2015 Annual Monitoring Report
Area E (PICA-077) Groundwater and Surface Water

Picatinny Arsenal, New Jersey

Prepared for

Prepared by

EA Engineering, Science, and Technology, Inc., PBC.
Contract No. W91ZLK-13-D-0004-0009

March 2016

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LIST OF ACRONYMS AND ABBREVIATIONS

µg/L	Microgram(s) per liter
ARCADIS	ARCADIS U.S., Inc.
COC	Contaminant of concern
DCE	Dichloroethene
DO	Dissolved oxygen
EA	EA Engineering, Science, and Technology, Inc., PBC
ft	Foot (feet)
MNA	Monitored natural attenuation
NJDEP	New Jersey Department of Environmental Protection
NJGWQS	New Jersey Groundwater Quality Standards
ORP	Oxidation reduction potential
PCE	Tetrachloroethene
PDB	Passive diffusion bag
PICA	Picatinny Arsenal
SWQC	Surface Water Quality Criteria
TCE	Trichloroethene
USEPA	United States Environmental Protection Agency
VC	Vinyl chloride
VOC	Volatile organic compound

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1. INTRODUCTION

EA Engineering, Science, and Technology, Inc., PBC (EA) has been retained by the United States Army Environmental Command (USAEC) to perform Installation Restoration Program activities at Picatinny Arsenal (PICA), located in Morris County, New Jersey. This work is being performed under the Environmental Remediation Multiple Award Indefinite Delivery/Indefinite Quantity Contract W91ZLK-13-D-0004 Delivery Order 0009, and will be overseen by the USAEC and the United States Army Corps of Engineers (USACE) for PICA, under approval by the New Jersey Department of Environmental Protection (NJDEP), and United States Environmental Protection Agency (USEPA) Region 2. Field activities are being conducted by EA's subcontractor Sovereign Consulting Inc. (Sovereign).

Area E (PICA-077) is approximately 38 acres in size and is located in the south-central portion of PICA (**Figure 1**). Area E groundwater is predominantly impacted by waste disposal practices associated with metal plating operations involving the use of degreasing and cleaning with chlorinated solvents from the 1960s through the mid-1970s. Contaminants of concern (COCs) for include the following: tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (DCE), 1,1-DCE, and vinyl chloride (VC).

As stated within the Record of Decision (U.S. Army 2007) the primary response actions for Area E includes the following:

- Demonstration of monitored natural attenuation (MNA) through the implementation of long-term groundwater and surface water monitoring, primarily for natural attenuation parameters to verify the progress of natural attenuation.

- Implementation of land use controls (LUCs) to ensure protectiveness that include land use and access restrictions, public education, and emergency provisions throughout the entire duration of MNA.

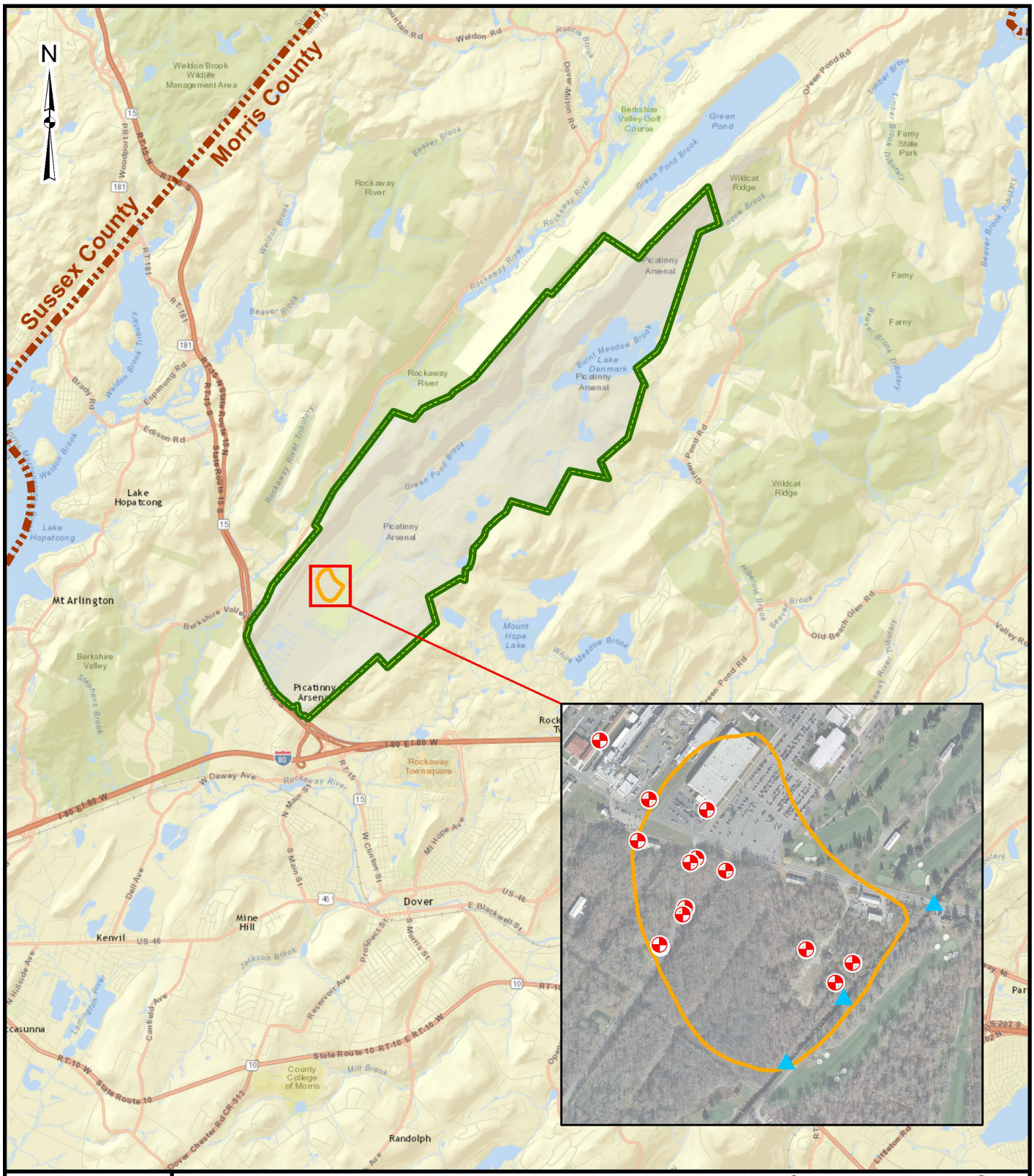
The land use controls and annual evaluation will be documented in the 2015 Annual Land Use Certification and No Further Action Site Monitoring Report, submitted under separate cover.

The MNA program has been designed to evaluate long-term behavior of the plume; verify that exposure to contaminants and their breakdown products do not pose additional risks, and assess whether it is necessary to implement any contingency actions. This Annual Monitoring Report discusses the actions taken in implementation of the MNA groundwater remedy at Area E. The following activities are covered in this report:

- Annual groundwater and surface water sampling

- Collection of additional groundwater samples as per the planned biennial groundwater sampling.

The monitoring schedule for Area E is shown in **Table 1**.



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AREA E (PICA-077)
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Figure 1
Area E (PICA-077) Site Location, Monitoring Well Network, and Surface Water Sample Locations

Table 1 Monitoring Program Schedule (Through 2020)

						Calendar Year	2007		2008		2009		2010		2011		2012							
						Operation Year	First Year of Operation				Second Year of Operation				Third Year of Operation		Fourth Year of Operation		Fourth Continued		Fifth Year of Operation		Sixth Year of Operation	
							Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
Site Name	Category	Media	Purpose	Schedule	Sample Locations	Sampling Method	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th
77 Area E	MNA VOC Groundwater Sampling	Groundwater	Evaluate MNA for groundwater remedy across Area E	Yr: 1-2 quarterly Yr 3-5: semi-annually Yr 6-duration annually	E-80-3, E-82-1 E-95-3, E-95-5[1] E-12-H, E-12-L E-70-4, E-3WG-2 E-11WG-1, E-1[2] E-2, E-12A[1]	Passive Diffusion Bag	Completed	Completed	Completed	Complete	Complete	Complete	Complete	Complete	Complete		Completed		Completed		Completed		Completed		Completed		Completed	
	Biennial	Groundwater	Comprehensive, include these locations with MNA VOC	Biennial	E-18-1, E-80-1, E-80-2 E-80-3, E-82-1, E-82-2 E-82-3, E-95-3, E-MW-11 E-12-D, E-12-H, E-12-K E-12-L, E-70-2, E-70-3 E-70-4, E-3WG-1, E-3WG-2 E-3WG-3, E-11WG-1, E-11WG-1 E-11WG-2, E-11WG-3	Passive Diffusion Bag	Completed								Complete								Completed					
	Surface Water Sampling	Surface Water	SW sampling as part of the groundwater MNA remedy	Yr: 1-2 quarterly Yr 3-5: semi-annually Yr 6-duration annually	D-SW-5 E-38SW-1 E-38SW-4	Grab Sample	Completed	Completed	Completed	Complete	Complete	Complete	Complete	Complete	Complete		Completed		Completed		Completed		Completed.		Completed		Completed	

						Calendar Year	2013		2014		2015		2016		2017		2018	
						Operation Year	Sixth Year of Operation Continued		Seventh Year of Operation		Eighth Year of Operation		Ninth Year of Operation		Tenth Year of Operation		Eleventh Year of Operation	
							Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun
Site Name	Category	Media	Purpose	Schedule	Sample Locations	Sampling Method	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd
77 Area E	MNA VOC Groundwater Sampling	Groundwater	Evaluate MNA for groundwater remedy across Area E	Yr: 1-2 quarterly Yr 3-5: semi-annually Yr 6-duration annually	E-80-3, E-82-1 E-95-3, E-95-5[1] E-12-H, E-12-L E-70-4, E-3WG-2 E-11WG-1, E-1[2] E-2, E-12-A[1]	Passive Diffusion Bag			Completed				Completed				Completed				Planned				Planned			
	Biennial	Groundwater	Comprehensive, include these locations with MNA VOC	Biennial	E-18-1[3], E-80-1[3], E-80-2[3] E-80-3, E-82-1, E-82-2 E-82-3[3], E-95-3, E-MW-11 E-12-D, E-12-H, E-MW-12K[3] E-12-L, E-70-2, E-70-3 E-70-4, E-3WG-1, E-3WG-2 E-3WG-3, E-11WG-1, E-11WG-1 E-11WG-2, E-11WG-3[3]	Passive Diffusion Bag			Completed								Completed								Planned			
	Surface Water Sampling	Surface Water	SW sampling as part of the groundwater MNA remedy	Yr: 1-2 quarterly Yr 3-5: semi-annually Yr 6-duration annually	D-SW-5 E-38SW-1 E-38SW-4	Grab Sample			Completed				Completed				Completed				Planned				Planned			

						Calendar Year	2018		2019				2020			
						Operation Year	Twelfth Year of Operation				Thirteenth Year of Operation				Fourteenth Year of Operation	
							Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
Site Name	Category	Media	Purpose	Schedule	Sample Locations	Sampling Method	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th
77 Area E	MNA VOC Groundwater Sampling	Groundwater	Evaluate MNA for groundwater remedy across Area E	Yr: 1-2 quarterly Yr 3-5: semi-annually Yr 6-duration annually	E-80-3, E-82-1 E-95-3, E-95-5[1] E-12-H, E-12-L E-70-4, E-3WG-2 E-11WG-1, E-1[2] E-2, E-12-A[1]	Passive Diffusion Bag	Planned				Planned				Planned	
	Biennial	Groundwater	Comprehensive, include these locations with MNA VOC	Biennial	E-18-1[3], E-80-1[3], E-80-2[3] E-80-3, E-82-1, E-82-2 E-82-3[3], E-95-3, E-MW-11 E-12-D, E-12-H, E-MW-12K[3] E-12-L, E-70-2, E-70-3 E-70-4, E-3WG-1, E-3WG-2 E-3WG-3, E-11WG-1, E-11WG-1 E-11WG-2, E-11WG-3[3]	Passive Diffusion Bag					Planned					
	Surface Water Sampling	Surface Water	SW sampling as part of the groundwater MNA remedy	Yr: 1-2 quarterly Yr 3-5: semi-annually Yr 6-duration annually	D-SW-5 E-38SW-1 E-38SW-4	Grab Sample	Planned				Planned				Planned	

Notes:
[1]Temporarily added to the long-term monitoring program; these samples will not be collected after the third quarter 2012 sampling eve
[2]Monitoring well E-1 was not sampled during 2012 due to inaccessibilit
[3]Cessation of sampling approved for the biennial wells in blue text prior to the September 2013 biennial sampling eve
The Biennial comprehensive groundwater sampling includes sampling 24 wells (6 proposed for cessation of sampling) identified in the Record of Decision for VOCs via passive diffusion bags.
GW = Groundwater
MNA = Monitored Natural Attenuation
SW = Surface Water
VOC = Volatile Organic Compound

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2. SAMPLING ACTIVITIES

This section discusses the site activities conducted during the 2015 calendar year.

2.1 GROUNDWATER ELEVATION MEASUREMENTS

Prior to groundwater sampling activities, water levels and well depths in the MNA network (10 wells) were gauged. The MNA network is displayed in **Figure 2**. In addition, monitoring wells were inspected to ensure continued performance. **Appendix A** includes all field forms for 2015. Well construction specifications and historical water level data for the approved monitoring well network are provided in **Table 2**.

2.2 COMPLIANCE MONITORING

Groundwater and surface water monitoring activities were conducted in accordance with the Final Remedial Design for Area E and Site 22 (ARCADIS 2008), PICA Facility-Wide Health and Safety Plan (ARCADIS 2006a), PICA Facility-Wide Field Quality Assurance Project Plan (ARCADIS 2006b), and the PICA Facility-Wide Field Sampling Plan (ARCADIS 2007a).

In addition to the documents listed above, groundwater and surface water monitoring was conducted and data were evaluated in accordance with the following New Jersey Department of Environmental Protection (NJDEP) and United States Environmental Protection Agency (USEPA) guidance documents: Field Sampling Procedures Manual (NJDEP 2005), Guidance for Data Quality Assessment, Practical Methods for Data Analysis (USEPA 2000), and Data Quality Assessment: Statistical Methods for Practitioners (USEPA 2006).

An annual groundwater sampling event was completed in August and September 2015 in accordance with the Area E Final Remedial Design (ARCADIS 2008) and as amended by the Final 2012 Annual Monitoring Report (ARCADIS 2013). The annual event included sampling 19 groundwater monitoring wells and three surface water monitoring points. Groundwater samples were collected using passive diffusion bags (PDBs) and were analyzed for VOCs. Field parameters, including pH, conductivity, temperature, dissolved oxygen (DO), and oxidation-reduction potential (ORP), were collected via a down-well probe following retrieval of each PDB. Three surface water grab samples were collected and field parameters were recorded.

2.3 DATA VALIDATION AND USABILITY

All data collected were third party validated in accordance with the USEPA National Functional Guidelines for Organic Data Review, dated August 2014. The validation criteria for long-term monitoring data include a review of the laboratory report narrative for noted deficiencies and the potential impact to data usability. Therefore, a review of chain-of-custodies, sample preservation, sample receipt logs, and a review of quality control parameters were performed for all data packages. No major deficiencies were identified during the data validation; therefore, no additional review was performed. Acetone, a common laboratory contaminant, was detected in all samples; however the results were not qualified by the validator as the results are considered valid. A copy of the Data Validation Report is included with Appendix B.

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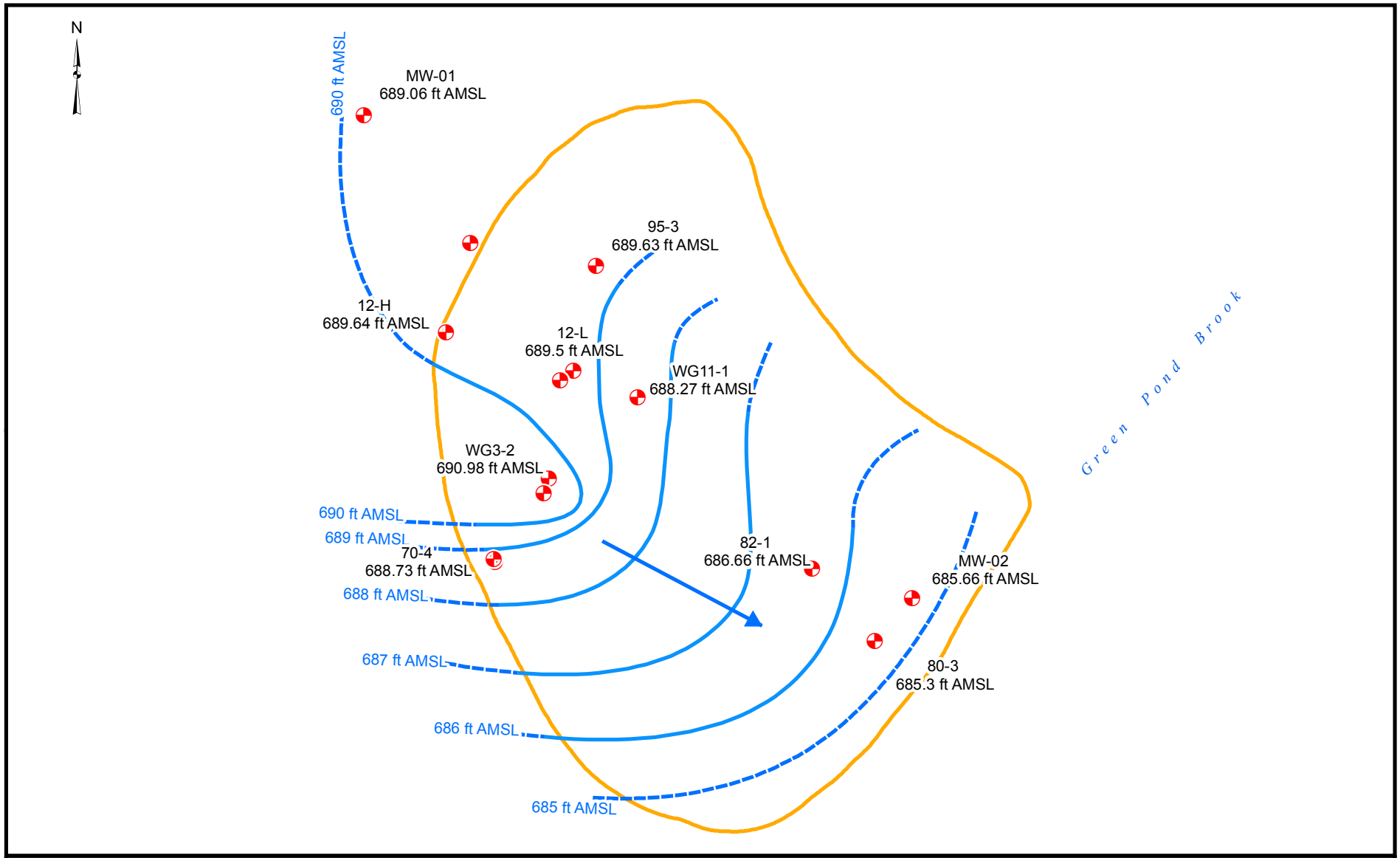

Area E

Groundwater Monitoring Well

Interpolated Groundwater Elevation Contour

Inferred Groundwater Elevation Contour

Approximate Groundwater Flow Direction

ABBREVIATIONS:
ft AMSL – feet above mean sea level

0 500
Feet

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Figure 2
2015 PICA-077 Groundwater Elevation Contour Map

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Table 2 Well Specification and Groundwater Elevation Summary

Location	Well Material	Well Diameter (inches)	Measuring Point Elevation (msl) (TOC)	Total Depth (ft bmp)	Screen Interval (msl)	9/10/2007		12/10/2007		1/22/2008		5/6/2008		8/5/2008		11/5/2008		3/10-11/2009		6/4/2009		8/31/2009		3/11/2010		8/25/2010		3/8/2011		8/12/2011		3/6/2012		9/5/2012		8/14/2013		7/9/2014		8/26/2015	
						DTW (ft bmp)	WE (msl)	DTW (ft bmp)	WE (msl)	DTW (ft bmp)	WE (msl)	DTW (ft bmp)	WE (msl)	DTW (ft bmp)	WE (msl)	DTW (ft bmp)	WE (msl)	DTW (ft bmp)	WE (msl)	DTW (ft bmp)	WE (msl)	DTW (ft bmp)	WE (msl)	DTW (ft bmp)	WE (msl)	DTW (ft bmp)	WE (msl)	DTW (ft bmp)	WE (msl)	DTW (ft bmp)	WE (msl)	DTW (ft bmp)	WE (msl)	DTW (ft bmp)	WE (msl)	DTW (ft bmp)	WE (msl)	DTW (ft bmp)	WE (msl)
80-3	PVC	2	692.97	43	655.17 - 650.17	7.11	685.86	6.31	686.66	6.23	686.74	6.02	686.95	6.63	686.34	5.31	687.66	5.62	687.35	5.89	687.08	5.74	687.23	5.48	687.49	8.72	684.25	4.27	688.70	7.31	685.66	6.84	686.13	6.91	686.06	5.95	687.02	7.37	685.60	7.67	685.30
82-1	PVC	2	691.93	18	679.13 - 674.13	4.72	687.21	3.67	688.26	3.61	688.32	3.46	688.47	4.98	686.95	3.24	688.69	3.51	688.42	3.55	688.38	3.70	688.23	2.84	689.09	4.81	687.12	2.43	689.50	4.95	686.98	4.17	687.76	4.96	686.97	3.62	688.31	8.55	683.38	5.27	686.66
95-3	PVC	2	696.35	21	685.85 - 675.85	6.12	690.23	8.59	687.76	8.59	687.76	5.47	690.88	6.94	689.41	5.55	690.80	5.62	690.73	5.61	690.74	5.63	690.72	4.82	691.53	7.25	689.10	4.24	692.11	6.21	690.14	5.72	690.63	6.71	689.64	NM	NA	6.07	690.28	6.72	689.63
95-5[1]	PVC	2	NA	21	16-21[2]	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.31	NA	--	--	4.61	NA	5.57	NA	NM	NA	NM	NA	NA	NA
MW-12A[1]	PVC	4	NA	18	11-18[2]	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.41	NA	--	--	5.12	NA	6.05	NA	NM	NA	NM	NA	NA	NA
MW-12H	PVC	2	695.51	14	686.51 - 681.51	5.71	689.80	5.12	690.39	5.18	690.33	5.21	690.30	6.37	689.14	5.32	690.19	4.19	691.32	4.93	690.58	5.29	690.22	4.74	690.77	5.83	689.68	4.81	690.70	5.86	689.65	5.37	690.14	6.00	689.51	4.91	690.60	5.59	689.92	5.87	689.64
MW-12L	PVC	2	695.51	24	676.91 - 671.91	5.96	689.55	5.31	690.20	5.26	690.25	5.38	690.13	6.63	688.88	5.38	690.13	5.34	690.17	5.26	690.25	5.44	690.07	4.73	690.78	5.91	689.60	4.51	691.00	6.65	688.86	5.16	690.35	5.92	689.59	4.91	690.60	5.65	689.86	6.01	689.50
70-4	PVC	2	694.77	27	673.47 - 668.47	5.92	688.85	4.96	689.81	5.06	689.71	5.16	689.61	6.31	688.46	5.10	689.67	5.05	689.72	4.92	689.85	5.23	689.54	4.84	689.93	5.64	689.13	4.75	690.02	5.76	689.01	5.14	689.63	5.90	688.87	4.98	689.79	5.97	688.80	6.04	688.73
WG3-2	PVC	2	695.28	26	674.98 -669.98	4.15	691.13	3.30	691.98	3.38	691.90	3.48	691.80	4.67	690.61	3.41	691.87	3.37	691.91	3.29	691.99	3.51	691.77	3.13	692.15	4.04	691.24	2.95	692.33	4.00	691.28	3.42	691.86	4.18	691.10	3.48	691.80	4.18	691.10	4.30	690.98
WG11-1	PVC	2	693.69	26	673.59 - 668.59	4.39	689.30	3.65	690.04	3.57	690.12	3.72	689.97	5.08	688.61	3.68	690.01	3.69	690.00	3.61	690.08	3.81	689.88	3.27	690.42	4.84	688.85	3.03	690.66	4.41	689.28	3.83	689.86	4.73	688.96	3.56	690.13	4.42	689.27	5.42	688.27
E-MW-01	PVC	2	696.85	20	686.85 - 676.85	5.85	691.00	4.71	692.14	3.39	693.46	4.70	692.15	7.08	689.77	5.63	691.22	5.28	691.57	4.90	691.95	5.45	691.40	3.40	693.45	7.22	689.63	2.98[1]	693.87	8.540	688.31	NM	NM	NM	NM	3.57	693.28	6.24	690.61	6.99	689.86
E-MW-02	PVC	2	692.40	20	682.40 - 672.40	7.30	685.10	6.54	685.86	6.51	685.89	6.20	686.20	6.75	685.65	5.55	686.85	5.85	686.55	6.05	686.35	5.93	686.47	5.77	686.63	6.87	685.53	4.41	687.99	7.54	684.86	7.11	685.29	7.07	685.33	6.22	686.18	7.57	684.83	6.74	685.66

[1]Monitoring Wells 95-5 and MW-12A were removed from the long-term monitoring regime in accordance with the approved 2012 Annual Monitoring Report.
[2]Screen interval feet below top of casing.
-- = Sample not collected
msl = Mean sea level
ft bmp = Feet below measuring point
TOC = Top of casing
DTW = Depth to water
WE = Water elevation
NA = Data not available

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3. RESULTS

This section presents the results of the sampling activities and evaluates the remedy performance.

3.1 GROUNDWATER ELEVATIONS

Groundwater elevations ranged from a maximum of 690.98 feet (ft) above mean sea level at E-WG3-2 to a minimum elevation 685.30 ft above mean sea level at E-80-3 in August 2015. Historical groundwater elevation data indicate that groundwater flows generally toward the southeast under a horizontal hydraulic gradient of less than 0.01 feet per foot. A groundwater elevation contour map, based on the August 2015 gauging event, is presented in **Figure 2**. The flow direction indicated in the 2015 data is consistent with that previously observed at the Site.

3.2 ANALYTICAL RESULTS

Groundwater samples were analyzed for VOCs. The five COCs for this Site are: PCE, TCE, cis-1,2-DCE, 1,1-DCE, and VC. **Table 3** presents the summary of all analyzed VOCs from the first quarter 2007 through the third quarter 2015 sampling events. Complete laboratory reports are included in **Appendix B**.

Based on a review of analytical data for groundwater samples collected during 2015, the following is a summary of the results for the COCs:

- Five wells (E-95-3, E-12-L, E-WG11-1, E-WG-11-2, and E-WG3-2) had concentrations of PCE (ranging from 1.9 µg/L [E-12-D] to 13.4 µg/L [E-WG11-1]) that exceeded the New Jersey Ground Water Quality Standard (NJGWQS) of 1 microgram per liter (µg/L) during the 2015 reporting period. A significant decrease in the concentration of PCE was observed in well E-95-3; 4.1 µg/L was detected in September 2015, which is much less than the 94.1 µg/L concentration observed in July 2014 and less than the average concentration of 43.7 µg/L observed over the previous five sampling events. Well E-95-3 typically has the highest concentrations of PCE; however, the highest concentration detected in September 2015 was at E-WG11-1 (13.4 µg/L). PCE was not detected in downgradient monitoring wells E-MW-02 or E-80-3. A PCE groundwater concentration map based on the 2015 groundwater sampling event is presented as **Figure 3**.

- Nine wells (E-12-D, E-12-H, E-12-L, E-WG3-2, E-82-1, E-WG11-1, E-MW-02, E-MW-11, and E-WG11-2) had concentrations of TCE that exceeded the NJGWQS of 1 µg/L during the 2015 reporting period. The maximum reported concentration was 15.5 µg/L in monitoring well E-12-1. Monitoring wells downgradient of E-82-1 did not report results above the sample detection limit for TCE. A TCE groundwater concentration map based on the 2015 groundwater sampling event is presented as **Figure 4**.

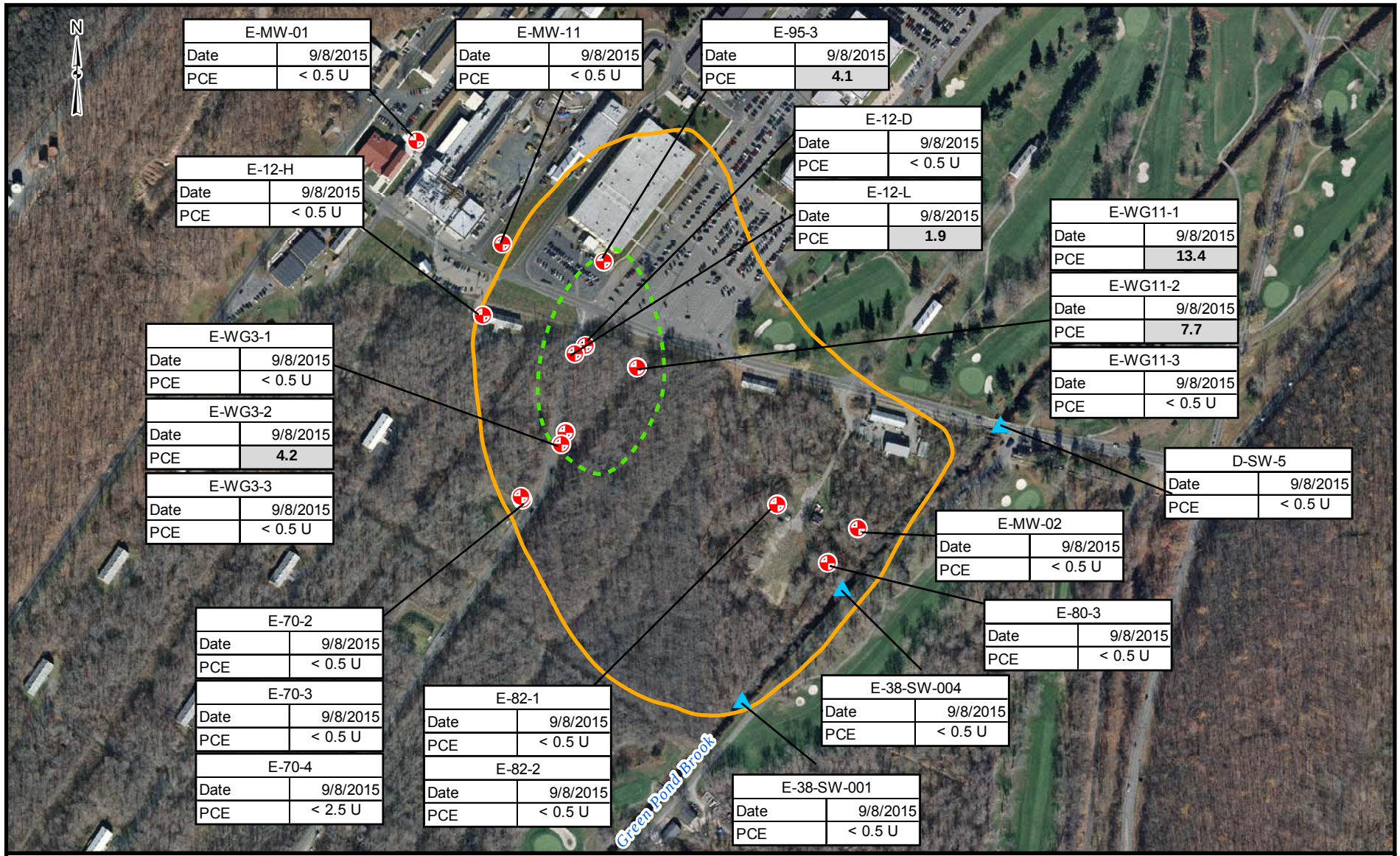
- No wells had concentrations of cis-1,2-DCE that exceeded the NJGWQS of 70 µg/L during 2015.

- Four wells (E-70-4, E-80-3, E-82-1, and E-W611-3) had concentrations of 1,1-DCE that exceeded the NJGWQS of 2 µg/L during the 2015 reporting period. The maximum concentration reported from wells within the plume center was 16.3 µg/L from E-82-1.

- Three wells (E-70-3, E-W63-2, and E-70-4) had concentrations of VC that exceeded the NJGWQS of 1 µg/L during the 2015 reporting period. The maximum concentration reported was 14.3 µg/L from E-70-4.

- Acetone, a common laboratory contaminant, was detected in all samples at concentrations (13.4 to an estimated 90.5 µg/L) greater than NJWQS. Acetone is not a COC at Area E.

Table 4 summarizes the 2015 surface water sampling results. As indicated in the table and included on **Figures 3 and 4**, concentrations of PCE, and TCE were not detected at the three sampled locations (E-38-SW-001, E-38-SW-004 and D-SW-5) in September 2015. Additionally, there were no detections of cis-1,2-DCE and 1,1-DCE. VC was not detected in any of the surface water samples. However, the method detection limit (0.5 µg/L) exceeds the SWQC of 0.34 µg/L for PCE and 0.082 µg/L for VC. Table 5 presents the surface water discharge data summary for Green Pond Brook in September 2015 and historical sampling events.



Area E

PCE Plume Boundary

Groundwater Monitoring Well

Surface Water Monitoring Point

NOTES:
1. All concentrations are presented in micrograms per liter (µg/L).
2. Bolded and shaded values indicate concentrations above the site cleanup level (1 µg/L for groundwater and 0.34 µg/L for surface water).

ABBREVIATIONS:
µg/L – micrograms per liter
PCE – Tetrachloroethene
U – Indicates that the analyte was analyzed for but not detected.

