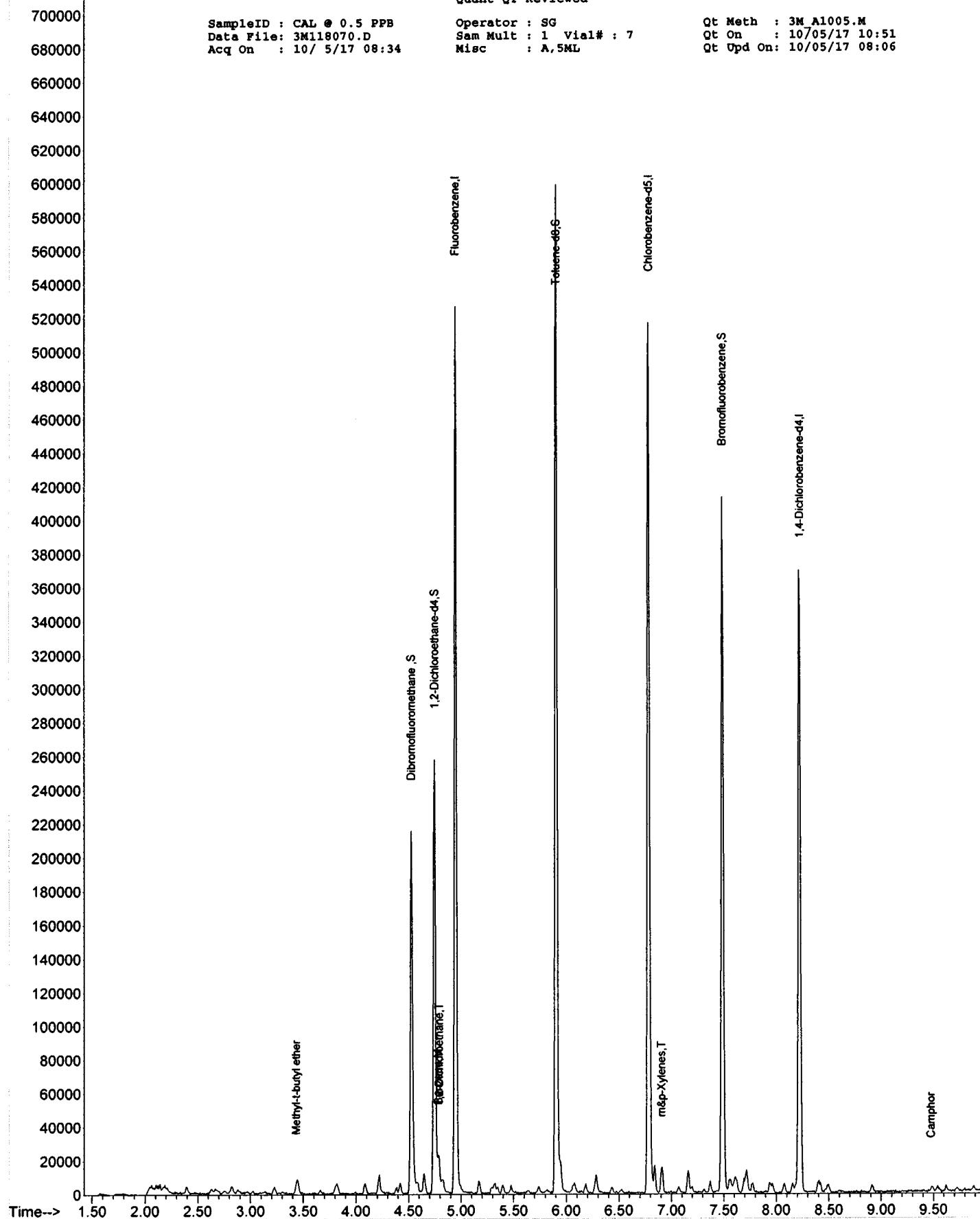
TIC: 3M118070.D\data.ms

Quant QT Reviewed

SampleID : CAL @ 0.5 PPB
 Data File: 3M118070.D
 Acq On : 10/ 5/17 08:34

Operator : SG
 Sam Mult : 1 Vial# : 7
 Misc : A,5ML

Qt Meth : 3M_A1005.M
 Qt On : 10/05/17 10:51
 Qt Upd On: 10/05/17 08:06



Form7
Continuing Calibration

Calibration Name: CAL @ 20 PPB Data File: 3M118933.D Instrument: GCMS 3
Cont Calibration Date/Time 10/20/2017 4:20:00 P Method: EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	4.95	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.59	14.49	20	20	0.1	0.373	0.270	27.57	C1
Dichlorodifluoromethane	1	0		1.59	18.67	20	20	0.1	0.233	0.218	6.64	
Chloromethane	1	0		1.74	17.68	20	20	0.1	0.239	0.211	11.62	
Bromomethane	1	0		2.12	18.66	20	20	0.1	0.097	0.090	6.72	
Vinyl Chloride	1	0		1.82	18.17	20	20	0.1	0.190	0.172	9.15	
Chloroethane	1	0		2.19	20.03	20	20	0.1	0.118	0.118	0.15	
Trichlorofluoromethane	1	0		2.40	19.34	20	20	0.1	0.384	0.371	3.29	
Ethyl ether	1	0		2.63	19.39	20	20	0.5	0.221	0.214	3.06	
Furan	1	0		2.68	19.52	20	20	0.5	0.467	0.456	2.40	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		2.81	19.68	20	20	0.1	0.153	0.150	1.58	
Methylene Chloride	1	0		3.23	18.82	20	20	0.1	0.255	0.240	5.88	
Acrolein	1	0		2.75	60.13	100	20		0.040	0.024	39.87	C1
Acrylonitrile	1	0		3.44	19.61	20	20		0.077	0.083	1.97	
Iodomethane	1	0		2.98	19.04	20	20		0.183	0.174	4.81	
Acetone	1	0		2.89	98.36	100	20	0.1	0.086	0.084	1.64	
Carbon Disulfide	1	0		3.03	15.95	20	20	0.1	0.351	0.280	20.27	
t-Butyl Alcohol	1	0		3.30	77.05	100	20		0.020	0.020	22.95	C1
n-Hexane	1	0		3.66	19.83	20	20		0.089	0.099	0.86	
Di-isopropyl-ether	1	0		3.83	20.89	20	20		0.618	0.646	4.43	
1,1-Dichloroethene	1	0		2.83	19.36	20	20	0.1	0.340	0.329	3.23	
Methyl Acetate	1	0		3.13	20.17	20	20	0.1	0.284	0.287	0.85	
Methyl-t-butyl ether	1	0		3.44	20.57	20	20	0.1	0.609	0.626	2.86	
1,1-Dichloroethane	1	0		3.80	19.86	20	20	0.2	0.400	0.397	0.72	
trans-1,2-Dichloroethene	1	0		3.45	20.22	20	20	0.1	0.220	0.222	1.09	
Ethyl-t-butyl ether	1	0		4.09	20.50	20	20	0.5	0.713	0.731	2.50	
cis-1,2-Dichloroethene	1	0		4.22	20.44	20	20	0.1	0.447	0.457	2.19	
Bromochloromethane	1	0		4.38	19.25	20	20		0.199	0.192	3.75	
2,2-Dichloropropane	1	0		4.22	19.36	20	20		0.336	0.325	3.21	
Ethyl acetate	1	0		4.24	22.46	20	20		0.235	0.264	12.29	
1,4-Dioxane	1	0		5.39	1105.16	1000	20		0.003	0.003	10.52	
1,1-Dichloropropene	1	0		4.65	22.02	20	20		0.305	0.335	10.08	
Chloroform	1	0		4.42	19.64	20	20	0.2	0.497	0.488	1.81	
Dibromofluoromethane	1	0	S	4.53	30.67	30	**		0.290	0.297	2.25	
Cyclohexane	1	0		4.59	20.27	20	20	0.1	0.192	0.195	1.37	
1,2-Dichloroethane-d4	1	0	S	4.75	28.99	30	**		0.229	0.221	3.38	
1,2-Dichloroethane	1	0		4.80	21.10	20	20	0.1	0.545	0.506	5.48	
2-Butanone	1	0		4.23	19.49	20	20	0.1	0.120	0.117	2.53	
1,1,1-Trichloroethane	1	0		4.55	18.94	20	20	0.1	0.417	0.395	5.30	
Carbon Tetrachloride	1	0		4.66	20.17	20	20	0.1	0.302	0.304	0.85	
Vinyl Acetate	1	0		3.82	20.65	20	20		0.436	0.450	3.26	
Bromodichloromethane	1	0		5.48	19.29	20	20	0.2	0.375	0.362	3.56	
Methylcyclohexane	1	0		5.29	21.40	20	20	0.1	0.140	0.150	7.01	
Dibromomethane	1	0		5.40	20.11	20	20		0.186	0.187	0.56	
1,2-Dichloropropane	1	0		5.32	19.91	20	20	0.1	0.213	0.212	0.45	
Trichloroethene	1	0		5.17	20.27	20	20	0.2	0.228	0.231	1.37	
Benzene	1	0		4.79	20.24	20	20	0.5	0.819	0.829	1.18	
tert-Amyl methyl ether	1	0		4.83	21.31	20	20		0.595	0.634	6.56	
Chlorobenzene-d5	1	0	I	6.78	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.78	19.31	20	20	0.5	0.640	0.618	3.46	
Methyl methacrylate	1	0		5.35	20.23	20	20	0.5	0.375	0.379	1.15	
Dibromochloromethane	1	0		6.44	17.51	20	20	0.1	0.367	0.321	12.45	

S-Surrogate Compound
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
CI-Compound %Diff exceeds limits

Page 1 of 2
** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Form7
Continuing Calibration

Calibration Name: CAL @ 20 PPB
Cont Calibration Date/Time 10/20/2017 4:20:00 P

Data File: 3M118933.D
Method: EPA 8260C

Instrument: GCMS 3

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.63	18.30	20	20	0.206	0.188	8.52		
cis-1,3-Dichloropropene	1	0		5.74	18.12	20	20	0.2	0.462	0.419	9.43	
trans-1,3-Dichloropropene	1	0		6.06	17.36	20	20	0.1	0.465	0.403	13.18	
Ethyl methacrylate	1	0		6.08	19.43	20	20	0.5	0.376	0.366	2.83	
1,1,2-Trichloroethane	1	0		6.18	17.19	20	20	0.1	0.304	0.261	14.07	
1,2-Dibromoethane	1	0		6.52	17.46	20	20	0.1	0.321	0.281	12.68	
1,3-Dichloropropane	1	0		6.29	18.75	20	20	0.539	0.505	6.24		
4-Methyl-2-Pentanone	1	0		5.81	19.26	20	20	0.1	0.323	0.311	3.69	
2-Hexanone	1	0		6.30	19.80	20	20	0.1	0.225	0.223	1.01	
Tetrachloroethene	1	0		6.28	19.98	20	20	0.2	0.193	0.193	0.12	
Toluene-d8	1	0	S	5.91	28.46	30	**	1.337	1.268	5.13		
Toluene	1	0		5.95	19.04	20	20	0.4	0.660	0.628	4.81	
1,1,1,2-Tetrachloroethane	1	0		6.84	18.77	20	20	0.276	0.259	6.14		
Chlorobenzene	1	0		6.80	18.89	20	20	0.5	0.715	0.675	5.54	
1,4-Dichlorobenzene-d4	1	0	I	8.22	30.00	30	**	0.000	0.000	0.00		
n-Butyl acrylate	1	0		7.07	18.40	20	20	0.5	1.663	1.530	7.99	
n-Amyl acetate	1	0		7.19	18.56	20	20	0.5	1.292	1.199	7.21	
Bromoform	1	0		7.31	15.40	20	20	0.1	0.562	0.433	23.02 C1	
Ethylbenzene	1	0		6.84	18.57	20	20	0.1	0.528	0.490	7.14	
1,1,2,2-Tetrachloroethane	1	0		7.55	16.97	20	20	0.1	0.835	0.708	15.16	
Bromofluorobenzene	1	0	S	7.49	29.01	30	**	1.059	1.024	3.30		
Styrene	1	0		7.16	18.93	20	20	0.3	1.644	1.556	5.36	
m&p-Xylenes	1	0		6.91	36.55	40	20	0.1	0.889	0.812	8.62	
o-Xylene	1	0		7.16	18.69	20	20	0.3	0.885	0.827	6.54	
trans-1,4-Dichloro-2-butene	1	0		7.58	17.59	20	20	0.436	0.383	12.04		
1,3-Dichlorobenzene	1	0		8.18	17.86	20	20	0.6	1.003	0.896	10.68	
1,4-Dichlorobenzene	1	0		8.24	16.99	20	20	0.5	1.053	0.895	15.03	
1,2-Dichlorobenzene	1	0		8.50	17.55	20	20	0.4	0.986	0.866	12.23	
Isopropylbenzene	1	0		7.37	18.99	20	20	0.1	1.844	1.750	5.07	
Cyclohexanone	1	0		7.47	82.82	100	20	0.047	0.029	17.18		
Camphene	1	0		7.56	19.27	20	20	0.610	0.588	3.65		
1,2,3-Trichloropropane	1	0		7.59	16.80	20	20	1.156	0.971	16.01		
2-Chlorotoluene	1	0		7.71	19.97	20	20	1.180	1.178	0.16		
p-Ethyltoluene	1	0		7.69	17.78	20	20	1.971	1.753	11.09		
4-Chlorotoluene	1	0		7.77	19.10	20	20	1.274	1.217	4.49		
n-Propylbenzene	1	0		7.62	18.88	20	20	1.938	1.829	5.61		
Bromobenzene	1	0		7.61	16.54	20	20	1.839	1.521	17.28		
1,3,5-Trimethylbenzene	1	0		7.72	21.51	20	20	1.297	1.395	7.56		
Butyl methacrylate	1	0		7.72	19.08	20	20	0.5	1.080	1.030	4.62	
t-Butylbenzene	1	0		7.94	19.18	20	20	1.199	1.150	4.08		
1,2,4-Trimethylbenzene	1	0		7.97	18.89	20	20	1.556	1.469	5.54		
sec-Butylbenzene	1	0		8.08	19.48	20	20	1.374	1.338	2.61		
4-Isopropyltoluene	1	0		8.15	19.34	20	20	1.143	1.105	3.32		
n-Butylbenzene	1	0		8.42	19.29	20	20	1.399	1.350	3.54		
p-Diethylbenzene	1	0		8.40	19.51	20	20	0.766	0.747	2.45		
1,2,4,5-Tetramethylbenzene	1	0		8.92	19.93	20	20	1.122	1.118	0.36		
1,2-Dibromo-3-Chloropropane	1	0		9.00	14.29	20	20	0.05	0.144	0.111	28.53 C1	
Camphor	1	0		9.49	170.80	200	20	0.076	0.081	14.60		
Hexachlorobutadiene	1	0		9.63	16.79	20	20	0.215	0.211	16.07		
1,2,4-Trichlorobenzene	1	0		9.54	18.25	20	20	0.2	0.420	0.383	8.77	
1,2,3-Trichlorobenzene	1	0		9.88	18.30	20	20	0.363	0.332	8.50		
Naphthalene	1	0		9.73	19.31	20	20	1.124	1.085	3.46		

S-Surrogate Compound
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
C1-Compound %Diff exceeds limits

Page 2 of 2
** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

SampleID : CAL @ 20 PPB
 Data File: 3M118933.D
 Acq On : 10/20/17 16:20

Operator : WP
 Sam Mult : 1 Vial# : 4
 Misc : A,5ML

Qt Meth : 3M_A1005.M
 Qt On : 10/20/17 17:07
 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.952	96	385109	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.784	117	318495	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	136912	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.525	111	114336	30.67	ug/l	0.00
Spiked Amount 30.000				Recovery	=	102.23%
39) 1,2-Dichloroethane-d4	4.748	67	85089	28.99	ug/l	0.00
Spiked Amount 30.000				Recovery	=	96.63%
66) Toluene-d8	5.907	98	403992	28.46	ug/l	0.00
Spiked Amount 30.000				Recovery	=	94.87%
76) Bromofluorobenzene	7.493	174	140213	29.01	ug/l	0.00
Spiked Amount 30.000				Recovery	=	96.70%
Target Compounds						
5) Chlorodifluoromethane	1.592	51	69398m	14.4853	ug/l	
6) Dichlorodifluoromethane	1.592	85	55920m	18.6720	ug/l	
7) Chloromethane	1.742	50	54256m	17.6752	ug/l	
8) Bromomethane	2.116	94	23197m	18.6560	ug/l	
9) Vinyl Chloride	1.825	62	44221	18.1692	ug/l	94
10) Chloroethane	2.195	64	30414m	20.0308	ug/l	
11) Trichlorofluoromethane	2.399	101	95324	19.3428	ug/l	90
12) Ethyl ether	2.633	59	54931	19.3882	ug/l	76
13) Furan	2.675	39	117019m	19.5194	ug/l	
14) 1,1,2-Trichloro-1,2,2-...	2.813	101	38571	19.6840	ug/l	90
15) Methylene Chloride	3.228	84	61624	18.8235	ug/l	88
16) Acrolein	2.753	56	30568	60.1277	ug/l	99
17) Acrylonitrile	3.444	53	21254m	19.6051	ug/l	
18) Iodomethane	2.975	142	44781m	19.0371	ug/l	
19) Acetone	2.885	43	107975	98.3554	ug/l	91
20) Carbon Disulfide	3.030	76	71925	15.9455	ug/l	100
21) t-Butyl Alcohol	3.300	59	25678	77.0499	ug/l	90
22) n-Hexane	3.660	57	25427	19.8278	ug/l	86
23) Di-isopropyl-ether	3.828	45	165763	20.8867	ug/l	91
24) 1,1-Dichloroethene	2.831	61	84503	19.3550	ug/l	97
25) Methyl Acetate	3.132	43	73607	20.1700	ug/l	100
26) Methyl-t-butyl ether	3.444	73	160734	20.5718	ug/l	64
27) 1,1-Dichloroethane	3.804	63	101897	19.8560	ug/l	90
28) trans-1,2-Dichloroethene	3.450	96	57032	20.2172	ug/l	89
29) Ethyl-t-butyl ether	4.087	59	187629	20.5010	ug/l	95
30) cis-1,2-Dichloroethene	4.219	61	117396	20.4375	ug/l	92
31) Bromochloromethane	4.381	49	49274	19.2504	ug/l	85
32) 2,2-Dichloropropane	4.219	77	83427	19.3572	ug/l	94
33) Ethyl acetate	4.243	43	67832m	22.4582	ug/l	
34) 1,4-Dioxane	5.390	88	41449	1105.1602	ug/l	79
35) 1,1-Dichloropropene	4.651	75	86067	22.0163	ug/l	99
36) Chloroform	4.423	83	125330	19.6382	ug/l	85
38) Cyclohexane	4.585	56	50053	20.2735	ug/l	95
40) 1,2-Dichloroethane	4.796	62	129993	21.0957	ug/l	94
41) 2-Butanone	4.231	43	29917m	19.4932	ug/l	
42) 1,1,1-Trichloroethane	4.549	97	101405	18.9392	ug/l	96
43) Carbon Tetrachloride	4.657	117	78093	20.1700	ug/l	95
44) Vinyl Acetate	3.822	43	115511	20.6520	ug/l	100
45) Bromodichloromethane	5.480	83	92963	19.2876	ug/l	92
46) Methylcyclohexane	5.294	83	38471	21.4021	ug/l	98
47) Dibromomethane	5.402	174	48101	20.1122	ug/l	93
48) 1,2-Dichloropropane	5.318	63	54360	19.9102	ug/l	93
49) Trichloroethene	5.174	130	59372	20.2748	ug/l	87
50) Benzene	4.790	78	212714	20.2360	ug/l	100
51) tert-Amyl methyl ether	4.826	73	162719	21.3116	ug/l	88
53) Iso-propylacetate	4.784	43	131122	19.3071	ug/l	93
54) Methyl methacrylate	5.348	41	80549	20.2305	ug/l	76
55) Dibromochloromethane	6.436	129	68239	17.5106	ug/l	99
56) 2-Chloroethylvinylether	5.631	63	39953	18.2964	ug/l	85
57) cis-1,3-Dichloropropene	5.739	75	88864	18.1150	ug/l	94
58) trans-1,3-Dichloropropene	6.063	75	85668	17.3638	ug/l	89
59) Ethyl methacrylate	6.075	41	77625	19.4339	ug/l	54
60) 1,1,2-Trichloroethane	6.183	97	55388	17.1868	ug/l	92
61) 1,2-Dibromoethane	6.520	107	59579	17.4635	ug/l	92
62) 1,3-Dichloropropane	6.285	76	107298	18.7512	ug/l	98
63) 4-Methyl-2-Pentanone	5.811	43	65960	19.2620	ug/l	83
64) 2-Hexanone	6.303	43	47354	19.7970	ug/l	85
65) Tetrachloroethene	6.279	164	40951	19.9752	ug/l	90
67) Toluene	5.949	92	133374	19.0378	ug/l	97

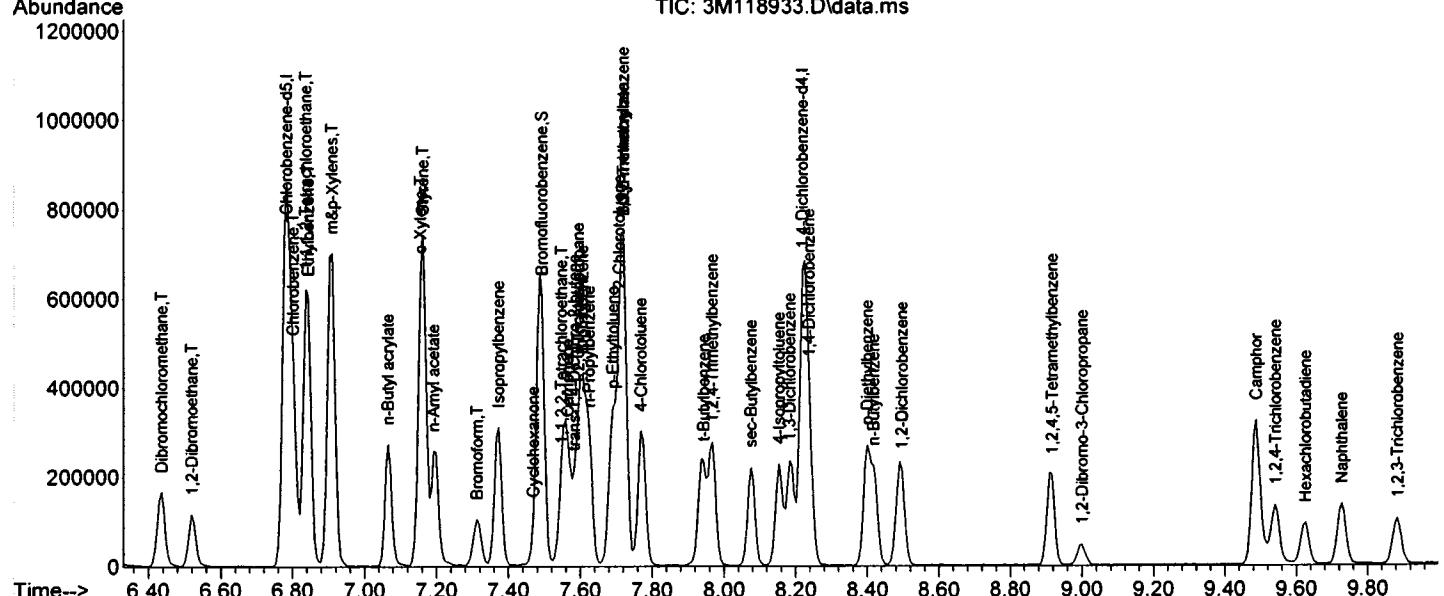
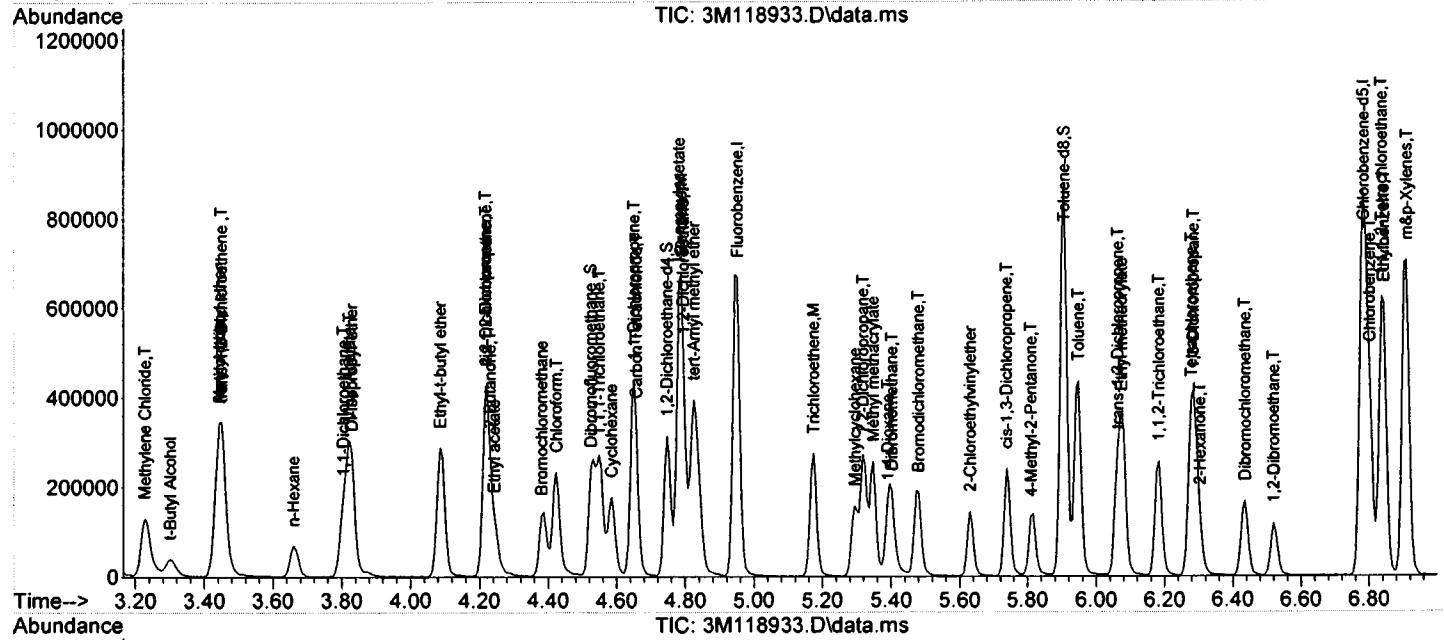
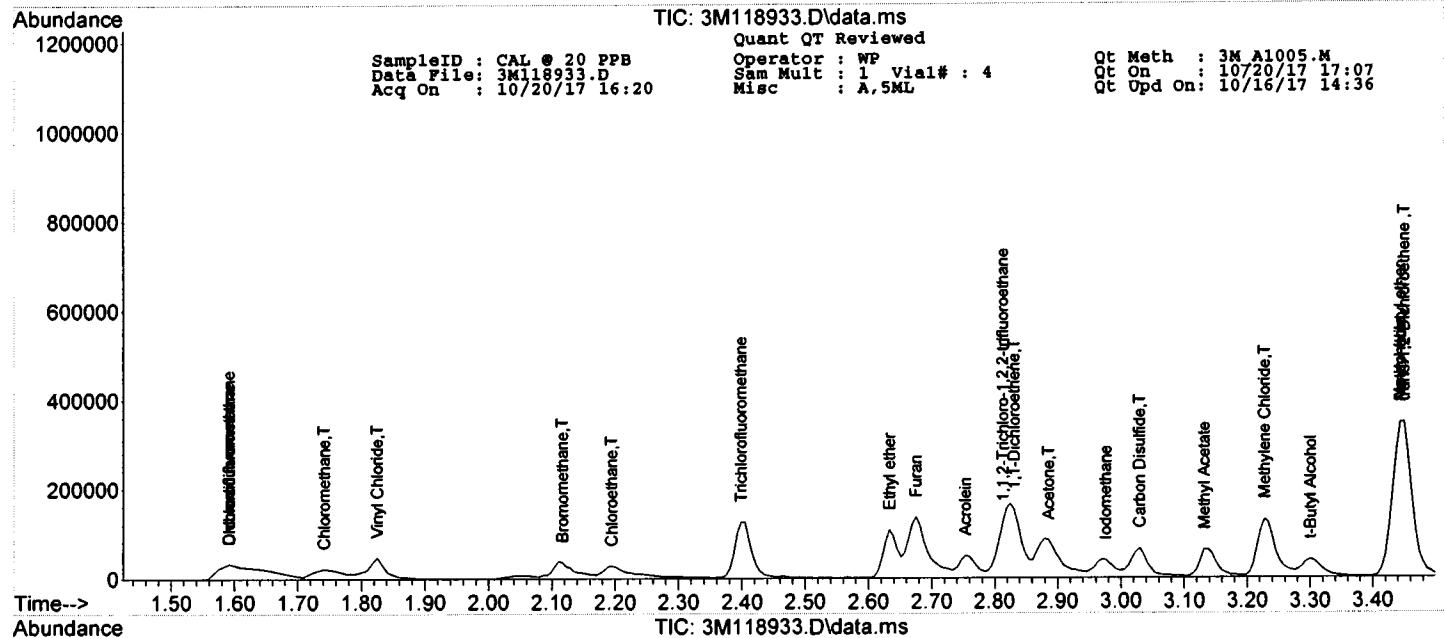
Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB Operator : WP Qt Meth : 3M A1005.M
 Data File: 3M118933.D Sam Mult : 1 Vial# : 4 Qt On : 10/20/17 17:07
 Acq On : 10/20/17 16:20 Misc : A,5ML Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1,1,1,2-Tetrachloroethane	6.838	133	54978	18.7712	ug/l	81
69) Chlorobenzene	6.802	112	143380	18.8915	ug/l	95
71) n-Butyl acrylate	7.066	55	139659	18.4029	ug/l	97
72) n-Amyl acetate	7.192	43	109444	18.5587	ug/l	78
73) Bromoform	7.313	173	39510	15.3966	ug/l	91
74) Ethylbenzene	6.844	106	44752	18.5719	ug/l	89
75) 1,1,2,2-Tetrachloroethane	7.547	83	64660	16.9680	ug/l	92
77) Styrene	7.162	104	142030	18.9275	ug/l	89
78) m&p-Xylenes	6.910	106	148287	36.5516	ug/l	98
79) o-Xylene	7.156	106	75461	18.6927	ug/l	88
80) trans-1,4-Dichloro-2-b...	7.583	53	34966m	17.5918	ug/l	
81) 1,3-Dichlorobenzene	8.184	146	81800	17.8647	ug/l	95
82) 1,4-Dichlorobenzene	8.238	146	81677	16.9940	ug/l	98
83) 1,2-Dichlorobenzene	8.496	146	79004	17.5545	ug/l	95
84) Isopropylbenzene	7.373	105	159738	18.9861	ug/l	96
85) Cyclohexanone	7.469	55	13167	82.8205	ug/l	86
86) Camphene	7.565	93	53625	19.2696	ug/l	94
87) 1,2,3-Trichloropropane	7.595	75	88635	16.7974	ug/l	98
88) 2-Chlorotoluene	7.709	91	107536	19.9681	ug/l	95
89) p-Ethyltoluene	7.691	105	159988	17.7822	ug/l	79
90) 4-Chlorotoluene	7.769	91	111080	19.1018	ug/l	94
91) n-Propylbenzene	7.625	91	166948	18.8785	ug/l	96
92) Bromobenzene	7.607	77	138869	16.5445	ug/l	94
93) 1,3,5-Trimethylbenzene	7.721	105	127339	21.5127	ug/l	99
94) Butyl methacrylate	7.721	41	94045	19.0752	ug/l	97
95) t-Butylbenzene	7.943	119	104993	19.1834	ug/l	96
96) 1,2,4-Trimethylbenzene	7.967	105	134117	18.8916	ug/l	97
97) sec-Butylbenzene	8.075	105	122121	19.4783	ug/l	99
98) 4-Isopropyltoluene	8.153	119	100901	19.3353	ug/l	98
99) n-Butylbenzene	8.418	91	123205	19.2922	ug/l	94
100) p-Diethylbenzene	8.400	119	68168	19.5092	ug/l	92
101) 1,2,4,5-Tetramethylben...	8.916	119	102070	19.9280	ug/l	98
102) 1,2-Dibromo-3-Chloropr...	9.000	157	10094	14.2940	ug/l	94
103) Camphor	9.487	95	74351	170.7976	ug/l	100
104) Hexachlorobutadiene	9.625	225	19273	16.7863	ug/l	98
105) 1,2,4-Trichlorobenzene	9.541	180	34950	18.2461	ug/l	98
106) 1,2,3-Trichlorobenzene	9.883	180	30304	18.3004	ug/l	96
107) Naphthalene	9.727	128	99043	19.3087	ug/l	100

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



Form 7
Continuing Calibration

Calibration Name: CAL @ 20 PPB
Cont Calibration Date/Time 10/23/2017 7:36:00

Data File: 3M118995.D
Method: EPA 8260C

Instrument: GCMS 3

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	4.94	30.00	30	**		0.000	0.00		
Chlorodifluoromethane	1	0		1.58	16.91	20	20	0.1	0.373	0.315	15.47	
Dichlorodifluoromethane	1	0		1.58	20.38	20	20	0.1	0.233	0.238	1.91	
Chloromethane	1	0		1.73	19.79	20	20	0.1	0.239	0.237	1.07	
Bromomethane	1	0		2.11	17.81	20	20	0.1	0.097	0.086	10.96	
Vinyl Chloride	1	0		1.81	20.33	20	20	0.1	0.190	0.193	1.65	
Chloroethane	1	0		2.19	23.19	20	20	0.1	0.118	0.137	15.95	
Trichlorofluoromethane	1	0		2.39	22.08	20	20	0.1	0.384	0.424	10.40	
Ethyl ether	1	0		2.63	23.10	20	20	0.5	0.221	0.255	15.49	
Furan	1	0		2.66	23.79	20	20	0.5	0.467	0.556	18.96	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		2.81	22.72	20	20	0.1	0.153	0.173	13.62	
Methylene Chloride	1	0		3.22	23.26	20	20	0.1	0.255	0.297	16.29	
Acrolein	1	0		2.74	56.72	100	20		0.040	0.022	43.28 C1	
Acrylonitrile	1	0		3.43	23.43	20	20		0.077	0.099	17.14	
Iodomethane	1	0		2.96	20.48	20	20		0.183	0.188	2.42	
Acetone	1	0		2.87	114.34	100	20	0.1	0.086	0.098	14.34	
Carbon Disulfide	1	0		3.02	21.25	20	20	0.1	0.351	0.373	6.27	
t-Butyl Alcohol	1	0		3.29	95.65	100	20		0.020	0.025	4.35	
n-Hexane	1	0		3.65	25.08	20	20		0.089	0.125	25.38 C1	
Di-isopropyl-ether	1	0		3.82	26.21	20	20		0.618	0.810	31.06 C1	
1,1-Dichloroethene	1	0		2.82	23.78	20	20	0.1	0.340	0.404	18.88	
Methyl Acetate	1	0		3.13	23.68	20	20	0.1	0.284	0.337	18.38	
Methyl-t-butyl ether	1	0		3.43	23.94	20	20	0.1	0.609	0.728	19.68	
1,1-Dichloroethane	1	0		3.79	24.14	20	20	0.2	0.400	0.482	20.69 C1	
trans-1,2-Dichloroethene	1	0		3.44	23.77	20	20	0.1	0.220	0.261	18.84	
Ethyl-t-butyl ether	1	0		4.08	25.67	20	20	0.5	0.713	0.915	28.33 C1	
cis-1,2-Dichloroethene	1	0		4.21	23.59	20	20	0.1	0.447	0.528	17.97	
Bromochloromethane	1	0		4.38	23.33	20	20		0.199	0.233	16.63	
2,2-Dichloropropane	1	0		4.21	25.78	20	20		0.336	0.433	28.89 C1	
Ethyl acetate	1	0		4.23	22.30	20	20		0.235	0.262	11.51	
1,4-Dioxane	1	0		5.39	1248.37	1000	20		0.003	0.004	24.84 C1	
1,1-Dichloropropene	1	0		4.64	25.61	20	20		0.305	0.390	28.06 C1	
Chloroform	1	0		4.41	23.24	20	20	0.2	0.497	0.578	16.22	
Dibromofluoromethane	1	0	S	4.52	30.75	30	**		0.290	0.298	2.51	
Cyclohexane	1	0		4.57	26.84	20	20	0.1	0.192	0.258	34.21 C1	
1,2-Dichloroethane-d4	1	0	S	4.74	29.68	30	**		0.229	0.226	1.05	
1,2-Dichloroethane	1	0		4.78	23.16	20	20	0.1	0.545	0.555	15.78	
2-Butanone	1	0		4.22	20.78	20	20	0.1	0.120	0.124	3.89	
1,1,1-Trichloroethane	1	0		4.54	22.83	20	20	0.1	0.417	0.476	14.17	
Carbon Tetrachloride	1	0		4.65	24.00	20	20	0.1	0.302	0.362	19.98	
Vinyl Acetate	1	0		3.81	25.50	20	20		0.436	0.556	27.50 C1	
Bromodichloromethane	1	0		5.47	23.83	20	20	0.2	0.375	0.447	19.14	
Methylcyclohexane	1	0		5.28	26.13	20	20	0.1	0.140	0.183	30.67 C1	
Dibromomethane	1	0		5.39	23.70	20	20		0.186	0.221	18.48	
1,2-Dichloropropane	1	0		5.31	23.87	20	20	0.1	0.213	0.254	19.33	
Trichloroethene	1	0		5.16	23.97	20	20	0.2	0.228	0.273	19.85	
Benzene	1	0		4.78	23.90	20	20	0.5	0.819	0.979	19.51	
tert-Amyl methyl ether	1	0		4.81	27.26	20	20		0.595	0.811	36.28 C1	
Chlorobenzene-d5	1	0	I	6.77	30.00	30	**		0.000	0.00		
Iso-propylacetate	1	0		4.78	22.12	20	20	0.5	0.640	0.707	10.58	
Methyl methacrylate	1	0		5.34	20.39	20	20	0.5	0.375	0.382	1.97	
Dibromochloromethane	1	0		6.42	20.82	20	20	0.1	0.367	0.382	4.09	

S-Surrogate Compound
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
CI-Compound %Diff exceeds limits

Page 1 of 2
** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Form7
Continuing Calibration

Calibration Name: CAL @ 20 PPB
Cont Calibration Date/Time 10/23/2017 7:36:00

Data File: 3M118995.D
Method: EPA 8260C

Instrument: GCMS 3

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.62	20.99	20	20	0.206	0.216	4.96		
cis-1,3-Dichloropropene	1	0		5.73	22.62	20	20	0.2 0.462	0.523	13.09		
trans-1,3-Dichloropropene	1	0		6.05	22.07	20	20	0.1 0.465	0.513	10.37		
Ethyl methacrylate	1	0		6.07	22.70	20	20	0.5 0.376	0.427	13.50		
1,1,2-Trichloroethane	1	0		6.17	20.59	20	20	0.1 0.304	0.312	2.95		
1,2-Dibromoethane	1	0		6.51	20.24	20	20	0.1 0.321	0.325	1.21		
1,3-Dichloropropane	1	0		6.28	21.67	20	20	0.539	0.584	8.34		
4-Methyl-2-Pentanone	1	0		5.81	22.09	20	20	0.1 0.323	0.356	10.45		
2-Hexanone	1	0		6.29	21.88	20	20	0.1 0.225	0.247	9.41		
Tetrachloroethene	1	0		6.27	22.02	20	20	0.2 0.193	0.213	10.10		
Toluene-d8	1	0	S	5.90	27.91	30	**	1.337	1.244	6.97		
Toluene	1	0		5.94	22.32	20	20	0.4 0.660	0.736	11.59		
1,1,1,2-Tetrachloroethane	1	0		6.83	21.57	20	20	0.276	0.298	7.84		
Chlorobenzene	1	0		6.79	21.10	20	20	0.5 0.715	0.754	5.48		
1,4-Dichlorobenzene-d4	1	0	I	8.21	30.00	30	**	0.000	0.000	0.00		
n-Butyl acrylate	1	0		7.06	22.04	20	20	0.5 1.663	1.832	10.18		
n-Amyl acetate	1	0		7.19	22.20	20	20	0.5 1.292	1.434	11.01		
Bromoform	1	0		7.31	19.08	20	20	0.1 0.562	0.536	4.59		
Ethylbenzene	1	0		6.83	22.28	20	20	0.1 0.528	0.588	11.38		
1,1,2,2-Tetrachloroethane	1	0		7.54	20.38	20	20	0.1 0.835	0.851	1.92		
Bromofluorobenzene	1	0	S	7.48	28.52	30	**	1.059	1.007	4.94		
Styrene	1	0		7.15	22.82	20	20	0.3 1.644	1.876	14.08		
m&p-Xylenes	1	0		6.90	42.57	40	20	0.1 0.889	0.946	6.43		
o-Xylene	1	0		7.15	22.66	20	20	0.3 0.885	1.002	13.28		
trans-1,4-Dichloro-2-butene	1	0		7.57	20.24	20	20	0.436	0.441	1.20		
1,3-Dichlorobenzene	1	0		8.17	20.98	20	20	0.6 1.003	1.053	4.90		
1,4-Dichlorobenzene	1	0		8.23	19.74	20	20	0.5 1.053	1.039	1.32		
1,2-Dichlorobenzene	1	0		8.48	20.23	20	20	0.4 0.986	0.997	1.13		
Isopropylbenzene	1	0		7.36	22.54	20	20	0.1 1.844	2.078	12.69		
Cyclohexanone	1	0		7.46	168.17	100	20	0.047	0.059	68.17 C1		
Camphene	1	0		7.55	21.82	20	20	0.610	0.665	9.08		
1,2,3-Trichloropropane	1	0		7.58	20.73	20	20	1.156	1.198	3.63		
2-Chlorotoluene	1	0		7.70	23.31	20	20	1.180	1.375	16.53		
p-Ethyltoluene	1	0		7.68	21.10	20	20	1.971	2.080	5.52		
4-Chlorotoluene	1	0		7.76	21.87	20	20	1.274	1.393	9.35		
n-Propylbenzene	1	0		7.61	22.47	20	20	1.938	2.177	12.36		
Bromobenzene	1	0		7.60	20.18	20	20	1.839	1.856	0.92		
1,3,5-Trimethylbenzene	1	0		7.71	22.02	20	20	1.297	1.428	10.10		
Butyl methacrylate	1	0		7.71	23.41	20	20	0.5 1.080	1.264	17.05		
t-Butylbenzene	1	0		7.93	22.89	20	20	1.199	1.372	14.44		
1,2,4-Trimethylbenzene	1	0		7.96	22.71	20	20	1.556	1.766	13.55		
sec-Butylbenzene	1	0		8.06	22.67	20	20	1.374	1.557	13.34		
4-Isopropyltoluene	1	0		8.14	23.23	20	20	1.143	1.328	16.15		
n-Butylbenzene	1	0		8.41	22.68	20	20	1.399	1.587	13.42		
p-Diethylbenzene	1	0		8.39	22.68	20	20	0.766	0.868	13.39		
1,2,4,5-Tetramethylbenzene	1	0		8.90	21.89	20	20	1.122	1.228	9.43		
1,2-Dibromo-3-Chloropropane	1	0		8.99	17.13	20	20	0.05 0.144	0.133	14.33		
Camphor	1	0		9.48	181.86	200	20	0.076	0.087	9.07		
Hexachlorobutadiene	1	0		9.61	17.15	20	20	0.215	0.216	14.23		
1,2,4-Trichlorobenzene	1	0		9.53	19.05	20	20	0.2 0.420	0.400	4.77		
1,2,3-Trichlorobenzene	1	0		9.87	18.48	20	20	0.363	0.335	7.62		
Naphthalene	1	0		9.72	18.63	20	20	1.124	1.047	6.84		

S-Surrogate Compound
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
C1-Compound %Diff exceeds limits

Page 2 of 2
** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

SampleID : CAL @ 20 PPB Operator : SG Qt Meth : 3M_A1005.M
 Data File: 3M118995.D Sam Mult : 1 Qt On : 10/23/17 08:22
 Acq On : 10/23/17 07:36 Vial# : 3 Qt Upd On: 10/16/17 14:36
 Misc : A,5ML

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-23-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.941	96	424920	30.00	ug/l	-0.01
52) Chlorobenzene-d5	6.773	117	364201	30.00	ug/l	-0.01
70) 1,4-Dichlorobenzene-d4	8.214	152	152199	30.00	ug/l	-0.01
System Monitoring Compounds						
37) Dibromofluoromethane	4.520	111	126481	30.75	ug/l	-0.01
Spiked Amount 30.000			Recovery	=	102.50%	
39) 1,2-Dichloroethane-d4	4.736	67	96149	29.68	ug/l	-0.02
Spiked Amount 30.000			Recovery	=	98.93%	
66) Toluene-d8	5.896	98	453003	27.91	ug/l	-0.01
Spiked Amount 30.000			Recovery	=	93.03%	
76) Bromofluorobenzene	7.482	174	153223	28.52	ug/l	-0.01
Spiked Amount 30.000			Recovery	=	95.07%	
Target Compounds						
5) Chlorodifluoromethane	1.575	51	89368	16.9059	ug/l	78
6) Dichlorodifluoromethane	1.575	85	67354	20.3828	ug/l	95
7) Chloromethane	1.725	50	67013	19.7857	ug/l	88
8) Bromomethane	2.105	94	24431	17.8076	ug/l	81
9) Vinyl Chloride	1.808	62	54593	20.3292	ug/l	93
10) Chloroethane	2.189	64	38849	23.1890	ug/l	97
11) Trichlorofluoromethane	2.394	101	120062	22.0800	ug/l	87
12) Ethyl ether	2.628	59	72204m	23.0971	ug/l	
13) Furan	2.664	39	157384	23.7929	ug/l	92
14) 1,1,2-Trichloro-1,2,2-...	2.808	101	49130	22.7235	ug/l	94
15) Methylene Chloride	3.223	84	84016	23.2589	ug/l	88
16) Acrolein	2.742	56	31815	56.7174	ug/l	87
17) Acrylonitrile	3.427	53	28023	23.4285	ug/l	100
18) Iodomethane	2.964	142	53167	20.4846	ug/l	97
19) Acetone	2.868	43	138496	114.3376	ug/l	96
20) Carbon Disulfide	3.018	76	105783	21.2545	ug/l	100
21) t-Butyl Alcohol	3.295	59	35165	95.6475	ug/l	88
22) n-Hexane	3.649	57	35495	25.0753	ug/l	85
23) Di-isopropyl-ether	3.817	45	229523	26.2111	ug/l	94
24) 1,1-Dichloroethene	2.820	61	114532	23.7752	ug/l	98
25) Methyl Acetate	3.127	43	95330	23.6751	ug/l	100
26) Methyl-t-butyl ether	3.433	73	206350	23.9357	ug/l	65
27) 1,1-Dichloroethane	3.793	63	136677	24.1380	ug/l	97
28) trans-1,2-Dichloroethene	3.445	96	73982m	23.7687	ug/l	
29) Ethyl-t-butyl ether	4.082	59	259184	25.6662	ug/l	96
30) cis-1,2-Dichloroethene	4.214	61	149533m	23.5932	ug/l	
31) Bromochloromethane	4.376	49	65877	23.3256	ug/l	89
32) 2,2-Dichloropropane	4.214	77	122587	25.7785	ug/l	95
33) Ethyl acetate	4.232	43	74324m	22.3022	ug/l	
34) 1,4-Dioxane	5.385	88	51660	1248.3664	ug/l	84
35) 1,1-Dichloropropene	4.640	75	110472	25.6116	ug/l	95
36) Chloroform	4.412	83	163680	23.2444	ug/l	88
38) Cyclohexane	4.574	56	73121	26.8422	ug/l	99
40) 1,2-Dichloroethane	4.784	62	157232m	23.1559	ug/l	
41) 2-Butanone	4.220	43	35185m	20.7777	ug/l	
42) 1,1,1-Trichloroethane	4.544	97	134896	22.8338	ug/l	100
43) Carbon Tetrachloride	4.646	117	102509	23.9956	ug/l	90
44) Vinyl Acetate	3.811	43	157376	25.5008	ug/l	100
45) Bromodichloromethane	5.469	83	126721	23.8283	ug/l	94
46) Methylcyclohexane	5.283	83	51833	26.1340	ug/l	96
47) Dibromomethane	5.391	174	62531	23.6961	ug/l	91
48) 1,2-Dichloropropane	5.313	63	71896m	23.8658	ug/l	
49) Trichloroethene	5.163	130	77446m	23.9691	ug/l	
50) Benzene	4.778	78	277220m	23.9018	ug/l	
51) tert-Amyl methyl ether	4.814	73	229621	27.2562	ug/l	86
53) Iso-propylacetate	4.778	43	171749	22.1156	ug/l	93
54) Methyl methacrylate	5.337	41	92855	20.3945	ug/l	68
55) Dibromochloromethane	6.424	129	92771	20.8182	ug/l	99
56) 2-Chloroethylvinylether	5.619	63	52418	20.9922	ug/l	81
57) cis-1,3-Dichloropropene	5.734	75	126872	22.6172	ug/l	94
58) trans-1,3-Dichloropropene	6.052	75	124537	22.0743	ug/l	95
59) Ethyl methacrylate	6.070	41	103683	22.7001	ug/l	56
60) 1,1,2-Trichloroethane	6.172	97	75874	20.5890	ug/l	92
61) 1,2-Dibromoethane	6.508	107	78965	20.2411	ug/l	96
62) 1,3-Dichloropropane	6.280	76	141776	21.6671	ug/l	96
63) 4-Methyl-2-Pentanone	5.806	43	86497	22.0893	ug/l	77
64) 2-Hexanone	6.292	43	59851	21.8815	ug/l	82
65) Tetrachloroethene	6.268	164	51621	22.0199	ug/l	93
67) Toluene	5.938	92	178793	22.3181	ug/l	98