0 500
Feet

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Figure 3
PCE Groundwater and Surface Water Concentrations Map

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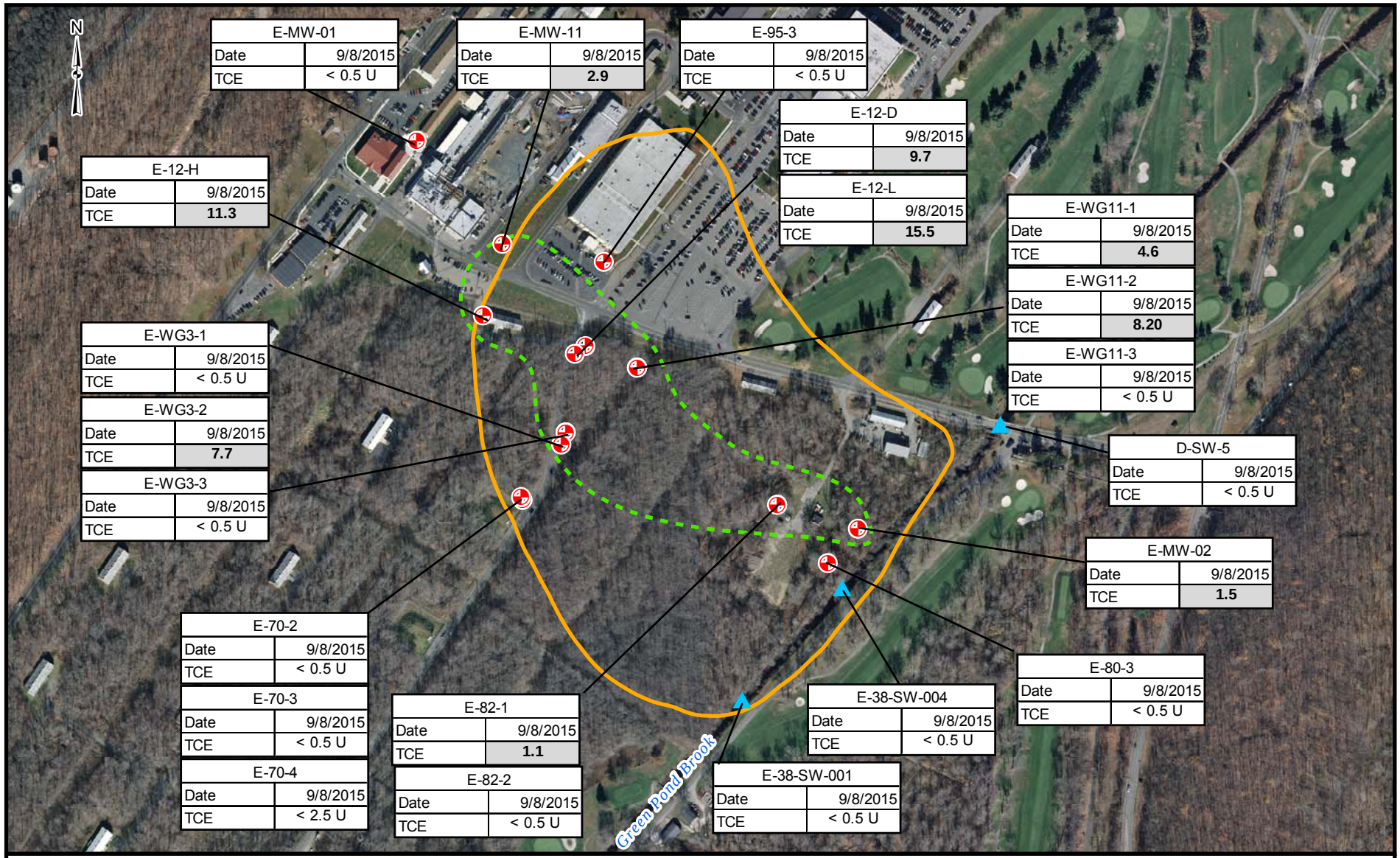

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Figure 4
TCE Groundwater and Surface Water Concentrations Map

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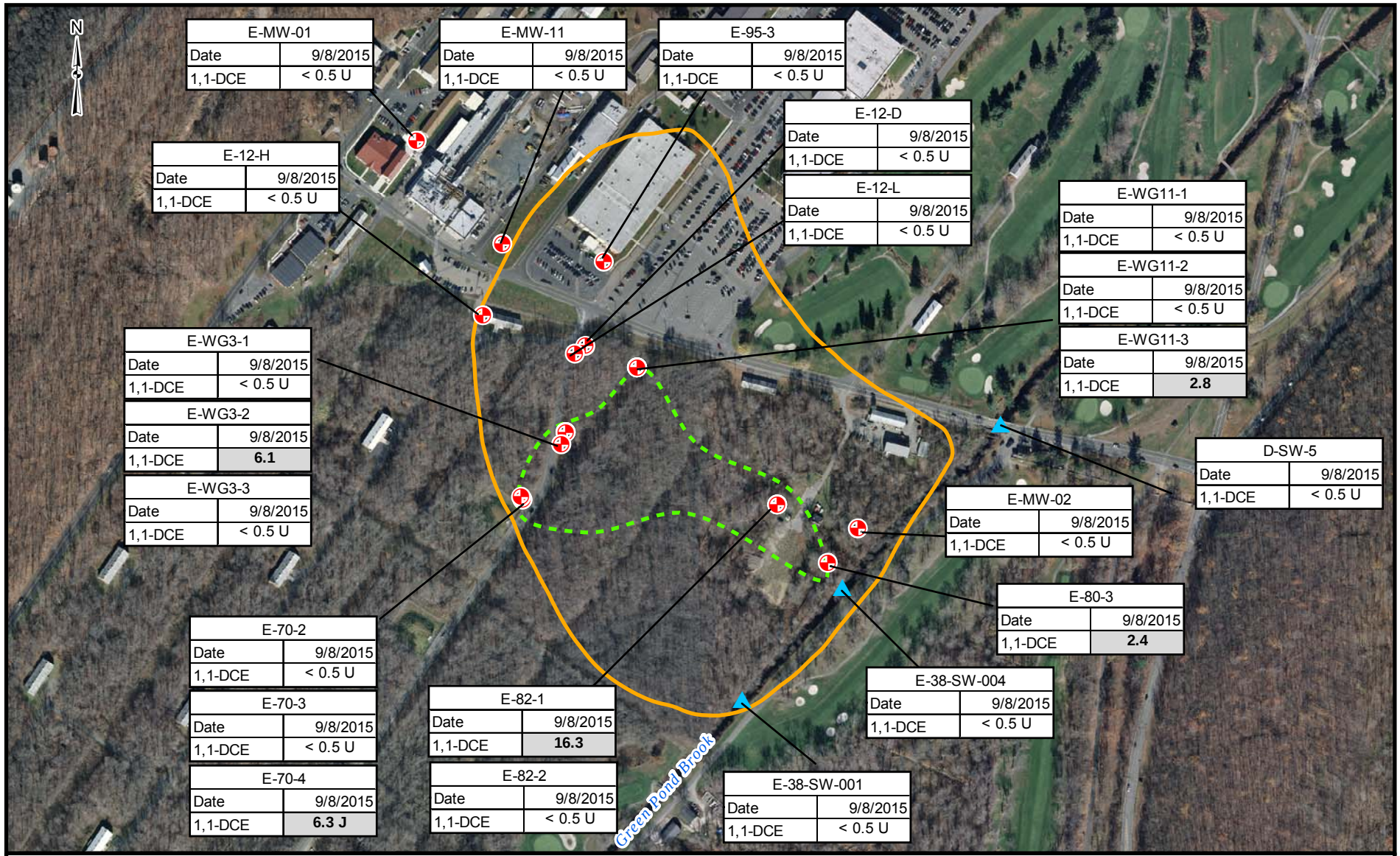

Area E

1,1-DCE Plume Boundary

Groundwater Monitoring Well

Surface Water Monitoring Point

NOTES:
1. All concentrations are presented in micrograms per liter (µg/L).
2. Bolded and shaded values indicate concentrations above the site cleanup level (2 µg/L for groundwater and 4.7 µg/L for surface water).

ABBREVIATIONS:
µg/L – micrograms per liter
1,1-DCE – 1,1-Dichloroethene
U – Indicates that the analyte was analyzed for but not detected.

0 500
Feet

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Figure 5
1,1-DCE Groundwater and Surface Water Concentrations Map

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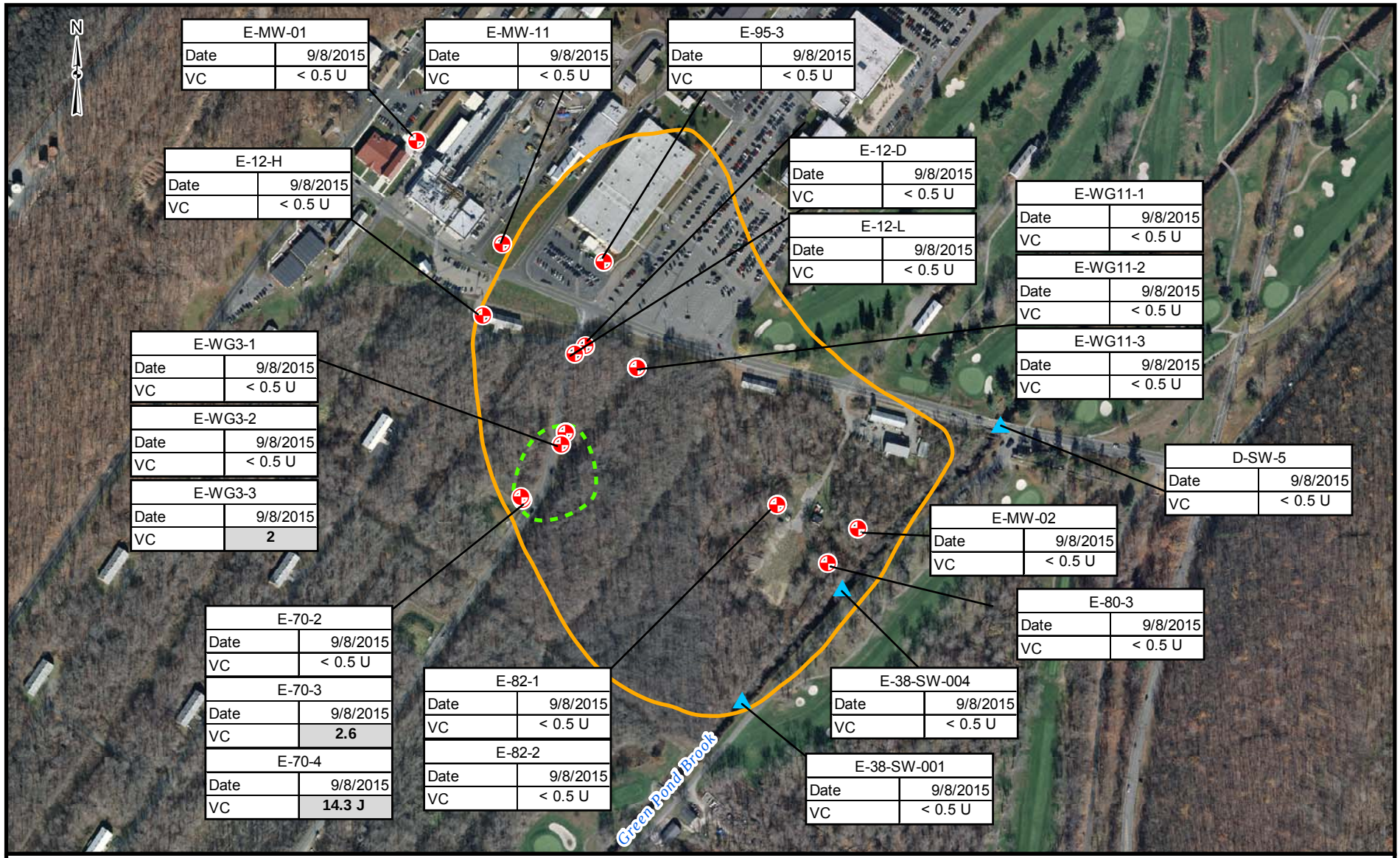

Area E

VC Plume Boundary

Groundwater Monitoring Well

Surface Water Monitoring Point

NOTES:
1. All concentrations are presented in micrograms per liter (µg/L).
2. Bolded and shaded values indicate concentrations above the site cleanup level (1 µg/L for groundwater and 0.082 µg/L for surface water).

ABBREVIATIONS:
µg/L – micrograms per liter
VC – Vinyl Chloride
U – Indicates that the analyte was analyzed for but not detected.

0 500
Feet

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Figure 6
VC Groundwater and Surface Water Concentrations Map

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Table 3 Historical Groundwater Sampling Results

			Location ID:	E-12-A	E-12-A	E-12-A	E-12-D	E-12-D	E-12-D	E-12-D	E-12-D	E-12-H	E-12-H	E-12-H	E-12-H	E-12-H	E-12-H	E-12-H	E-12-H	E-12-H	E-12-H	E-12-H	E-12-H	E-12-H	E-12-H	E-12-H	E-12-H	E-12-H	E-MW-12H	E-12-H	E-12-K	E-12-K	E-12-K	E-12-L	E-12-L	E-12-L	E-12-L	E-12-L	E-12-L	E-12-L	E-12-L	E-12-L	E-12-L	E-12-L	E-12-L	E-12-L	E-12-L
			Depth Interval:	11 - 18	11 - 18	11 - 18	25 - 30	25 - 30	25 - 30	25 - 30	25 - 30	9 - 14	9 - 14	9 - 14	9 - 14	9 - 14	9 - 14	9 - 14	9 - 14	9 - 14	9 - 14	9 - 14	9 - 14	9 - 14	9 - 14	9 - 14	9 - 14	9 - 14	9-20	9 - 14	33.1 - 38.1	33.1 - 38.1	33.1 - 38.1	19.75 - 24.75	19.75 - 24.75	19.75 - 24.75	19.75 - 24.75	19.75 - 24.75	19.75 - 24.75	19.75 - 24.75	19.75 - 24.75	19.75 - 24.75	19.75 - 24.75	19.75 - 24.75	19.75 - 24.75	19.75 - 24.75	19.75 - 24.75
			Sample Date:	#######	3/20/2012	#######	9/13/2007	8/31/2009	8/26/2011	#######	9/8/2015	9/12/2007	12/27/2007	2/5/2008	5/20/2008	8/26/2008	11/19/2008	3/24/2009	6/18/2009	8/31/2009	3/29/2010	9/8/2010	#######	8/26/2011	3/20/2012	#######	#######	7/9/2014	9/8/2015	9/13/2007	8/31/2009	8/26/2011	9/13/2007	12/27/2007	2/5/2008	5/20/2008	8/26/2008	11/19/2008	3/24/2009	6/18/2009	8/31/2009	3/29/2010	9/8/2010	8/26/2011	3/21/2011	3/20/2012
CAS No	Chemical Name	Units	Area E ROD Comparison Criteria[1]																																												
630-20-6	1,1,1,2-Tetrachloroetha	ug/L	---	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U
71-55-6	1,1,1-Trichloroethane	ug/L	---	**1.69**	**1.73**	**1.65**	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	**1.05**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**0.259 J**	**0.289 J**	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U
79-34-5	1,1,2,2-Tetrachloroetha	ug/L	---	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U
79-00-5	1,1,2-Trichloroethane	ug/L	---	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U
75-34-3	1,1-Dichloroethane	ug/L	---	**1.11**	**2.34**	**3.34**	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U
75-35-4	1,1-Dichloroethene	ug/L	2	< 1 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U
563-58-6	1,1-Dichloropropene	ug/L	---	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U
87-61-6	1,2,3-Trichlorobenzene	ug/L	---	< 1 U	< 0.15 U	< 0.15 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.15 U
96-18-4	1,2,3-Trichloropropane	ug/L	---	< 1 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U
120-82-1	1,2,4-Trichlorobenzene	ug/L	---	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U
95-63-6	1,2,4-Trimethylbenzene	ug/L	---	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U
106-93-4	1,2-Dibromoethane	ug/L	---	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U
95-50-1	1,2-Dichlorobenzene	ug/L	---	< 1 U	< 0.125 U	< 0.125 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.5 U	< 1 U	< 1 U	< 1 U	**0.308 J**	**0.182 J**	**0.181 J**	**0.149 J**	< 1 U	< 1 U	< 1 U	**0.136 J**	< 1 U	**0.177 J**	< 1 U	< 1 U	**0.16 J**	< 0.125 U
107-06-2	1,2-Dichloroethane	ug/L	---	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U
78-87-5	1,2-Dichloropropane	ug/L	---	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U
108-67-8	1,3,5-Trimethylbenzene	ug/L	---	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U
541-73-1	1,3-Dichlorobenzene	ug/L	---	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U
142-28-9	1,3-Dichloropropane	ug/L	---	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U
106-46-7	1,4-Dichlorobenzene	ug/L	---	< 1 U	< 0.125 U	< 0.125 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U
594-20-7	2,2-dichloropropane	ug/L	---	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U
78-93-3	2-Butanone	ug/L	---	< 10 U	< 2.5 U	< 2.5 U	< 10 U	< 10 U	< 10 U	< 10 U	< 5 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	**3.54 J**	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	**3.71 J**	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2.5 U
110-75-8	2-Chloroethyl vinyl eth	ug/L	---	< 10 U	< 2 U	< 2 U	< 10 U	< 10 U	< 10 U	< 10 U		< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U	< 2 U	< 2 U	< 2 U		< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
95-49-8	2-Chlorotoluene	ug/L	---	< 1 U	< 0.125 U	< 0.125 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U
591-78-6	2-Hexanone	ug/L	---	< 10 U	< 2.5 U	< 2.5 U	< 10 U	< 10 U	< 10 U	< 10 U	< 5 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2.5 U
106-43-4	4-Chlorotoluene	ug/L	---	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U
108-10-1	4-Methyl-2-pentanone (	ug/L	---	< 10 U	< 2.5 U	< 2.5 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2.5 U
67-64-1	Acetone	ug/L	---	< 10 UB	**50 UB**	**14.2**	< 10 U	< 10 U	**5.77 UB**	**4.63 J**	**27.3**	< 10 U	< 10 U	< 10 U	**2.99 J**	**4.4 J**	**22.1**	< 10 U	**5.66 UB**	< 10 U	**3.5 UB**	**4.32 J**	< 10 UB	**6.19 UB**	**50.2 UB**	**15.6**	**26.1**	**53.7**	**26.1**	< 10 U	< 10 U	**7.17 UB**	< 10 U	< 10 U	**4.15 J**	**2.6 J**	**4.61 J**	**22.8**	**4.43 J**	**6.18 UB**	< 10 U	**3.01 UB**	< 10 U	**6.96 UB**	< 10 UB	**50.4 UB**
71-43-2	Benzene	ug/L	---	< 1 U	< 0.125 U	< 0.125 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U
75-27-4	Bromodichloromethane	ug/L	---	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U
75-25-2	Bromoform	ug/L	---	< 1 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U
74-83-9	Bromomethane	ug/L	---	< 1 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U
104-51-8	Butyl benzene	ug/L	---	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U
75-15-0	Carbon disulfide	ug/L	---	< 1 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U
56-23-5	Carbon tetrachloride	ug/L	---	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U
108-90-7	Chlorobenzene	ug/L	---	< 1 U	< 0.125 U	< 0.125 U	**0.154 J**	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.5 U	< 1 U	< 1 U	< 1 U	**0.552 J**	**0.527 UB**	**0.395 UB**	**0.365 J**	**0.476 J**	**0.271 J**	**0.2 J**	**0.408 J**	**0.269 J**	**0.244 J**	< 1 U	**0.314 J**	**0.264 J**	< 0.125 U
74-97-5	Chlorobromomethane	ug/L	---	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U
75-00-3	Chloroethane	ug/L	---	< 1 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U
67-66-3	Chloroform	ug/L	---	**0.32 J**	**0.369 J**	**0.626 J**	**0.458 J**	**0.372 J**	**0.355 UB**	**0.248 J**	< 0.5 U	**0.138 J**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**0.231 UB**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**0.207 J**	< 0.125 U	< 0.125 U	**0.193 J**	< 0.5 U	< 1 U	< 1 U	< 1 U	**0.564 J**	**0.538 UB**	**0.452 J**	**0.46 J**	**0.467 J**	**0.484 J**	**0.363 J**	**0.389 UB**	**0.264 J**	**0.455 J**	**0.282 J**	**0.362 UB**	**0.369 J**	**0.361 J**
74-87-3	Chloromethane	ug/L	---	< 1 U	< 0.5 U	< 0.5 U	**0.792 J**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**0.628 B**	< 1 U	< 1 U	**0.264 J**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	**1.23**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**0.549 B**	**0.393 J**	**0.473 J**	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U
156-59-2	cis-1,2-Dichloroethene	ug/L	70	< 1 U	< 0.25 U	< 0.25 U	**0.865 J**	**0.659 J**	**0.69 J**	**0.376 J**	< 0.5 U	**1.77**	**0.564 J**	**1.4**	**1.8**	**1.21**	**1.35**	**1.66**	**1.57**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**2.3**	< 0.25 U	< 0.25 U	**0.813 J**	**1.2**	< 1 U	< 1 U	< 1 U	**0.699 J**	**0.82 J**	**0.691 J**	**0.593 J**	**0.674 J**	**0.697 J**	**0.685 J**	**0.723 J**	**0.555 J**	**0.668 J**	**0.545 J**	**0.452 J**	**0.666 J**	**0.5 J**
10061-01-5	cis-1,3-Dichloropropen	ug/L	---	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U
99-87-6	Cymene	ug/L	---	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U
124-48-1	Dibromochloromethane	ug/L	---	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U
96-12-8	Dibromochloropropane	ug/L	---	< 5 U	< 1 U	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 1 U
75-71-8	Dichlorodifluoromethan	ug/L	---	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U
100-41-4	Ethyl benzene	ug/L	---	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U
87-68-3	Hexachlorobutadiene	ug/L	---	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U
74-88-4	Iodomethane	ug/L	---	NA	NA	NA	NA	NA	NA	NA	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
98-82-8	Isopropylbenzene	ug/L	---	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U

Table 3 Historical Groundwater Sampling Results

			Location ID:	E-12-L	E-12-L	E-MW-12L	E-12-L	E-18-1	E-18-1	E-18-1	E-70-2	E-70-2	E-70-2	E-70-2	E-70-2	E-70-3	E-70-3	E-70-3	E-70-3	E-70-3	E-70-3	E-70-4	E-70-4	E-70-4	E-70-4	E-70-4	E-70-4	E-70-4	E-70-4	E-70-4	E-70-4	E-70-4	E-70-4	E-70-4	E-70-4	E-70-4	E-70-4	E-70-4	E-80-1	E-80-1	E-80-1	E-80-2	E-80-2	E-80-3	E-80-3	E-80-3
			Depth Interval:	19.75 - 24.75	19.75 - 24.75	20-30	19.75 - 24.75	10 - 20	10 - 20	10 - 20	34.6 - 39.6	34.6 - 39.6	34.6 - 39.6	34.6-39.6	34.6-39.6	10 - 15	10 - 15	10 - 15	10 - 15	10 - 15	10 - 15	21.3 - 26.3	21.3 - 26.3	21.3 - 26.3	21.3 - 26.3	21.3 - 26.3	21.3 - 26.3	21.3 - 26.3	21.3 - 26.3	21.3 - 26.3	21.3 - 26.3	21.3 - 26.3	21.3 - 26.3	21.3 - 26.3	21.3 - 26.3	21.3 - 26.3	21.3 - 26.3	21.3 - 26.3	25 - 30	25 - 30	25 - 30	9.4 - 14.4	9.4 - 14.4	40 - 50	40 - 50	40 - 50
			Sample Date:	9/18/2012	8/14/2013	7/9/2014	9/8/2015	9/11/2007	8/31/2009	8/26/2011	9/11/2007	8/31/2009	8/26/2011	#######	9/8/2015	9/11/2007	8/31/2009	8/26/2011	9/18/2012	8/14/2013	9/8/2015	9/11/2007	12/27/2007	2/5/2008	5/20/2008	8/26/2008	11/19/2008	3/24/2009	6/18/2009	8/31/2009	3/29/2010	9/8/2010	3/21/2011	8/26/2011	3/20/2012	9/18/2012	8/14/2013	7/9/2014	9/8/2015	9/12/2007	8/31/2009	8/26/2011	9/12/2007	8/31/2009	9/12/2007	12/27/2007	2/5/2008
CAS No	Chemical Name	Units	Area E ROD Comparison Criteria[1]																																											
630-20-6	1,1,1,2-Tetrachloroetha	ug/L	---	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 2.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
71-55-6	1,1,1-Trichloroethane	ug/L	---	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	**1.06**	< 1 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 2.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
79-34-5	1,1,2,2-Tetrachloroetha	ug/L	---	< 0.2 U	< 0.2 U	< 0.2 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
79-00-5	1,1,2-Trichloroethane	ug/L	---	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 2.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
75-34-3	1,1-Dichloroethane	ug/L	---	< 0.125 U	< 0.125 U	< 0.125 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	**4.82**	< 1 U	< 1 U	< 0.5 U	**5.5**	**1.09**	**3.14**	**12.2**	**1.84**	**2.2**	**9.92**	**9.07**	**8.18**	**8.51**	**7.8**	**7.01**	**3.98**	**6.59**	**3.02**	**7.23**	**5.58**	**6**	**3.62**	**5**	**4.94**	**4.09**	**6.4**	**24.2 J**	**1.31**	**0.948 J**	**1.02**	**0.746 J**	**0.318 J**	**21.9**	**19.7**	**18.3**
75-35-4	1,1-Dichloroethene	ug/L	2	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	**4.76**	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**0.69 J**	< 1 U	**0.735 J**	< 1 U	**0.642 J**	**0.77 J**	**0.736 J**	**1.7**	**6.4 J**	**2**	**1.08**	**1.63**	**0.565 J**	< 1 U	**8.46**	**6.18**	**5.75**
563-58-6	1,1-Dichloropropene	ug/L	---	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 2.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
87-61-6	1,2,3-Trichlorobenzene	ug/L	---	< 0.15 U	< 0.15 U	< 0.15 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 0.15 U	< 0.15 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 10 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
96-18-4	1,2,3-Trichloropropane	ug/L	---	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
120-82-1	1,2,4-Trichlorobenzene	ug/L	---	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
95-63-6	1,2,4-Trimethylbenzene	ug/L	---	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 2.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
106-93-4	1,2-Dibromoethane	ug/L	---	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
95-50-1	1,2-Dichlorobenzene	ug/L	---	< 0.125 U	< 0.125 U	**0.178 J**	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 2.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
107-06-2	1,2-Dichloroethane	ug/L	---	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 2.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
78-87-5	1,2-Dichloropropane	ug/L	---	< 0.2 U	< 0.2 U	< 0.2 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
108-67-8	1,3,5-Trimethylbenzene	ug/L	---	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 2.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
541-73-1	1,3-Dichlorobenzene	ug/L	---	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 2.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
142-28-9	1,3-Dichloropropane	ug/L	---	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
106-46-7	1,4-Dichlorobenzene	ug/L	---	< 0.125 U	< 0.125 U	< 0.125 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 2.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
594-20-7	2,2-dichloropropane	ug/L	---	< 0.25 U	< 0.25 U	< 0.25 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 10 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
78-93-3	2-Butanone	ug/L	---	< 2.5 U	< 2.5 U	< 2.5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2.5 U	< 2.5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	**5.64 J**	< 10 U	**2.7 UB**	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 25.0 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
110-75-8	2-Chloroethyl vinyl eth	ug/L	---	< 2 U	< 2 U	< 2 U		< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U		< 10 U	< 10 U	< 10 U	< 2 U	< 2 U		< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U	< 2 U	< 2 U	< 2 U		< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
95-49-8	2-Chlorotoluene	ug/L	---	< 0.125 U	< 0.125 U	< 0.125 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
591-78-6	2-Hexanone	ug/L	---	< 2.5 U	< 2.5 U	< 2.5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2.5 U	< 2.5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 25.0 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
106-43-4	4-Chlorotoluene	ug/L	---	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
108-10-1	4-Methyl-2-pentanone (	ug/L	---	< 2.5 U	< 2.5 U	< 2.5 U	< 2 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U	< 10 U	< 10 U	< 10 U	< 2.5 U	< 2.5 U	< 2 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
67-64-1	Acetone	ug/L	---	**14.6**	**4.51 J**	**54**	**24.9**	< 10 U	< 10 U	**6.76 UB**	< 10 U	< 10 U	**8.02 UB**	**4.20 J**	**19.7**	< 10 U	< 10 U	**6.93 UB**	**14.8**	**7.87**	**20.6**	< 10 U	< 10 U	< 10 U	**3.55 J**	**2.93 J**	**20.3**	< 10 U	**5.64 UB**	< 10 U	**3.54 UB**	**3.33 J**	< 10 UB	**6.67 UB**	**49.7 UB**	**15**	**4.65 J**	**56.8**	**90.5 J**	< 10 U	**3.41 J**	**5.53 UB**	< 10 U	**3.18 J**	< 10 U	< 10 U	< 10 U
71-43-2	Benzene	ug/L	---	< 0.125 U	< 0.125 U	< 0.125 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 2.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
75-27-4	Bromodichloromethane	ug/L	---	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 2.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
75-25-2	Bromoform	ug/L	---	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
74-83-9	Bromomethane	ug/L	---	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
104-51-8	Butyl benzene	ug/L	---	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
75-15-0	Carbon disulfide	ug/L	---	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
56-23-5	Carbon tetrachloride	ug/L	---	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 2.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
108-90-7	Chlorobenzene	ug/L	---	< 0.125 U	**0.186 J**	**0.343 J**	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 2.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
74-97-5	Chlorobromomethane	ug/L	---	< 0.2 U	< 0.2 U	< 0.2 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
75-00-3	Chloroethane	ug/L	---	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
67-66-3	Chloroform	ug/L	---	**0.265 J**	**0.517 J**	**0.314 J**	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**0.248 UB**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 2.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
74-87-3	Chloromethane	ug/L	---	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**0.299 J**	< 1 U	< 1 U	< 1 U	< 1 U	**0.345 J**	< 1 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**0.397 J**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
156-59-2	cis-1,2-Dichloroethene	ug/L	70	**0.29 J**	**0.362 J**	**0.412 J**	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**0.29 J**	< 1 U	**0.47 J**	**0.297 J**	**0.693 J**	**0.716 J**	**1.35**	**2.65**	**13.5 J**	**0.266 J**	< 1 U	**0.632 J**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
10061-01-	cis-1,3-Dichloropropen	ug/L	---	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 2.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
99-87-6	Cymene	ug/L	---	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
124-48-1	Dibromochloromethane	ug/L	---	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 2.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
96-12-8	Dibromochloropropane	ug/L	---	< 1 U	< 1 U	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 1 U	< 1 U	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
75-71-8	Dichlorodifluoromethan	ug/L	---	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
100-41-4	Ethyl benzene	ug/L	---	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 2.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
87-68-3	Hexachlorobutadiene	ug/L	---	< 0

Table 3 Historical Groundwater Sampling Results

| | | | Location ID: | E-80-3 | E-80-3 | E-80-3 | E-80-3 | E-80-3 | E-80-3 | E-80-3 | E-80-3 | E-80-3 | E-80-3 | E-80-3 | E-80-3 | E-80-3 | E-80-3 | E-80-3 | E-81-1 | E-81-1 | E-81-1

Table 3 Historical Groundwater Sampling Results

			Location ID:	E-95-3	E-95-3	E-95-3	E-95-3	E-95-3	E-95-3	E-95-3	E-95-3	E-95-3	E-95-3	E-95-3	E-95-3	E-95-3	E-95-3	E-95-3	E-95-5	E-95-5	E-95-5	E-MW-01	E-MW-01	E-MW-01	E-MW-01	E-MW-01	E-MW-01	E-MW-01	E-MW-01	E-MW-01	E-MW-01	E-MW-01	E-MW-01	E-MW-01	E-MW-01	E-MW-01	E-MW-01	E-MW-01	E-MW-01	E-MW-02	E-MW-02	E-MW-02
			Depth Interval:	10 - 20	10 - 20	10 - 20	10 - 20	10 - 20	10 - 20	10 - 20	10 - 20	10 - 20	10 - 20	10 - 20	10 - 20	10-20	10-20	10-20	16 - 21	16 - 21	16 - 21	10 - 20	10 - 20	10 - 20	10 - 20	10 - 20	10 - 20	10 - 20	10 - 20	10 - 20	10 - 20	10 - 20	10 - 20	10 - 20	10 - 20	10 - 20	10 - 20	10 - 20	10 - 20	10 - 20	10 - 20	10 - 20
			Sample Date:	5/20/2008	8/26/2008	11/19/2008	3/24/2009	6/18/2009	8/31/2009[2]	3/30/2010	9/8/2010	3/21/2011	8/26/2011	#######	#######	#######	7/9/2014	9/8/2015	3/21/2011	#######	#######	9/20/2007	12/27/2007	2/5/2008	5/20/2008	8/26/2008	11/19/2008	3/24/2009	6/18/2009	8/31/2009	3/30/2010	9/8/2010	3/30/2011	8/26/2011	9/10/2013	7/9/2014	9/8/2015	9/20/2007	12/27/2007	2/5/2008
CAS No	Chemical Name	Units	Area E ROD Comparison Criteria[1]																																							
630-20-6	1,1,1,2-Tetrachloroetha	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U
71-55-6	1,1,1-Trichloroethane	ug/L	---	**4.05**	**5.01**	**3.42**	**4.36**	**1.46**	< 1 U	**7.53**	**7.86**	**8.15**	**5.16**	**1.05**	**8.58**	**1.68**	**13.2**	**2.3**	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U
79-34-5	1,1,2,2-Tetrachloroetha	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.5 U	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.5 U	< 1 U	< 1 U	< 1 U
79-00-5	1,1,2-Trichloroethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U
75-34-3	1,1-Dichloroethane	ug/L	---	**1.07**	**1.21**	**1.66**	**1.89**	**0.29 J**	< 1 U	**2.81**	**2.86**	**3.06**	**2.4**	**0.267 J**	**4.7**	**0.674 J**	**8.1**	**1.1**	< 1 U	< 0.125 U	< 0.125 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	**0.73 J**	**1.87**	**2.01**	**2.13**
75-35-4	1,1-Dichloroethene	ug/L	2	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**0.77 J**	**0.522 J**	**0.665 J**	**0.509 J**	< 0.5 U	< 0.5 U	< 0.5 U	0.851 J	< 0.5 U	< 1 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U
563-58-6	1,1-Dichloropropene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U
87-61-6	1,2,3-Trichlorobenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 2 U	< 1 U	< 0.15 U	< 0.15 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.15 U	< 2 U	< 1 U	< 1 U	< 1 U
96-18-4	1,2,3-Trichloropropane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U
120-82-1	1,2,4-Trichlorobenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 1 U	< 1 U	< 1 U	< 1 U
95-63-6	1,2,4-Trimethylbenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U
106-93-4	1,2-Dibromoethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U
95-50-1	1,2-Dichlorobenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.5 U	< 1 U	< 0.125 U	< 0.125 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.5 U	< 1 U	< 1 U	< 1 U
107-06-2	1,2-Dichloroethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U
78-87-5	1,2-Dichloropropane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.5 U	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.5 U	< 1 U	< 1 U	< 1 U
108-67-8	1,3,5-Trimethylbenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U
541-73-1	1,3-Dichlorobenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U
142-28-9	1,3-Dichloropropane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 1 U	< 1 U	< 1 U	< 1 U
106-46-7	1,4-Dichlorobenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.5 U	< 1 U	< 0.125 U	< 0.125 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.5 U	< 1 U	< 1 U	< 1 U
594-20-7	2,2-dichloropropane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 2 U	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 2 U	< 1 U	< 1 U	< 1 U
78-93-3	2-Butanone	ug/L	---	< 10 U	< 10 U	**3.46 J**	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 5 U	< 10 U	< 2.5 U	< 2.5 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	**3.34 J**	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2.5 U	< 5 U	< 10 U	< 10 U	< 10 U
110-75-8	2-Chloroethyl vinyl eth	ug/L	---	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U	< 2 U	< 2 U	< 2 U		< 10 U	< 2 U	< 2 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U		< 10 U	< 10 U	< 10 U
95-49-8	2-Chlorotoluene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 1 U	< 1 U	< 1 U	< 1 U
591-78-6	2-Hexanone	ug/L	---	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 5 U	< 10 U	< 2.5 U	< 2.5 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2.5 U	< 5 U	< 10 U	< 10 U	< 10 U
106-43-4	4-Chlorotoluene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U
108-10-1	4-Methyl-2-pentanone (	ug/L	---	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2 U	< 10 U	< 2.5 U	< 2.5 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2.5 U	< 2 U	< 10 U	< 10 U	< 10 U
67-64-1	Acetone	ug/L	---	**2.89 J**	**4.91 J**	**20.1**	**7.19 J**	**4.2 UB**	< 10 U	**2.54 J**	< 10 U	< 10 UB	**5.41 UB**	**50.1 UB**	**14.6**	**486**	**36.4 UB**	**20.6**	< 10 UB	**51.5 UB**	**14.4**	< 10 U	< 10 U	**4.86 J**	**2.99 J**	< 10 U	**20.8**	**5.1 J**	**4.49 UB**	**2.65 J**	**2.87 J**	**3.77 J**	< 10 UB	**7.18 UB**	**530**	**35 UB**	**17.9**	< 10 U	< 10 U	**4.38 J**
71-43-2	Benzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.5 U	< 1 U	< 0.125 U	< 0.125 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.5 U	< 1 U	< 1 U	< 1 U
75-27-4	Bromodichloromethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	**0.825 J**	**1.24**	**1.02**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U
75-25-2	Bromoform	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U
74-83-9	Bromomethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U
104-51-8	Butyl benzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U
75-15-0	Carbon disulfide	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U
56-23-5	Carbon tetrachloride	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U
108-90-7	Chlorobenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.5 U	< 1 U	< 0.125 U	< 0.125 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.5 U	< 1 U	< 1 U	< 1 U
74-97-5	Chlorobromomethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.5 U	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.5 U	< 1 U	< 1 U	< 1 U
75-00-3	Chloroethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U
67-66-3	Chloroform	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**0.165 J**	**0.152 J**	**0.243 UB**	< 0.125 U	< 0.125 U	**0.324 J**	**0.132 J**	< 0.5 U	**0.218 J**	**0.231 J**	**0.164 J**	**0.372 J**	**0.328 UB**	**2.5**	**3.85**	**4.24**	**4.56**	**1.78**	**1.31 UB**	**0.989 J**	**0.671 J**	**0.664 J**	**1.05**	**1.12**	**1.42**	**1.26**	< 0.5 U	< 1 U	< 1 U	< 1 U
74-87-3	Chloromethane	ug/L	---	< 1 U	< 1 U	**0.548 B**	**0.402 J**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**0.531 B**	**0.353 J**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U
156-59-2	cis-1,2-Dichloroethene	ug/L	70	**2.54**	**0.846 J**	**0.727 J**	**3.32**	**1.24**	< 1 U	**6.77**	**2.32**	**3.23**	**3.48**	**1.18**	**1.53**	**2.6**	**14.4**	< 0.5 U	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U
10061-01-5	cis-1,3-Dichloropropen	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U
99-87-6	Cymene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U
124-48-1	Dibromochloromethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	**0.822 J**	**1.19**	**1.6**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U
96-12-8	Dibromochloropropane	ug/L	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 1 U	< 1 U	< 5 U	< 5 U	< 5 U
75-71-8	Dichlorodifluoromethan	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	**0.674 J**	< 0.25 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U
100-41-4	Ethyl benzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U
87-68-3	Hexachlorobutadiene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U
74-88-4	Iodomethane	ug/L	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U	NA	NA	NA
98-82-8	Isopropylbenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U
179601-23	m-,p-Xylene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U
74-95-3	Methylene bromide	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U
1634-04-4	Methyl tert-butyl ether	ug/L	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.5 U	NA	NA	NA
75-09-2	Methylene chloride	ug/L	---	< 5 U	< 5 U	< 5 U	**1.54 J**	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 5 U	< 0.25 U	< 0.25 U	< 5 U	< 5 U	< 5 U	< 5 U	**0.387 UB**	< 5 U	< 5 U	< 5 U	**0.268 UB**	**0.737 J**	< 5 U	< 5 U	< 5 U	< 5 U	< 0.25 U	< 1 U	< 5 U	< 5 U	< 5 U
108-86-1	Monobromobenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 1 U	< 1 U	< 1 U	< 1 U
91-20-3	Naphthalene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**0.535 J**	< 1 U	< 0.2 U	< 2 U	< 1 U	< 1 U	< 1 U
103-65-1	n-Propylbenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 1 U	< 1 U	< 1 U	< 1 U
95-47-6	o-Xylene	ug/L	---	< 1 U	< 1 U	<

Table 3 Historical Groundwater Sampling Results

			Location ID:	E-MW-02	E-MW-02	E-MW-02	E-MW-02	E-MW-02	E-MW-02	E-MW-02	E-MW-02	E-MW-02	E-MW-02	E-MW-02	E-MW-02	E-MW-02	E-MW-02	E-MW-02	E-MW-11	E-MW-11	E-MW-11	E-MW-11	E-MW-11	EG11-1	EG11-1	EG11-1	EG11-1	EG11-1	EG11-1	EG11-1	EG11-1	EG11-1	EG11-1	EG11-1	EG11-1	EG11-1
			Depth Interval:	10 - 20	10 - 20	10 - 20	10 - 20	10 - 20	10 - 20	10 - 20	10 - 20	10 - 20	10 - 20	10 - 20	10 - 20	10 - 20	10 - 20	10 - 20	9 - 20	9 - 20	9 - 20	9 - 20	9 - 20	20 - 30	20 - 30	20.1 - 25.1	20.1 - 25.1	20.1 - 25.1	20.1 - 25.1	20.1 - 25.1	20.1 - 25.1	20.1 - 25.1	20.1 - 25.1	20.1 - 25.1	20.1 - 25.1	20.1 - 25.1	20.1 - 25.1
			Sample Date:	5/20/2008	8/26/2008	11/19/2008	3/30/2009	6/18/2009	8/31/2009[2]	3/30/2010	9/10/2010	3/21/2011	8/26/2011	3/20/2012	9/18/2012	8/14/2013	7/9/2014	9/8/2015	9/11/2007	8/31/2009	8/26/2011	8/14/2013	9/8/2015	9/13/2007	9/13/2007	12/27/2007	2/5/2008	5/20/2008	8/26/2008	11/19/2008	3/30/2009	6/18/2009	8/31/2009	8/31/2009	3/30/2010	9/8/2010
CAS No	Chemical Name	Units	Area E ROD Comparison Criteria[1]																																	
630-20-6	1,1,1,2-Tetrachloroetha	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
71-55-6	1,1,1-Trichloroethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	**6.05**	**5.97**	**4.88**	**1.71**	**1.1**	**3.88**	**2.89**	**2.2**	**1.31**	**0.945 J**	**0.832 J**	**0.73 J**	**2.44**
79-34-5	1,1,2,2-Tetrachloroetha	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
79-00-5	1,1,2-Trichloroethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
75-34-3	1,1-Dichloroethane	ug/L	---	**2.05**	**1.74**	**1.93**	**1.89**	**1.56 J**	**1.7**	**0.511 J**	**1.4**	**0.44 J**	**1.05**	**1.38**	**1.44**	**1.29**	**1.61**	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	**4.15**	**4.01**	**3.83**	**2.05**	**0.827 J**	**2.39**	**2.81**	**2.15**	**1.91**	**1.51**	**1.45**	**1.04**	**1.77**
75-35-4	1,1-Dichloroethene	ug/L	2	< 1 U	< 1 U	**1.06**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 1 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	**4.69**	**4.35**	**6.03**	**4.79**	**5.68**	**5.14**	**9.33**	**5.58**	**7.8**	**4.89**	**5.08**	**4.57**	**2.43**
563-58-6	1,1-Dichloropropene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
87-61-6	1,2,3-Trichlorobenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**0.153 UB**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
96-18-4	1,2,3-Trichloropropane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
120-82-1	1,2,4-Trichlorobenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
95-63-6	1,2,4-Trimethylbenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
106-93-4	1,2-Dibromoethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
95-50-1	1,2-Dichlorobenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
107-06-2	1,2-Dichloroethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
78-87-5	1,2-Dichloropropane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
108-67-8	1,3,5-Trimethylbenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
541-73-1	1,3-Dichlorobenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
142-28-9	1,3-Dichloropropane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
106-46-7	1,4-Dichlorobenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
594-20-7	2,2-dichloropropane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
78-93-3	2-Butanone	ug/L	---	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 10 U	< 5 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
110-75-8	2-Chloroethyl vinyl eth	ug/L	---	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U	< 2 U	< 2 U	< 2 U		< 10 U	< 10 U	< 10 U	< 10 U		< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
95-49-8	2-Chlorotoluene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
591-78-6	2-Hexanone	ug/L	---	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 10 U	< 5 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
106-43-4	4-Chlorotoluene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
108-10-1	4-Methyl-2-pentanone (	ug/L	---	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
67-64-1	Acetone	ug/L	---	< 10 U	**3.6 J**	**18.6**	**5.22 J**	**4.36 J**	< 10 U	< 10 U	< 10 U	< 10 UB	**5.22 UB**	**47.5 UB**	**14.1**	**3.97**	**40.3 UB**	**20.5**	< 10 U	< 10 U	**7.41 UB**	**4.36**	**22.6**	< 10 U	< 10 U	**4.46 J**	< 10 U	**2.52 J**	**19.7**	**9.68 J**	**6.59 UB**	< 10 U	**3.75 J**	< 10 U	**3.36 J**
71-43-2	Benzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
75-27-4	Bromodichloromethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
75-25-2	Bromoform	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
74-83-9	Bromomethane	ug/L	---	< 1 U	< 1 U	**2.81 B**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**2.78 B**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
104-51-8	Butyl benzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
75-15-0	Carbon disulfide	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
56-23-5	Carbon tetrachloride	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
108-90-7	Chlorobenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	**0.246 J**	**0.249 J**	**0.165 UB**	< 1 U	< 1 U	**0.357 UB**	**0.14 J**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
74-97-5	Chlorobromomethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
75-00-3	Chloroethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
67-66-3	Chloroform	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	**1.3**	< 1 U	**0.312 J**	**0.803 UB**	**0.455**	< 0.5 U	**0.327 J**	**0.319 J**	**0.309 UB**	**0.174 J**	**0.148 J**	**0.214 J**	**0.298 J**	**0.176 J**	**0.313 UB**	< 1 U	< 1 U	< 1 U	**0.15 J**
74-87-3	Chloromethane	ug/L	---	< 1 U	< 1 U	**0.35 J**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**0.294 J**	< 1 U	< 1 U	**0.266 J**	< 1 U	< 1 U	< 1 U
156-59-2	cis-1,2-Dichloroethene	ug/L	70	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**4.51**	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	**3.17**	**3.26**	**2.98**	**1.37**	**1.2**	**2**	**2.35**	**1.87**	**1.69**	**3.01**	**2.95**	**1.66**	**2.39**
10061-01-5	cis-1,3-Dichloropropen	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
99-87-6	Cymene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
124-48-1	Dibromochloromethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
96-12-8	Dibromochloropropane	ug/L	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
75-71-8	Dichlorodifluoromethan	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
100-41-4	Ethyl benzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
87-68-3	Hexachlorobutadiene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
74-88-4	Iodomethane	ug/L	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U	NA	NA	NA	NA	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
98-82-8	Isopropylbenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
179601-23	m-,p-Xylene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
74-95-3	Methylene bromide	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1634-04-4	Methyl tert-butyl ether	ug/L	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.5 U	NA	NA	NA	NA	< 0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
75-09-2	Methylene chloride	ug/L	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	**0.786 J**	< 5 U	< 5 U	< 5 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	**0.968 UB**	< 5 U	**0.416 UB**	< 5 U	**0.428 J**	< 5 U
108-86-1	Monobromobenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
91-20-3	Naphthalene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 2 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**0.24 UB**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
103-65-1	n-Propylbenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
95-47-6	o-Xylene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
135-98-8	sec-Butylbenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
100-42-5	Styrene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
98-06-6	tert-Butylbenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
127-18-4	Tetrachloroethene	ug/L	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**57.1**	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 1 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	**39.9**	**37.9**	**11.4**	**6.63**	**11.9**	**19**	**6.64**	**15.9**	**11.4**	**1.75**	**2.09**	**6.64**	**5.79**
108-88-3	Toluene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**0.325 J**	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**0.73 J**
156-60-5	trans-1,2-Dichloroether	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	1.11	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
10061-02-6	trans-1,3-Dichloroprop	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1

Table 3 Historical Groundwater Sampling Results

			Location ID:	E-WG11-1	E-WG11-1	E-WG11-1	E-WG11-1	E-WG11-1	E-WG11-1	E-WG11-1	E-WG11-2	E-WG11-2	E-WG11-2	E-WG11-2	E-WG11-2	E-WG11-3	E-WG11-3	E-WG11-3	E-WG11-3
			Depth Interval:	20.1 - 25.1	20.1 - 25.1	20.1 - 25.1	20.1 - 25.1	20.1 - 25.1	20.1 - 25.1	20.1 - 25.1	7 - 17	10 - 15	10 - 15	10 - 15	10 - 15	30 - 35	30 - 35	30 - 35	11.5 - 16.5
			Sample Date:	3/21/2011	8/26/2011	3/20/2012	9/18/2012	8/14/2013	7/9/2014	9/8/2015	9/13/2007	8/31/2009	8/26/2011	8/14/2013	9/8/2015	9/13/2007	8/31/2009	8/26/2011	9/8/2015
CAS No	Chemical Name	Units	Area E ROD Comparison Criteria[1]																
630-20-6	1,1,1,2-Tetrachloroetha	ug/L	---	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
71-55-6	1,1,1-Trichloroethane	ug/L	---	**2.76**	**1.49**	**2.25**	**2.21**	< 1 U	**1.44**	**1.8**	**6.92**	**0.893 J**	**1.18**	**1.44**	**1.6**	**0.599 J**	< 1 U	< 1 U	< 0.5 U
79-34-5	1,1,2,2-Tetrachloroetha	ug/L	---	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
79-00-5	1,1,2-Trichloroethane	ug/L	---	< 1 U	< 1 U	< 0.25 U	< 0.25 U	**1.03**	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
75-34-3	1,1-Dichloroethane	ug/L	---	**2.48**	**1.19**	**1.57**	**1.31**	**1.33**	**1.72**	**1.3**	**3.92**	**0.509 J**	**0.833 J**	**1.14**	**1.5**	**3.15**	< 1 U	**0.508 J**	**1**
75-35-4	1,1-Dichloroethene	ug/L	2	**5.06**	**4.6**	**3.81**	**1.09**	**3.81**	**3.5**	< 0.5 U	**0.768 J**	< 1 U	< 1 U	< 1 U	< 0.5 U	**1.9**	< 1 U	< 1 U	**2.8**
563-58-6	1,1-Dichloropropene	ug/L	---	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
87-61-6	1,2,3-Trichlorobenzene	ug/L	---	< 1 U	< 1 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 2 U
96-18-4	1,2,3-Trichloropropane	ug/L	---	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
120-82-1	1,2,4-Trichlorobenzene	ug/L	---	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
95-63-6	1,2,4-Trimethylbenzene	ug/L	---	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
106-93-4	1,2-Dibromoethane	ug/L	---	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
95-50-1	1,2-Dichlorobenzene	ug/L	---	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.5 U	**0.37 J**	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
107-06-2	1,2-Dichloroethane	ug/L	---	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
78-87-5	1,2-Dichloropropane	ug/L	---	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
108-67-8	1,3,5-Trimethylbenzene	ug/L	---	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
541-73-1	1,3-Dichlorobenzene	ug/L	---	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	**0.308 J**	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
142-28-9	1,3-Dichloropropane	ug/L	---	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
106-46-7	1,4-Dichlorobenzene	ug/L	---	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.5 U	**0.267 J**	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
594-20-7	2,2-dichloropropane	ug/L	---	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 2 U
78-93-3	2-Butanone	ug/L	---	< 10 U	< 10 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 10 U	< 5 U	< 10 U	< 10 U	< 10 U	< 5 U
110-75-8	2-Chloroethyl vinyl eth	ug/L	---	< 10 U	< 10 U	< 2 U	< 2 U	< 2 U	< 2 U		< 10 UJ	< 10 U	< 10 U	< 10 U		< 10 U	< 10 U	< 10 U	
95-49-8	2-Chlorotoluene	ug/L	---	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
591-78-6	2-Hexanone	ug/L	---	< 10 U	< 10 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 10 U	< 5 U	< 10 U	< 10 U	< 10 U	< 5 U
106-43-4	4-Chlorotoluene	ug/L	---	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
108-10-1	4-Methyl-2-pentanone (	ug/L	---	< 10 U	< 10 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U	< 10 U	< 10 U	< 10 U	< 2 U
67-64-1	Acetone	ug/L	---	< 10 UB	**7.66 UB**	**49.4 UB**	**14.1**	**3.52 J**	**51.9**	**19.2**	< 10 U	**2.61 J**	**4.66 UB**	**4.28 J**	**23.2**	< 10 U	**4.95 J**	**7.83 UB**	**24**
71-43-2	Benzene	ug/L	---	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
75-27-4	Bromodichloromethane	ug/L	---	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
75-25-2	Bromoform	ug/L	---	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
74-83-9	Bromomethane	ug/L	---	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
104-51-8	Butyl benzene	ug/L	---	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
75-15-0	Carbon disulfide	ug/L	---	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
56-23-5	Carbon tetrachloride	ug/L	---	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
108-90-7	Chlorobenzene	ug/L	---	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	**0.145 J**	< 0.5 U	**0.189 J**	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
74-97-5	Chlorobromomethane	ug/L	---	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
75-00-3	Chloroethane	ug/L	---	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
67-66-3	Chloroform	ug/L	---	**0.18 J**	**0.143 UB**	**0.135 J**	< 0.125 U	< 0.125 U	**0.184 J**	< 0.5 U	**0.145 J**	< 1 U	**0.161 UB**	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
74-87-3	Chloromethane	ug/L	---	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**0.28 J**	< 1 U	< 1 U	< 1 U
156-59-2	cis-1,2-Dichloroethene	ug/L	70	**3.55**	**2.37**	**2.12**	**2.34**	**1.99**	**4.32**	**1.6**	**1.9**	**0.863 J**	**1.12**	**0.749 J**	**2.4**	< 1 U	< 1 U	< 1 U	< 0.5 U
10061-01-5	cis-1,3-Dichloropropen	ug/L	---	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
99-87-6	Cymene	ug/L	---	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
124-48-1	Dibromochloromethane	ug/L	---	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
96-12-8	Dibromochloropropane	ug/L	---	< 5 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 1 U	< 5 U	< 5 U	< 5 U	< 1 U
75-71-8	Dichlorodifluoromethan	ug/L	---	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
100-41-4	Ethyl benzene	ug/L	---	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
87-68-3	Hexachlorobutadiene	ug/L	---	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
74-88-4	Iodomethane	ug/L	---	NA	NA	NA	NA	NA	NA	< 1 U	NA	NA	NA	NA	< 1 U	NA	NA	NA	< 1 U
98-82-8	Isopropylbenzene	ug/L	---	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
179601-23	m-,p-Xylene	ug/L	---	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
74-95-3	Methylene bromide	ug/L	---	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1634-04-4	Methyl tert-butyl ether	ug/L	---	NA	NA	NA	NA	NA	NA	< 0.5 U	NA	NA	NA	NA	< 0.5 U	NA	NA	NA	< 0.5 U
75-09-2	Methylene chloride	ug/L	---	< 5 U	< 5 U	< 0.25 U	< 0.25 U	< 0.25 U	**0.434 UB**	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 1 U	< 5 U	< 5 U	< 5 U	< 1 U
108-86-1	Monobromobenzene	ug/L	---	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
91-20-3	Naphthalene	ug/L	---	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 2 U
103-65-1	n-Propylbenzene	ug/L	---	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
95-47-6	o-Xylene	ug/L	---	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
135-98-8	sec-Butylbenzene	ug/L	---	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
100-42-5	Styrene	ug/L	---	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
98-06-6	tert-Butylbenzene	ug/L	---	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
127-18-4	Tetrachloroethene	ug/L	1	**10.5**	**6.76**	**16.1**	**8.72**	**6.27**	**22.9**	**13.4**	**20.1**	**7.09**	**3.42**	**0.892 J**	**7.7**	**1.26**	< 1 U	< 1 U	< 0.5 U
108-88-3	Toluene	ug/L	---	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
156-60-5	trans-1,2-Dichloroether	ug/L	---	< 1 U	< 1 U	< 0.25 U	< 0.25 U	1.99	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
10061-02-6	trans-1,3-Dichloroprop	ug/L	---	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
79-01-6	Trichloroethene	ug/L	1	**7.4**	**6.16**	**9.42**	**7.64**	**7.88**	**10.2**	**4.6**	**5.13**	**4.11**	**2.94**	**2.25**	**8.2**	**0.513 J**	< 1 U	< 1 U	< 0.5 U
75-69-4	Trichlorofluoromethane	ug/L	---	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
108-05-4	Vinyl acetate	ug/L	---	< 10 U	< 10 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U	< 10 U	< 10 U	< 10 U	< 2 U
75-01-4	Vinyl chloride	ug/L	1	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	**0.548 J**	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
1330-20-7	Xylenes, Total	ug/L	---	NA	NA	NA	NA	NA	NA	< 0.5 U	NA	NA	NA	NA	< 0.5 U	NA	NA	NA	< 0.5 U

			Location ID:	E-WG3-1	E-WG3-1	E-WG3-1	E-WG3-1	E-WG3-1	E-WG3-2	E-WG3-2	E-WG3-2	E-WG3-2	E-WG3-2	E-WG3-2	E-WG3-2	E-WG3-2	E-WG3-2	E-WG3-2	E-WG3-2	E-WG3-2	E-WG3-2	E-WG3-2	E-WG3-2	E-WG3-2	E-WG3-2	E-WG3-2	E-WG3-2	E-WG3-2	E-WG3-2	E-WG3-2	E-WG3-3	E-WG3-3	E-WG3-3	E-WG63-3
			Depth Interval:	31.8 - 36.8	31.8 - 36.8	31.8 - 36.8	31.8 - 36.8	31.8 - 36.8	20.3 - 25.3	20.3 - 25.3	20.3 - 25.3	20.3 - 25.3	20.3 - 25.3	20.3 - 25.3	20.3 - 25.3	20.3 - 25.3	20.3 - 25.3	20.3 - 25.3	20.3 - 25.3	20.3 - 25.3	20.3 - 25.3	20.3 - 25.3	20.3 - 25.3	20.3 - 25.3	20.3 - 25.3	20.3 - 25.3	20.3 - 25.3	20.3 - 25.3	20.3 - 25.3		11.5 - 16.5	11.5 - 16.5	11.5 - 16.5	
			Sample Date:	9/11/2007	8/31/2009	8/26/2011	9/10/2013	9/8/2015	9/11/2007	12/27/2007	2/5/2008	5/20/2008	8/26/2008	11/19/2008	3/24/2009	6/18/2009	8/31/2009	3/29/2010	9/8/2010	3/21/2011	8/26/2011	3/20/2012	9/18/2012	9/10/2013	7/9/2014	9/8/2015	8/31/2009	8/26/2011	9/10/2013	9/8/2015
CAS No	Chemical Name	Units	Area E ROD Comparison Criteria[1]																														
630-20-6	1,1,1,2-Tetrachloroetha	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
71-55-6	1,1,1-Trichloroethane	ug/L	---	**2.63**	< 1 U	< 1 U	**0.931**	**1.1**	**6.32**	**4.08**	**4.06**	**4.04**	**4.94**	**2.48**	**3.98**	**2.87**	**1.4**	**3.45**	**1.42**	**2.16**	**1.62**	**3.65**	**1.36**	< 1 U	**3.8**	**4**	< 1 U	**0.669 J**	< 1 U	< 0.5 U
79-34-5	1,1,2,2-Tetrachloroetha	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
79-00-5	1,1,2-Trichloroethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	**2.58**	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
75-34-3	1,1-Dichloroethane	ug/L	---	**2.1**	**15.3**	< 1 U	< 1 U	**1.9**	**1.63**	**1.37**	**1.2**	**0.851 J**	**1.42**	**1.16**	**1.41**	**1.18**	**0.785 J**	**1.25**	**0.746 J**	**0.882 J**	**0.722 J**	**1.3**	**0.799 J**	**0.998 J**	**1.31**	**1.2**	< 1 U	**0.932 J**	< 1 U	< 0.5 U
75-35-4	1,1-Dichloroethene	ug/L	2	< 1 U	**4.52**	< 1 U	**1.48**	< 0.5 U	**5.97**	**4.15**	**3.71**	**4.07**	**5.47**	**3.37**	**4.73**	**2.94**	**1.73**	**3.19**	**2.23**	**2.35**	**2.49**	**4.21**	**1.39**	**2.08**	**3.7**	**6.1**	< 1 U	< 1 U	< 1 U	< 0.5 U
563-58-6	1,1-Dichloropropene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
87-61-6	1,2,3-Trichlorobenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 2 U	< 1 U	< 1 U	< 1 U	< 2 U
96-18-4	1,2,3-Trichloropropane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
120-82-1	1,2,4-Trichlorobenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
95-63-6	1,2,4-Trimethylbenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
106-93-4	1,2-Dibromoethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
95-50-1	1,2-Dichlorobenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
107-06-2	1,2-Dichloroethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
78-87-5	1,2-Dichloropropane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
108-67-8	1,3,5-Trimethylbenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
541-73-1	1,3-Dichlorobenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
142-28-9	1,3-Dichloropropane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
106-46-7	1,4-Dichlorobenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.5 U
594-20-7	2,2-dichloropropane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 2 U	< 1 U	< 1 U	< 1 U	< 2 U
78-93-3	2-Butanone	ug/L	---	< 10 U	< 10 U	< 10 U	< 10 U	< 5 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	**3.9 J**	< 10 U	**2.97 UB**	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 5 U
110-75-8	2-Chloroethyl vinyl eth	ug/L	---	< 10 U	< 10 U	< 10 U	< 10 U		< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U	< 2 U	< 2 U	< 2 U		< 10 U	< 10 U	< 10 U	
95-49-8	2-Chlorotoluene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
591-78-6	2-Hexanone	ug/L	---	< 10 U	< 10 U	< 10 U	< 10 U	< 5 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 5 U
106-43-4	4-Chlorotoluene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.

Table 4 Historical Surface Water Sampling Results

			Location ID:	D-SW-5	D-SW-5	D-SW-5	D-SW-5	D-SW-5	D-SW-5	D-SW-5	D-SW-5	D-SW-5	D-SW-5	D-SW-5	D-SW-5	D-SW-5	D-SW-5	D-SW-5	D-SW-5	D-SW-5	E-38-SW-001	E-38-SW-001	E-38-SW-001	E-38-SW-001	E-38-SW-001	E-38-SW-001	E-38-SW-001	E-38-SW-001	E-38-SW-001	E-38-SW-001	E-38-SW-001	E-38-SW-001	E-38-SW-001	E-38-SW-001	E-38-SW-001	E-38-SW-001
			Sample Date:	9/10/2007	12/27/2007	2/5/2008	5/20/2008	8/25/2008	11/19/2008	3/24/2009	6/18/2009	8/25/2009	3/30/2010	########	8/11/2011	3/9/2012	9/7/2012	########	**7/9/2014**	**9/8/2015**	9/10/2007	12/27/2007	2/5/2008	5/20/2008	8/25/2008	11/19/2008	3/24/2009	6/18/2009	8/25/2009	3/30/2010	3/21/2011	8/11/2011	3/9/2012	9/7/2012	7/30/2013	7/9/2014
CAS No	**Chemical Name**	**Units**	**SWQC for COCs[1]**																																	
630-20-6	1,1,1,2-Tetrachloroethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U
71-55-6	1,1,1-Trichloroethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U
79-34-5	1,1,2,2-Tetrachloroethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
79-00-5	1,1,2-Trichloroethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U
75-34-3	1,1-Dichloroethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U
75-35-4	1,1-Dichloroethene	ug/L	4.7	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
563-58-6	1,1-Dichloropropene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U
87-61-6	1,2,3-Trichlorobenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U
96-18-4	1,2,3-Trichloropropane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
120-82-1	1,2,4-Trichlorobenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
95-63-6	1,2,4-Trimethylbenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U
106-93-4	1,2-Dibromoethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U
95-50-1	1,2-Dichlorobenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U
107-06-2	1,2-Dichloroethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U
78-87-5	1,2-Dichloropropane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
108-67-8	1,3,5-Trimethylbenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U
541-73-1	1,3-Dichlorobenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U
142-28-9	1,3-Dichloropropane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
106-46-7	1,4-Dichlorobenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U
594-20-7	2,2-dichloropropane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U
78-93-3	2-Butanone	ug/L	---	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
110-75-8	2-Chloroethyl vinyl ether	ug/L	---	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U	< 2 U	< 2 U	< 2 U	NA	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U	< 2 U	< 2 U	< 2 U
95-49-8	2-Chlorotoluene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U
591-78-6	2-Hexanone	ug/L	---	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
106-43-4	4-Chlorotoluene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U
108-10-1	4-Methyl-2-pentanone (MIBK)	ug/L	---	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
67-64-1	Acetone	ug/L	---	< 10 U	< 10 U	< 10 U	< 10 U	**3.46 J**	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
71-43-2	Benzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U
75-27-4	Bromodichloromethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U
75-25-2	Bromoform	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
74-83-9	Bromomethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**2.91 B**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**2.98 B**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
104-51-8	Butyl benzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U
75-15-0	Carbon disulfide	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
56-23-5	Carbon tetrachloride	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U
108-90-7	Chlorobenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	**0.156 UB**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	**0.172 UB**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U
74-97-5	Chlorobromomethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
75-00-3	Chloroethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
67-66-3	Chloroform	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U
74-87-3	Chloromethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**0.281 J**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**0.328 J**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
156-59-2	cis-1,2-Dichloroethene	ug/L	---	**1.95**	< 1 U	< 1 U	< 1 U	**1.27**	< 1 U	**0.998 J**	< 1 U	< 1 U	< 1 U	< 1 U	**1.92**	**0.744 J**	**0.907 J**	< 1 U	**0.828 J**	< 0.5 U	**1.9**	< 1 U	< 1 U	< 1 U	**0.929 J**	< 1 U	**0.733 J**	< 1 U	< 1 U	< 1 U	< 1 U	**1.85**	**0.763 J**	**0.674 J**	**0.281 J**	**0.742 J**
10061-01-5	cis-1,3-Dichloropropene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U
99-87-6	Cymene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U
124-48-1	Dibromochloromethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U
96-12-8	Dibromochloropropane	ug/L	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U
75-71-8	Dichlorodifluoromethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U
100-41-4	Ethyl benzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U
87-68-3	Hexachlorobutadiene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U
74-88-4	Iodomethane	ug/L	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
98-82-8	Isopropylbenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U
179601-23-1	m-,p-Xylene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
74-95-3	Methylene bromide	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U
1634-04-4	Methyl tert-butyl ether	ug/L	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
75-09-2	Methylene chloride	ug/L	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	**0.539 J**	< 5 U	< 5 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U
108-86-1	Monobromobenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U
91-20-3	Naphthalene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
103-65-1	n-Propylbenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U
95-47-6	o-Xylene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U
135-98-8	sec-Butylbenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U
100-42-5	Styrene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U
98-06-6	tert-Butylbenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U
127-18-4	Tetrachloroethene	ug/L	0.34	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U
108-88-3	Toluene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U
156-60-5	trans-1,2-Dichloroethene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0

Table 4 Historical Surface Water Sampling Results

			Location ID:	E-38-SW-001	E-38-SW-004	E-38-SW-004	E-38-SW-004	E-38-SW-004	E-38-SW-004	E-38-SW-004	E-38-SW-004	E-38-SW-004	E-38-SW-004	E-38-SW-004	E-38-SW-004	E-38-SW-004	E-38-SW-004	E-38-SW-004	E-38-SW-004	E-38-SW-004	E-38-SW-004
			Sample Date:	**9/8/2015**	9/10/2007	12/27/2007	2/5/2008	5/20/2008	8/25/2008	11/19/2008	3/24/2009	6/18/2009	8/25/2009	3/30/2010	3/23/2011	8/11/2011	3/6/2012	9/7/2012	7/30/2013	7/9/2014	9/8/2015
CAS No	**Chemical Name**	**Units**	**SWQC for COCs[1]**																		
630-20-6	1,1,1,2-Tetrachloroethane	ug/L	---	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U
71-55-6	1,1,1-Trichloroethane	ug/L	---	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U
79-34-5	1,1,2,2-Tetrachloroethane	ug/L	---	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.5 U
79-00-5	1,1,2-Trichloroethane	ug/L	---	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U
75-34-3	1,1-Dichloroethane	ug/L	---	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.5 U
75-35-4	1,1-Dichloroethene	ug/L	4.7	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
563-58-6	1,1-Dichloropropene	ug/L	---	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U
87-61-6	1,2,3-Trichlorobenzene	ug/L	---	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 2 U
96-18-4	1,2,3-Trichloropropane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U
120-82-1	1,2,4-Trichlorobenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U
95-63-6	1,2,4-Trimethylbenzene	ug/L	---	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U
106-93-4	1,2-Dibromoethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U
95-50-1	1,2-Dichlorobenzene	ug/L	---	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.5 U
107-06-2	1,2-Dichloroethane	ug/L	---	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U
78-87-5	1,2-Dichloropropane	ug/L	---	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.5 U
108-67-8	1,3,5-Trimethylbenzene	ug/L	---	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U
541-73-1	1,3-Dichlorobenzene	ug/L	---	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U
142-28-9	1,3-Dichloropropane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U
106-46-7	1,4-Dichlorobenzene	ug/L	---	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.5 U
594-20-7	2,2-dichloropropane	ug/L	---	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 2 U
78-93-3	2-Butanone	ug/L	---	< 5 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 5 U
110-75-8	2-Chloroethyl vinyl ether	ug/L	---	**NA**	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U	< 2 U	< 2 U	< 2 U	**NA**
95-49-8	2-Chlorotoluene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 1 U
591-78-6	2-Hexanone	ug/L	---	< 5 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 5 U
106-43-4	4-Chlorotoluene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U
108-10-1	4-Methyl-2-pentanone (MIBK)	ug/L	---	< 2 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2 U
67-64-1	Acetone	ug/L	---	< 5 U	< 10 U	< 10 U	< 10 U	< 10 U	**2.85 J**	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 5 U
71-43-2	Benzene	ug/L	---	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.5 U
75-27-4	Bromodichloromethane	ug/L	---	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U
75-25-2	Bromoform	ug/L	---	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
74-83-9	Bromomethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**2.97 B**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U
104-51-8	Butyl benzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U
75-15-0	Carbon disulfide	ug/L	---	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
56-23-5	Carbon tetrachloride	ug/L	---	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U
108-90-7	Chlorobenzene	ug/L	---	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	**0.191 UB**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.5 U
74-97-5	Chlorobromomethane	ug/L	---	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.5 U
75-00-3	Chloroethane	ug/L	---	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
67-66-3	Chloroform	ug/L	---	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.5 U
74-87-3	Chloromethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**0.283 J**	**0.321 J**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U
156-59-2	cis-1,2-Dichloroethene	ug/L	---	< 0.5 U	**1.81**	< 1 U	< 1 U	< 1 U	**1.01**	< 1 U	**0.819 J**	< 1 U	< 1 U	< 1 U	< 1 U	**1.91**	**0.805 J**	**0.852 J**	**0.333 J**	**0.789 J**	< 0.5 U
10061-01-5	cis-1,3-Dichloropropene	ug/L	---	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U
99-87-6	Cymene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U
124-48-1	Dibromochloromethane	ug/L	---	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U
96-12-8	Dibromochloropropane	ug/L	---	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
75-71-8	Dichlorodifluoromethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U
100-41-4	Ethyl benzene	ug/L	---	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U
87-68-3	Hexachlorobutadiene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U
74-88-4	Iodomethane	ug/L	---	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U
98-82-8	Isopropylbenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U
179601-23-1	m-,p-Xylene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U
74-95-3	Methylene bromide	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U
1634-04-4	Methyl tert-butyl ether	ug/L	---	< 0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.5 U
75-09-2	Methylene chloride	ug/L	---	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U
108-86-1	Monobromobenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 1 U
91-20-3	Naphthalene	ug/L	---	< 2 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 UJ
103-65-1	n-Propylbenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 1 U
95-47-6	o-Xylene	ug/L	---	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U
135-98-8	sec-Butylbenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U
100-42-5	Styrene	ug/L	---	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.125 U	< 0.5 U
98-06-6	tert-Butylbenzene	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U
127-18-4	Tetrachloroethene	ug/L	0.34	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U
108-88-3	Toluene	ug/L	---	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U
156-60-5	trans-1,2-Dichloroethene	ug/L	---	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.5 U
10061-02-6	trans-1,3-Dichloropropene	ug/L	---	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
79-01-6	Trichloroethene	ug/L	1	< 0.5 U	**0.618 J**	< 1 U	< 1 U	< 1 U	**0.426 J**	< 1 U	**0.251 J**	< 1 UJ	< 1 U	< 1 U	< 1 U	**0.413 J**	**0.269 J**	**0.266 J**	< 1 U	0.344 J	< 0.5 U
75-69-4	Trichlorofluoromethane	ug/L	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1 U
108-05-4	Vinyl acetate	ug/L	---	< 2 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2 UJ
75-01-4	Vinyl chloride	ug/L	0.082	< 0.5 U	**0.393 J**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**0.282 J**	< 1 U	< 1 U	< 1 U	< 1 U	**0.757 J**	**0.350 J**	**0.833 J**	< 1 U	**0.321 J**	< 0.5 U
1330-20-7	Xylenes, Total	ug/L	---	< 0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.5 U

Notes:

All detections are boldfaced

Values exceeding the chemical-specific criteria are shaded gray.

LOC = Level of Concern

ug/L = Micrograms per liter

B = Analyte found in associated blank

J = Estimated concentration

U = Non-detect at the specified reporting limit

NA = Not available

(1) New Jersey Department of Environmental Protection (NJDEP) Surface Water Quality Criteria (SWQC) provided for comparison purposes for the five contaminants of concern (COCs) identified in the Record of Decision (2007).

(2) September 2010 surface water samples were inadvertently not collected.