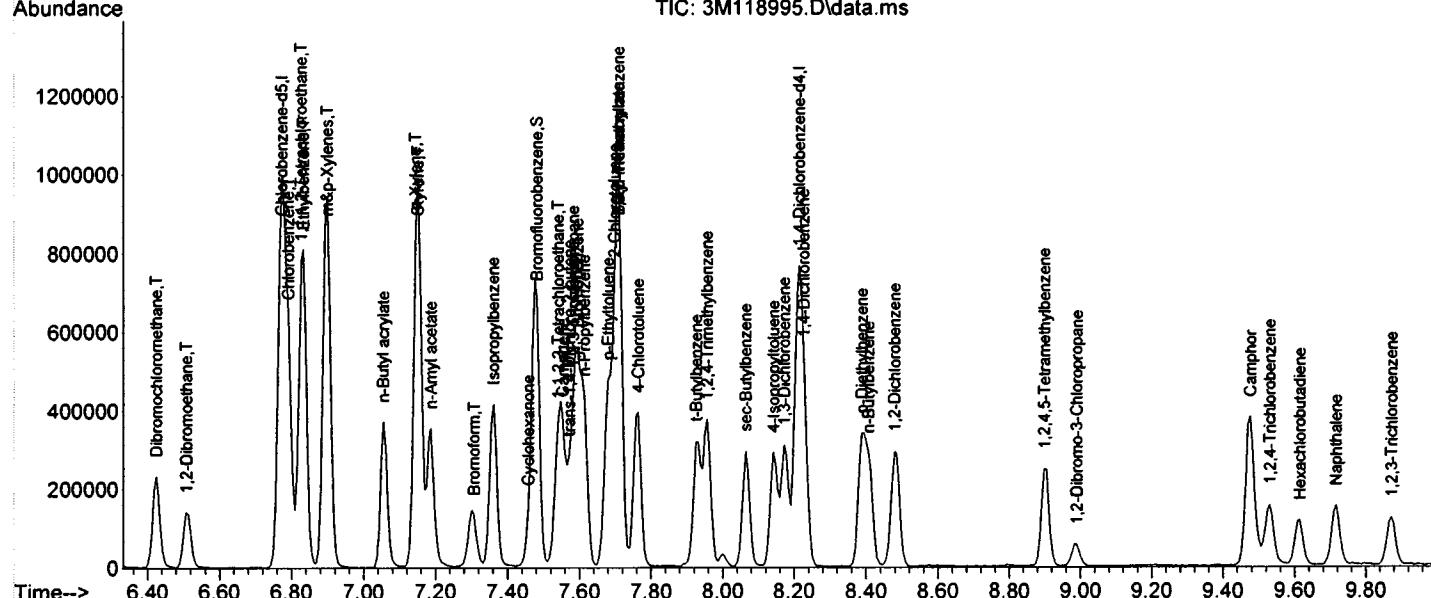
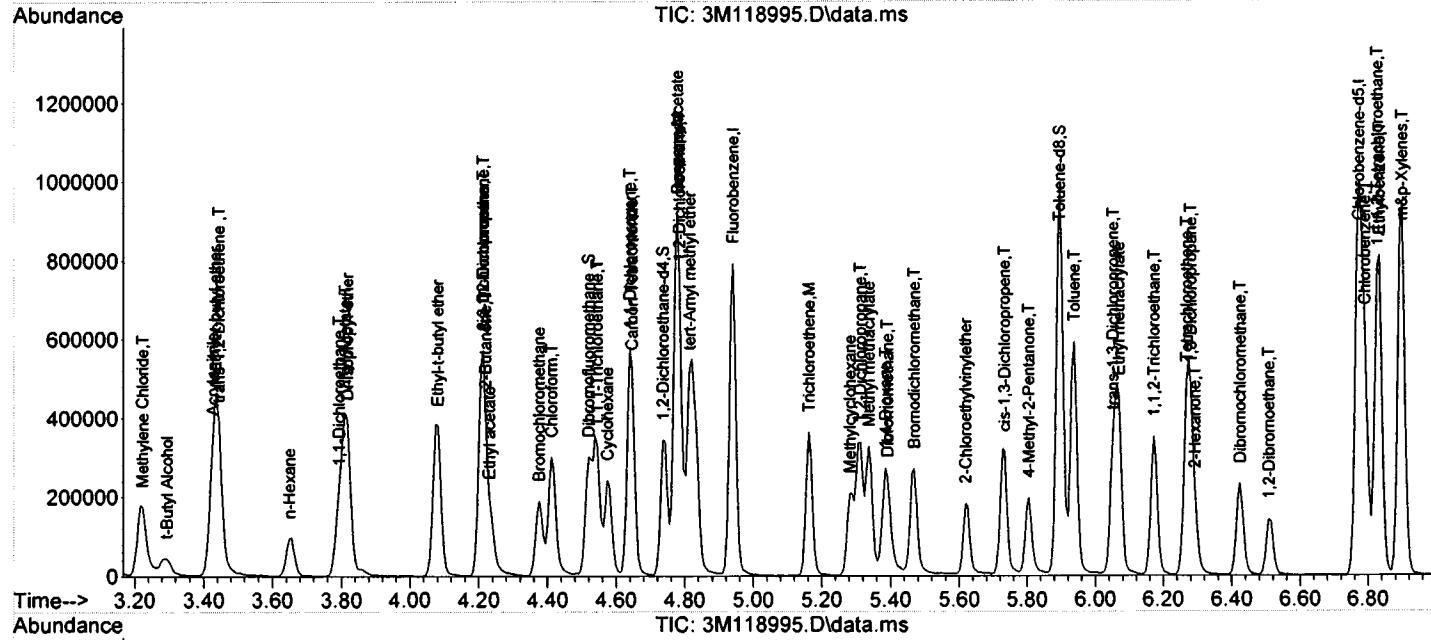
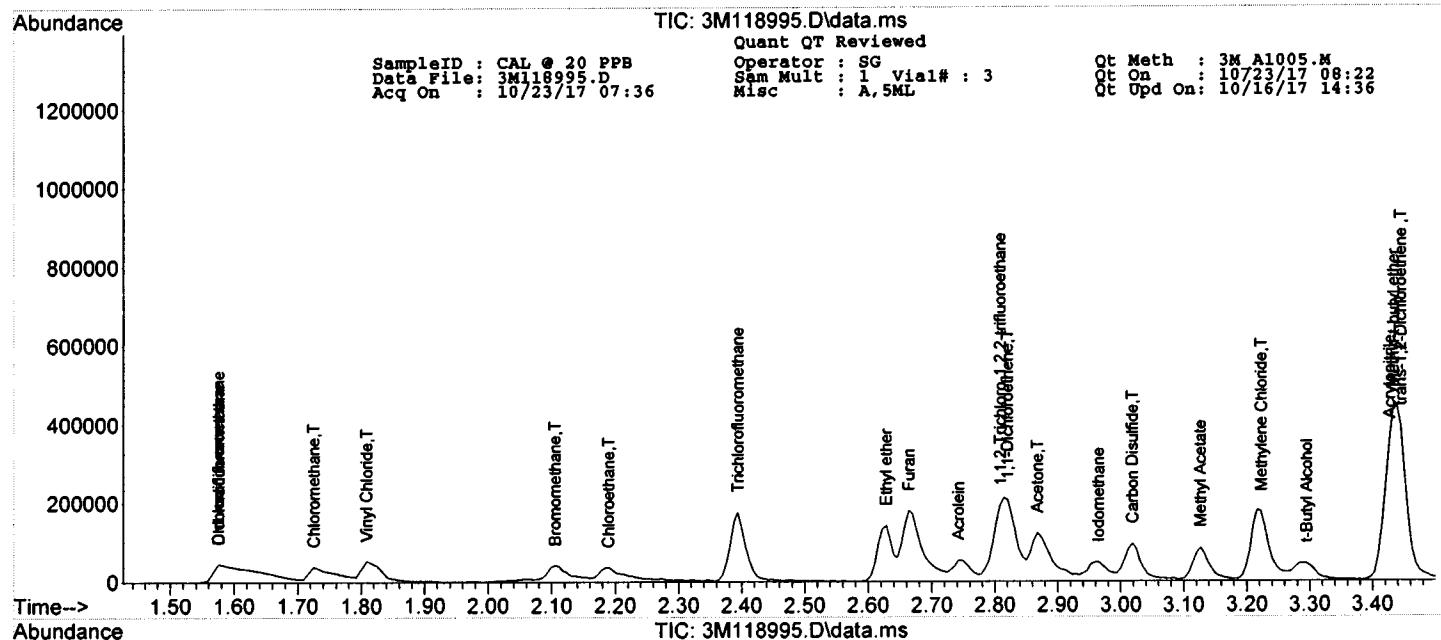
Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB Operator : SG Qt Meth : 3M_A1005.M
 Data File: 3M118995.D Sam Mult : 1 Vial# : 3 Qt On : 10/23/17 08:22
 Acq On : 10/23/17 07:36 Misc : A,5ML Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-23-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1,1,1,2-Tetrachloroethane	6.827	133	72235	21.5681	ug/l	77
69) Chlorobenzene	6.791	112	183081	21.0951	ug/l	94
71) n-Butyl acrylate	7.055	55	185907	22.0365	ug/l	96
72) n-Amyl acetate	7.187	43	145551	22.2024	ug/l	78
73) Bromoform	7.307	173	54436	19.0824	ug/l	99
74) Ethylbenzene	6.833	106	59672	22.2764	ug/l	97
75) 1,1,2,2-Tetrachloroethane	7.542	83	86351	20.3841	ug/l	87
77) Styrene	7.151	104	190333	22.8169	ug/l	87
78) m&p-Xylenes	6.899	106	191999	42.5728	ug/l	100
79) o-Xylene	7.145	106	101668	22.6550	ug/l	87
80) trans-1,4-Dichloro-2-b...	7.572	53	44721	20.2397	ug/l	84
81) 1,3-Dichlorobenzene	8.172	146	106793	20.9804	ug/l	93
82) 1,4-Dichlorobenzene	8.226	146	105451	19.7367	ug/l	99
83) 1,2-Dichlorobenzene	8.479	146	101191	20.2261	ug/l	97
84) Isopropylbenzene	7.361	105	210801	22.5387	ug/l	97
85) Cyclohexanone	7.458	55	29952	168.1707	ug/l	95
86) Camphene	7.554	93	67491	21.8163	ug/l	94
87) 1,2,3-Trichloropropane	7.584	75	121578	20.7262	ug/l	95
88) 2-Chlorotoluene	7.698	91	139521	23.3051	ug/l	95
89) p-Ethyltoluene	7.680	105	211082	21.1047	ug/l	80
90) 4-Chlorotoluene	7.764	91	141376	21.8697	ug/l	96
91) n-Propylbenzene	7.614	91	220912	22.4717	ug/l	98
92) Bromobenzene	7.596	77	188334	20.1839	ug/l	91
93) 1,3,5-Trimethylbenzene	7.710	105	144898	22.0204	ug/l	83
94) Butyl methacrylate	7.710	41	128300	23.4093	ug/l	96
95) t-Butylbenzene	7.926	119	139261	22.8889	ug/l	94
96) 1,2,4-Trimethylbenzene	7.956	105	179230	22.7105	ug/l	95
97) sec-Butylbenzene	8.064	105	157992	22.6687	ug/l	99
98) 4-Isopropyltoluene	8.142	119	134764	23.2305	ug/l	97
99) n-Butylbenzene	8.407	91	161040	22.6839	ug/l	95
100) p-Diethylbenzene	8.389	119	88089	22.6783	ug/l	93
101) 1,2,4,5-Tetramethylben...	8.899	119	124620	21.8869	ug/l	97
102) 1,2-Dibromo-3-Chloropr...	8.989	157	13470	17.1331	ug/l	87
103) Camphor	9.476	95	88009	181.8625	ug/l	99
104) Hexachlorobutadiene	9.614	225	21890	17.1532	ug/l	94
105) 1,2,4-Trichlorobenzene	9.530	180	40555	19.0457	ug/l	97
106) 1,2,3-Trichlorobenzene	9.872	180	34012	18.4766	ug/l	95
107) Naphthalene	9.716	128	106243	18.6320	ug/l	100

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



Compound	bytCol Num:	bytMr Num:	Type	sngConc:	Exp Conc	Rec	Flag	sngLoLim:	sngHiLim:
Chlorodifluoromethane	1	0		20.8636	20	104		70	130
Dichlorodifluoromethane	1	0		19.1158	20	96		50	150
Chloromethane	1	0		17.6813	20	88		70	130
Bromomethane	1	0		17.455	20	87		70	130
Vinyl Chloride	1	0		18.3423	20	92		70	130
Chloroethane	1	0		19.148	20	96		70	130
Trichlorodifluoromethane	1	0		19.6602	20	98		70	130
Ethyl ether	1	0		19.5549	20	98		70	130
Furan	1	0		16.6308	20	83		70	130
1.1.2-Trichloro-1,2,2-trifluoroethane	1	0		20.7051	20	104		70	130
Methylene Chloride	1	0		19.9335	20	100		70	130
Acrolein	1	0		93.1914	100	93		50	150
Acrylonitrile	1	0		19.6404	20	98		50	150
Iodomethane	1	0		25.8141	20	129		70	130
Acetone	1	0		98.7592	100	99		50	150
Carbon Disulfide	1	0		27.9042	20	140	*	70	130
t-Butyl Alcohol	1	0		84.671	100	85		50	150
n-Hexane	1	0		19.3222	20	97		70	130
Di-isopropl-ether	1	0		21.0506	20	105		70	130
1,1-Dichloroethene	1	0		19.2096	20	96		70	130
Methyl Acetate	1	0		19.0768	20	95		70	130
Methyl-t-butyl ether	1	0		21.3491	20	107		70	130
1,1-Dichloroethane	1	0		19.3922	20	97		70	130
trans-1,2-Dichloroethene	1	0		20.0809	20	100		70	130
Ethyl-t-butyl ether	1	0		21.8439	20	109		70	130
cis-1,2-Dichloroethene	1	0		20.3015	20	102		70	130
Bromochloromethane	1	0		18.6865	20	93		70	130
2,2-Dichloropropane	1	0		20.2019	20	101		70	130
Ethyl acetate	1	0		19.7992	20	99		70	130
1,4-Dioxane	1	0		1075.791	1000	108		70	130
1,1-Dichloropropene	1	0		21.5953	20	108		70	130
Chloroform	1	0		19.7819	20	99		70	130
Cyclohexane	1	0		20.4306	20	102		70	130
1,2-Dichloroethane	1	0		19.2295	20	96		70	130
2-Butanone	1	0		16.7811	20	84		70	130
1,1,1-Trichloroethane	1	0		20.2581	20	101		70	130
Carbon Tetrachloride	1	0		20.8439	20	104		70	130
Vinyl Acetate	1	0		21.882	20	109		70	130
Bromodichloromethane	1	0		19.3955	20	97		70	130
Methylcyclohexane	1	0		19.8417	20	99		70	130
Dibromomethane	1	0		20.1041	20	101		70	130
1,2-Dichloropropane	1	0		19.8357	20	99		70	130
Trichloroethene	1	0		19.9956	20	100		70	130
Benzene	1	0		20.3853	20	102		70	130
Iso-propylacetate	1	0		20.7405	20	104		70	130
Methyl methacrylate	1	0		21.6513	20	108		70	130
Dibromochloromethane	1	0		20.142	20	101		70	130
2-Chloroethylvinylether	1	0		20.2629	20	101		70	130
cis-1,3-Dichloropropene	1	0		20.6255	20	103		70	130
trans-1,3-Dichloropropene	1	0		20.6937	20	103		70	130
Ethyl methacrylate	1	0		20.0112	20	100		70	130
1,1,2-Trichloroethane	1	0		18.9866	20	95		70	130
1,2-Dibromoethane	1	0		20.1501	20	101		70	130
1,3-Dichloropropane	1	0		20.2297	20	101		70	130
4-Methyl-2-Pentanone	1	0		20.0839	20	100		70	130
2-Hexanone	1	0		20.4728	20	102		70	130
Tetrachloroethene	1	0		20.3134	20	102		70	130
Toluene	1	0		20.4236	20	102		70	130
1,1,1,2-Tetrachloroethane	1	0		20.9785	20	105		70	130
Chlorobenzene	1	0		20.539	20	103		70	130
n-Butyl acrylate	1	0		17.8868	20	89		70	130
n-Amyl acetate	1	0		20.5424	20	103		70	130
Bromoform	1	0		18.0387	20	90		70	130
Ethylbenzene	1	0		20.9394	20	105		70	130
1,1,2,2-Tetrachloroethane	1	0		19.1031	20	96		70	130
Styrene	1	0		21.5267	20	108		70	130
m-→-Xlenes	1	0		39.5474	40	99		70	130
o-Xlene	1	0		20.9635	20	105		70	130
trans-1,4-Dichloro-2-butene	1	0		18.1892	20	91		70	130
1,3-Dichlorobenzene	1	0		18.8145	20	94		70	130
1,4-Dichlorobenzene	1	0		18.9129	20	95		70	130
1,2-Dichlorobenzene	1	0		19.4391	20	97		70	130
Isopropylbenzene	1	0		20.2548	20	101		70	130
1,2,3-Trichloropropane	1	0		19.0024	20	95		70	130
2-Chlorotoluene	1	0		21.2959	20	106		70	130
4-Chlorotoluene	1	0		20.2801	20	101		70	130
n-Propylbenzene	1	0		20.0264	20	100		70	130
Bromobenzene	1	0		20.3607	20	102		70	130
1,3,5-Trimethylbenzene	1	0		22.634	20	113		70	130
Butyl methacrylate	1	0		19.5594	20	98		70	130
t-Butylbenzene	1	0		19.4225	20	97		70	130
1,2,4-Trimethylbenzene	1	0		20.3888	20	102		70	130
sec-Butylbenzene	1	0		18.9337	20	95		70	130
4-Isopropyltoluene	1	0		19.6458	20	98		70	130
n-Butylbenzene	1	0		18.2502	20	91		70	130
1,2-Dibromo-3-Chloropropane	1	0		16.2251	20	81		70	130
Hexachlorobutadiene	1	0		20.7318	20	104		70	130
1,2,4-Trichlorobenzene	1	0		19.111	20	96		70	130
1,2,3-Trichlorobenzene	1	0		18.8029	20	94		70	130
Naphthalene	1	0		19.1271	20	96		70	130

ICV FORM

Date/Time: 10/05/17 12:51

Compound	bytCol Num:	bytMr Num:	Type	sngConc:	Exp Conc	Rec	Flag	sngLoLim:	sngHiLim:
Chlorodifluoromethane	1	0		18.8747	20	94		70	130
Dichlorodifluoromethane	1	0		19.926	20	100		50	150
Chloromethane	1	0		18.6275	20	93		70	130
Bromomethane	1	0		18.1655	20	91		70	130
Vinyl Chloride	1	0		19.795	20	99		70	130
Chloroethane	1	0		20.2383	20	101		70	130
Trichlorofluoromethane	1	0		19.5703	20	98		70	130
Ethyl ether	1	0		19.2427	20	96		70	130
Furan	1	0		17.1039	20	86		70	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	0		20.9402	20	105		70	130
Methylene Chloride	1	0		18.615	20	93		70	130
Acrolein	1	0		98.9006	100	99		50	150
Acrylonitrile	1	0		18.3322	20	92		50	150
Iodomethane	1	0		18.9814	20	95		70	130
Acetone	1	0		93.9686	100	94		50	150
Carbon Disulfide	1	0		17.9459	20	90		70	130
t-Butyl Alcohol	1	0		75.9023	100	76		50	150
n-Hexane	1	0		19.4496	20	97		70	130
Di-isopropyl-ether	1	0		20.1312	20	101		70	130
1,1-Dichloroethene	1	0		18.5227	20	93		70	130
Methyl Acetate	1	0		18.5088	20	93		70	130
Methyl-t-butyl ether	1	0		20.4764	20	102		70	130
1,1-Dichloroethane	1	0		19.1817	20	96		70	130
trans-1,2-Dichloroethene	1	0		20.0684	20	100		70	130
Ethyl-t-butyl ether	1	0		20.5167	20	103		70	130
cis-1,2-Dichloroethene	1	0		19.4185	20	97		70	130
Bromochloromethane	1	0		18.9693	20	95		70	130
2,2-Dichloropropane	1	0		20.5665	20	103		70	130
Ethyl acetate	1	0		21.283	20	106		70	130
1,4-Dioxane	1	0		1072.677	1000	107		70	130
1,1-Dichloropropene	1	0		21.5655	20	108		70	130
Chloroform	1	0		18.865	20	94		70	130
Cyclohexane	1	0		20.2109	20	101		70	130
1,2-Dichloroethane	1	0		17.7894	20	89		70	130
2-Butanone	1	0		18.2605	20	91		70	130
1,1,1-Trichloroethane	1	0		19.8207	20	99		70	130
Carbon Tetrachloride	1	0		19.9033	20	100		70	130
Vinyl Acetate	1	0		19.4491	20	97		70	130
Bromodichloromethane	1	0		19.0125	20	95		70	130
Methylcyclohexane	1	0		21.2626	20	106		70	130
Dibromomethane	1	0		19.3203	20	97		70	130
1,2-Dichloropropane	1	0		19.4349	20	97		70	130
Trichloroethene	1	0		19.4896	20	97		70	130
Benzene	1	0		19.6035	20	98		70	130
Iso-propylacetate	1	0		20.2003	20	101		70	130
Methyl methacrylate	1	0		20.8754	20	104		70	130
Dibromochloromethane	1	0		18.5849	20	93		70	130
2-Chloroethylvinylether	1	0		19.586	20	98		70	130
cis-1,3-Dichloropropene	1	0		20.0634	20	100		70	130
trans-1,3-Dichloropropene	1	0		19.5984	20	98		70	130
Ethyl methacrylate	1	0		20.1599	20	101		70	130
1,1,2-Trichloroethane	1	0		19.4202	20	97		70	130
1,2-Dibromoethane	1	0		18.6617	20	93		70	130
1,3-Dichloropropane	1	0		19.1802	20	96		70	130
4-Methyl-2-Pentanone	1	0		19.3235	20	97		70	130
2-Hexanone	1	0		19.5627	20	98		70	130
Tetrachloroethene	1	0		20.5165	20	103		70	130
Toluene	1	0		19.6433	20	98		70	130
1,1,1,2-Tetrachloroethane	1	0		20.0464	20	100		70	130
Chlorobenzene	1	0		19.1653	20	96		70	130
n-Butyl acrylate	1	0		19.7937	20	99		70	130
n-Amyl acetate	1	0		19.5466	20	98		70	130
Bromoform	1	0		17.2199	20	86		70	130
Ethylbenzene	1	0		20.7307	20	104		70	130
1,1,2,2-Tetrachloroethane	1	0		18.2925	20	91		70	130
Styrene	1	0		20.3206	20	102		70	130
m&p-Xylenes	1	0		39.1067	40	98		70	130
o-Xylene	1	0		20.8337	20	104		70	130
trans-1,4-Dichloro-2-butene	1	0		17.3774	20	87		70	130
1,3-Dichlorobenzene	1	0		18.9001	20	95		70	130
1,4-Dichlorobenzene	1	0		18.9968	20	95		70	130
1,2-Dichlorobenzene	1	0		19.3831	20	97		70	130
Isopropylbenzene	1	0		19.5694	20	98		70	130
1,2,3-Trichloropropane	1	0		18.5414	20	93		70	130
2-Chlorotoluene	1	0		20.9854	20	105		70	130
4-Chlorotoluene	1	0		19.383	20	97		70	130
n-Propylbenzene	1	0		20.0704	20	100		70	130
Bromobenzene	1	0		20.0867	20	100		70	130
1,3,5-Trimethylbenzene	1	0		20.4443	20	102		70	130
Butyl methacrylate	1	0		20.7561	20	104		70	130
t-Butylbenzene	1	0		20.103	20	101		70	130
1,2,4-Trimethylbenzene	1	0		20.5029	20	103		70	130
sec-Butylbenzene	1	0		19.3712	20	97		70	130
4-Isopropyltoluene	1	0		20.5886	20	103		70	130
n-Butylbenzene	1	0		19.7167	20	99		70	130
1,2-Dibromo-3-Chloropropane	1	0		15.7012	20	79		70	130
Hexachlorobutadiene	1	0		20.7207	20	104		70	130
1,2,4-Trichlorobenzene	1	0		19.6841	20	98		70	130
1,2,3-Trichlorobenzene	1	0		20.2994	20	101		70	130
Naphthalene	1	0		20.075	20	100		70	130

7102003 0357

**GC/MS Volatile Data
Raw QC Data**

Form 5

Tune Name: BFB TUNE
 Instrument: GCMS 3

Data File: 3M118064.D
 Analysis Date: 10/05/17 06:58
 Method: EPA 8260C

Tune Scan/Time Range: Average of 4.971 to 4.981 min

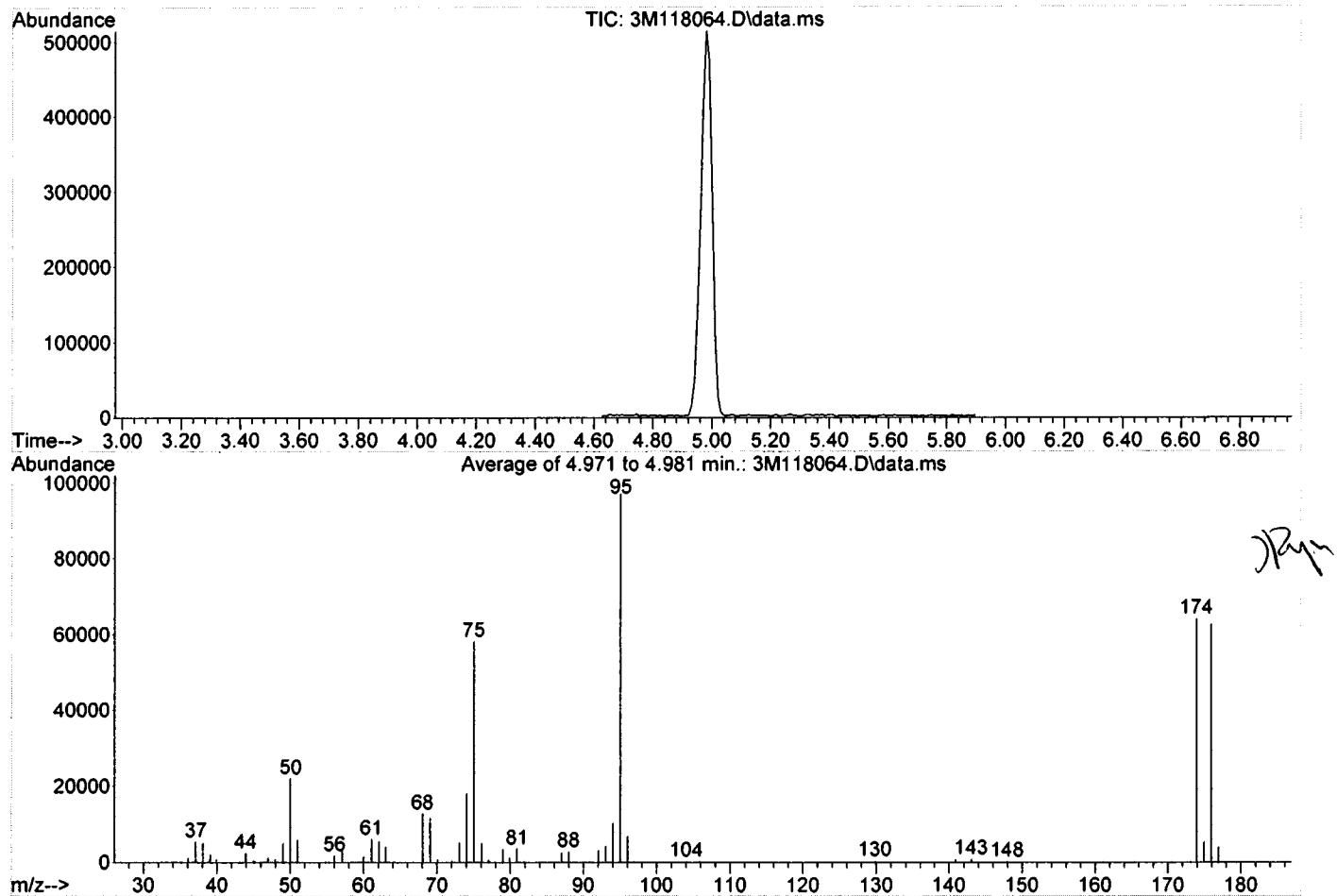
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	22.8	22116	PASS
75	95	30	60	60.0	58264	PASS
95	95	100	100	100.0	97124	PASS
96	95	5	9	7.1	6865	PASS
173	174	0.00	2	0.5	314	PASS
174	95	50	100	66.0	64140	PASS
175	174	5	9	8.4	5377	PASS
176	174	95	101	97.9	62796	PASS
177	176	5	9	6.4	4048	PASS

Data File	Sample Number	Analysis Date:
3M118065.D	BLK	10/05/17 07:08
3M118068.D	1 PPB	10/05/17 07:59
3M118069.D	CAL @ 1 PPB	10/05/17 08:16
3M118070.D	CAL @ 0.5 PPB	10/05/17 08:34
3M118071.D	1 PPB	10/05/17 08:50
3M118072.D	CAL @ 5 PPB	10/05/17 09:07
3M118073.D	CAL @ 10 PPB	10/05/17 09:24
3M118074.D	CAL @ 20 PPB	10/05/17 09:41
3M118075.D	CAL @ 500 PPB	10/05/17 09:58
3M118077.D	CAL @ 250 PPB	10/05/17 10:31
3M118079.D	CAL @ 100 PPB	10/05/17 11:05
3M118081.D	CAL @ 50 PPB	10/05/17 11:38
3M118084.D	ICV	10/05/17 12:29
3M118086.D	ICV	10/05/17 12:51

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-05-17\
 Data File : 3M118064.D
 Acq On : 5 Oct 2017 6:58
 Operator : SG
 Sample : BFB TUNE
 Misc : A,5ML
 ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2017\GCMS_3\MethodQt\3M_A0830.M
 Title : @GCMS_3,ug,624,8260
 Last Update : Wed Aug 30 15:24:38 2017



Spectrum Information: Average of 4.971 to 4.981 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.8	22116	PASS
75	95	30	60	60.0	58264	PASS
95	95	100	100	100.0	97124	PASS
96	95	5	9	7.1	6865	PASS
173	174	0.00	2	0.5	314	PASS
174	95	50	100	66.0	64140	PASS
175	174	5	9	8.4	5377	PASS
176	174	95	101	97.9	62796	PASS
177	176	5	9	6.4	4048	PASS

Form 5

Tune Name: BFB TUNE Data File: 3M118931.D
 Instrument: GCMS 3 Analysis Date: 10/20/17 15:53
 Method: EPA 8260C

Tune Scan/Time Range: Average of 4.917 to 4.996 min

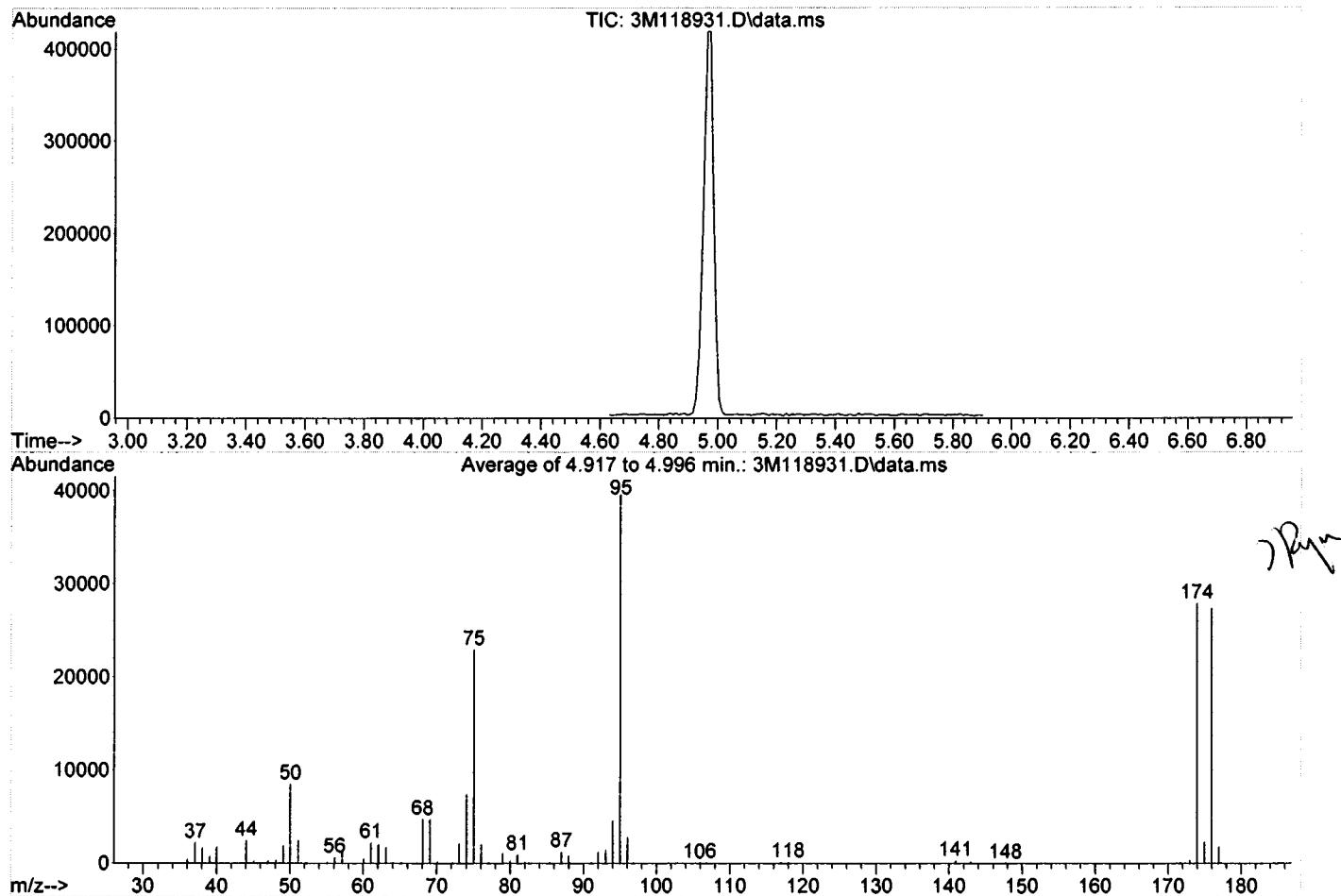
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/Fail
50	95	15	40	21.5	8518	PASS
75	95	30	60	58.0	22973	PASS
95	95	100	100	100.0	39612	PASS
96	95	5	9	7.0	2789	PASS
173	174	0.00	2	1.1	312	PASS
174	95	50	100	70.5	27933	PASS
175	174	5	9	8.2	2301	PASS
176	174	95	101	98.0	27388	PASS
177	176	5	9	6.6	1804	PASS

Data File	Sample Number	Analysis Date:
3M118932.D	20 PPB	10/20/17 16:03
3M118933.D	CAL @ 20 PPB	10/20/17 16:20
3M118934.D	BLK	10/20/17 16:37
3M118935.D	DAILY BLANK	10/20/17 16:53
3M118936.D	AD00690-002	10/20/17 17:10
3M118937.D	AD00693-001	10/20/17 17:27
3M118938.D	AD00719-001	10/20/17 17:44
3M118939.D	STD	10/20/17 18:01
3M118941.D	MBS64948	10/20/17 18:34
3M118942.D	AD00698-022(MS:	10/20/17 18:51
3M118943.D	AD00698-023(MSD	10/20/17 19:08
3M118944.D	AD00698-021	10/20/17 19:25
3M118945.D	00500-001(500X)	10/20/17 19:42
3M118946.D	AD00698-002	10/20/17 19:59
3M118947.D	AD00698-003	10/20/17 20:15
3M118948.D	AD00698-004	10/20/17 20:32
3M118949.D	AD00698-005	10/20/17 20:49
3M118950.D	AD00698-006	10/20/17 21:06
3M118951.D	AD00698-008	10/20/17 21:22
3M118952.D	AD00698-009	10/20/17 21:39
3M118953.D	AD00698-010	10/20/17 21:56
3M118954.D	AD00698-012	10/20/17 22:10
3M118955.D	AD00698-013	10/20/17 22:26
3M118956.D	AD00698-014	10/20/17 22:43
3M118957.D	AD00698-015	10/20/17 23:00
3M118958.D	AD00698-016	10/20/17 23:19
3M118959.D	AD00698-017	10/20/17 23:36
3M118960.D	AD00698-018	10/20/17 23:53
3M118961.D	BLK	10/21/17 00:10
3M118962.D	AD00698-019	10/21/17 00:27
3M118963.D	AD00698-030	10/21/17 00:44
3M118964.D	AD00698-031(MS:	10/21/17 01:01
3M118965.D	AD00698-032(MSD	10/21/17 01:17
3M118966.D	MBS64949	10/21/17 01:34
3M118967.D	AD00698-020	10/21/17 01:51
3M118968.D	AD00698-024	10/21/17 02:08
3M118969.D	AD00698-025	10/21/17 02:25
3M118970.D	AD00698-026	10/21/17 02:41
3M118971.D	AD00698-027	10/21/17 02:58
3M118972.D	AD00698-028	10/21/17 03:15
3M118973.D	AD00698-033	10/21/17 03:32
3M118974.D	AD00698-034	10/21/17 03:49
3M118975.D	AD00698-035	10/21/17 04:06
3M118976.D	AD00698-007	10/21/17 04:22
3M118977.D	BLK	10/21/17 04:39
3M118978.D	AD00696-003	10/21/17 04:56
3M118979.D	AD00696-002	10/21/17 05:13
3M118980.D	AD00696-001	10/21/17 05:30
3M118981.D	MBS64950	10/21/17 05:47
3M118982.D	00710-001	10/21/17 06:03

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Data File : 3M118931.D
 Acq On : 20 Oct 2017 15:53
 Operator : WP
 Sample : BFB TUNE
 Misc : A, 5ML
 ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2017\GCMS_3\MethodQt\3M_A1005.M
 Title : @GCMS_3, ug, 624, 8260
 Last Update : Thu Oct 05 12:05:11 2017



Spectrum Information: Average of 4.917 to 4.996 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.5	8518	PASS
75	95	30	60	58.0	22973	PASS
95	95	100	100	100.0	39612	PASS
96	95	5	9	7.0	2789	PASS
173	174	0.00	2	1.1	312	PASS
174	95	50	100	70.5	27933	PASS
175	174	5	9	8.2	2301	PASS
176	174	95	101	98.0	27388	PASS
177	176	5	9	6.6	1804	PASS

Form 5

Tune Name: BFB TUNE
 Instrument: GCMS 3

Data File: 3M118992.D
 Analysis Date: 10/23/17 06:50
 Method: EPA 8260C

Tune Scan/Time Range: Average of 4.960 to 4.980 min

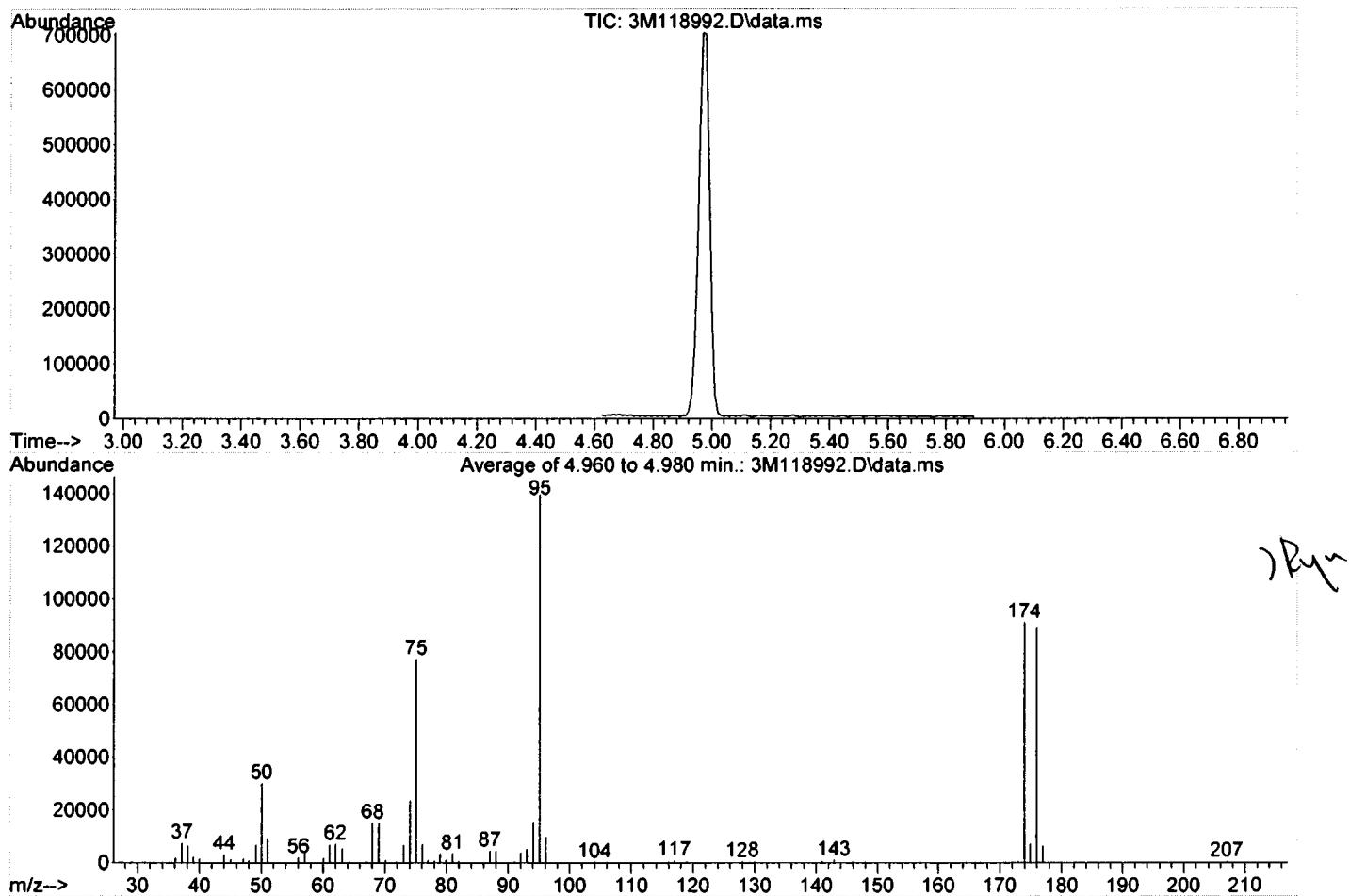
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/Fail
50	95	15	40	21.6	30176	PASS
75	95	30	60	55.4	77307	PASS
95	95	100	100	100.0	139653	PASS
96	95	5	9	7.0	9793	PASS
173	174	0.00	2	0.6	517	PASS
174	95	50	100	65.3	91171	PASS
175	174	5	9	7.8	7144	PASS
176	174	95	101	97.7	89109	PASS
177	176	5	9	7.1	6322	PASS

Data File	Sample Number	Analysis Date:
3M118995.D	CAL @ 20 PPB	10/23/17 07:36
3M118997.D	BLKDI	10/23/17 08:12
3M118998.D	DAILY BLANK	10/23/17 08:28
3M118999.D	DAILY BLANK	10/23/17 08:45
3M119000.D	AD00698-042	10/23/17 09:03
3M119001.D	AD00698-001	10/23/17 09:19
3M119002.D	00698-011(100X)	10/23/17 09:36
3M119003.D	00698-029(20X)	10/23/17 09:53
3M119004.D	00698-036(10X)	10/23/17 10:10
3M119005.D	AD00698-011	10/23/17 10:27
3M119006.D	AD00698-029	10/23/17 10:43
3M119007.D	AD00698-036	10/23/17 11:00
3M119008.D	MBS64954	10/23/17 11:17
3M119009.D	MBS64955	10/23/17 11:34
3M119010.D	AD00698-001(MS)	10/23/17 11:51
3M119011.D	AD00698-001(MSD)	10/23/17 12:07
3M119012.D	BLK	10/23/17 12:24
3M119013.D	AD00698-037	10/23/17 12:41
3M119014.D	AD00698-038	10/23/17 12:58
3M119015.D	AD00698-039	10/23/17 13:15
3M119016.D	AD00698-040	10/23/17 13:32
3M119017.D	AD00698-041	10/23/17 13:48
3M119018.D	AD00698-035	10/23/17 14:05
3M119019.D	AD00698-007	10/23/17 14:22
3M119020.D	AD00672-001(T)	10/23/17 14:39
3M119021.D	AD00672-003(T)	10/23/17 14:55
3M119022.D	AD00701-001(T)	10/23/17 15:12
3M119023.D	BLK	10/23/17 15:29
3M119024.D	AD00631-006	10/23/17 15:46
3M119025.D	AD00686-001	10/23/17 16:02
3M119026.D	AD00686-005	10/23/17 16:19
3M119027.D	AD00698-021	10/23/17 16:36
3M119028.D	AD00631-011	10/23/17 16:53
3M119029.D	00698-018	10/23/17 17:09
3M119030.D	00698-020	10/23/17 17:26

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-23-17\
 Data File : 3M118992.D
 Acq On : 23 Oct 2017 6:50
 Operator : SG
 Sample : BFB TUNE
 Misc : A, 5ML
 ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2017\GCMS_3\MethodQt\3M_A1005.M
 Title : @GCMS_3, ug, 624, 8260
 Last Update : Thu Oct 05 12:05:11 2017



Spectrum Information: Average of 4.960 to 4.980 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.6	30176	PASS
75	95	30	60	55.4	77307	PASS
95	95	100	100	100.0	139653	PASS
96	95	5	9	7.0	9793	PASS
173	174	0.00	2	0.6	517	PASS
174	95	50	100	65.3	91171	PASS
175	174	5	9	7.8	7144	PASS
176	174	95	101	97.7	89109	PASS
177	176	5	9	7.1	6322	PASS

Form1
ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK

Client Id:

Data File: 3M118935.D

Analysis Date: 10/20/17 16:53

Date Rec/Extracted:

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U				

Worksheet #: 442070

Total Target Concentration

0

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

7102003 0365

SampleID : DAILY BLANK
 Data File: 3M118935.D
 Acq On : 10/20/17 16:53

Operator : WP
 Sam Mult : 1 Vial# : 6
 Misc : A,SML

Qt Meth : 3M_A1005.M
 Qt On : 10/20/17 17:09
 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.951	96	366907	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.783	117	300858	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.225	152	129077	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.525	111	107781	30.35	ug/l	0.00
Spiked Amount	30.000			Recovery	=	101.17%
39) 1,2-Dichloroethane-d4	4.747	67	83661	29.91	ug/l	0.00
Spiked Amount	30.000			Recovery	=	99.70%
66) Toluene-d8	5.906	98	372508	27.78	ug/l	0.00
Spiked Amount	30.000			Recovery	=	92.60%
76) Bromofluorobenzene	7.492	174	127588	28.00	ug/l	0.00
Spiked Amount	30.000			Recovery	=	93.33%

Target Compounds	Qvalue
<hr/>	

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



Abundance

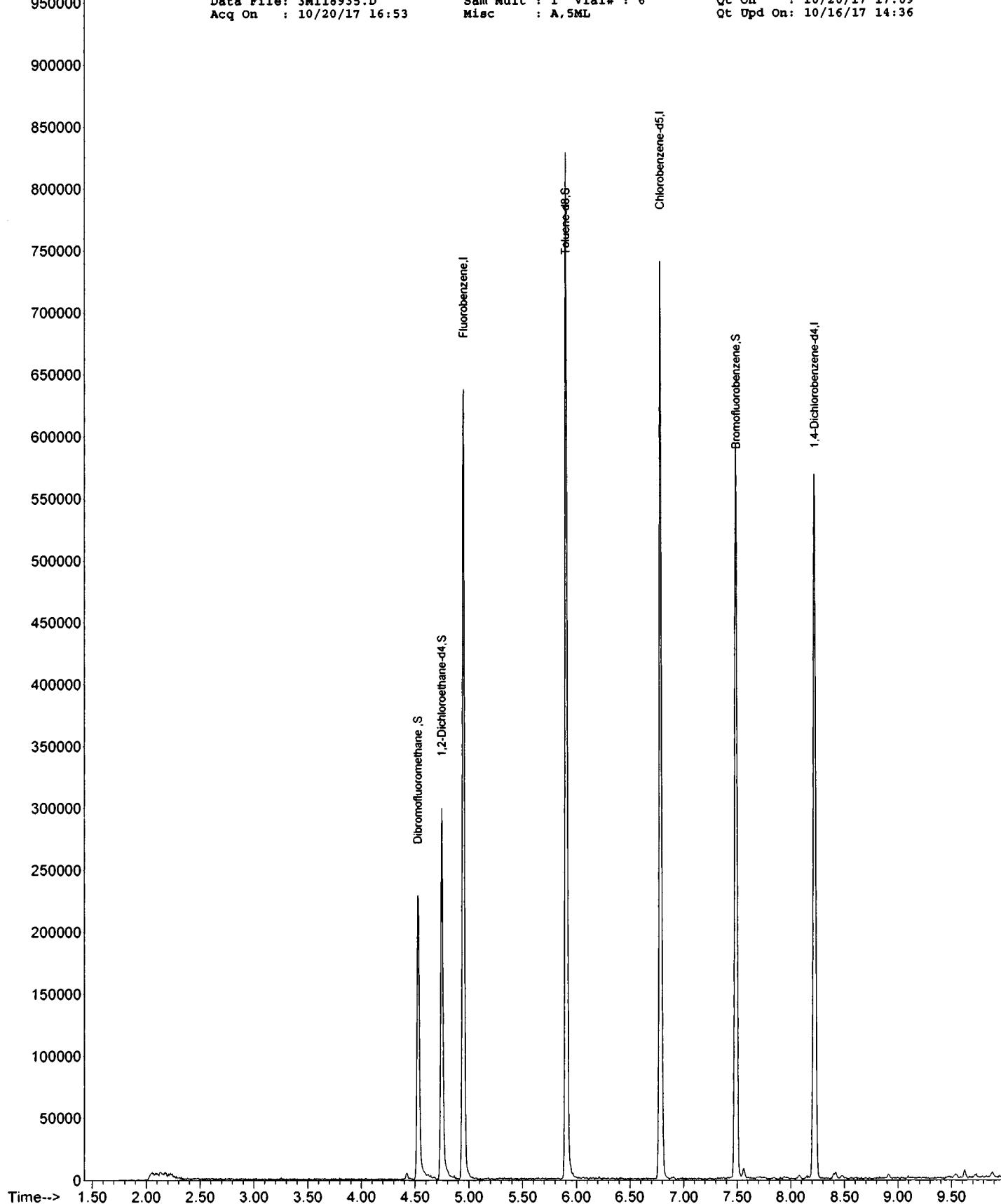
TIC: 3M118935.D\data.ms

Quant QT Reviewed

SampleID : DAILY BLANK
Data File: 3M118935.D
Acq On : 10/20/17 16:53

Operator : WP
Sam Mult : 1 vial# : 6
Misc : A,5ML

Qt Meth : 3M_A1005.M
Qt On : 10/20/17 17:09
Qt Upd On: 10/16/17 14:36



Form1
ORGANICS VOLATILE REPORT

Sample Number:DAILY BLANK

Client Id:

Data File:3M118999.D

Analysis Date: 10/23/17 08:45

Date Rec/Extracted:

Column:DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix:Aqueous

Initial Vol:5ml

Final Vol:NA

Dilution:1.00

Solids:0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U				

Worksheet #: 442070

Total Target Concentration

0

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

SampleID : DAILY BLANK
 Data File: 3M118999.D
 Acq On : 10/23/17 08:45

Operator : SG
 Sam Mult : 1 Vial# : 7
 Misc : A,5ML

Qt Meth : 3M_A1005.M
 Qt On : 10/23/17 08:59
 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-23-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.947	96	374927	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.779	117	310383	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	132329	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.520	111	101964	28.10	ug/l	-0.01
Spiked Amount	30.000			Recovery	=	93.67%
39) 1,2-Dichloroethane-d4	4.742	67	88220	30.87	ug/l	-0.01
Spiked Amount	30.000			Recovery	=	102.90%
66) Toluene-d8	5.902	98	390582	28.24	ug/l	0.00
Spiked Amount	30.000			Recovery	=	94.13%
76) Bromofluorobenzene	7.487	174	130350	27.90	ug/l	0.00
Spiked Amount	30.000			Recovery	=	93.00%

Target Compounds	Qvalue
------------------	--------

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

16

Abundance

1000000
950000
900000
850000
800000
750000
700000
650000
600000
550000
500000
450000
400000
350000
300000
250000
200000
150000
100000
50000
0

TIC: 3M118999.D\data.ms

Quant QT Reviewed

SampleID : DAILY BLANK
Data File: 3M118999.D
Acq On : 10/23/17 08:45

Operator : SG
Sam Mult : 1 Vial# : 7
Misc : A,5ML

Qt Meth : 3M_A1005.M
Qt On : 10/23/17 08:59
Qt Upd On: 10/16/17 14:36

Time--> 1.50 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 6.00 6.50 7.00 7.50 8.00 8.50 9.00 9.50

Form1
ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK

Client Id:

Data File: 3M118999.D

Analysis Date: 10/23/17 08:45

Date Rec/Extracted:

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	75-00-3	Chloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	67-66-3	Chloroform	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	74-87-3	Chloromethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	110-82-7	Cyclohexane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	100-41-4	Ethylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	98-82-8	Isopropylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	79601-23-1	m&p-Xylenes	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79-20-9	Methyl Acetate	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
74-83-9	Bromomethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U	75-01-4	Vinyl Chloride	1.0	U
108-90-7	Chlorobenzene	1.0	U				

Worksheet #: 442352

Total Target Concentration

0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

SampleID : DAILY BLANK
 Data File: 3M118999.D
 Acq On : 10/23/17 08:45

Operator : SG
 Sam Mult : 1 Vial# : 7
 Misc : A,5ML

Qt Meth : 3M_A1005.M
 Qt On : 10/23/17 08:59
 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-23-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<hr/>						
Internal Standards						
4) Fluorobenzene	4.947	96	374927	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.779	117	310383	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	132329	30.00	ug/l	0.00
<hr/>						
System Monitoring Compounds						
37) Dibromofluoromethane	4.520	111	101964	28.10	ug/l	-0.01
Spiked Amount	30.000		Recovery	=	93.67%	
39) 1,2-Dichloroethane-d4	4.742	67	88220	30.87	ug/l	-0.01
Spiked Amount	30.000		Recovery	=	102.90%	
66) Toluene-d8	5.902	98	390582	28.24	ug/l	0.00
Spiked Amount	30.000		Recovery	=	94.13%	
76) Bromofluorobenzene	7.487	174	130350	27.90	ug/l	0.00
Spiked Amount	30.000		Recovery	=	93.00%	
<hr/>						
Target Compounds						Qvalue
<hr/>						

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

Abundance

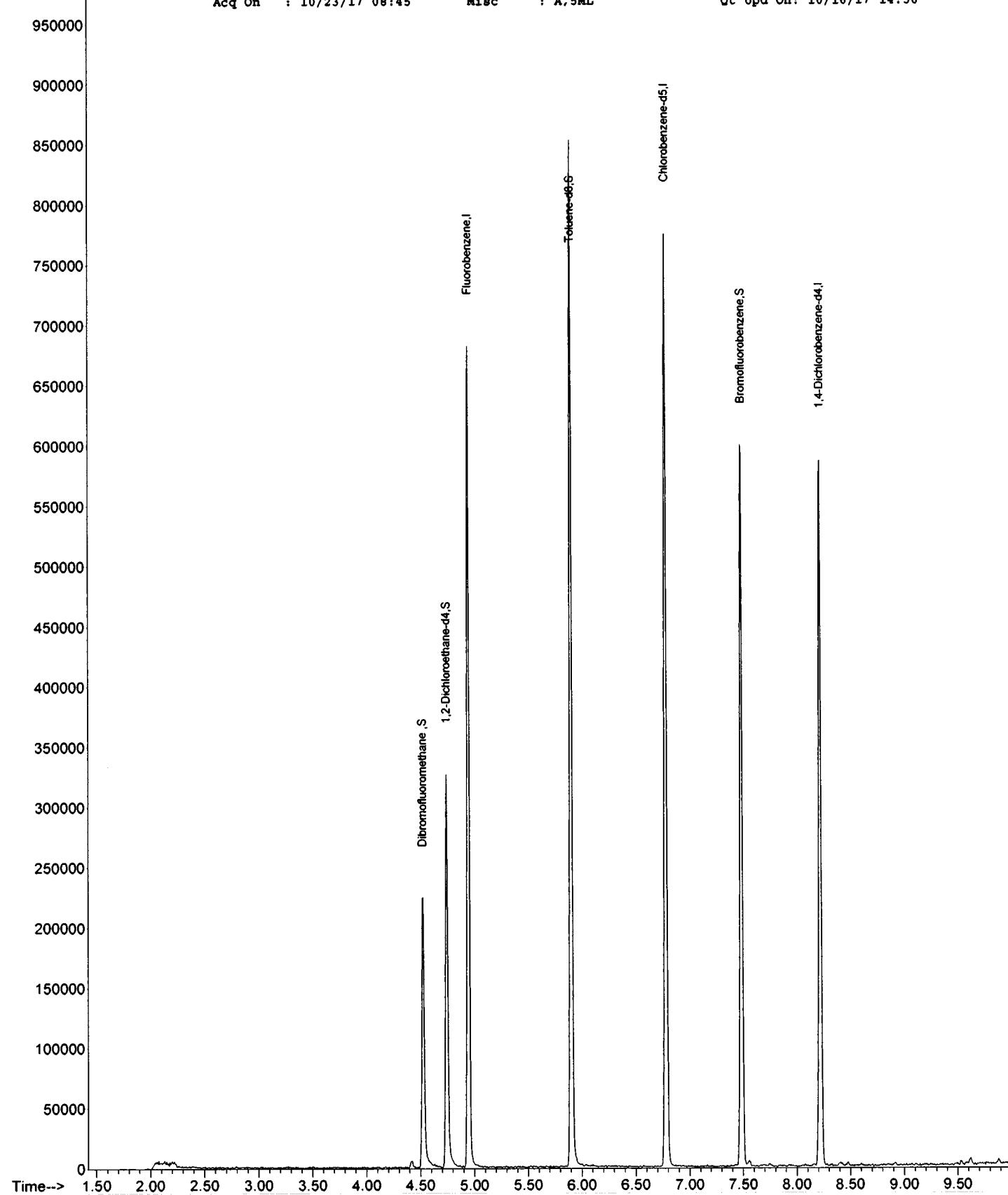
TIC: 3M118999.D\data.ms

Quant QT Reviewed

SampleID : DAILY BLANK
Data File: 3M118999.D
Acq On : 10/23/17 08:45

Operator : SG
Sam Mult : 1 Vial# : 7
Misc : A,5ML

Qt Meth : 3M_A1005.M
Qt On : 10/23/17 08:59
Qt Upd On: 10/16/17 14:36



Form3
Recovery Data Laboratory Limits
QC Batch: MBS64948

Data File	Sample ID:	Analysis Date
Spike or Dup: 3M118941.D	MBS64948	10/20/2017 6:34:00 PM
Non Spike(If applicable):		
Inst Blank(If applicable):		

Method: 8260C		Matrix: Aqueous		QC Type: MBS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	24.39	0	20	122	50	150
Dichlorodifluoromethane	1	14.8716	0	20	74	50	150
Chloromethane	1	17.8262	0	20	89	50	150
Bromomethane	1	18.1066	0	20	91	50	150
Vinyl Chloride	1	17.1397	0	20	86	50	150
Chloroethane	1	20.6948	0	20	103	50	150
Trichlorofluoromethane	1	19.7459	0	20	99	50	150
Ethyl ether	1	18.8877	0	20	94	50	150
Furan	1	18.1896	0	20	91	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	22.5936	0	20	113	50	150
Methylene Chloride	1	21.1273	0	20	106	70	130
Acrolein	1	86.516	0	100	87	50	150
Acrylonitrile	1	21.1676	0	20	106	50	150
Iodomethane	1	27.0664	0	20	135	50	150
Acetone	1	99.3282	0	100	99	50	150
Carbon Disulfide	1	30.1747	0	20	151*	50	150
t-Butyl Alcohol	1	80.8556	0	100	81	50	150
n-Hexane	1	22.1561	0	20	111	70	130
Di-isopropyl-ether	1	21.9208	0	20	110	70	130
1,1-Dichloroethene	1	20.0749	0	20	100	70	130
Methyl Acetate	1	20.2298	0	20	101	50	150
Methyl-t-butyl ether	1	21.1838	0	20	106	70	130
1,1-Dichloroethane	1	20.2727	0	20	101	70	130
trans-1,2-Dichloroethene	1	21.1595	0	20	106	70	130
Ethyl-t-butyl ether	1	21.5067	0	20	108	70	130
cis-1,2-Dichloroethene	1	20.7775	0	20	104	70	130
Bromochloromethane	1	18.8484	0	20	94	70	130
2,2-Dichloropropane	1	20.2809	0	20	101	70	130
Ethyl acetate	1	22.9635	0	20	115	50	150
1,4-Dioxane	1	1136.228	0	1000	114	50	150
1,1-Dichloropropene	1	23.151	0	20	116	70	130
Chloroform	1	21.2641	0	20	106	70	130
Cyclohexane	1	22.0565	0	20	110	70	130
1,2-Dichloroethane	1	21.6071	0	20	108	70	130
2-Butanone	1	21.2464	0	20	106	50	150
1,1,1-Trichloroethane	1	20.3996	0	20	102	70	130
Carbon Tetrachloride	1	21.3705	0	20	107	50	150
Vinyl Acetate	1	22.7083	0	20	114	50	150
Bromodichloromethane	1	20.3439	0	20	102	70	130
Methylcyclohexane	1	21.5733	0	20	108	70	130
Dibromomethane	1	20.7595	0	20	104	70	130
1,2-Dichloropropane	1	21.8659	0	20	109	70	130
Trichloroethene	1	22.0855	0	20	110	70	130
Benzene	1	21.5775	0	20	108	70	130
tert-Amyl methyl ether	1	20.3998	0	20	102	70	130
Iso-propylacetate	1	19.6972	0	20	98	70	130
Methyl methacrylate	1	20.2749	0	20	101	70	130
Dibromochloromethane	1	17.6592	0	20	88	70	130
2-Chloroethylvinylether	1	17.7538	0	20	89	70	130
cis-1,3-Dichloropropene	1	18.3181	0	20	92	70	130
trans-1,3-Dichloropropene	1	17.3886	0	20	87	70	130
Ethyl methacrylate	1	18.3058	0	20	92	70	130
1,1,2-Trichloroethane	1	18.0188	0	20	90	70	130
1,2-Dibromoethane	1	17.9639	0	20	90	70	130
1,3-Dichloropropane	1	18.6815	0	20	93	70	130
4-Methyl-2-Pentanone	1	18.511	0	20	93	50	150
2-Hexanone	1	19.523	0	20	98	50	150
Tetrachloroethene	1	19.6407	0	20	98	50	150
Toluene	1	19.92	0	20	100	70	130
1,1,1,2-Tetrachloroethane	1	18.418	0	20	92	70	130
Chlorobenzene	1	19.3114	0	20	97	70	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3

Recovery Data Laboratory Limits

QC Batch: MBS64948

n-Butyl acrylate	1	15.8781	0	20	79	70	130
n-Amyl acetate	1	17.9715	0	20	90	70	130
Bromoform	1	15.1186	0	20	76	70	130
Ethylbenzene	1	18.2546	0	20	91	70	130
1,1,2,2-Tetrachloroethane	1	17.521	0	20	88	70	130
Styrene	1	19.4936	0	20	97	70	130
m&p-Xylenes	1	36.3815	0	40	91	70	130
o-Xylene	1	19.069	0	20	95	70	130
trans-1,4-Dichloro-2-butene	1	16.3822	0	20	82	50	150
1,3-Dichlorobenzene	1	17.6859	0	20	88	70	130
1,4-Dichlorobenzene	1	16.6323	0	20	83	70	130
1,2-Dichlorobenzene	1	17.9475	0	20	90	70	130
Isopropylbenzene	1	18.4795	0	20	92	70	130
Cyclohexanone	1	73.7569	0	100	74	50	150
Camphene	1	15.884	0	20	79	70	130
1,2,3-Trichloropropane	1	16.4563	0	20	82	70	130
2-Chlorotoluene	1	18.6255	0	20	93	70	130
p-Ethyltoluene	1	17.01	0	20	85	70	130
4-Chlorotoluene	1	17.951	0	20	90	70	130
n-Propylbenzene	1	18.3687	0	20	92	70	130
Bromobenzene	1	17.9827	0	20	90	70	130
1,3,5-Trimethylbenzene	1	19.8119	0	20	99	70	130
Butyl methacrylate	1	17.2529	0	20	86	70	130
t-Butylbenzene	1	17.7415	0	20	89	70	130
1,2,4-Trimethylbenzene	1	17.6377	0	20	88	70	130
sec-Butylbenzene	1	17.6976	0	20	88	70	130
4-Isopropyltoluene	1	17.6752	0	20	88	70	130
n-Butylbenzene	1	16.591	0	20	83	70	130
p-Diethylbenzene	1	17.6847	0	20	88	70	130
1,2,4,5-Tetramethylbenzene	1	15.925	0	20	80	70	130
1,2-Dibromo-3-Chloropropane	1	13.1267	0	20	66	50	150
Camphor	1	161.8003	0	200	81	20	150
Hexachlorobutadiene	1	12.8036	0	20	64	50	150
1,2,4-Trichlorobenzene	1	15.2343	0	20	76	70	130
1,2,3-Trichlorobenzene	1	15.2251	0	20	76	70	130
Naphthalene	1	16.1034	0	20	81	50	150

SampleID : MBS Operator : WP Qt Meth : 3M_A1005.M
 Data File: 3M118941.D Sam Mult : 1 Qt On : 10/20/17 18:45
 Acq On : 10/20/17 18:34 Misc : A,5ML Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.947	96	365081	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.785	117	309966	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	137001	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.526	111	106844	30.24	ug/l	0.00
Spiked Amount 30.000				Recovery	= 100.80%	
39) 1,2-Dichloroethane-d4	4.748	67	81050	29.12	ug/l	0.00
Spiked Amount 30.000				Recovery	= 97.07%	
66) Toluene-d8	5.908	98	381468	27.61	ug/l	0.00
Spiked Amount 30.000				Recovery	= 92.03%	
76) Bromofluorobenzene	7.488	174	130636	27.01	ug/l	0.00
Spiked Amount 30.000				Recovery	= 90.03%	
Target Compounds						
5) Chlorodifluoromethane	1.581	51	110774m	24.3900	ug/l	Qvalue
6) Dichlorodifluoromethane	1.581	85	422222m	14.8716	ug/l	
7) Chloromethane	1.731	50	51874m	17.8262	ug/l	
8) Bromomethane	2.111	94	21343	18.1066	ug/l	81
9) Vinyl Chloride	1.831	62	39546	17.1397	ug/l	95
10) Chloroethane	2.195	64	29788m	20.6948	ug/l	
11) Trichlorofluoromethane	2.400	101	92250	19.7459	ug/l	90
12) Ethyl ether	2.634	59	50730	18.8877	ug/l	79
13) Furan	2.676	39	103376m	18.1896	ug/l	
14) 1,1,2-Trichloro-1,2,2-...	2.820	101	41970	22.5936	ug/l	91
15) Methylene Chloride	3.229	84	65569	21.1273	ug/l	76
16) Acrolein	2.754	56	41696	86.5160	ug/l	93
17) Acrylonitrile	3.439	53	21754	21.1676	ug/l	80
18) Iodomethane	2.970	142	60357	27.0664	ug/l	99
19) Acetone	2.880	43	103372	99.3282	ug/l	92
20) Carbon Disulfide	3.030	76	129030	30.1747	ug/l	100
21) t-Butyl Alcohol	3.301	59	25544	80.8556	ug/l	94
22) n-Hexane	3.661	57	26940	22.1561	ug/l	86
23) Di-isopropyl-ether	3.823	45	164922	21.9208	ug/l	90
24) 1,1-Dichloroethene	2.832	61	83088	20.0749	ug/l	98
25) Methyl Acetate	3.138	43	69986	20.2298	ug/l	100
26) Methyl-t-butyl ether	3.439	73	156908	21.1838	ug/l	65
27) 1,1-Dichloroethane	3.805	63	98625	20.2727	ug/l	97
28) trans-1,2-Dichloroethene	3.451	96	56586	21.1595	ug/l	93
29) Ethyl-t-butyl ether	4.088	59	186596	21.5067	ug/l	95
30) cis-1,2-Dichloroethene	4.220	61	113142	20.7775	ug/l	85
31) Bromochloromethane	4.382	49	45736	18.8484	ug/l	96
32) 2,2-Dichloropropane	4.220	77	82862	20.2809	ug/l	97
33) Ethyl acetate	4.244	43	65751m	22.9635	ug/l	
34) 1,4-Dioxane	5.391	88	40398	1136.2280	ug/l	76
35) 1,1-Dichloropropene	4.646	75	85796	23.1510	ug/l	98
36) Chloroform	4.424	83	128649	21.2641	ug/l	84
38) Cyclohexane	4.586	56	51623	22.0565	ug/l	93
40) 1,2-Dichloroethane	4.796	62	126179	21.6071	ug/l	90
41) 2-Butanone	4.232	43	30912m	21.2464	ug/l	
42) 1,1,1-Trichloroethane	4.550	97	103544	20.3996	ug/l	99
43) Carbon Tetrachloride	4.658	117	78438	21.3705	ug/l	88
44) Vinyl Acetate	3.823	43	120407	22.7083	ug/l	100
45) Bromodichloromethane	5.475	83	92955	20.3439	ug/l	96
46) Methylcyclohexane	5.295	83	36762	21.5733	ug/l	96
47) Dibromomethane	5.397	174	47067	20.7595	ug/l	90
48) 1,2-Dichloropropane	5.319	63	56595	21.8659	ug/l	99
49) Trichloroethene	5.175	130	61311	22.0855	ug/l	84
50) Benzene	4.784	78	215020	21.5775	ug/l	100
51) tert-Amyl methyl ether	4.826	73	147657	20.3998	ug/l	87
53) Iso-propylacetate	4.784	43	130189	19.6972	ug/l	97
54) Methyl methacrylate	5.349	41	78564	20.2749	ug/l	75
55) Dibromochloromethane	6.436	129	66975	17.6592	ug/l	97
56) 2-Chloroethylvinylether	5.631	63	37730	17.7538	ug/l	88
57) cis-1,3-Dichloropropene	5.739	75	87454	18.3181	ug/l	87
58) trans-1,3-Dichloropropene	6.064	75	83493	17.3886	ug/l	99
59) Ethyl methacrylate	6.076	41	71161m	18.3058	ug/l	
60) 1,1,2-Trichloroethane	6.184	97	56514	18.0188	ug/l	94
61) 1,2-Dibromoethane	6.520	107	59645	17.9639	ug/l	85
62) 1,3-Dichloropropane	6.286	76	104037	18.6815	ug/l	97
63) 4-Methyl-2-Pentanone	5.812	43	61691	18.5110	ug/l	74
64) 2-Hexanone	6.298	43	45448	19.5230	ug/l	89
65) Tetrachloroethene	6.274	164	39187	19.6407	ug/l	89
67) Toluene	5.944	92	135817	19.9200	ug/l	100

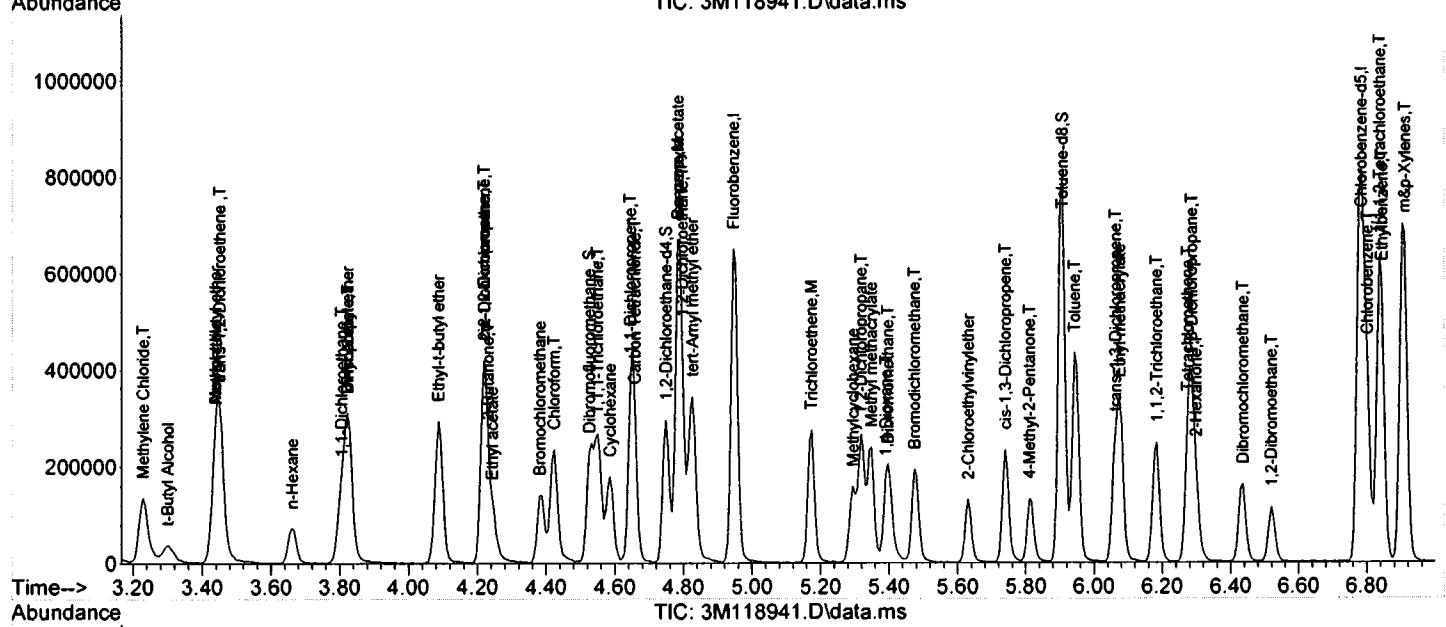
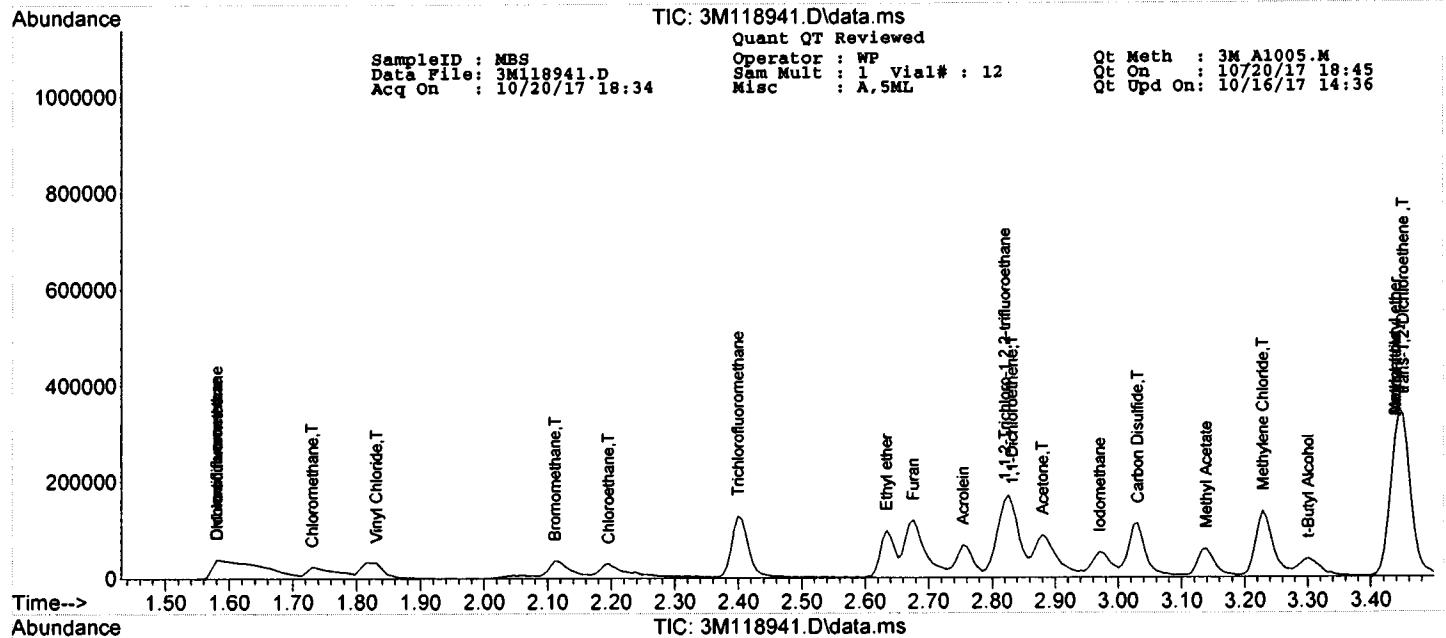
Quantitation Report (QT Reviewed)

SampleID : MBS Operator : WP Qt Meth : 3M_A1005.M
 Data File: 3M118941.D Sam Mult : 1 Vial# : 12 Qt On : 10/20/17 18:45
 Acq On : 10/20/17 18:34 Misc : A,5ML Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1,1,1,2-Tetrachloroethane	6.839	133	52499	18.4180	ug/l	89
69) Chlorobenzene	6.803	112	142642	19.3114	ug/l	97
71) n-Butyl acrylate	7.067	55	120577	15.8781	ug/l	95
72) n-Amyl acetate	7.193	43	106050	17.9715	ug/l	78
73) Bromoform	7.313	173	38822	15.1186	ug/l	87
74) Ethylbenzene	6.845	106	44016	18.2546	ug/l	89
75) 1,1,2,2-Tetrachloroethane	7.548	83	66811	17.5210	ug/l	90
77) Styrene	7.163	104	146373	19.4936	ug/l	96
78) m&p-Xylenes	6.911	106	147693	36.3815	ug/l	97
79) o-Xylene	7.157	106	77030	19.0690	ug/l	89
80) trans-1,4-Dichloro-2-b...	7.578	53	32583m	16.3822	ug/l	
81) 1,3-Dichlorobenzene	8.184	146	81034	17.6859	ug/l	92
82) 1,4-Dichlorobenzene	8.238	146	79991	16.6323	ug/l	98
83) 1,2-Dichlorobenzene	8.491	146	80825	17.9475	ug/l	95
84) Isopropylbenzene	7.367	105	155577	18.4795	ug/l	97
85) Cyclohexanone	7.476	55	11724	73.7569	ug/l	89
86) Camphene	7.560	93	44232	15.8840	ug/l	89
87) 1,2,3-Trichloropropane	7.596	75	86892	16.4563	ug/l	98
88) 2-Chlorotoluene	7.710	91	100371	18.6255	ug/l	95
89) p-Ethyltoluene	7.692	105	153140	17.0100	ug/l	80
90) 4-Chlorotoluene	7.770	91	104456	17.9510	ug/l	97
91) n-Propylbenzene	7.620	91	162545	18.3687	ug/l	99
92) Bromobenzene	7.608	77	151039	17.9827	ug/l	89
93) 1,3,5-Trimethylbenzene	7.722	105	117348	19.8119	ug/l	99
94) Butyl methacrylate	7.716	41	85116	17.2529	ug/l	98
95) t-Butylbenzene	7.938	119	97164	17.7415	ug/l	97
96) 1,2,4-Trimethylbenzene	7.968	105	125296	17.6377	ug/l	93
97) sec-Butylbenzene	8.076	105	111029	17.6976	ug/l	99
98) 4-Isopropyltoluene	8.154	119	92298	17.6752	ug/l	97
99) n-Butylbenzene	8.419	91	106023	16.5910	ug/l	93
100) p-Diethylbenzene	8.401	119	61833	17.6847	ug/l	93
101) 1,2,4,5-Tetramethylben...	8.911	119	81620	15.9250	ug/l	95
102) 1,2-Dibromo-3-Chloropr...	9.001	157	9270	13.1267	ug/l	91
103) Camphor	9.488	95	70479	161.8003	ug/l	92
104) Hexachlorobutadiene	9.620	225	14733	12.8036	ug/l	94
105) 1,2,4-Trichlorobenzene	9.542	180	29200	15.2343	ug/l	98
106) 1,2,3-Trichlorobenzene	9.884	180	25228	15.2251	ug/l	96
107) Naphthalene	9.728	128	82655	16.1034	ug/l	100

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



Form3
Recovery Data Laboratory Limits
QC Batch: MBS64949

Data File Spike or Dup: 3M118966.D	Sample ID: MBS64949	Analysis Date 10/21/2017 1:34:00 AM
Non Spike(If applicable):		
Inst Blank(If applicable):		

Method: 8260C		Matrix: Aqueous		QC Type: MBS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	23.7004	0	20	119	50	150
Dichlorodifluoromethane	1	14.1987	0	20	71	50	150
Chloromethane	1	17.0001	0	20	85	50	150
Bromomethane	1	18.1845	0	20	91	50	150
Vinyl Chloride	1	18.4996	0	20	92	50	150
Chloroethane	1	19.8549	0	20	99	50	150
Trichlorodifluoromethane	1	20.0004	0	20	100	50	150
Ethyl ether	1	17.6441	0	20	88	50	150
Furan	1	18.3667	0	20	92	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	21.8444	0	20	109	50	150
Methylene Chloride	1	19.831	0	20	99	70	130
Acrolein	1	88.3535	0	100	88	50	150
Acrylonitrile	1	19.0027	0	20	95	50	150
Iodomethane	1	26.6676	0	20	133	50	150
Acetone	1	94.1757	0	100	94	50	150
Carbon Disulfide	1	30.8523	0	20	154 *	50	150
t-Butyl Alcohol	1	69.763	0	100	70	50	150
n-Hexane	1	18.8816	0	20	94	70	130
Di-isopropyl-ether	1	21.355	0	20	107	70	130
1,1-Dichloroethene	1	20.0481	0	20	100	70	130
Methyl Acetate	1	19.0136	0	20	95	50	150
Methyl-t-butyl ether	1	19.7337	0	20	99	70	130
1,1-Dichloroethane	1	20.7994	0	20	104	70	130
trans-1,2-Dichloroethene	1	21.9148	0	20	110	70	130
Ethyl-t-butyl ether	1	19.1348	0	20	96	70	130
cis-1,2-Dichloroethene	1	20.1437	0	20	101	70	130
Bromochloromethane	1	18.1635	0	20	91	70	130
2,2-Dichloropropane	1	15.5747	0	20	78	70	130
Ethyl acetate	1	21.481	0	20	107	50	150
1,4-Dioxane	1	1073.024	0	1000	107	50	150
1,1-Dichloropropene	1	22.2834	0	20	111	70	130
Chloroform	1	20.4451	0	20	102	70	130
Cyclohexane	1	21.7992	0	20	109	70	130
1,2-Dichloroethane	1	21.6663	0	20	108	70	130
2-Butanone	1	18.674	0	20	93	50	150
1,1,1-Trichloroethane	1	20.1006	0	20	101	70	130
Carbon Tetrachloride	1	21.2107	0	20	106	50	150
Vinyl Acetate	1	21.9216	0	20	110	50	150
Bromodichloromethane	1	20.3391	0	20	102	70	130
Methylcyclohexane	1	21.8265	0	20	109	70	130
Dibromomethane	1	20.0724	0	20	100	70	130
1,2-Dichloropropane	1	20.705	0	20	104	70	130
Trichloroethene	1	21.8797	0	20	109	70	130
Benzene	1	21.196	0	20	106	70	130
tert-Amyl methyl ether	1	18.7834	0	20	94	70	130
Iso-propylacetate	1	18.1108	0	20	91	70	130
Methyl methacrylate	1	18.957	0	20	95	70	130
Dibromochloromethane	1	18.1358	0	20	91	70	130
2-Chloroethylvinylether	1	16.4733	0	20	82	70	130
cis-1,3-Dichloropropene	1	17.4986	0	20	87	70	130
trans-1,3-Dichloropropene	1	16.5938	0	20	83	70	130
Ethyl methacrylate	1	17.7921	0	20	89	70	130
1,1,2-Trichloroethane	1	17.8288	0	20	89	70	130
1,2-Dibromoethane	1	17.6077	0	20	88	70	130
1,3-Dichloropropane	1	18.5809	0	20	93	70	130
4-Methyl-2-Pentanone	1	17.8435	0	20	89	50	150
2-Hexanone	1	18.2179	0	20	91	50	150
Tetrachloroethene	1	20.173	0	20	101	50	150
Toluene	1	19.1342	0	20	96	70	130
1,1,1,2-Tetrachloroethane	1	19.2741	0	20	96	70	130
Chlorobenzene	1	19.2517	0	20	96	70	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3

Recovery Data Laboratory Limits

QC Batch: MBS64949

n-Butyl acrylate	1	15.671	0	20	78	70	130
n-Amyl acetate	1	17.6456	0	20	88	70	130
Bromoform	1	16.1328	0	20	81	70	130
Ethylbenzene	1	19.4302	0	20	97	70	130
1,1,2,2-Tetrachloroethane	1	16.9454	0	20	85	70	130
Styrene	1	19.0236	0	20	95	70	130
m&p-Xylenes	1	36.6489	0	40	92	70	130
o-Xylene	1	19.4703	0	20	97	70	130
trans-1,4-Dichloro-2-butene	1	16.2728	0	20	81	50	150
1,3-Dichlorobenzene	1	18.0734	0	20	90	70	130
1,4-Dichlorobenzene	1	17.7339	0	20	89	70	130
1,2-Dichlorobenzene	1	18.3893	0	20	92	70	130
Isopropylbenzene	1	19.5349	0	20	98	70	130
Cyclohexanone	1	71.4784	0	100	71	50	150
Camphene	1	16.9272	0	20	85	70	130
1,2,3-Trichloropropane	1	15.909	0	20	80	70	130
2-Chlorotoluene	1	20.1483	0	20	101	70	130
p-Ethyltoluene	1	18.1462	0	20	91	70	130
4-Chlorotoluene	1	19.2251	0	20	96	70	130
n-Propylbenzene	1	19.3519	0	20	97	70	130
Bromobenzene	1	16.5611	0	20	83	70	130
1,3,5-Trimethylbenzene	1	21.3233	0	20	107	70	130
Butyl methacrylate	1	17.2578	0	20	86	70	130
t-Butylbenzene	1	19.1822	0	20	96	70	130
1,2,4-Trimethylbenzene	1	19.6474	0	20	98	70	130
sec-Butylbenzene	1	19.4774	0	20	97	70	130
4-Isopropyltoluene	1	19.5251	0	20	98	70	130
n-Butylbenzene	1	18.8893	0	20	94	70	130
p-Diethylbenzene	1	19.4959	0	20	97	70	130
1,2,4,5-Tetramethylbenzene	1	20.0164	0	20	100	70	130
1,2-Dibromo-3-Chloropropane	1	12.6767	0	20	63	50	150
Camphor	1	157.185	0	200	79	20	150
Hexachlorobutadiene	1	14.8082	0	20	74	50	150
1,2,4-Trichlorobenzene	1	18.3437	0	20	92	70	130
1,2,3-Trichlorobenzene	1	18.0827	0	20	90	70	130
Naphthalene	1	18.0165	0	20	90	50	150

SampleID : MBS Operator : WP Qt Meth : 3M_A1005.M
 Data File: 3M118966.D Sam Mult : 1 Qt On : 10/23/17 12:39
 Acq On : 10/21/17 01:34 Misc : A,5ML Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.947	96	375236	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.780	117	312847	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.215	152	137321	30.00	ug/l	-0.01
System Monitoring Compounds						
37) Dibromofluoromethane	4.521	111	111752	30.77	ug/l	-0.01
Spiked Amount 30.000				Recovery	=	102.57%
39) 1,2-Dichloroethane-d4	4.743	67	84174	29.43	ug/l	-0.01
Spiked Amount 30.000				Recovery	=	98.10%
66) Toluene-d8	5.903	98	386430	27.72	ug/l	0.00
Spiked Amount 30.000				Recovery	=	92.40%
76) Bromofluorobenzene	7.488	174	136017	28.06	ug/l	0.00
Spiked Amount 30.000				Recovery	=	93.53%
Target Compounds						
5) Chlorodifluoromethane	1.579	51	110636m	23.7004	ug/l	
6) Dichlorodifluoromethane	1.579	85	41433m	14.1987	ug/l	
7) Chloromethane	1.729	50	50846m	17.0001	ug/l	
8) Bromomethane	2.106	94	22031	18.1845	ug/l	76
9) Vinyl Chloride	1.812	62	43871	18.4996	ug/l	92
10) Chloroethane	2.190	64	29374m	19.8549	ug/l	
11) Trichlorofluoromethane	2.394	101	96038	20.0004	ug/l	85
12) Ethyl ether	2.629	59	48708	17.6441	ug/l	77
13) Furan	2.665	39	107286m	18.3667	ug/l	
14) 1,1,2-Trichloro-1,2,2-...	2.809	101	41707	21.8444	ug/l	90
15) Methylene Chloride	3.223	84	63258	19.8310	ug/l	85
16) Acrolein	2.749	56	43766	88.3535	ug/l	82
17) Acrylonitrile	3.434	53	20073	19.0027	ug/l	92
18) Iodomethane	2.965	142	61122	26.6676	ug/l	98
19) Acetone	2.875	43	100736	94.1757	ug/l	95
20) Carbon Disulfide	3.019	76	135597	30.8523	ug/l	100
21) t-Butyl Alcohol	3.295	59	22655	69.7630	ug/l	77
22) n-Hexane	3.656	57	23591	18.8816	ug/l	87
23) Di-isopropyl-ether	3.818	45	165134	21.3550	ug/l	93
24) 1,1-Dichloroethene	2.827	61	85285	20.0481	ug/l	96
25) Methyl Acetate	3.127	43	67608m	19.0136	ug/l	
26) Methyl-t-butyl ether	3.434	73	150233	19.7337	ug/l	66
27) 1,1-Dichloroethane	3.800	63	104002	20.7994	ug/l	96
28) trans-1,2-Dichloroethene	3.446	96	60236	21.9148	ug/l	92
29) Ethyl-t-butyl ether	4.082	59	170635	19.1348	ug/l	94
30) cis-1,2-Dichloroethene	4.215	61	112742	20.1437	ug/l	80
31) Bromochloromethane	4.377	49	45300	18.1635	ug/l	94
32) 2,2-Dichloropropane	4.215	77	65404	15.5747	ug/l	98
33) Ethyl acetate	4.239	43	63217m	21.4810	ug/l	
34) 1,4-Dioxane	5.386	88	39212	1073.0238	ug/l	79
35) 1,1-Dichloropropene	4.647	75	84878	22.2834	ug/l	96
36) Chloroform	4.419	83	127135	20.4451	ug/l	88
38) Cyclohexane	4.581	56	52440	21.7992	ug/l	97
40) 1,2-Dichloroethane	4.791	62	130039	21.6663	ug/l	94
41) 2-Butanone	4.227	43	27925m	18.6740	ug/l	
42) 1,1,1-Trichloroethane	4.545	97	104864	20.1006	ug/l	98
43) Carbon Tetrachloride	4.653	117	80017	21.2107	ug/l	97
44) Vinyl Acetate	3.818	43	119469	21.9216	ug/l	100
45) Bromodichloromethane	5.470	83	95518	20.3391	ug/l	95
46) Methylcyclohexane	5.290	83	38228	21.8265	ug/l	97
47) Dibromomethane	5.392	174	46775	20.0724	ug/l	95
48) 1,2-Dichloropropane	5.314	63	55081	20.7050	ug/l	93
49) Trichloroethene	5.170	130	62429	21.8797	ug/l	87
50) Benzene	4.779	78	217093	21.1960	ug/l	100
51) tert-Amyl methyl ether	4.821	73	139739	18.7834	ug/l	85
53) Iso-propylacetate	4.779	43	120816	18.1108	ug/l	94
54) Methyl methacrylate	5.344	41	74140	18.9570	ug/l	69
55) Dibromochloromethane	6.431	129	69422	18.1358	ug/l	93
56) 2-Chloroethylvinylether	5.626	63	35334	16.4733	ug/l	85
57) cis-1,3-Dichloropropene	5.734	75	84318	17.4986	ug/l	93
58) trans-1,3-Dichloropropene	6.059	75	80417	16.5938	ug/l	95
59) Ethyl methacrylate	6.071	41	69807	17.7921	ug/l	53
60) 1,1,2-Trichloroethane	6.179	97	56438	17.8288	ug/l	93
61) 1,2-Dibromoethane	6.515	107	59006	17.6077	ug/l	85
62) 1,3-Dichloropropane	6.281	76	104438	18.5809	ug/l	100
63) 4-Methyl-2-Pentanone	5.812	43	60019	17.8435	ug/l	86
64) 2-Hexanone	6.299	43	42804	18.2179	ug/l	75
65) Tetrachloroethene	6.275	164	40623	20.1730	ug/l	95
67) Toluene	5.945	92	131672	19.1342	ug/l	95

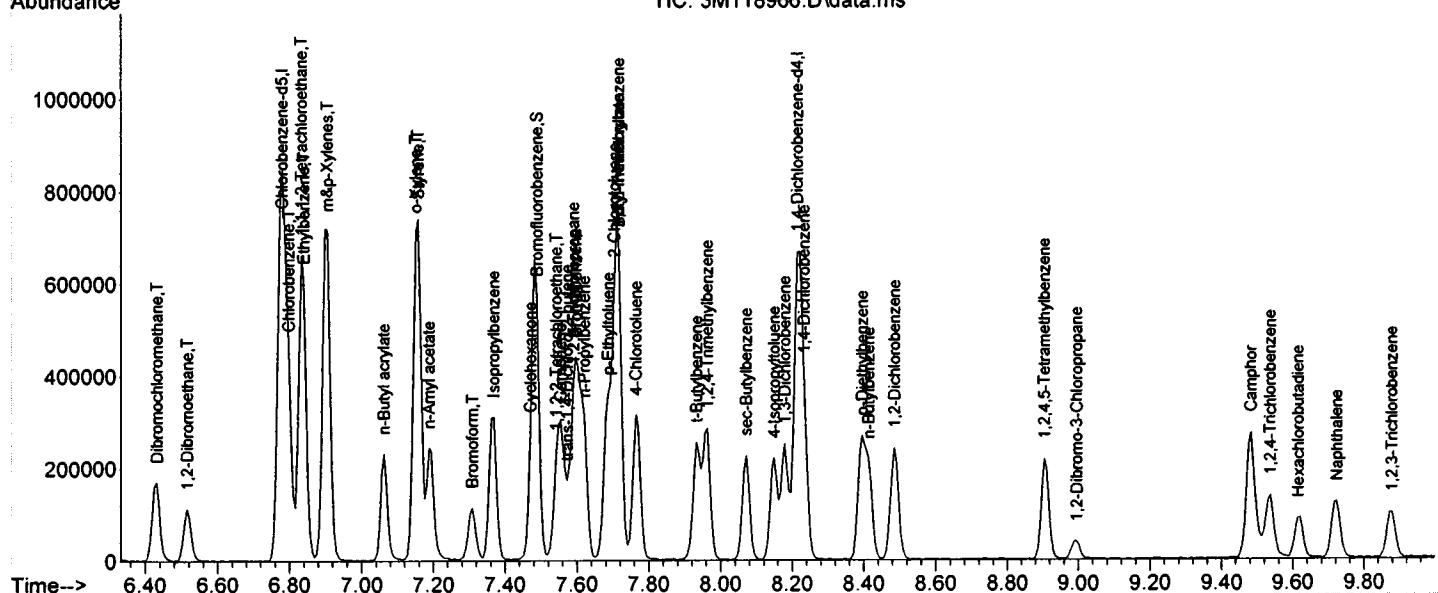
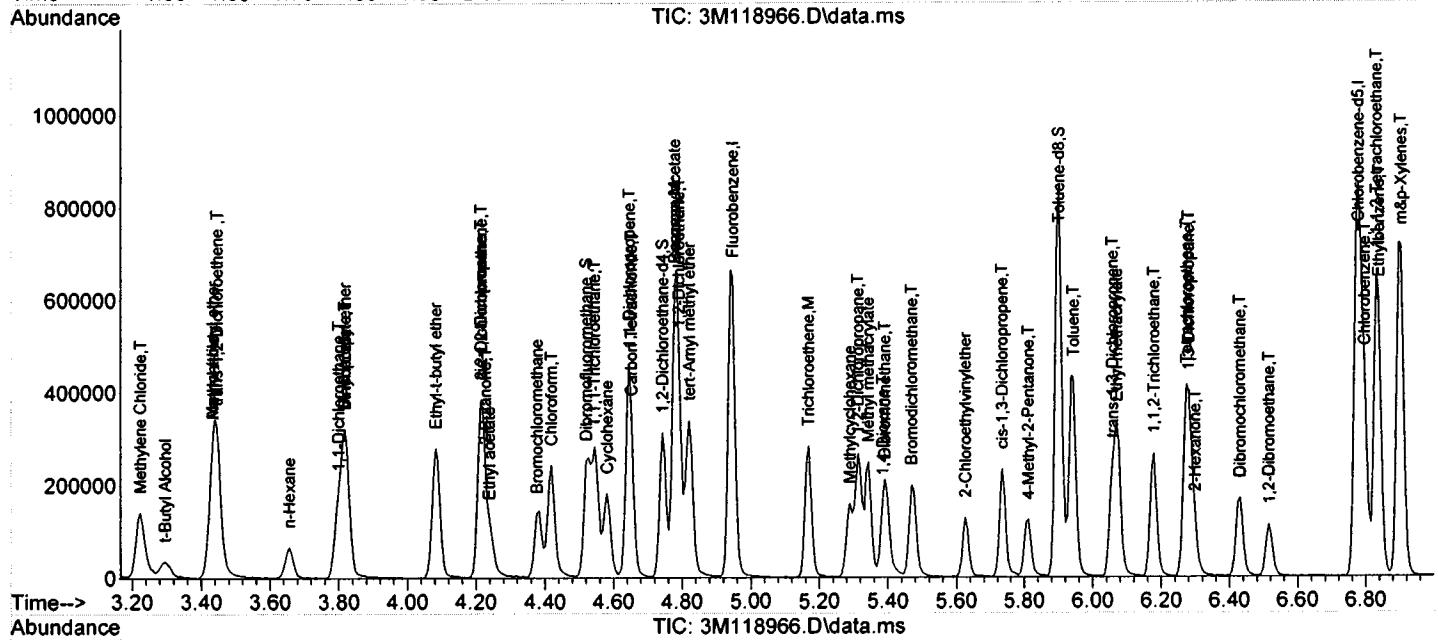
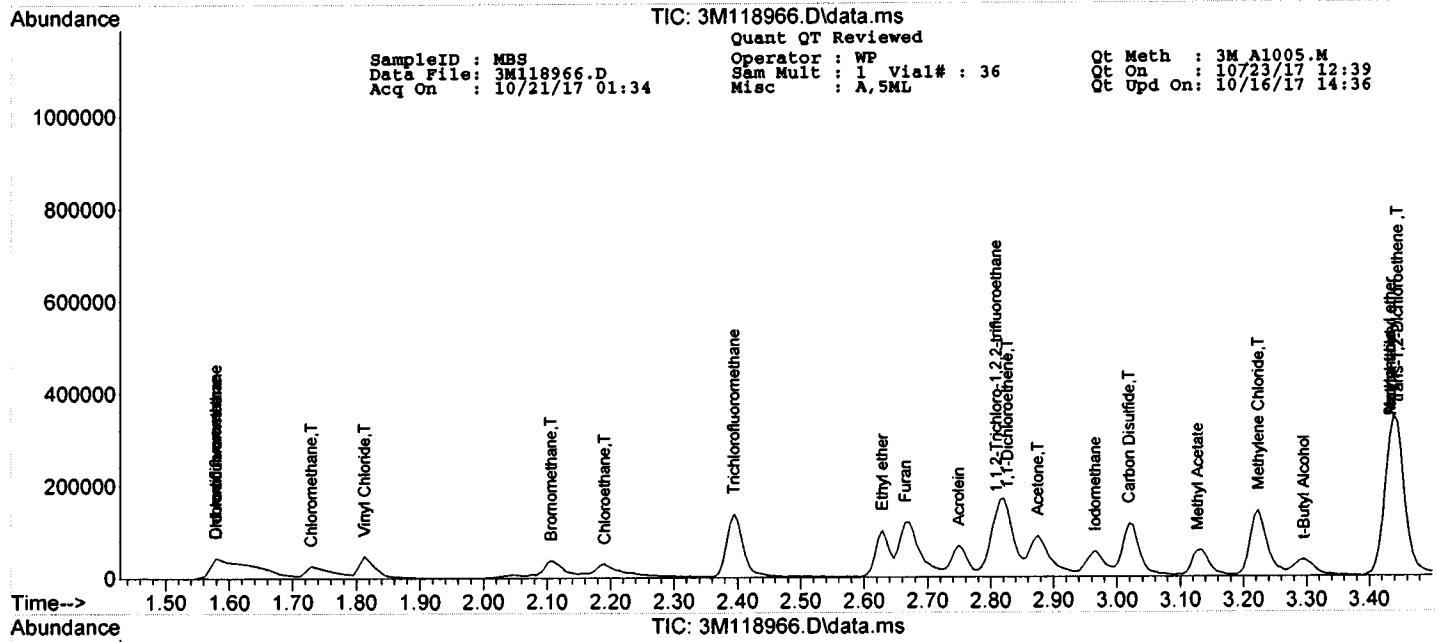
Quantitation Report (QT Reviewed)

SampleID : MBS Operator : WP Qt Meth : 3M_A1005.M
 Data File: 3M118966.D Sam Mult : 1 Vial# : 36 Qt On : 10/23/17 12:39
 Acq On : 10/21/17 01:34 Misc : A,5ML Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
68) 1,1,1,2-Tetrachloroethane	6.834	133	55450	19.2741	ug/l	85
69) Chlorobenzene	6.798	112	143523	19.2517	ug/l	94
71) n-Butyl acrylate	7.062	55	119282	15.6710	ug/l	94
72) n-Amyl acetate	7.188	43	104370	17.6456	ug/l	78
73) Bromoform	7.308	173	41523	16.1328	ug/l	98
74) Ethylbenzene	6.840	106	46960	19.4302	ug/l	86
75) 1,1,2,2-Tetrachloroethane	7.542	83	64767	16.9454	ug/l	88
77) Styrene	7.158	104	143178	19.0236	ug/l	84
78) m&p-Xylenes	6.906	106	149126	36.6489	ug/l	98
79) o-Xylene	7.152	106	78835	19.4703	ug/l	89
80) trans-1,4-Dichloro-2-b...	7.572	53	32441m	16.2728	ug/l	
81) 1,3-Dichlorobenzene	8.179	146	83003	18.0734	ug/l	94
82) 1,4-Dichlorobenzene	8.233	146	85488	17.7339	ug/l	98
83) 1,2-Dichlorobenzene	8.486	146	83008	18.3893	ug/l	95
84) Isopropylbenzene	7.368	105	164846	19.5349	ug/l	98
85) Cyclohexanone	7.470	55	11386	71.4784	ug/l	87
86) Camphene	7.554	93	47247	16.9272	ug/l	92
87) 1,2,3-Trichloropropane	7.590	75	84198	15.9090	ug/l	99
88) 2-Chlorotoluene	7.705	91	108831	20.1483	ug/l	94
89) p-Ethyltoluene	7.687	105	163750	18.1462	ug/l	79
90) 4-Chlorotoluene	7.765	91	112131	19.2251	ug/l	97
91) n-Propylbenzene	7.620	91	171645	19.3519	ug/l	98
92) Bromobenzene	7.596	77	139424	16.5611	ug/l	94
93) 1,3,5-Trimethylbenzene	7.717	105	126595	21.3233	ug/l	98
94) Butyl methacrylate	7.717	41	85339	17.2578	ug/l	97
95) t-Butylbenzene	7.933	119	105300	19.1822	ug/l	96
96) 1,2,4-Trimethylbenzene	7.963	105	139899	19.6474	ug/l	95
97) sec-Butylbenzene	8.071	105	122480	19.4774	ug/l	98
98) 4-Isopropyltoluene	8.149	119	102196	19.5251	ug/l	97
99) n-Butylbenzene	8.413	91	120992	18.8893	ug/l	93
100) p-Diethylbenzene	8.395	119	68325	19.4959	ug/l	92
101) 1,2,4,5-Tetramethylben...	8.906	119	102829	20.0164	ug/l	96
102) 1,2-Dibromo-3-Chloropr...	8.996	157	8971	12.6767	ug/l	96
103) Camphor	9.483	95	68628m	157.1850	ug/l	
104) Hexachlorobutadiene	9.615	225	17066	14.8082	ug/l	90
105) 1,2,4-Trichlorobenzene	9.537	180	35242	18.3437	ug/l	98
106) 1,2,3-Trichlorobenzene	9.879	180	30033	18.0827	ug/l	98
107) Naphthalene	9.723	128	92691	18.0165	ug/l	100