Table 5 Surface Water Discharge Data Summary for Green Pond Brook

USGS Gauging Station Number	Location Description	September 2007 Mean Discharge (ft^3/sec.)	December 2007 Mean Discharge (ft^3/sec.)	January 2008 Mean Discharge (ft^3/sec.)	May 2008 Mean Discharge (ft^3/sec.)	August 2008 Mean Discharge (ft^3/sec.)	November 2008 Mean Discharge (ft^3/sec.)	March 2009 Mean Discharge (ft^3/sec.)	June 2009 Mean Discharge (ft^3/sec.)	August 2009 Mean Discharge (ft^3/sec.)	March 2010 Mean Discharge (ft^3/sec.)	June 2010 Mean Discharge (ft^3/sec)
01379780[1]	**Monthly Discharge for Green Pond Brook (Period of Record 10/01/1984 - 9/30/2008)**	3.0	15.6	24.1	17.3	0.9	21.5	9.3	23.3	12.1	88.4	2.4

USGS Gauging Station Number	Location Description	9/10/2007 Mean Discharge (ft^3/sec.)	12/10/2007 Mean Discharge (ft^3/sec.)	1/22/2008 Mean Discharge (ft^3/sec.)	5/6/2008 Mean Discharge (ft^3/sec.)	8/25/2008 Mean Discharge (ft^3/sec.)	11/19/2008 Mean Discharge (ft^3/sec.)	3/24/2009 Mean Discharge (ft^3/sec.)	6/18/2009 Mean Discharge (ft^3/sec.)	8/25/2009 Mean Discharge (ft^3/sec.)	3/30/2010 Mean Discharge (ft^3/sec.)	6/8/2010 Mean Discharge (ft^3/sec.)
01379780[1]	**Green Pond Brook Mean Surface Water Discharge on the day of the site Surface Water Sampling Event**	1.5	13.0	16.0	12.0	0.42	31.0	6.8	33.0	11.0	129.0	1.1

ft^3/sec - cubic feet per second
USGS - United States Geological Survey

[1] This is the closest Green Pond Brook gauging station to the subject site. Mean discharges are listed for the gauging station for the days when surface water samples are collected at the site. For comparison purposes, the mean of the monthly discharges calculated for each month for the entire period of record are also provided above.

Table 5 Surface Water Discharge Data Summary for Green Pond Brook

USGS Gauging Station Number	Location Description	August 2010 Mean Discharge (ft^3/sec.)	December 2010 Mean Discharge (ft^3/sec.)	March 2011 Mean Discharge (ft^3/sec.)	June 2011 Mean Discharge (ft^3/sec.)	August 2011 Mean Discharge (ft^3/sec.)	December 2011 Mean Discharge (ft^3/sec.)	March 2012 Mean Discharge (ft^3/sec.)	September 2012 Mean Discharge (ft^3/sec.)	July 2013 Mean Discharge (ft^3/sec.)	July 2014 Mean Discharge (ft^3/sec.)	September 2015 Mean Discharge (ft^3/sec.)
01379780[1]	**Monthly Discharge for Green Pond Brook (Period of Record 10/01/1984 - 9/30/2008)**	1.3	24.0	85.3	7.1	55.6	35.3	6.0	2.0	8.9	5.3	1.4

USGS Gauging Station Number	Location Description	8/24/2010 Mean Discharge (ft^3/sec.)	12/8/2010 Mean Discharge (ft^3/sec.)	3/23/2011 Mean Discharge (ft^3/sec.)	6/22/2011 Mean Discharge (ft^3/sec.)	8/11/2011 Mean Discharge (ft^3/sec.)	12/22/2011 Mean Discharge (ft^3/sec.)	3/23/2012 Mean Discharge (ft^3/sec.)	9/7/2012 Mean Discharge (ft^3/sec.)	7/30/2013 Mean Discharge (ft^3/sec.)	7/9/2014 Mean Discharge (ft^3/sec.)	9/8/2015 Mean Discharge (ft^3/sec.)
01379780[1]	**Green Pond Brook Mean Surface Water Discharge on the day of the site Surface Water Sampling Event**	2.6	13.0	61.0	2.7	1.4		4.8	2.1	6.0	3.8	1.5

ft^3/sec - cubic feet per second
USGS - United States Geological Survey

[1] This is the closest Green Pond Brook gauging station to the subject site. Mean discharges are listed for the gauging station for the days when surface water samples are collected at the site. For comparison purposes, the mean of the monthly discharges calculated for each month for the entire period of record are also provided above.

3.3 EVALUATION OF DATA TRENDS

The following data trend analysis is based on results of analytical laboratory testing and compliance monitoring from the third quarter 2003 or third quarter 2007 through the third quarter 2015. The data trend plots for the monitoring well network are presented in **Appendix C**. It should be noted that non-detections are reported in the graphical trend plots as zero.

3.3.1 Upgradient Site Boundary

Concentrations of TCE were less than the NJGWQS of 1 µg/L in upgradient, site boundary monitoring well E-MW-01. All other COCs also remained stable with concentrations below the laboratory reporting limit.

3.3.2 Plume Center/Fringe Monitoring Wells

Well E-95-3 is close to the former source areas for the Area E plume (surface impoundment units closed under the Resource Conservation and Recovery Act). PCE was detected at a concentration (4.1 µg/L) greater than the NJGWQS of 1 µg/L in September 2015. It should be noted that concentrations of PCE at this location have historically fluctuated (higher concentrations have been detected during the spring and summer months) and were declining from September 2010 (57.6 µg/L) through September 2013 (13.3 µg/L) before spiking in July 2014 (94.6 µg/L). Concentrations of PCE at wells proximate to the plume center and the plume outskirts have stabilized back to pre-2014 concentrations.

The September 2015 sampling event included an additional ten monitoring wells as part of the comprehensive biennial event, which includes an expanded set of wells within the long-term management regimen. Concentrations of PCE at monitoring wells located within the plume center/fringe (E-MW-11, E-MW-12D, E-3WG-1, E-3WG-3, E-11WG-1, and E-11WG-2) ranged from not detected to 13.4 µg/L and were similar to that observed at E-95-3.

The remedial design identified monitoring wells E-12-H and WG3-2 as locations of the plume with historically elevated concentrations (i.e., greater than 30.0 µg/L) of TCE. The TCE concentration in E-12-H has exhibited a sustained overall decline. However, since March 2012, TCE has been detected at a concentration of 5 µg/L in three of the four sampling events, with a high concentration of 18.3 µg/L in March 2012. In well E-WG3-2, the concentration of TCE is generally lower since 2009. There has been a sustained elevated concentration of cis-1,2-DCE concurrent to the decline of PCE/TCE in E-WG3-2, indicating that biodegradation is naturally occurring.

PCE concentrations within E-WG11-1 and E-12-L, both of which are downgradient of the former source area, have also exhibited a decline since the start of MNA sampling. The concentration of PCE within E-WG11-1 has declined from an historical maximum of 39.9 µg/L (September 2007) to 13.4 µg/L (September 2015). The concentration of PCE at E-12-L has declined from a historical maximum of 7.26 µg/L (September 2003) to 3.0 µg/L (September

2015). However, TCE remains at a relatively stable concentration of approximately 15 µg/L (15.5 µg/L in September 2015).

An slight increase in CVOC daughter products (1,1-DCE, cis-1,2-DCE, and VC) has been observed at E-70-4 over the last three sampling periods. This suggests that natural dechlorination is ongoing and perhaps related to a minor increase in TCE observed at E-12-H.

3.3.3 Downgradient Site Boundary and Adjacent to Green Pond Brook

Data for downgradient monitoring well E-80-3 show mostly low-level, stable COC concentrations. 1,1-DCE, (2.4 µg/L) was detected at a concentration greater than NJGWQS in E-80-3 in September 2015. 1,1-DCE has been consistently detected at E-80-3 at concentrations ranging from non-detect to 8.55 µg/L with a median of 6.54 µg/L.

3.3.4 Green Pond Brook

Analytical data collected for surface water samples indicate that COC concentrations are generally non-detect or less than the NJSWQC. There are occasional low-level detections of TCE; however all concentrations have been less than the NJSWQC and TCE was not detected in 2015. VC was not detected in any of the surface water samples. However, the method detection limit (0.5 µg/L) exceeds the SWQC of 0.082 µg /L. In general, the 2015 surface monitoring data are consistent with data from past sampling events

4. REMEDY PERFORMANCE AND FUTURE ACTIONS

In 2007, the Record of Decision stated that the remedial timeframe to achieve groundwater standards at Area E is 45 years. The 2013 Annual Report indicated that, based on the decline of TCE concentrations at E-12-L, it was estimated that TCE will reach groundwater standards in approximately 38 years. However, recent analytical results at E-12-L and at E-95-3 have fluctuated and indicate that additional monitoring data are required to provide a more accurate remedial duration at these locations. There is no evidence that the plume is expanding, or that significant impacts to surface water are occurring. It is noted that the remedy remains protective, continues to meet all the Remedial Action Objectives, and overall the selected remedy (MNA) is effective.

Compliance monitoring will continue at the Site under the schedule presented in **Table 1**. The next comprehensive biennial sampling event is scheduled for 2016. Future monitoring events include sampling and analysis of groundwater and surface water for VOCs.

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5. REFERENCES

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Appendix A

Field Forms

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EPA Region 2 Superfund Well Assessment Checklist

Owner Well ID: E 80-3

Facility Information

Site Name:	Picatinny Arsenal	*Area:*	*Site:* Area E
Site Address:	North East Office Garrison Bldg. 319, Picatinny, NJ 07806		
Site County:	Morris County		
Site State:	New Jersey		
EPA Site ID Number:	NJ3210020704		
Site Owner:	US Department of Army Picatinny Arsenal		
EPA Project Manager:	Mr. William Roach, USEPA Region II		

Well Location Information

State Well Permit No: N/A
Well Tag ID and Condition none
Well Installation Date N/A

	From Log	*From GPS*[1]
Ground Surface Elevation	N/A	N/A
Latitude	N/A	N/A
Longitude	N/A	N/A
Northing (State Plane)	N/A	N/A
Easting (State Plane)	N/A	N/A

Cross streets (if applicable): N/A
GPS Instrument used:[1] Ø
Datum: Ø
Accuracy/Precision: Ø

Well Construction Details

Type of well (Circle one) *Flush Mount* *Stick up* *Multilevel Well*[2]

Well lock\security type:	OK	
Elevation (top of inner casing):	N/A	
Surface protective casing material:	steel	
Surface Casing diameter:	4"	*inches*
Well Diameter and Casing Material:	2" PVC	*inches*
Well Depth (as installed):		*ftbgs*
Well Depth (as measured):	54.05	*fttoc*
Well Stick Up Height (as measured):	2.6	*ftbgs*
Screened interval:	44.85 - 54.85	*ft*
Open hole interval:	N/A	*ft*
Depth to water:	7.67	*ftbtoc*

Date: 8-26-15 *Time:* 1150

[1] Picatinny wells will not be resurveyed by GPS unless existing Northing and Easting coordinates from prior survey efforts are not available or other conditions warrant resurveying.
[2] If multilevel well please see attached worksheet.
N/A= Not Applicable
- - - = Not Available

Well Headspace Readings

PID/FID Reading taken inside top of casing (if applicable): N/A *ppm*

Multi-gas/CGI meter Readings taken (if applicable):[3]

LEL:	N/A	*% LEL*
O_2:	N/A	*40% Vol.*
CO:	N/A	*ppm*
H_2S:	N/A	*ppm*

Do readings indicate unsafe conditions exist? *Yes* *No*

Well Condition

Is the concrete pad in good condition?	*Yes*	*No*
Is the well surface casing in good condition?	*Yes*	*No*
Is the surface casing vertical?	*Yes*	*No*
Is there an internal well seal?	*Yes*	*No*
Has there been physical damage to the well?	*Yes*	*No*
Does sounding depth match completed depth?	*Yes*	*No*
Is measuring point marked?	*Yes*	*No*
Is the well clearly labeled?	*Yes*	*No*
Flush mount - Is it secure from runoff?	*Yes*	*No*

Overall well condition (circle one) *Good* *Fair* *Poor*

Other Comments:

Recommendations

Well needs to be redeveloped	*Yes*	*No*
Well needs to be re-surveyed.	*Yes*	*No*
Well needs to be repaired.	*Yes*	*No*
Well needs to be replaced.	*Yes*	*No*
Well needs to be properly abandoned.	*Yes*	*No*
No action necessary.	*Yes*	*No*

Comments

Signatures

Inspected by: D. Thompson

Date of Inspection: 8-26-15

Reviewed by: Ronald L Trower (Print)

(Sign)

[3] Multi-gas readings are considered not applicable for Picatinny wells.

N/A= Not Applicable

- - - = Not Available

EPA Region 2 Superfund Well Assessment Checklist

Owner Well ID: EMW-02

Facility Information

Site Name:	Picatinny Arsenal *Area:* *Site:* Area E
Site Address:	North East Office Garrison Bldg. 319, Picatinny, NJ 07806
Site County:	Morris County
Site State:	New Jersey
EPA Site ID Number:	NJ3210020704
Site Owner:	US Department of Army Picatinny Arsenal
EPA Project Manager:	Mr. William Roach, USEPA Region II

Well Location Information

State Well Permit No:	Ø
Well Tag ID and Condition	none
Well Installation Date	N/A

	From Log	*From GPS*[1]
Ground Surface Elevation	N/A	N/A
Latitude	N/A	N/A
Longitude	N/A	N/A
Northing (State Plane)	Ø	N/A
Easting (State Plane)	Ø	N/A

Cross streets (if applicable):	N/A
GPS Instrument used:[1]	Ø
Datum:	Ø
Accuracy/Precision:	Ø

Well Construction Details

Type of well (Circle one) *Flush Mount* (Stick up) *Multilevel Well*[2]

Well lock\security type:	OK	
Elevation (top of inner casing):	N/A	
Surface protective casing material:	steel	
Surface Casing diameter:	6"	*inches*
Well Diameter and Casing Material:	2" PVC	*inches*
Well Depth (as installed):		*ftbgs*
Well Depth (as measured):	22.15	*fttoc*
Well Stick Up Height (as measured):		*ftbgs*
Screened interval:	N/A	*ft*
Open hole interval:		*ft*
Depth to water:	6.74	*ftbtoc*

Date: 8-25-15 *Time:* 11:35

[1] Picatinny wells will not be resurveyed by GPS unless existing Northing and Easting coordinates from prior survey efforts are not available or other conditions warrant resurveying.

[2] If multilevel well please see attached worksheet.

N/A= Not Applicable

- - - = Not Available

Well Headspace Readings

PID/FID Reading taken inside top of casing (if applicable): N/A *ppm*

Multi-gas/CGI meter Readings taken (if applicable):[3]

LEL:	N/A	*% LEL*
O_2:	N/A	*40% Vol.*
CO:	N/A	*ppm*
H_2S:	N/A	*ppm*

Do readings indicate unsafe conditions exist? *Yes* *No*

Well Condition

Is the concrete pad in good condition?	*Yes*	*No*
Is the well surface casing in good condition?	*Yes*	*No*
Is the surface casing vertical?	*Yes*	*No*
Is there an internal well seal?	*Yes*	*No*
Has there been physical damage to the well?	*Yes*	*No*
Does sounding depth match completed depth?	*Yes*	*No*
Is measuring point marked?	*Yes*	*No*
Is the well clearly labeled?	*Yes*	*No*
Flush mount - Is it secure from runoff?	*Yes*	*No*

Overall well condition (circle one) *Good* *Fair* *Poor*

Other Comments:

Recommendations

Well needs to be redeveloped	*Yes*	*No*
Well needs to be re-surveyed.	*Yes*	*No*
Well needs to be repaired.	*Yes*	*No*
Well needs to be replaced.	*Yes*	*No*
Well needs to be properly abandoned.	*Yes*	*No*
No action necessary.	*Yes*	*No*

Comments

Signatures

Inspected by: D. Thompson

Date of Inspection: 8-25-15

Reviewed by: Ronald L Trace (Print)

(Sign)

[3] Multi-gas readings are considered not applicable for Picatinny wells.

N/A= Not Applicable

- - - = Not Available

EPA Region 2 Superfund Well Assessment Checklist

Owner Well ID. 63WG-1

Facility Information

Site Name:	Picatinny Arsenal	*Area:*	*Site:* Area E
Site Address:	North East Office Garrison Bldg. 319, Picatinny, NJ 07806		
Site County:	Morris County		
Site State:	New Jersey		
EPA Site ID Number:	NJ3210020704		
Site Owner:	US Department of Army Picatinny Arsenal		
EPA Project Manager:	Mr. William Roach, USEPA Region II		

Well Location Information

State Well Permit No: N/A
Well Tag ID and Condition none
Well Installation Date N/A

	From Log	*From GPS*[1]
Ground Surface Elevation	Ø	N/A
Latitude	N/A	N/A
Longitude	N/A	N/A
Northing (State Plane)	Ø	N/A
Easting (State Plane)	Ø	N/A

Cross streets (if applicable): N/A
GPS Instrument used:[1] Ø
Datum: Ø
Accuracy/Precision: Ø

Well Construction Details

Type of well (Circle one) *Flush Mount* *Stick up* *Multilevel Well*[2]

Well lock\security type:	no lock	
Elevation (top of inner casing):	N/A	
Surface protective casing material:	steel	
Surface Casing diameter:	4	*inches*
Well Diameter and Casing Material:	2" PVC	*inches*
Well Depth (as installed):		*ftbgs*
Well Depth (as measured):	29.45	*fttoc*
Well Stick Up Height (as measured):		*ftbgs*
Screened interval:	21.95 - 26.95	*ft*
Open hole interval:	N/A	*ft*
Depth to water:	4.22	*ftbtoc*

Date: 8-25-15 *Time:* 1400

[1] Picatinny wells will not be resurveyed by GPS unless existing Northing and Easting coordinates from prior survey efforts are not available or other conditions warrant resurveying.
[2] If multilevel well please see attached worksheet.
N/A= Not Applicable
- - - = Not Available

Well Headspace Readings

PID/FID Reading taken inside top of casing (if applicable): N/A *ppm*

Multi-gas/CGI meter Readings taken (if applicable):[3]

LEL:	N/A	*% LEL*
O_2:	N/A	*40% Vol.*
CO:	N/A	*ppm*
H_2S:	N/A	*ppm*

Do readings indicate unsafe conditions exist? *Yes* *No*

Well Condition

Is the concrete pad in good condition?	*Yes*	*No*
Is the well surface casing in good condition?	*Yes*	*No*
Is the surface casing vertical?	*Yes*	*No*
Is there an internal well seal?	*Yes*	*No*
Has there been physical damage to the well?	*Yes*	*No*
Does sounding depth match completed depth?	*Yes*	*No*
Is measuring point marked?	*Yes*	*No*
Is the well clearly labeled?	*Yes*	*No*
Flush mount - Is it secure from runoff?	*Yes*	*No*

Overall well condition (circle one) *Good* *Fair* *Poor*

Other Comments:

Recommendations

Well needs to be redeveloped	*Yes*	*No*
Well needs to be re-surveyed.	*Yes*	*No*
Well needs to be repaired.	*Yes*	*No*
Well needs to be replaced.	*Yes*	*No*
Well needs to be properly abandoned.	*Yes*	*No*
No action necessary.	*Yes*	*No*

Comments

Signatures

Inspected by: D. Thompson

Date of Inspection: 8-25-15

Reviewed by: Ronald L Trace (Print)

(Sign)

[3] Multi-gas readings are considered not applicable for Picatinny wells.

N/A= Not Applicable

- - - = Not Available

EPA Region 2 Superfund Well Assessment Checklist

Owner Well ID: E11W6-2

Facility Information

Site Name:	Picatinny Arsenal	*Area:*	*Site:* Area E
Site Address:	North East Office Garrison Bldg. 319, Picatinny, NJ 07806		
Site County:	Morris County		
Site State:	New Jersey		
EPA Site ID Number:	NJ3210020704		
Site Owner:	US Department of Army Picatinny Arsenal		
EPA Project Manager:	Mr. William Roach, USEPA Region II		

Well Location Information

State Well Permit No: N/A
Well Tag ID and Condition none
Well Installation Date N/A

	From Log	*From GPS*[1]
Ground Surface Elevation	Ø	N/A
Latitude	N/A	N/A
Longitude	N/A	N/A
Northing (State Plane)	Ø	N/A
Easting (State Plane)	Ø	N/A

Cross streets (if applicable): N/A
GPS Instrument used:[1] Ø
Datum: Ø
Accuracy/Precision: Ø

Well Construction Details

Type of well (Circle one) *Flush Mount* *Stick up* *Multilevel Well*[2]

Well lock\security type:	OK	
Elevation (top of inner casing):	N/A	
Surface protective casing material:	Steel	
Surface Casing diameter:	4"	*inches*
Well Diameter and Casing Material:	2" PVC	*inches*
Well Depth (as installed):		*ftbgs*
Well Depth (as measured):	17.17	*fttoc*
Well Stick Up Height (as measured):		*ftbgs*
Screened interval:	11.81 - 16.81	*ft*
Open hole interval:		*ft*
Depth to water:	5.62	*ftbtoc*

Date: 8-25-15 *Time:* 1025

[1] Picatinny wells will not be resurveyed by GPS unless existing Northing and Easting coordinates from prior survey efforts are not available or other conditions warrant resurveying.
[2] If multilevel well please see attached worksheet.
N/A= Not Applicable
- - - = Not Available

Well Headspace Readings

PID/FID Reading taken inside top of casing (if applicable): N/A *ppm*

Multi-gas/CGI meter Readings taken (if applicable):[3]

LEL:	N/A	*% LEL*
O_2:	N/A	*40% Vol.*
CO:	N/A	*ppm*
H_2S:	N/A	*ppm*

Do readings indicate unsafe conditions exist? *Yes* *No*

Well Condition

Is the concrete pad in good condition?	*Yes*	*No*
Is the well surface casing in good condition?	*Yes*	*No*
Is the surface casing vertical?	*Yes*	*No*
Is there an internal well seal?	*Yes*	*No*
Has there been physical damage to the well?	*Yes*	*No*
Does sounding depth match completed depth?	*Yes*	*No*
Is measuring point marked?	*Yes*	*No*
Is the well clearly labeled?	*Yes*	*No*
Flush mount - Is it secure from runoff?	*Yes*	*No*

Overall well condition (circle one) *Good* *Fair* *Poor*

Other Comments:

Recommendations

Well needs to be redeveloped	*Yes*	*No*
Well needs to be re-surveyed.	*Yes*	*No*
Well needs to be repaired.	*Yes*	*No*
Well needs to be replaced.	*Yes*	*No*
Well needs to be properly abandoned.	*Yes*	*No*
No action necessary.	*Yes*	*No*

Comments

Signatures

Inspected by: D. Thompson

Date of Inspection: 8-25-15

Reviewed by: Ronald S Traver (Print)

(Sign)

[3]Multi-gas readings are considered not applicable for Picatinny wells.

N/A= Not Applicable

- - - = Not Available

EPA Region 2 Superfund Well Assessment Checklist

Owner Well ID: E70-4

Facility Information

Site Name:	Picatinny Arsenal	*Area:*	*Site:* Area F
Site Address:	North East Office Garrison Bldg. 319, Picatinny, NJ 07806		
Site County:	Morris County		
Site State:	New Jersey		
EPA Site ID Number:	NJ3210020704		
Site Owner:	US Department of Army Picatinny Arsenal		
EPA Project Manager:	Mr. William Roach, USEPA Region II		

Well Location Information

State Well Permit No: N/A

Well Tag ID and Condition None

Well Installation Date N/A

	From Log	*From GPS*[1]
Ground Surface Elevation	Ø	N/A
Latitude	N/A	N/A
Longitude	N/A	N/A
Northing (State Plane)	Ø	N/A
Easting (State Plane)	Ø	N/A

Cross streets (if applicable): N/A

GPS Instrument used:[1] Ø

Datum: Ø

Accuracy/Precision: Ø

Well Construction Details

Type of well (Circle one) *Flush Mount* *Stick up* *Multilevel Well*[2]

Well lock\security type: OK

Elevation (top of inner casing): N/A

Surface protective casing material: Steel

Surface Casing diameter: 4" *inches*

Well Diameter and Casing Material: 2" PVC *inches*

Well Depth (as installed): *ftbgs*

Well Depth (as measured): 29.02 *fttoc*

Well Stick Up Height (as measured): *ftbgs*

Screened interval: 23.79 - 28.79 *ft*

Open hole interval: *ft*

Depth to water: 6.04 *ftbtoc*

Date: 8-25-18 *Time:* 1045

[1] Picatinny wells will not be resurveyed by GPS unless existing Northing and Easting coordinates from prior survey efforts are not available or other conditions warrant resurveying.

[2] If multilevel well please see attached worksheet.

N/A= Not Applicable

- - - = Not Available

Well Headspace Readings

PID/FID Reading taken inside top of casing (if applicable): N/A *ppm*

Multi-gas/CGI meter Readings taken (if applicable):[3]

LEL:	N/A	*% LEL*
O_2:	N/A	*40% Vol.*
CO:	N/A	*ppm*
H_2S:	N/A	*ppm*

Do readings indicate unsafe conditions exist? *Yes* *No*

Well Condition

Is the concrete pad in good condition?	*Yes*	*No*
Is the well surface casing in good condition?	*Yes*	*No*
Is the surface casing vertical?	*Yes*	*No*
Is there an internal well seal?	*Yes*	*No*
Has there been physical damage to the well?	*Yes*	*No*
Does sounding depth match completed depth?	*Yes*	*No*
Is measuring point marked?	*Yes*	*No*
Is the well clearly labeled?	*Yes*	*No*
Flush mount - Is it secure from runoff?	*Yes*	*No*

Overall well condition (circle one) *Good* *Fair* *Poor*

Other Comments:

Recommendations

Well needs to be redeveloped	*Yes*	*No*
Well needs to be re-surveyed.	*Yes*	*No*
Well needs to be repaired.	*Yes*	*No*
Well needs to be replaced.	*Yes*	*No*
Well needs to be properly abandoned.	*Yes*	*No*
No action necessary.	*Yes*	*No*

Comments

Signatures

Inspected by: D. Thompson

Date of Inspection: 8-25-15

Reviewed by: Ronald L Traver (Print)

(Sign)

[3] Multi-gas readings are considered not applicable for Picatinny wells.

N/A= Not Applicable

- - - = Not Available

EPA Region 2 Superfund Well Assessment Checklist

Owner Well ID: EMW12-L

Facility Information

Site Name:	Picatinny Arsenal	*Area:*	*Site:* Area E
Site Address:	North East Office Garrison Bldg. 319, Picatinny, NJ 07806		
Site County:	Morris County		
Site State:	New Jersey		
EPA Site ID Number:	NJ3210020704		
Site Owner:	US Department of Army Picatinny Arsenal		
EPA Project Manager:	Mr. William Roach, USEPA Region II		

Well Location Information

State Well Permit No: N/A

Well Tag ID and Condition none

Well Installation Date N/A

	From Log	*From GPS*[1]
Ground Surface Elevation	Ø	N/A
Latitude	N/A	N/A
Longitude	N/A	N/A
Northing (State Plane)	Ø	N/A
Easting (State Plane)	Ø	N/A

Cross streets (if applicable): N/A

GPS Instrument used:[1] Ø

Datum: Ø

Accuracy/Precision: Ø

Well Construction Details

Type of well (Circle one) *Flush Mount* (Stick up) *Multilevel Well*[2]

Well lock\security type: no lock - no grippee

Elevation (top of inner casing): N/A

Surface protective casing material: steel

Surface Casing diameter: 4" *inches*

Well Diameter and Casing Material: 2" PVC *inches*

Well Depth (as installed): *ftbgs*

Well Depth (as measured): 24.61 *fttoc*

Well Stick Up Height (as measured): *ftbgs*

Screened interval: 19.85 - 24.85 *ft*

Open hole interval: *ft*

Depth to water: 6.01 *ftbtoc*

Date: 8-25-15 *Time:* 1011

[1] Picatinny wells will not be resurveyed by GPS unless existing Northing and Easting coordinates from prior survey efforts are not available or other conditions warrant resurveying.

[2] If multilevel well please see attached worksheet.

N/A= Not Applicable

- - - = Not Available

Well Headspace Readings

PID/FID Reading taken inside top of casing (if applicable): N/A *ppm*

Multi-gas/CGI meter Readings taken (if applicable):[3]

LEL:	N/A	*% LEL*
O_2:	N/A	*40% Vol.*
CO:	N/A	*ppm*
H_2S:	N/A	*ppm*

Do readings indicate unsafe conditions exist? *Yes* *No*

Well Condition

Is the concrete pad in good condition?	*Yes*	*No*
Is the well surface casing in good condition?	*Yes*	*No*
Is the surface casing vertical?	*Yes*	*No*
Is there an internal well seal?	*Yes*	*No*
Has there been physical damage to the well?	*Yes*	*No*
Does sounding depth match completed depth?	*Yes*	*No*
Is measuring point marked?	*Yes*	*No*
Is the well clearly labeled?	*Yes*	*No*
Flush mount - Is it secure from runoff?	*Yes*	*No*

Overall well condition (circle one) *Good* *Fair* *Poor*

Other Comments:

Recommendations

Well needs to be redeveloped	*Yes*	*No*
Well needs to be re-surveyed.	*Yes*	*No*
Well needs to be repaired.	*Yes*	*No*
Well needs to be replaced.	*Yes*	*No*
Well needs to be properly abandoned.	*Yes*	*No*
No action necessary.	*Yes*	*No*

Comments

Signatures

Inspected by: D. Thompson

Date of Inspection: 8-25-15

Reviewed by: Ronald L Traver (Print)

(Sign)

[3] Multi-gas readings are considered not applicable for Picatinny wells.

N/A= Not Applicable

- - - = Not Available

EPA Region 2 Superfund Well Assessment Checklist

Owner Well ID: EMW 12-H

Facility Information

Site Name:	Picatinny Arsenal	*Area:*	*Site:* Area E
Site Address:	North East Office Garrison Bldg. 319, Picatinny, NJ 07806		
Site County:	Morris County		
Site State:	New Jersey		
EPA Site ID Number:	NJ3210020704		
Site Owner:	US Department of Army Picatinny Arsenal		
EPA Project Manager:	Mr. William Roach, USEPA Region II		

Well Location Information

State Well Permit No: N/A

Well Tag ID and Condition none

Well Installation Date N/A

	From Log	*From GPS*[1]
Ground Surface Elevation	Ø	N/A
Latitude	N/A	N/A
Longitude	N/A	N/A
Northing (State Plane)	Ø	N/A
Easting (State Plane)	Ø	N/A

Cross streets (if applicable): N/A

GPS Instrument used:[1] Ø

Datum: Ø

Accuracy/Precision: Ø

Well Construction Details

Type of well (Circle one) *Flush Mount* *Stick up* *Multilevel Well*[2]

Well lock\security type: no lock

Elevation (top of inner casing): N/A

Surface protective casing material: steel

Surface Casing diameter: 4" *inches*

Well Diameter and Casing Material: 2" PVC *inches*

Well Depth (as installed): *ftbgs*

Well Depth (as measured): 15.62 *fttoc*

Well Stick Up Height (as measured): *ftbgs*

Screened interval: 10.39 - 15.39 *ft*

Open hole interval: *ft*

Depth to water: 5.87 *ftbtoc*

Date: 8-25-15 *Time:* 1123

[1] Picatinny wells will not be resurveyed by GPS unless existing Northing and Easting coordinates from prior survey efforts are not available or other conditions warrant resurveying.

[2] If multilevel well please see attached worksheet.

N/A= Not Applicable

- - - = Not Available

Well Headspace Readings

PID/FID Reading taken inside top of casing (if applicable): N/A *ppm*

Multi-gas/CGI meter Readings taken (if applicable):[3]

LEL:	N/A	*% LEL*
O_2:	N/A	*40% Vol.*
CO:	N/A	*ppm*
H_2S:	N/A	*ppm*

Do readings indicate unsafe conditions exist? *Yes* *No*

Well Condition

Is the concrete pad in good condition?	*Yes*	*No*
Is the well surface casing in good condition?	*Yes*	*No*
Is the surface casing vertical?	*Yes*	*No*
Is there an internal well seal?	*Yes*	*No*
Has there been physical damage to the well?	*Yes*	*No*
Does sounding depth match completed depth?	*Yes*	*No*
Is measuring point marked?	*Yes*	*No*
Is the well clearly labeled?	*Yes*	*No*
Flush mount - Is it secure from runoff?	*Yes*	*No*

Overall well condition (circle one) *Good* *Fair* *Poor*

Other Comments:

Recommendations

Well needs to be redeveloped	*Yes*	*No*
Well needs to be re-surveyed.	*Yes*	*No*
Well needs to be repaired.	*Yes*	*No*
Well needs to be replaced.	*Yes*	*No*
Well needs to be properly abandoned.	*Yes*	*No*
No action necessary.	*Yes*	*No*

Comments

Signatures

Inspected by: D. Thompson

Date of Inspection: 8-25-15

Reviewed by: Ronald L Traver (Print)

(Sign)

[3] Multi-gas readings are considered not applicable for Picatinny wells.

N/A= Not Applicable

- - - = Not Available

EPA Region 2 Superfund Well Assessment Checklist

Owner Well ID: EMW-01

Facility Information

Site Name:	Picatinny Arsenal	*Area:*	*Site:* Area E
Site Address:	North East Office Garrison Bldg. 319, Picatinny, NJ 07806		
Site County:	Morris County		
Site State:	New Jersey		
EPA Site ID Number:	NJ3210020704		
Site Owner:	US Department of Army Picatinny Arsenal		
EPA Project Manager:	Mr. William Roach, USEPA Region II		

Well Location Information

State Well Permit No: N/A

Well Tag ID and Condition none

Well Installation Date N/A

	From Log	*From GPS*[1]
Ground Surface Elevation	Ø	N/A
Latitude	N/A	N/A
Longitude	N/A	N/A
Northing (State Plane)	Ø	N/A
Easting (State Plane)	Ø	N/A

Cross streets (if applicable): N/A

GPS Instrument used:[1] Ø

Datum: Ø

Accuracy/Precision: Ø

Well Construction Details

Type of well (Circle one) *Flush Mount* *Stick up* *Multilevel Well*[2]

Well lock\security type: Manhole cover in place

Elevation (top of inner casing): N/A

Surface protective casing material: Steel

Surface Casing diameter: 8" *inches*

Well Diameter and Casing Material: 2" PVC *inches*

Well Depth (as installed): *ftbgs*

Well Depth (as measured): 19.26 *fttoc*

Well Stick Up Height (as measured): *ftbgs*

Screened interval: N/A *ft*

Open hole interval: N/A *ft*

Depth to water: 6.99 *ftbtoc*

Date: 8-25-15 *Time:* 1135

[1] Picatinny wells will not be resurveyed by GPS unless existing Northing and Easting coordinates from prior survey efforts are not available or other conditions warrant resurveying.

[2] If multilevel well please see attached worksheet.

N/A= Not Applicable

- - - = Not Available

Well Headspace Readings

PID/FID Reading taken inside top of casing (if applicable): N/A *ppm*

Multi-gas/CGI meter Readings taken (if applicable):[3]

LEL:	N/A	*% LEL*
O_2:	N/A	*40% Vol.*
CO:	N/A	*ppm*
H_2S:	N/A	*ppm*

Do readings indicate unsafe conditions exist? *Yes* *No*

Well Condition

Is the concrete pad in good condition?	*Yes*	*No*
Is the well surface casing in good condition?	*Yes*	*No*
Is the surface casing vertical?	*Yes*	*No*
Is there an internal well seal?	*Yes*	*No*
Has there been physical damage to the well?	*Yes*	*No*
Does sounding depth match completed depth?	*Yes*	*No*
Is measuring point marked?	*Yes*	*No*
Is the well clearly labeled?	*Yes*	*No*
Flush mount - Is it secure from runoff?	*Yes*	*No*

Overall well condition (circle one) *Good* *Fair* *Poor*

Other Comments:

Recommendations

Well needs to be redeveloped	*Yes*	*No*
Well needs to be re-surveyed.	*Yes*	*No*
Well needs to be repaired.	*Yes*	*No*
Well needs to be replaced.	*Yes*	*No*
Well needs to be properly abandoned.	*Yes*	*No*
No action necessary.	*Yes*	*No*

Comments

Signatures

Inspected by: D. Thompson

Date of Inspection: 8-25-15

Reviewed by: Ronald L Traver (Print)

(Sign)

[3] Multi-gas readings are considered not applicable for Picatinny wells.

N/A= Not Applicable

- - - = Not Available

EPA Region 2 Superfund Well Assessment Checklist

Owner Well ID: E95-3

Facility Information

Site Name:	Picatinny Arsenal	*Area:*	*Site:* Area E
Site Address:	North East Office Garrison Bldg. 319, Picatinny, NJ 07806		
Site County:	Morris County		
Site State:	New Jersey		
EPA Site ID Number:	NJ3210020704		
Site Owner:	US Department of Army Picatinny Arsenal		
EPA Project Manager:	Mr. William Roach, USEPA Region II		

Well Location Information

State Well Permit No: N/A

Well Tag ID and Condition none

Well Installation Date N/A

	From Log	*From GPS*[1]
Ground Surface Elevation	Ø	N/A
Latitude	N/A	N/A
Longitude	N/A	N/A
Northing (State Plane)	Ø	N/A
Easting (State Plane)	Ø	N/A

Cross streets (if applicable): N/A

GPS Instrument used:[1] Ø

Datum: Ø

Accuracy/Precision: Ø

Well Construction Details

Type of well (Circle one) *Flush Mount* *Stick up* *Multilevel Well*[2]

Well lock\security type: manhole cover in place

Elevation (top of inner casing): N/A

Surface protective casing material: steel

Surface Casing diameter: 10" *inches*

Well Diameter and Casing Material: 2" PVC *inches*

Well Depth (as installed): *ftbgs*

Well Depth (as measured): 19.94 *fttoc*

Well Stick Up Height (as measured): N/A *ftbgs*

Screened interval: 9.7 - 19.7 *ft*

Open hole interval: N/A *ft*

Depth to water: 6.72 *ftbtoc*

Date: 8-25-15 *Time:* 1140

[1] Picatinny wells will not be resurveyed by GPS unless existing Northing and Easting coordinates from prior survey efforts are not available or other conditions warrant resurveying.

[2] If multilevel well please see attached worksheet.

N/A= Not Applicable

- - - = Not Available

Well Headspace Readings

PID/FID Reading taken inside top of casing (if applicable): N/A *ppm*

Multi-gas/CGI meter Readings taken (if applicable):[3]

LEL:	N/A	*% LEL*
O_2:	N/A	*40% Vol.*
CO:	N/A	*ppm*
H_2S:	N/A	*ppm*

Do readings indicate unsafe conditions exist? *Yes* *No*

Well Condition

Is the concrete pad in good condition?	*Yes*	*No*
Is the well surface casing in good condition?	*Yes*	*No*
Is the surface casing vertical?	*Yes*	*No*
Is there an internal well seal?	*Yes*	*No*
Has there been physical damage to the well?	*Yes*	*No*
Does sounding depth match completed depth?	*Yes*	*No*
Is measuring point marked?	*Yes*	*No*
Is the well clearly labeled?	*Yes*	*No*
Flush mount - Is it secure from runoff?	*Yes*	*No*

Overall well condition (circle one) *Good* *Fair* *Poor*

Other Comments:

Recommendations

Well needs to be redeveloped	*Yes*	*No*
Well needs to be re-surveyed.	*Yes*	*No*
Well needs to be repaired.	*Yes*	*No*
Well needs to be replaced.	*Yes*	*No*
Well needs to be properly abandoned.	*Yes*	*No*
No action necessary.	*Yes*	*No*

Comments

Signatures

Inspected by: D. Thompson

Date of Inspection: 8-25-15

Reviewed by: Ronald L Traver (Print)

(Sign)

[3] Multi-gas readings are considered not applicable for Picatinny wells.

N/A= Not Applicable

- - - = Not Available

EPA Region 2 Superfund Well Assessment Checklist

Owner Well ID: E82-1

Facility Information

Site Name:	Picatinny Arsenal	*Area:*	*Site:* Area E
Site Address:	North East Office Garrison Bldg. 319, Picatinny, NJ 07806		
Site County:	Morris County		
Site State:	New Jersey		
EPA Site ID Number:	NJ3210020704		
Site Owner:	US Department of Army Picatinny Arsenal		
EPA Project Manager:	Mr. William Roach, USEPA Region II		

Well Location Information

State Well Permit No: N/A

Well Tag ID and Condition none

Well Installation Date N/A

	From Log	*From GPS*[1]
Ground Surface Elevation	Ø	N/A
Latitude	N/A	N/A
Longitude	N/A	N/A
Northing (State Plane)	Ø	N/A
Easting (State Plane)	Ø	N/A

Cross streets (if applicable): N/A

GPS Instrument used:[1] Ø

Datum: Ø

Accuracy/Precision: Ø

Well Construction Details

Type of well (Circle one) *Flush Mount* (Stick up) *Multilevel Well*[2]

Well lock\security type: OK

Elevation (top of inner casing): N/A

Surface protective casing material: steel

Surface Casing diameter: 6" *inches*

Well Diameter and Casing Material: 2" PVC *inches*

Well Depth (as installed): *ftbgs*

Well Depth (as measured): 18.10 *fttoc*

Well Stick Up Height (as measured): *ftbgs*

Screened interval: 14.5-19.5 *ft*

Open hole interval: *ft*

Depth to water: 5.27 *ftbtoc*

Date: 8-25-15 *Time:* 8:45

[1] Picatinny wells will not be resurveyed by GPS unless existing Northing and Easting coordinates from prior survey efforts are not available or other conditions warrant resurveying.

[2] If multilevel well please see attached worksheet.

N/A= Not Applicable

- - - = Not Available

Well Headspace Readings

PID/FID Reading taken inside top of casing (if applicable): N/A *ppm*

Multi-gas/CGI meter Readings taken (if applicable):[3]

LEL:	N/A	*% LEL*
O_2:	N/A	*40% Vol.*
CO:	N/A	*ppm*
H_2S:	N/A	*ppm*

Do readings indicate unsafe conditions exist? *Yes* *No*

Well Condition

Is the concrete pad in good condition?	*Yes*	*No*
Is the well surface casing in good condition?	*Yes*	*No*
Is the surface casing vertical?	*Yes*	*No*
Is there an internal well seal?	*Yes*	*No*
Has there been physical damage to the well?	*Yes*	*No*
Does sounding depth match completed depth?	*Yes*	*No*
Is measuring point marked?	*Yes*	*No*
Is the well clearly labeled?	*Yes*	*No*
Flush mount - Is it secure from runoff?	*Yes*	*No*

Overall well condition (circle one) *Good* *Fair* *Poor*

Other Comments:

Recommendations

Well needs to be redeveloped	*Yes*	*No*
Well needs to be re-surveyed.	*Yes*	*No*
Well needs to be repaired.	*Yes*	*No*
Well needs to be replaced.	*Yes*	*No*
Well needs to be properly abandoned.	*Yes*	*No*
No action necessary.	*Yes*	*No*

Comments

Signatures

Inspected by: D. Thompson

Date of Inspection: 8-25-15

Reviewed by: Ronald L Traver (Print)

(Sign)

[3] Multi-gas readings are considered not applicable for Picatinny wells.

N/A= Not Applicable

- - - = Not Available

EPA Region 2 Superfund Well Assessment Checklist

Owner Well ID: E82-2

Facility Information

Site Name:	Picatinny Arsenal	*Area:*	*Site:* Area E
Site Address:	North East Office Garrison Bldg. 319, Picatinny, NJ 07806		
Site County:	Morris County		
Site State:	New Jersey		
EPA Site ID Number:	NJ3210020704		
Site Owner:	US Department of Army Picatinny Arsenal		
EPA Project Manager:	Mr. William Roach, USEPA Region II		

Well Location Information

State Well Permit No: N/A
Well Tag ID and Condition none
Well Installation Date N/A

	From Log	*From GPS*[1]
Ground Surface Elevation	Ø	N/A
Latitude	N/A	N/A
Longitude	N/A	N/A
Northing (State Plane)	Ø	N/A
Easting (State Plane)	Ø	N/A

Cross streets (if applicable): N/A
GPS Instrument used:[1] Ø
Datum: Ø
Accuracy/Precision: Ø

Well Construction Details

Type of well (Circle one) *Flush Mount* *Stick up* *Multilevel Well*[2]
Well lock\security type: lock ok - no 2" gripper
Elevation (top of inner casing): N/A
Surface protective casing material: steel
Surface Casing diameter: 6" *inches*
Well Diameter and Casing Material: 2" PVC *inches*
Well Depth (as installed): *ftbgs*
Well Depth (as measured): 29.68 *fttoc*
Well Stick Up Height (as measured): *ftbgs*
Screened interval: N/A *ft*
Open hole interval: N/A *ft*
Depth to water: 5.33 *ftbtoc*

Date: 8-25-15 *Time:* 8:48

[1] Picatinny wells will not be resurveyed by GPS unless existing Northing and Easting coordinates from prior survey efforts are not available or other conditions warrant resurveying.
[2] If multilevel well please see attached worksheet.
N/A= Not Applicable
- - - = Not Available

Well Headspace Readings

PID/FID Reading taken inside top of casing (if applicable): n/A *ppm*

Multi-gas/CGI meter Readings taken (if applicable):[3]

LEL:	N/A	*% LEL*
O_2:	N/A	*40% Vol.*
CO:	N/A	*ppm*
H_2S:	N/A	*ppm*

Do readings indicate unsafe conditions exist? *Yes* *No*

Well Condition

Is the concrete pad in good condition?	*Yes*	*No*
Is the well surface casing in good condition?	*Yes*	*No*
Is the surface casing vertical?	*Yes*	*No*
Is there an internal well seal?	*Yes*	*No*
Has there been physical damage to the well?	*Yes*	*No*
Does sounding depth match completed depth?	*Yes*	*No*
Is measuring point marked?	*Yes*	*No*
Is the well clearly labeled?	*Yes*	*No*
Flush mount - Is it secure from runoff?	*Yes*	*No*

Overall well condition (circle one) *Good* *Fair* *Poor*

Other Comments:

Recommendations

Well needs to be redeveloped	*Yes*	*No*
Well needs to be re-surveyed.	*Yes*	*No*
Well needs to be repaired.	*Yes*	*No*
Well needs to be replaced.	*Yes*	*No*
Well needs to be properly abandoned.	*Yes*	*No*
No action necessary.	*Yes*	*No*

Comments

Signatures

Inspected by: D. Thompson

Date of Inspection: 8-25-15

Reviewed by: Ronald L Traver (Print)

(Sign)

[3] Multi-gas readings are considered not applicable for Picatinny wells.

N/A= Not Applicable

- - - = Not Available

EPA Region 2 Superfund Well Assessment Checklist

Owner Well ID: EMW12-D

Facility Information

Site Name:	Picatinny Arsenal	*Area:*	*Site:* Area E
Site Address:	North East Office Garrison Bldg. 319, Picatinny, NJ 07806		
Site County:	Morris County		
Site State:	New Jersey		
EPA Site ID Number:	NJ3210020704		
Site Owner:	US Department of Army Picatinny Arsenal		
EPA Project Manager:	Mr. William Roach, USEPA Region II		

Well Location Information

State Well Permit No:	none
Well Tag ID and Condition	none
Well Installation Date	N/A

	From Log	*From GPS*[1]
Ground Surface Elevation	Ø	N/A
Latitude	N/A	N/A
Longitude	N/A	N/A
Northing (State Plane)	Ø	N/A
Easting (State Plane)	Ø	N/A

Cross streets (if applicable):	N/A
GPS Instrument used:[1]	Ø
Datum:	Ø
Accuracy/Precision:	Ø

Well Construction Details

Type of well (Circle one) *Flush Mount* *Stick up* *Multilevel Well*[2]

Well lock\security type:	no lock	
Elevation (top of inner casing):	N/A	
Surface protective casing material:	steel	
Surface Casing diameter:	4"	*inches*
Well Diameter and Casing Material:	2" PVC	*inches*
Well Depth (as installed):		*ftbgs*
Well Depth (as measured):	29.91	*fttoc*
Well Stick Up Height (as measured):		*ftbgs*
Screened interval:	N/A	*ft*
Open hole interval:	N/A	*ft*
Depth to water:	7.67	*ftbtoc*

Date: 8-25-15 *Time:* 1005

[1] Picatinny wells will not be resurveyed by GPS unless existing Northing and Easting coordinates from prior survey efforts are not available or other conditions warrant resurveying.

[2] If multilevel well please see attached worksheet.

N/A= Not Applicable

- - - = Not Available

Well Headspace Readings

PID/FID Reading taken inside top of casing (if applicable): N/A ppm

Multi-gas/CGI meter Readings taken (if applicable):[3]

LEL:	N/A	% LEL
O_2:	N/A	40% Vol.
CO:	N/A	ppm
H_2S:	N/A	ppm

Do readings indicate unsafe conditions exist? Yes No

Well Condition

Is the concrete pad in good condition?	Yes	No
Is the well surface casing in good condition?	Yes	No
Is the surface casing vertical?	Yes	No
Is there an internal well seal?	Yes	No
Has there been physical damage to the well?	Yes	No
Does sounding depth match completed depth?	Yes	No
Is measuring point marked?	Yes	No
Is the well clearly labeled?	Yes	No
Flush mount - Is it secure from runoff?	Yes	No

Overall well condition (circle one) Good Fair Poor

Other Comments:

Recommendations

Well needs to be redeveloped	Yes	No
Well needs to be re-surveyed.	Yes	No
Well needs to be repaired.	Yes	No
Well needs to be replaced.	Yes	No
Well needs to be properly abandoned.	Yes	No
No action necessary.	Yes	No

Comments

Signatures

Inspected by: D. Thompson

Date of Inspection: 8-25-15

Reviewed by: Ronald L Traver (Print)

(Sign)

[3] Multi-gas readings are considered not applicable for Picatinny wells.

N/A= Not Applicable

- - - = Not Available

EPA Region 2 Superfund Well Assessment Checklist

Owner Well ID: E70-2

Facility Information

Site Name:	Picatinny Arsenal — *Area:* — *Site:* Area E
Site Address:	North East Office Garrison Bldg. 319, Picatinny, NJ 07806
Site County:	Morris County
Site State:	New Jersey
EPA Site ID Number:	NJ3210020704
Site Owner:	US Department of Army Picatinny Arsenal
EPA Project Manager:	Mr. William Roach, USEPA Region II

Well Location Information

State Well Permit No:	N/A
Well Tag ID and Condition	none
Well Installation Date	N/A

	From Log	*From GPS*[1]
Ground Surface Elevation	Ø	N/A
Latitude	N/A	N/A
Longitude	N/A	N/A
Northing (State Plane)	Ø	N/A
Easting (State Plane)	Ø	N/A

Cross streets (if applicable):	N/A
GPS Instrument used:[1]	Ø
Datum:	Ø
Accuracy/Precision:	Ø

Well Construction Details

Type of well (Circle one) *Flush Mount* *Stick up* *Multilevel Well*[2]

Well lock\security type:	OK	
Elevation (top of inner casing):	N/A	
Surface protective casing material:	steel	
Surface Casing diameter:	6"	*inches*
Well Diameter and Casing Material:	2" PVC	*inches*
Well Depth (as installed):		*ftbgs*
Well Depth (as measured):	41.42	*fttoc*
Well Stick Up Height (as measured):		*ftbgs*
Screened interval:	N/A	*ft*
Open hole interval:	N/A	*ft*
Depth to water:	4.25	*ftbtoc*

Date: 8-25-15 *Time:* 1050

[1] Picatinny wells will not be resurveyed by GPS unless existing Northing and Easting coordinates from prior survey efforts are not available or other conditions warrant resurveying.

[2] If multilevel well please see attached worksheet.

N/A= Not Applicable

- - - = Not Available

Well Headspace Readings

PID/FID Reading taken inside top of casing (if applicable): N/A *ppm*

Multi-gas/CGI meter Readings taken (if applicable):[3]

LEL:	N/A	*% LEL*
O_2:	N/A	*40% Vol.*
CO:	N/A	*ppm*
H_2S:	N/A	*ppm*

Do readings indicate unsafe conditions exist? *Yes* *No*

Well Condition

Is the concrete pad in good condition?	*Yes*	*No*
Is the well surface casing in good condition?	*Yes*	*No*
Is the surface casing vertical?	*Yes*	*No*
Is there an internal well seal?	*Yes*	*No*
Has there been physical damage to the well?	*Yes*	*No*
Does sounding depth match completed depth?	*Yes*	*No*
Is measuring point marked?	*Yes*	*No*
Is the well clearly labeled?	*Yes*	*No*
Flush mount - Is it secure from runoff?	*Yes*	*No*

Overall well condition (circle one) *Good* *Fair* *Poor*

Other Comments:

Recommendations

Well needs to be redeveloped	*Yes*	*No*
Well needs to be re-surveyed.	*Yes*	*No*
Well needs to be repaired.	*Yes*	*No*
Well needs to be replaced.	*Yes*	*No*
Well needs to be properly abandoned.	*Yes*	*No*
No action necessary.	*Yes*	*No*

Comments

Signatures

Inspected by: D. Thompson

Date of Inspection: 8-25-15

Reviewed by: Ronald L Traver (Print)

(Sign)

[3] Multi-gas readings are considered not applicable for Picatinny wells.

N/A= Not Applicable

- - - = Not Available

EPA Region 2 Superfund Well Assessment Checklist

Owner Well ID: E 70-3

Facility Information

Site Name:	Picatinny Arsenal	*Area:*	*Site:* Area E
Site Address:	North East Office Garrison Bldg. 319, Picatinny, NJ 07806		
Site County:	Morris County		
Site State:	New Jersey		
EPA Site ID Number:	NJ3210020704		
Site Owner:	US Department of Army Picatinny Arsenal		
EPA Project Manager:	Mr. William Roach, USEPA Region II		

Well Location Information

State Well Permit No: N/A

Well Tag ID and Condition none

Well Installation Date N/A

	From Log	*From GPS*[1]
Ground Surface Elevation	Ø	N/A
Latitude	N/A	N/A
Longitude	N/A	N/A
Northing (State Plane)	Ø	N/A
Easting (State Plane)	Ø	N/A

Cross streets (if applicable): N/A

GPS Instrument used:[1] Ø

Datum: Ø

Accuracy/Precision: Ø

Well Construction Details

Type of well (Circle one) *Flush Mount* *Stick up* *Multilevel Well*[2]

Well lock\security type: OK

Elevation (top of inner casing): N/A

Surface protective casing material: steel

Surface Casing diameter: 6" inches

Well Diameter and Casing Material: 2" PVC inches

Well Depth (as installed): ftbgs

Well Depth (as measured): 16.86 fttoc

Well Stick Up Height (as measured): ftbgs

Screened interval: N/A ft

Open hole interval: N/A ft

Depth to water: 4.70 ftbtoc

Date: 8-25-05 *Time:* 1052

[1] Picatinny wells will not be resurveyed by GPS unless existing Northing and Easting coordinates from prior survey efforts are not available or other conditions warrant resurveying.

[2] If multilevel well please see attached worksheet.

N/A= Not Applicable

- - - = Not Available

Well Headspace Readings

PID/FID Reading taken inside top of casing (if applicable): N/A *ppm*

Multi-gas/CGI meter Readings taken (if applicable):[3]

LEL:	N/A	*% LEL*
O_2:	N/A	*40% Vol.*
CO:	N/A	*ppm*
H_2S:	N/A	*ppm*

Do readings indicate unsafe conditions exist? *Yes* *No*

Well Condition

Is the concrete pad in good condition?	*Yes*	*No*
Is the well surface casing in good condition?	*Yes*	*No*
Is the surface casing vertical?	*Yes*	*No*
Is there an internal well seal?	*Yes*	*No*
Has there been physical damage to the well?	*Yes*	*No*
Does sounding depth match completed depth?	*Yes*	*No*
Is measuring point marked?	*Yes*	*No*
Is the well clearly labeled?	*Yes*	*No*
Flush mount - Is it secure from runoff?	*Yes*	*No*

Overall well condition (circle one) *Good* *Fair* *Poor*

Other Comments:

Recommendations

Well needs to be redeveloped		*No*
Well needs to be re-surveyed.		*No*
Well needs to be repaired.		*No*
Well needs to be replaced.	*Yes*	*No*
Well needs to be properly abandoned.	*Yes*	*No*
No action necessary.	*Yes*	*No*

Comments

Signatures

Inspected by: D. Thompson

Date of Inspection: 8-25-15

Reviewed by: Ronald L Traver (Print)

(Sign)

[3] Multi-gas readings are considered not applicable for Picatinny wells.

N/A= Not Applicable

- - - = Not Available

EPA Region 2 Superfund Well Assessment Checklist

Owner Well ID: EMW-11

Facility Information

Site Name:	Picatinny Arsenal	*Area:*	*Site:* Area E
Site Address:	North East Office Garrison Bldg. 319, Picatinny, NJ 07806		
Site County:	Morris County		
Site State:	New Jersey		
EPA Site ID Number:	NJ3210020704		
Site Owner:	US Department of Army Picatinny Arsenal		
EPA Project Manager:	Mr. William Roach, USEPA Region II		

Well Location Information

State Well Permit No: N/A

Well Tag ID and Condition None

Well Installation Date N/A

	From Log	*From GPS*[1]
Ground Surface Elevation	Ø	N/A
Latitude	N/A	N/A
Longitude	N/A	N/A
Northing (State Plane)	Ø	N/A
Easting (State Plane)	Ø	N/A

Cross streets (if applicable): N/A

GPS Instrument used:[1] Ø

Datum: Ø

Accuracy/Precision: Ø

Well Construction Details

Type of well (Circle one) *Flush Mount* *Stick up* *Multilevel Well*[2]

Well lock\security type: OK

Elevation (top of inner casing): N/A

Surface protective casing material: Steel

Surface Casing diameter: 4 *inches*

Well Diameter and Casing Material: 2" PVC *inches*

Well Depth (as installed): *ftbgs*

Well Depth (as measured): 19.65 *fttoc*

Well Stick Up Height (as measured): *ftbgs*

Screened interval: N/A *ft*

Open hole interval: N/A *ft*

Depth to water: 7.35 *ftbtoc*

Date: 8-25-15 *Time:* 1157

[1] Picatinny wells will not be resurveyed by GPS unless existing Northing and Easting coordinates from prior survey efforts are not available or other conditions warrant resurveying.

[2] If multilevel well please see attached worksheet.

N/A= Not Applicable

- - - = Not Available

Well Headspace Readings

PID/FID Reading taken inside top of casing (if applicable): N/A *ppm*

Multi-gas/CGI meter Readings taken (if applicable):[3]

LEL:	N/A	*% LEL*
O_2:	N/A	*40% Vol.*
CO:	N/A	*ppm*
H_2S:	N/A	*ppm*

Do readings indicate unsafe conditions exist? *Yes* *No*

Well Condition

Is the concrete pad in good condition?	*Yes*	*No*
Is the well surface casing in good condition?	*Yes*	*No*
Is the surface casing vertical?	*Yes*	*No*
Is there an internal well seal?	*Yes*	*No*
Has there been physical damage to the well?	*Yes*	*No*
Does sounding depth match completed depth?	*Yes*	*No*
Is measuring point marked?	*Yes*	*No*
Is the well clearly labeled?	*Yes*	*No*
Flush mount - Is it secure from runoff?	*Yes*	*No*

Overall well condition (circle one) *Good* *Fair* *Poor*

Other Comments:

Recommendations

Well needs to be redeveloped	*Yes*	*No*
Well needs to be re-surveyed.	*Yes*	*No*
Well needs to be repaired.	*Yes*	*No*
Well needs to be replaced.	*Yes*	*No*
Well needs to be properly abandoned.	*Yes*	*No*
No action necessary.	*Yes*	*No*

Comments

Signatures

Inspected by: D. Thompson

Date of Inspection: 8-25-15

Reviewed by: Ronald L Traver (Print)

(Sign)

[3] Multi-gas readings are considered not applicable for Picatinny wells.

N/A= Not Applicable

- - - = Not Available

EPA Region 2 Superfund Well Assessment Checklist

Owner Well ID: E11W6-3

Facility Information

Site Name:	Picatinny Arsenal	*Area:*	*Site:* Area E
Site Address:	North East Office Garrison Bldg. 319, Picatinny, NJ 07806		
Site County:	Morris County		
Site State:	New Jersey		
EPA Site ID Number:	NJ3210020704		
Site Owner:	US Department of Army Picatinny Arsenal		
EPA Project Manager:	Mr. William Roach, USEPA Region II		

Well Location Information

State Well Permit No: N/A
Well Tag ID and Condition none
Well Installation Date N/A

	From Log	*From GPS*[1]
Ground Surface Elevation	Ø	N/A
Latitude	N/A	N/A
Longitude	N/A	N/A
Northing (State Plane)	Ø	N/A
Easting (State Plane)	Ø	N/A

Cross streets (if applicable): N/A
GPS Instrument used:[1] Ø
Datum: Ø
Accuracy/Precision: Ø

Well Construction Details

Type of well (Circle one) *Flush Mount* *Stick up* *Multilevel Well*[2]

Well lock\security type:	ok	
Elevation (top of inner casing):	N/A	
Surface protective casing material:	steel	
Surface Casing diameter:	4"	*inches*
Well Diameter and Casing Material:	2" PVC	*inches*
Well Depth (as installed):		*ftbgs*
Well Depth (as measured):	26.11	*fttoc*
Well Stick Up Height (as measured):		*ftbgs*
Screened interval:	N/A	*ft*
Open hole interval:	N/A	*ft*
Depth to water:	5.85	*ftbtoc*

Date: 9-11-15 *Time:* 1200

[1] Picatinny wells will not be resurveyed by GPS unless existing Northing and Easting coordinates from prior survey efforts are not available or other conditions warrant resurveying.
[2] If multilevel well please see attached worksheet.
N/A= Not Applicable
- - - = Not Available

Well Headspace Readings

PID/FID Reading taken inside top of casing (if applicable): N/A *ppm*

Multi-gas/CGI meter Readings taken (if applicable):[3]

LEL:	N/A	*% LEL*
O_2:	N/A	*40% Vol.*
CO:	N/A	*ppm*
H_2S:	N/A	*ppm*

Do readings indicate unsafe conditions exist? *Yes* *No*

Well Condition

Is the concrete pad in good condition?	*Yes*	*No*
Is the well surface casing in good condition?	*Yes*	*No*
Is the surface casing vertical?	*Yes*	*No*
Is there an internal well seal?	*Yes*	*No*
Has there been physical damage to the well?	*Yes*	*No*
Does sounding depth match completed depth?	*Yes*	*No*
Is measuring point marked?	*Yes*	*No*
Is the well clearly labeled?	*Yes*	*No*
Flush mount - Is it secure from runoff?	*Yes*	*No*

Overall well condition (circle one) *Good* *Fair* *Poor*

Other Comments:

Recommendations

Well needs to be redeveloped	*Yes*	*No*
Well needs to be re-surveyed.	*Yes*	*No*
Well needs to be repaired.	*Yes*	*No*
Well needs to be replaced.	*Yes*	*No*
Well needs to be properly abandoned.	*Yes*	*No*
No action necessary.	*Yes*	*No*

Comments

Signatures

Inspected by: D. Thompson

Date of Inspection: 8-25-15

Reviewed by: Ronald L Traver (Print)

(Sign)

[3]Multi-gas readings are considered not applicable for Picatinny wells.

N/A= Not Applicable

- - - = Not Available

EPA Region 2 Superfund Well Assessment Checklist

Owner Well ID: E11W6-1

Facility Information

Site Name:	Picatinny Arsenal	*Area:*	*Site:* Area E
Site Address:	North East Office Garrison Bldg. 319, Picatinny, NJ 07806		
Site County:	Morris County		
Site State:	New Jersey		
EPA Site ID Number:	NJ3210020704		
Site Owner:	US Department of Army Picatinny Arsenal		
EPA Project Manager:	Mr. William Roach, USEPA Region II		

Well Location Information

State Well Permit No: N/A

Well Tag ID and Condition none

Well Installation Date N/A

	From Log	*From GPS*[1]
Ground Surface Elevation	Ø	N/A
Latitude	N/A	N/A
Longitude	N/A	N/A
Northing (State Plane)	Ø	N/A
Easting (State Plane)	Ø	N/A

Cross streets (if applicable): N/A

GPS Instrument used:[1] Ø

Datum: Ø

Accuracy/Precision: Ø

Well Construction Details

Type of well (Circle one) *Flush Mount* *Stick up* *Multilevel Well*[2]

Well lock\security type: no lock

Elevation (top of inner casing): N/A

Surface protective casing material: steel

Surface Casing diameter: 4" *inches*

Well Diameter and Casing Material: 2" PVC *inches*

Well Depth (as installed): *ftbgs*

Well Depth (as measured): 27.23 *fttoc*

Well Stick Up Height (as measured): *ftbgs*

Screened interval: N/A *ft*

Open hole interval: N/A *ft*

Depth to water: 4.80 *ftbtoc*

Date: 8-25-15 *Time:* 1020

[1] Picatinny wells will not be resurveyed by GPS unless existing Northing and Easting coordinates from prior survey efforts are not available or other conditions warrant resurveying.

[2] If multilevel well please see attached worksheet.

N/A= Not Applicable

- - - = Not Available

Well Headspace Readings

PID/FID Reading taken inside top of casing (if applicable): N/A *ppm*

Multi-gas/CGI meter Readings taken (if applicable):[3]

LEL:	N/A	*% LEL*
O_2:	N/A	*40% Vol.*
CO:	N/A	*ppm*
H_2S:	N/A	*ppm*

Do readings indicate unsafe conditions exist? *Yes* *No*

Well Condition

Is the concrete pad in good condition?	*Yes*	*No*
Is the well surface casing in good condition?	*Yes*	*No*
Is the surface casing vertical?	*Yes*	*No*
Is there an internal well seal?	*Yes*	*No*
Has there been physical damage to the well?	*Yes*	*No*
Does sounding depth match completed depth?	*Yes*	*No*
Is measuring point marked?	*Yes*	*No*
Is the well clearly labeled?	*Yes*	*No*
Flush mount - Is it secure from runoff?	*Yes*	*No*

Overall well condition (circle one) *Good* *Fair* *Poor*

Other Comments:

Recommendations

Well needs to be redeveloped	*Yes*	*No*
Well needs to be re-surveyed.	*Yes*	*No*
Well needs to be repaired.	*Yes*	*No*
Well needs to be replaced.	*Yes*	*No*
Well needs to be properly abandoned.	*Yes*	*No*
No action necessary.	*Yes*	*No*

Comments

Signatures

Inspected by: D Thompson

Date of Inspection: 8-25-15

Reviewed by: Ronald L Traver (Print)

(Sign)

[3] Multi-gas readings are considered not applicable for Picatinny wells.

N/A= Not Applicable

- - - = Not Available

EPA Region 2 Superfund Well Assessment Checklist

Owner Well ID: E3W G-2

Facility Information

Site Name:	Picatinny Arsenal	*Area:*	*Site:* Area E
Site Address:	North East Office Garrison Bldg. 319, Picatinny, NJ 07806		
Site County:	Morris County		
Site State:	New Jersey		
EPA Site ID Number:	NJ3210020704		
Site Owner:	US Department of Army Picatinny Arsenal		
EPA Project Manager:	Mr. William Roach, USEPA Region II		

Well Location Information

State Well Permit No: N/A

Well Tag ID and Condition none

Well Installation Date N/A

	From Log	*From GPS*[1]
Ground Surface Elevation	0	N/A
Latitude	N/A	N/A
Longitude	N/A	N/A
Northing (State Plane)	0	N/A
Easting (State Plane)	0	N/A

Cross streets (if applicable): N/A

GPS Instrument used:[1] 0

Datum: 0

Accuracy/Precision: 0

Well Construction Details

Type of well (Circle one) *Flush Mount* *Stick up* *Multilevel Well*[2]

Well lock\security type: no lock

Elevation (top of inner casing): N/A

Surface protective casing material: Steel

Surface Casing diameter: 4" *inches*

Well Diameter and Casing Material: 2" PVC *inches*

Well Depth (as installed): *ftbgs*

Well Depth (as measured): 27.63 *fttoc*

Well Stick Up Height (as measured): *ftbgs*

Screened interval: N/A *ft*

Open hole interval: N/A *ft*

Depth to water: 4.30 *ftbtoc*

Date: 8-25-15 *Time:* 1115

[1] Picatinny wells will not be resurveyed by GPS unless existing Northing and Easting coordinates from prior survey efforts are not available or other conditions warrant resurveying.

[2] If multilevel well please see attached worksheet.

N/A= Not Applicable

- - - = Not Available

Well Headspace Readings

PID/FID Reading taken inside top of casing (if applicable): N/A *ppm*

Multi-gas/CGI meter Readings taken (if applicable):[3]

LEL:	N/A	*% LEL*
O_2:	N/A	*40% Vol.*
CO:	N/A	*ppm*
H_2S:	N/A	*ppm*

Do readings indicate unsafe conditions exist? *Yes* *No*

Well Condition

Is the concrete pad in good condition?	*Yes*	*No*
Is the well surface casing in good condition?	*Yes*	*No*
Is the surface casing vertical?	*Yes*	*No*
Is there an internal well seal?	*Yes*	*No*
Has there been physical damage to the well?	*Yes*	*No*
Does sounding depth match completed depth?	*Yes*	*No*
Is measuring point marked?	*Yes*	*No*
Is the well clearly labeled?	*Yes*	*No*
Flush mount - Is it secure from runoff?	*Yes*	*No*

Overall well condition (circle one) *Good* *Fair* *Poor*

Other Comments:

Recommendations

Well needs to be redeveloped	*Yes*	*No*
Well needs to be re-surveyed.	*Yes*	*No*
Well needs to be repaired.	*Yes*	*No*
Well needs to be replaced.	*Yes*	*No*
Well needs to be properly abandoned.	*Yes*	*No*
No action necessary.	*Yes*	*No*

Comments

Signatures

Inspected by: D. Thompson

Date of Inspection: 8-28-15

Reviewed by: Ronald L Traver (Print)

(Sign)

[3] Multi-gas readings are considered not applicable for Picatinny wells.

N/A= Not Applicable

- - - = Not Available

EPA Region 2 Superfund Well Assessment Checklist

Owner Well ID: EW63-3

Facility Information

Site Name:	Picatinny Arsenal	*Area:*	*Site:* Area E
Site Address:	North East Office Garrison Bldg. 319, Picatinny, NJ 07806		
Site County:	Morris County		
Site State:	New Jersey		
EPA Site ID Number:	NJ3210020704		
Site Owner:	US Department of Army Picatinny Arsenal		
EPA Project Manager:	Mr. William Roach, USEPA Region II		

Well Location Information

State Well Permit No: N/A

Well Tag ID and Condition none

Well Installation Date N/A

	From Log	*From GPS*[1]
Ground Surface Elevation	0	N/A
Latitude	N/A	N/A
Longitude	N/A	N/A
Northing (State Plane)	0	N/A
Easting (State Plane)	0	N/A

Cross streets (if applicable): N/A

GPS Instrument used:[1] 0

Datum: 0

Accuracy/Precision: 0

Well Construction Details

Type of well (Circle one) *Flush Mount* *Stick up* *Multilevel Well*[2]

Well lock\security type: no lock no 2" gripper

Elevation (top of inner casing): N/A

Surface protective casing material: steel

Surface Casing diameter: 4" *inches*

Well Diameter and Casing Material: 2" PVC *inches*

Well Depth (as installed): N *ftbgs*

Well Depth (as measured): 17.09 *fttoc*

Well Stick Up Height (as measured): *ftbgs*

Screened interval: N/A *ft*

Open hole interval: N/A *ft*

Depth to water: 4.25 *ftbtoc*

Date: 8-25-05 *Time:* 1120

[1] Picatinny wells will not be resurveyed by GPS unless existing Northing and Easting coordinates from prior survey efforts are not available or other conditions warrant resurveying.

[2] If multilevel well please see attached worksheet.

N/A= Not Applicable

- - - = Not Available

Well Headspace Readings

PID/FID Reading taken inside top of casing (if applicable): N/A *ppm*

Multi-gas/CGI meter Readings taken (if applicable):[3]

LEL:	N/A	*% LEL*
O_2:	N/A	*40% Vol.*
CO:	N/A	*ppm*
H_2S:	N/A	*ppm*

Do readings indicate unsafe conditions exist? *Yes* *No*

Well Condition

Is the concrete pad in good condition?	*Yes*	*No*
Is the well surface casing in good condition?	*Yes*	*No*
Is the surface casing vertical?	*Yes*	*No*
Is there an internal well seal?	*Yes*	*No*
Has there been physical damage to the well?	*Yes*	*No*
Does sounding depth match completed depth?	*Yes*	*No*
Is measuring point marked?	*Yes*	*No*
Is the well clearly labeled?	*Yes*	*No*
Flush mount - Is it secure from runoff?	*Yes*	*No*

Overall well condition (circle one) *Good* *Fair* *Poor*

Other Comments:

Recommendations

Well needs to be redeveloped	*Yes*	*No*
Well needs to be re-surveyed.	*Yes*	*No*
Well needs to be repaired.	*Yes*	*No*
Well needs to be replaced.	*Yes*	*No*
Well needs to be properly abandoned.	*Yes*	*No*
No action necessary.	*Yes*	*No*

Comments

Signatures

Inspected by: D. Thompson

Date of Inspection: 8-25-08

Reviewed by: Ronald L Traver (Print)

(Sign)

[3] Multi-gas readings are considered not applicable for Picatinny wells.