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



Form3
Recovery Data Laboratory Limits
QC Batch: MBS64955

Data File		Sample ID:		Analysis Date									
Spike or Dup: 3M119009.D		MBS64955		10/23/2017 11:34:00 A									
Non Spike(If applicable):													
Inst Blank(If applicable):													
Method: 8260C		Matrix: Aqueous		QC Type: MBS									
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit						
Chlorodifluoromethane	1	25.7619	0	20	129	50	150						
Dichlorodifluoromethane	1	12.8901	0	20	64	50	150						
Chloromethane	1	18.163	0	20	91	50	150						
Bromomethane	1	15.8142	0	20	79	50	150						
Vinyl Chloride	1	17.8265	0	20	89	50	150						
Chloroethane	1	20.8096	0	20	104	50	150						
Trichlorofluoromethane	1	20.4349	0	20	102	50	150						
Ethyl ether	1	20.3968	0	20	102	50	150						
Furan	1	18.148	0	20	91	50	150						
1,1,2-Trichloro-1,2,2-trifluoroethane	1	23.5836	0	20	118	50	150						
Methylene Chloride	1	21.9367	0	20	110	70	130						
Acrolein	1	81.4269	0	100	81	50	150						
Acrylonitrile	1	23.3859	0	20	117	50	150						
Iodomethane	1	29.1281	0	20	146	50	150						
Acetone	1	113.7067	0	100	114	50	150						
Carbon Disulfide	1	31.3471	0	20	157*	50	150						
t-Butyl Alcohol	1	93.6259	0	100	94	50	150						
n-Hexane	1	22.6927	0	20	113	70	130						
Di-isopropyl-ether	1	24.9834	0	20	125	70	130						
1,1-Dichloroethene	1	20.6338	0	20	103	70	130						
Methyl Acetate	1	22.32	0	20	112	50	150						
Methyl-t-butyl ether	1	23.2715	0	20	116	70	130						
1,1-Dichloroethane	1	22.5862	0	20	113	70	130						
trans-1,2-Dichloroethene	1	22.869	0	20	114	70	130						
Ethyl-t-butyl ether	1	23.815	0	20	119	70	130						
cis-1,2-Dichloroethene	1	23.5505	0	20	118	70	130						
Bromochloromethane	1	21.3034	0	20	107	70	130						
2,2-Dichloropropane	1	21.8742	0	20	109	70	130						
Ethyl acetate	1	23.1784	0	20	116	50	150						
1,4-Dioxane	1	1336.475	0	1000	134	50	150						
1,1-Dichloropropene	1	23.8606	0	20	119	70	130						
Chloroform	1	22.3315	0	20	112	70	130						
Cyclohexane	1	25.0178	0	20	125	70	130						
1,2-Dichloroethane	1	23.3362	0	20	117	70	130						
2-Butanone	1	20.1832	0	20	101	50	150						
1,1,1-Trichloroethane	1	21.5249	0	20	108	70	130						
Carbon Tetrachloride	1	22.2062	0	20	111	50	150						
Vinyl Acetate	1	24.9436	0	20	125	50	150						
Bromodichloromethane	1	21.3985	0	20	107	70	130						
Methylcyclohexane	1	22.9443	0	20	115	70	130						
Dibromomethane	1	23.0238	0	20	115	70	130						
1,2-Dichloropropane	1	22.8545	0	20	114	70	130						
Trichloroethene	1	24.5984	0	20	123	70	130						
Benzene	1	23.9565	0	20	120	70	130						
tert-Amyl methyl ether	1	24.2302	0	20	121	70	130						
Iso-propylacetate	1	20.7635	0	20	104	70	130						
Methyl methacrylate	1	21.0012	0	20	105	70	130						
Dibromochloromethane	1	18.4147	0	20	92	70	130						
2-Chloroethylvinylether	1	20.5502	0	20	103	70	130						
cis-1,3-Dichloropropene	1	19.0332	0	20	95	70	130						
trans-1,3-Dichloropropene	1	18.8281	0	20	94	70	130						
Ethyl methacrylate	1	20.4816	0	20	102	70	130						
1,1,2-Trichloroethane	1	19.5874	0	20	98	70	130						
1,2-Dibromoethane	1	19.2206	0	20	96	70	130						
1,3-Dichloropropane	1	20.3906	0	20	102	70	130						
4-Methyl-2-Pentanone	1	22.1176	0	20	111	50	150						
2-Hexanone	1	21.2891	0	20	106	50	150						
Tetrachloroethene	1	20.8485	0	20	104	50	150						
Toluene	1	20.8145	0	20	104	70	130						
1,1,1,2-Tetrachloroethane	1	20.1966	0	20	101	70	130						
Chlorobenzene	1	20.4345	0	20	102	70	130						

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3

Recovery Data Laboratory Limits

QC Batch: MBS64955

n-Butyl acrylate	1	17.4421	0	20	87	70	130
n-Amyl acetate	1	20.6821	0	20	103	70	130
Bromoform	1	15.8151	0	20	79	70	130
Ethylbenzene	1	21.2331	0	20	106	70	130
1,1,2,2-Tetrachloroethane	1	17.8568	0	20	89	70	130
Styrene	1	20.7965	0	20	104	70	130
m&p-Xylenes	1	39.8676	0	40	100	70	130
o-Xylene	1	21.1719	0	20	106	70	130
trans-1,4-Dichloro-2-butene	1	16.9968	0	20	85	50	150
1,3-Dichlorobenzene	1	19.1155	0	20	96	70	130
1,4-Dichlorobenzene	1	19.4623	0	20	97	70	130
1,2-Dichlorobenzene	1	19.0748	0	20	95	70	130
Isopropylbenzene	1	19.6785	0	20	98	70	130
Cyclohexanone	1	142.4123	0	100	142	50	150
Camphene	1	18.2491	0	20	91	70	130
1,2,3-Trichloropropane	1	18.4349	0	20	92	70	130
2-Chlorotoluene	1	20.6209	0	20	103	70	130
p-Ethyltoluene	1	19.5848	0	20	98	70	130
4-Chlorotoluene	1	20.5441	0	20	103	70	130
n-Propylbenzene	1	19.8281	0	20	99	70	130
Bromobenzene	1	18.4992	0	20	92	70	130
1,3,5-Trimethylbenzene	1	19.8341	0	20	99	70	130
Butyl methacrylate	1	18.3247	0	20	92	70	130
t-Butylbenzene	1	19.7037	0	20	99	70	130
1,2,4-Trimethylbenzene	1	19.9506	0	20	100	70	130
sec-Butylbenzene	1	19.1284	0	20	96	70	130
4-Isopropyltoluene	1	19.1132	0	20	96	70	130
n-Butylbenzene	1	18.5022	0	20	93	70	130
p-Diethylbenzene	1	19.1668	0	20	96	70	130
1,2,4,5-Tetramethylbenzene	1	19.3477	0	20	97	70	130
1,2-Dibromo-3-Chloropropane	1	14.7857	0	20	74	50	150
Camphor	1	181.5644	0	200	91	20	150
Hexachlorobutadiene	1	14.5861	0	20	73	50	150
1,2,4-Trichlorobenzene	1	18.0187	0	20	90	70	130
1,2,3-Trichlorobenzene	1	18.001	0	20	90	70	130
Naphthalene	1	19.0075	0	20	95	50	150

SampleID : MBS Operator : SG Qt Meth : 3M A1005.M
 Data File: 3M119009.D Sam Mult : 1 Vial# : 14 Qt On : 10/23/17 15:06
 Acq On : 10/23/17 11:34 Misc : A,5ML Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-23-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<hr/>						
Internal Standards						
4) Fluorobenzene	4.946	96	372390	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.778	117	323105	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	140282	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.525	111	106578	29.57	ug/l	0.00
Spiked Amount 30.000				Recovery	=	98.57%
39) 1,2-Dichloroethane-d4	4.748	67	82477	29.06	ug/l	0.00
Spiked Amount 30.000				Recovery	=	96.87%
66) Toluene-d8	5.901	98	395300	27.45	ug/l	0.00
Spiked Amount 30.000				Recovery	=	91.50%
76) Bromofluorobenzene	7.487	174	142935	28.86	ug/l	0.00
Spiked Amount 30.000				Recovery	=	96.20%
Target Compounds				Qvalue		
5) Chlorodifluoromethane	1.626	51	119347	25.7619	ug/l	63
6) Dichlorodifluoromethane	1.576	85	37329	12.8901	ug/l	95
7) Chloromethane	1.726	50	53912	18.1630	ug/l	77
8) Bromomethane	2.105	94	19014	15.8142	ug/l	82
9) Vinyl Chloride	1.826	62	41954	17.8265	ug/l	94
10) Chloroethane	2.195	64	30553	20.8096	ug/l	89
11) Trichlorofluoromethane	2.399	101	97380	20.4349	ug/l	88
12) Ethyl ether	2.633	59	55880	20.3968	ug/l	78
13) Furan	2.669	39	105204	18.1480	ug/l	75
14) 1,1,2-Trichloro-1,2,2-...	2.813	101	44686	23.5836	ug/l	91
15) Methylene Chloride	3.222	84	69444	21.9367	ug/l	84
16) Acrolein	2.753	56	40029	81.4269	ug/l	98
17) Acrylonitrile	3.438	53	24514	23.3859	ug/l	93
18) Iodomethane	2.970	142	66255	29.1281	ug/l	90
19) Acetone	2.880	43	120705	113.7067	ug/l	97
20) Carbon Disulfide	3.024	76	136727	31.3471	ug/l	100
21) t-Butyl Alcohol	3.300	59	30167	93.6259	ug/l	85
22) n-Hexane	3.654	57	28146	22.6927	ug/l	85
23) Di-isopropyl-ether	3.823	45	191727	24.9834	ug/l	88
24) 1,1-Dichloroethene	2.831	61	87111	20.6338	ug/l	99
25) Methyl Acetate	3.132	43	78763	22.3200	ug/l	100
26) Methyl-t-butyl ether	3.438	73	175822	23.2715	ug/l	66
27) 1,1-Dichloroethane	3.799	63	112080	22.5862	ug/l	99
28) trans-1,2-Dichloroethene	3.450	96	62382	22.8690	ug/l	95
29) Ethyl-t-butyl ether	4.087	59	210760	23.8150	ug/l	96
30) cis-1,2-Dichloroethene	4.219	61	130810	23.5505	ug/l	89
31) Bromochloromethane	4.381	49	52728	21.3034	ug/l	91
32) 2,2-Dichloropropane	4.219	77	91161	21.8742	ug/l	92
33) Ethyl acetate	4.243	43	67695m	23.1784	ug/l	
34) 1,4-Dioxane	5.390	88	48469	1336.4752	ug/l	87
35) 1,1-Dichloropropene	4.646	75	90196	23.8606	ug/l	96
36) Chloroform	4.417	83	137812	22.3315	ug/l	90
38) Cyclohexane	4.579	56	59726	25.0178	ug/l	100
40) 1,2-Dichloroethane	4.790	62	138851	23.3362	ug/l	97
41) 2-Butanone	4.225	43	29953m	20.1832	ug/l	
42) 1,1,1-Trichloroethane	4.549	97	111443	21.5249	ug/l	95
43) Carbon Tetrachloride	4.652	117	83137	22.2062	ug/l	95
44) Vinyl Acetate	3.823	43	134907	24.9436	ug/l	100
45) Bromodichloromethane	5.475	83	99731	21.3985	ug/l	93
46) Methylcyclohexane	5.288	83	39881	22.9443	ug/l	97
47) Dibromomethane	5.396	174	53246	23.0238	ug/l	91
48) 1,2-Dichloropropane	5.318	63	60338	22.8545	ug/l	94
49) Trichloroethene	5.168	130	69654	24.5984	ug/l	84
50) Benzene	4.784	78	243506	23.9565	ug/l	100
51) tert-Amyl methyl ether	4.820	73	178893	24.2302	ug/l	84
53) Iso-propylacetate	4.778	43	143054	20.7635	ug/l	88
54) Methyl methacrylate	5.342	41	84828	21.0012	ug/l	73
55) Dibromochloromethane	6.430	129	72801	18.4147	ug/l	97
56) 2-Chloroethylvinylether	5.631	63	45524	20.5502	ug/l	86
57) cis-1,3-Dichloropropene	5.739	75	94720	19.0332	ug/l	92
58) trans-1,3-Dichloropropene	6.057	75	94237	18.8281	ug/l	96
59) Ethyl methacrylate	6.075	41	82994	20.4816	ug/l	51
60) 1,1,2-Trichloroethane	6.177	97	64038	19.5874	ug/l	93
61) 1,2-Dibromoethane	6.514	107	66523	19.2206	ug/l	95
62) 1,3-Dichloropropane	6.285	76	118368	20.3906	ug/l	99
63) 4-Methyl-2-Pentanone	5.811	43	76835	22.1176	ug/l	85
64) 2-Hexanone	6.297	43	51660	21.2891	ug/l	90
65) Tetrachloroethene	6.273	164	43360	20.8485	ug/l	93
67) Toluene	5.943	92	147932	20.8145	ug/l	95

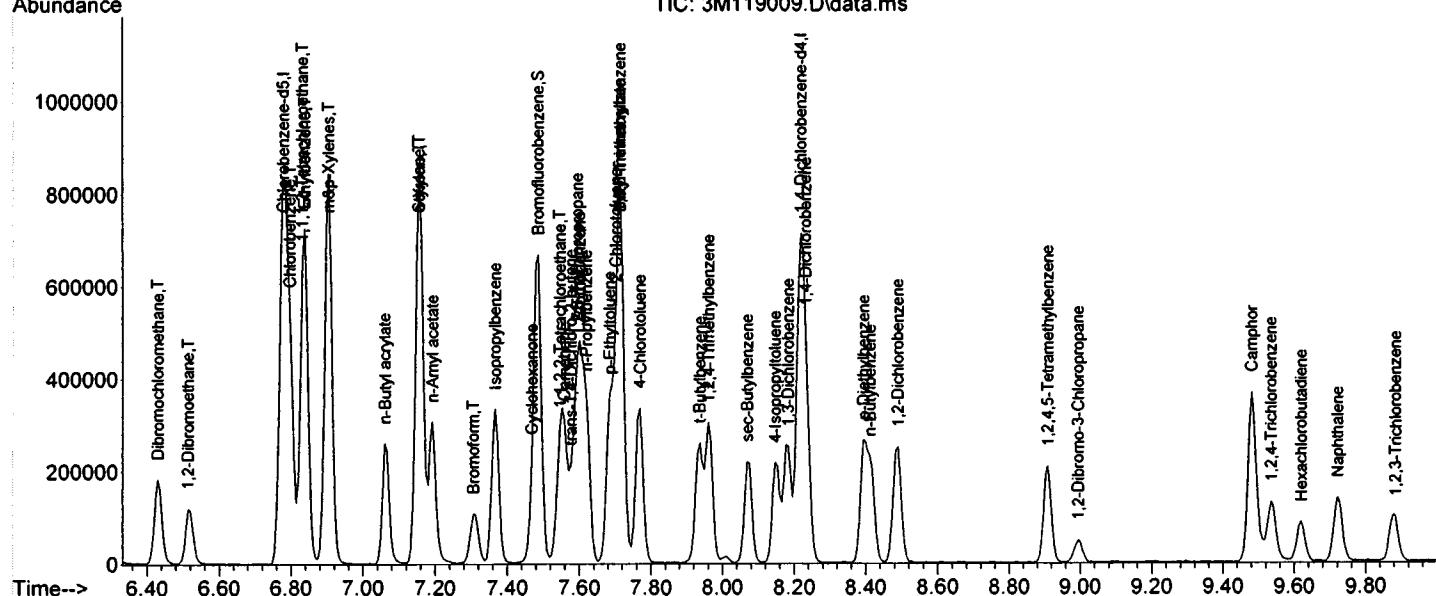
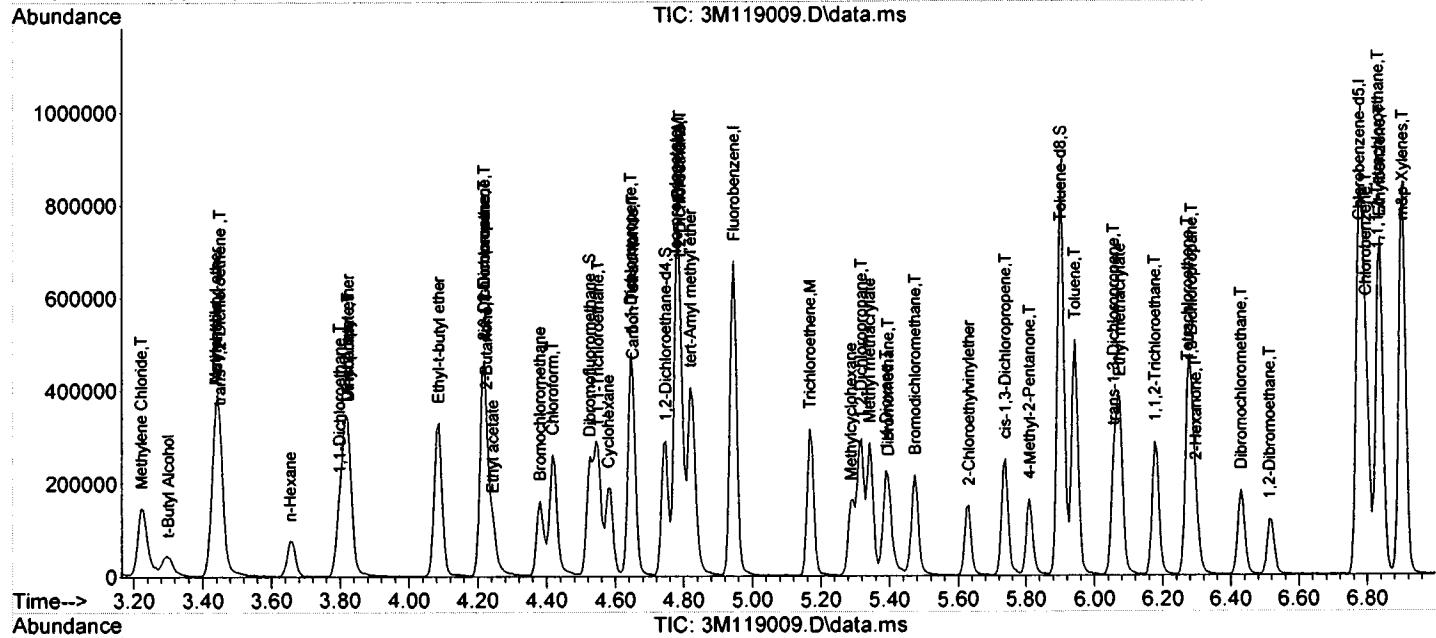
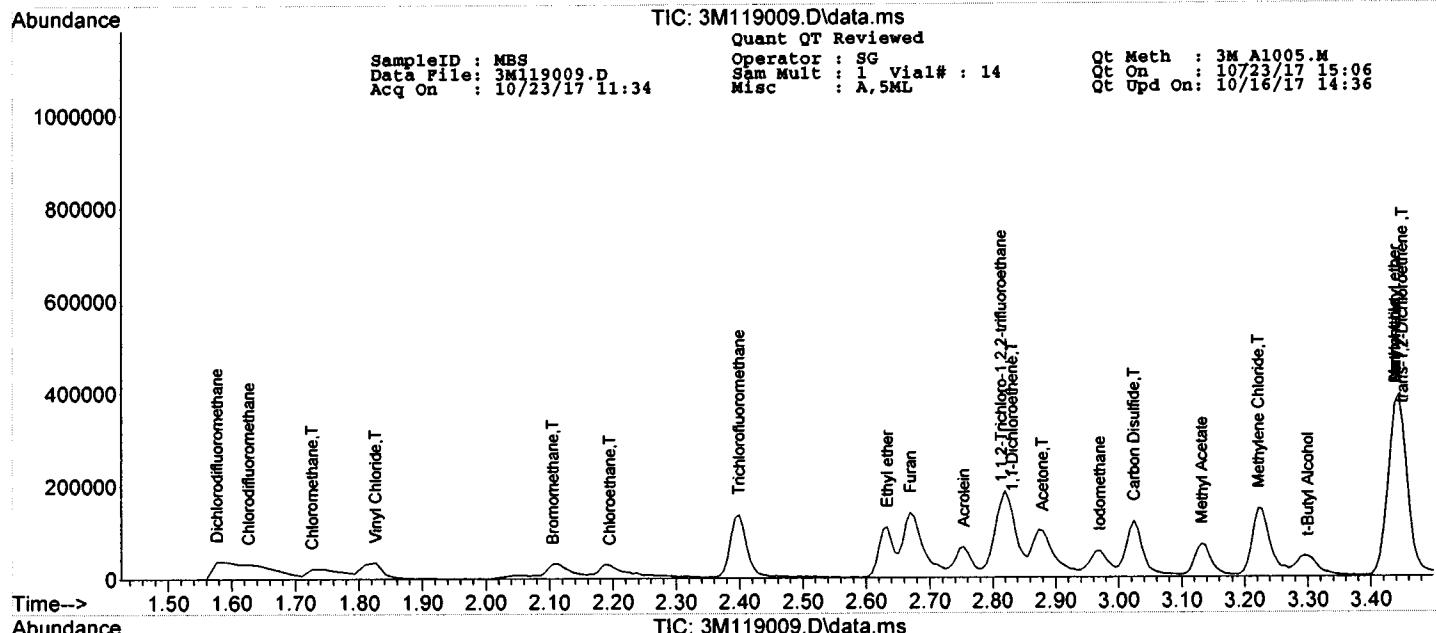
Quantitation Report (QT Reviewed)

SampleID : MBS Operator : SG Qt Meth : 3M_A1005.M
 Data File: 3M119009.D Sam Mult : 1 Vial# : 14 Qt On : 10/23/17 15:06
 Acq On : 10/23/17 11:34 Misc : A,5ML Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-23-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1,1,1,2-Tetrachloroethane	6.832	133	60009	20.1966	ug/l	79
69) Chlorobenzene	6.796	112	157336	20.4345	ug/l	92
71) n-Butyl acrylate	7.060	55	135626	17.4421	ug/l	96
72) n-Amyl acetate	7.192	43	124968	20.6821	ug/l	80
73) Bromoform	7.307	173	41583	15.8151	ug/l	98
74) Ethylbenzene	6.838	106	52424	21.2331	ug/l	90
75) 1,1,2,2-Tetrachloroethane	7.547	83	69722	17.8568	ug/l	92
77) Styrene	7.156	104	159896	20.7965	ug/l	83
78) m&p-Xylenes	6.904	106	165721	39.8676	ug/l	98
79) o-Xylene	7.156	106	87573	21.1719	ug/l	91
80) trans-1,4-Dichloro-2-b...	7.577	53	34615	16.9968	ug/l	89
81) 1,3-Dichlorobenzene	8.184	146	89682	19.1155	ug/l	94
82) 1,4-Dichlorobenzene	8.232	146	95843	19.4623	ug/l	95
83) 1,2-Dichlorobenzene	8.490	146	87959	19.0748	ug/l	97
84) Isopropylbenzene	7.367	105	169639	19.6785	ug/l	97
85) Cyclohexanone	7.469	55	23324	142.4123	ug/l	91
86) Camphene	7.559	93	52035	18.2491	ug/l	92
87) 1,2,3-Trichloropropane	7.595	75	99670	18.4349	ug/l	98
88) 2-Chlorotoluene	7.703	91	113785	20.6209	ug/l	97
89) p-Ethyltoluene	7.685	105	180543	19.5848	ug/l	74
90) 4-Chlorotoluene	7.769	91	122408	20.5441	ug/l	96
91) n-Propylbenzene	7.619	91	179661	19.8281	ug/l	99
92) Bromobenzene	7.601	77	159098	18.4992	ug/l	92
93) 1,3,5-Trimethylbenzene	7.715	105	120293	19.8341	ug/l	84
94) Butyl methacrylate	7.715	41	92569	18.3247	ug/l	97
95) t-Butylbenzene	7.937	119	110495	19.7037	ug/l	95
96) 1,2,4-Trimethylbenzene	7.961	105	145121	19.9506	ug/l	95
97) sec-Butylbenzene	8.070	105	122879	19.1284	ug/l	98
98) 4-Isopropyltoluene	8.148	119	102197	19.1132	ug/l	97
99) n-Butylbenzene	8.412	91	121068	18.5022	ug/l	94
100) p-Diethylbenzene	8.394	119	68620	19.1668	ug/l	92
101) 1,2,4,5-Tetramethylben...	8.910	119	101537	19.3477	ug/l	97
102) 1,2-Dibromo-3-Chloropr...	8.995	157	10701	14.7857	ug/l	96
103) Camphor	9.481	95	80985	181.5644	ug/l	98
104) Hexachlorobutadiene	9.619	225	17174	14.5861	ug/l	97
105) 1,2,4-Trichlorobenzene	9.535	180	35364	18.0187	ug/l	96
106) 1,2,3-Trichlorobenzene	9.884	180	30542	18.0010	ug/l	98
107) Naphthalene	9.721	128	99898	19.0075	ug/l	100

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



Form3
Recovery Data Laboratory Limits
QC Batch: MBS64948

Data File	Sample ID:	Analysis Date
Spike or Dup: 3M118942.D	AD00698-022(MS:AD00698-021	10/20/2017 6:51:00 PM
Non Spike(if applicable): 3M118944.D	AD00698-021	10/20/2017 7:25:00 PM
Inst Blank(if applicable):		

Method: 8260C Matrix: Aqueous QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	18.7888	0	20	94	50	150
Dichlorodifluoromethane	1	9.3296	0	20	47*	50	150
Chloromethane	1	11.8042	0	20	59	50	150
Bromomethane	1	14.9415	0	20	75	50	150
Vinyl Chloride	1	14.107	0	20	71	50	150
Chloroethane	1	11.8615	0	20	59	50	150
Trichlorodifluoromethane	1	16.4902	0	20	82	50	150
Ethyl ether	1	16.804	0	20	84	50	150
Furan	1	14.108	0	20	71	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	19.2162	0	20	96	50	150
Methylene Chloride	1	17.9604	0	20	90	70	130
Acrolein	1	76.0213	0	100	76	50	150
Acrylonitrile	1	17.7905	0	20	89	50	150
Iodomethane	1	22.9887	0	20	115	50	150
Acetone	1	86.2445	0	100	86	50	150
Carbon Disulfide	1	25.3162	0	20	127	50	150
t-Butyl Alcohol	1	73.773	0	100	74	50	150
n-Hexane	1	19.0952	0	20	95	70	130
Di-isopropyl-ether	1	20.3534	0	20	102	70	130
1,1-Dichloroethene	1	15.5421	0	20	78	70	130
Methyl Acetate	1	16.9422	0	20	85	50	150
Methyl-t-butyl ether	1	18.4241	0	20	92	70	130
1,1-Dichloroethane	1	18.6902	0	20	93	70	130
trans-1,2-Dichloroethene	1	18.6806	0	20	93	70	130
Ethyl-t-butyl ether	1	19.3148	0	20	97	70	130
cis-1,2-Dichloroethene	1	19.4385	0	20	97	70	130
Bromochloromethane	1	17.4959	0	20	87	70	130
2,2-Dichloropropane	1	18.4796	0	20	92	70	130
Ethyl acetate	1	21.5845	0	20	108	50	150
1,4-Dioxane	1	990.147	0	1000	99	50	150
1,1-Dichloropropene	1	20.0619	0	20	100	70	130
Chloroform	1	18.6709	0	20	93	70	130
Cyclohexane	1	20.4668	0	20	102	70	130
1,2-Dichloroethane	1	19.4439	0	20	97	70	130
2-Butanone	1	17.3504	0	20	87	50	150
1,1,1-Trichloroethane	1	17.7064	0	20	89	70	130
Carbon Tetrachloride	1	18.702	0	20	94	50	150
Vinyl Acetate	1	20.6998	0	20	103	50	150
Bromodichloromethane	1	17.8659	0	20	89	70	130
Methylcyclohexane	1	20.5277	0	20	103	70	130
Dibromomethane	1	18.7102	0	20	94	70	130
1,2-Dichloropropane	1	19.46	0	20	97	70	130
Trichloroethene	1	19.9426	0	20	100	70	130
Benzene	1	18.9138	0	20	95	70	130
tert-Amyl methyl ether	1	19.0529	0	20	95	70	130
Iso-propylacetate	1	16.5204	0	20	83	70	130
Methyl methacrylate	1	16.946	0	20	85	70	130
Dibromochloromethane	1	15.7456	0	20	79	70	130
2-Chloroethylvinylether	1	0	0	20	0*	70	130
cis-1,3-Dichloropropene	1	15.9268	0	20	80	70	130
trans-1,3-Dichloropropene	1	15.3831	0	20	77	70	130
Ethyl methacrylate	1	16.9511	0	20	85	70	130
1,1,2-Trichloroethane	1	16.2289	0	20	81	70	130
1,2-Dibromoethane	1	15.9656	0	20	80	70	130
1,3-Dichloropropane	1	16.1815	0	20	81	70	130
4-Methyl-2-Pentanone	1	16.65	0	20	83	50	150
2-Hexanone	1	17.9703	0	20	90	50	150
Tetrachloroethene	1	22.8582	6.2013	20	83	50	150
Toluene	1	16.8435	0	20	84	70	130
1,1,1,2-Tetrachloroethane	1	17.4884	0	20	87	70	130
Chlorobenzene	1	17.0734	0	20	85	70	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits

QC Batch: MBS64948

n-Butyl acrylate	1	14.6717	0	20	73	70	130
n-Amyl acetate	1	17.3203	0	20	87	70	130
Bromoform	1	14.0802	0	20	70	70	130
Ethylbenzene	1	18.6869	0	20	93	70	130
1,1,2,2-Tetrachloroethane	1	16.3305	0	20	82	70	130
Styrene	1	18.2016	0	20	91	70	130
m&p-Xylenes	1	34.9794	0	40	87	70	130
o-Xylene	1	18.0777	0	20	90	70	130
trans-1,4-Dichloro-2-butene	1	14.4187	0	20	72	50	150
1,3-Dichlorobenzene	1	17.2429	0	20	86	70	130
1,4-Dichlorobenzene	1	17.0182	0	20	85	70	130
1,2-Dichlorobenzene	1	17.3453	0	20	87	70	130
Isopropylbenzene	1	18.4821	0	20	92	70	130
Cyclohexanone	1	73.1658	0	100	73	50	150
Camphene	1	11.0805	0	20	55*	70	130
1,2,3-Trichloropropane	1	15.6918	0	20	78	70	130
2-Chlorotoluene	1	18.6589	0	20	93	70	130
p-Ethyltoluene	1	16.9734	0	20	85	70	130
4-Chlorotoluene	1	18.1498	0	20	91	70	130
n-Propylbenzene	1	18.7823	0	20	94	70	130
Bromobenzene	1	16.9998	0	20	85	70	130
1,3,5-Trimethylbenzene	1	17.9034	0	20	90	70	130
Butyl methacrylate	1	16.2658	0	20	81	70	130
t-Butylbenzene	1	19.14	0	20	96	70	130
1,2,4-Trimethylbenzene	1	18.7042	0	20	94	70	130
sec-Butylbenzene	1	18.9869	0	20	95	70	130
4-Isopropyltoluene	1	18.9719	0	20	95	70	130
n-Butylbenzene	1	18.3841	1.9573	20	82	70	130
p-Diethylbenzene	1	18.8215	0	20	94	70	130
1,2,4,5-Tetramethylbenzene	1	20.0912	0	20	100	70	130
1,2-Dibromo-3-Chloropropane	1	13.0561	0	20	65	50	150
Camphor	1	160.8176	0	200	80	20	150
Hexachlorobutadiene	1	15.7846	0	20	79	50	150
1,2,4-Trichlorobenzene	1	17.1904	0	20	86	70	130
1,2,3-Trichlorobenzene	1	17.8455	0	20	89	70	130
Naphthalene	1	18.6088	2.4468	20	81	50	150

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: MBS64948

Data File	Sample ID:	Analysis Date
Spike or Dup: 3M118943.D	AD00698-023(MSD:AD00698-0	10/20/2017 7:08:00 PM
Non Spike(if applicable): 3M118944.D	AD00698-021	10/20/2017 7:25:00 PM
Inst Blank(if applicable):		

Method: 8260C	Matrix: Aqueous	QC Type: MSD					
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	19.57	0	20	98	50	150
Dichlorodifluoromethane	1	9.7978	0	20	49*	50	150
Chloromethane	1	13.0732	0	20	65	50	150
Bromomethane	1	14.2233	0	20	71	50	150
Vinyl Chloride	1	13.9668	0	20	70	50	150
Chloroethane	1	14.8953	0	20	74	50	150
Trichlorofluoromethane	1	16.6907	0	20	83	50	150
Ethyl ether	1	17.2855	0	20	86	50	150
Furan	1	14.8712	0	20	74	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	20.4948	0	20	102	50	150
Methylene Chloride	1	17.5733	0	20	88	70	130
Acrolein	1	79.9567	0	100	80	50	150
Acrylonitrile	1	18.4034	0	20	92	50	150
Iodomethane	1	24.0284	0	20	120	50	150
Acetone	1	93.3093	0	100	93	50	150
Carbon Disulfide	1	26.2278	0	20	131	50	150
t-Butyl Alcohol	1	73.9167	0	100	74	50	150
n-Hexane	1	19.7463	0	20	99	70	130
Di-isopropyl-ether	1	20.7185	0	20	104	70	130
1,1-Dichloroethene	1	17.9428	0	20	90	70	130
Methyl Acetate	1	19.2208	0	20	96	50	150
Methyl-t-butyl ether	1	18.9984	0	20	95	70	130
1,1-Dichloroethane	1	18.8672	0	20	94	70	130
trans-1,2-Dichloroethene	1	19.6988	0	20	98	70	130
Ethyl-t-butyl ether	1	19.6985	0	20	98	70	130
cis-1,2-Dichloroethene	1	19.6424	0	20	98	70	130
Bromochloromethane	1	17.3043	0	20	87	70	130
2,2-Dichloropropane	1	17.8614	0	20	89	70	130
Ethyl acetate	1	21.5142	0	20	108	50	150
1,4-Dioxane	1	1096.672	0	1000	110	50	150
1,1-Dichloropropene	1	20.8189	0	20	104	70	130
Chloroform	1	19.0242	0	20	95	70	130
Cyclohexane	1	20.8089	0	20	104	70	130
1,2-Dichloroethane	1	20.3851	0	20	102	70	130
2-Butanone	1	21.1427	0	20	106	50	150
1,1,1-Trichloroethane	1	18.6651	0	20	93	70	130
Carbon Tetrachloride	1	19.5613	0	20	98	50	150
Vinyl Acetate	1	20.997	0	20	105	50	150
Bromodichloromethane	1	18.3454	0	20	92	70	130
Methylcyclohexane	1	21.3403	0	20	107	70	130
Dibromomethane	1	19.049	0	20	95	70	130
1,2-Dichloropropane	1	19.9327	0	20	100	70	130
Trichloroethene	1	20.5712	0	20	103	70	130
Benzene	1	19.7396	0	20	99	70	130
tert-Amyl methyl ether	1	19.1547	0	20	96	70	130
Iso-propylacetate	1	18.4771	0	20	92	70	130
Methyl methacrylate	1	18.4127	0	20	92	70	130
Dibromochloromethane	1	16.3297	0	20	82	70	130
2-Chloroethylvinylether	1	0	0	20	0*	70	130
cis-1,3-Dichloropropene	1	16.703	0	20	84	70	130
trans-1,3-Dichloropropene	1	15.9967	0	20	80	70	130
Ethyl methacrylate	1	17.5243	0	20	88	70	130
1,1,2-Trichloroethane	1	16.9336	0	20	85	70	130
1,2-Dibromoethane	1	17.2813	0	20	86	70	130
1,3-Dichloropropane	1	17.8792	0	20	89	70	130
4-Methyl-2-Pentanone	1	18.2957	0	20	91	50	150
2-Hexanone	1	19.4424	0	20	97	50	150
Tetrachloroethene	1	23.9343	6.2013	20	89	50	150
Toluene	1	18.172	0	20	91	70	130
1,1,1,2-Tetrachloroethane	1	18.2767	0	20	91	70	130
Chlorobenzene	1	18.0676	0	20	90	70	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3

Recovery Data Laboratory Limits

QC Batch: MBS64948

n-Butyl acrylate	1	15.5149	0	20	78	70	130
n-Amyl acetate	1	16.7776	0	20	84	70	130
Bromoform	1	14.6481	0	20	73	70	130
Ethylbenzene	1	17.9698	0	20	90	70	130
1,1,2,2-Tetrachloroethane	1	16.4411	0	20	82	70	130
Styrene	1	18.1904	0	20	91	70	130
m&p-Xylenes	1	35.5319	0	40	89	70	130
o-Xylene	1	18.1512	0	20	91	70	130
trans-1,4-Dichloro-2-butene	1	14.5143	0	20	73	50	150
1,3-Dichlorobenzene	1	16.771	0	20	84	70	130
1,4-Dichlorobenzene	1	16.8623	0	20	84	70	130
1,2-Dichlorobenzene	1	17.1236	0	20	86	70	130
Isopropylbenzene	1	17.6639	0	20	88	70	130
Cyclohexanone	1	78.8238	0	100	79	50	150
Camphepane	1	8.0602	0	20	40*	70	130
1,2,3-Trichloropropane	1	15.9306	0	20	80	70	130
2-Chlorotoluene	1	17.7743	0	20	89	70	130
p-Ethyltoluene	1	16.8672	0	20	84	70	130
4-Chlorotoluene	1	18.52	0	20	93	70	130
n-Propylbenzene	1	18.0006	0	20	90	70	130
Bromobenzene	1	17.0291	0	20	85	70	130
1,3,5-Trimethylbenzene	1	18.1715	0	20	91	70	130
Butyl methacrylate	1	17.0541	0	20	85	70	130
t-Butylbenzene	1	17.4014	0	20	87	70	130
1,2,4-Trimethylbenzene	1	17.6818	0	20	88	70	130
sec-Butylbenzene	1	17.3486	0	20	87	70	130
4-Isopropyltoluene	1	17.5253	0	20	88	70	130
n-Butylbenzene	1	17.1209	1.9573	20	76	70	130
p-Diethylbenzene	1	17.1185	0	20	86	70	130
1,2,4,5-Tetramethylbenzene	1	18.3198	0	20	92	70	130
1,2-Dibromo-3-Chloropropane	1	14.7586	0	20	74	50	150
Camphor	1	165.3775	0	200	83	20	150
Hexachlorobutadiene	1	13.7385	0	20	69	50	150
1,2,4-Trichlorobenzene	1	16.6187	0	20	83	70	130
1,2,3-Trichlorobenzene	1	17.5449	0	20	88	70	130
Naphthalene	1	18.1679	2.4468	20	79	50	150

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
RPD Data Laboratory Limits
QC Batch: MBS64948

Data File		Sample ID:	Analysis Date		
Spike or Dup:	3M118943.D	AD00698-023(MSD:AD00698-0	10/20/2017 7:08:00 PM		
Duplicate(if applicable):	3M118942.D	AD00698-022(MS:AD00698-021	10/20/2017 6:51:00 PM		
Inst Blank(if applicable):					
Method: 8260C		Matrix: Aqueous	QC Type: MSD		
Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	19.57	18.7888	4.1	30
Dichlorodifluoromethane	1	9.7978	9.3296	4.9	30
Chloromethane	1	13.0732	11.8042	10	30
Bromomethane	1	14.2233	14.9415	4.9	30
Vinyl Chloride	1	13.9668	14.107	1	40
Chloroethane	1	14.8953	11.8615	23	30
Trichlorofluoromethane	1	16.6907	16.4902	1.2	30
Ethyl ether	1	17.2855	16.804	2.8	30
Furan	1	14.8712	14.108	5.3	30
1,1,2-Trichloro-1,2,2-trifluoroethane	1	20.4948	19.2162	6.4	30
Methylene Chloride	1	17.5733	17.9604	2.2	30
Acrolein	1	79.9567	76.0213	5	30
Acrylonitrile	1	18.4034	17.7905	3.4	30
Iodomethane	1	24.0284	22.9887	4.4	30
Acetone	1	93.3093	86.2445	7.9	30
Carbon Disulfide	1	26.2278	25.3162	3.5	30
t-Butyl Alcohol	1	73.9167	73.773	0.19	30
n-Hexane	1	19.7463	19.0952	3.4	30
Di-isopropyl-ether	1	20.7185	20.3534	1.8	30
1,1-Dichloroethene	1	17.9428	15.5421	14	40
Methyl Acetate	1	19.2208	16.9422	13	30
Methyl-t-butyl ether	1	18.9984	18.4241	3.1	30
1,1-Dichloroethane	1	18.8672	18.6902	0.94	40
trans-1,2-Dichloroethene	1	19.6988	18.6806	5.3	30
Ethyl-t-butyl ether	1	19.6985	19.3148	2	30
cis-1,2-Dichloroethene	1	19.6424	19.4385	1	30
Bromochloromethane	1	17.3043	17.4959	1.1	30
2,2-Dichloropropane	1	17.8614	18.4796	3.4	30
Ethyl acetate	1	21.5142	21.5845	0.33	30
1,4-Dioxane	1	1096.672	990.147	10	30
1,1-Dichloropropene	1	20.8189	20.0619	3.7	30
Chloroform	1	19.0242	18.6709	1.9	40
Cyclohexane	1	20.8089	20.4668	1.7	30
1,2-Dichloroethane	1	20.3851	19.4439	4.7	40
2-Butanone	1	21.1427	17.3504	20	40
1,1,1-Trichloroethane	1	18.6651	17.7064	5.3	30
Carbon Tetrachloride	1	19.5613	18.702	4.5	40
Vinyl Acetate	1	20.997	20.6998	1.4	30
Bromodichloromethane	1	18.3454	17.8659	2.6	30
Methylcyclohexane	1	21.3403	20.5277	3.9	30
Dibromomethane	1	19.049	18.7102	1.8	30
1,2-Dichloropropane	1	19.9327	19.46	2.4	30
Trichloroethene	1	20.5712	19.9426	3.1	40
Benzene	1	19.7396	18.9138	4.3	40
tert-Amyl methyl ether	1	19.1547	19.0529	0.53	30
Iso-propylacetate	1	18.4771	16.5204	11	30
Methyl methacrylate	1	18.4127	16.946	8.3	30
Dibromochloromethane	1	16.3297	15.7456	3.6	30
2-Chloroethylvinylether	1	0	0	NA	30
cis-1,3-Dichloropropene	1	16.703	15.9268	4.8	30
trans-1,3-Dichloropropene	1	15.9967	15.3831	3.9	30
Ethyl methacrylate	1	17.5243	16.9511	3.3	30
1,1,2-Trichloroethane	1	16.9336	16.2289	4.2	30
1,2-Dibromoethane	1	17.2813	15.9656	7.9	30
1,3-Dichloropropane	1	17.8792	16.1815	10	30
4-Methyl-2-Pentanone	1	18.2957	16.65	9.4	30
2-Hexanone	1	19.4424	17.9703	7.9	30
Tetrachloroethene	1	23.9343	22.8582	4.6	40
Toluene	1	18.172	16.8435	7.6	40
1,1,1,2-Tetrachloroethane	1	18.2767	17.4884	4.4	30
Chlorobenzene	1	18.0676	17.0734	5.7	40
n-Butyl acrylate	1	15.5149	14.6717	5.6	30
n-Amyl acetate	1	16.7776	17.3203	3.2	30

Form3
RPD Data Laboratory Limits

QC Batch: MBS64948

Bromoform	1	14.6481	14.0802	4	30
Ethylbenzene	1	17.9698	18.6869	3.9	30
1,1,2,2-Tetrachloroethane	1	16.4411	16.3305	0.67	30
Styrene	1	18.1904	18.2016	0.06	30
m&p-Xylenes	1	35.5319	34.9794	1.6	30
o-Xylene	1	18.1512	18.0777	0.41	30
trans-1,4-Dichloro-2-butene	1	14.5143	14.4187	0.66	30
1,3-Dichlorobenzene	1	16.771	17.2429	2.8	30
1,4-Dichlorobenzene	1	16.8623	17.0182	0.92	40
1,2-Dichlorobenzene	1	17.1236	17.3453	1.3	40
Isopropylbenzene	1	17.6639	18.4821	4.5	30
Cyclohexanone	1	78.8238	73.1658	7.4	30
Camphene	1	8.0602	11.0805	32*	30
1,2,3-Trichloropropane	1	15.9306	15.6918	1.5	30
2-Chlorotoluene	1	17.7743	18.6589	4.9	30
p-Ethyltoluene	1	16.8672	16.9734	0.63	30
4-Chlorotoluene	1	18.52	18.1498	2	30
n-Propylbenzene	1	18.0006	18.7823	4.3	40
Bromobenzene	1	17.0291	16.9998	0.17	30
1,3,5-Trimethylbenzene	1	18.1715	17.9034	1.5	30
Butyl methacrylate	1	17.0541	16.2658	4.7	30
t-Butylbenzene	1	17.4014	19.14	9.5	30
1,2,4-Trimethylbenzene	1	17.6818	18.7042	5.6	30
sec-Butylbenzene	1	17.3486	18.9869	9	40
4-Isopropyltoluene	1	17.5253	18.9719	7.9	30
n-Butylbenzene	1	17.1209	18.3841	7.1	30
p-Diethylbenzene	1	17.1185	18.8215	9.5	30
1,2,4,5-Tetramethylbenzene	1	18.3198	20.0912	9.2	30
1,2-Dibromo-3-Chloropropane	1	14.7586	13.0561	12	30
Camphor	1	165.3775	160.8176	2.8	30
Hexachlorobutadiene	1	13.7385	15.7846	14	30
1,2,4-Trichlorobenzene	1	16.6187	17.1904	3.4	30
1,2,3-Trichlorobenzene	1	17.5449	17.8455	1.7	30
Naphthalene	1	18.1679	18.6088	2.4	30

* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

SampleID : AD00698-022 (MS:AD00) Operator : WP Qt Meth : 3M_A1005.M
 Data File: 3M118942.D Sam Mult : 1 Vial# : 10 Qt On : 10/20/17 19:40
 Acq On : 10/20/17 18:51 Misc : A,5ML!2 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.952	96	382906	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.784	117	327301	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	134805	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.525	111	114628	30.93	ug/l	0.00
Spiked Amount 30.000			Recovery	= 103.10%		
39) 1,2-Dichloroethane-d4	4.747	67	86006	29.47	ug/l	0.00
Spiked Amount 30.000			Recovery	= 98.23%		
66) Toluene-d8	5.907	98	398585	27.33	ug/l	0.00
Spiked Amount 30.000			Recovery	= 91.10%		
76) Bromofluorobenzene	7.487	174	138652	29.14	ug/l	0.00
Spiked Amount 30.000			Recovery	= 97.13%		
Target Compounds						
5) Chlorodifluoromethane	1.581	51	89501	18.7888	ug/l	64
6) Dichlorodifluoromethane	1.581	85	27781	9.3296	ug/l	88
7) Chloromethane	1.731	50	36027	11.8042	ug/l	88
8) Bromomethane	2.110	94	18472	14.9415	ug/l	86
9) Vinyl Chloride	1.814	62	34138	14.1070	ug/l	98
10) Chloroethane	2.195	64	17907	11.8615	ug/l	97
11) Trichlorofluoromethane	2.399	101	80801	16.4902	ug/l	86
12) Ethyl ether	2.633	59	47337	16.8040	ug/l	81
13) Furan	2.675	39	84094	14.1080	ug/l	76
14) 1,1,2-Trichloro-1,2,2-...	2.819	101	37439	19.2162	ug/l	91
15) Methylene Chloride	3.228	84	58462	17.9604	ug/l	81
16) Acrolein	2.759	56	38427	76.0213	ug/l	92
17) Acrylonitrile	3.438	53	19177	17.7905	ug/l	98
18) Iodomethane	2.969	142	53767	22.9887	ug/l	98
19) Acetone	2.879	43	94138	86.2445	ug/l	99
20) Carbon Disulfide	3.030	76	113540	25.3162	ug/l	100
21) t-Butyl Alcohol	3.300	59	24446	73.7730	ug/l	82
22) n-Hexane	3.660	57	24346	19.0952	ug/l	87
23) Di-isopropyl-ether	3.822	45	160606	20.3534	ug/l	95
24) 1,1-Dichloroethene	2.831	61	67468	15.5421	ug/l	98
25) Methyl Acetate	3.138	43	61474	16.9422	ug/l	100
26) Methyl-t-butyl ether	3.444	73	143130	18.4241	ug/l	65
27) 1,1-Dichloroethane	3.804	63	95366	18.6902	ug/l	95
28) trans-1,2-Dichloroethene	3.450	96	52396	18.6806	ug/l	93
29) Ethyl-t-butyl ether	4.087	59	175761	19.3148	ug/l	95
30) cis-1,2-Dichloroethene	4.219	61	111019	19.4385	ug/l	86
31) Bromochloromethane	4.381	49	44527	17.4959	ug/l	94
32) 2,2-Dichloropropane	4.219	77	79189	18.4796	ug/l	95
33) Ethyl acetate	4.243	43	64820m	21.5845	ug/l	
34) 1,4-Dioxane	5.390	88	36923	990.1470	ug/l	88
35) 1,1-Dichloropropene	4.651	75	77978	20.0619	ug/l	96
36) Chloroform	4.423	83	118475	18.6709	ug/l	89
38) Cyclohexane	4.585	56	50241	20.4668	ug/l	96
40) 1,2-Dichloroethane	4.796	62	119255	19.4439	ug/l	92
41) 2-Butanone	4.231	43	26476m	17.3504	ug/l	
42) 1,1,1-Trichloroethane	4.549	97	94262	17.7064	ug/l	97
43) Carbon Tetrachloride	4.657	117	71995	18.7020	ug/l	95
44) Vinyl Acetate	3.822	43	115116	20.6998	ug/l	100
45) Bromodichloromethane	5.480	83	85618	17.8659	ug/l	96
46) Methylcyclohexane	5.294	83	36688	20.5277	ug/l	98
47) Dibromomethane	5.402	174	44492	18.7102	ug/l	90
48) 1,2-Dichloropropane	5.318	63	52827	19.4600	ug/l	96
49) Trichloroethene	5.174	130	58065	19.9426	ug/l	86
50) Benzene	4.790	78	197678	18.9138	ug/l	100
51) tert-Amyl methyl ether	4.826	73	144641	19.0529	ug/l	85
53) Iso-propylacetate	4.784	43	115298	16.5204	ug/l	92
54) Methyl methacrylate	5.348	41	69337	16.9460	ug/l	68
55) Dibromochloromethane	6.435	129	63057	15.7456	ug/l	92
57) cis-1,3-Dichloropropene	5.739	75	80290	15.9268	ug/l	96
58) trans-1,3-Dichloropropene	6.063	75	77994	15.3831	ug/l	99
59) Ethyl methacrylate	6.081	41	69580	16.9511	ug/l	53
60) 1,1,2-Trichloroethane	6.183	97	53747	16.2289	ug/l	96
61) 1,2-Dibromoethane	6.520	107	55975	15.9656	ug/l	89
62) 1,3-Dichloropropane	6.285	76	95154	16.1815	ug/l	97
63) 4-Methyl-2-Pentanone	5.817	43	58592	16.6500	ug/l	78
64) 2-Hexanone	6.303	43	44173	17.9703	ug/l	87
65) Tetrachloroethene	6.279	164	48157	22.8582	ug/l	92
67) Toluene	5.949	92	121264	16.8435	ug/l	100
68) 1,1,1,2-Tetrachloroethane	6.838	133	52637	17.4884	ug/l	76