N/A= Not Applicable

- - - = Not Available

Sovereign Consulting Inc

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SURFACE WATER SAMPLE COLLECTION LOG

Sample ID: D-SW-5

Date: 9-8-15

Time: 1410

Weather: Sunny

Project Name & No.: Pictny Rcs571

Sampling Personnel: MC/AS

DESCRIPTION OF SAMPLE LOCATION:

Name of Water Body: Green Brook

Depth of Water: 1.5

Velocity: Slow

Other Comments:

Substrate Description: Steep Slope

Sample Location and Depth (ft): 0-0.5'

Description of Nearby Vegetation: brush

FIELD PARAMETERS:

Sample Method: Bailer

Sample Description:

Temp. (°F): 26.89

pH: 6.57

D.O.: 6.99

SC: .357

Salinity: 0.07

CONTAINER DESCRIPTION:

Bottle Type	Analysis	Preservative	
VOA	VOC	HCl	
VOA	VOC(DUP)	HCl	DUP D090515 SW
VOA	VOC(MS)	HCl	
VOA	VOC(MSD)	HCl	

TOTAL: 8

Sovereign Consulting Inc

Page ___ of ___

SURFACE WATER SAMPLE COLLECTION LOG

Sample ID: E-35 SW-1
Date: 6-8-15
Time: 1415
Weather: Sun 95

Project Name & No.: Pictory
Sampling Personnel: MC

DESCRIPTION OF SAMPLE LOCATION:

Name of Water Body: Green Brook
Depth of Water: 1.5
Velocity: Slow
Other Comments:
Substrate Description: Steep Slope
Sample Location and Depth (ft): 0-0.5'

Description of Nearby Vegetation: Brush

FIELD PARAMETERS:

Sample Method: Bailer
Sample Description: Clear

Temp. (°F): 26.0
pH: 6.56
D.O.: 14.56
SC: 1.401
Salinity: 0.02

CONTAINER DESCRIPTION:

Bottle Type	Analysis	Preservative
VOA	VOC	HCl

TOTAL: 2

Sovereign Consulting Inc

SURFACE WATER SAMPLE COLLECTION LOG

B-38-SW-4

Sample ID ~~E-38-SW/004~~

Date 9-8-15

Time 1400

Weather Sun 9r

Project Name & No. Rigitny

Sampling Personnel M

DESCRIPTION OF SAMPLE LOCATION:

Name of Water Body Green Brook

Depth of Water 1.5

Velocity S/CR

Other Comments

Substrate Description Steep slope

Sample Location and Depth (ft) 0-0.5'

Description of Nearby Vegetation Brush

FIELD PARAMETERS:

Sample Method: Bailer

Sample Description:

Temp. (°F) 24.45

pH 5.98

D.O. 13.15

SC 1420

Salinity 0.02

CONTAINER DESCRIPTION:

Bottle Type	Analysis	Preservative
VOA	VOC	HCl

TOTAL: 2

Sovereign Consulting Inc

Passive Diffusion Bag (PDB) Sampling Form

Site: Picatinny Arsenal

Location: Area E

Well ID: EMW 12-D

Well Type: [X] Monitoring [ ] Other:

Well Finish: [X] Stick-up [ ] Flush Mount

Measuring Pt: [X] Top of Casing [ ] Other:

Total Depth as Constructed (ft bgs): 29.91 Screened Interval:

Well Casing: Diameter: 2 Material: PVC

Well Screen: Diameter: 2

Deployment

Date and Time of Deployment	Date 8-25-15	Time 10:05	
Weather Conditions	Sunny 80's		
Depth to GW @ Time of Deployment	7.67		
Type of PDB Used:	[X] Lab Filled (Modified Trip Blank must be taken at time of deployment)		
	[ ] Field Filled (Modified Equipment Blank of fill water must be taken at time of deployment. If PDB isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)		
Dimensions of PDB:	Length (in.) 18"	Diameter (in.) 2"	
Position of PDB Weight:	[ ] Attached to bottom of PDB and suspended in well		
	[ ] Attached to bottom of deployment line and suspended in well		
	[X] Attached to bottom of deployment lin and resting on bottom of well (preferred)		

Retrieval (note: mimimum deployment period is 2 weeks)

Date and Time of Retrieval	Date 9-8-15	Time 13:25	
Total # of Days Deployed	11		
Weather Conditions	90's Sunny		
Depth to GW at Time of Retrieval	8.39		
Downhole Field Parameters Upon Retrieval:			
Temp 18.75	ORP 273	Water Quality Meters:	U-52
pH 4.62	DO 200	Serial #:	ENGEJDC4

Notes/Observations: DUP, MS, MSD collected

Field Sampling Tech: D. Thompson Company: Sovereign

Sovereign Consulting Inc

Passive Diffusion Bag (PDB) Sampling Form

Site: Picatinny Arsenal
Location: Area E
Well ID: E70-4
Well Type: [x] Monitoring [ ] Other:
Well Finish: [x] Stick-up [ ] Flush Mount
Measuring Pt: [x] Top of Casing [ ] Other:
Total Depth as Constructed (ft bgs): 29.02 Screened Interval: 23.79 - 28.79
Well Casing: Diameter: 2 Material: PVC
Well Screen: Diameter: 2

Deployment

Date and Time of Deployment Date 8-25-15 Time 10:45
Weather Conditions Sunny 80's
Depth to GW @ Time of Deployment 6.04
Type of PDB Used: [x] **Lab Filled (Modified Trip Blank must be taken at time of deployment)**
[ ] Field Filled (Modified Equipment Blank of fill water must be taken at time of deployment. If PDB isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)
Dimensions of PDB: Length (in.) 18" Diameter (in.) 2"
Position of PDB Weight:
[ ] Attached to bottom of PDB and suspended in well
[ ] Attached to bottom of deployment line and suspended in well
[x] Attached to bottom of deployment lin and resting on bottom of well (preferred)

Retrieval (note: mimimum deployment period is 2 weeks)

Date and Time of Retrieval Date 9-8-15 Time 13.40
Total # of Days Deployed 11
Weather Conditions 90's Sunny
Depth to GW at Time of Retrieval 6.89
Downhole Field Parameters Upon Retrieval:
Temp 18.63 ORP 265 Water Quality Meters: U-52
pH 4.82 DO 1.22 Serial #: ENGESDCY

Notes/Observations: DUP # 2 Area E

Field Sampling Tech: D. Thompson Company: Sovereign

Sovereign Consulting Inc

Passive Diffusion Bag (PDB) Sampling Form

Site: Picatinny Arsenal

Location: Area E

Well ID: E80-3

Well Type: [x] Monitoring [ ] Other:

Well Finish: [x] Stick-up [ ] Flush Mount

Measuring Pt: [x] Top of Casing [ ] Other:

Total Depth as Constructed (ft bgs): 54.05 Screened Interval: 44.85 - 54.85

Well Casing: Diameter: 2 Material: PVC

Well Screen: Diameter: 2

Deployment

Date and Time of Deployment Date 8-26-15 Time 1150

Weather Conditions Sunny 80's

Depth to GW @ Time of Deployment 7.67

Type of PDB Used:

[x] **Lab Filled (Modified Trip Blank must be taken at time of deployment)**

[ ] Field Filled (Modified Equipment Blank of fill water must be taken at time of deployment. If PDB isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)

Dimensions of PDB: Length (in.) 18" Diameter (in.) 2"

Position of PDB Weight:

[ ] Attached to bottom of PDB and suspended in well

[ ] Attached to bottom of deployment line and suspended in well

[x] Attached to bottom of deployment lin and resting on bottom of well (preferred)

Retrieval (note: mimimum deployment period is 2 weeks)

Date and Time of Retrieval Date 9-8-15 Time 15.25

Total # of Days Deployed 10

Weather Conditions 90's Sunny

Depth to GW at Time of Retrieval 7.70

Downhole Field Parameters Upon Retrieval:

Temp 19.55 ORP 298 Water Quality Meters: U-52

pH 4.45 DO 3.39 Serial #: ENGESDC4

Notes/Observations:

Field Sampling Tech: D. Thompson Company: Sovereign

Sovereign Consulting Inc

Passive Diffusion Bag (PDB) Sampling Form

Site: Picatinny Arsenal
Location: Area E
Well ID: EMW-02
Well Type: [x] Monitoring [ ] Other:
Well Finish: [x] Stick-up [ ] Flush Mount
Measuring Pt: [x] Top of Casing [ ] Other:
Total Depth as Constructed (ft bgs): 22.15 Screened Interval: N/A
Well Casing: Diameter: 2 Material: PVC
Well Screen: Diameter: 2

Deployment

Date and Time of Deployment	Date 8-25-15	Time 1135	
Weather Conditions	Sunny 80's		
Depth to GW @ Time of Deployment	6.74		
Type of PDB Used:	[x] **Lab Filled (Modified Trip Blank must be taken at time of deployment)**		
	[ ] Field Filled (Modified Equipment Blank of fill water must be taken at time of deployment. If PDB isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)		
Dimensions of PDB:	Length (in.) 18"	Diameter (in.) 2"	
Position of PDB Weight:	[ ] Attached to bottom of PDB and suspended in well		
	[ ] Attached to bottom of deployment line and suspended in well		
	[x] Attached to bottom of deployment lin and resting on bottom of well (preferred)		

Retrieval (note: mimimum deployment period is 2 weeks)

Date and Time of Retrieval	Date 9-8-15	Time 1510	
Total # of Days Deployed	11		
Weather Conditions	90's Sunny		
Depth to GW at Time of Retrieval	7.11		
Downhole Field Parameters Upon Retrieval:			
Temp 24.39	ORP 416	Water Quality Meters: U-52	
pH 3.64	DO 5.45	Serial #: ENGESDC4	

Notes/Observations:

Field Sampling Tech: D. Thompson Company: Sovereign

Sovereign Consulting Inc

Passive Diffusion Bag (PDB) Sampling Form

Site: Picatinny Arsenal
Location: Area F
Well ID: E3WG-1
Well Type: [x] Monitoring [ ] Other:
Well Finish: [x] Stick-up [ ] Flush Mount
Measuring Pt: [x] Top of Casing [ ] Other:
Total Depth as Constructed (ft bgs): 29.45 Screened Interval: 21.95 - 26.95
Well Casing: Diameter: 2 Material: PVC
Well Screen: Diameter: 2

Deployment

Date and Time of Deployment Date 8-25-15 Time 1110
Weather Conditions Sunny 80's
Depth to GW @ Time of Deployment 4.22
Type of PDB Used:
[x] **Lab Filled (Modified Trip Blank must be taken at time of deployment)**
[ ] Field Filled (Modified Equipment Blank of fill water must be taken at time of deployment. If PDB isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)

Dimensions of PDB: Length (in.) 18" Diameter (in.) 2"

Position of PDB Weight:
[ ] Attached to bottom of PDB and suspended in well
[ ] Attached to bottom of deployment line and suspended in well
[x] Attached to bottom of deployment lin and resting on bottom of well (preferred)

Retrieval (note: mimimum deployment period is 2 weeks)

Date and Time of Retrieval Date 9-8-15 Time 1400
Total # of Days Deployed 11
Weather Conditions 90's Sunny
Depth to GW at Time of Retrieval 5.17
Downhole Field Parameters Upon Retrieval:
Temp 20.87 ORP 271 Water Quality Meters: U-52
pH 4.85 DO 4.09 Serial #: ENGESDC4

Notes/Observations:

Field Sampling Tech: D. Thompson Company: Sovereign

Sovereign Consulting Inc

Passive Diffusion Bag (PDB) Sampling Form

Site: Picatinny Arsenal

Location: Area E

Well ID: E11-WG-2

Well Type: [x] Monitoring [ ] Other:

Well Finish: [x] Stick-up [ ] Flush Mount

Measuring Pt: [x] Top of Casing [ ] Other:

Total Depth as Constructed (ft bgs): 17.17 Screened Interval: 11.81 - 16.81

Well Casing: Diameter: 2 Material: PVC

Well Screen: Diameter: 2

Deployment

Date and Time of Deployment Date 8-25-15 Time 10:25

Weather Conditions Sunny 80's

Depth to GW @ Time of Deployment 5.62

Type of PDB Used: [x] **Lab Filled (Modified Trip Blank must be taken at time of deployment)**

[ ] Field Filled (Modified Equipment Blank of fill water must be taken at time of deployment. If PDB isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)

Dimensions of PDB: Length (in.) 18" Diameter (in.) 2"

Position of PDB Weight:

[ ] Attached to bottom of PDB and suspended in well

[ ] Attached to bottom of deployment line and suspended in well

[x] Attached to bottom of deployment lin and resting on bottom of well (preferred)

Retrieval (note: mimimum deployment period is 2 weeks)

Date and Time of Retrieval Date 9-8-15 Time 14:15

Total # of Days Deployed 11

Weather Conditions 90's Sunny

Depth to GW at Time of Retrieval 6.27

Downhole Field Parameters Upon Retrieval:

Temp 16.77 ORP 374 Water Quality Meters: U-52

pH 4.20 DO 1.46 Serial #: ENGESDC4

Notes/Observations:

Field Sampling Tech: D. Thompson Company: Sovereign

Sovereign Consulting Inc

Passive Diffusion Bag (PDB) Sampling Form

Site: Picatinny Arsenal

Location: Area E

Well ID: EMW12-L

Well Type: [x] Monitoring [ ] Other:

Well Finish: [x] Stick-up [ ] Flush Mount

Measuring Pt: [x] Top of Casing [ ] Other:

Total Depth as Constructed (ft bgs): 24.61 Screened Interval: 19.85 - 24.85

Well Casing: Diameter: 2 Material: PVC

Well Screen: Diameter: 2

Deployment

Date and Time of Deployment	Date 8-25-15 Time 10:11
Weather Conditions	Sunny 80's
Depth to GW @ Time of Deployment	6.01
Type of PDB Used:	[x] **Lab Filled (Modified Trip Blank must be taken at time of deployment)** [ ] Field Filled (Modified Equipment Blank of fill water must be taken at time of deployment. If PDB isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)
Dimensions of PDB:	Length (in.) 18" Diameter (in.) 2"
Position of PDB Weight:	[ ] Attached to bottom of PDB and suspended in well [ ] Attached to bottom of deployment line and suspended in well [x] Attached to bottom of deployment lin and resting on bottom of well (preferred)

Retrieval (note: mimimum deployment period is 2 weeks)

Date and Time of Retrieval	Date 9-8-15 Time 13.20
Total # of Days Deployed	11
Weather Conditions	90's Sunny
Depth to GW at Time of Retrieval	6.69
Downhole Field Parameters Upon Retrieval:	
Temp 21.35 ORP 247	Water Quality Meters: U-52
pH 5.05 DO 0.72	Serial #: ENGESDC4

Notes/Observations:

Field Sampling Tech: D. Thompson Company: Sovereign

Sovereign Consulting Inc

Passive Diffusion Bag (PDB) Sampling Form

Site: Picatinny Arsenal
Location: Area E
Well ID: EMW12-H
Well Type: ☑ Monitoring ☐ Other:
Well Finish: ☑ Stick-up ☐ Flush Mount
Measuring Pt: ☑ Top of Casing ☐ Other:
Total Depth as Constructed (ft bgs): 15.62 Screened Interval: 10.39 - 15.39
Well Casing: Diameter: 2 Material:
Well Screen: Diameter: 2

Deployment

Date and Time of Deployment	Date 8-25-15	Time 1123	
Weather Conditions	Sunny 80's		
Depth to GW @ Time of Deployment	5.87		
Type of PDB Used:	☒ Lab Filled (Modified Trip Blank must be taken at time of deployment)		
	☐ Field Filled (Modified Equipment Blank of fill water must be taken at time of deployment. If PDB isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)		
Dimensions of PDB:	Length (in.) 18"	Diameter (in.) 2"	
Position of PDB Weight:	☐ Attached to bottom of PDB and suspended in well		
	☐ Attached to bottom of deployment line and suspended in well		
	☒ Attached to bottom of deployment lin and resting on bottom of well (preferred)		

Retrieval (note: mimimum deployment period is 2 weeks)

Date and Time of Retrieval	Date 9-8-15	Time 1310	
Total # of Days Deployed	11		
Weather Conditions	90's Sunny		
Depth to GW at Time of Retrieval	7.32		
Downhole Field Parameters Upon Retrieval:			
Temp 23.41	ORP 232	Water Quality Meters: U-52	
pH 5.28	DO 5.33	Serial #: ENGESDC4	

Notes/Observations:

Field Sampling Tech: D. Thompson Company: Sovereign

Sovereign Consulting Inc

Passive Diffusion Bag (PDB) Sampling Form

Site: Picatinny Arsenal

Location: Area E

Well ID: EMW-01

Well Type: [x] Monitoring [ ] Other:

Well Finish: [ ] Stick-up [x] Flush Mount

Measuring Pt: [x] Top of Casing [ ] Other:

Total Depth as Constructed (ft bgs): 19.26 Screened Interval:

Well Casing: Diameter: 2 Material: PVC

Well Screen: Diameter: 2

Deployment

Date and Time of Deployment Date 8-25-15 Time 1135

Weather Conditions Sunny 80's

Depth to GW @ Time of Deployment 6.99

Type of PDB Used:

[x] **Lab Filled (Modified Trip Blank must be taken at time of deployment)**

[ ] Field Filled (Modified Equipment Blank of fill water must be taken at time of deployment. If PDB isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)

Dimensions of PDB: Length (in.) 18" Diameter (in.) 2"

Position of PDB Weight:

[ ] Attached to bottom of PDB and suspended in well

[ ] Attached to bottom of deployment line and suspended in well

[x] Attached to bottom of deployment lin and resting on bottom of well (preferred)

Retrieval (note: mimimum deployment period is 2 weeks)

Date and Time of Retrieval Date 9-8-15 Time 14:35

Total # of Days Deployed 11

Weather Conditions 90's Sunny

Depth to GW at Time of Retrieval 7.16

Downhole Field Parameters Upon Retrieval:

Temp 19.74 ORP 235 Water Quality Meters: U-52

pH 5.45 DO 2.64 Serial #: ENGESDC4

Notes/Observations:

Field Sampling Tech: D. Thompson Company: Sovereign

Sovereign Consulting Inc

Passive Diffusion Bag (PDB) Sampling Form

Site: Picatinny Arsenal

Location: Area E

Well ID: E95-3

Well Type: ☒ Monitoring ☐ Other:

Well Finish: ☐ Stick-up ☒ Flush Mount

Measuring Pt: ☒ Top of Casing ☐ Other:

Total Depth as Constructed (ft bgs): 19.94 Screened Interval: 9.7 – 19.7

Well Casing: Diameter: 2 Material: PVC

Well Screen: Diameter: 2

Deployment

Date and Time of Deployment	Date 8-25-15	Time 1140	
Weather Conditions	Sunny 80's		
Depth to GW @ Time of Deployment	6.72		
Type of PDB Used:	☒ **Lab Filled (Modified Trip Blank must be taken at time of deployment)**		
	☐ Field Filled (Modified Equipment Blank of fill water must be taken at time of deployment. If PDB isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)		
Dimensions of PDB:	Length (in.) 18"	Diameter (in.) 2"	
Position of PDB Weight:	☐ Attached to bottom of PDB and suspended in well		
	☐ Attached to bottom of deployment line and suspended in well		
	☒ Attached to bottom of deployment lin and resting on bottom of well (preferred)		

Retrieval (note: mimimum deployment period is 2 weeks)

Date and Time of Retrieval	Date 9-8-15	Time 14.25	
Total # of Days Deployed	11		
Weather Conditions	90's Sunny		
Depth to GW at Time of Retrieval	7.11		
Downhole Field Parameters Upon Retrieval:			
Temp 20.49	ORP 310	Water Quality Meters: U-52	
pH 4.52	DO 6.88	Serial #: ENGESDC4	

Notes/Observations:

Field Sampling Tech: D. Thompson Company: Sovereign

Sovereign Consulting Inc

Passive Diffusion Bag (PDB) Sampling Form

Site: Picatinny Arsenal

Location: Area E

Well ID: E82-1

Well Type: [x] Monitoring [ ] Other:

Well Finish: [x] Stick-up [ ] Flush Mount

Measuring Pt: [x] Top of Casing [ ] Other:

Total Depth as Constructed (ft bgs): 18.10 Screened Interval: 14.5 - 19.5

Well Casing: Diameter: 2 Material: PVC

Well Screen: Diameter: 2

Deployment

Date and Time of Deployment	Date 8-25-15	Time 845	
Weather Conditions	Sunny 80's		
Depth to GW @ Time of Deployment	5.27		
Type of PDB Used:	[x] **Lab Filled (Modified Trip Blank must be taken at time of deployment)**		
	[ ] Field Filled (Modified Equipment Blank of fill water must be taken at time of deployment. If PDB isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)		
Dimensions of PDB:	Length (in.) 18"	Diameter (in.) 2"	
Position of PDB Weight:	[ ] Attached to bottom of PDB and suspended in well		
	[ ] Attached to bottom of deployment line and suspended in well		
	[x] Attached to bottom of deployment lin and resting on bottom of well (preferred)		

Retrieval (note: mimimum deployment period is 2 weeks)

Date and Time of Retrieval	Date 9-8-15	Time 15:15	
Total # of Days Deployed	11		
Weather Conditions	90's Sunny		
Depth to GW at Time of Retrieval	5.58		
Downhole Field Parameters Upon Retrieval:			
Temp 20.50	ORP 290	Water Quality Meters: U-52	
pH 4.75	DO 8.56	Serial #: ENGESDC4	

Notes/Observations:

Field Sampling Tech: D. Thompson Company: Sovereign

Sovereign Consulting Inc

Passive Diffusion Bag (PDB) Sampling Form

Site: Picatinny Arsenal
Location: Area E
Well ID: E82-2
Well Type: ☒ Monitoring ☐ Other:
Well Finish: ☒ Stick-up ☐ Flush Mount
Measuring Pt: ☒ Top of Casing ☐ Other:
Total Depth as Constructed (ft bgs): 29.68 Screened Interval:
Well Casing: Diameter: 2 Material: PVC
Well Screen: Diameter: 2

Deployment

Date and Time of Deployment	Date 8-25-15	Time 848	
Weather Conditions	Sonny 80's		
Depth to GW @ Time of Deployment	533		
Type of PDB Used:	☒ **Lab Filled (Modified Trip Blank must be taken at time of deployment)**		
	☐ Field Filled (Modified Equipment Blank of fill water must be taken at time of deployment. If PDB isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)		
Dimensions of PDB:	Length (in.) 18"	Diameter (in.) 2"	
Position of PDB Weight:	☐ Attached to bottom of PDB and suspended in well		
	☐ Attached to bottom of deployment line and suspended in well		
	☒ Attached to bottom of deployment lin and resting on bottom of well (preferred)		

Retrieval (note: mimimum deployment period is 2 weeks)

Date and Time of Retrieval	Date 9-8-15	Time 15:20	
Total # of Days Deployed	11		
Weather Conditions	90's Sonny		
Depth to GW at Time of Retrieval	5.55		
Downhole Field Parameters Upon Retrieval:			
Temp 19.73	ORP 281	Water Quality Meters: U-52	
pH 4.76	DO 0.70	Serial #: ENGESDC4	

Notes/Observations: no 2" CAP

Field Sampling Tech: D. Thompson Company: Sovereign

Sovereign Consulting Inc

Passive Diffusion Bag (PDB) Sampling Form

Site: Picatinny Arsenal

Location: Area E

Well ID: E70-2

Well Type: [x] Monitoring [ ] Other:

Well Finish: [x] Stick-up [ ] Flush Mount

Measuring Pt: [x] Top of Casing [ ] Other:

Total Depth as Constructed (ft bgs): 41.42 Screened Interval:

Well Casing: Diameter: 2 Material: PVC

Well Screen: Diameter: 2

Deployment

Date and Time of Deployment Date 8-25-15 Time 1050

Weather Conditions Sunny 80's

Depth to GW @ Time of Deployment 4.25

Type of PDB Used:

[x] **Lab Filled (Modified Trip Blank must be taken at time of deployment)**

[ ] Field Filled (Modified Equipment Blank of fill water must be taken at time of deployment. If PDB isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)

Dimensions of PDB: Length (in.) 18" Diameter (in.) 2"

Position of PDB Weight:

[ ] Attached to bottom of PDB and suspended in well

[ ] Attached to bottom of deployment line and suspended in well

[x] Attached to bottom of deployment lin and resting on bottom of well (preferred)

Retrieval (note: mimimum deployment period is 2 weeks)

Date and Time of Retrieval Date 9-8-15 Time 1330

Total # of Days Deployed 11

Weather Conditions 90's Sunny

Depth to GW at Time of Retrieval 5.07

Downhole Field Parameters Upon Retrieval:

Temp 21.59 ORP 260 Water Quality Meters: U-52

pH 5.05 DO 4.93 Serial #: ENGESDC4

Notes/Observations:

Field Sampling Tech: D. Thompson Company: Sovereign

Sovereign Consulting Inc

Passive Diffusion Bag (PDB) Sampling Form

Site: Picatinny Arsenal

Location: Area E

Well ID: E70-3

Well Type: ☑ Monitoring ☐ Other:

Well Finish: ☑ Stick-up ☐ Flush Mount

Measuring Pt: ☑ Top of Casing ☐ Other:

Total Depth as Constructed (ft bgs): 16.86 Screened Interval:

Well Casing: Diameter: 2 Material: PVC

Well Screen: Diameter: 2

Deployment

Date and Time of Deployment Date 8-25-15 Time 10:52

Weather Conditions Sunny 80's

Depth to GW @ Time of Deployment 4.70

Type of PDB Used:

☒ **Lab Filled (Modified Trip Blank must be taken at time of deployment)**

☐ Field Filled (Modified Equipment Blank of fill water must be taken at time of deployment. If PDB isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)

Dimensions of PDB: Length (in.) 18" Diameter (in.) 2"

Position of PDB Weight:

☐ Attached to bottom of PDB and suspended in well

☐ Attached to bottom of deployment line and suspended in well

☒ Attached to bottom of deployment lin and resting on bottom of well (preferred)

Retrieval (note: mimimum deployment period is 2 weeks)

Date and Time of Retrieval Date 9-8-15 Time 1335

Total # of Days Deployed 11

Weather Conditions 90's Sunny

Depth to GW at Time of Retrieval 5.56

Downhole Field Parameters Upon Retrieval:

Temp 21.34 ORP 276 Water Quality Meters: U-52

pH 4.80 DO 6.78 Serial #: ENGESDCY

Notes/Observations:

Field Sampling Tech: D. Thompson Company: Sovereign

Sovereign Consulting Inc

Passive Diffusion Bag (PDB) Sampling Form

Site: Picatinny Arsenal

Location: Area E

Well ID: EMW-11

Well Type: [x] Monitoring [ ] Other:

Well Finish: [x] Stick-up [ ] Flush Mount

Measuring Pt: [x] Top of Casing [ ] Other:

Total Depth as Constructed (ft bgs): 19.65 Screened Interval:

Well Casing: Diameter: 4 Material: PVC

Well Screen: Diameter: 4

Deployment

Date and Time of Deployment Date 8-25-15 Time 1137

Weather Conditions Sunny 80's

Depth to GW @ Time of Deployment 7.35

Type of PDB Used:

[x] **Lab Filled (Modified Trip Blank must be taken at time of deployment)**

[ ] Field Filled (Modified Equipment Blank of fill water must be taken at time of deployment. If PDB isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)

Dimensions of PDB: Length (in.) 18" Diameter (in.) 2"

Position of PDB Weight:

[ ] Attached to bottom of PDB and suspended in well

[ ] Attached to bottom of deployment line and suspended in well

[x] Attached to bottom of deployment lin and resting on bottom of well (preferred)

Retrieval (note: mimimum deployment period is 2 weeks)

Date and Time of Retrieval Date 9-8-15 Time 14.30

Total # of Days Deployed 11

Weather Conditions 90's Sunny

Depth to GW at Time of Retrieval 7.87

Downhole Field Parameters Upon Retrieval:

Temp 20.53 ORP 315 Water Quality Meters: U-52

pH 4.21 DO 4.55 Serial #: ENGESDC4

Notes/Observations:

Field Sampling Tech: D. Thompson Company: Sovereign

Sovereign Consulting Inc

HydraSleeve Field Form

Site: Picatinny Arsenal
Location: Area E
Well ID: E11W6-3
Well Type: [x] Monitoring [ ] Other:
Well Finish: [x] Stick-up [ ] Flush Mount
Measuring Pt: [x] Top of Casing [ ] Other:
Total Depth as Constructed (ft bgs): N/A Screened Interval:
Well Casing: Diameter: 2 Material: PVC
Well Screen: Diameter: 2

Deployment

Date and Time of Deployment: 9-11-15 1200
Weather Conditions: Sunny 80's
Depth to GW @ Time of Deployment: 5.85
Total Well Depth at Time of Deployment: 26.11
Dimensions of HydraSleeve: Length (in.) 36 Diameter (in.) 1.75
Deployment Method/Position of Weight:
[x] Bottom Anchor: Weight attached to bottom of HydraSleeve. Weight rests on well bottom
[ ] Top-Down: Weight attached to bottom of HydraSleeve. Weight suspended in well.
[ ] Top-Down: Weight attached to top of HydraSleeve. Weight suspended in well.
Deployment Depth (Top of HydraSleeve)(ft bgs):

Retrieval

Date and Time of Retrieval: Date: 9-14-15 Time: 1040
Total # of Days Deployed: 3
Weather Conditions: Sunny 80's
Retrieval Method:
[x] Continuous Pull (preferred)
[ ] Short Strokes
Depth to GW at Time of Retrieval (measured before retrieval): 6.02
Total Well Depth at Time of Retrieval (measured before retrieval): 26.11
Downhole Firld Parameters Upon Retrieval:

Temp:	16.55	ORP:	110	Cond:	.011
pH:	8.08	DO:	2.02	Turb:	17.0

Turbidity of GW Sample (dispensed from HydraSleeve):
Turbidity: 17.0 Meter Type: U-52 Serial #: ENGEJDCY

Notes/Observations:

Field Sampling Tech: D. Thompson Company: Sovereign

Sovereign Consulting Inc

Passive Diffusion Bag (PDB) Sampling Form

Site: Picatinny Arsenal

Location: Area E

Well ID: E11WG-1

Well Type: ☑ Monitoring ☐ Other:

Well Finish: ☑ Stick-up ☐ Flush Mount

Measuring Pt: ☑ Top of Casing ☐ Other:

Total Depth as Constructed (ft bgs): 27.23 Screened Interval:

Well Casing: Diameter: 2 Material: PVC

Well Screen: Diameter: 2

Deployment

Date and Time of Deployment Date 8-25-15 Time 1020

Weather Conditions Sunny 80's

Depth to GW @ Time of Deployment 4.80

Type of PDB Used:

☒ **Lab Filled (Modified Trip Blank must be taken at time of deployment)**

☐ Field Filled (Modified Equipment Blank of fill water must be taken at time of deployment. If PDB isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)

Dimensions of PDB: Length (in.) 18" Diameter (in.) 2"

Position of PDB Weight:

☐ Attached to bottom of PDB and suspended in well

☐ Attached to bottom of deployment line and suspended in well

☒ Attached to bottom of deployment lin and resting on bottom of well (preferred)

Retrieval (note: mimimum deployment period is 2 weeks)

Date and Time of Retrieval Date 9-8-15 Time 14:20

Total # of Days Deployed 11

Weather Conditions 90's Sunny

Depth to GW at Time of Retrieval 5.42

Downhole Field Parameters Upon Retrieval:

Temp 17.77 ORP 310 Water Quality Meters: U-52

pH 4.06 DO 7.41 Serial #: ENGESDC4

Notes/Observations:

Field Sampling Tech: D. Thompson Company: Sovereign

Sovereign Consulting Inc

Passive Diffusion Bag (PDB) Sampling Form

Site: Picatinny Arsenal

Location: Area E

Well ID: E3WG-2

Well Type: ☑ Monitoring ☐ Other:

Well Finish: ☑ Stick-up ☐ Flush Mount

Measuring Pt: ☑ Top of Casing ☐ Other:

Total Depth as Constructed (ft bgs): 27.63 Screened Interval:

Well Casing: Diameter: 2 Material: PVC

Well Screen: Diameter: 2

Deployment

Date and Time of Deployment Date 8-25-15 Time 1115

Weather Conditions Sunny 80's

Depth to GW @ Time of Deployment 4.30

Type of PDB Used:

☒ **Lab Filled (Modified Trip Blank must be taken at time of deployment)**

☐ Field Filled (Modified Equipment Blank of fill water must be taken at time of deployment. If PDB isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)

Dimensions of PDB: Length (in.) 18" Diameter (in.) 2"

Position of PDB Weight:

☐ Attached to bottom of PDB and suspended in well

☐ Attached to bottom of deployment line and suspended in well

☒ Attached to bottom of deployment lin and resting on bottom of well (preferred)

Retrieval (note: mimimum deployment period is 2 weeks)

Date and Time of Retrieval Date 9-8-15 Time 14:05

Total # of Days Deployed 11

Weather Conditions 90's Sunny

Depth to GW at Time of Retrieval 5.17

Downhole Field Parameters Upon Retrieval:

Temp 16.92 ORP 292 Water Quality Meters: U-52

pH 4.15 DO 3.87 Serial #: ENGESDC4

Notes/Observations:

Field Sampling Tech: D. Thompson Company: Sovereign

Sovereign Consulting Inc

Passive Diffusion Bag (PDB) Sampling Form

Site: Picatinny Arsenal
Location: Area E
Well ID: EWG3-3
Well Type: [x] Monitoring [ ] Other:
Well Finish: [x] Stick-up [ ] Flush Mount
Measuring Pt: [x] Top of Casing [ ] Other:
Total Depth as Constructed (ft bgs): 17.09 Screened Interval:
Well Casing: Diameter: 2 Material: PVC
Well Screen: Diameter: 2

Deployment

Date and Time of Deployment	Date 8-25-15	Time 1120	
Weather Conditions	Sonny 80's		
Depth to GW @ Time of Deployment	4.25		
Type of PDB Used:	[x] **Lab Filled (Modified Trip Blank must be taken at time of deployment)**		
	[ ] Field Filled (Modified Equipment Blank of fill water must be taken at time of deployment. If PDB isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)		
Dimensions of PDB:	Length (in.) 18"	Diameter (in.) 2"	
Position of PDB Weight:	[ ] Attached to bottom of PDB and suspended in well		
	[ ] Attached to bottom of deployment line and suspended in well		
	[x] Attached to bottom of deployment lin and resting on bottom of well (preferred)		

Retrieval (note: mimimum deployment period is 2 weeks)

Date and Time of Retrieval	Date 9-8-15	Time 14:10	
Total # of Days Deployed	11		
Weather Conditions	90's Sonny		
Depth to GW at Time of Retrieval	5.11		
Downhole Field Parameters Upon Retrieval:			
Temp 18.20	ORP 291	Water Quality Meters: U-52	
pH 4.35	DO 2.52	Serial #: ENGEJDC4	

Notes/Observations:

Field Sampling Tech: D. Thompson Company: Sovereign

EPA Region 2 Superfund Well Assessment Checklist

Owner Well ID:

Facility Information

Site Name:	Picatinny Arsenal — *Area:* 6 — *Site:* 308
Site Address:	North East Office Garrison Bldg. 319, Picatinny, NJ 07806
Site County:	Morris County
Site State:	New Jersey
EPA Site ID Number:	NJ3210020704
Site Owner:	US Department of Army Picatinny Arsenal
EPA Project Manager:	Mr. William Roach, USEPA Region II

Well Location Information

State Well Permit No:	—
Well Tag ID and Condition	MW-126
Well Installation Date	—

	From Log	*From GPS*[1]
Ground Surface Elevation	—	N/A
Latitude	N/A	N/A
Longitude	N/A	N/A
Northing (State Plane)	764660	N/A
Easting (State Plane)	471523	N/A

Cross streets (if applicable):	—
GPS Instrument used:[1]	—
Datum:	—
Accuracy/Precision:	—

Well Construction Details

Type of well (Circle one) *Flush Mount* *Stick up* *Multilevel Well*[2]

Well lock\security type:	lock	
Elevation (top of inner casing):	—	
Surface protective casing material:	Steel	
Surface Casing diameter:	6"	*inches*
Well Diameter and Casing Material:	Steel	*inches*
Well Depth (as installed):	20.5	*ftbgs*
Well Depth (as measured):	20.68	*fttoc*
Well Stick Up Height (as measured):	—	*ftbgs*
Screened interval:	—	*ft*
Open hole interval:	—	*ft*
Depth to water:	2.85	*ftbtoc*

Date: 10/23/15 *Time:* 9:45

[1] Picatinny wells will not be resurveyed by GPS unless existing Northing and Easting coordinates from prior survey efforts are not available or other conditions warrant resurveying.