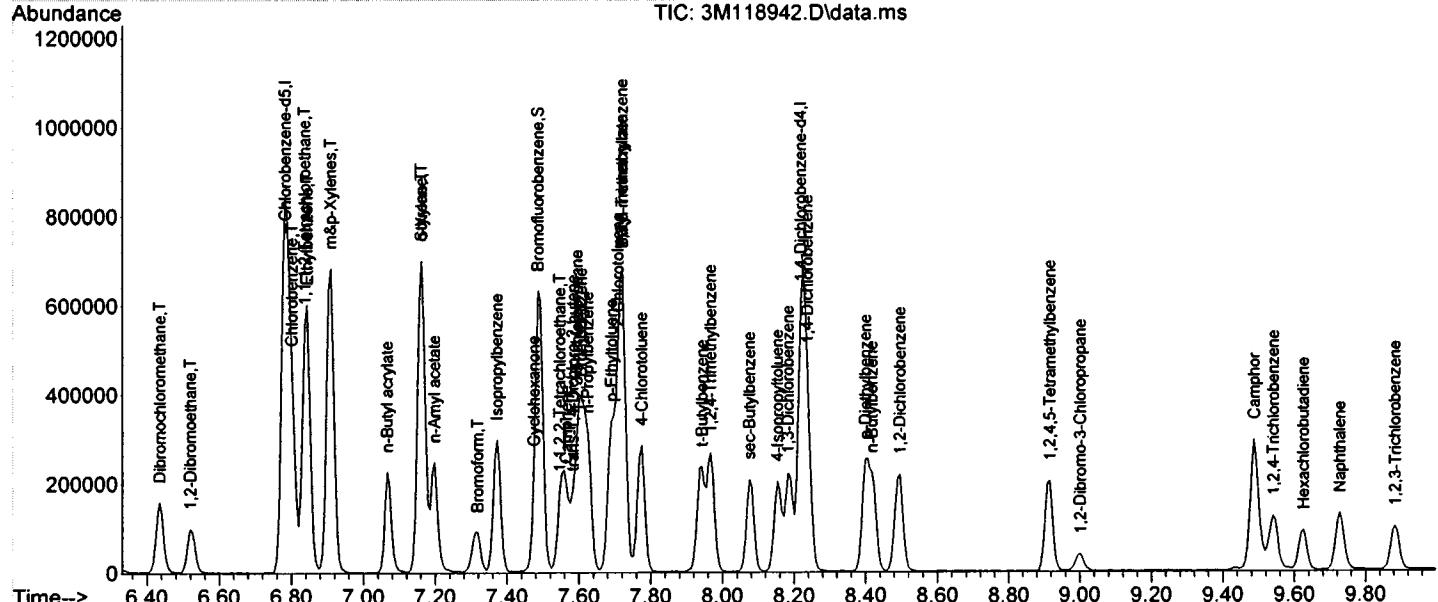
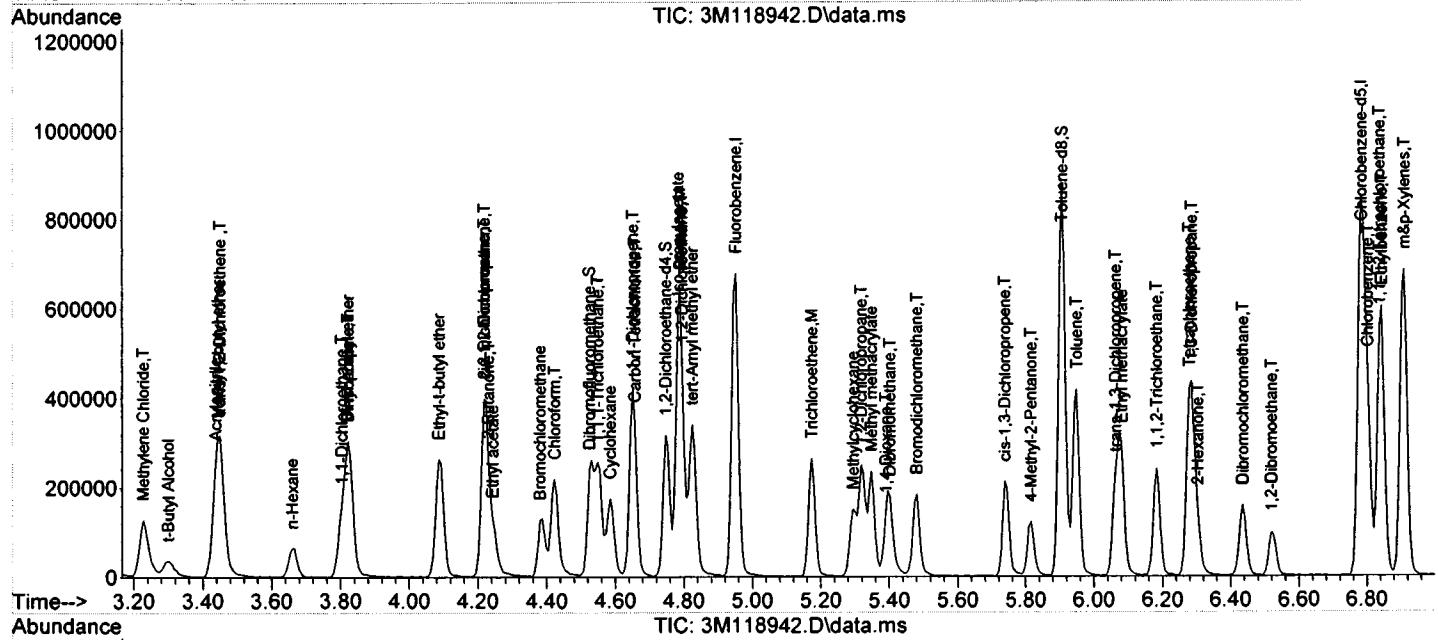
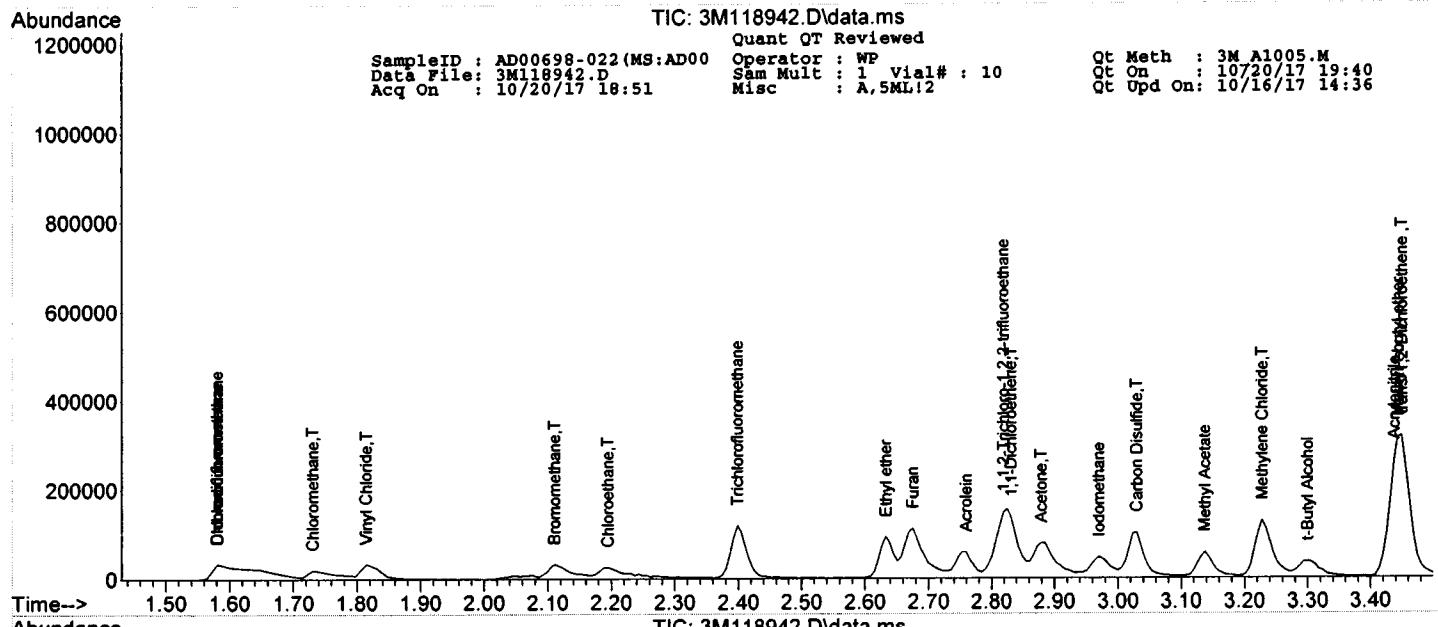
Quantitation Report (QT Reviewed)

SampleID : AD00698-022 (MS:AD00) Operator : WP Qt Meth : 3M_A1005.M
 Data File: 3M118942.D Sam Mult : 1 Vial# : 10 Qt On : 10/20/17 19:40
 Acq On : 10/20/17 18:51 Misc : A,5ML!2 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
69) Chlorobenzene	6.802	112	133164	17.0734	ug/l	94
71) n-Butyl acrylate	7.066	55	109630	14.6717	ug/l	95
72) n-Amyl acetate	7.198	43	100569	17.3203	ug/l	79
73) Bromoform	7.318	173	35576	14.0802	ug/l	89
74) Ethylbenzene	6.844	106	44336	18.6869	ug/l	88
75) 1,1,2,2-Tetrachloroethane	7.547	83	61273	16.3305	ug/l	89
77) Styrene	7.162	104	134481	18.2016	ug/l	85
78) m&p-Xylenes	6.910	106	139725	34.9794	ug/l	96
79) o-Xylene	7.162	106	71855	18.0777	ug/l	90
80) trans-1,4-Dichloro-2-b...	7.583	53	28218	14.4187	ug/l	89
81) 1,3-Dichlorobenzene	8.183	146	77738	17.2429	ug/l	95
82) 1,4-Dichlorobenzene	8.238	146	80535	17.0182	ug/l	98
83) 1,2-Dichlorobenzene	8.496	146	76861	17.3453	ug/l	95
84) Isopropylbenzene	7.373	105	153105	18.4821	ug/l	97
85) Cyclohexanone	7.475	55	11443	73.1658	ug/l	83
86) Camphene	7.565	93	30361	11.0805	ug/l	92
87) 1,2,3-Trichloropropane	7.595	75	81527	15.6918	ug/l	98
88) 2-Chlorotoluene	7.709	91	98939	18.6589	ug/l	96
89) p-Ethyltoluene	7.691	105	150361	16.9734	ug/l	78
90) 4-Chlorotoluene	7.775	91	103920	18.1498	ug/l	96
91) n-Propylbenzene	7.625	91	163541	18.7823	ug/l	97
92) Bromobenzene	7.607	77	140495	16.9998	ug/l	89
93) 1,3,5-Trimethylbenzene	7.721	105	104344	17.9034	ug/l	88
94) Butyl methacrylate	7.721	41	78960	16.2658	ug/l	99
95) t-Butylbenzene	7.943	119	103143	19.1400	ug/l	94
96) 1,2,4-Trimethylbenzene	7.967	105	130743	18.7042	ug/l	95
97) sec-Butylbenzene	8.075	105	117208	18.9869	ug/l	99
98) 4-Isopropyltoluene	8.153	119	97481	18.9719	ug/l	99
99) n-Butylbenzene	8.418	91	115599	18.3841	ug/l	96
100) p-Diethylbenzene	8.400	119	64753	18.8215	ug/l	93
101) 1,2,4,5-Tetramethylben...	8.916	119	101322	20.0912	ug/l	97
102) 1,2-Dibromo-3-Chloropr...	9.000	157	9072	13.0561	ug/l	99
103) Camphor	9.487	95	68928	160.8176	ug/l	95
104) Hexachlorobutadiene	9.625	225	17851	15.7846	ug/l	98
105) 1,2,4-Trichlorobenzene	9.541	180	32421	17.1904	ug/l	96
106) 1,2,3-Trichlorobenzene	9.883	180	29096	17.8455	ug/l	96
107) Naphthalene	9.727	128	93984	18.6088	ug/l	100

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



SampleID : AD00698-023(MSD:AD0) Operator : WP Qt Meth : 3M_A1005.M
 Data File: 3M118943.D Sam Mult : 1 Vial# : 11 Qt On : 10/20/17 19:40
 Acq On : 10/20/17 19:08 Misc : A,5ML!2 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.946	96	374017	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.778	117	312059	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	134999	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.526	111	108688	30.02	ug/l	0.00
Spiked Amount 30.000			Recovery	= 100.07%		
39) 1,2-Dichloroethane-d4	4.748	67	83676	29.35	ug/l	0.00
Spiked Amount 30.000			Recovery	= 97.83%		
66) Toluene-d8	5.907	98	388915	27.97	ug/l	0.00
Spiked Amount 30.000			Recovery	= 93.23%		
76) Bromofluorobenzene	7.487	174	136409	28.62	ug/l	0.00
Spiked Amount 30.000			Recovery	= 95.40%		
Target Compounds						
5) Chlorodifluoromethane	1.593	51	91058	19.5700	ug/l	63
6) Dichlorodifluoromethane	1.577	85	28498	9.7978	ug/l	83
7) Chloromethane	1.727	50	38974	13.0732	ug/l	79
8) Bromomethane	2.111	94	17176	14.2233	ug/l	57
9) Vinyl Chloride	1.827	62	33014	13.9668	ug/l	87
10) Chloroethane	2.195	64	21965	14.8953	ug/l	97
11) Trichlorofluoromethane	2.399	101	79885	16.6907	ug/l	92
12) Ethyl ether	2.634	59	47563	17.2855	ug/l	84
13) Furan	2.670	39	86585	14.8712	ug/l	79
14) 1,1,2-Trichloro-1,2,2-...	2.814	101	39003	20.4948	ug/l	89
15) Methylene Chloride	3.228	84	55874	17.5733	ug/l	82
16) Acrolein	2.754	56	39478	79.9567	ug/l	92
17) Acrylonitrile	3.445	53	19377	18.4034	ug/l	83
18) Iodomethane	2.970	142	54894	24.0284	ug/l	98
19) Acetone	2.880	43	99485	93.3093	ug/l	89
20) Carbon Disulfide	3.024	76	114898	26.2278	ug/l	100
21) t-Butyl Alcohol	3.300	59	23925	73.9167	ug/l	85
22) n-Hexane	3.661	57	24593	19.7463	ug/l	83
23) Di-isopropyl-ether	3.823	45	159692	20.7185	ug/l	91
24) 1,1-Dichloroethene	2.832	61	76081	17.9428	ug/l	96
25) Methyl Acetate	3.138	43	68123	19.2208	ug/l	100
26) Methyl-t-butyl ether	3.439	73	144165	18.9984	ug/l	65
27) 1,1-Dichloroethane	3.799	63	94034	18.8672	ug/l	94
28) trans-1,2-Dichloroethene	3.451	96	53969	19.6988	ug/l	90
29) Ethyl-t-butyl ether	4.087	59	175091	19.6985	ug/l	96
30) cis-1,2-Dichloroethene	4.219	61	109579	19.6424	ug/l	83
31) Bromochloromethane	4.382	49	43017	17.3043	ug/l	92
32) 2,2-Dichloropropane	4.219	77	74763	17.8614	ug/l	94
33) Ethyl acetate	4.243	43	63109m	21.5142	ug/l	
34) 1,4-Dioxane	5.391	88	39946	1096.6721	ug/l	94
35) 1,1-Dichloropropene	4.646	75	79042	20.8189	ug/l	97
36) Chloroform	4.424	83	117915	19.0242	ug/l	86
38) Cyclohexane	4.586	56	49895	20.8089	ug/l	99
40) 1,2-Dichloroethane	4.796	62	122052	20.3851	ug/l	92
41) 2-Butanone	4.231	43	31514m	21.1427	ug/l	
42) 1,1,1-Trichloroethane	4.550	97	97059	18.6651	ug/l	97
43) Carbon Tetrachloride	4.652	117	73555	19.5613	ug/l	93
44) Vinyl Acetate	3.823	43	114058	20.9970	ug/l	100
45) Bromodichloromethane	5.475	83	85875	18.3454	ug/l	96
46) Methylcyclohexane	5.295	83	37255	21.3403	ug/l	100
47) Dibromomethane	5.397	174	44246	19.0490	ug/l	91
48) 1,2-Dichloropropane	5.319	63	52854	19.9327	ug/l	95
49) Trichloroethene	5.175	130	58505	20.5712	ug/l	88
50) Benzene	4.784	78	201520	19.7396	ug/l	100
51) tert-Amyl methyl ether	4.826	73	142038	19.1547	ug/l	86
53) Iso-propylacetate	4.784	43	122949	18.4771	ug/l	93
54) Methyl methacrylate	5.343	41	71830	18.4127	ug/l	72
55) Dibromochloromethane	6.436	129	62351	16.3297	ug/l	95
57) cis-1,3-Dichloropropene	5.739	75	80282	16.7030	ug/l	93
58) trans-1,3-Dichloropropene	6.064	75	77328	15.9967	ug/l	99
59) Ethyl methacrylate	6.076	41	68583m	17.5243	ug/l	
60) 1,1,2-Trichloroethane	6.184	97	53469	16.9336	ug/l	93
61) 1,2-Dibromoethane	6.520	107	57766	17.2813	ug/l	97
62) 1,3-Dichloropropane	6.286	76	100241	17.8792	ug/l	98
63) 4-Methyl-2-Pentanone	5.811	43	61385	18.2957	ug/l	84
64) 2-Hexanone	6.298	43	45566	19.4424	ug/l	71
65) Tetrachloroethene	6.274	164	48076	23.9343	ug/l	94
67) Toluene	5.943	92	124736	18.1720	ug/l	100
68) 1,1,1,2-Tetrachloroethane	6.838	133	52448	18.2767	ug/l	76

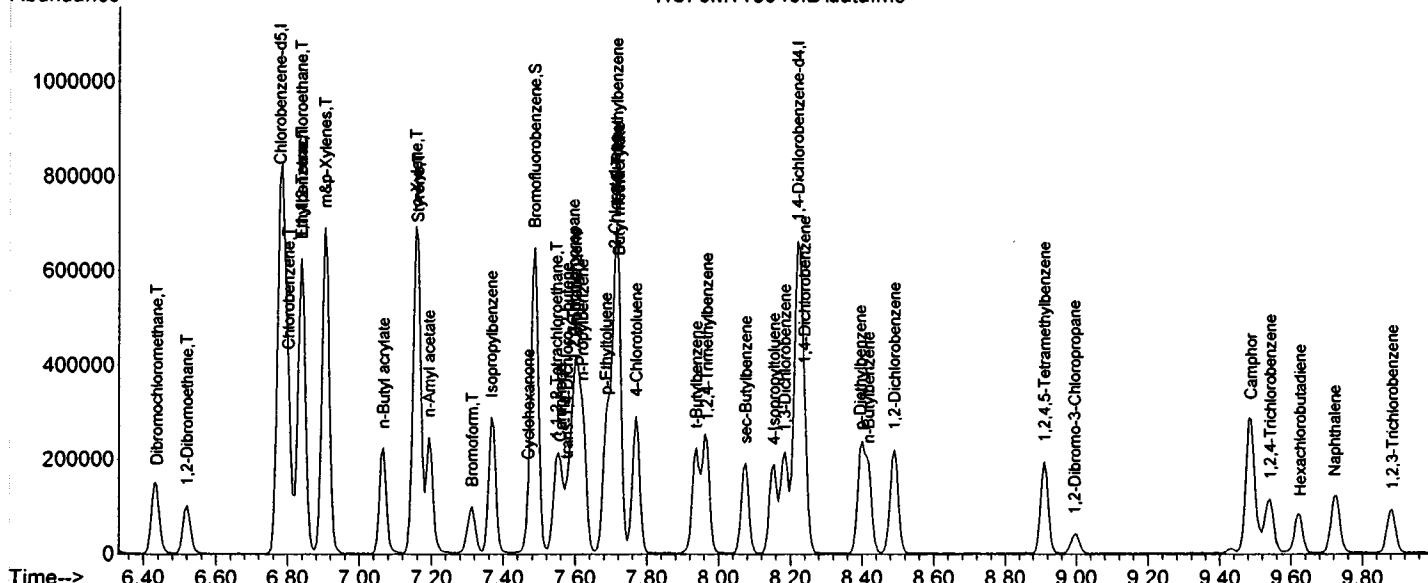
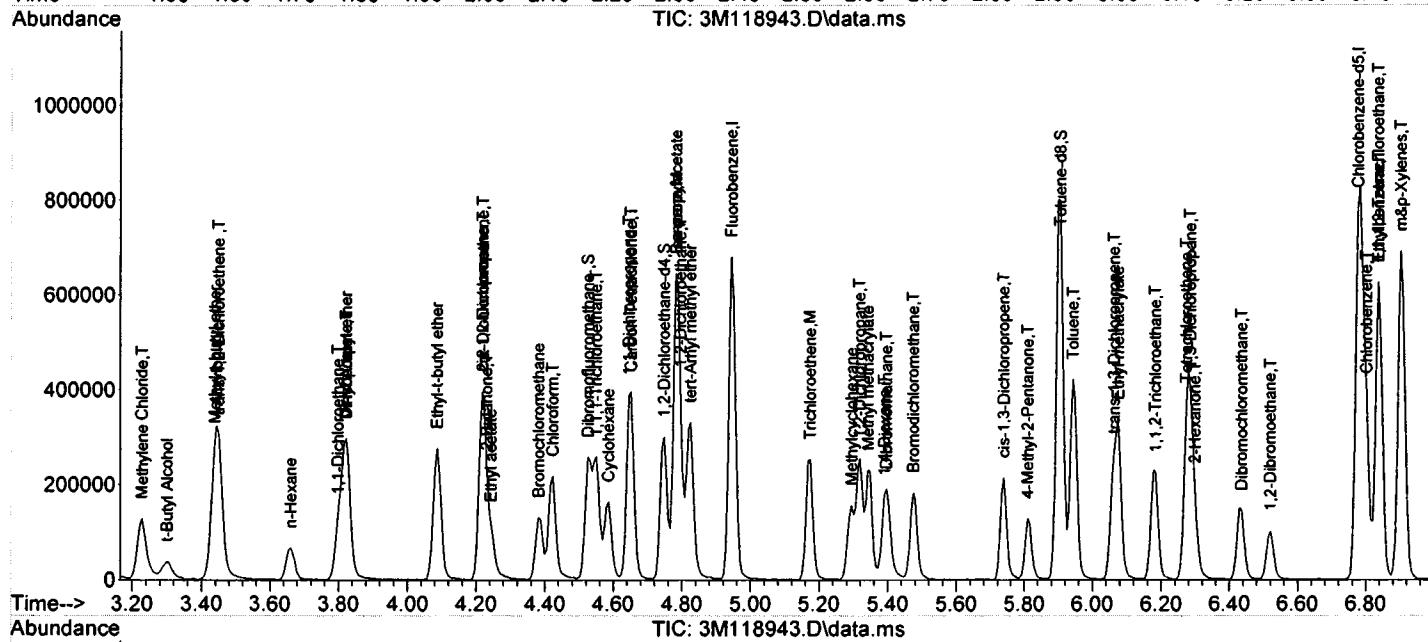
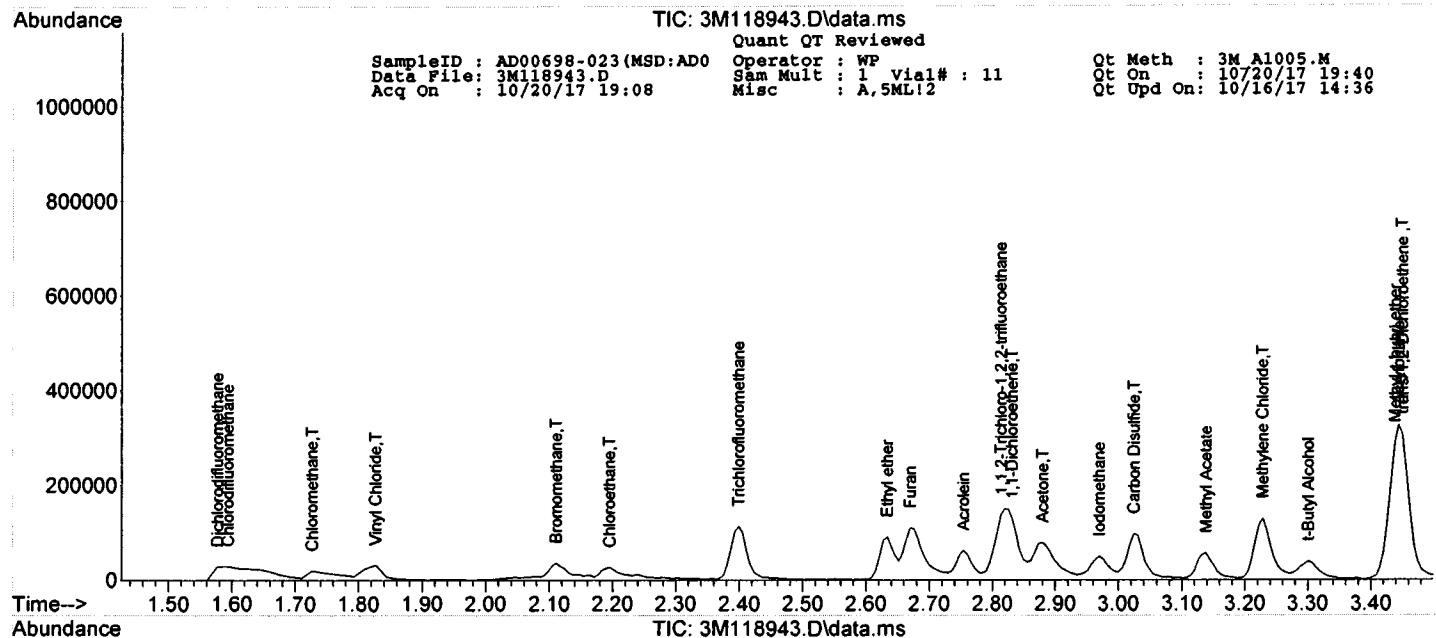
Quantitation Report (QT Reviewed)

SampleID : AD00698-023 (MSD:AD0) Operator : WP Qt Meth : 3M_A1005.M
 Data File: 3M118943.D Sam Mult : 1 Vial# : 11 Qt On : 10/20/17 19:40
 Acq On : 10/20/17 19:08 Misc : A,5ML!2 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
69) Chlorobenzene	6.802	112	134356	18.0676	ug/l	98
71) n-Butyl acrylate	7.067	55	116097	15.5149	ug/l	94
72) n-Amyl acetate	7.193	43	97558	16.7776	ug/l	76
73) Bromoform	7.313	173	37064	14.6481	ug/l	94
74) Ethylbenzene	6.838	106	42696	17.9698	ug/l	94
75) 1,1,2,2-Tetrachloroethane	7.547	83	61777	16.4411	ug/l	91
77) Styrene	7.163	104	134592	18.1904	ug/l	87
78) m&p-Xylenes	6.905	106	142136	35.5319	ug/l	95
79) o-Xylene	7.157	106	72251	18.1512	ug/l	95
80) trans-1,4-Dichloro-2-b...	7.577	53	28446	14.5143	ug/l	89
81) 1,3-Dichlorobenzene	8.184	146	75719	16.7710	ug/l	94
82) 1,4-Dichlorobenzene	8.238	146	79912	16.8623	ug/l	95
83) 1,2-Dichlorobenzene	8.490	146	75988	17.1236	ug/l	96
84) Isopropylbenzene	7.367	105	146537	17.6639	ug/l	96
85) Cyclohexanone	7.469	55	12352	78.8238	ug/l	82
86) Camphene	7.559	93	22117	8.0602	ug/l	93
87) 1,2,3-Trichloropropane	7.595	75	82887	15.9306	ug/l	99
88) 2-Chlorotoluene	7.710	91	94384	17.7743	ug/l	99
89) p-Ethyltoluene	7.685	105	149635	16.8672	ug/l	81
90) 4-Chlorotoluene	7.770	91	106192	18.5200	ug/l	95
91) n-Propylbenzene	7.619	91	156960	18.0006	ug/l	100
92) Bromobenzene	7.601	77	140940	17.0291	ug/l	89
93) 1,3,5-Trimethylbenzene	7.716	105	106059	18.1715	ug/l	95
94) Butyl methacrylate	7.722	41	82906	17.0541	ug/l	96
95) t-Butylbenzene	7.938	119	93909	17.4014	ug/l	95
96) 1,2,4,5-Tetramethylbenzene	7.968	105	123774	17.6818	ug/l	95
97) sec-Butylbenzene	8.076	105	107249	17.3486	ug/l	99
98) 4-Isopropyltoluene	8.154	119	90178	17.5253	ug/l	98
99) n-Butylbenzene	8.418	91	107811	17.1209	ug/l	93
100) p-Diethylbenzene	8.394	119	58979	17.1185	ug/l	94
101) 1,2,4,5-Tetramethylbenzene	8.911	119	92522	18.3198	ug/l	95
102) 1,2-Dibromo-3-Chloroprop...	8.995	157	10279	14.7586	ug/l	85
103) Camphor	9.488	95	70985	165.3775	ug/l	96
104) Hexachlorobutadiene	9.626	225	15572	13.7385	ug/l	90
105) 1,2,4-Trichlorobenzene	9.542	180	31388	16.6187	ug/l	97
106) 1,2,3-Trichlorobenzene	9.884	180	28647	17.5449	ug/l	95
107) Naphthalene	9.722	128	91889	18.1679	ug/l	100

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



SampleID : AD00698-021 Operator : WP Qt Meth : 3M_A1005.M
 Data File: 3M118944.D Sam Mult : 1 Vial# : 14 Qt On : 10/20/17 19:40
 Acq On : 10/20/17 19:25 Misc : A,5ML!2 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.947	96	319100	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.779	117	268459	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.221	152	112314	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.527	111	93181	30.17	ug/l	0.00
Spiked Amount 30.000				Recovery	=	100.57%
39) 1,2-Dichloroethane-d4	4.749	67	71049	29.21	ug/l	0.00
Spiked Amount 30.000				Recovery	=	97.37%
66) Toluene-d8	5.902	98	331392	27.70	ug/l	0.00
Spiked Amount 30.000				Recovery	=	92.33%
76) Bromofluorobenzene	7.488	174	110709	27.92	ug/l	0.00
Spiked Amount 30.000				Recovery	=	93.07%
Target Compounds						
65) Tetrachloroethene	6.281	164	10716	6.2013	ug/l	80
99) n-Butylbenzene	8.413	91	10254	1.9573	ug/l	97
107) Naphthalene	9.723	128	10296	2.4468	ug/l	100

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

Abundance

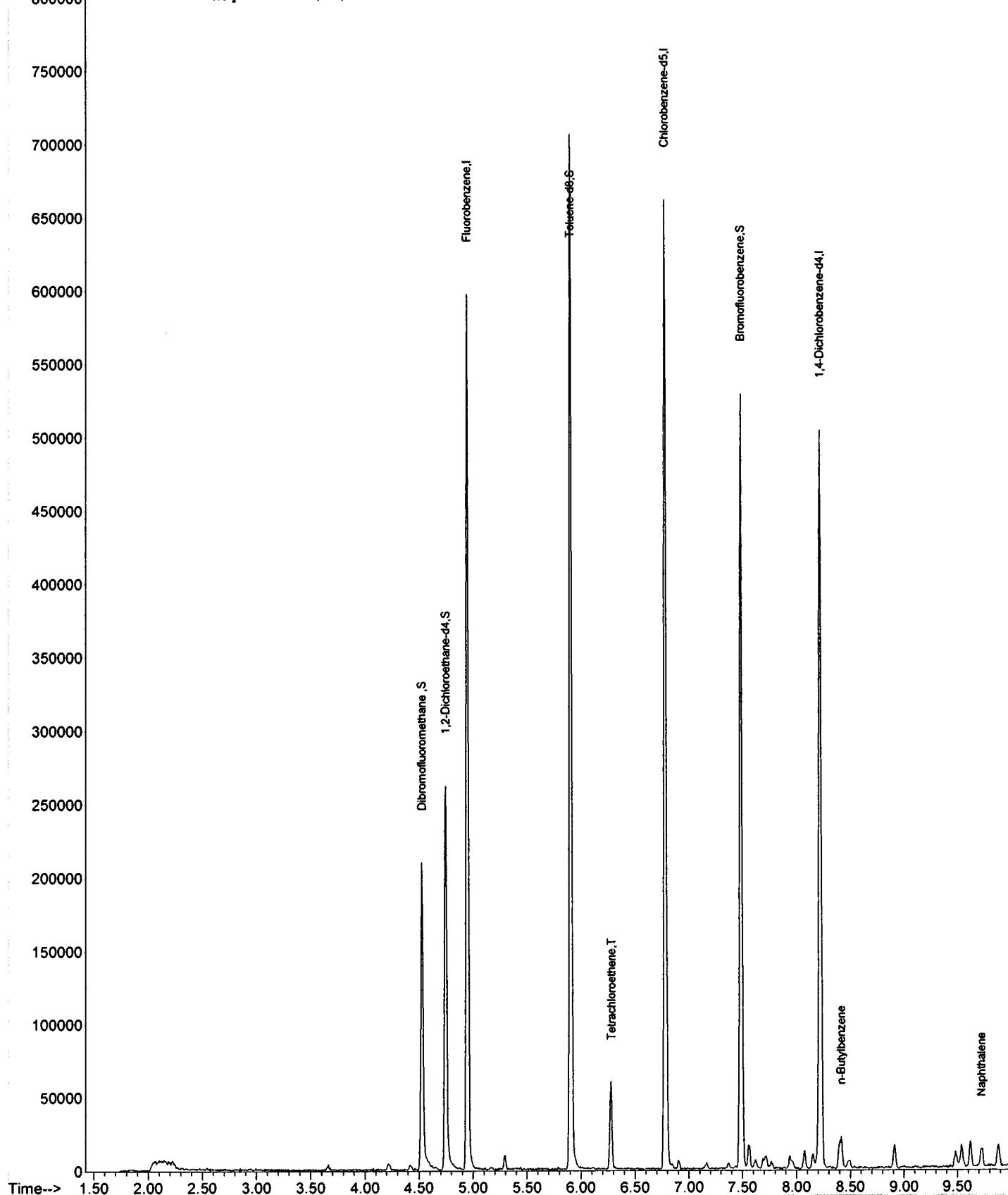
TIC: 3M118944.D\data.ms

Quant QT Reviewed

SampleID : AD00698-021
Data File: 3M118944.D
Acq On : 10/20/17 19:25

Operator : WP
Sam Mult : 1 Vial# : 14
Misc : A,5ML:2

Qt Meth : 3M_A1005.M
Qt On : 10/20/17 19:40
Qt Upd On: 10/16/17 14:36



Form3
Recovery Data Laboratory Limits
QC Batch: MBS64949

Data File	Sample ID:	Analysis Date
Spike or Dup: 3M118964.D	AD00698-031(MS:AD00698-030)	10/21/2017 1:01:00 AM
Non Spike(if applicable): 3M118963.D	AD00698-030	10/21/2017 12:44:00 A
Inst Blank(if applicable):		

Method: 8260C		Matrix: Aqueous		QC Type: MS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	20.4191	0	20	102	50	150
Dichlorodifluoromethane	1	9.073	0	20	45*	50	150
Chloromethane	1	13.0565	0	20	65	50	150
Bromomethane	1	15.9194	0	20	80	50	150
Vinyl Chloride	1	14.8899	0	20	74	50	150
Chloroethane	1	13.5623	0	20	68	50	150
Trichlorodifluoromethane	1	17.113	0	20	86	50	150
Ethyl ether	1	16.0954	0	20	80	50	150
Furan	1	13.9783	0	20	70	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	18.9777	0	20	95	50	150
Methylene Chloride	1	17.2691	0	20	86	70	130
Acrolein	1	70.8821	0	100	71	50	150
Acrylonitrile	1	16.4123	0	20	82	50	150
Iodomethane	1	22.7065	0	20	114	50	150
Acetone	1	81.7976	0	100	82	50	150
Carbon Disulfide	1	25.5982	0	20	128	50	150
t-Butyl Alcohol	1	61.822	0	100	62	50	150
n-Hexane	1	15.3369	0	20	77	70	130
Di-isopropyl-ether	1	18.6435	0	20	93	70	130
1,1-Dichloroethene	1	17.9106	0	20	90	70	130
Methyl Acetate	1	14.1984	0	20	71	50	150
Methyl-t-butyl ether	1	16.4398	0	20	82	70	130
1,1-Dichloroethane	1	17.6213	0	20	88	70	130
trans-1,2-Dichloroethene	1	18.9057	0	20	95	70	130
Ethyl-t-butyl ether	1	16.6934	0	20	83	70	130
cis-1,2-Dichloroethene	1	17.7918	0	20	89	70	130
Bromochloromethane	1	17.3451	0	20	87	70	130
2,2-Dichloropropane	1	13.131	0	20	66*	70	130
Ethyl acetate	1	18.748	0	20	94	50	150
1,4-Dioxane	1	938.2686	0	1000	94	50	150
1,1-Dichloropropene	1	19.74	0	20	99	70	130
Chloroform	1	18.231	0	20	91	70	130
Cyclohexane	1	18.9846	0	20	95	70	130
1,2-Dichloroethane	1	19.1965	0	20	96	70	130
2-Butanone	1	15.2353	0	20	76	50	150
1,1,1-Trichloroethane	1	18.308	0	20	92	70	130
Carbon Tetrachloride	1	19.4331	0	20	97	50	150
Vinyl Acetate	1	18.1412	0	20	91	50	150
Bromodichloromethane	1	17.9012	0	20	90	70	130
Methylcyclohexane	1	18.3387	0	20	92	70	130
Dibromomethane	1	18.0173	0	20	90	70	130
1,2-Dichloropropane	1	18.4213	0	20	92	70	130
Trichloroethene	1	19.0308	0	20	95	70	130
Benzene	1	18.8341	0	20	94	70	130
tert-Amyl methyl ether	1	16.106	0	20	81	70	130
Iso-propylacetate	1	14.468	0	20	72	70	130
Methyl methacrylate	1	17.6525	0	20	88	70	130
Dibromochloromethane	1	15.8691	0	20	79	70	130
2-Chloroethylvinylether	1	0	0	20	0*	70	130
cis-1,3-Dichloropropene	1	14.5855	0	20	73	70	130
trans-1,3-Dichloropropene	1	13.9612	0	20	70	70	130
Ethyl methacrylate	1	15.9662	0	20	80	70	130
1,1,2-Trichloroethane	1	15.4287	0	20	77	70	130
1,2-Dibromoethane	1	15.4205	0	20	77	70	130
1,3-Dichloropropane	1	16.4323	0	20	82	70	130
4-Methyl-2-Pentanone	1	15.5361	0	20	78	50	150
2-Hexanone	1	16.183	0	20	81	50	150
Tetrachloroethene	1	17.6161	0	20	88	50	150
Toluene	1	16.9745	0	20	85	70	130
1,1,1,2-Tetrachloroethane	1	17.469	0	20	87	70	130
Chlorobenzene	1	16.941	0	20	85	70	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3

Recovery Data Laboratory Limits

QC Batch: MBS64949

n-Butyl acrylate	1	12.956	0	20	65*	70	130
n-Amyl acetate	1	13.3162	0	20	67*	70	130
Bromoform	1	13.0287	0	20	65*	70	130
Ethylbenzene	1	15.8375	0	20	79	70	130
1,1,2,2-Tetrachloroethane	1	14.9987	0	20	75	70	130
Styrene	1	16.5599	0	20	83	70	130
m&p-Xylenes	1	32.0942	0	40	80	70	130
o-Xylene	1	16.9741	0	20	85	70	130
trans-1,4-Dichloro-2-butene	1	11.8309	0	20	59	50	150
1,3-Dichlorobenzene	1	15.351	0	20	77	70	130
1,4-Dichlorobenzene	1	14.7449	0	20	74	70	130
1,2-Dichlorobenzene	1	15.3562	0	20	77	70	130
Isopropylbenzene	1	16.0108	0	20	80	70	130
Cyclohexanone	1	61.0097	0	100	61	50	150
Camphene	1	2.9107	0	20	15*	70	130
1,2,3-Trichloropropane	1	14.3669	0	20	72	70	130
2-Chlorotoluene	1	16.9167	0	20	85	70	130
p-Ethyltoluene	1	15.6189	0	20	78	70	130
4-Chlorotoluene	1	15.2737	0	20	76	70	130
n-Propylbenzene	1	15.6343	0	20	78	70	130
Bromobenzene	1	14.6151	0	20	73	70	130
1,3,5-Trimethylbenzene	1	15.26	0	20	76	70	130
Butyl methacrylate	1	14.4985	0	20	72	70	130
t-Butylbenzene	1	15.4734	0	20	77	70	130
1,2,4-Trimethylbenzene	1	15.7897	0	20	79	70	130
sec-Butylbenzene	1	14.6774	0	20	73	70	130
4-Isopropyltoluene	1	14.2913	0	20	71	70	130
n-Butylbenzene	1	13.3788	0	20	67*	70	130
p-Diethylbenzene	1	13.78	0	20	69*	70	130
1,2,4,5-Tetramethylbenzene	1	13.3009	0	20	67*	70	130
1,2-Dibromo-3-Chloropropane	1	10.9859	0	20	55	50	150
Camphor	1	122.7289	0	200	61	20	150
Hexachlorobutadiene	1	10.5303	0	20	53	50	150
1,2,4-Trichlorobenzene	1	12.9417	0	20	65*	70	130
1,2,3-Trichlorobenzene	1	12.6106	0	20	63*	70	130
Naphthalene	1	13.018	0	20	65	50	150

Form3
Recovery Data Laboratory Limits
QC Batch: MBS64949

Data File	Sample ID:	Analysis Date
Spike or Dup: 3M118965.D	AD00698-032(MSD:AD00698-0	10/21/2017 1:17:00 AM
Non Spike(if applicable): 3M118963.D	AD00698-030	10/21/2017 12:44:00 A
Inst Blank(if applicable):		

Method: 8260C	Matrix: Aqueous	QC Type: MSD
---------------	-----------------	--------------

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	20.1611	0	20	101	50	150
Dichlorodifluoromethane	1	8.7514	0	20	44*	50	150
Chloromethane	1	11.6991	0	20	58	50	150
Bromomethane	1	14.2399	0	20	71	50	150
Vinyl Chloride	1	14.6471	0	20	73	50	150
Chloroethane	1	11.6361	0	20	58	50	150
Trichlorofluoromethane	1	16.1991	0	20	81	50	150
Ethyl ether	1	16.5754	0	20	83	50	150
Furan	1	13.6224	0	20	68	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	17.7349	0	20	89	50	150
Methylene Chloride	1	17.3723	0	20	87	70	130
Acrolein	1	71.8669	0	100	72	50	150
Acrylonitrile	1	17.7758	0	20	89	50	150
Iodomethane	1	22.8038	0	20	114	50	150
Acetone	1	88.3238	0	100	88	50	150
Carbon Disulfide	1	25.6122	0	20	128	50	150
t-Butyl Alcohol	1	60.3541	0	100	60	50	150
n-Hexane	1	15.0832	0	20	75	70	130
Di-isopropyl-ether	1	18.7945	0	20	94	70	130
1,1-Dichloroethene	1	16.8654	0	20	84	70	130
Methyl Acetate	1	14.7688	0	20	74	50	150
Methyl-t-butyl ether	1	16.8461	0	20	84	70	130
1,1-Dichloroethane	1	17.5582	0	20	88	70	130
trans-1,2-Dichloroethene	1	18.967	0	20	95	70	130
Ethyl-t-butyl ether	1	17.6353	0	20	88	70	130
cis-1,2-Dichloroethene	1	17.8276	0	20	89	70	130
Bromochloromethane	1	16.847	0	20	84	70	130
2,2-Dichloropropane	1	13.0017	0	20	65*	70	130
Ethyl acetate	1	21.3083	0	20	107	50	150
1,4-Dioxane	1	978.3271	0	1000	98	50	150
1,1-Dichloropropene	1	19.693	0	20	98	70	130
Chloroform	1	18.2964	0	20	91	70	130
Cyclohexane	1	18.7194	0	20	94	70	130
1,2-Dichloroethane	1	19.9459	0	20	100	70	130
2-Butanone	1	10.4538	0	20	52	50	150
1,1,1-Trichloroethane	1	17.6208	0	20	88	70	130
Carbon Tetrachloride	1	18.9747	0	20	95	50	150
Vinyl Acetate	1	18.4671	0	20	92	50	150
Bromodichloromethane	1	17.7532	0	20	89	70	130
Methylcyclohexane	1	18.2609	0	20	91	70	130
Dibromomethane	1	19.2757	0	20	96	70	130
1,2-Dichloropropane	1	17.8635	0	20	89	70	130
Trichloroethene	1	19.3141	0	20	97	70	130
Benzene	1	18.9313	0	20	95	70	130
tert-Amyl methyl ether	1	16.1517	0	20	81	70	130
Iso-propylacetate	1	15.3443	0	20	77	70	130
Methyl methacrylate	1	17.4813	0	20	87	70	130
Dibromochloromethane	1	15.8635	0	20	79	70	130
2-Chloroethylvinylether	1	0	0	20	0*	70	130
cis-1,3-Dichloropropene	1	14.0426	0	20	70	70	130
trans-1,3-Dichloropropene	1	13.4001	0	20	67*	70	130
Ethyl methacrylate	1	15.6583	0	20	78	70	130
1,1,2-Trichloroethane	1	15.5439	0	20	78	70	130
1,2-Dibromoethane	1	15.597	0	20	78	70	130
1,3-Dichloropropane	1	15.9404	0	20	80	70	130
4-Methyl-2-Pentanone	1	16.0921	0	20	80	50	150
2-Hexanone	1	16.7191	0	20	84	50	150
Tetrachloroethene	1	17.1111	0	20	86	50	150
Toluene	1	16.9857	0	20	85	70	130
1,1,1,2-Tetrachloroethane	1	17.1853	0	20	86	70	130
Chlorobenzene	1	17.0497	0	20	85	70	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3

Recovery Data Laboratory Limits

QC Batch: MBS64949

n-Butyl acrylate	1	12.5421	0	20	63*	70	130
n-Amyl acetate	1	13.3442	0	20	67*	70	130
Bromoform	1	13.3381	0	20	67*	70	130
Ethylbenzene	1	15.4845	0	20	77	70	130
1,1,2,2-Tetrachloroethane	1	13.8026	0	20	69*	70	130
Styrene	1	15.8598	0	20	79	70	130
m&p-Xylenes	1	30.4363	0	40	76	70	130
o-Xylene	1	15.9057	0	20	80	70	130
trans-1,4-Dichloro-2-butene	1	10.3082	0	20	52	50	150
1,3-Dichlorobenzene	1	14.3949	0	20	72	70	130
1,4-Dichlorobenzene	1	14.6327	0	20	73	70	130
1,2-Dichlorobenzene	1	14.8269	0	20	74	70	130
Isopropylbenzene	1	15.0206	0	20	75	70	130
Cyclohexanone	1	58.8474	0	100	59	50	150
Camphepane	1	2.7753	0	20	14*	70	130
1,2,3-Trichloropropane	1	13.5997	0	20	68*	70	130
2-Chlorotoluene	1	15.8358	0	20	79	70	130
p-Ethyltoluene	1	13.7325	0	20	69*	70	130
4-Chlorotoluene	1	15.021	0	20	75	70	130
n-Propylbenzene	1	14.8096	0	20	74	70	130
Bromobenzene	1	14.3101	0	20	72	70	130
1,3,5-Trimethylbenzene	1	16.7967	0	20	84	70	130
Butyl methacrylate	1	14.4492	0	20	72	70	130
t-Butylbenzene	1	14.8071	0	20	74	70	130
1,2,4-Trimethylbenzene	1	15.2629	0	20	76	70	130
sec-Butylbenzene	1	13.6949	0	20	68*	70	130
4-Isopropyltoluene	1	14.1735	0	20	71	70	130
n-Butylbenzene	1	13.5059	0	20	68*	70	130
p-Diethylbenzene	1	13.9373	0	20	70	70	130
1,2,4,5-Tetramethylbenzene	1	14.103	0	20	71	70	130
1,2-Dibromo-3-Chloropropane	1	11.3421	0	20	57	50	150
Camphor	1	129.6398	0	200	65	20	150
Hexachlorobutadiene	1	10.7947	0	20	54	50	150
1,2,4-Trichlorobenzene	1	13.0902	0	20	65*	70	130
1,2,3-Trichlorobenzene	1	12.9744	0	20	65*	70	130
Naphthalene	1	14.5579	0	20	73	50	150

Form3
RPD Data Laboratory Limits
QC Batch: MBS64949

Data File		Sample ID:		Analysis Date	
Spike or Dup:	3M118965.D	AD00698-032(MSD:AD00698-0		10/21/2017 1:17:00 AM	
Duplicate(if applicable):	3M118964.D	AD00698-031(MS:AD00698-030		10/21/2017 1:01:00 AM	
Inst Blank(if applicable):					
Method: 8260C		Matrix: Aqueous		QC Type: MSD	
Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	20.1611	20.4191	1.3	30
Dichlorodifluoromethane	1	8.7514	9.073	3.6	30
Chloromethane	1	11.6991	13.0565	11	30
Bromomethane	1	14.2399	15.9194	11	30
Vinyl Chloride	1	14.6471	14.8899	1.6	40
Chloroethane	1	11.6361	13.5623	15	30
Trichlorodifluoromethane	1	16.1991	17.113	5.5	30
Ethyl ether	1	16.5754	16.0954	2.9	30
Furan	1	13.6224	13.9783	2.6	30
1,1,2-Trichloro-1,2,2-trifluoroethane	1	17.7349	18.9777	6.8	30
Methylene Chloride	1	17.3723	17.2691	0.6	30
Acrolein	1	71.8669	70.8821	1.4	30
Acrylonitrile	1	17.7758	16.4123	8	30
Iodomethane	1	22.8038	22.7065	0.43	30
Acetone	1	88.3238	81.7976	7.7	30
Carbon Disulfide	1	25.6122	25.5982	0.05	30
t-Butyl Alcohol	1	60.3541	61.822	2.4	30
n-Hexane	1	15.0832	15.3369	1.7	30
Di-isopropyl-ether	1	18.7945	18.6435	0.81	30
1,1-Dichloroethene	1	16.8654	17.9106	6	40
Methyl Acetate	1	14.7688	14.1984	3.9	30
Methyl-t-butyl ether	1	16.8461	16.4398	2.4	30
1,1-Dichloroethane	1	17.5582	17.6213	0.36	40
trans-1,2-Dichloroethene	1	18.967	18.9057	0.32	30
Ethyl-t-butyl ether	1	17.6353	16.6934	5.5	30
cis-1,2-Dichloroethene	1	17.8276	17.7918	0.2	30
Bromochloromethane	1	16.847	17.3451	2.9	30
2,2-Dichloropropane	1	13.0017	13.131	0.99	30
Ethyl acetate	1	21.3083	18.748	13	30
1,4-Dioxane	1	978.3271	938.2686	4.2	30
1,1-Dichloropropene	1	19.693	19.74	0.24	30
Chloroform	1	18.2964	18.231	0.36	40
Cyclohexane	1	18.7194	18.9846	1.4	30
1,2-Dichloroethane	1	19.9459	19.1965	3.8	40
2-Butanone	1	10.4538	15.2353	37	40
1,1,1-Trichloroethane	1	17.6208	18.308	3.8	30
Carbon Tetrachloride	1	18.9747	19.4331	2.4	40
Vinyl Acetate	1	18.4671	18.1412	1.8	30
Bromodichloromethane	1	17.7532	17.9012	0.83	30
Methylcyclohexane	1	18.2609	18.3387	0.43	30
Dibromomethane	1	19.2757	18.0173	6.7	30
1,2-Dichloropropane	1	17.8635	18.4213	3.1	30
Trichloroethene	1	19.3141	19.0308	1.5	40
Benzene	1	18.9313	18.8341	0.51	40
tert-Amyl methyl ether	1	16.1517	16.106	0.28	30
Iso-propylacetate	1	15.3443	14.468	5.9	30
Methyl methacrylate	1	17.4813	17.6525	0.97	30
Dibromochloromethane	1	15.8635	15.8691	0.04	30
2-Chloroethylvinylether	1	0	0	NA	30
cis-1,3-Dichloropropene	1	14.0426	14.5855	3.8	30
trans-1,3-Dichloropropene	1	13.4001	13.9612	4.1	30
Ethyl methacrylate	1	15.6583	15.9662	1.9	30
1,1,2-Trichloroethane	1	15.5439	15.4287	0.74	30
1,2-Dibromoethane	1	15.597	15.4205	1.1	30
1,3-Dichloropropane	1	15.9404	16.4323	3	30
4-Methyl-2-Pentanone	1	16.0921	15.5361	3.5	30
2-Hexanone	1	16.7191	16.183	3.3	30
Tetrachloroethene	1	17.1111	17.6161	2.9	40
Toluene	1	16.9857	16.9745	0.07	40
1,1,1,2-Tetrachloroethane	1	17.1853	17.469	1.6	30
Chlorobenzene	1	17.0497	16.941	0.64	40
n-Butyl acrylate	1	12.5421	12.956	3.2	30
n-Amyl acetate	1	13.3442	13.3162	0.21	30

Form3
RPD Data Laboratory Limits

QC Batch: MBS64949

Bromoform	1	13.3381	13.0287	2.3	30
Ethylbenzene	1	15.4845	15.8375	2.3	30
1,1,2,2-Tetrachloroethane	1	13.8026	14.9987	8.3	30
Styrene	1	15.8598	16.5599	4.3	30
m&p-Xylenes	1	30.4363	32.0942	5.3	30
o-Xylene	1	15.9057	16.9741	6.5	30
trans-1,4-Dichloro-2-butene	1	10.3082	11.8309	14	30
1,3-Dichlorobenzene	1	14.3949	15.351	6.4	30
1,4-Dichlorobenzene	1	14.6327	14.7449	0.76	40
1,2-Dichlorobenzene	1	14.8269	15.3562	3.5	40
Isopropylbenzene	1	15.0206	16.0108	6.4	30
Cyclohexanone	1	58.8474	61.0097	3.6	30
Camphene	1	2.7753	2.9107	4.8	30
1,2,3-Trichloropropane	1	13.5997	14.3669	5.5	30
2-Chlorotoluene	1	15.8358	16.9167	6.6	30
p-Ethyltoluene	1	13.7325	15.6189	13	30
4-Chlorotoluene	1	15.021	15.2737	1.7	30
n-Propylbenzene	1	14.8096	15.6343	5.4	40
Bromobenzene	1	14.3101	14.6151	2.1	30
1,3,5-Trimethylbenzene	1	16.7967	15.26	9.6	30
Butyl methacrylate	1	14.4492	14.4985	0.34	30
t-Butylbenzene	1	14.8071	15.4734	4.4	30
1,2,4-Trimethylbenzene	1	15.2629	15.7897	3.4	30
sec-Butylbenzene	1	13.6949	14.6774	6.9	40
4-Isopropyltoluene	1	14.1735	14.2913	0.83	30
n-Butylbenzene	1	13.5059	13.3788	0.95	30
p-Diethylbenzene	1	13.9373	13.78	1.1	30
1,2,4,5-Tetramethylbenzene	1	14.103	13.3009	5.9	30
1,2-Dibromo-3-Chloropropane	1	11.3421	10.9859	3.2	30
Camphor	1	129.6398	122.7289	5.5	30
Hexachlorobutadiene	1	10.7947	10.5303	2.5	30
1,2,4-Trichlorobenzene	1	13.0902	12.9417	1.1	30
1,2,3-Trichlorobenzene	1	12.9744	12.6106	2.8	30
Naphthalene	1	14.5579	13.018	11	30

* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

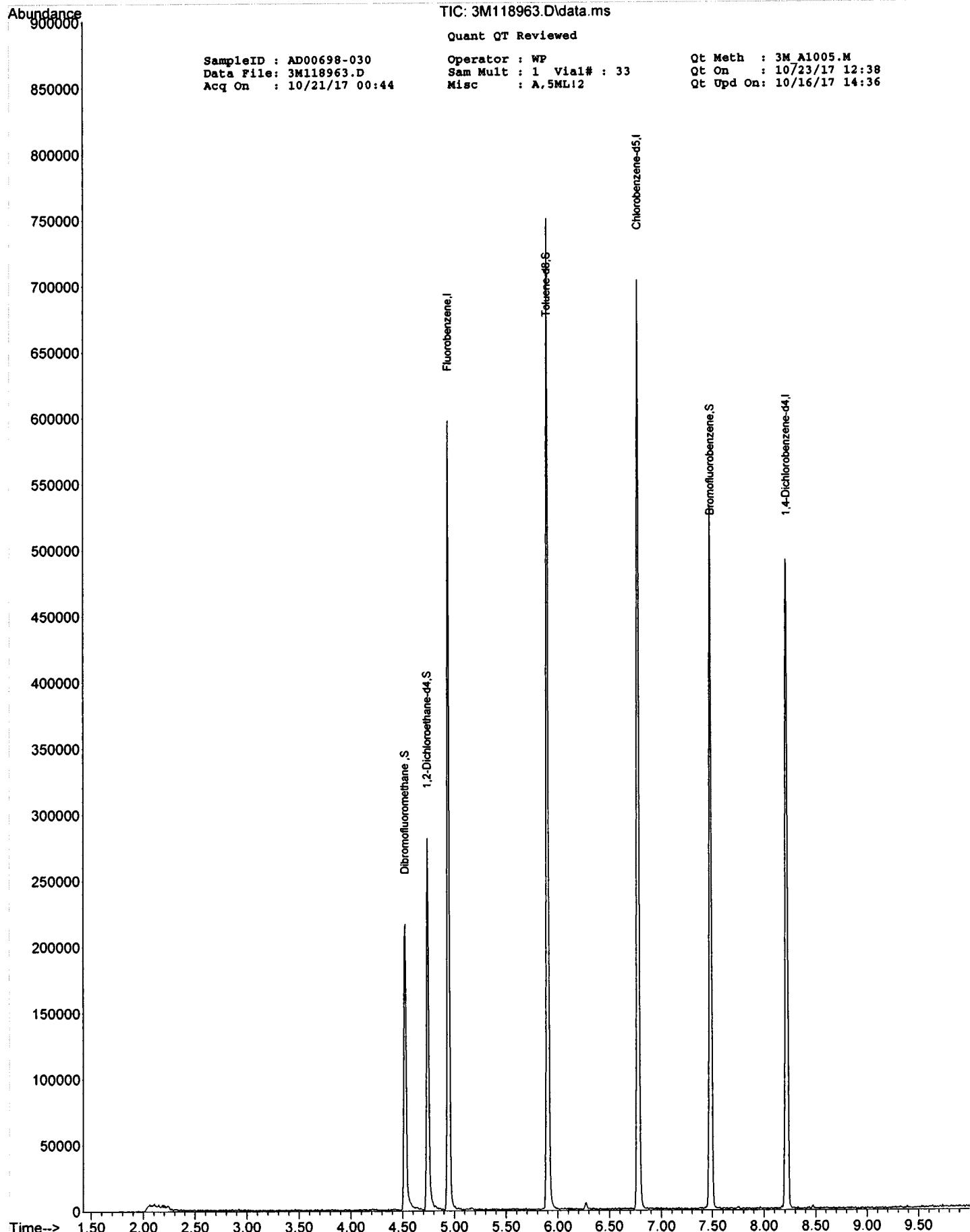
SampleID : AD00698-030 Operator : WP Qt Meth : 3M_A1005.M
 Data File: 3M118963.D Sam Mult : 1 Vial# : 33 Qt On : 10/23/17 12:38
 Acq On : 10/21/17 00:44 Misc : A,5ML!2 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.946	96	323514	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.778	117	266634	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	111146	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.526	111	98398	31.42	ug/l	0.00
Spiked Amount 30.000				Recovery	=	104.73%
39) 1,2-Dichloroethane-d4	4.742	67	75105	30.46	ug/l	-0.01
Spiked Amount 30.000				Recovery	=	101.53%
66) Toluene-d8	5.901	98	334089	28.12	ug/l	0.00
Spiked Amount 30.000				Recovery	=	93.73%
76) Bromofluorobenzene	7.487	174	113440	28.91	ug/l	0.00
Spiked Amount 30.000				Recovery	=	96.37%

Target Compounds	Qvalue
<hr/>	

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



SampleID : AD00698-031 (MS:AD00) Operator : WP Qt Meth : 3M_A1005.M
 Data File: 3M118964.D Sam Mult : 1 Vial# : 34 Qt On : 10/23/17 12:39
 Acq On : 10/21/17 01:01 Misc : A,5ML!2 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.946	96	341096	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.779	117	285154	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	126598	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.526	111	99572	30.16	ug/l	0.00
Spiked Amount 30.000			Recovery	= 100.53%		
39) 1,2-Dichloroethane-d4	4.742	67	77397	29.77	ug/l	-0.01
Spiked Amount 30.000			Recovery	= 99.23%		
66) Toluene-d8	5.902	98	352963	27.77	ug/l	0.00
Spiked Amount 30.000			Recovery	= 92.57%		
76) Bromofluorobenzene	7.481	174	125317	28.04	ug/l	-0.01
Spiked Amount 30.000			Recovery	= 93.47%		
Target Compounds						
5) Chlorodifluoromethane	1.592	51	86646	20.4191	ug/l	58
6) Dichlorodifluoromethane	1.575	85	24067	9.0730	ug/l	98
7) Chloromethane	1.725	50	35498	13.0565	ug/l	90
8) Bromomethane	2.105	94	17532	15.9194	ug/l	96
9) Vinyl Chloride	1.825	62	32098	14.8899	ug/l	97
10) Chloroethane	2.189	64	18239	13.5623	ug/l	99
11) Trichlorofluoromethane	2.393	101	74697	17.1130	ug/l	84
12) Ethyl ether	2.628	59	40390	16.0954	ug/l	77
13) Furan	2.670	39	74223	13.9783	ug/l	80
14) 1,1,2-Trichloro-1,2,2-...	2.814	101	32937	18.9777	ug/l	93
15) Methylene Chloride	3.228	84	50074	17.2691	ug/l	81
16) Acrolein	2.754	56	31917	70.8821	ug/l	97
17) Acrylonitrile	3.433	53	15760	16.4123	ug/l	97
18) Iodomethane	2.970	142	47308	22.7065	ug/l	100
19) Acetone	2.880	43	79535	81.7976	ug/l	95
20) Carbon Disulfide	3.024	76	102269	25.5982	ug/l	100
21) t-Butyl Alcohol	3.294	59	18251	61.8220	ug/l	82
22) n-Hexane	3.661	57	17414	15.3369	ug/l	92
23) Di-isopropyl-ether	3.817	45	131050	18.6435	ug/l	93
24) 1,1-Dichloroethene	2.826	61	69260	17.9106	ug/l	97
25) Methyl Acetate	3.132	43	45893	14.1984	ug/l	100
26) Methyl-t-butyl ether	3.439	73	113769	16.4398	ug/l	68
27) 1,1-Dichloroethane	3.799	63	80094	17.6213	ug/l	99
28) trans-1,2-Dichloroethene	3.445	96	47237	18.9057	ug/l	91
29) Ethyl-t-butyl ether	4.081	59	135320	16.6934	ug/l	94
30) cis-1,2-Dichloroethene	4.214	61	90519	17.7918	ug/l	84
31) Bromochloromethane	4.382	49	39323	17.3451	ug/l	95
32) 2,2-Dichloropropane	4.220	77	50125	13.1310	ug/l	96
33) Ethyl acetate	4.244	43	50154m	18.7480	ug/l	
34) 1,4-Dioxane	5.385	88	31168	938.2686	ug/l	88
35) 1,1-Dichloropropene	4.646	75	68349	19.7400	ug/l	96
36) Chloroform	4.418	83	103052	18.2310	ug/l	91
38) Cyclohexane	4.580	56	41514	18.9846	ug/l	98
40) 1,2-Dichloroethane	4.790	62	104898	19.1965	ug/l	95
41) 2-Butanone	4.226	43	20710m	15.2353	ug/l	
42) 1,1,1-Trichloroethane	4.544	97	86822	18.3080	ug/l	92
43) Carbon Tetrachloride	4.652	117	66641	19.4331	ug/l	96
44) Vinyl Acetate	3.817	43	89871	18.1412	ug/l	100
45) Bromodichloromethane	5.475	83	76420	17.9012	ug/l	94
46) Methylcyclohexane	5.289	83	29197	18.3387	ug/l	96
47) Dibromomethane	5.397	174	38166	18.0173	ug/l	97
48) 1,2-Dichloropropane	5.319	63	44547	18.4213	ug/l	99
49) Trichloroethene	5.169	130	49360	19.0308	ug/l	84
50) Benzene	4.778	78	175351	18.8341	ug/l	100
51) tert-Amyl methyl ether	4.820	73	108919	16.1060	ug/l	85
53) Iso-propylacetate	4.778	43	87972	14.4680	ug/l	88
54) Methyl methacrylate	5.343	41	62927	17.6525	ug/l	80
55) Dibromochemicalmethane	6.430	129	55368	15.8691	ug/l	97
57) cis-1,3-Dichloropropene	5.733	75	64060	14.5855	ug/l	90
58) trans-1,3-Dichloropropene	6.058	75	61670	13.9612	ug/l	96
59) Ethyl methacrylate	6.070	41	57098	15.9662	ug/l	51
60) 1,1,2-Trichloroethane	6.178	97	44517	15.4287	ug/l	93
61) 1,2-Dibromoethane	6.514	107	47102	15.4205	ug/l	99
62) 1,3-Dichloropropane	6.286	76	84186	16.4323	ug/l	96
63) 4-Methyl-2-Pentanone	5.811	43	47632	15.5361	ug/l	84
64) 2-Hexanone	6.298	43	34657	16.1830	ug/l	80
65) Tetrachloroethene	6.274	164	32334	17.6161	ug/l	92
67) Toluene	5.944	92	106470	16.9745	ug/l	91
68) 1,1,1,2-Tetrachloroethane	6.833	133	45808	17.4690	ug/l	76

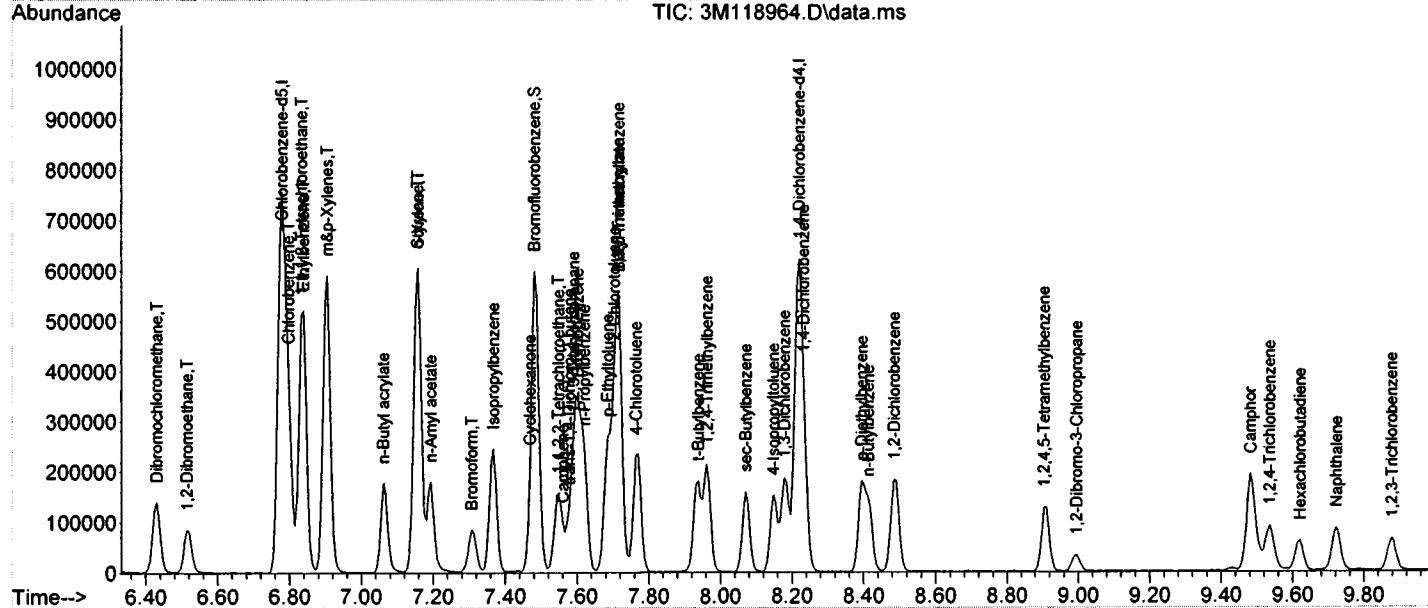
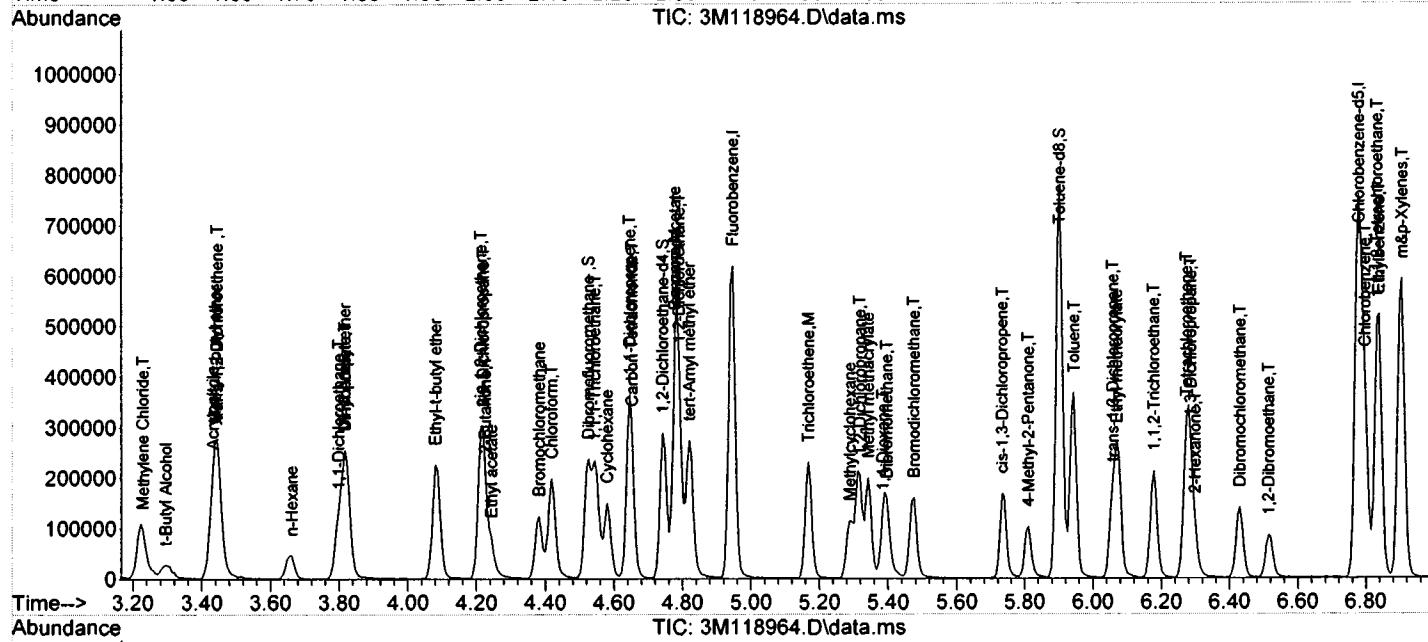
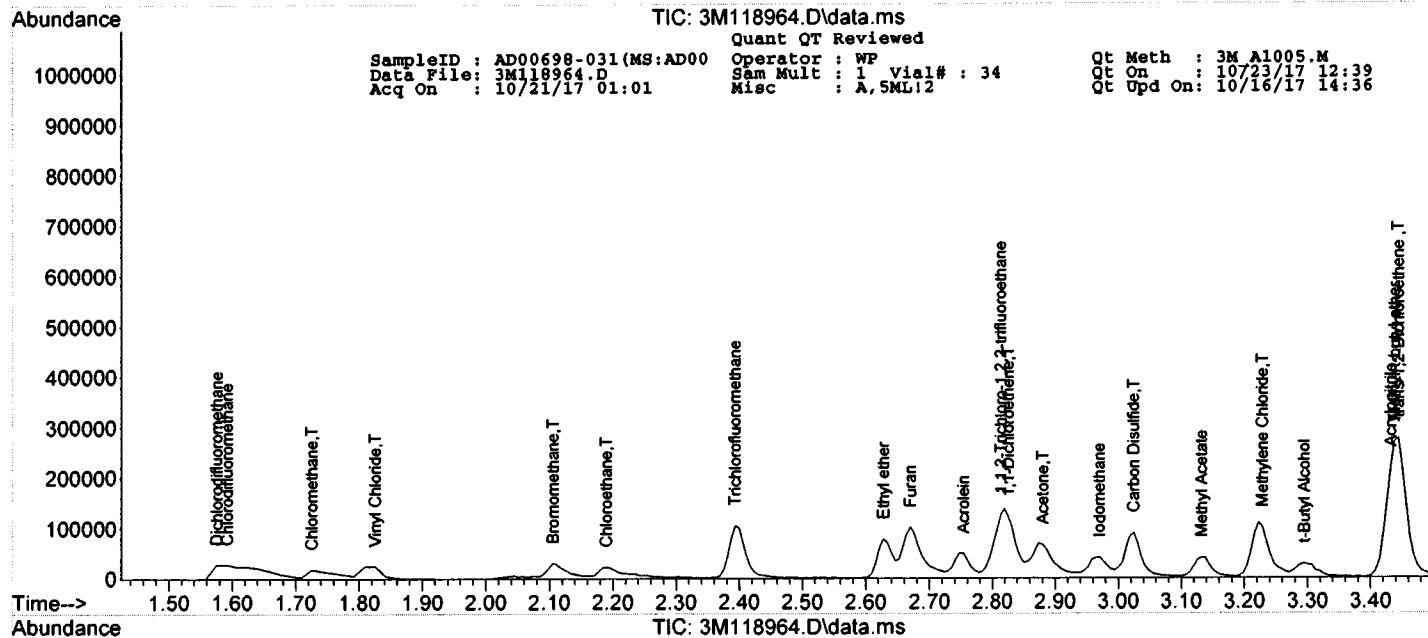
Quantitation Report (QT Reviewed)

SampleID : AD00698-031(MS:AD00) Operator : WP Qt Meth : 3M_A1005.M
 Data File: 3M118964.D Sam Mult : 1 Vial# : 34 Qt On : 10/23/17 12:39
 Acq On : 10/21/17 01:01 Misc : A,5ML!2 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
69) Chlorobenzene	6.797	112	115117	16.9410	ug/l	93
71) n-Butyl acrylate	7.061	55	90916	12.9560	ug/l	94
72) n-Amyl acetate	7.193	43	72612	13.3162	ug/l	77
73) Bromoform	7.307	173	30915	13.0287	ug/l	90
74) Ethylbenzene	6.839	106	35288	15.8375	ug/l	98
75) 1,1,2,2-Tetrachloroethane	7.547	83	52850	14.9987	ug/l	92
77) Styrene	7.157	104	114903	16.5599	ug/l	84
78) m,p-Xylenes	6.905	106	120395	32.0942	ug/l	99
79) o-Xylene	7.157	106	63361	16.9741	ug/l	83
80) trans-1,4-Dichloro-2-b...	7.577	53	21744	11.8309	ug/l	93
81) 1,3-Dichlorobenzene	8.178	146	64995	15.3510	ug/l	94
82) 1,4-Dichlorobenzene	8.232	146	65529	14.7449	ug/l	99
83) 1,2-Dichlorobenzene	8.485	146	63904	15.3562	ug/l	96
84) Isopropylbenzene	7.367	105	124558	16.0108	ug/l	96
85) Cyclohexanone	7.469	55	8951	61.0097	ug/l	84
86) Camphene	7.559	93	7490	2.9107	ug/l	86
87) 1,2,3-Trichloropropane	7.589	75	70099	14.3669	ug/l	97
88) 2-Chlorotoluene	7.704	91	84240	16.9167	ug/l	97
89) p-Ethyltoluene	7.686	105	129938	15.6189	ug/l	74
90) 4-Chlorotoluene	7.764	91	82128	15.2737	ug/l	96
91) n-Propylbenzene	7.620	91	127843	15.6343	ug/l	98
92) Bromobenzene	7.601	77	113433	14.6151	ug/l	93
93) 1,3,5-Trimethylbenzene	7.716	105	83523	15.2600	ug/l	84
94) Butyl methacrylate	7.716	41	66096	14.4985	ug/l	94
95) t-Butylbenzene	7.938	119	78308	15.4734	ug/l	94
96) 1,2,4-Trimethylbenzene	7.962	105	103651	15.7897	ug/l	95
97) sec-Butylbenzene	8.070	105	85089	14.6774	ug/l	99
98) 4-Isopropyltoluene	8.148	119	68961	14.2913	ug/l	97
99) n-Butylbenzene	8.412	91	79004	13.3788	ug/l	92
100) p-Diethylbenzene	8.394	119	44522m	13.7800	ug/l	
101) 1,2,4,5-Tetramethylben...	8.905	119	62994	13.3009	ug/l	99
102) 1,2-Dibromo-3-Chloropr...	8.995	157	7161	10.9859	ug/l	98
103) Camphor	9.482	95	49397	122.7289	ug/l	98
104) Hexachlorobutadiene	9.620	225	11207	10.5303	ug/l	96
105) 1,2,4-Trichlorobenzene	9.536	180	22922	12.9417	ug/l	97
106) 1,2,3-Trichlorobenzene	9.878	180	19309	12.6106	ug/l	96
107) Naphthalene	9.722	128	61745	13.0180	ug/l	100

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



SampleID : AD00698-032 (MSD:AD0 Operator : WP Qt Meth : 3M A1005.M
 Data File: 3M118965.D Sam Mult : 1 Vial# : 35 Qt On : 10/23/17 12:39
 Acq On : 10/21/17 01:17 Misc : A,5ML!1 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<hr/>						
Internal Standards						
4) Fluorobenzene	4.947	96	342936	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.779	117	294796	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.214	152	133505	30.00	ug/l	-0.01
<hr/>						
System Monitoring Compounds						
37) Dibromofluoromethane	4.526	111	100845	30.38	ug/l	0.00
Spiked Amount 30.000				Recovery	=	101.27%
39) 1,2-Dichloroethane-d4	4.742	67	79361	30.36	ug/l	-0.01
Spiked Amount 30.000				Recovery	=	101.20%
66) Toluene-d8	5.902	98	362738	27.61	ug/l	0.00
Spiked Amount 30.000				Recovery	=	92.03%
76) Bromofluorobenzene	7.482	174	127222	27.00	ug/l	-0.01
Spiked Amount 30.000				Recovery	=	90.00%
<hr/>						
Target Compounds						
5) Chlorodifluoromethane	1.581	51	86013	20.1611	ug/l	58
6) Dichlorodifluoromethane	1.581	85	23339	8.7514	ug/l	86
7) Chloromethane	1.731	50	31979	11.6991	ug/l	96
8) Bromomethane	2.105	94	15767	14.2399	ug/l	82
9) Vinyl Chloride	1.815	62	31745	14.6471	ug/l	91
10) Chloroethane	2.189	64	15733	11.6361	ug/l	94
11) Trichlorofluoromethane	2.400	101	71089	16.1991	ug/l	84
12) Ethyl ether	2.628	59	41819	16.5754	ug/l	81
13) Furan	2.670	39	72723	13.6224	ug/l	82
14) 1,1,2-Trichloro-1,2,2-...	2.808	101	30946	17.7349	ug/l	92
15) Methylene Chloride	3.223	84	50645	17.3723	ug/l	88
16) Acrolein	2.748	56	32535	71.8669	ug/l	92
17) Acrylonitrile	3.439	53	17161	17.7758	ug/l	96
18) Iodomethane	2.964	142	47767	22.8038	ug/l	86
19) Acetone	2.874	43	86344	88.3238	ug/l	91
20) Carbon Disulfide	3.024	76	102877	25.6122	ug/l	100
21) t-Butyl Alcohol	3.295	59	17914	60.3541	ug/l	92
22) n-Hexane	3.655	57	17218	15.0832	ug/l	85
23) Di-isopropyl-ether	3.817	45	132824	18.7945	ug/l	90
24) 1,1-Dichloroethene	2.826	61	65570	16.8654	ug/l	95
25) Methyl Acetate	3.133	43	47994	14.7688	ug/l	100
26) Methyl-t-butyl ether	3.439	73	117210	16.8461	ug/l	67
27) 1,1-Dichloroethane	3.799	63	80238	17.5582	ug/l	97
28) trans-1,2-Dichloroethene	3.451	96	47646	18.9670	ug/l	89
29) Ethyl-t-butyl ether	4.082	59	143726	17.6353	ug/l	94
30) cis-1,2-Dichloroethene	4.214	61	91190	17.8276	ug/l	80
31) Bromochloromethane	4.382	49	38400	16.8470	ug/l	91
32) 2,2-Dichloropropane	4.220	77	49899	13.0017	ug/l	96
33) Ethyl acetate	4.244	43	57311m	21.3083	ug/l	
34) 1,4-Dioxane	5.391	88	32674	978.3271	ug/l	92
35) 1,1-Dichloropropene	4.646	75	68554	19.6930	ug/l	97
36) Chloroform	4.418	83	103980	18.2964	ug/l	89
38) Cyclohexane	4.580	56	41155	18.7194	ug/l	97
40) 1,2-Dichloroethane	4.790	62	109529	19.9459	ug/l	92
41) 2-Butanone	4.220	43	142877m	10.4538	ug/l	
42) 1,1,1-Trichloroethane	4.544	97	84014	17.6208	ug/l	100
43) Carbon Tetrachloride	4.652	117	65420	18.9747	ug/l	96
44) Vinyl Acetate	3.817	43	91979	18.4671	ug/l	100
45) Bromodichloromethane	5.475	83	76197	17.7532	ug/l	89
46) Methylcyclohexane	5.289	83	29230	18.2609	ug/l	96
47) Dibromomethane	5.397	174	41052	19.2757	ug/l	92
48) 1,2-Dichloropropane	5.313	63	43431	17.8635	ug/l	94
49) Trichloroethene	5.169	130	50365	19.3141	ug/l	84
50) Benzene	4.784	78	177207	18.9313	ug/l	100
51) tert-Amyl methyl ether	4.820	73	109817	16.1517	ug/l	86
53) Iso-propylacetate	4.778	43	96455	15.3443	ug/l	93
54) Methyl methacrylate	5.343	41	64424	17.4813	ug/l	79
55) Dibromochloromethane	6.430	129	57220	15.8635	ug/l	97
57) cis-1,3-Dichloropropene	5.734	75	63761	14.0426	ug/l	91
58) trans-1,3-Dichloropropene	6.058	75	61193	13.4001	ug/l	99
59) Ethyl methacrylate	6.070	41	57890	15.6583	ug/l	50
60) 1,1,2-Trichloroethane	6.178	97	46366	15.5439	ug/l	94
61) 1,2-Dibromoethane	6.514	107	49252	15.5970	ug/l	95
62) 1,3-Dichloropropane	6.280	76	84427	15.9404	ug/l	99
63) 4-Methyl-2-Pentanone	5.812	43	51005	16.0921	ug/l	88
64) 2-Hexanone	6.298	43	37016	16.7191	ug/l	80
65) Tetrachloroethene	6.274	164	32469	17.1111	ug/l	98
67) Toluene	5.944	92	110143	16.9857	ug/l	90
68) 1,1,1,2-Tetrachloroethane	6.833	133	46588	17.1853	ug/l	80

Quantitation Report (QT Reviewed)

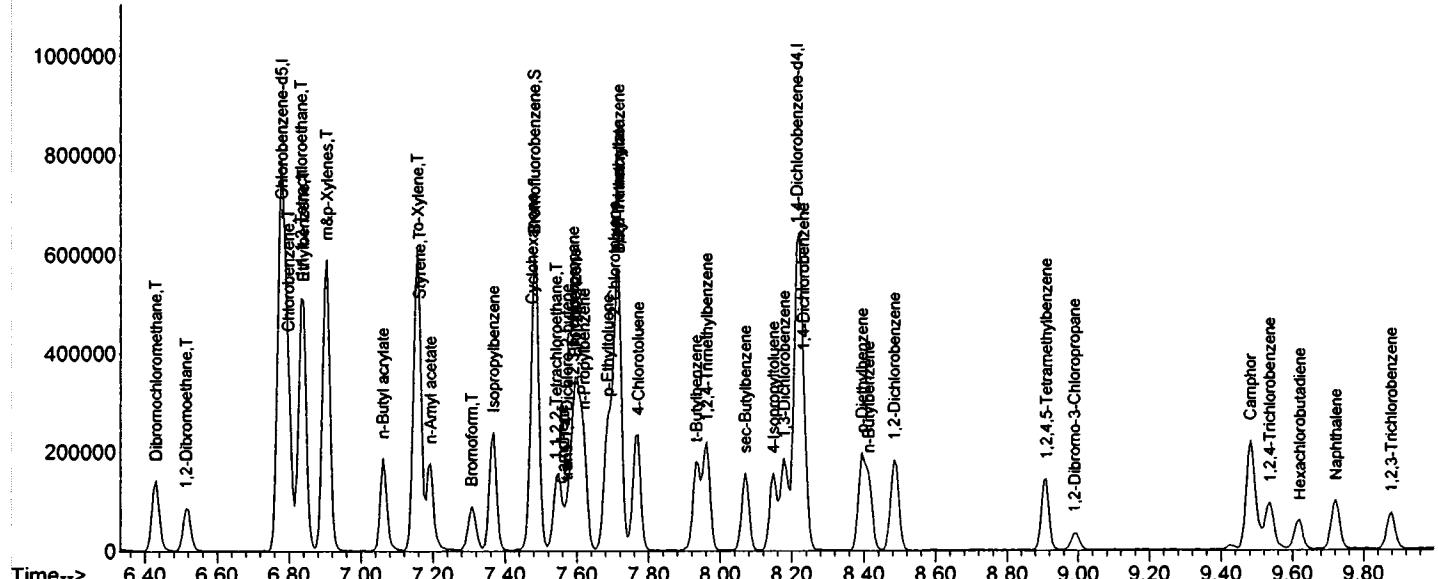
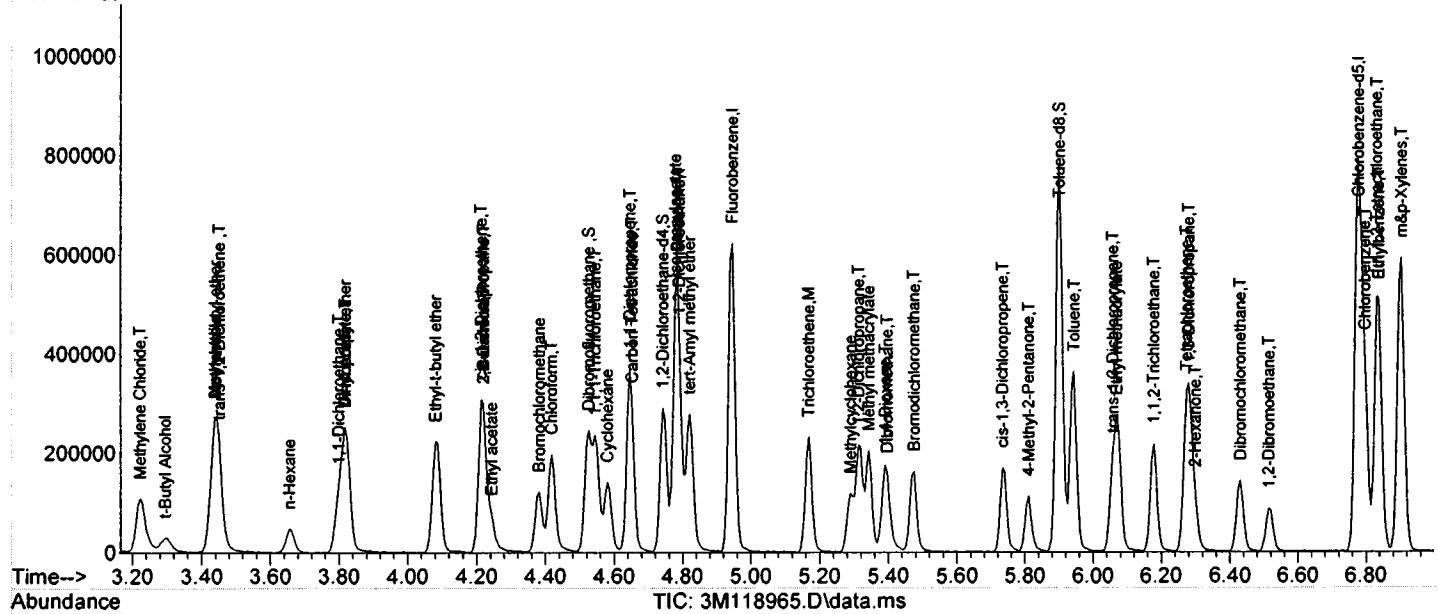
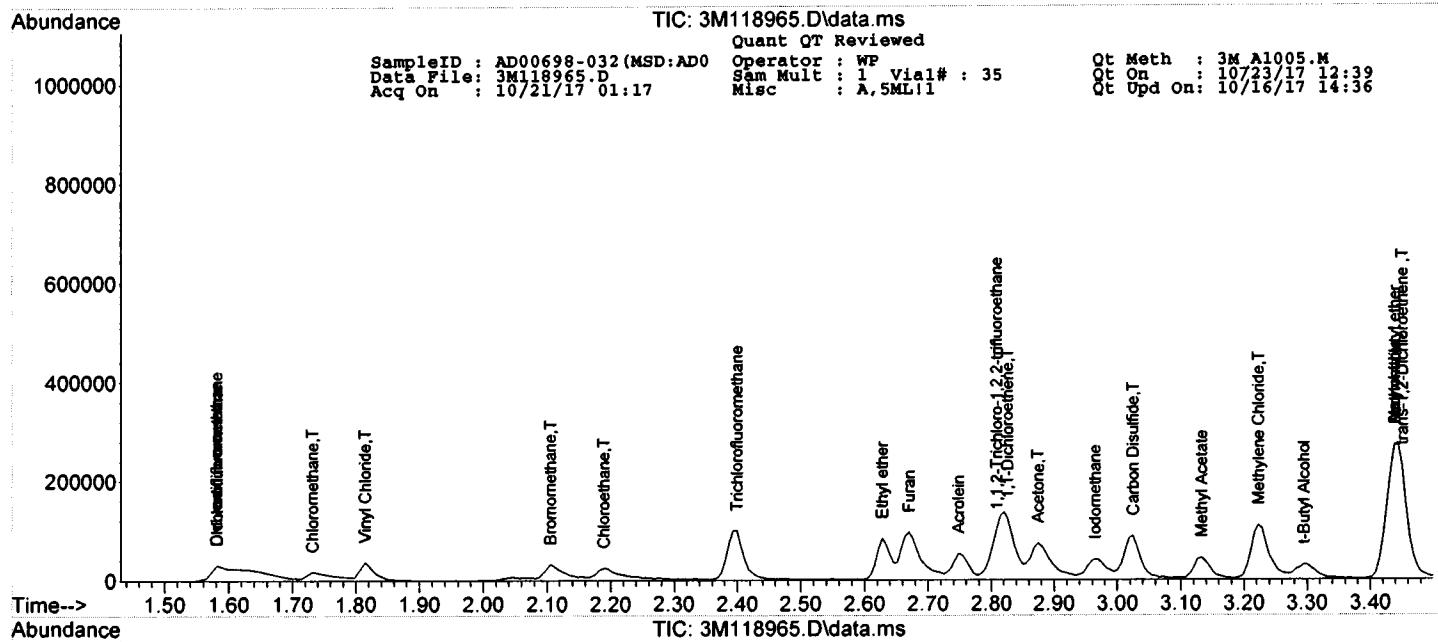
SampleID : AD00698-032(MSD:AD0) Operator : WP Qt Meth : 3M_A1005.M
 Data File: 3M118965.D Sam Mult : 1 Vial# : 35 Qt On : 10/23/17 12:39
 Acq On : 10/21/17 01:17 Misc : A,5ML!1 Qt Upd On: 10/16/17 14:36

 Data Path : G:\GcMsData\2017\GCMS_3\Data\10-2017\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
69) Chlorobenzene	6.797	112	119773	17.0497	ug/l	97
71) n-Butyl acrylate	7.061	55	92813	12.5421	ug/l	95
72) n-Amyl acetate	7.193	43	76735	13.3442	ug/l	82
73) Bromoform	7.307	173	33376	13.3381	ug/l	92
74) Ethylbenzene	6.839	106	36384	15.4845	ug/l	94
75) 1,1,2,2-Tetrachloroethane	7.542	83	51289	13.8026	ug/l	96
77) Styrene	7.163	104	116049	15.8598	ug/l	99
78) m&p-Xylenes	6.905	106	120405	30.4363	ug/l	95
79) o-Xylene	7.157	106	62612	15.9057	ug/l	78
80) trans-1,4-Dichloro-2-b...	7.572	53	19979	10.3082	ug/l	86
81) 1,3-Dichlorobenzene	8.178	146	64272	14.3949	ug/l	94
82) 1,4-Dichlorobenzene	8.232	146	68578	14.6327	ug/l	97
83) 1,2-Dichlorobenzene	8.485	146	65068	14.8269	ug/l	96
84) Isopropylbenzene	7.367	105	123230	15.0206	ug/l	97
85) Cyclohexanone	7.476	55	9103	58.8474	ug/l	93
86) Camphene	7.560	93	7531	2.7753	ug/l	97
87) 1,2,3-Trichloropropane	7.590	75	69976	13.5997	ug/l	98
88) 2-Chlorotoluene	7.704	91	83160	15.8358	ug/l	96
89) p-Ethyltoluene	7.686	105	120478	13.7325	ug/l	77
90) 4-Chlorotoluene	7.770	91	85176	15.0210	ug/l	97
91) n-Propylbenzene	7.620	91	127706	14.8096	ug/l	97
92) Bromobenzene	7.596	77	117125	14.3101	ug/l	92
93) 1,3,5-Trimethylbenzene	7.716	105	96950	16.7967	ug/l	97
94) Butyl methacrylate	7.716	41	69465	14.4492	ug/l	96
95) t-Butylbenzene	7.932	119	79024	14.8071	ug/l	93
96) 1,2,4-Trimethylbenzene	7.962	105	105659	15.2629	ug/l	97
97) sec-Butylbenzene	8.070	105	83725	13.6949	ug/l	99
98) 4-Isopropyltoluene	8.148	119	72124	14.1735	ug/l	98
99) n-Butylbenzene	8.413	91	84106	13.5059	ug/l	95
100) p-Diethylbenzene	8.395	119	47487m	13.9373	ug/l	
101) 1,2,4,5-Tetramethylben...	8.911	119	70437	14.1030	ug/l	97
102) 1,2-Dibromo-3-Chloropr...	8.989	157	7798	11.3421	ug/l	94
103) Camphor	9.482	95	55026	129.6398	ug/l	97
104) Hexachlorobutadiene	9.620	225	12114	10.7947	ug/l	98
105) 1,2,4-Trichlorobenzene	9.536	180	24450	13.0902	ug/l	96
106) 1,2,3-Trichlorobenzene	9.878	180	20950	12.9744	ug/l	96
107) Naphthalene	9.722	128	72816	14.5579	ug/l	100

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

7102003 0415



Form3
Recovery Data Laboratory Limits
QC Batch: MBS64955

Data File		Sample ID:		Analysis Date			
Spike or Dup: 3M119010.D		AD00698-001(MS)		10/23/2017 11:51:00 A			
Non Spike(if applicable): 3M119001.D		AD00698-001		10/23/2017 9:19:00 AM			
Inst Blank(if applicable):							
Method: 8260C		Matrix: Aqueous		QC Type: MS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	22.1291	0	20	111	50	150
Dichlorodifluoromethane	1	9.927	0	20	50	50	150
Chloromethane	1	15.8171	0	20	79	50	150
Bromomethane	1	17.2162	0	20	86	50	150
Vinyl Chloride	1	16.5891	0	20	83	50	150
Chloroethane	1	17.8183	0	20	89	50	150
Trichlorodifluoromethane	1	19.8539	0	20	99	50	150
Ethyl ether	1	20.9279	0	20	105	50	150
Furan	1	18.7108	0	20	94	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	23.9961	0	20	120	50	150
Methylene Chloride	1	22.5125	0	20	113	70	130
Acrolein	1	93.3964	0	100	93	50	150
Acrylonitrile	1	24.1341	0	20	121	50	150
Iodomethane	1	27.915	0	20	140	50	150
Acetone	1	114.1712	0	100	114	50	150
Carbon Disulfide	1	31.1263	0	20	156*	50	150
t-Butyl Alcohol	1	96.0821	0	100	96	50	150
n-Hexane	1	23.2535	0	20	116	70	130
Di-isopropyl-ether	1	25.5924	0	20	128	70	130
1,1-Dichloroethene	1	21.0148	0	20	105	70	130
Methyl Acetate	1	22.1631	0	20	111	50	150
Methyl-t-butyl ether	1	23.6683	0	20	118	70	130
1,1-Dichloroethane	1	23.2569	0	20	116	70	130
trans-1,2-Dichloroethene	1	23.3034	0	20	117	70	130
Ethyl-t-butyl ether	1	25.2146	0	20	126	70	130
cis-1,2-Dichloroethene	1	34.8271	13.3129	20	108	70	130
Bromochloromethane	1	22.5033	0	20	113	70	130
2,2-Dichloropropane	1	22.0087	0	20	110	70	130
Ethyl acetate	1	30.6023	0	20	153*	50	150
1,4-Dioxane	1	1332.851	0	1000	133	50	150
1,1-Dichloropropene	1	25.4729	0	20	127	70	130
Chloroform	1	23.6415	0	20	118	70	130
Cyclohexane	1	25.6027	0	20	128	70	130
1,2-Dichloroethane	1	24.3741	0	20	122	70	130
2-Butanone	1	15.9855	0	20	80	50	150
1,1,1-Trichloroethane	1	22.6349	0	20	113	70	130
Carbon Tetrachloride	1	23.1049	0	20	116	50	150
Vinyl Acetate	1	25.8146	0	20	129	50	150
Bromodichloromethane	1	22.1907	0	20	111	70	130
Methylcyclohexane	1	24.4984	0	20	122	70	130
Dibromomethane	1	23.3622	0	20	117	70	130
1,2-Dichloropropane	1	24.4694	0	20	122	70	130
Trichloroethene	1	24.4337	0	20	122	70	130
Benzene	1	24.7175	0	20	124	70	130
tert-Amyl methyl ether	1	24.6974	0	20	123	70	130
Iso-propylacetate	1	21.3714	0	20	107	70	130
Methyl methacrylate	1	22.1269	0	20	111	70	130
Dibromochloromethane	1	18.9004	0	20	95	70	130
2-Chloroethylvinylether	1	0	0	20	0*	70	130
cis-1,3-Dichloropropene	1	20.0069	0	20	100	70	130
trans-1,3-Dichloropropene	1	19.5302	0	20	98	70	130
Ethyl methacrylate	1	19.9957	0	20	100	70	130
1,1,2-Trichloroethane	1	19.5066	0	20	98	70	130
1,2-Dibromoethane	1	19.1471	0	20	96	70	130
1,3-Dichloropropane	1	20.3224	0	20	102	70	130
4-Methyl-2-Pentanone	1	20.6355	0	20	103	50	150
2-Hexanone	1	22.1121	0	20	111	50	150
Tetrachloroethene	1	21.653	0	20	108	50	150
Toluene	1	21.5172	0	20	108	70	130
1,1,1,2-Tetrachloroethane	1	21.1248	0	20	106	70	130
Chlorobenzene	1	20.9193	0	20	105	70	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3

Recovery Data Laboratory Limits

QC Batch: MBS64955

n-Butyl acrylate	1	17.2928	0	20	86	70	130
n-Amyl acetate	1	20.0813	0	20	100	70	130
Bromoform	1	16.0653	0	20	80	70	130
Ethylbenzene	1	20.3008	0	20	102	70	130
1,1,2,2-Tetrachloroethane	1	18.5964	0	20	93	70	130
Styrene	1	20.688	0	20	103	70	130
m&p-Xylenes	1	39.1931	0	40	98	70	130
o-Xylene	1	20.4026	0	20	102	70	130
trans-1,4-Dichloro-2-butene	1	16.093	0	20	80	50	150
1,3-Dichlorobenzene	1	18.9441	0	20	95	70	130
1,4-Dichlorobenzene	1	18.5696	0	20	93	70	130
1,2-Dichlorobenzene	1	18.8348	0	20	94	70	130
Isopropylbenzene	1	19.7813	0	20	99	70	130
Cyclohexanone	1	85.725	0	100	86	50	150
Camphepane	1	7.7299	0	20	39*	70	130
1,2,3-Trichloropropane	1	18.2603	0	20	91	70	130
2-Chlorotoluene	1	20.8708	0	20	104	70	130
p-Ethyltoluene	1	18.3492	0	20	92	70	130
4-Chlorotoluene	1	19.5724	0	20	98	70	130
n-Propylbenzene	1	19.6357	0	20	98	70	130
Bromobenzene	1	19.0757	0	20	95	70	130
1,3,5-Trimethylbenzene	1	21.9803	0	20	110	70	130
Butyl methacrylate	1	18.8775	0	20	94	70	130
t-Butylbenzene	1	19.387	0	20	97	70	130
1,2,4-Trimethylbenzene	1	19.705	0	20	99	70	130
sec-Butylbenzene	1	19.07	0	20	95	70	130
4-Isopropyltoluene	1	19.5703	0	20	98	70	130
n-Butylbenzene	1	18.715	0	20	94	70	130
p-Diethylbenzene	1	19.2229	0	20	96	70	130
1,2,4,5-Tetramethylbenzene	1	19.3902	0	20	97	70	130
1,2-Dibromo-3-Chloropropane	1	14.4538	0	20	72	50	150
Camphor	1	183.5731	0	200	92	20	150
Hexachlorobutadiene	1	14.2231	0	20	71	50	150
1,2,4-Trichlorobenzene	1	17.5507	0	20	88	70	130
1,2,3-Trichlorobenzene	1	17.5749	0	20	88	70	130
Naphthalene	1	19.52	0	20	98	50	150

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: MBS64955

Data File	Sample ID:	Analysis Date
Spike or Dup: 3M119011.D	AD00698-001(MSD)	10/23/2017 12:07:00 P
Non Spike(if applicable): 3M119001.D	AD00698-001	10/23/2017 9:19:00 AM
Inst Blank(if applicable):		

Method: 8260C		Matrix: Aqueous		QC Type: MSD			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	18.0432	0	20	90	50	150
Dichlorodifluoromethane	1	7.8913	0	20	39*	50	150
Chloromethane	1	12.4922	0	20	62	50	150
Bromomethane	1	14.1602	0	20	71	50	150
Vinyl Chloride	1	13.4059	0	20	67	50	150
Chloroethane	1	15.2678	0	20	76	50	150
Trichlorofluoromethane	1	16.173	0	20	81	50	150
Ethyl ether	1	18.2905	0	20	91	50	150
Furan	1	17.0919	0	20	85	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	18.8578	0	20	94	50	150
Methylene Chloride	1	19.0416	0	20	95	70	130
Acrolein	1	81.3447	0	100	81	50	150
Acrylonitrile	1	20.2113	0	20	101	50	150
Iodomethane	1	24.3514	0	20	122	50	150
Acetone	1	93.916	0	100	94	50	150
Carbon Disulfide	1	25.1465	0	20	126	50	150
t-Butyl Alcohol	1	81.465	0	100	81	50	150
n-Hexane	1	18.4999	0	20	92	70	130
Di-isopropyl-ether	1	21.6771	0	20	108	70	130
1,1-Dichloroethene	1	16.3501	0	20	82	70	130
Methyl Acetate	1	18.2522	0	20	91	50	150
Methyl-t-butyl ether	1	20.3595	0	20	102	70	130
1,1-Dichloroethane	1	19.244	0	20	96	70	130
trans-1,2-Dichloroethene	1	20.3223	0	20	102	70	130
Ethyl-t-butyl ether	1	21.3326	0	20	107	70	130
cis-1,2-Dichloroethene	1	29.1239	13.3129	20	79	70	130
Bromochloromethane	1	17.8127	0	20	89	70	130
2,2-Dichloropropane	1	18.8249	0	20	94	70	130
Ethyl acetate	1	20.4271	0	20	102	50	150
1,4-Dioxane	1	1121.213	0	1000	112	50	150
1,1-Dichloropropene	1	21.1954	0	20	106	70	130
Chloroform	1	19.3547	0	20	97	70	130
Cyclohexane	1	21.1486	0	20	106	70	130
1,2-Dichloroethane	1	20.6441	0	20	103	70	130
2-Butanone	1	22.3176	0	20	112	50	150
1,1,1-Trichloroethane	1	18.9795	0	20	95	70	130
Carbon Tetrachloride	1	19.077	0	20	95	50	150
Vinyl Acetate	1	21.509	0	20	108	50	150
Bromodichloromethane	1	18.7941	0	20	94	70	130
Methylcyclohexane	1	21.1636	0	20	106	70	130
Dibromomethane	1	19.1682	0	20	96	70	130
1,2-Dichloropropane	1	20.6658	0	20	103	70	130
Trichloroethene	1	20.8476	0	20	104	70	130
Benzene	1	20.7605	0	20	104	70	130
tert-Amyl methyl ether	1	20.2971	0	20	101	70	130
Iso-propylacetate	1	18.3705	0	20	92	70	130
Methyl methacrylate	1	19.2527	0	20	96	70	130
Dibromochloromethane	1	16.6115	0	20	83	70	130
2-Chloroethylvinylether	1	0	0	20	0*	70	130
cis-1,3-Dichloropropene	1	16.7886	0	20	84	70	130
trans-1,3-Dichloropropene	1	16.8265	0	20	84	70	130
Ethyl methacrylate	1	18.0329	0	20	90	70	130
1,1,2-Trichloroethane	1	17.4668	0	20	87	70	130
1,2-Dibromoethane	1	17.3577	0	20	87	70	130
1,3-Dichloropropane	1	17.5014	0	20	88	70	130
4-Methyl-2-Pentanone	1	18.4436	0	20	92	50	150
2-Hexanone	1	19.3149	0	20	97	50	150
Tetrachloroethene	1	19.036	0	20	95	50	150
Toluene	1	18.3627	0	20	92	70	130
1,1,1,2-Tetrachloroethane	1	18.5655	0	20	93	70	130
Chlorobenzene	1	18.4716	0	20	92	70	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3