[2] If multilevel well please see attached worksheet.

N/A= Not Applicable

- - - = Not Available

Well Headspace Readings

PID/FID Reading taken inside top of casing (if applicable): --- *ppm*

Multi-gas/CGI meter Readings taken (if applicable):[3]

LEL:	N/A	*% LEL*
O_2:	N/A	*40% Vol.*
CO:	N/A	*ppm*
H_2S:	N/A	*ppm*

Do readings indicate unsafe conditions exist? *Yes* *No*

Well Condition

Is the concrete pad in good condition?	*Yes*	*No*
Is the well surface casing in good condition?	*Yes*	*No*
Is the surface casing vertical?	*Yes*	*No*
Is there an internal well seal?	*Yes*	*No*
Has there been physical damage to the well?	*Yes*	*No*
Does sounding depth match completed depth?	*Yes*	*No*
Is measuring point marked?	*Yes*	*No*
Is the well clearly labeled?	*Yes*	*No*
Flush mount - Is it secure from runoff?	*Yes*	*No*

Overall well condition (circle one) *Good* *Fair* *Poor*

Other Comments:

Recommendations

Well needs to be redeveloped	*Yes*	*No*
Well needs to be re-surveyed.	*Yes*	*No*
Well needs to be repaired.	*Yes*	*No*
Well needs to be replaced.	*Yes*	*No*
Well needs to be properly abandoned.	*Yes*	*No*
No action necessary.	*Yes*	*No*

Comments

Signatures

Inspected by: John Vragel

Date of Inspection: 10/23/15

Reviewed by: Ronald L. Traver (Print)

(Sign)

[3] Multi-gas readings are considered not applicable for Picatinny wells.

N/A= Not Applicable

--- = Not Available

EPA Region 2 Superfund Well Assessment Checklist

Owner Well ID:

Facility Information

Site Name:	Picatinny Arsenal — *Area:* E — *Site:* 28
Site Address:	North East Office Garrison Bldg. 319, Picatinny, NJ 07806
Site County:	Morris County
Site State:	New Jersey
EPA Site ID Number:	NJ3210020704
Site Owner:	US Department of Army Picatinny Arsenal
EPA Project Manager:	Mr. William Roach, USEPA Region II

Well Location Information

State Well Permit No: 25-25432

Well Tag ID and Condition 12-E

Well Installation Date

	From Log	*From GPS*[1]
Ground Surface Elevation	—	N/A
Latitude	N/A	N/A
Longitude	N/A	N/A
Northing (State Plane)	784695.4729	N/A
Easting (State Plane)	471555.8797	N/A

Cross streets (if applicable): —

GPS Instrument used:[1] —

Datum: —

Accuracy/Precision: —

Well Construction Details

Type of well (Circle one) *Flush Mount* *Stick up* *Multilevel Well*[2]

Well lock\security type:	lock	
Elevation (top of inner casing):	—	
Surface protective casing material:	steel	
Surface Casing diameter:	12"	*inches*
Well Diameter and Casing Material:	4" pvc	*inches*
Well Depth (as installed):	36	*ftbgs*
Well Depth (as measured):	35.56	*fttoc*
Well Stick Up Height (as measured):	—	*ftbgs*
Screened interval:	5	*ft*
Open hole interval:	—	*ft*
Depth to water:	6.00	*ftbtoc*

Date: 10/23/15 *Time:* 930

[1] Picatinny wells will not be resurveyed by GPS unless existing Northing and Easting coordinates from prior survey efforts are not available or other conditions warrant resurveying.

[2] If multilevel well please see attached worksheet.

N/A= Not Applicable

- - - = Not Available

Well Headspace Readings

PID/FID Reading taken inside top of casing (if applicable): _____ ppm

Multi-gas/CGI meter Readings taken (if applicable):[3]

LEL:	N/A	% LEL
O_2:	N/A	40% Vol.
CO:	N/A	ppm
H_2S:	N/A	ppm

Do readings indicate unsafe conditions exist? Yes No

Well Condition

Is the concrete pad in good condition?	Yes	No
Is the well surface casing in good condition?	Yes	No
Is the surface casing vertical?	Yes	No
Is there an internal well seal?	Yes	No
Has there been physical damage to the well?	Yes	No
Does sounding depth match completed depth?	Yes	No
Is measuring point marked?	Yes	No
Is the well clearly labeled?	Yes	No
Flush mount - Is it secure from runoff?	Yes	No

Overall well condition (circle one) Good Fair Poor

Other Comments: _____

Recommendations

Well needs to be redeveloped	Yes	No
Well needs to be re-surveyed.	Yes	No
Well needs to be repaired.	Yes	No
Well needs to be replaced.	Yes	No
Well needs to be properly abandoned.	Yes	No
No action necessary.	Yes	No

Comments

Signatures

Inspected by: John Vrabel

Date of Inspection: 10/23/15

Reviewed by: Ronald L. Traver (Print)

(Sign)

[3] Multi-gas readings are considered not applicable for Picatinny wells.

N/A= Not Applicable

- - - = Not Available

EPA Region 2 Superfund Well Assessment Checklist

Owner Well ID:

Facility Information

Site Name:	Picatinny Arsenal — *Area:* E — *Site:* 208
Site Address:	North East Office Garrison Bldg. 319, Picatinny, NJ 07806
Site County:	Morris County
Site State:	New Jersey
EPA Site ID Number:	NJ3210020704
Site Owner:	US Department of Army Picatinny Arsenal
EPA Project Manager:	Mr. William Roach, USEPA Region II

Well Location Information

State Well Permit No: 25-33703

Well Tag ID and Condition 70-1A

Well Installation Date

	From Log	*From GPS*[1]
Ground Surface Elevation	—	N/A
Latitude	N/A	N/A
Longitude	N/A	N/A
Northing (State Plane)	765215.2193	N/A
Easting (State Plane)	471342.1823	N/A

Cross streets (if applicable): —

GPS Instrument used:[1] —

Datum: —

Accuracy/Precision: —

Well Construction Details

Type of well (Circle one) *Flush Mount* *Stick up* *Multilevel Well*[2]

Well lock\security type: lock

Elevation (top of inner casing): —

Surface protective casing material: Steel

Surface Casing diameter: 6" *inches*

Well Diameter and Casing Material: 2" PVC *inches*

Well Depth (as installed): 151 *ftbgs*

Well Depth (as measured): 16.09 *fttoc*

Well Stick Up Height (as measured): — *ftbgs*

Screened interval: 5 *ft*

Open hole interval: — *ft*

Depth to water: 4.60 *ftbtoc*

Date: 10/23/15 *Time:* 8:15

[1] Picatinny wells will not be resurveyed by GPS unless existing Northing and Easting coordinates from prior survey efforts are not available or other conditions warrant resurveying.

[2] If multilevel well please see attached worksheet.

N/A= Not Applicable

- - - = Not Available

Well Headspace Readings

PID/FID Reading taken inside top of casing (if applicable): ---- *ppm*

Multi-gas/CGI meter Readings taken (if applicable):[3]

LEL:	N/A	*% LEL*
O_2:	N/A	*40% Vol.*
CO:	N/A	*ppm*
H_2S:	N/A	*ppm*

Do readings indicate unsafe conditions exist? *Yes* *No*

Well Condition

Is the concrete pad in good condition?	*Yes*	*No*
Is the well surface casing in good condition?	*Yes*	*No*
Is the surface casing vertical?	*Yes*	*No*
Is there an internal well seal?	*Yes*	*No*
Has there been physical damage to the well?	*Yes*	*No*
Does sounding depth match completed depth?	*Yes*	*No*
Is measuring point marked?	*Yes*	*No*
Is the well clearly labeled?	*Yes*	*No*
Flush mount - Is it secure from runoff?	*Yes*	*No*

Overall well condition (circle one) *Good* *Fair* *Poor*

Other Comments:

Recommendations

Well needs to be redeveloped	*Yes*	*No*
Well needs to be re-surveyed.	*Yes*	*No*
Well needs to be repaired.	*Yes*	*No*
Well needs to be replaced.	*Yes*	*No*
Well needs to be properly abandoned.	*Yes*	*No*
No action necessary.	*Yes*	*No*

Comments

Signatures

Inspected by: John Urabel

Date of Inspection: 10/23/15

Reviewed by: Ronald L. Traver (Print)

(Sign)

[3] Multi-gas readings are considered not applicable for Picatinny wells.

N/A= Not Applicable

- - - = Not Available

EPA Region 2 Superfund Well Assessment Checklist

Owner Well ID:

Facility Information

Site Name:	Picatinny Arsenal *Area:* E *Site:* 208
Site Address:	North East Office Garrison Bldg. 319, Picatinny, NJ 07806
Site County:	Morris County
Site State:	New Jersey
EPA Site ID Number:	NJ3210020704
Site Owner:	US Department of Army Picatinny Arsenal
EPA Project Manager:	Mr. William Roach, USEPA Region II

Well Location Information

State Well Permit No:	25-33572
Well Tag ID and Condition	70-1
Well Installation Date	—

	From Log	*From GPS*[1]
Ground Surface Elevation	—	N/A
Latitude	N/A	N/A
Longitude	N/A	N/A
Northing (State Plane)	765040.00	N/A
Easting (State Plane)	497127.65	N/A

Cross streets (if applicable):	—
GPS Instrument used:[1]	—
Datum:	—
Accuracy/Precision:	—

Well Construction Details

Type of well (Circle one) *Flush Mount* (Stick up) *Multilevel Well*[2]

Well lock\security type:	lock	
Elevation (top of inner casing):	—	
Surface protective casing material:	steel	
Surface Casing diameter:	6"	*inches*
Well Diameter and Casing Material:	2" PVC	*inches*
Well Depth (as installed):	68	*ftbgs*
Well Depth (as measured):	62.89	*fttoc*
Well Stick Up Height (as measured):	—	*ftbgs*
Screened interval:	10	*ft*
Open hole interval:	—	*ft*
Depth to water:	4.25	*ftbtoc*

Date: 10/23/15 *Time:* 8:00

[1] Picatinny wells will not be resurveyed by GPS unless existing Northing and Easting coordinates from prior survey efforts are not available or other conditions warrant resurveying.

[2] If multilevel well please see attached worksheet.

N/A= Not Applicable

- - - = Not Available

Well Headspace Readings

PID/FID Reading taken inside top of casing (if applicable): ---- *ppm*

Multi-gas/CGI meter Readings taken (if applicable):[3]

LEL:	N/A	*% LEL*
O_2:	N/A	*40% Vol.*
CO:	N/A	*ppm*
H_2S:	N/A	*ppm*

Do readings indicate unsafe conditions exist? *Yes* *No*

Well Condition

Is the concrete pad in good condition?	*Yes*	*No*
Is the well surface casing in good condition?	*Yes*	*No*
Is the surface casing vertical?	*Yes*	*No*
Is there an internal well seal?	*Yes*	*No*
Has there been physical damage to the well?	*Yes*	*No*
Does sounding depth match completed depth?	*Yes*	*No*
Is measuring point marked?	*Yes*	*No*
Is the well clearly labeled?	*Yes*	*No*
Flush mount - Is it secure from runoff?	*Yes*	*No*

Overall well condition (circle one) *Good* *Fair* *Poor*

Other Comments:

Recommendations

Well needs to be redeveloped	*Yes*	*No*
Well needs to be re-surveyed.	*Yes*	*No*
Well needs to be repaired.	*Yes*	*No*
Well needs to be replaced.	*Yes*	*No*
Well needs to be properly abandoned.	*Yes*	*No*
No action necessary.	*Yes*	*No*

Comments

Signatures

Inspected by: Isha Vrabel

Date of Inspection: 10/23/15

Reviewed by: Ronald L. Traver (Print)

(Sign)

[3] Multi-gas readings are considered not applicable for Picatinny wells.

N/A= Not Applicable

- - - = Not Available

EPA Region 2 Superfund Well Assessment Checklist

Owner Well ID:

Facility Information

Site Name:	Picatinny Arsenal — *Area:* E — *Site:* 38
Site Address:	North East Office Garrison Bldg. 319, Picatinny, NJ 07806
Site County:	Morris County
Site State:	New Jersey
EPA Site ID Number:	NJ3210020704
Site Owner:	US Department of Army Picatinny Arsenal
EPA Project Manager:	Mr. William Roach, USEPA Region II

Well Location Information

State Well Permit No:	25-29351
Well Tag ID and Condition	~~[illegible]~~ 95-2
Well Installation Date	

	From Log	*From GPS*[1]
Ground Surface Elevation	—	N/A
Latitude	N/A	N/A
Longitude	N/A	N/A
Northing (State Plane)	765907.6561	N/A
Easting (State Plane)	471403.8101	N/A

Cross streets (if applicable):	Fourth + First
GPS Instrument used:[1]	–
Datum:	–
Accuracy/Precision:	–

Well Construction Details

Type of well (Circle one) *Flush Mount* *Stick up* *Multilevel Well*[2]

Well lock\security type:	No lock	
Elevation (top of inner casing):	–	
Surface protective casing material:	Steel	
Surface Casing diameter:	10.5	*inches*
Well Diameter and Casing Material:	4" PVC	*inches*
Well Depth (as installed):	200	*ftbgs*
Well Depth (as measured):	201.7	*fttoc*
Well Stick Up Height (as measured):	–	*ftbgs*
Screened interval:	10	*ft*
Open hole interval:	–	*ft*
Depth to water:	9.33	*ftbtoc*

Date: 10/23/15 *Time:* 11:00

[1] Picatinny wells will not be resurveyed by GPS unless existing Northing and Easting coordinates from prior survey efforts are not available or other conditions warrant resurveying.

[2] If multilevel well please see attached worksheet.

N/A= Not Applicable

- - - = Not Available

Well Headspace Readings

PID/FID Reading taken inside top of casing (if applicable): — *ppm*

Multi-gas/CGI meter Readings taken (if applicable):[3]

LEL:	N/A	*% LEL*
O_2:	N/A	*40% Vol.*
CO:	N/A	*ppm*
H_2S:	N/A	*ppm*

Do readings indicate unsafe conditions exist? *Yes* *No*

Well Condition

Is the concrete pad in good condition?	*Yes*	*No*
Is the well surface casing in good condition?	*Yes*	*No*
Is the surface casing vertical?	*Yes*	*No*
Is there an internal well seal?	*Yes*	*No*
Has there been physical damage to the well?	*Yes*	*No*
Does sounding depth match completed depth?	*Yes*	*No*
Is measuring point marked?	*Yes*	*No*
Is the well clearly labeled?	*Yes*	*No*
Flush mount - Is it secure from runoff?	*Yes*	*No*

Overall well condition (circle one) *Good* *Fair* *Poor*

Other Comments:

Recommendations

Well needs to be redeveloped	*Yes*	*No*
Well needs to be re-surveyed.	*Yes*	*No*
Well needs to be repaired.	*Yes*	*No*
Well needs to be replaced.	*Yes*	*No*
Well needs to be properly abandoned.	*Yes*	*No*
No action necessary.	*Yes*	*No*

Comments

Signatures

Inspected by: John Vrabel

Date of Inspection: 10/23/15

Reviewed by: Ronald L. Traver (Print)

(Sign)

[3] Multi-gas readings are considered not applicable for Picatinny wells.

N/A= Not Applicable

- - - = Not Available

EPA Region 2 Superfund Well Assessment Checklist

Owner Well ID:

Facility Information

Site Name:	Picatinny Arsenal	*Area:* E	*Site:* 38
Site Address:	North East Office Garrison Bldg. 319, Picatinny, NJ 07806		
Site County:	Morris County		
Site State:	New Jersey		
EPA Site ID Number:	NJ3210020704		
Site Owner:	US Department of Army Picatinny Arsenal		
EPA Project Manager:	Mr. William Roach, USEPA Region II		

Well Location Information

State Well Permit No: 22-29274

Well Tag ID and Condition 95-5

Well Installation Date

	From Log	*From GPS*[1]
Ground Surface Elevation		N/A
Latitude	N/A	N/A
Longitude	N/A	N/A
Northing (State Plane)	471475.3744	N/A
Easting (State Plane)	765901.8966	N/A

Cross streets (if applicable): first + Forth

GPS Instrument used:[1] —

Datum: —

Accuracy/Precision: —

Well Construction Details

Type of well (Circle one) *Flush Mount* *Stick up* *Multilevel Well*[2]

Well lock\security type: Lock

Elevation (top of inner casing):

Surface protective casing material: steel

Surface Casing diameter: 12.5" *inches*

Well Diameter and Casing Material: 2" pvc *inches*

Well Depth (as installed): 21 *ftbgs*

Well Depth (as measured): 20.65 *fttoc*

Well Stick Up Height (as measured): *ftbgs*

Screened interval: 5 *ft*

Open hole interval: *ft*

Depth to water: 5.20 *ftbtoc*

Date: 10/3/15 *Time:* 1330

[1] Picatinny wells will not be resurveyed by GPS unless existing Northing and Easting coordinates from prior survey efforts are not available or other conditions warrant resurveying.

[2] If multilevel well please see attached worksheet.

N/A= Not Applicable

- - - = Not Available

Well Headspace Readings

PID/FID Reading taken inside top of casing (if applicable): _____ *ppm*

Multi-gas/CGI meter Readings taken (if applicable):[3]

LEL:	N/A	*% LEL*
O_2:	N/A	*40% Vol.*
CO:	N/A	*ppm*
H_2S:	N/A	*ppm*

Do readings indicate unsafe conditions exist? *Yes* *No*

Well Condition

Is the concrete pad in good condition?	*Yes*	*No*
Is the well surface casing in good condition?	*Yes*	*No*
Is the surface casing vertical?	*Yes*	*No*
Is there an internal well seal?	*Yes*	*No*
Has there been physical damage to the well?	*Yes*	*No*
Does sounding depth match completed depth?	*Yes*	*No*
Is measuring point marked?	*Yes*	*No*
Is the well clearly labeled?	*Yes*	*No*
Flush mount - Is it secure from runoff?	*Yes*	*No*

Overall well condition (circle one) *Good* *Fair* *Poor*

Other Comments: broken well cover

Recommendations

Well needs to be redeveloped	*Yes*	*No*
Well needs to be re-surveyed.	*Yes*	*No*
Well needs to be repaired.	*Yes*	*No*
Well needs to be replaced.	*Yes*	*No*
Well needs to be properly abandoned.	*Yes*	*No*
No action necessary.	*Yes*	*No*

Comments

broken well cover

Signatures

Inspected by: John Vrabel

Date of Inspection: 10/13/15

Reviewed by: Ronald L. Traver (Print)

Ronald L. Traver (Sign)

[3]Multi-gas readings are considered not applicable for Picatinny wells.
N/A= Not Applicable
- - - = Not Available

A Region 2 Superfund Well Assessment Checklist

Owner Well ID:

on

	Picatinny Arsenal Area: E Site: 38
	North East Office Garrison Bldg. 319, Picatinny, NJ 07806
Site Co	Morris County
Site State:	New Jersey
EPA Site ID Number:	NJ3210020704
Site Owner:	US Department of Army Picatinny Arsenal
EPA Project Manager:	Mr. William Roach, USEPA Region II

Well Location Information

State Well Permit No:	2529850
Well Tag ID and Condition	GS-1
Well Installation Date	

	From Log	From GPS[1]
Ground Surface Elevation		N/A
Latitude	N/A	N/A
Longitude	N/A	N/A
Northing (State Plane)	471522.5453	N/A
Easting (State Plane)	765923.2697	N/A

Cross streets (if applicable):	first + forth
GPS Instrument used:[1]	—
Datum:	—
Accuracy/Precision:	—

Well Construction Details

Type of well (Circle one) Flush Mount Stick up Multilevel Well[2]

Well lock\security type:	lock	
Elevation (top of inner casing):		
Surface protective casing material:	steel	
Surface Casing diameter:	10.5"	inches
Well Diameter and Casing Material:	4" steel	inches
Well Depth (as installed):	120	ftbgs
Well Depth (as measured):	122.7	fttoc
Well Stick Up Height (as measured):		ftbgs
Screened interval:	20	ft
Open hole interval:		ft
Depth to water:	5.95	ftbtoc

Date: 11/13/15 Time: 13:40

[1] Picatinny wells will not be resurveyed by GPS unless existing Northing and Easting coordinates from prior survey efforts are not available or other conditions warrant resurveying.

[2] If multilevel well please see attached worksheet.

N/A= Not Applicable

- - - = Not Available

Well Headspace Readings

PID/FID Reading taken inside top of casing (if applicable): _____ *ppm*

Multi-gas/CGI meter Readings taken (if applicable):[3]

LEL:	N/A	*% LEL*
O_2:	N/A	*40% Vol.*
CO:	N/A	*ppm*
H_2S:	N/A	*ppm*

Do readings indicate unsafe conditions exist? *Yes* *No*

Well Condition

Is the concrete pad in good condition?	(Yes)	*No*
Is the well surface casing in good condition?	(Yes)	*No*
Is the surface casing vertical?	(Yes)	*No*
Is there an internal well seal?	(Yes)	*No*
Has there been physical damage to the well?	*Yes*	(No)
Does sounding depth match completed depth?	(Yes)	*No*
Is measuring point marked?	*Yes*	(No)
Is the well clearly labeled?	(Yes)	*No*
Flush mount - Is it secure from runoff?	(Yes)	*No*

Overall well condition (circle one) (Good) *Fair* *Poor*

Other Comments: _____

Recommendations

Well needs to be redeveloped	*Yes*	(No)
Well needs to be re-surveyed.	*Yes*	(No)
Well needs to be repaired.	*Yes*	(No)
Well needs to be replaced.	*Yes*	(No)
Well needs to be properly abandoned.	*Yes*	(No)
No action necessary.	(Yes)	*No*

Comments

Signatures

Inspected by: John Vrabel

Date of Inspection: 10/13/15

Reviewed by: Ronald L. Traver (Print)

(Sign)

[3]Multi-gas readings are considered not applicable for Picatinny wells.

N/A= Not Applicable

- - - = Not Available

EPA Region 2 Superfund Well Assessment Checklist

Owner Well ID:

Facility Information

Site Name:	Picatinny Arsenal	*Area:* C	*Site:* 44
Site Address:	North East Office Garrison Bldg. 319, Picatinny, NJ 07806		
Site County:	Morris County		
Site State:	New Jersey		
EPA Site ID Number:	NJ3210020704		
Site Owner:	US Department of Army Picatinny Arsenal		
EPA Project Manager:	Mr. William Roach, USEPA Region II		

Well Location Information

State Well Permit No: 25-29847

Well Tag ID and Condition 34-2

Well Installation Date

	From Log	From GPS[1]
Ground Surface Elevation		N/A
Latitude	N/A	N/A
Longitude	N/A	N/A
Northing (State Plane)	4725 [illegible].4461	N/A
Easting (State Plane)	765294.7278	N/A

Cross streets (if applicable): —

GPS Instrument used:[1] —

Datum: —

Accuracy/Precision: —

Well Construction Details

Type of well (Circle one) *Flush Mount* *Stick up* *Multilevel Well*[2]

Well lock\security type: Lock

Elevation (top of inner casing):

Surface protective casing material: Steel

Surface Casing diameter: 10.5" *inches*

Well Diameter and Casing Material: 4" Steel *inches*

Well Depth (as installed): 100 *ftbgs*

Well Depth (as measured): 100.45 *fttoc*

Well Stick Up Height (as measured): *ftbgs*

Screened interval: 10 *ft*

Open hole interval: *ft*

Depth to water: 6.33 *ftbtoc*

Date: 10/13/15 *Time:* 12:45

[1] Picatinny wells will not be resurveyed by GPS unless existing Northing and Easting coordinates from prior survey efforts are not available or other conditions warrant resurveying.

[2] If multilevel well please see attached worksheet.

N/A= Not Applicable

- - - = Not Available

Well Headspace Readings

PID/FID Reading taken inside top of casing (if applicable): — ppm

Multi-gas/CGI meter Readings taken (if applicable):[3]

LEL:	N/A	*% LEL*
O_2:	N/A	*40% Vol.*
CO:	N/A	*ppm*
H_2S:	N/A	*ppm*

Do readings indicate unsafe conditions exist? Yes (circled) No

Well Condition

Is the concrete pad in good condition?	Yes (circled)	No
Is the well surface casing in good condition?	Yes (circled)	No
Is the surface casing vertical?	Yes (circled)	No
Is there an internal well seal?	Yes (circled)	No
Has there been physical damage to the well?	Yes	No (circled)
Does sounding depth match completed depth?	Yes (circled)	No
Is measuring point marked?	Yes	No (circled)
Is the well clearly labeled?	Yes (circled)	No
Flush mount - Is it secure from runoff?	Yes (circled)	No

Overall well condition (circle one) Good (circled) Fair Poor

Other Comments:

Recommendations

Well needs to be redeveloped	Yes	No (circled)
Well needs to be re-surveyed.	Yes	No (circled)
Well needs to be repaired.	Yes	No (circled)
Well needs to be replaced.	Yes	No (circled)
Well needs to be properly abandoned.	Yes	No (circled)
No action necessary.	Yes (circled)	No

Comments

Signatures

Inspected by: John Vrabel

Date of Inspection: 10/13/15

Reviewed by: Ronald L. Traver (Print)

Ronald L. Traver (Sign)

[3] Multi-gas readings are considered not applicable for Picatinny wells.

N/A= Not Applicable

- - - = Not Available

EPA Region 2 Superfund Well Assessment Checklist

Owner Well ID:

Facility Information

Site Name:	Picatinny Arsenal — *Area:* E — *Site:* 44
Site Address:	North East Office Garrison Bldg. 319, Picatinny, NJ 07806
Site County:	Morris County
Site State:	New Jersey
EPA Site ID Number:	NJ3210020704
Site Owner:	US Department of Army Picatinny Arsenal
EPA Project Manager:	Mr. William Roach, USEPA Region II

Well Location Information

State Well Permit No: 25-29846

Well Tag ID and Condition 39-1

Well Installation Date

	From Log	From GPS[1]
Ground Surface Elevation		N/A
Latitude	N/A	N/A
Longitude	N/A	N/A
Northing (State Plane)	972486.1613	N/A
Easting (State Plane)	765279.5562	N/A

Cross streets (if applicable): —

GPS Instrument used:[1] —

Datum: —

Accuracy/Precision: —

Well Construction Details

Type of well (Circle one) *Flush Mount* *Stick up* *Multilevel Well*[2]

Well lock\security type: Lock

Elevation (top of inner casing):

Surface protective casing material: Steel

Surface Casing diameter: 10.5" *inches*

Well Diameter and Casing Material: Steel 4" *inches*

Well Depth (as installed): 205 *ftbgs*

Well Depth (as measured): 204.50 *fttoc*

Well Stick Up Height (as measured): *ftbgs*

Screened interval: 10 *ft*

Open hole interval: *ft*

Depth to water: 6.41 *ftbtoc*

Date: 10/13/15 *Time:* 12:50

[1] Picatinny wells will not be resurveyed by GPS unless existing Northing and Easting coordinates from prior survey efforts are not available or other conditions warrant resurveying.

[2] If multilevel well please see attached worksheet.

N/A= Not Applicable

- - - = Not Available

Well Headspace Readings

PID/FID Reading taken inside top of casing (if applicable): ---- *ppm*

Multi-gas/CGI meter Readings taken (if applicable):[3]

LEL:	N/A	*% LEL*
O_2:	N/A	*40% Vol.*
CO:	N/A	*ppm*
H_2S:	N/A	*ppm*

Do readings indicate unsafe conditions exist? *Yes* *No*

Well Condition

Is the concrete pad in good condition?	*Yes*	*No*
Is the well surface casing in good condition?	*Yes*	*No*
Is the surface casing vertical?	*Yes*	*No*
Is there an internal well seal?	*Yes*	*No*
Has there been physical damage to the well?	*Yes*	*No*
Does sounding depth match completed depth?	*Yes*	*No*
Is measuring point marked?	*Yes*	*No*
Is the well clearly labeled?	*Yes*	*No*
Flush mount - Is it secure from runoff?	*Yes*	*No*

Overall well condition (circle one) *Good* *Fair* *Poor*

Other Comments:

Recommendations

Well needs to be redeveloped	*Yes*	*No*
Well needs to be re-surveyed.	*Yes*	*No*
Well needs to be repaired.	*Yes*	*No*
Well needs to be replaced.	*Yes*	*No*
Well needs to be properly abandoned.	*Yes*	*No*
No action necessary.	*Yes*	*No*

Comments

Signatures

Inspected by: John Vrabel

Date of Inspection: 10/13/15

Reviewed by: Ronald L. Traver (Print)

(Sign)

[3] Multi-gas readings are considered not applicable for Picatinny wells.

N/A= Not Applicable

- - - = Not Available

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Bottle Order Control #:
Accutest Quote #:
Accutest Job #:

Client / Reporting Information

Company Name: EA. Science & Technology
Street Address: 6712 Brooklawn Prkway Suite 104
City State Zip: Syracuse, NY 13211
Project Contact: Frank DeSantis Jr
E-mail:
Phone #: 315 - 565 - 6554
Fax #:
Sampler(s) Name(s):
Phone #:

Project Information

Project Name: Picatinny Arsenal
Street: Rte. 15, Picatinny Arsenal
City:
Project#: RB577
Client PO#:
Project Manager:

Billing Information (If different from Report to)

Company Name:
Street Address:
City State Zip:
Attention: PO#:

Requested Analysis (see TEST CODE sheet): VOC by EPA 524.2

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB- Equipment Blank; RB- Rinse Blank; TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Bisulfate	VOC by EPA 524.2	LAB USE ONLY
	E-MW-02		9-8-15	1510	MC	GW	2	✓									X	
	D-SW-5		9-8-15	1440	MC	SW	2	✓									X	
	D-SW-5MS		9-8-15	1440	MC	SW	2	✓									X	
	D-SW-5MSD		9-8-15	1440	MC	SW	2	✓									X	
	B-38SW-1		9-8-15	1415	MC	SW	2	✓									X	
	B-38SW-4		9-8-15	1400	MC	SW	2	✓									X	
	NUP-DO-0815SW		9-8-15	00:00	/	SW	2	✓									X	
	Trip Blank		9-8-15			TB	2	X									X	
	Equipment Blank		9-8-15	1540	JU	FB	2	X									X	
	MW-H		9-8-15	1310		GW	2	2									X	
	WGM-1		9-8-15	1420			2	2									X	
	WGM-2		9-8-15	1415			2	2									X	

Turnaround Time (Business days)
- [x] Std. 10 Business Days
- [ ] Std. 5 Business Days (By Contract only)
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

Data Deliverable Information
- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] CT RCP
- [ ] MA MCP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary

Comments / Special Instructions

SHIP ALL SAMPLES TO MA LAB.

collected by: (SCI - Sovereign Consulting)

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	9/8/15 1800	1	2		2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # 602		

Intact [ ] Preserved where applicable [ ] On Ice [ ] Cooler Temp.
Not Intact [ ]

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

Accutest Laboratories of New England
495 Technology Center West, Building One
TEL. 508-481-6200 FAX: 508-481-7753
www.accutest.com

FED-EX Tracking #: | Bottle Order Control #:
Accutest Quote #: | Accutest Job #:

Client / Reporting Information

Company Name: EA. Science & Technology
Street Address: 6712 Brooklawn Prkway Suite 104
City State Zip: Syracuse, NY 13211
Project Contact: Frank DeSantis Jr | E-mail:
Phone #: 315 - 565 - 6554 | Fax #:
Sampler(s) Name(s): | Phone #:

Project Information

Project Name: Picatinny Arsenal
Street: Rte. 15, Picatinny Arsenal
City:
Project#: RB577
Client PO#:
Project Manager:

Billing Information (If different from Report to)

Company Name:
Street Address:
City State Zip:
Attention: PO#:

Requested Analysis (see TEST CODE sheet): VOC by EPA 8260

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB- Equipment Blank; RB- Rinse Blank; TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	Collection: MEOH/DI Vial #	Date	Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Bisulfate	VOC by EPA 8260	LAB USE ONLY
	E 80-3			1525	JU	GW	2	2									X	
	E 82-2			1520			2	2									X	
	E 82-1			1515			2	2									X	
	70-2			1330			2	2									X	
	70-3			1335			2	2									X	
	70-4			1340			2	2									X	
	D12-4			1320			2	2									X	
	DUP 1 Area E			0000			2	2									X	
	DUP 2 Area E			0000			2	2									X	
	D12-D			1325			2	2									X	
	D12-D MS			1325			2	2									X	
	D12-D MSD			1325			2	2									X	

Turnaround Time (Business days)
- [x] Std. 10 Business Days
- [ ] Std. 5 Business Days (By Contract only)
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Labfink

Approved By (Accutest PM): / Date:

Data Deliverable Information
- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] CT RCP
- [ ] MA MCP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary

Comments / Special Instructions

SHIP ALL SAMPLES TO MA LAB.

collected by: (SCI - Sovereign Consulting)

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	9/8/15 1800	1	2		2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # 602	[ ] Intact [ ] Not intact	Preserved where applicable [ ]

On Ice [ ] Cooler Temp.

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

Accutest Laboratories of New England
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TEL. 508-481-6200 FAX: 508-481-7753
www.accutest.com

FED-EX Tracking #: | Bottle Order Control #:
Accutest Quote #: | Accutest Job #:

Client / Reporting Information

Company Name: EA. Science & Technology
Street Address: 6712 Brooklawn Prkway Suite 104
City State Zip: Syracuse, NY 13211
Project Contact: Frank DeSantis Jr | E-mail:
Phone #: 315 - 565 - 6554 | Fax #:
Sampler(s) Name(s): | Phone #:

Project Information

Project Name: Picatinny Arsenal
Street: Rte. 15, Picatinny Arsenal
City:
Project#: RB577
Client PO#:
Project Manager:

Billing Information (If different from Report to)

Company Name:
Street Address:
City State Zip:
Attention: PO#:

Requested Analysis (see TEST CODE sheet): VOCs by EPA 8260

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB- Equipment Blank; RB- Rinse Blank; TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Bisulfate	VOCs by EPA 8260	LAB USE ONLY
	WG3-1		9/8/15	1400	JV	GW	2	2									X	
	WG3-2		9-8-15	1405	JV	|	2	2									X	
	WG3-3		9-8-15	1410	JV	|	2	2									X	
	95-3		9-8-15	1425	JV	|	2	2									X	
	MW-11		9-8-15	1430	JV	|	2	2									X	
	EMW-01		9-8-15	1435	JV	|	2	2									X	

Turnaround Time (Business days)
- [x] Std. 10 Business Days
- [ ] Std. 5 Business Days (By Contract only)
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

Data Deliverable Information
- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] CT RCP
- [ ] MA MCP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary

Comments / Special Instructions

SHIP ALL SAMPLES TO MA LAB.

collected by: (SCI - Sovereign Consulting)

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Date Time	Received By	Relinquished By	Date Time	Received By
1 Relinquished by Sampler:	9/8/15 1800	1	2		2
3 Relinquished by Sampler:		3	4		4
5 Relinquished by:		5	Custody Seal #		

Intact / Not intact | Preserved where applicable | On Ice | Cooler Temp.

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Appendix B

Analytical Data Reports

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New England ACCUTEST LABORATORIES

09/30/15

Technical Report for

EA Engineering

SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

RB577

Accutest Job Number: MC41544

Sampling Date: 09/14/15

Report to:

EA Engineering
6712 Brooklawn Parkway Suite 104
Syracuse, NY 13211
tlamond@eaest.com; hwilliams@eaest.com;
fdesantis@eaest.com
ATTN: Tara Lamond

Total number of pages in report: **172**

NELAP ACCREDITED TNI LABORATORY

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Reza Tand
Lab Director

Client Service contact: Frank DAgostino 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO MN (11546AA) NC (653) IL (002337) WI (399080220) DoD ELAP (L-A-B L2235)

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Test results relate only to samples analyzed.