Recovery Data Laboratory Limits

QC Batch: MBS64955

n-Butyl acrylate	1	15.598	0	20	78	70	130
n-Amyl acetate	1	17.0694	0	20	85	70	130
Bromoform	1	14.0567	0	20	70	70	130
Ethylbenzene	1	17.6456	0	20	88	70	130
1,1,2,2-Tetrachloroethane	1	16.829	0	20	84	70	130
Styrene	1	18.3324	0	20	92	70	130
m&p-Xylenes	1	35.7233	0	40	89	70	130
o-Xylene	1	18.5319	0	20	93	70	130
trans-1,4-Dichloro-2-butene	1	13.5243	0	20	68	50	150
1,3-Dichlorobenzene	1	17.2747	0	20	86	70	130
1,4-Dichlorobenzene	1	17.264	0	20	86	70	130
1,2-Dichlorobenzene	1	17.7556	0	20	89	70	130
Isopropylbenzene	1	18.4628	0	20	92	70	130
Cyclohexanone	1	76.0792	0	100	76	50	150
Camphene	1	5.2931	0	20	26*	70	130
1,2,3-Trichloropropane	1	16.4055	0	20	82	70	130
2-Chlorotoluene	1	18.638	0	20	93	70	130
p-Ethyltoluene	1	18.5911	0	20	93	70	130
4-Chlorotoluene	1	18.0226	0	20	90	70	130
n-Propylbenzene	1	18.4582	0	20	92	70	130
Bromobenzene	1	16.9958	0	20	85	70	130
1,3,5-Trimethylbenzene	1	18.8614	0	20	94	70	130
Butyl methacrylate	1	16.6604	0	20	83	70	130
t-Butylbenzene	1	18.334	0	20	92	70	130
1,2,4-Trimethylbenzene	1	18.8543	0	20	94	70	130
sec-Butylbenzene	1	18.6294	0	20	93	70	130
4-Isopropyltoluene	1	18.9636	0	20	95	70	130
n-Butylbenzene	1	18.2156	0	20	91	70	130
p-Diethylbenzene	1	18.5484	0	20	93	70	130
1,2,4,5-Tetramethylbenzene	1	19.4706	0	20	97	70	130
1,2-Dibromo-3-Chloropropane	1	13.4529	0	20	67	50	150
Camphor	1	171.5655	0	200	86	20	150
Hexachlorobutadiene	1	14.558	0	20	73	50	150
1,2,4-Trichlorobenzene	1	17.9439	0	20	90	70	130
1,2,3-Trichlorobenzene	1	17.3495	0	20	87	70	130
Naphthalene	1	18.8575	0	20	94	50	150

Form3
RPD Data Laboratory Limits
QC Batch: MBS64955

Data File		Sample ID:		Analysis Date	
Spike or Dup: 3M119011.D		AD00698-001(MSD)		10/23/2017 12:07:00 P	
Duplicate(if applicable): 3M119010.D		AD00698-001(MS)		10/23/2017 11:51:00 A	
Inst Blank(if applicable):					
Method: 8260C		Matrix: Aqueous		QC Type: MSD	
Analyte:	Column	Dup/MSD/MBSD	Sample/MS/MBS	RPD	Limit
		Conc	Conc		
Chlorodifluoromethane	1	18.0432	22.1291	20	30
Dichlorodifluoromethane	1	7.8913	9.927	23	30
Chloromethane	1	12.4922	15.8171	23	30
Bromomethane	1	14.1602	17.2162	19	30
Vinyl Chloride	1	13.4059	16.5891	21	40
Chloroethane	1	15.2678	17.8183	15	30
Trichlorodifluoromethane	1	16.173	19.8539	20	30
Ethyl ether	1	18.2905	20.9279	13	30
Furan	1	17.0919	18.7108	9	30
1,1,2-Trichloro-1,2,2-trifluoroethane	1	18.8578	23.9961	24	30
Methylene Chloride	1	19.0416	22.5125	17	30
Acrolein	1	81.3447	93.3964	14	30
Acrylonitrile	1	20.2113	24.1341	18	30
Iodomethane	1	24.3514	27.915	14	30
Acetone	1	93.916	114.1712	19	30
Carbon Disulfide	1	25.1465	31.1263	21	30
t-Butyl Alcohol	1	81.465	96.0821	16	30
n-Hexane	1	18.4999	23.2535	23	30
Di-isopropyl-ether	1	21.6771	25.5924	17	30
1,1-Dichloroethene	1	16.3501	21.0148	25	40
Methyl Acetate	1	18.2522	22.1631	19	30
Methyl-t-butyl ether	1	20.3595	23.6683	15	30
1,1-Dichloroethane	1	19.244	23.2569	19	40
trans-1,2-Dichloroethene	1	20.3223	23.3034	14	30
Ethyl-t-butyl ether	1	21.3326	25.2146	17	30
cis-1,2-Dichloroethene	1	29.1239	34.8271	18	30
Bromochloromethane	1	17.8127	22.5033	23	30
2,2-Dichloropropane	1	18.8249	22.0087	16	30
Ethyl acetate	1	20.4271	30.6023	40*	30
1,4-Dioxane	1	1121.213	1332.851	17	30
1,1-Dichloropropene	1	21.1954	25.4729	18	30
Chloroform	1	19.3547	23.6415	20	40
Cyclohexane	1	21.1486	25.6027	19	30
1,2-Dichloroethane	1	20.6441	24.3741	17	40
2-Butanone	1	22.3176	15.9855	33	40
1,1,1-Trichloroethane	1	18.9795	22.6349	18	30
Carbon Tetrachloride	1	19.077	23.1049	19	40
Vinyl Acetate	1	21.509	25.8146	18	30
Bromodichloromethane	1	18.7941	22.1907	17	30
Methylcyclohexane	1	21.1636	24.4984	15	30
Dibromomethane	1	19.1682	23.3622	20	30
1,2-Dichloropropane	1	20.6658	24.4694	17	30
Trichloroethene	1	20.8476	24.4337	16	40
Benzene	1	20.7605	24.7175	17	40
tert-Amyl methyl ether	1	20.2971	24.6974	20	30
Iso-propylacetate	1	18.3705	21.3714	15	30
Methyl methacrylate	1	19.2527	22.1269	14	30
Dibromochloromethane	1	16.6115	18.9004	13	30
2-Chloroethylvinylether	1	0	0	NA	30
cis-1,3-Dichloropropene	1	16.7886	20.0069	17	30
trans-1,3-Dichloropropene	1	16.8265	19.5302	15	30
Ethyl methacrylate	1	18.0329	19.9957	10	30
1,1,2-Trichloroethane	1	17.4668	19.5066	11	30
1,2-Dibromoethane	1	17.3577	19.1471	9.8	30
1,3-Dichloropropane	1	17.5014	20.3224	15	30
4-Methyl-2-Pentanone	1	18.4436	20.6355	11	30
2-Hexanone	1	19.3149	22.1121	14	30
Tetrachloroethene	1	19.036	21.653	13	40
Toluene	1	18.3627	21.5172	16	40
1,1,2-Tetrachloroethane	1	18.5655	21.1248	13	30
Chlorobenzene	1	18.4716	20.9193	12	40
n-Butyl acrylate	1	15.598	17.2928	10	30
n-Amyl acetate	1	17.0694	20.0813	16	30

Form3
RPD Data Laboratory Limits
QC Batch: MBS64955

Bromoform	1	14.0567	16.0653	13	30
Ethylbenzene	1	17.6456	20.3008	14	30
1,1,2,2-Tetrachloroethane	1	16.829	18.5964	10	30
Styrene	1	18.3324	20.688	12	30
m&p-Xylenes	1	35.7233	39.1931	9.3	30
o-Xylene	1	18.5319	20.4026	9.6	30
trans-1,4-Dichloro-2-butene	1	13.5243	16.093	17	30
1,3-Dichlorobenzene	1	17.2747	18.9441	9.2	30
1,4-Dichlorobenzene	1	17.264	18.5696	7.3	40
1,2-Dichlorobenzene	1	17.7556	18.8348	5.9	40
Isopropylbenzene	1	18.4628	19.7813	6.9	30
Cyclohexanone	1	76.0792	85.725	12	30
Camphene	1	5.2931	7.7299	37*	30
1,2,3-Trichloropropane	1	16.4055	18.2603	11	30
2-Chlorotoluene	1	18.638	20.8708	11	30
p-Ethyltoluene	1	18.5911	18.3492	1.3	30
4-Chiortoluene	1	18.0226	19.5724	8.2	30
n-Propylbenzene	1	18.4582	19.6357	6.2	40
Bromobenzene	1	16.9958	19.0757	12	30
1,3,5-Trimethylbenzene	1	18.8614	21.9803	15	30
Butyl methacrylate	1	16.6604	18.8775	12	30
t-Butylbenzene	1	18.334	19.387	5.6	30
1,2,4-Trimethylbenzene	1	18.8543	19.705	4.4	30
sec-Butylbenzene	1	18.6294	19.07	2.3	40
4-Isopropyltoluene	1	18.9636	19.5703	3.1	30
n-Butylbenzene	1	18.2156	18.715	2.7	30
p-Diethylbenzene	1	18.5484	19.2229	3.6	30
1,2,4,5-Tetramethylbenzene	1	19.4706	19.3902	0.41	30
1,2-Dibromo-3-Chloropropane	1	13.4529	14.4538	7.2	30
Camphor	1	171.5655	183.5731	6.8	30
Hexachlorobutadiene	1	14.558	14.2231	2.3	30
1,2,4-Trichlorobenzene	1	17.9439	17.5507	2.2	30
1,2,3-Trichlorobenzene	1	17.3495	17.5749	1.3	30
Naphthalene	1	18.8575	19.52	3.5	30

* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

SampleID : AD00698-001 Operator : SG Qt Meth : 3M_A1005.M
 Data File: 3M119001.D Sam Mult : 1 Vial# : 9 Qt On : 10/23/17 09:32
 Acq On : 10/23/17 09:19 Misc : A,5ML!2 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-23-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
4) Fluorobenzene	4.946	96	349820	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.778	117	300623	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	124621	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.525	111	102407	30.25	ug/l	0.00
Spiked Amount 30.000				Recovery	=	100.83%
39) 1,2-Dichloroethane-d4	4.742	67	81602	30.60	ug/l	-0.01
Spiked Amount 30.000				Recovery	=	102.00%
66) Toluene-d8	5.901	98	367706	27.45	ug/l	0.00
Spiked Amount 30.000				Recovery	=	91.50%
76) Bromofluorobenzene	7.487	174	124835	28.38	ug/l	0.00
Spiked Amount 30.000				Recovery	=	94.60%
Target Compounds						
30) cis-1,2-Dichloroethene	4.213	61	69464	13.3129	ug/l	75

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

Abundance

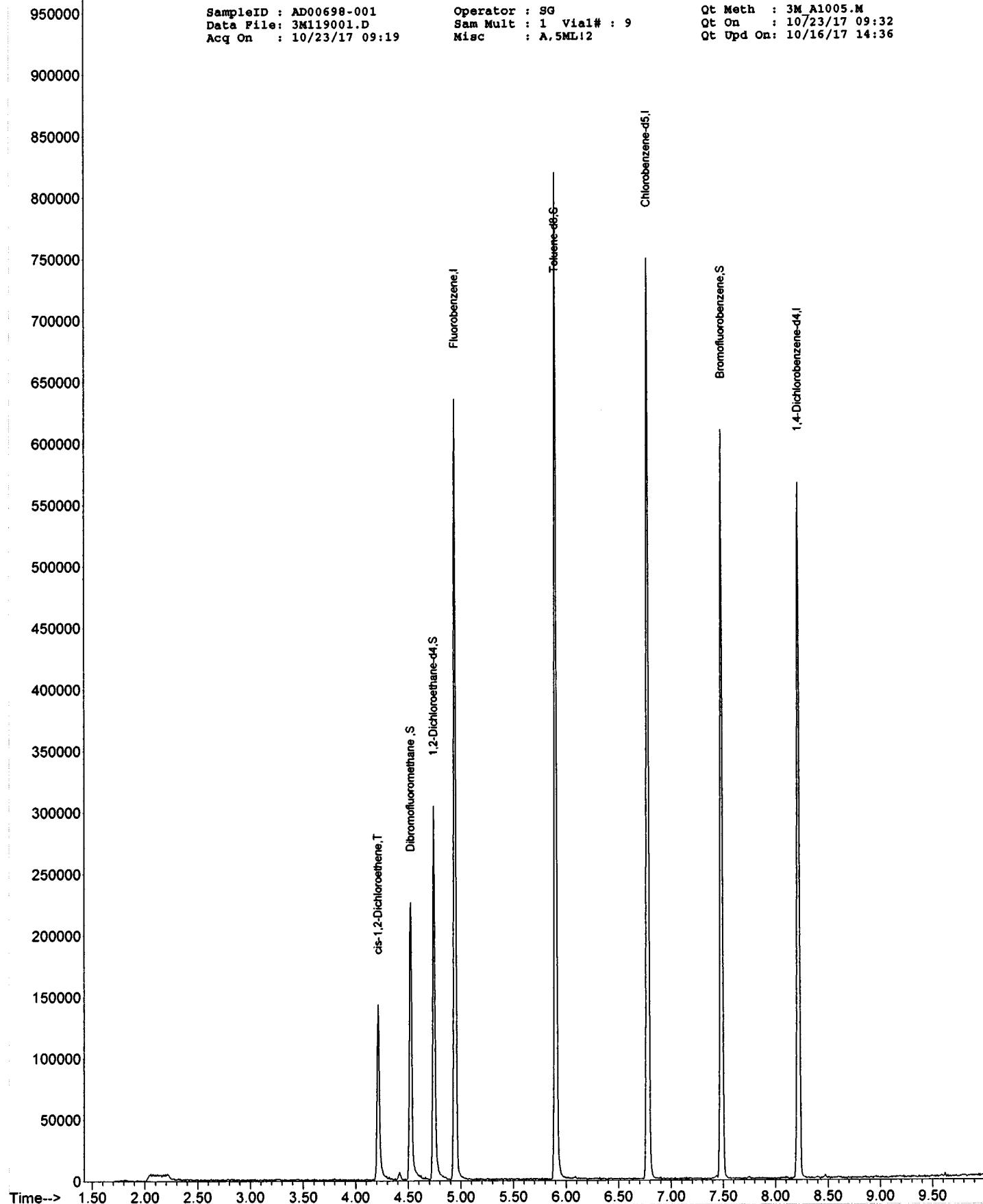
TIC: 3M119001.D\data.ms

Quant QT Reviewed

SampleID : AD00698-001
Data File: 3M119001.D
Acq On : 10/23/17 09:19

Operator : SG
Sam Mult : 1 Vial# : 9
Misc : A.5ML12

Qt Meth : 3M_A1005.M
Qt On : 10/23/17 09:32
Qt Upd On: 10/16/17 14:36



SampleID : AD00698-001(MS) Operator : SG Qt Meth : 3M_A1005.M
 Data File: 3M119010.D Sam Mult : 1 Vial# : 15 Qt On : 10/23/17 15:06
 Acq On : 10/23/17 11:51 Misc : A,5ML!2 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-23-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.952	96	334382	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.784	117	292044	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	130290	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.532	111	98842	30.54	ug/l	0.00
Spiked Amount 30.000			Recovery	= 101.80%		
39) 1,2-Dichloroethane-d4	4.748	67	75680	29.69	ug/l	0.00
Spiked Amount 30.000			Recovery	= 98.97%		
66) Toluene-d8	5.907	98	359468	27.62	ug/l	0.00
Spiked Amount 30.000			Recovery	= 92.07%		
76) Bromofluorobenzene	7.487	174	128216	27.88	ug/l	0.00
Spiked Amount 30.000			Recovery	= 92.93%		
Target Compounds						
5) Chlorodifluoromethane	1.613	51	92054	22.1291	ug/l	58
6) Dichlorodifluoromethane	1.596	85	25814	9.9270	ug/l	82
7) Chloromethane	1.746	50	42157	15.8171	ug/l	79
8) Bromomethane	2.117	94	18587	17.2162	ug/l	87
9) Vinyl Chloride	1.830	62	35057	16.5891	ug/l	97
10) Chloroethane	2.195	64	23491	17.8183	ug/l	96
11) Trichlorofluoromethane	2.405	101	84955	19.8539	ug/l	88
12) Ethyl ether	2.634	59	51483	20.9279	ug/l	75
13) Furan	2.676	39	97396	18.7108	ug/l	90
14) 1,1,2-Trichloro-1,2,2-...	2.820	101	40827	23.9961	ug/l	89
15) Methylene Chloride	3.228	84	63993	22.5125	ug/l	91
16) Acrolein	2.760	56	41227	93.3964	ug/l	97
17) Acrylonitrile	3.438	53	22716	24.1341	ug/l	95
18) Iodomethane	2.976	142	57015	27.9150	ug/l	90
19) Acetone	2.880	43	108828	114.1712	ug/l	96
20) Carbon Disulfide	3.030	76	121907	31.1263	ug/l	100
21) t-Butyl Alcohol	3.300	59	27798	96.0821	ug/l	88
22) n-Hexane	3.661	57	25899	23.2535	ug/l	88
23) Di-isopropyl-ether	3.823	45	176355	25.5924	ug/l	95
24) 1,1-Dichloroethene	2.838	61	79664	21.0148	ug/l	96
25) Methyl Acetate	3.138	43	70227	22.1631	ug/l	100
26) Methyl-t-butyl ether	3.444	73	160569	23.6683	ug/l	66
27) 1,1-Dichloroethane	3.805	63	103629	23.2569	ug/l	92
28) trans-1,2-Dichloroethene	3.456	96	57079	23.3034	ug/l	93
29) Ethyl-t-butyl ether	4.087	59	200371	25.2146	ug/l	95
30) cis-1,2-Dichloroethene	4.219	61	173701	34.8271	ug/l	80
31) Bromochloromethane	4.388	49	50013	22.5033	ug/l	89
32) 2,2-Dichloropropane	4.225	77	82360	22.0087	ug/l	94
33) Ethyl acetate	4.243	43	80255m	30.6023	ug/l	
34) 1,4-Dioxane	5.391	88	43404	1332.8514	ug/l	77
35) 1,1-Dichloropropene	4.652	75	86463	25.4729	ug/l	98
36) Chloroform	4.424	83	131005	23.6415	ug/l	91
38) Cyclohexane	4.586	56	54884	25.6027	ug/l	97
40) 1,2-Dichloroethane	4.796	62	130138	24.3741	ug/l	100
41) 2-Butanone	4.225	43	21302m	15.9855	ug/l	
42) 1,1,1-Trichloroethane	4.550	97	105229	22.6349	ug/l	100
43) Carbon Tetrachloride	4.658	117	77673	23.1049	ug/l	86
44) Vinyl Acetate	3.829	43	125368	25.8146	ug/l	100
45) Bromodichloromethane	5.481	83	92867	22.1907	ug/l	100
46) Methylcyclohexane	5.295	83	38236	24.4984	ug/l	98
47) Dibromomethane	5.403	174	48514	23.3622	ug/l	92
48) 1,2-Dichloropropane	5.319	63	58008	24.4694	ug/l	97
49) Trichloroethene	5.174	130	62126	24.4337	ug/l	84
50) Benzene	4.790	78	225598	24.7175	ug/l	100
51) tert-Amyl methyl ether	4.826	73	163732	24.6974	ug/l	83
53) Iso-propylacetate	4.784	43	133087	21.3714	ug/l	95
54) Methyl methacrylate	5.349	41	80783	22.1269	ug/l	77
55) Dibromochloromethane	6.436	129	67538	18.9004	ug/l	94
57) cis-1,3-Dichloropropene	5.739	75	89994	20.0069	ug/l	92
58) trans-1,3-Dichloropropene	6.064	75	88354	19.5302	ug/l	100
59) Ethyl methacrylate	6.076	41	73236m	19.9957	ug/l	
60) 1,1,2-Trichloroethane	6.184	97	57643	19.5066	ug/l	93
61) 1,2-Dibromoethane	6.520	107	59898	19.1471	ug/l	79
62) 1,3-Dichloropropane	6.286	76	106631	20.3224	ug/l	94
63) 4-Methyl-2-Pentanone	5.817	43	64795	20.6355	ug/l	78
64) 2-Hexanone	6.304	43	48499	22.1121	ug/l	81
65) Tetrachloroethene	6.280	164	40704	21.6530	ug/l	99
67) Toluene	5.949	92	138225	21.5172	ug/l	99
68) 1,1,1,2-Tetrachloroethane	6.838	133	56733	21.1248	ug/l	90

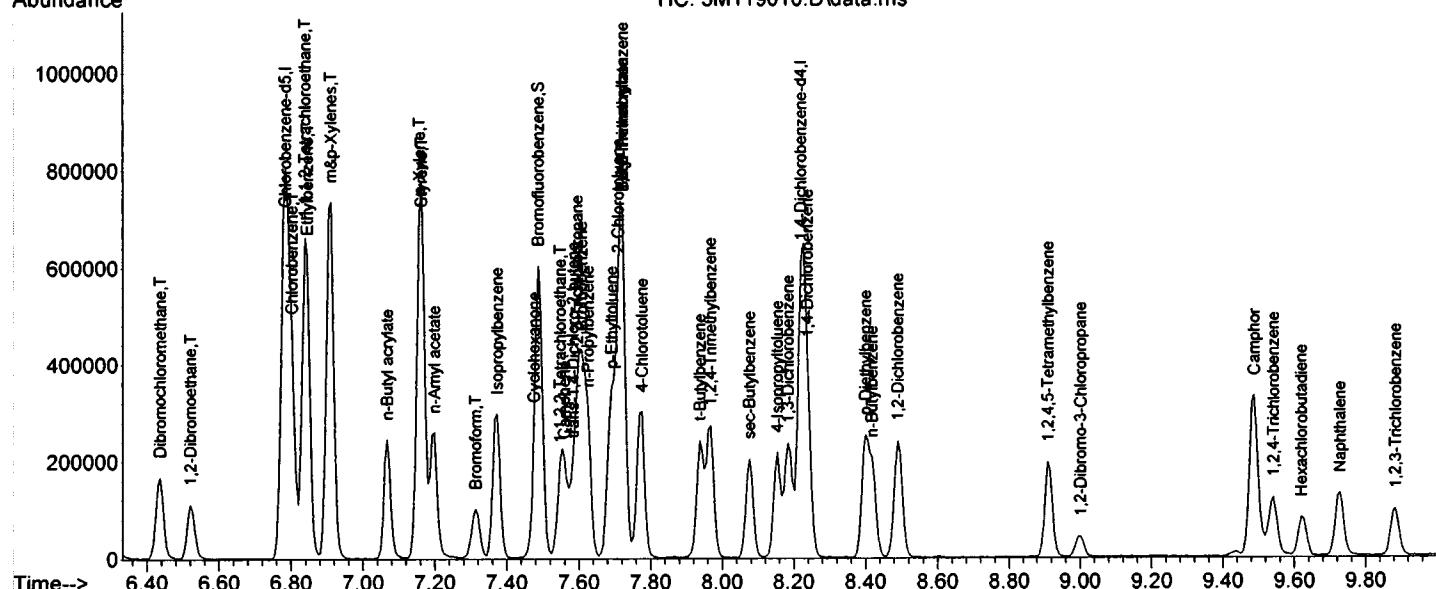
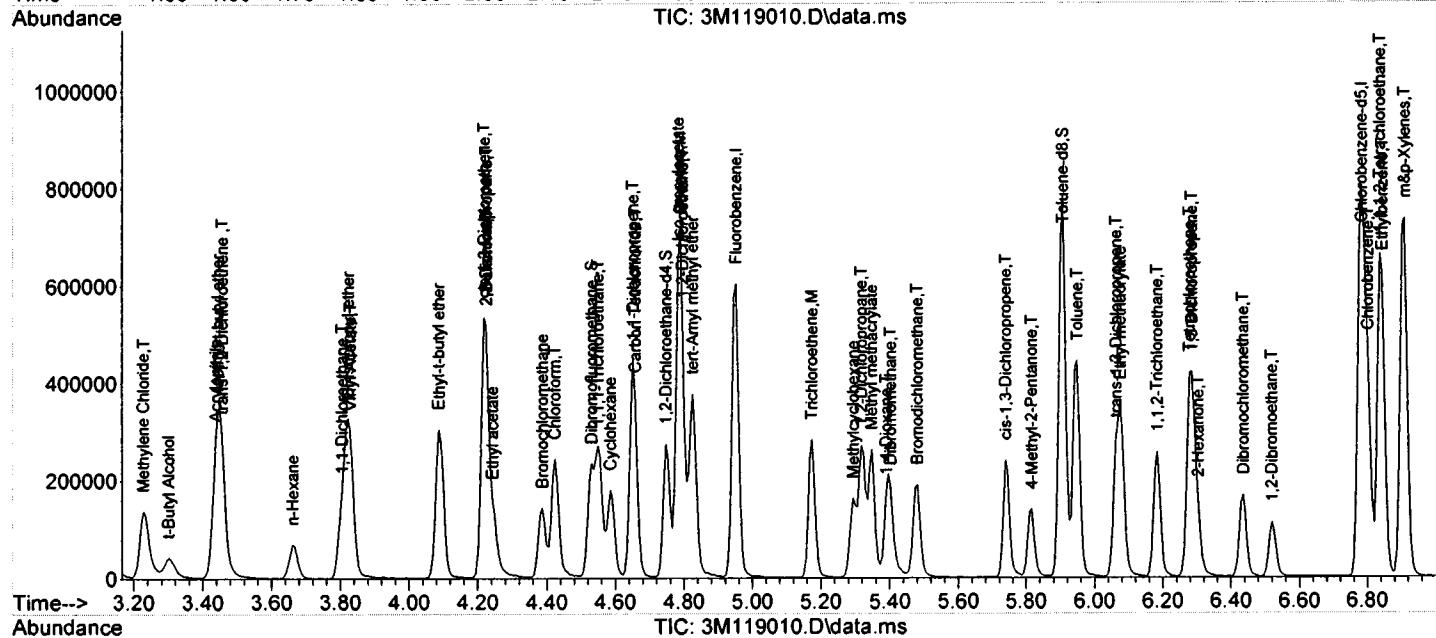
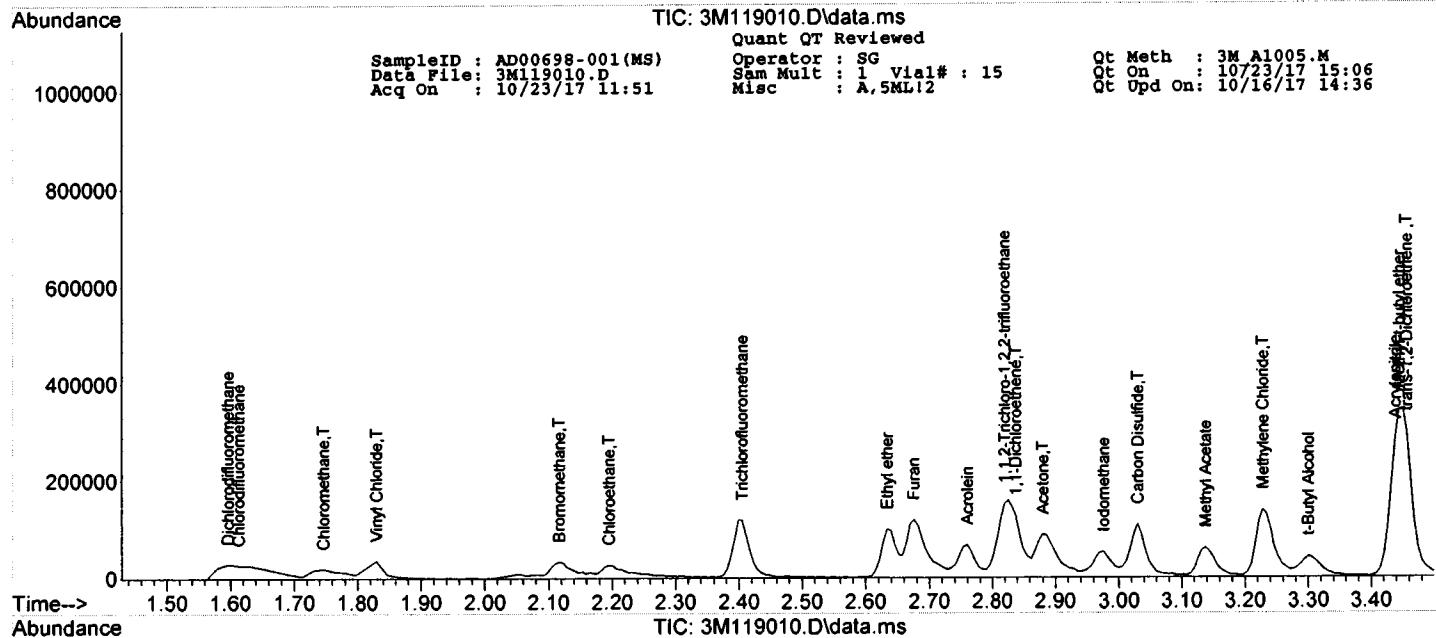
Quantitation Report (QT Reviewed)

SampleID : AD00698-001(MS) Operator : SG Qt Meth : 3M_A1005.M
 Data File: 3M119010.D Sam Mult : 1 Vial# : 15 Qt On : 10/23/17 15:06
 Acq On : 10/23/17 11:51 Misc : A,5ML!2 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-23-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
69) Chlorobenzene	6.802	112	145585	20.9193	ug/l	95
71) n-Butyl acrylate	7.067	55	124887	17.2928	ug/l	95
72) n-Amyl acetate	7.199	43	112695	20.0813	ug/l	80
73) Bromoform	7.313	173	39232	16.0653	ug/l	97
74) Ethylbenzene	6.844	106	46552	20.3008	ug/l	91
75) 1,1,2,2-Tetrachloroethane	7.547	83	67438	18.5964	ug/l	95
77) Styrene	7.163	104	147732	20.6880	ug/l	86
78) m&p-Xylenes	6.910	106	151313	39.1931	ug/l	96
79) o-Xylene	7.157	106	78380	20.4026	ug/l	94
80) trans-1,4-Dichloro-2-b...	7.583	53	30440	16.0930	ug/l	84
81) 1,3-Dichlorobenzene	8.184	146	82547	18.9441	ug/l	94
82) 1,4-Dichlorobenzene	8.238	146	84933	18.5696	ug/l	99
83) 1,2-Dichlorobenzene	8.490	146	80666	18.8348	ug/l	97
84) Isopropylbenzene	7.373	105	158379	19.7813	ug/l	97
85) Cyclohexanone	7.475	55	12973	85.7250	ug/l	87
86) Camphene	7.559	93	20471	7.7299	ug/l	89
87) 1,2,3-Trichloropropane	7.595	75	91694	18.2603	ug/l	99
88) 2-Chlorotoluene	7.709	91	106961	20.8708	ug/l	94
89) p-Ethyltoluene	7.691	105	157104	18.3492	ug/l	79
90) 4-Chlorotoluene	7.775	91	108312	19.5724	ug/l	97
91) n-Propylbenzene	7.625	91	165245	19.6357	ug/l	98
92) Bromobenzene	7.607	77	152371	19.0757	ug/l	90
93) 1,3,5-Trimethylbenzene	7.721	105	123814	21.9803	ug/l	97
94) Butyl methacrylate	7.721	41	88569	18.8775	ug/l	98
95) t-Butylbenzene	7.938	119	100975	19.3870	ug/l	96
96) 1,2,4,5-Tetramethylben...	7.968	105	133125	19.7050	ug/l	95
97) sec-Butylbenzene	8.076	105	113778	19.0700	ug/l	99
98) 4-Isopropyltoluene	8.154	119	97188	19.5703	ug/l	97
99) n-Butylbenzene	8.418	91	113738	18.7150	ug/l	93
100) p-Diethylbenzene	8.400	119	63919	19.2229	ug/l	90
101) 1,2,4,5-Tetramethylben...	8.911	119	94512	19.3902	ug/l	99
102) 1,2-Dibromo-3-Chloropr...	9.001	157	9714	14.4538	ug/l	95
103) Camphor	9.487	95	76049	183.5731	ug/l	99
104) Hexachlorobutadiene	9.620	225	15556	14.2231	ug/l	91
105) 1,2,4-Trichlorobenzene	9.542	180	31992	17.5507	ug/l	98
106) 1,2,3-Trichlorobenzene	9.884	180	27695	17.5749	ug/l	97
107) Naphthalene	9.728	128	95284	19.5200	ug/l	100

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



SampleID : AD00698-001(MSD) Operator : SG Qt Meth : 3M_A1005.M
 Data File: 3M119011.D Sam Mult : 1 Vial# : 16 Qt On : 10/23/17 15:06
 Acq On : 10/23/17 12:07 Misc : A,5ML!2 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-23-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.946	96	387517	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.779	117	327852	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.220	152	142090	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.526	111	113224	30.19	ug/l	0.00
Spiked Amount 30.000				Recovery	= 100.63%	
39) 1,2-Dichloroethane-d4	4.748	67	88356	29.91	ug/l	0.00
Spiked Amount 30.000				Recovery	= 99.70%	
66) Toluene-d8	5.902	98	406384	27.81	ug/l	0.00
Spiked Amount 30.000				Recovery	= 92.70%	
76) Bromofluorobenzene	7.487	174	140139	27.94	ug/l	0.00
Spiked Amount 30.000				Recovery	= 93.13%	
Target Compounds						
5) Chlorodifluoromethane	1.592	51	86984	18.0432	ug/l	58
6) Dichlorodifluoromethane	1.592	85	23781	7.8913	ug/l	90
7) Chloromethane	1.742	50	38586	12.4922	ug/l	80
8) Bromomethane	2.111	94	17717	14.1602	ug/l	81
9) Vinyl Chloride	1.825	62	32832	13.4059	ug/l	95
10) Chloroethane	2.195	64	23327	15.2678	ug/l	84
11) Trichlorofluoromethane	2.399	101	80201	16.1730	ug/l	92
12) Ethyl ether	2.634	59	52145	18.2905	ug/l	83
13) Furan	2.676	39	103107	17.0919	ug/l	90
14) 1,1,2-Trichloro-1,2,2-...	2.814	101	37183	18.8578	ug/l	92
15) Methylene Chloride	3.228	84	62728	19.0416	ug/l	88
16) Acrolein	2.754	56	41613	81.3447	ug/l	92
17) Acrylonitrile	3.439	53	22048	20.2113	ug/l	86
18) Iodomethane	2.970	142	57640	24.3514	ug/l	100
19) Acetone	2.880	43	103746	93.9160	ug/l	90
20) Carbon Disulfide	3.024	76	114137	25.1465	ug/l	100
21) t-Butyl Alcohol	3.307	59	27318	81.4650	ug/l	94
22) n-Hexane	3.661	57	23870	18.4999	ug/l	88
23) Di-isopropyl-ether	3.823	45	173111	21.6771	ug/l	96
24) 1,1-Dichloroethene	2.832	61	71830	16.3501	ug/l	93
25) Methyl Acetate	3.132	43	67025	18.2522	ug/l	100
26) Methyl-t-butyl ether	3.439	73	160070	20.3595	ug/l	66
27) 1,1-Dichloroethane	3.799	63	99374	19.2440	ug/l	99
28) trans-1,2-Dichloroethene	3.451	96	57687	20.3223	ug/l	89
29) Ethyl-t-butyl ether	4.087	59	196460	21.3326	ug/l	95
30) cis-1,2-Dichloroethene	4.220	61	168338	29.1239	ug/l	78
31) Bromochloromethane	4.382	49	45879	17.8127	ug/l	93
32) 2,2-Dichloropropane	4.220	77	81640	18.8249	ug/l	95
33) Ethyl acetate	4.244	43	62083m	20.4271	ug/l	
34) 1,4-Dioxane	5.391	88	42314	1121.2131	ug/l	79
35) 1,1-Dichloropropene	4.646	75	83376	21.1954	ug/l	99
36) Chloroform	4.424	83	124293	19.3547	ug/l	85
38) Cyclohexane	4.586	56	52540	21.1486	ug/l	99
40) 1,2-Dichloroethane	4.790	62	128043	20.6441	ug/l	97
41) 2-Butanone	4.232	43	34466m	22.3176	ug/l	
42) 1,1,1-Trichloroethane	4.550	97	102256	18.9795	ug/l	94
43) Carbon Tetrachloride	4.652	117	74323	19.0770	ug/l	88
44) Vinyl Acetate	3.823	43	121057	21.5090	ug/l	100
45) Bromodichloromethane	5.475	83	91151	18.7941	ug/l	97
46) Methylcyclohexane	5.295	83	38280	21.1636	ug/l	99
47) Dibromomethane	5.397	174	46130	19.1682	ug/l	90
48) 1,2-Dichloropropane	5.319	63	56776	20.6658	ug/l	96
49) Trichloroethene	5.175	130	61431	20.8476	ug/l	89
50) Benzene	4.784	78	219592	20.7605	ug/l	100
51) tert-Amyl methyl ether	4.826	73	155942	20.2971	ug/l	86
53) Iso-propylacetate	4.784	43	128426	18.3705	ug/l	89
54) Methyl methacrylate	5.343	41	78908	19.2527	ug/l	75
55) Dibromochloromethane	6.430	129	66637	16.6115	ug/l	96
57) cis-1,3-Dichloropropene	5.739	75	84777	16.7886	ug/l	96
58) trans-1,3-Dichloropropene	6.058	75	85456	16.8265	ug/l	95
59) Ethyl methacrylate	6.076	41	74145m	18.0329	ug/l	
60) 1,1,2-Trichloroethane	6.184	97	57944	17.4668	ug/l	94
61) 1,2-Dibromoethane	6.520	107	60958	17.3577	ug/l	99
62) 1,3-Dichloropropane	6.286	76	103089	17.5014	ug/l	100
63) 4-Methyl-2-Pentanone	5.811	43	65013	18.4436	ug/l	90
64) 2-Hexanone	6.298	43	47558	19.3149	ug/l	74
65) Tetrachloroethene	6.274	164	40172	19.0360	ug/l	100
67) Toluene	5.944	92	132424	18.3627	ug/l	94
68) 1,1,1,2-Tetrachloroethane	6.839	133	55973	18.5655	ug/l	82

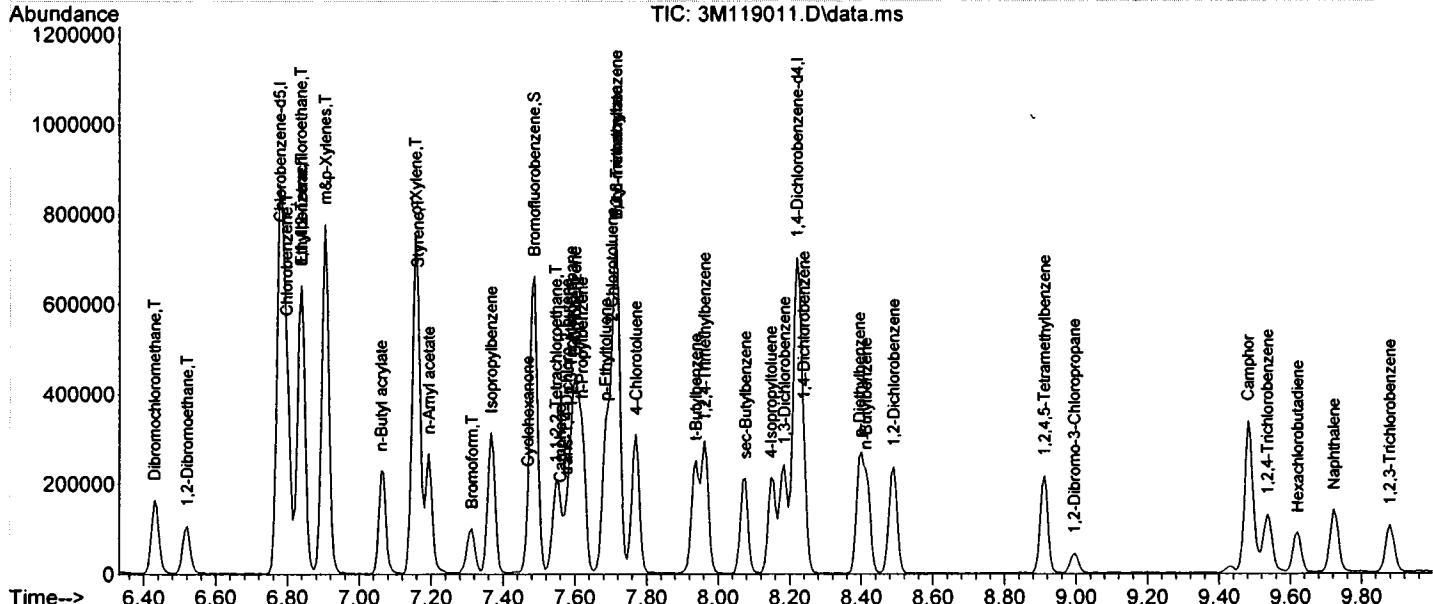
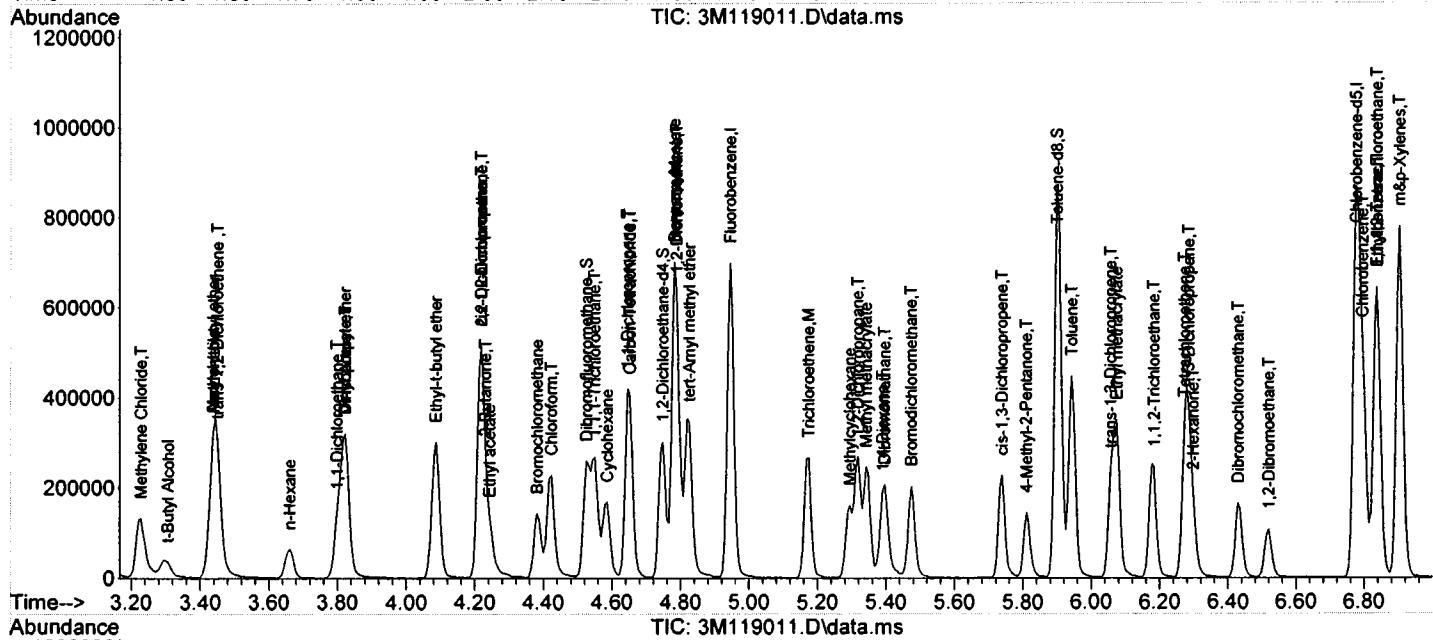
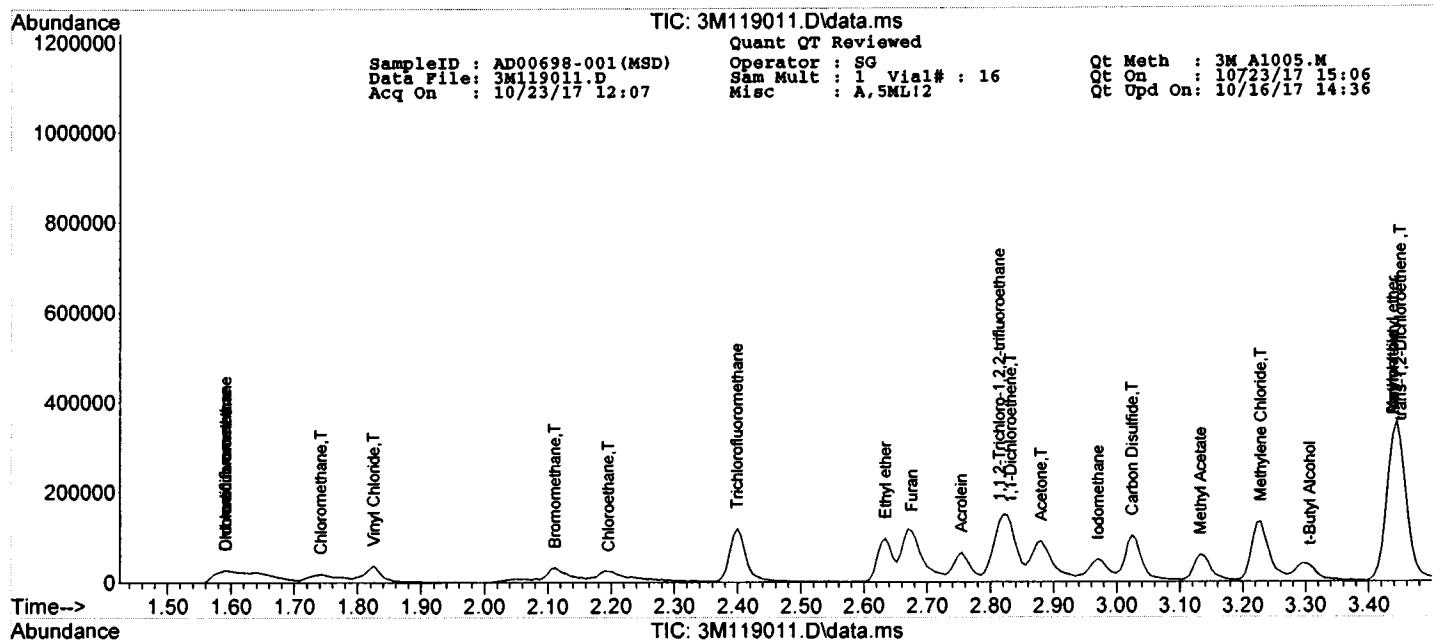
Quantitation Report (QT Reviewed)

SampleID : AD00698-001(MSD) Operator : SG Qt Meth : 3M_A1005.M
 Data File: 3M119011.D Sam Mult : 1 Vial# : 16 Qt On : 10/23/17 15:06
 Acq On : 10/23/17 12:07 Misc : A,5ML!2 Qt Upd On: 10/16/17 14:36

Data Path : G:\GcMsData\2017\GCMS_3\Data\10-23-17\
 Qt Path : G:\GcMsData\2017\GCMS_3\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
69) Chlorobenzene	6.797	112	144312	18.4716	ug/l	97
71) n-Butyl acrylate	7.061	55	122850	15.5980	ug/l	93
72) n-Amyl acetate	7.193	43	104468	17.0694	ug/l	74
73) Bromoform	7.313	173	37436	14.0567	ug/l	87
74) Ethylbenzene	6.839	106	44128	17.6456	ug/l	96
75) 1,1,2,2-Tetrachloroethane	7.547	83	66556	16.8290	ug/l	99
77) Styrene	7.163	104	142767	18.3324	ug/l	90
78) m&p-Xylenes	6.905	106	150408	35.7233	ug/l	90
79) o-Xylene	7.157	106	77641	18.5319	ug/l	91
80) trans-1,4-Dichloro-2-b...	7.577	53	27898	13.5243	ug/l	81
81) 1,3-Dichlorobenzene	8.184	146	82090	17.2747	ug/l	96
82) 1,4-Dichlorobenzene	8.238	146	86113	17.2640	ug/l	97
83) 1,2-Dichlorobenzene	8.491	146	82931	17.7556	ug/l	96
84) Isopropylbenzene	7.367	105	161210	18.4628	ug/l	96
85) Cyclohexanone	7.469	55	12545	76.0792	ug/l	92
86) Camphene	7.559	93	15287	5.2931	ug/l	85
87) 1,2,3-Trichloropropane	7.590	75	89841	16.4055	ug/l	99
88) 2-Chlorotoluene	7.704	91	104169	18.6380	ug/l	97
89) p-Ethyltoluene	7.686	105	173591	18.5911	ug/l	73
90) 4-Chlorotoluene	7.770	91	108768	18.0226	ug/l	96
91) n-Propylbenzene	7.620	91	169404	18.4582	ug/l	99
92) Bromobenzene	7.602	77	148053	16.9958	ug/l	91
93) 1,3,5-Trimethylbenzene	7.716	105	115868	18.8614	ug/l	86
94) Butyl methacrylate	7.716	41	85246	16.6604	ug/l	98
95) t-Butylbenzene	7.938	119	104139	18.3340	ug/l	99
96) 1,2,4-Trimethylbenzene	7.962	105	138914	18.8543	ug/l	91
97) sec-Butylbenzene	8.076	105	121216	18.6294	ug/l	99
98) 4-Isopropyltoluene	8.148	119	102704	18.9636	ug/l	98
99) n-Butylbenzene	8.412	91	120729	18.2156	ug/l	94
100) p-Diethylbenzene	8.394	119	67262	18.5484	ug/l	95
101) 1,2,4,5-Tetramethylben...	8.911	119	103499	19.4706	ug/l	94
102) 1,2-Dibromo-3-Chloropr...	8.995	157	9855	13.4529	ug/l	89
103) Camphor	9.482	95	77510	171.5655	ug/l	93
104) Hexachlorobutadiene	9.620	225	17362	14.5580	ug/l	93
105) 1,2,4-Trichlorobenzene	9.536	180	35671	17.9439	ug/l	96
106) 1,2,3-Trichlorobenzene	9.878	180	29816	17.3495	ug/l	95
107) Naphthalene	9.722	128	100387	18.8575	ug/l	100

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



7102003 0430

**GC/MS Volatile Data
Logbook Data**

Hampton-Clarke, Inc.

10.20.17 (P)

Volatile Sample Batching - GC/MS 3

10.20.17 (P)

10.23.17

(10.23.17)

Batch #:	Batch #:	Batch #:	Batch #:
MATRIX: AQG/B	MATRIX: AQG/B	MATRIX: AQG/B	MATRIX: AQG/B
MBS: 3m11894	MBS: 3m118966	MBS: 3m11909	MBS: 3m11905
MS: AD00698.021	MS: AD00698.030	MS: AD00698.001	MS: AD00672.001(T)
MSD: .021	MSD: .030	MSD: .001	MSD: .001(T)
1. AD00710.001	1. AD00698.018	1. AD00631.011	1. AD00701.001(T)
2. AD00690.002	2. .019	2. AD00698.001	2. AD00672.001(T)
3. AD00693.001	3. .020	3. .007	3. .003(T)
4. AD00696.001	4. .022	4. .011	4. AD00681.002(T)
5. .002	5. .023	5. .021	5. AD00684.001(T)
6. .003	6. .024	6. .029	6. AD00718.002(T)
7. AD00698.002	7. .025	7. .035	7. .004(T)
8. .003	8. .026	8. .037	8. .008(T)
9. .004	9. .027	9. .038	9. .011(T)
10. .005	10. .028	10. .039	10. AD00716.004(T)
11. .006	11. .030	11. .040	11. .005(T)
12. .008	12. .031	12. .041	12. .006(T)
13. .009	13. .032	13. .042	13. AD00709.000(T)
14. .010	14. .033	14. .043	14. .005(T)
15. .012	15. .034	15. .044	15. .006(T)
16. .013	16. .035	16. .045	16. AD00704.001(T)
17. .014	17. .036	17. .046	17. .004(T)
18. .015	18. .037	18. .047	18. .005(T)
19. .016	19. .038	19. .048	19. AD00631.013
20. .017	20. .039	20. .049	20. AD00694.005

10.23.17

10.24.17

10.24.17

10.24.17

Batch #:	Batch #:	Batch #:	Batch #:
JRyu 10/31	Batch #: 61959	Batch #: 61964	Batch #: 64965
MATRIX: AQG/B	MATRIX: MeOH	MATRIX: AQG/B	MATRIX: AQG/B
MBS: 3m119065	MBS: 3m119090	MBS: 3m119094	MBS: 3m119130
MS: AD00667.001	MS: AD00679.004	MS: AD00720.000	MS: AD00667.002
MSD: .001	MSD: .004	MSD: .000	MS/MSD: .002
1. AD00720.001	1. AD00699.006	1. AD00715.001	1. AD00738.001
2. AD00704.010	2. .012	2. .002	2. .002
3. AD00694.005	3. .014	3. AD00726.006	3. .003
4. AD00726.005	4. .015	4. .004	4. .004
5. .016	5. .016	5. .005	5. .005
6. .017	6. .017	6. .006	6. .006
7. .018	7. .018	7. .007	7. AD00739.001
8. .019	8. .019	8. .008	8. .008
9. .020	9. .020	9. .009	9. .009
10. .021	10. .021	10. .010	10. .004
11. .022	11. .022	11. .011	11. .005
12. .023	12. .023	12. .012	12. .006
13. .024	13. .024	13. .013	13. .007
14. .025	14. .025	14. .014	14. .008
15. .026	15. .026	15. .015	15. AD00740.003
16. .027	16. .027	16. .016	16. .006
17. .028	17. .028	17. .017	17. .007
18. .029	18. .029	18. .018	18. .008
19. .030	19. .030	19. .019	19. .009
20. .031	20. .031	20. .020	20. .010

Hampton-Clarke, Inc.

10.20.17 (D)

Volatile Sample Batching - GC/MS 3

10.20.17 (D)

10.23.17

(10.23.17)

Batch #: 611948.	Batch #: 611949	Batch #: 611955	Batch #: 611958
MATRIX: AQG/B	MATRIX: AQG/B	MATRIX: AQG/B	MATRIX: AQG/B
MBS: 3m118944	MBS: 3m118966	MBS: 3m119009	MBS: 3m119045
MS: AD00698.021	MS: AD00698.030	MS: AD00698.001	MS: AD00672.001(T)
MSD: .021	MSD: .030	MSD: .021	MSD: .021(T)
1. AD00719.001	1. AD00698.018.	1. AD00681.011.	1. AD00701.001(T)
2. AD00690.002	2. .019	2. AD00698.001	2. AD00672.001(T)
3. AD00693.001	3. .020	3. .017	3. .033(T)
4. AD00696.001	4. .020	4. .011	4. AD00681.002(T)
5. .02	5. .023.	5. .021	5. AD00684.001(T)
6. .03,	6. .024	6. .029	6. AD00718.002(T)
7. AD00698.002	7. .025	7. .035	7. .004(T)
8. .023	8. .026.	8. .037	8. .008(T)
9. .04	9. .027	9. .038	9. .011(T)
10. .05	10. .028	10. .039	10. AD00716.004(T)
11. .06	11. .030	11. .010	11. .005(T)
12. .008	12. .031	12. .041	12. .006(T)
13. .09	13. .032	13. .042.	13. AD00709.001(T)
14. .010	14. .033	14. AD00686.001	14. .005(T)
15. .012	15. .034	15. AD00698.002	15. .006(T)
16. .013	16. .035	16.	16. AD00704.001(T)
17. .014	17. .036	17.	17. .004(T)
18. .015	18. .037	18.	18. .007(T)
19. .016	19. .038	19.	19. AD00681.013.
20. .017	20. .039	20.	20. AD00694.005

10.23.17

10.24.17

10.24.17

10.24.17

Batch #: 611959	Batch #: 611964	Batch #: 611965	Batch #: 611974
MATRIX: AQG/B	MATRIX: MeOH	MATRIX: AQG/B	MATRIX: AQG/B
MBS: 3m119065	MBS: 3m119090-	MBS: 3m119094	MBS: 3m119130.
MS: AD00667.001	MS: AD00679.004	MS: AD00720.000	MS: AD00667.002
MSD: .01	MSD: .004	MSD: .001	MS/MSD: .002
1. AD00720.001	1. AD00699.006.	1. AD00715.001	1. AD00738.001
2. AD00704.010.	2. .012	2. .02	2. .02
3. AD00691.005	3. .014	3. AD00726.006,	3. .03
4. AD00726.005	4.	4. AD00686.005	4. .04
5. AD00686.006	5.	5. AD00721.009	5. .05
6. .07	6.	6. .010	6. .06
7. .08	7.	7.	7. AD00739.001
8. AD00724.002	8.	8.	8. .02
9. .08	9.	9.	9. .03
10. .05	10.	10.	10. .004
11. .06	11.	11.	11. .005
12.	12.	12.	12. .06
13.	13.	13.	13. .07
14.	14.	14.	14. .008.
15.	15.	15.	15. AD00740.003.
16.	16.	16.	16. .06
17.	17.	17.	17. AD00707.006
18.	18.	18.	18. AD00686.005
19.	19.	19.	19.
20.	20.	20.	20.

1-1-3M118064

RUN LOG

7102003.0433
 Instrument: GCMS_3 Year: 2017
 Analyst: SG

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
3M118064.	BFB TUNE		V-259806,V-264745,V-264623	WP 10/06/17						10/05 06:58
3M118065.	BLK	CnBnfAnc	-	WP 10/06/17		Aqueous 1	1	624\826		10/05 07:08
3M118068.	1 PPB	CnBnfAnc	-	WP 10/06/17		Aqueous 1	1	624\826		10/05 07:59
3M118069.	CAL @ 1 PPB		B-23800	WP 10/06/17		Aqueous 1	1	624\826		10/05 08:16
3M118070.	CAL @ 0.5 PPB		B-23800	WP 10/06/17		Aqueous 1	1	624\826		10/05 08:34
3M118071.	1 PPB	IlsBnf	B-23800	WP 10/06/17		Aqueous 1	1	624\826		10/05 08:50
3M118072.	CAL @ 5 PPB		B-23800	WP 10/06/17		Aqueous 1	1	624\826		10/05 09:07
3M118073.	CAL @ 10 PPB		B-23800	WP 10/06/17		Aqueous 1	1	624\826		10/05 09:24
3M118074.	CAL @ 20 PPB		B-23800	WP 10/06/17		Aqueous 1	1	624\826		10/05 09:41
3M118075.	CAL @ 500 PPB		B-23800	WP 10/06/17		Aqueous 1	1	624\826		10/05 09:58
3M118077.	CAL @ 250 PPB		B-23800	WP 10/06/17		Aqueous 1	1	624\826		10/05 10:31
3M118079.	CAL @ 100 PPB		B-23800	WP 10/06/17		Aqueous 1	1	624\826		10/05 11:05
3M118081.	CAL @ 50 PPB		B-23800	WP 10/06/17		Aqueous 1	1	624\826		10/05 11:38
3M118084.	ICV	IvoBnf				Aqueous 1	1	624\826		10/05 12:29
3M118086.	ICV	Bnf	V-264782	WP 10/06/17		Aqueous 1	1	624\826		10/05 12:51

Anc	Area Not Checked	En	Extraction Performed Past Hold	Cn	Warning Possible Carry Over
An	Area Out	Esm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
B6m	Blank 600 series missing	Etn	Tchn/Solvent Extraction Date Missing/Not check'd	Cm	C30/C20 failed for enh
B8m	Blank 8000 series missing	Etn	Tchn Extraction Performed Outside of Hold	EvF	Eval Mix Failed
Bnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (800 Series)	Hh	Analysis Before Collection Date	Evr	Eval Mix missing drift or enrin
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rnd Out on MsMod (col1 and or col2) 800 series
C26	Calibration Column 2 Out (800 Series)	I16 I26	Initial cal 800 series failed Column 1 and or 2	R18 R28	Rnd Out on MsMod (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Rn	Retention Time Out Or %Diff Out
C5f	800 series sample/blank did not have passing cal	is	Initial Cal Not Checked	Rtm	Can't Calculate Drift
C5f	8000 series sample/blank did not have passing cal	iv	Pmh with calml csv for init calibration chek rfc	S6	800 series surrogate out
Cme	Endline Cal missing for sample (8000 series)	lw	(initial cal warning ini cal file <> method)	S8	8000 series surrogate out
Cn	Calibration Not Checked for sample/blank/eval	lx	Initial Cal Elles Not Updated Properly for a sampl	Saf Sb6	Acid and or BN Surrogate Out (800 series)

7102003 0434

Instrument: GCMS_3 Year: 2017

Analyst: WP

1-1-3M118931

RUN LOG

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Analysis Method(s)	Date
3M118931.	BFB TUNE		V-264745,V-259806,V-265235,V-265699	WP 10/23/17						10/20 15:53
3M118932.	20 PPB	CnAnc				Aqueous 1	1	624\826		10/20 16:03
3M118933.	CAL @ 20 PPB		OK	WP 10/23/17		Aqueous 1	1	624\826		10/20 16:20
3M118934.	BLK		-	WP 10/23/17		Aqueous 1	1	624\826		10/20 16:37
3M118935.	DAILY BLANK		OK	WP 10/23/17		Aqueous 1	1	624\826		10/20 16:53
3M118936.	AD00690-002		OK	WP 10/23/17	VO15-8260	Aqueous 1	1	8260C		10/20 17:10
3M118937.	AD00693-001		OK	WP 10/23/17	VO15-8260	Aqueous 1	1	8260C		10/20 17:27
3M118938.	AD00719-001		OK	WP 10/23/17	VO15-8260	Aqueous 1	1	8260C		10/20 17:44
3M118939.	STD		-	WP 10/23/17		Aqueous 1	1	624\826		10/20 18:01
3M118941.	MBS64948	M18	OK MBS64948	WP 10/23/17		Aqueous 1	1	624\826		10/20 18:34
3M118942.	AD00698-022(MS:AM16M18		OK MBS64948	WP 10/23/17	VO-8260	Aqueous 1	1	624\826		10/20 18:51
3M118943.	AD00698-023(MSD:R18M16M18		OK MBS64948	WP 10/23/17	VO-8260	Aqueous 1	1	624\826		10/20 19:08
3M118944.	AD00698-021		OK MBS64948	WP 10/23/17	VO-8260	Aqueous 1	1	624\826		10/20 19:25
3M118945.	00500-001(500X)					Aqueous 1	500	624\826		10/20 19:42
3M118946.	AD00698-002		OK	WP 10/23/17	VO-8260	Aqueous 1	1	8260C		10/20 19:59
3M118947.	AD00698-003		OK	WP 10/23/17	VO-8260	Aqueous 1	1	8260C		10/20 20:15
3M118948.	AD00698-004		OK	WP 10/23/17	VO-8260	Aqueous 1	1	8260C		10/20 20:32
3M118949.	AD00698-005		OK	WP 10/23/17	VO-8260	Aqueous 1	1	8260C		10/20 20:49
3M118950.	AD00698-006		OK	WP 10/23/17	VO-8260	Aqueous 1	1	8260C		10/20 21:06
3M118951.	AD00698-008		OK	WP 10/23/17	VO-8260	Aqueous 1	1	8260C		10/20 21:22
3M118952.	AD00698-009		OK	WP 10/23/17	VO-8260	Aqueous 1	1	8260C		10/20 21:39
3M118953.	AD00698-010		OK	WP 10/23/17	VO-8260	Aqueous 1	1	8260C		10/20 21:56
3M118954.	AD00698-012		OK	WP 10/23/17	VO-8260	Aqueous 1	1	8260C		10/20 22:10
3M118955.	AD00698-013		OK	WP 10/23/17	VO-8260	Aqueous 1	1	8260C		10/20 22:26
3M118956.	AD00698-014		OK	WP 10/23/17	VO-8260	Aqueous 1	1	8260C		10/20 22:43
3M118957.	AD00698-015		OK	WP 10/23/17	VO-8260	Aqueous 1	1	8260C		10/20 23:00
3M118958.	AD00698-016		OK	WP 10/23/17	VO-8260	Aqueous 1	1	8260C		10/20 23:19
3M118959.	AD00698-017		OK	WP 10/23/17	VO-8260	Aqueous 1	1	8260C		10/20 23:36
3M118960.	AD00698-018		OK	WP 10/23/17	VO-8260	Aqueous 1	1	8260C		10/20 23:53
3M118961.	BLK		OK	WP 10/23/17		Aqueous 1	1	624\826		10/21 00:10
3M118962.	AD00698-019		OK	WP 10/23/17	VO-8260	Aqueous 1	1	8260C		10/21 00:27
3M118963.	AD00698-030		OK MBS64949	WP 10/23/17	VO-8260	Aqueous 1	1	624\826		10/21 00:44
3M118964.	AD00698-031(MS:AM16M18		OK MBS64949	WP 10/23/17	VO-8260	Aqueous 1	1	624\826		10/21 01:01
3M118965.	AD00698-032(MSD:M16M18		OK MBS64949	WP 10/23/17	VO-8260	Aqueous 1	1	624\826		10/21 01:17
3M118966.	MBS64949	M18	OK MBS64949	WP 10/23/17		Aqueous 1	1	624\826		10/21 01:34
3M118967.	AD00698-020		OK	WP 10/23/17	VO-8260	Aqueous 1	1	8260C		10/21 01:51
3M118968.	AD00698-024		OK	WP 10/23/17	VO-8260	Aqueous 1	1	8260C		10/21 02:08
3M118969.	AD00698-025		OK	WP 10/23/17	VO-8260	Aqueous 1	1	8260C		10/21 02:25
3M118970.	AD00698-026		OK	WP 10/23/17	VO-8260	Aqueous 1	1	8260C		10/21 02:41
3M118971.	AD00698-027		OK	WP 10/23/17	VO-8260	Aqueous 1	1	8260C		10/21 02:58
3M118972.	AD00698-028		OK	WP 10/23/17	VO-8260	Aqueous 1	1	8260C		10/21 03:15
3M118973.	AD00698-033		OK	WP 10/23/17	VO-8260	Aqueous 1	1	8260C		10/21 03:32
3M118974.	AD00698-034		OK	WP 10/23/17	VO-8260	Aqueous 1	1	8260C		10/21 03:49
3M118975.	AD00698-035	Ti8	RR-1X	WP 10/23/17	VO-8260	Aqueous 1	1	8260C		10/21 04:06
3M118976.	AD00698-007	Ti8	RR-1X	WP 10/23/17	VO-8260	Aqueous 1	1	8260C		10/21 04:22
3M118977.	BLK	Ti8	-	WP 10/23/17		Aqueous 1	1	624\826		10/21 04:39
3M118978.	AD00696-003		OK	WP 10/23/17	VOBTEX-624	Aqueous 1	1	624		10/21 04:56
3M118979.	AD00696-002		OK	WP 10/23/17	VOBTEX-624	Aqueous 1	1	624		10/21 05:13
3M118980.	AD00696-001		OK	WP 10/23/17	VOBTEX-624	Aqueous 1	1	624		10/21 05:30
3M118981.	MBS64950	Ti8	- MBS64950	WP 10/23/17		Aqueous 1	1	624\826		10/21 05:47
3M118982.	00710-001	B8mTi8	RR-5G,dirty	WP 10/23/17		Methano 1	1.126	8260C		10/21 06:03

Anc:	All Not Checked	En	Extraction Performed Past Hold	Cn	Warning Possible Carry Over
An:	Ans Out	Esm	Solvent Extraction Date Missing/Not check'd	CRN	Warning r30/c20 not checked
B8m:	Blank 800 series missing	Eln	Tdn/Solvent Extraction Date Missing/Not check'd	Crn	C30/c20 failed for anh
B8m:	Blank 8000 series missing	Eln	Tdn Extraction Performed Outside of Hold	EvF	Eval Mix Failed
Rnf:	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evn:	Eval Mix Not Checked
C16:	Calibration Column 1 Out (800 Series)	Hh	Analysis Before Collection Date	Evr:	Eval Mix missing/dfl or erin
C18:	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rnd Out on MsMod (r16 and/or r26) 800 series
C26:	Calibration Column 2 Out (800 Series)	I16 I26	Initial cal 800 series failed Column 1 and/or 2	R18 R28	Rnd Out on MsMod (r18 and/or r28) 8000 series
C28:	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and/or 2	Rn	Retaining Time Out Or %Diff Out
C6f:	600 series sample/blank did not have nassino cal	Is	Initial Cal Not Checked	Rtn	Can't Calculate Diff
Csf:	8000 series sample/blank did not have nassino cal	Iv	Pmb with calm.csv for init calibration check rfs	S8	600 series surrogate out
Cme:	Endline Cal missing for sample (8000 series)	Iw	Initial cal warning..ini cal file <> method	S8	8000 series surrogate out
Co:	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Properly for a sampl	S8 Sh8	Acid and/or BN Surrogate Out (800 series)

7102003 0435

Instrument: GCMS_3 Year: 2017

Analyst: SG

RUN LOG

1-1-3M118992

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
3M118992.	BFB TUNE		V-264745,V-259806,V-265235,V-265797	SG 10/23/17						10/23 06:50
3M118995.	CAL @ 20 PPB		OK	SG 10/24/17		Aqueous 1	1	624\826		10/23 07:36
3M118997.	BLKDI					Aqueous 1	1	624\826		10/23 08:12
3M118998.	DAILY BLANK		OK,11024	SG 10/24/17		Methano 1	1	8260C		10/23 08:28
3M118999.	DAILY BLANK		OK	SG 10/24/17		Aqueous 1	1	624\826		10/23 08:45
3M119000.	AD00698-042		OK	SG 10/24/17	VO-8260	Aqueous 1	1	8260C		10/23 09:03
3M119001.	AD00698-001		OK MBS64955	SG 10/24/17	VO-8260	Aqueous 1	1	624\826		10/23 09:19
3M119002.	00698-011(100X)		RR-1X	SG 10/24/17		Aqueous 1	100	624\826		10/23 09:36
3M119003.	00698-029(20X)		RR-1X	SG 10/24/17		Aqueous 1	20	624\826		10/23 09:53
3M119004.	00698-036(10X)		RR-1X	SG 10/24/17		Aqueous 1	10	624\826		10/23 10:10
3M119005.	AD00698-011		OK	SG 10/24/17	VO-8260	Aqueous 1	1	8260C		10/23 10:27
3M119006.	AD00698-029		OK	SG 10/24/17	VO-8260	Aqueous 1	1	8260C		10/23 10:43
3M119007.	AD00698-036		RR-1X	SG 10/24/17	VO-8260	Aqueous 1	1	8260C		10/23 11:00
3M119008.	MBS64954		OK MBS64954	SG 10/24/17		Methano 1	1	8260C		10/23 11:17
3M119009.	MBS64955	M18	OK MBS64955	SG 10/24/17		Aqueous 1	1	624\826		10/23 11:34
3M119010.	AD00698-001(MS)	M16M18	OK MBS64955	SG 10/24/17	VO-8260	Aqueous 1	1	624\826		10/23 11:51
3M119011.	AD00698-001(MSD)R18M16M18		OK MBS64955	SG 10/24/17	VO-8260	Aqueous 1	1	624\826		10/23 12:07
3M119012.	BLK		-	SG 10/24/17		Aqueous 1	1	624\826		10/23 12:24
3M119013.	AD00698-037		OK	SG 10/24/17	VO-8260	Aqueous 1	1	8260C		10/23 12:41
3M119014.	AD00698-038		OK	SG 10/24/17	VO-8260	Aqueous 1	1	8260C		10/23 12:58
3M119015.	AD00698-039		OK	SG 10/24/17	VO-8260	Aqueous 1	1	8260C		10/23 13:15
3M119016.	AD00698-040		OK	SG 10/24/17	VO-8260	Aqueous 1	1	8260C		10/23 13:32
3M119017.	AD00698-041		OK	SG 10/24/17	VO-8260	Aqueous 1	1	8260C		10/23 13:48
3M119018.	AD00698-035		OK	SG 10/24/17	VO-8260	Aqueous 1	1	8260C		10/23 14:05
3M119019.	AD00698-007		OK	SG 10/24/17	VO-8260	Aqueous 1	1	8260C		10/23 14:22
3M119020.	AD00672-001(T)		OK MBS64958	SG 10/24/17	VOTCLP-826	Aqueous 1	1	624\826		10/23 14:39
3M119021.	AD00672-003(T)		OK	SG 10/24/17	VOTCLP-826	Aqueous 1	1	8260C		10/23 14:55
3M119022.	AD00701-001(T)		OK	SG 10/24/17	VOTCLP-826	Aqueous 1	1	8260C		10/23 15:12
3M119023.	BLK		-	SG 10/24/17		Aqueous 1	1	624\826		10/23 15:29
3M119024.	AD00631-006		OK	SG 10/24/17	VO15-8260	Aqueous 1	1	8260C		10/23 15:46
3M119025.	AD00686-001		OK	SG 10/24/17	VO15-8260	Aqueous 1	1	8260C		10/23 16:02
3M119026.	AD00686-005		RR-1X	SG 10/24/17	VO15-8260	Aqueous 1	1	8260C		10/23 16:19
3M119027.	AD00698-021		OK	SG 10/24/17	VO-8260	Aqueous 1	1	624\826		10/23 16:36
3M119028.	AD00631-011		OK	SG 10/24/17	VO15-8260	Aqueous 1	1	8260C		10/23 16:53
3M119029.	00698-018					Aqueous 1	1	624\826		10/23 17:09
3M119030.	00698-020					Aqueous 1	1	624\826		10/23 17:26

An:	Area Not Checked	En:	Extraction Performed Past Hold	Cn:	Waminn Possible Carry Over
An:	Area Out	Em:	Solvent Extraction Date Missing/Not check'd	CRN:	Waminn c30/c20... not checked
B6m:	Blank 600 series missing	EIn:	Tcln/Solvent Extraction Date Missing/Not check'd	Cm:	C30/C20 failed for enh
B8m:	Blank 800 series missing	EIn:	Tcln Extraction Performed Outside of Hold	EvF:	Eval Mix Failed
Rnf:	Blank Not Found/Assigned	Ev:	Eval Time Exceeded	Evnc:	Eval Mix Not Checked
C16:	Calibration Column 1 Out (600 Series)	Ht:	Analysis Before Collection Date	Evrr:	Eval Mix missing drift or endrin
C18:	Calibration Column 1 Out (8000 Series)	Hn:	Sample Analyzed outside of hold time	R18 R28:	Rnd Out on McMcI (col1 and/or col2) 800 series
C26:	Calibration Column 2 Out (600 Series)	I16 I26:	Initial cal 800 series failed: Column 1 and/or 2	R18 R28:	Rnd Out on McMcI (col1 and/or col2) 8000 series
C28:	Calibration Column 2 Out (8000 Series)	I18 I28:	Initial cal 8000 series failed: Column 1 and/or 2	Rn:	Retention Time Out Or %Diff Out
C6f:	600 series sample/blank did not have pass/no cal	Iv:	Initial Cal Not Checked	Rin:	Can't Calculate Drift
C8f:	8000 series sample/blank did not have pass/no cal	Iw:	Pmbr with calibr csv for init calibration chek rfr	SA:	600 series summate out
Cme:	Endion Cal missing for sample (8000 series)	Ix:	Initial cal warning: ini cal file <> method	SB:	8000 series summate out
Cn:	Calibration Not Checked for sample/blank/eval	Ix:	Initial Cal Files Not Updated Property for a sampl	Se& Sb&	Acid and/or BN Surrogate Out (800 series)

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-253443

Prepared By: Revolus, Jean Description: Ethyl ether/Furan Mix Prep Date: 4/5/2017 Expiration Date: 3/31/2018	Department: Organics BatchNumber: Concentration: 5000 ppm Final Volume: 10 ml	ApprovedBy: akmal ApproveDate: 04/11/17 Checked: Yes		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
10096	Furan	50 mg	Neat neat	5000 ppm
10710	METHYL ALCOHOL	10 ml	NEAT neat	
8786	Ethyl Ether	50 mg	neat neat	5000 ppm

Veritech Lot Number: V-253448

Prepared By: Revolus, Jean Description: Ethyl ether/Furan Mix(2ndSource) Prep Date: 4/5/2017 Expiration Date: 3/31/2018	Department: Organics BatchNumber: Concentration: 5000 ppm Final Volume: 10 ml	ApprovedBy: akmal ApproveDate: 04/11/17 Checked: Yes		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
10096	Furan	50 mg	Neat neat	5000 ppm
8786	Ethyl Ether	50 mg	neat neat	5000 ppm
10710	METHYL ALCOHOL	10 ml	NEAT neat	

Veritech Lot Number: V-259806

Prepared By: Previlon, Wilner Description: VOA WORKING INT/SURR MIX Prep Date: 7/17/2017 Expiration Date: 1/17/2018	Department: Organics BatchNumber: Concentration: 150 ppm Final Volume: 100 ml	ApprovedBy: akmal ApproveDate: 07/21/17 Checked: Yes		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
7966	Methanol	88 ml	neat neat	
10520	8260A Surrogate Mix	6 ml	2500 ppm	150 ppm
10519	8260A Internal Standard Mix	6 ml	2500 ppm	150 ppm

Veritech Lot Number: V-261014

Prepared By: Revolus, Jean Description: VOA ADD MIX Prep Date: 8/4/2017 Expiration Date: 8/4/2018	Department: Organics BatchNumber: Concentration: 5000 ppm Final Volume: 10 ml	ApprovedBy: akmal ApproveDate: 08/08/17 Checked: Yes		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
2889	1,2,4,5-TETRAMETHYLBENZENE	50 mg	NEAT	5000 ppm
9626	p-Ethyltoluene	50 mg	Neat	5000 ppm
9642	p-Diethylbenzene	50 mg	Neat	5000 ppm
11024	METHYL Alcohol		neat neat	
10966	Cyclohexanone	250 mg	NEAT neat	25000 ppm

Veritech Lot Number: V-261028

Prepared By: Revolus, Jean Description: VOA ADD MIX(2nd Source) Prep Date: 8/4/2017 Expiration Date: 8/4/2018	Department: Organics BatchNumber: Concentration: 5000 ppm Final Volume: 10 ml	ApprovedBy: akmal ApproveDate: 08/08/17 Checked: Yes		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
2889	1,2,4,5-TETRAMETHYLBENZENE	50 mg	NEAT	5000 ppm
9626	p-Ethyltoluene	50 mg	Neat	5000 ppm
10966	Cyclohexanone	250 mg	NEAT neat	25000 ppm
9642	p-Diethylbenzene	50 mg	Neat	5000 ppm
11024	METHYL Alcohol		neat neat	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-261034



Prepared By: Revolus, Jean	Department: Organics	ApprovedBy: akmal		
Description: Voa Extra Add Mix	BatchNumber:	ApproveDate: 08/11/17		
Prep Date: 8/7/2017	Concentration: 2000-20000 p	Checked: Yes		
Expiration Date: 8/7/2018	Final Volume: 10 ml			
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8784	Methyl Methacrylate	20 mg	neat neat	2000 ppm
10271	Ethyl methacrylate	20 mg	Neat neat	2000 ppm
11024	METHYL Alcohol	10 ml	neat neat	
9627	Butyl methacrylate	20 mg	Neat	2000 ppm
10964	Isopropyl Acetate	20 mg	NEAT neat	2000 ppm
8787	n-Butyl Acrylate	20 mg	neat neat	2000 ppm
9641	d-Camphor	200 mg	Neat	20000 ppm
8809	n-Amyl Acetate	20 mg	neat neat	2000 ppm
8782	Ethyl Acetate	20 mg	neat neat	2000 ppm
8781	Camphene	20 mg	neat neat	2000 ppm

Veritech Lot Number: V-261036



Prepared By: Revolus, Jean	Department: Organics	ApprovedBy: akmal		
Description: Voa Extra Add Mix(2nd Source)	BatchNumber:	ApproveDate: 08/08/17		
Prep Date: 8/7/2017	Concentration: 2000-20000 p	Checked: Yes		
Expiration Date: 8/7/2018	Final Volume: 10 ml			
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8784	Methyl Methacrylate	20 mg	neat neat	2000 ppm
11024	METHYL Alcohol	10 ml	neat neat	
10964	Isopropyl Acetate	20 mg	NEAT neat	2000 ppm
8787	n-Butyl Acrylate	20 mg	neat neat	2000 ppm
9627	Butyl methacrylate	20 mg	Neat	2000 ppm
10271	Ethyl methacrylate	20 mg	Neat neat	2000 ppm
9641	d-Camphor	200 mg	Neat	20000 ppm
8809	n-Amyl Acetate	20 mg	neat neat	2000 ppm
8782	Ethyl Acetate	20 mg	neat neat	2000 ppm
8781	Camphene	20 mg	neat neat	2000 ppm

Veritech Lot Number: V-264622



Prepared By: Previlon, Wilner	Department: Organics	ApprovedBy: akmal		
Description: 200ppm VOA Working Std	BatchNumber:	ApproveDate: 10/06/17		
Prep Date: 10/4/2017	Concentration: VARIOUS pp	Checked: Yes		
Expiration Date: 1/14/2018	Final Volume: 1 ml			
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
10865	methyl alcohol	220 ul	neat neat	neat
10516	502.2 Cal Mix #1(Gases)	100 ul	2000 ppm	200 ppm
10515	502.2 CAL2000 Mega Mix	100 ul	2000 ppm	200 ppm
10570	8260 CAL.Mix 2	100 ul	2000 ppm	200 ppm
11091	Custom Volatile Std.	100 ul	2000-VARIE	various ppm
10518	tert-Amyl Methyl Ether	100 ul	2000 ppm	200 ppm
V-261014	VOA ADD MIX	40 ul	5000 ppm	various ppm
V-253443	Ethyl ether/Furan Mix	40 ul	5000 ppm	200 ppm
V-261034	Voa Extra Add Mix	100 ul	2000-20000 p	200 ppm
10517	Ethyl-tert-Butyl Ether(ETBE)	100 ul	2000 ppm	200 ppm

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-264623



Prepared By: Previlon, Wilner	Department: Organics	ApprovedBy: akmal		
Description: MBS	BatchNumber:	ApproveDate: 10/06/17		
Prep Date: 10/4/2017	Concentration: 100 ppm	Checked: Yes		
Expiration Date: 1/14/2018	Final Volume: 1 ml			
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
10865	methyl alcohol	610 ul	neat neat	neat neat
10919	Volatile.Org.COMPDS Mix 6	50 ul	2000 ppm	100 ppm
10569	502/524 Vol.Org.Cal. Mix	50 ul	2000 ppm	100 ppm
10571	SS 8260 CAL.Mix 2(2nd Source)	50 ul	2000 ppm	100 ppm
11086	Custom VOC Standard	50 ul	2000-100000	various ppm
10704	Tert-Amyl methyl ether	50 ul	2000 ppm	100 ppm
V-261028	VOA ADD MIX(2nd Source)	20 ul	5000 ppm	various ppm
V-261036	Voa Extra Add Mix(2nd Source)	50 ul	2000-20000 p	100-1000 pp
V-253448	Ethyl ether/Furan Mix(2ndSource)	20 ul	5000 ppm	100 ppm
10739	Ethyl-tert-Butyl Ether	50 ul	2000 ppm	100 ppm

Veritech Lot Number: V-264745



Prepared By: Goring, Shawn	Department: Organics	ApprovedBy: akmal		
Description: BFB Tune Mix	BatchNumber:	ApproveDate: 10/06/17		
Prep Date: 10/4/2017	Concentration: 50 ppm	Checked: Yes		
Expiration Date: 1/17/2018	Final Volume: 1.5 ml			
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-259806	VOA WORKING INT/SURR MIX	500 ul	150 ppm	50 ppm
7967	Methanol	1000 ul	neat neat	

Veritech Lot Number: V-264770



Prepared By: Rania, Ghrayeb	Department: Organics	ApprovedBy: akmal		
Description: 624/8260 CAL @ 250 PPB	BatchNumber: B-23800	ApproveDate: 10/06/17		
Prep Date: 10/5/2017	Concentration: VARIOUS ppb	Checked: Yes		
Expiration Date: 10/12/2017	Final Volume: 100 ml			
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-264622	200ppm VOA Working Std	125 ul	VARIOUS pp	250 ppb
9712	P&T Water	100 ml	Neat neat	
10840	Chlorodifluoromethane	125 ul	200 ppm	250 ppb

Veritech Lot Number: V-264771



Prepared By: Rania, Ghrayeb	Department: Organics	ApprovedBy: akmal		
Description: 624/8260 CAL @ 100 PPB	BatchNumber: B-23800	ApproveDate: 10/06/17		
Prep Date: 10/5/2017	Concentration: VARIOUS ppb	Checked: Yes		
Expiration Date: 10/12/2017	Final Volume: 100 ml			
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-264622	200ppm VOA Working Std	50 ul	VARIOUS pp	100 ppb
9712	P&T Water	100 ml	Neat neat	
10840	Chlorodifluoromethane	50 ul	200 ppm	100 ppb

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-264772



Prepared By: Rania, Ghrayeb	Department: Organics	ApprovedBy: akmal
Description: 624/8260 CAL @ 50 PPB	BatchNumber: B-23800	ApproveDate: 10/06/17
Prep Date: 10/5/2017	Concentration: VARIOUS ppb	Checked: Yes
Expiration Date: 10/12/2017	Final Volume: 100 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-264622	200ppm VOA Working Std	25 ul	VARIOUS pp	50 ppb
9712	P&T Water	100 ml	Neat neat	
10840	Chlorodifluoromethane	25 ul	200 ppm	50 ppb

Veritech Lot Number: V-264773



Prepared By: Rania, Ghrayeb	Department: Organics	ApprovedBy: akmal
Description: 624/8260 CAL @ 20 PPB	BatchNumber: B-23800	ApproveDate: 10/06/17
Prep Date: 10/5/2017	Concentration: VARIOUS ppb	Checked: Yes
Expiration Date: 10/12/2017	Final Volume: 100 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-264622	200ppm VOA Working Std	10 ul	VARIOUS pp	20 ppb
9712	P&T Water	100 ml	Neat neat	
10840	Chlorodifluoromethane	10 ul	200 ppm	20 ppb

Veritech Lot Number: V-264774



Prepared By: Rania, Ghrayeb	Department: Organics	ApprovedBy: akmal
Description: 624/8260 CAL @ 10 PPB	BatchNumber: B-23800	ApproveDate: 10/06/17
Prep Date: 10/5/2017	Concentration: VARIOUS ppb	Checked: Yes
Expiration Date: 10/12/2017	Final Volume: 100 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-264622	200ppm VOA Working Std	5 ul	VARIOUS pp	10 ppb
9712	P&T Water	100 ml	Neat neat	
10840	Chlorodifluoromethane	5 ul	200 ppm	10 ppb

Veritech Lot Number: V-264775



Prepared By: Rania, Ghrayeb	Department: Organics	ApprovedBy: akmal
Description: 624/8260 CAL @ 5 PPB	BatchNumber: B-23800	ApproveDate: 10/06/17
Prep Date: 10/5/2017	Concentration: VARIOUS ppb	Checked: Yes
Expiration Date: 10/12/2017	Final Volume: 100 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-264622	200ppm VOA Working Std	2.5 ul	VARIOUS pp	5 ppb
9712	P&T Water	100 ml	Neat neat	
10840	Chlorodifluoromethane	2.5 ul	200 ppm	5 ppb

Veritech Lot Number: V-264776



Prepared By: Rania, Ghrayeb	Department: Organics	ApprovedBy: akmal
Description: 624/8260 CAL @ 1 PPB	BatchNumber: B-23800	ApproveDate: 10/06/17
Prep Date: 10/5/2017	Concentration: VARIOUS ppb	Checked: Yes
Expiration Date: 10/12/2017	Final Volume: 100 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-264622	200ppm VOA Working Std	.5 ul	VARIOUS pp	1 ppb
9712	P&T Water	100 ml	Neat neat	
10840	Chlorodifluoromethane	.5 ul	200 ppm	1 ppb

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-264777



Prepared By: Rania, Ghrayeb	Department: Organics	ApprovedBy: akmal		
Description: 624/8260 CAL @ 0.5 PPB	BatchNumber: B-23800	ApproveDate: 10/06/17		
Prep Date: 10/5/2017	Concentration: VARIOUS ppb	Checked: Yes		
Expiration Date: 10/12/2017	Final Volume: 100 ml			
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-264622 9712 10840	200ppm VOA Working Std P&T Water Chlorodifluoromethane	.25 ul 100 ml .25 ul	VARIOUS pp Neat neat 200 ppm	0.5 ppb 0.5 ppb

Veritech Lot Number: V-264778



Prepared By: Rania, Ghrayeb	Department: Organics	ApprovedBy: akmal		
Description: 624/8260 CAL @ 500 PPB	BatchNumber: B-23800	ApproveDate: 10/06/17		
Prep Date: 10/5/2017	Concentration: VARIOUS ppb	Checked: Yes		
Expiration Date: 10/12/2017	Final Volume: 100 ml			
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-264622 9712 10840	200ppm VOA Working Std P&T Water Chlorodifluoromethane	250 ul 100 ml 250 ul	VARIOUS pp Neat neat 200 ppm	500 ppb 500 ppb

Veritech Lot Number: V-264782



Prepared By: Rania, Ghrayeb	Department: Organics	ApprovedBy: akmal		
Description: ICV CAL @ 20 PPB	BatchNumber:	ApproveDate: 10/06/17		
Prep Date: 10/5/2017	Concentration: VARIOUS ppb	Checked: Yes		
Expiration Date: 10/12/2017	Final Volume: 100 ml			
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-264623 9712 11080	MBS P&T Water Chlorodifluoromethane(Freon #22)	20 ul 100 ml 10 ul	100 ppm Neat neat 0.2 mg/ml	20 ppb neat 20 ppb

Veritech Lot Number: V-265234



Prepared By: Revolus, Jean	Department: Organics	ApprovedBy: akmal		
Description: 200ppm VOA Working Std	BatchNumber:	ApproveDate: 10/13/17		
Prep Date: 10/12/2017	Concentration: VARIOUS pp	Checked: Yes		
Expiration Date: 1/14/2018	Final Volume: 1 ml			
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
10865	methyl alcohol	220 ul	neat neat	neat
10516	502.2 Cal Mix #1(Gases)	100 ul	2000 ppm	200 ppm
10515	502.2 CAL2000 Mega Mix	100 ul	2000 ppm	200 ppm
10570	8260 CAL.Mix 2	100 ul	2000 ppm	200 ppm
11091	Custom Volatile Std.	100 ul	2000-VARIE	various ppm
10518	tert-Amyl Methyl Ether	100 ul	2000 ppm	200 ppm
V-261014	VOA ADD MIX	40 ul	5000 ppm	various ppm
V-261034	Voa Extra Add Mix	100 ul	2000-20000 p	200 ppm
V-253443	Ethyl ether/Furan Mix	40 ul	5000 ppm	200 ppm
10517	Ethyl-tert-Butyl Ether(ETBE)	100 ul	2000 ppm	200 ppm

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-265235



Prepared By:	Revolus, Jean	Department:	Organics	ApprovedBy:	akmal
Description:	MBS	BatchNumber:		ApproveDate:	10/13/17
Prep Date:	10/12/2017	Concentration:	100 ppm	Checked:	Yes
Expiration Date:	1/14/2018	Final Volume:	1 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc	
10865	methyl alcohol	610 ul	neat neat	neat neat	
10919	Volatile.Org.COMPDS Mix 6	50 ul	2000 ppm	100 ppm	
10918	502/524 Volatile.Org.Cal Mix	50 ul	2000 ppm	100 ppm	
10571	SS 8260 CAL.Mix 2(2nd Source)	50 ul	2000 ppm	100 ppm	
11086	Custom VOC Standard	50 ul	2000-100000	various ppm	
10704	Tert-Amyl methyl ether	50 ul	2000 ppm	100 ppm	
V-261028	VOA ADD MIX(2nd Source)	20 ul	5000 ppm	various ppm	
V-261036	Voa Extra Add Mix(2nd Source)	50 ul	2000-20000 p	100-1000 pp	
V-253448	Ethyl ether/Furan Mix(2ndSource)	20 ul	5000 ppm	100 ppm	
10739	Ethyl-tert-Butyl Ether	50 ul	2000 ppm	100 ppm	

Veritech Lot Number: V-265699



Prepared By:	Goring, Shawn	Department:	Organics	ApprovedBy:	akmal
Description:	CAL @ 20 PPB	BatchNumber:		ApproveDate:	10/24/17
Prep Date:	10/20/2017	Concentration:	VARIOUS ppb	Checked:	Yes
Expiration Date:	10/27/2017	Final Volume:	100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc	
V-265234	200ppm VOA Working Std	10 ul	VARIOUS pp	20 ppb	
9712	P&T Water	100 ml	Neat neat		
10840	Chlorodifluoromethane	10 ul	200 ppm	20 ppb	

Veritech Lot Number: V-265797



Prepared By:	Goring, Shawn	Department:	Organics	ApprovedBy:	akmal
Description:	CAL @ 20 PPB	BatchNumber:		ApproveDate:	10/24/17
Prep Date:	10/23/2017	Concentration:	VARIOUS ppb	Checked:	Yes
Expiration Date:	10/30/2017	Final Volume:	100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc	
V-265234	200ppm VOA Working Std	10 ul	VARIOUS pp	20 ppb	
9712	P&T Water	100 ml	Neat neat		
10840	Chlorodifluoromethane	10 ul	200 ppm	20 ppb	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 2889



Description

1,2,4,5-TETRAMETHYLBENZENE

ApprovedBy: jean
ApproveDate: 07/30/09
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
ACROS ORGANI	409390050	A0214190	11/20/07	11/30/20	Revolus, Jean	1	1ML	NEAT	

Veritech Control/Receipt Number: 7966



Description

Methanol

ApprovedBy: jean
ApproveDate: 06/20/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
spectrum	PT705-02	2CE0318	06/19/13	06/18/18	Lopez, Jose	30	1L	neat	neat

Veritech Control/Receipt Number: 7967



Description

Methanol

ApprovedBy: jean
ApproveDate: 06/20/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
spectrum	PT705-02	2CE0317	06/19/13	06/18/18	Lopez, Jose	6	1L	neat	neat

Veritech Control/Receipt Number: 8781



Description

Camphene

ApprovedBy: akmal
ApproveDate: 06/19/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Chem Service	N-11395-1G	2868400	06/19/14	12/31/19	Hamid, Akmal	2	1g	neat	neat

Veritech Control/Receipt Number: 8782



Description

Ethyl Acetate

ApprovedBy: akmal
ApproveDate: 06/19/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Chem Service	N-11881-1G	2787200	06/19/14	09/30/18	Hamid, Akmal	1	1g	neat	neat

Veritech Control/Receipt Number: 8784



Description

Methyl Methacrylate

ApprovedBy: akmal
ApproveDate: 06/19/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Chem Service	N-12443-1G	2762100	06/19/14	10/31/18	Hamid, Akmal	5	1g	neat	neat

Veritech Control/Receipt Number: 8786



Description

Ethyl Ether

ApprovedBy: akmal
ApproveDate: 06/19/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Chem Service	N-11897-1G	2853600	06/19/14	03/31/18	Hamid, Akmal	2	1g	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number:8787



Description
n-Butyl Acrylate

ApprovedBy: akmal
ApproveDate: 06/19/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Chem Service	N-12513-1G	2865800	06/19/14	02/28/19	Hamid, Akmal	10	1g	neat	neat

Veritech Control/Receipt Number:8809



Description
n-Amyl Acetate

ApprovedBy: akmal
ApproveDate: 07/07/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
ChemService	N-12508-1G	2708400	07/07/14	01/31/19	Hamid, Akmal	1	1g	neat	neat

Veritech Control/Receipt Number:9626



Description
p-Ethyltoluene

ApprovedBy: jean
ApproveDate: 08/04/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CHEM SERVICE	N-12776-1G	3381600	08/04/15	11/30/21	Revolus, Jean	1	1g	Neat	

Veritech Control/Receipt Number:9627



Description
Butyl methacrylate

ApprovedBy: jean
ApproveDate: 08/04/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Chem Service	N-11371-1G	2127700	08/04/15	11/30/18	Revolus, Jean	1	1g	Neat	

Veritech Control/Receipt Number:9641



Description
d-Camphor

ApprovedBy: jean
ApproveDate: 08/11/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CHEM SERVICE	N-11556-1G	3256300	08/11/15	10/31/20	Revolus, Jean	2	1g	Neat	

Veritech Control/Receipt Number:9642



Description
p-Diethylbenzene

ApprovedBy: jean
ApproveDate: 08/11/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CHEM SERVICE	N-12771-100MG	4233000	08/11/15	08/31/20	Revolus, Jean	4	100m	Neat	

Veritech Control/Receipt Number:9712



Description
P&T Water

ApprovedBy: jean
ApproveDate: 10/20/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Veritech	N/A	N/A	09/28/15	09/28/20	Goring, Shawn	1	N/A	Neat	Neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 10096



Description	
Furan	

ApprovedBy: akmal
ApproveDate: 03/31/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Chem Service	N-12101-1G	3609300	03/31/16	02/28/20	Hamid, Akmal	1	1g	Neat	Neat

Veritech Control/Receipt Number: 10271



Description	
Ethyl methacrylate	

ApprovedBy: akmal
ApproveDate: 06/14/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Chem Service	N11903-1g	4592300	06/14/16	12/31/19	Hamid, Akmal	1	1g	Neat	Neat

Veritech Control/Receipt Number: 10515



Description	
502.2 CAL2000 Mega Mix	

ApprovedBy: Jean
ApproveDate: 11/17/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
RESTEK	30431	A0120695	11/01/16	07/31/18	Revolus, Jean	5	1ml	2000	PPM

Veritech Control/Receipt Number: 10516



Description	
502.2 Cal Mix #1(Gases)	

ApprovedBy: Jean
ApproveDate: 11/17/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
RESTEK	30042	A0120832	11/01/16	04/30/23	Revolus, Jean	5	1ml	2000	PPM

Veritech Control/Receipt Number: 10517



Description	
Ethyl-tert-Butyl Ether(ETBE)	

ApprovedBy: Jean
ApproveDate: 11/17/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
RESTEK	30628	A0116348	11/01/16	01/31/21	Revolus, Jean	3	1ml	2000	PPM

Veritech Control/Receipt Number: 10518



Description	
tert-Amyl Methyl Ether	

ApprovedBy: Jean
ApproveDate: 11/17/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
RESTEK	30629	A0104857	11/01/16	07/31/19	Revolus, Jean	5	1ml	2000	PPM

Veritech Control/Receipt Number: 10519



Description	
8260A Internal Standard Mix	

ApprovedBy: Jean
ApproveDate: 11/17/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
RESTEK	30241	A0117358	11/01/16	02/28/21	Revolus, Jean	10	1ml	2500	PPM

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 10520



Description

8260A Surrogate Mix

ApprovedBy: Jean

ApproveDate: 11/17/16

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Volume Conc:	Units:
RESTEK	30240	A0116870	11/01/16	01/31/21	Revoluts, Jean	10	1ml	2500	PPM

Veritech Control/Receipt Number: 10569



Description

502/524 Vol.Org.Cal. Mix

ApprovedBy: akmal

ApproveDate: 11/28/16

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Volume Conc:	Units:
Supelco	502111	LC22531V	11/03/16	08/31/18	Hamid, Akmal	3	1ML	2000	PPM

Veritech Control/Receipt Number: 10570



Description

8260 CAL.Mix 2

ApprovedBy: akmal

ApproveDate: 11/28/16

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Volume Conc:	Units:
Supelco	46831-U	LC16307V	11/03/16	08/31/18	Hamid, Akmal	4	1ML	2000	PPM

Veritech Control/Receipt Number: 10571



Description

SS 8260 CAL.Mix 2(2nd Source)

ApprovedBy: akmal

ApproveDate: 11/28/16

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Volume Conc:	Units:
Supelco	4S6831-U	LC19120V	11/03/16	03/31/18	Hamid, Akmal	4	1ML	2000	PPM

Veritech Control/Receipt Number: 10704



Description

Tert-Amyl methyl ether

ApprovedBy: akmal

ApproveDate: 01/17/17

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Volume Conc:	Units:
Supelco	506737	XA16639V	01/17/17	10/31/18	Hamid, Akmal	4	1ML	2000	PPM

Veritech Control/Receipt Number: 10710



Description

METHYL ALCOHOL

ApprovedBy: akmal

ApproveDate: 01/19/17

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Volume Conc:	Units:
TEDIA	MP1924	16080704	01/19/17	09/12/18	Burwell, John	12	1 L	NEAT	NEAT

Veritech Control/Receipt Number: 10739



Description

Ethyl-tert-Butyl Ether

ApprovedBy: akmal

ApproveDate: 02/07/17

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Volume Conc:	Units:
Restek	30628	A0124597	02/07/17	01/31/22	Hamid, Akmal	5	1ml	2000	ppm

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 10840



Description

Chlorodifluoromethane

ApprovedBy: Jean
ApproveDate: 03/31/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
ACCUSTANDAR	M-REF-03	215011021	03/20/17	01/05/25	Revolus, Jean	20	1ml	200	PPM

Veritech Control/Receipt Number: 10865



Description

methyl alcohol

ApprovedBy: akmal
ApproveDate: 04/06/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Tedia	MP1924	16080704	04/05/17	09/12/18	Lopez, Jose	24	6L	neat	neat

Veritech Control/Receipt Number: 10918



Description

502/524 Vola.Org.Cal Mix

ApprovedBy: akmal
ApproveDate: 04/28/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Supelco	502111	LC22531V	04/28/17	08/30/18	Hamid, Akmal	5	1ML	2000	PPM

Veritech Control/Receipt Number: 10919



Description

Volatile.Org.COMPDS Mix 6

ApprovedBy: akmal
ApproveDate: 04/28/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Supelco	CRM48799	XA25774V	04/28/17	06/30/18	Hamid, Akmal	5	1ML	2000	PPM

Veritech Control/Receipt Number: 10964



Description

Isopropyl Acetate

ApprovedBy: akmal
ApproveDate: 05/30/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Chem Service Inc	N-12223-1G	6037900	05/26/17	02/28/20	Hamid, Akmal	1	1G	NEAT	NEAT

Veritech Control/Receipt Number: 10966



Description

Cyclohexanone

ApprovedBy: akmal
ApproveDate: 05/30/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Chem Service Inc	N-11531-1G	6255400	05/26/17	10/31/19	Hamid, Akmal	1	1G	NEAT	NEAT

Veritech Control/Receipt Number: 11024



Description

METHYL Alcohol

ApprovedBy: akmal
ApproveDate: 06/27/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
TEDIA	MP1924	17030507	06/23/17	04/05/19	Burwell, John	30	1 L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 11080



Description

Chlorodifluoromethane(Freon #22)

ApprovedBy: akmal

ApproveDate: 07/17/17

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
AccuStandard	M-REF-03	217071159	07/14/17	07/12/27	Hamid, Akmal	5	1ML	0.2	MG/ML

Veritech Control/Receipt Number: 11086



Description

Custom VOC Standard

ApprovedBy: akmal

ApproveDate: 07/20/17

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
AccuStandard	S-16418	217071151	07/19/17	01/14/18	Hamid, Akmal	5	1ML	2000-100	PPM

Veritech Control/Receipt Number: 11091



Description

Custom Volatile Std.

ApprovedBy: akmal

ApproveDate: 07/25/17

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
AccuStandard	S-16418	217071140	07/25/17	01/14/18	Hamid, Akmal	5	1ML	2000-VA	PPM



Hampton-Clarke

Analytical & Field Services

Last Page of Report