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Accutest Laboratories

Sample Summary

EA Engineering

Job No: MC41544

SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Project No: RB577

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
MC41544-1	09/14/15	10:40	JVDT	09/17/15	AQ	Ground Water	W611-3
MC41544-2	09/14/15	15:30	JVDT	09/17/15	AQ	Field Blank Water	FIELD BLANK
MC41544-3	09/14/15	00:00	JVDT	09/17/15	AQ	Trip Blank Water	TRIP BLANK

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client:	EA Engineering	**Job No**	MC41544
Site:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ	**Report Date**	9/29/2015 4:11:11 PM

1 Sample(s), 1 Trip Blank(s) and 1 Field Blank(s) were collected on 09/14/2015 and were received at Accutest on 09/17/2015 properly preserved, at 2.4 Deg. C and intact. These Samples received an Accutest job number of MC41544. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260C

Matrix: AQ **Batch ID:** MSU1329

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- MC41493-27MS/MSD for cis-1,2-Dichloroethene, Trichloroethene are outside control limits due to high level in sample relative to spike amount.
- MC41544-1, -2, -3 for Chloromethane: Continuing Calibration outside of DOD acceptance criteria. Reporting Limit response verified by low-level standard.
- Continuing calibration check standard MSU1329-CC1316 for vinyl acetate, hexachlorobutadiene exceed 20% Difference (response biased high). Associated samples are non-detect for this compound
- Continuing calibration check standard MSU1329-CC1316 for chloromethane exceed 20% Difference. Compound response verified at Reporting Limit.
- Initial calibration verification standard MSU1317-ICV1316 for vinyl acetate exceed 20% Difference (response biased high). Associated samples are non-detect for these compounds.
- Sample(s) MC41493-27MS, MC41493-27MSD were used as the QC samples.
- MC41493-27MS/MSD for Styrene are outside DOD criteria but within in-house criteria.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety.The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(MC41544).

Summary of Hits

Job Number: MC41544
Account: EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Collected: 09/14/15

3

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
MC41544-1	**W611-3**					
Acetone		24.0	10	5.0	ug/l	SW846 8260C
1,1-Dichloroethane		1.0	1.0	0.50	ug/l	SW846 8260C
1,1-Dichloroethene		2.8	1.0	0.50	ug/l	SW846 8260C
MC41544-2	**FIELD BLANK**					
No hits reported in this sample.						
MC41544-3	**TRIP BLANK**					
No hits reported in this sample.						

New England ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID:	W611-3		
Lab Sample ID:	MC41544-1	**Date Sampled:**	09/14/15
Matrix:	AQ - Ground Water	**Date Received:**	09/17/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U32363.D	1	09/27/15	AD	n/a	n/a	MSU1329
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	24.0	10	5.0	ug/l	
71-43-2	Benzene	0.50 U	0.50	0.50	ug/l	
108-86-1	Bromobenzene	1.0 U	5.0	1.0	ug/l	
74-97-5	Bromochloromethane	0.50 U	5.0	0.50	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	ug/l	
74-83-9	Bromomethane	1.0 U	2.0	1.0	ug/l	
78-93-3	2-Butanone (MEK)	5.0 U	10	5.0	ug/l	
104-51-8	n-Butylbenzene	1.0 U	5.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	1.0 U	5.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	0.50 U	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	0.50 U	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	ug/l	
75-00-3	Chloroethane	0.50 U	2.0	0.50	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	ug/l	
74-87-3	Chloromethane [a]	1.0 U	2.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.0 U	5.0	1.0	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	1.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	1.0 U	2.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	1.0	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	2.8	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	2.0	0.50	ug/l	

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W611-3		
Lab Sample ID:	MC41544-1	**Date Sampled:**	09/14/15
Matrix:	AQ - Ground Water	**Date Received:**	09/17/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
142-28-9	1,3-Dichloropropane	1.0 U	5.0	1.0	ug/l	
594-20-7	2,2-Dichloropropane	2.0 U	5.0	2.0	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	5.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	5.0	1.0	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	ug/l	
74-88-4	Iodomethane	1.0 U	5.0	1.0	ug/l	
98-82-8	Isopropylbenzene	1.0 U	5.0	1.0	ug/l	
99-87-6	p-Isopropyltoluene	1.0 U	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	ug/l	
74-95-3	Methylene bromide	1.0 U	5.0	1.0	ug/l	
75-09-2	Methylene chloride	1.0 U	2.0	1.0	ug/l	
91-20-3	Naphthalene	2.0 U	5.0	2.0	ug/l	
103-65-1	n-Propylbenzene	1.0 U	5.0	1.0	ug/l	
100-42-5	Styrene	0.50 U	5.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	0.50	0.50	ug/l	
127-18-4	Tetrachloroethene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	2.0 U	5.0	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	5.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-01-6	Trichloroethene	0.50 U	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	1.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	5.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-05-4	Vinyl Acetate	2.0 U	5.0	2.0	ug/l	
75-01-4	Vinyl chloride	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	1.0 U	1.0	1.0	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		79-127%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W611-3		
Lab Sample ID:	MC41544-1	**Date Sampled:**	09/14/15
Matrix:	AQ - Ground Water	**Date Received:**	09/17/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	99%		80-116%
460-00-4	4-Bromofluorobenzene	90%		77-124%

(a) Continuing Calibration outside of DOD acceptance criteria. Reporting Limit response verified by low-level standard.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FIELD BLANK		
Lab Sample ID:	MC41544-2	**Date Sampled:**	09/14/15
Matrix:	AQ - Field Blank Water	**Date Received:**	09/17/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U32351.D	1	09/27/15	AD	n/a	n/a	MSU1329
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	5.0 U	10	5.0	ug/l	
71-43-2	Benzene	0.50 U	0.50	0.50	ug/l	
108-86-1	Bromobenzene	1.0 U	5.0	1.0	ug/l	
74-97-5	Bromochloromethane	0.50 U	5.0	0.50	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	ug/l	
74-83-9	Bromomethane	1.0 U	2.0	1.0	ug/l	
78-93-3	2-Butanone (MEK)	5.0 U	10	5.0	ug/l	
104-51-8	n-Butylbenzene	1.0 U	5.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	1.0 U	5.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	0.50 U	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	0.50 U	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	ug/l	
75-00-3	Chloroethane	0.50 U	2.0	0.50	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	ug/l	
74-87-3	Chloromethane [a]	1.0 U	2.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.0 U	5.0	1.0	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	1.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	1.0 U	2.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	0.50 U	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	2.0	0.50	ug/l	

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD BLANK		
Lab Sample ID:	MC41544-2	**Date Sampled:**	09/14/15
Matrix:	AQ - Field Blank Water	**Date Received:**	09/17/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
142-28-9	1,3-Dichloropropane	1.0 U	5.0	1.0	ug/l	
594-20-7	2,2-Dichloropropane	2.0 U	5.0	2.0	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	5.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	5.0	1.0	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	ug/l	
74-88-4	Iodomethane	1.0 U	5.0	1.0	ug/l	
98-82-8	Isopropylbenzene	1.0 U	5.0	1.0	ug/l	
99-87-6	p-Isopropyltoluene	1.0 U	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	ug/l	
74-95-3	Methylene bromide	1.0 U	5.0	1.0	ug/l	
75-09-2	Methylene chloride	1.0 U	2.0	1.0	ug/l	
91-20-3	Naphthalene	2.0 U	5.0	2.0	ug/l	
103-65-1	n-Propylbenzene	1.0 U	5.0	1.0	ug/l	
100-42-5	Styrene	0.50 U	5.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	0.50	0.50	ug/l	
127-18-4	Tetrachloroethene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	2.0 U	5.0	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	5.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-01-6	Trichloroethene	0.50 U	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	1.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	5.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-05-4	Vinyl Acetate	2.0 U	5.0	2.0	ug/l	
75-01-4	Vinyl chloride	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	1.0 U	1.0	1.0	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		79-127%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD BLANK		
Lab Sample ID:	MC41544-2	**Date Sampled:**	09/14/15
Matrix:	AQ - Field Blank Water	**Date Received:**	09/17/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	92%		80-116%
460-00-4	4-Bromofluorobenzene	94%		77-124%

(a) Continuing Calibration outside of DOD acceptance criteria. Reporting Limit response verified by low-level standard.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	MC41544-3	**Date Sampled:**	09/14/15
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/17/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U32350.D	1	09/27/15	AD	n/a	n/a	MSU1329
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	5.0 U	10	5.0	ug/l	
71-43-2	Benzene	0.50 U	0.50	0.50	ug/l	
108-86-1	Bromobenzene	1.0 U	5.0	1.0	ug/l	
74-97-5	Bromochloromethane	0.50 U	5.0	0.50	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	ug/l	
74-83-9	Bromomethane	1.0 U	2.0	1.0	ug/l	
78-93-3	2-Butanone (MEK)	5.0 U	10	5.0	ug/l	
104-51-8	n-Butylbenzene	1.0 U	5.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	1.0 U	5.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	0.50 U	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	0.50 U	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	ug/l	
75-00-3	Chloroethane	0.50 U	2.0	0.50	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	ug/l	
74-87-3	Chloromethane [a]	1.0 U	2.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.0 U	5.0	1.0	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	1.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	1.0 U	2.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	0.50 U	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	2.0	0.50	ug/l	

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	MC41544-3	**Date Sampled:**	09/14/15
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/17/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
142-28-9	1,3-Dichloropropane	1.0 U	5.0	1.0	ug/l	
594-20-7	2,2-Dichloropropane	2.0 U	5.0	2.0	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	5.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	5.0	1.0	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	ug/l	
74-88-4	Iodomethane	1.0 U	5.0	1.0	ug/l	
98-82-8	Isopropylbenzene	1.0 U	5.0	1.0	ug/l	
99-87-6	p-Isopropyltoluene	1.0 U	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	ug/l	
74-95-3	Methylene bromide	1.0 U	5.0	1.0	ug/l	
75-09-2	Methylene chloride	1.0 U	2.0	1.0	ug/l	
91-20-3	Naphthalene	2.0 U	5.0	2.0	ug/l	
103-65-1	n-Propylbenzene	1.0 U	5.0	1.0	ug/l	
100-42-5	Styrene	0.50 U	5.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	0.50	0.50	ug/l	
127-18-4	Tetrachloroethene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	2.0 U	5.0	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	5.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-01-6	Trichloroethene	0.50 U	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	1.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	5.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-05-4	Vinyl Acetate	2.0 U	5.0	2.0	ug/l	
75-01-4	Vinyl chloride	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	1.0 U	1.0	1.0	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		79-127%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	MC41544-3	**Date Sampled:**	09/14/15
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/17/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	94%		80-116%
460-00-4	4-Bromofluorobenzene	92%		77-124%

(a) Continuing Calibration outside of DOD acceptance criteria. Reporting Limit response verified by low-level standard.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

New England ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody
- QC Evaluation: DOD QSM5 Limits

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

Accutest Laboratories of New England
495 Technology Center West, Building One
TEL. 508-481-6200 FAX: 508-481-7753
www.accutest.com

PAGE 1 OF 1

FED-EX Tracking #:
Bottle Order Control #:
Accutest Quote #:
Accutest Job #: MC41544

Client / Reporting Information

Company Name: EA. Science & Technology
Street Address: 6712 Brooklawn Prkway Suite 104
City / State / Zip: Syracuse, NY 13211
Project Contact / E-mail: Frank DeSantis Jr
Phone # / Fax #: 315 - 565 - 6554
Sampler(s) Name(s) / Phone #:

Project Information

Project Name: Picatinny Arsenal
Street: Rte. 15, Picatinny Arsenal
City:
Project#: RB577
Client PO#:
Project Manager:

Billing Information (If different from Report to)

Company Name:
Street Address:
City / State / Zip:
Attention: PO#:

Requested Analysis (See TEST CODE sheet): Voc by EPA 8260B

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB- Equipment Blank; RB- Rinse Blank; TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Bacultate	Voc by EPA 8260B	LAB USE ONLY
-1	W611-3		9/14/15	1040	JV	GW	2	2									X	
-2	Field Blank			1530	DT	FB	2	2									X	
-3	Trip Blank		✓	—		TB	2	2									X	
																		253

2,400
3,300

Turnaround Time (Business days)
- [x] Std. 10 Business Days 15 Day
- [ ] Std. 5 Business Days (By Contract only)
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:
INITIAL ASESSMENT ~~NJ SE #L~~
LABEL VERIFICATION

Data Deliverable Information
- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [x] FULLT1 (Level 3+4)
- [ ] CT RCP
- [ ] MA MCP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary

Comments / Special Instructions

SHIP ALL SAMPLES TO MA LAB.

collected by: (SCI - Sovereign Consulting)

SEALS 611 & 612

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date/Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		9/14/15 1800	M Rutty	M Rutty	9-15-15 1600	9-15-15
2						
3	Relinquished by Sampler:	Date Time: 9-15-15 1725	Received By:	Relinquished By:	Date Time: 9-16-15 1700	Received By:
4						
5	Relinquished by:	Date Time: 9-17-15 0730	Received By: 2,4°C 2,2°	Custody Seal: Intact / Not intact	Preserved where applicable	On Ice: ✓ Cooler Temp. 3.4 5.6 2.5

MC41544: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: MC41544 **Client:** EA **Project:**

Date / Time Received: 9/17/2015 9:30:00 AM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #1: (2.4/2.4);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Thermometer ID:	G1;		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control _Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Accutest Laboratories
V:(508) 481-6200
495 Technology Center West, Bldg One
F: (508) 481-7753
Marlborough, MA 01752
www/accutest.com

MC41544: Chain of Custody
Page 2 of 2

Internal Sample Tracking Chronicle

EA Engineering

Job No: MC41544

SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Project No: RB577

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC41544-1 Collected: 14-SEP-15 10:40 By: JVDT W611-3			Received: 17-SEP-15 By: NT			
MC41544-1	SW846 8260C	27-SEP-15 21:07	AD			V8260STD
MC41544-2 Collected: 14-SEP-15 15:30 By: JVDT FIELD BLANK			Received: 17-SEP-15 By: NT			
MC41544-2	SW846 8260C	27-SEP-15 15:40	AD			V8260STD
MC41544-3 Collected: 14-SEP-15 00:00 By: JVDT TRIP BLANK			Received: 17-SEP-15 By: NT			
MC41544-3	SW846 8260C	27-SEP-15 15:13	AD			V8260STD

Accutest Internal Chain of Custody

Job Number: MC41544
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Received: 09/17/15

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC41544-1.1	VOC Ref #2	Andrew Delman	09/27/15 13:14	Retrieve from Storage
MC41544-1.1	Andrew Delman	GCMSU	09/27/15 13:14	Load on Instrument
MC41544-1.1	GCMSU	Cara Baker	09/28/15 08:44	Unload from Instrument
MC41544-1.1	Cara Baker	VOC Ref #2	09/28/15 08:44	Return to Storage
MC41544-2.1	VOC Ref #2	Andrew Delman	09/27/15 13:14	Retrieve from Storage
MC41544-2.1	Andrew Delman	GCMSU	09/27/15 13:14	Load on Instrument
MC41544-2.1	GCMSU	Cara Baker	09/28/15 08:44	Unload from Instrument
MC41544-2.1	Cara Baker	VOC Ref #2	09/28/15 08:44	Return to Storage
MC41544-2.2	VOC Ref #2	Jen Tran	09/29/15 13:31	Retrieve from Storage
MC41544-2.2	Jen Tran	GCMST	09/29/15 13:31	Load on Instrument
MC41544-3.1	VOC Ref #2	Andrew Delman	09/27/15 13:14	Retrieve from Storage
MC41544-3.1	Andrew Delman	GCMSU	09/27/15 13:14	Load on Instrument
MC41544-3.1	GCMSU	Cara Baker	09/28/15 08:44	Unload from Instrument
MC41544-3.1	Cara Baker	VOC Ref #2	09/28/15 08:44	Return to Storage

QC Evaluation: DOD QSM5 Limits

Job Number: MC41544
Account: EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Collected: 09/14/15

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MSU1329	SW846 8260C						
MSU1329-BS	67-64-1	Acetone	BSP	REC	74	%	39-160
MSU1329-BS	71-43-2	Benzene	BSP	REC	96	%	79-120
MSU1329-BS	108-86-1	Bromobenzene	BSP	REC	105	%	80-120
MSU1329-BS	74-97-5	Bromochloromethane	BSP	REC	99	%	78-123
MSU1329-BS	75-27-4	Bromodichloromethane	BSP	REC	108	%	79-125
MSU1329-BS	75-25-2	Bromoform	BSP	REC	112	%	66-130
MSU1329-BS	74-83-9	Bromomethane	BSP	REC	120	%	53-141
MSU1329-BS	78-93-3	2-Butanone (MEK)	BSP	REC	90	%	56-143
MSU1329-BS	104-51-8	n-Butylbenzene	BSP	REC	106	%	75-128
MSU1329-BS	135-98-8	sec-Butylbenzene	BSP	REC	109	%	77-126
MSU1329-BS	98-06-6	tert-Butylbenzene	BSP	REC	110	%	78-124
MSU1329-BS	75-15-0	Carbon disulfide	BSP	REC	81	%	64-133
MSU1329-BS	56-23-5	Carbon tetrachloride	BSP	REC	115	%	72-136
MSU1329-BS	108-90-7	Chlorobenzene	BSP	REC	104	%	82-118
MSU1329-BS	75-00-3	Chloroethane	BSP	REC	105	%	60-138
MSU1329-BS	67-66-3	Chloroform	BSP	REC	99	%	79-124
MSU1329-BS	74-87-3	Chloromethane	BSP	REC	56	%	50-139
MSU1329-BS	95-49-8	o-Chlorotoluene	BSP	REC	103	%	79-122
MSU1329-BS	106-43-4	p-Chlorotoluene	BSP	REC	102	%	78-122
MSU1329-BS	96-12-8	1,2-Dibromo-3-chloropropane	BSP	REC	108	%	62-128
MSU1329-BS	124-48-1	Dibromochloromethane	BSP	REC	115	%	74-126
MSU1329-BS	106-93-4	1,2-Dibromoethane	BSP	REC	113	%	77-121
MSU1329-BS	95-50-1	1,2-Dichlorobenzene	BSP	REC	116	%	80-119
MSU1329-BS	541-73-1	1,3-Dichlorobenzene	BSP	REC	104	%	80-119
MSU1329-BS	106-46-7	1,4-Dichlorobenzene	BSP	REC	105	%	79-118
MSU1329-BS	75-71-8	Dichlorodifluoromethane	BSP	REC	132	%	32-152
MSU1329-BS	75-34-3	1,1-Dichloroethane	BSP	REC	86	%	77-125
MSU1329-BS	107-06-2	1,2-Dichloroethane	BSP	REC	107	%	73-128
MSU1329-BS	75-35-4	1,1-Dichloroethene	BSP	REC	90	%	71-131
MSU1329-BS	156-59-2	cis-1,2-Dichloroethene	BSP	REC	100	%	78-123
MSU1329-BS	156-60-5	trans-1,2-Dichloroethene	BSP	REC	96	%	75-124
MSU1329-BS	78-87-5	1,2-Dichloropropane	BSP	REC	100	%	78-122
MSU1329-BS	142-28-9	1,3-Dichloropropane	BSP	REC	110	%	80-119
MSU1329-BS	594-20-7	2,2-Dichloropropane	BSP	REC	101	%	60-139
MSU1329-BS	563-58-6	1,1-Dichloropropene	BSP	REC	96	%	79-125
MSU1329-BS	10061-01-5	cis-1,3-Dichloropropene	BSP	REC	106	%	75-124
MSU1329-BS	10061-02-6	trans-1,3-Dichloropropene	BSP	REC	110	%	73-127
MSU1329-BS	100-41-4	Ethylbenzene	BSP	REC	107	%	79-121
MSU1329-BS	87-68-3	Hexachlorobutadiene	BSP	REC	130	%	66-134
MSU1329-BS	591-78-6	2-Hexanone	BSP	REC	100	%	57-139
MSU1329-BS	74-88-4	Iodomethane	BSP	REC	91	%	69-131
MSU1329-BS	98-82-8	Isopropylbenzene	BSP	REC	102	%	72-131

* Sample used for QC is not from job MC41544

QC Evaluation: DOD QSM5 Limits

Job Number: MC41544
Account: EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Collected: 09/14/15

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MSU1329-BS	99-87-6	p-Isopropyltoluene	BSP	REC	110	%	77-127
MSU1329-BS	1634-04-4	Methyl Tert Butyl Ether	BSP	REC	104	%	71-124
MSU1329-BS	108-10-1	4-Methyl-2-pentanone (MIBK)	BSP	REC	106	%	67-130
MSU1329-BS	74-95-3	Methylene bromide	BSP	REC	110	%	79-123
MSU1329-BS	75-09-2	Methylene chloride	BSP	REC	93	%	74-124
MSU1329-BS	91-20-3	Naphthalene	BSP	REC	103	%	61-128
MSU1329-BS	103-65-1	n-Propylbenzene	BSP	REC	99	%	76-126
MSU1329-BS	100-42-5	Styrene	BSP	REC	102	%	78-123
MSU1329-BS	630-20-6	1,1,1,2-Tetrachloroethane	BSP	REC	113	%	78-124
MSU1329-BS	79-34-5	1,1,2,2-Tetrachloroethane	BSP	REC	115	%	71-121
MSU1329-BS	127-18-4	Tetrachloroethene	BSP	REC	115	%	74-129
MSU1329-BS	108-88-3	Toluene	BSP	REC	105	%	80-121
MSU1329-BS	87-61-6	1,2,3-Trichlorobenzene	BSP	REC	118	%	69-129
MSU1329-BS	120-82-1	1,2,4-Trichlorobenzene	BSP	REC	115	%	69-130
MSU1329-BS	71-55-6	1,1,1-Trichloroethane	BSP	REC	106	%	74-131
MSU1329-BS	79-00-5	1,1,2-Trichloroethane	BSP	REC	111	%	80-119
MSU1329-BS	79-01-6	Trichloroethene	BSP	REC	99	%	79-123
MSU1329-BS	75-69-4	Trichlorofluoromethane	BSP	REC	110	%	65-141
MSU1329-BS	96-18-4	1,2,3-Trichloropropane	BSP	REC	102	%	73-122
MSU1329-BS	95-63-6	1,2,4-Trimethylbenzene	BSP	REC	104	%	76-124
MSU1329-BS	108-67-8	1,3,5-Trimethylbenzene	BSP	REC	111	%	75-124
MSU1329-BS	108-05-4	Vinyl Acetate	BSP	REC	121	%	54-146
MSU1329-BS	75-01-4	Vinyl chloride	BSP	REC	110	%	58-137
MSU1329-BS		m,p-Xylene	BSP	REC	106	%	80-121
MSU1329-BS	95-47-6	o-Xylene	BSP	REC	101	%	78-122
MSU1329-BS	1330-20-7	Xylene (total)	BSP	REC	105	%	79-121
MSU1329-BS	1868-53-7	Dibromofluoromethane	BSP	SURR	98	%	80-119
MSU1329-BS	2037-26-5	Toluene-D8	BSP	SURR	103	%	89-112
MSU1329-BS	460-00-4	4-Bromofluorobenzene	BSP	SURR	96	%	85-114
MC41493-27MS*	67-64-1	Acetone	MS	REC	78	%	39-160
MC41493-27MS*	71-43-2	Benzene	MS	REC	97	%	79-120
MC41493-27MS*	108-86-1	Bromobenzene	MS	REC	102	%	80-120
MC41493-27MS*	74-97-5	Bromochloromethane	MS	REC	102	%	78-123
MC41493-27MS*	75-27-4	Bromodichloromethane	MS	REC	105	%	79-125
MC41493-27MS*	75-25-2	Bromoform	MS	REC	91	%	66-130
MC41493-27MS*	74-83-9	Bromomethane	MS	REC	132	%	53-141
MC41493-27MS*	78-93-3	2-Butanone (MEK)	MS	REC	68	%	56-143
MC41493-27MS*	104-51-8	n-Butylbenzene	MS	REC	102	%	75-128
MC41493-27MS*	135-98-8	sec-Butylbenzene	MS	REC	106	%	77-126
MC41493-27MS*	98-06-6	tert-Butylbenzene	MS	REC	111	%	78-124
MC41493-27MS*	75-15-0	Carbon disulfide	MS	REC	75	%	64-133
MC41493-27MS*	56-23-5	Carbon tetrachloride	MS	REC	118	%	72-136
MC41493-27MS*	108-90-7	Chlorobenzene	MS	REC	102	%	82-118
MC41493-27MS*	75-00-3	Chloroethane	MS	REC	116	%	60-138
MC41493-27MS*	67-66-3	Chloroform	MS	REC	105	%	79-124

* Sample used for QC is not from job MC41544

QC Evaluation: DOD QSM5 Limits

Job Number: MC41544
Account: EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Collected: 09/14/15

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MC41493-27MS*	74-87-3	Chloromethane	MS	REC	83	%	50-139
MC41493-27MS*	95-49-8	o-Chlorotoluene	MS	REC	99	%	79-122
MC41493-27MS*	106-43-4	p-Chlorotoluene	MS	REC	99	%	78-122
MC41493-27MS*	96-12-8	1,2-Dibromo-3-chloropropane	MS	REC	101	%	62-128
MC41493-27MS*	124-48-1	Dibromochloromethane	MS	REC	100	%	74-126
MC41493-27MS*	106-93-4	1,2-Dibromoethane	MS	REC	105	%	77-121
MC41493-27MS*	95-50-1	1,2-Dichlorobenzene	MS	REC	115	%	80-119
MC41493-27MS*	541-73-1	1,3-Dichlorobenzene	MS	REC	102	%	80-119
MC41493-27MS*	106-46-7	1,4-Dichlorobenzene	MS	REC	102	%	79-118
MC41493-27MS*	75-71-8	Dichlorodifluoromethane	MS	REC	141	%	32-152
MC41493-27MS*	75-34-3	1,1-Dichloroethane	MS	REC	89	%	77-125
MC41493-27MS*	107-06-2	1,2-Dichloroethane	MS	REC	109	%	73-128
MC41493-27MS*	75-35-4	1,1-Dichloroethene	MS	REC	84	%	71-131
MC41493-27MS*	156-59-2	cis-1,2-Dichloroethene	MS	REC	-46 [a]	%	78-123
MC41493-27MS*	156-60-5	trans-1,2-Dichloroethene	MS	REC	95	%	75-124
MC41493-27MS*	78-87-5	1,2-Dichloropropane	MS	REC	98	%	78-122
MC41493-27MS*	142-28-9	1,3-Dichloropropane	MS	REC	100	%	80-119
MC41493-27MS*	594-20-7	2,2-Dichloropropane	MS	REC	103	%	60-139
MC41493-27MS*	563-58-6	1,1-Dichloropropene	MS	REC	95	%	79-125
MC41493-27MS*	10061-01-5	cis-1,3-Dichloropropene	MS	REC	94	%	75-124
MC41493-27MS*	10061-02-6	trans-1,3-Dichloropropene	MS	REC	94	%	73-127
MC41493-27MS*	100-41-4	Ethylbenzene	MS	REC	104	%	79-121
MC41493-27MS*	87-68-3	Hexachlorobutadiene	MS	REC	122	%	66-134
MC41493-27MS*	591-78-6	2-Hexanone	MS	REC	87	%	57-139
MC41493-27MS*	74-88-4	Iodomethane	MS	REC	93	%	69-131
MC41493-27MS*	98-82-8	Isopropylbenzene	MS	REC	97	%	72-131
MC41493-27MS*	99-87-6	p-Isopropyltoluene	MS	REC	104	%	77-127
MC41493-27MS*	1634-04-4	Methyl Tert Butyl Ether	MS	REC	101	%	71-124
MC41493-27MS*	108-10-1	4-Methyl-2-pentanone (MIBK)	MS	REC	103	%	67-130
MC41493-27MS*	74-95-3	Methylene bromide	MS	REC	108	%	79-123
MC41493-27MS*	75-09-2	Methylene chloride	MS	REC	93	%	74-124
MC41493-27MS*	91-20-3	Naphthalene	MS	REC	97	%	61-128
MC41493-27MS*	103-65-1	n-Propylbenzene	MS	REC	95	%	76-126
MC41493-27MS*	100-42-5	Styrene	MS	REC	70	%	78-123
MC41493-27MS*	630-20-6	1,1,1,2-Tetrachloroethane	MS	REC	115	%	78-124
MC41493-27MS*	79-34-5	1,1,2,2-Tetrachloroethane	MS	REC	114	%	71-121
MC41493-27MS*	127-18-4	Tetrachloroethene	MS	REC	109	%	74-129
MC41493-27MS*	108-88-3	Toluene	MS	REC	100	%	80-121
MC41493-27MS*	87-61-6	1,2,3-Trichlorobenzene	MS	REC	112	%	69-129
MC41493-27MS*	120-82-1	1,2,4-Trichlorobenzene	MS	REC	111	%	69-130
MC41493-27MS*	71-55-6	1,1,1-Trichloroethane	MS	REC	113	%	74-131
MC41493-27MS*	79-00-5	1,1,2-Trichloroethane	MS	REC	104	%	80-119
MC41493-27MS*	79-01-6	Trichloroethene	MS	REC	32 [a]	%	79-123
MC41493-27MS*	75-69-4	Trichlorofluoromethane	MS	REC	119	%	65-141
MC41493-27MS*	96-18-4	1,2,3-Trichloropropane	MS	REC	96	%	73-122

* Sample used for QC is not from job MC41544

QC Evaluation: DOD QSM5 Limits

Job Number: MC41544
Account: EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Collected: 09/14/15

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MC41493-27MS*	95-63-6	1,2,4-Trimethylbenzene	MS	REC	88	%	76-124
MC41493-27MS*	108-67-8	1,3,5-Trimethylbenzene	MS	REC	87	%	75-124
MC41493-27MS*	108-05-4	Vinyl Acetate	MS	REC	105	%	54-146
MC41493-27MS*	75-01-4	Vinyl chloride	MS	REC	102	%	58-137
MC41493-27MS*		m,p-Xylene	MS	REC	96	%	80-121
MC41493-27MS*	95-47-6	o-Xylene	MS	REC	95	%	78-122
MC41493-27MS*	1330-20-7	Xylene (total)	MS	REC	96	%	79-121
MC41493-27MS*	1868-53-7	Dibromofluoromethane	MS	SURR	109	%	80-119
MC41493-27MS*	2037-26-5	Toluene-D8	MS	SURR	101	%	89-112
MC41493-27MS*	460-00-4	4-Bromofluorobenzene	MS	SURR	94	%	85-114
MC41493-27MSD*	67-64-1	Acetone	MSD	REC	86	%	39-160
MC41493-27MSD*	67-64-1	Acetone	MSD	RPD	9	%	20
MC41493-27MSD*	71-43-2	Benzene	MSD	REC	94	%	79-120
MC41493-27MSD*	71-43-2	Benzene	MSD	RPD	3	%	20
MC41493-27MSD*	108-86-1	Bromobenzene	MSD	REC	98	%	80-120
MC41493-27MSD*	108-86-1	Bromobenzene	MSD	RPD	4	%	20
MC41493-27MSD*	74-97-5	Bromochloromethane	MSD	REC	102	%	78-123
MC41493-27MSD*	74-97-5	Bromochloromethane	MSD	RPD	0	%	20
MC41493-27MSD*	75-27-4	Bromodichloromethane	MSD	REC	100	%	79-125
MC41493-27MSD*	75-27-4	Bromodichloromethane	MSD	RPD	4	%	20
MC41493-27MSD*	75-25-2	Bromoform	MSD	REC	90	%	66-130
MC41493-27MSD*	75-25-2	Bromoform	MSD	RPD	1	%	20
MC41493-27MSD*	74-83-9	Bromomethane	MSD	REC	133	%	53-141
MC41493-27MSD*	74-83-9	Bromomethane	MSD	RPD	1	%	20
MC41493-27MSD*	78-93-3	2-Butanone (MEK)	MSD	REC	74	%	56-143
MC41493-27MSD*	78-93-3	2-Butanone (MEK)	MSD	RPD	8	%	20
MC41493-27MSD*	104-51-8	n-Butylbenzene	MSD	REC	100	%	75-128
MC41493-27MSD*	104-51-8	n-Butylbenzene	MSD	RPD	2	%	20
MC41493-27MSD*	135-98-8	sec-Butylbenzene	MSD	REC	104	%	77-126
MC41493-27MSD*	135-98-8	sec-Butylbenzene	MSD	RPD	2	%	20
MC41493-27MSD*	98-06-6	tert-Butylbenzene	MSD	REC	108	%	78-124
MC41493-27MSD*	98-06-6	tert-Butylbenzene	MSD	RPD	2	%	20
MC41493-27MSD*	75-15-0	Carbon disulfide	MSD	REC	73	%	64-133
MC41493-27MSD*	75-15-0	Carbon disulfide	MSD	RPD	2	%	20
MC41493-27MSD*	56-23-5	Carbon tetrachloride	MSD	REC	114	%	72-136
MC41493-27MSD*	56-23-5	Carbon tetrachloride	MSD	RPD	3	%	20
MC41493-27MSD*	108-90-7	Chlorobenzene	MSD	REC	99	%	82-118
MC41493-27MSD*	108-90-7	Chlorobenzene	MSD	RPD	3	%	20
MC41493-27MSD*	75-00-3	Chloroethane	MSD	REC	112	%	60-138
MC41493-27MSD*	75-00-3	Chloroethane	MSD	RPD	3	%	20
MC41493-27MSD*	67-66-3	Chloroform	MSD	REC	102	%	79-124
MC41493-27MSD*	67-66-3	Chloroform	MSD	RPD	3	%	20
MC41493-27MSD*	74-87-3	Chloromethane	MSD	REC	93	%	50-139
MC41493-27MSD*	74-87-3	Chloromethane	MSD	RPD	11	%	20
MC41493-27MSD*	95-49-8	o-Chlorotoluene	MSD	REC	97	%	79-122

* Sample used for QC is not from job MC41544

QC Evaluation: DOD QSM5 Limits

Job Number: MC41544
Account: EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Collected: 09/14/15

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MC41493-27MSD*	95-49-8	o-Chlorotoluene	MSD	RPD	3	%	20
MC41493-27MSD*	106-43-4	p-Chlorotoluene	MSD	REC	94	%	78-122
MC41493-27MSD*	106-43-4	p-Chlorotoluene	MSD	RPD	4	%	20
MC41493-27MSD*	96-12-8	1,2-Dibromo-3-chloropropane	MSD	REC	103	%	62-128
MC41493-27MSD*	96-12-8	1,2-Dibromo-3-chloropropane	MSD	RPD	2	%	20
MC41493-27MSD*	124-48-1	Dibromochloromethane	MSD	REC	97	%	74-126
MC41493-27MSD*	124-48-1	Dibromochloromethane	MSD	RPD	3	%	20
MC41493-27MSD*	106-93-4	1,2-Dibromoethane	MSD	REC	101	%	77-121
MC41493-27MSD*	106-93-4	1,2-Dibromoethane	MSD	RPD	4	%	20
MC41493-27MSD*	95-50-1	1,2-Dichlorobenzene	MSD	REC	114	%	80-119
MC41493-27MSD*	95-50-1	1,2-Dichlorobenzene	MSD	RPD	2	%	20
MC41493-27MSD*	541-73-1	1,3-Dichlorobenzene	MSD	REC	99	%	80-119
MC41493-27MSD*	541-73-1	1,3-Dichlorobenzene	MSD	RPD	3	%	20
MC41493-27MSD*	106-46-7	1,4-Dichlorobenzene	MSD	REC	99	%	79-118
MC41493-27MSD*	106-46-7	1,4-Dichlorobenzene	MSD	RPD	3	%	20
MC41493-27MSD*	75-71-8	Dichlorodifluoromethane	MSD	REC	144	%	32-152
MC41493-27MSD*	75-71-8	Dichlorodifluoromethane	MSD	RPD	2	%	20
MC41493-27MSD*	75-34-3	1,1-Dichloroethane	MSD	REC	87	%	77-125
MC41493-27MSD*	75-34-3	1,1-Dichloroethane	MSD	RPD	2	%	20
MC41493-27MSD*	107-06-2	1,2-Dichloroethane	MSD	REC	105	%	73-128
MC41493-27MSD*	107-06-2	1,2-Dichloroethane	MSD	RPD	4	%	20
MC41493-27MSD*	75-35-4	1,1-Dichloroethene	MSD	REC	82	%	71-131
MC41493-27MSD*	75-35-4	1,1-Dichloroethene	MSD	RPD	2	%	20
MC41493-27MSD*	156-59-2	cis-1,2-Dichloroethene	MSD	REC	-62 [a]	%	78-123
MC41493-27MSD*	156-59-2	cis-1,2-Dichloroethene	MSD	RPD	1	%	20
MC41493-27MSD*	156-60-5	trans-1,2-Dichloroethene	MSD	REC	93	%	75-124
MC41493-27MSD*	156-60-5	trans-1,2-Dichloroethene	MSD	RPD	2	%	20
MC41493-27MSD*	78-87-5	1,2-Dichloropropane	MSD	REC	95	%	78-122
MC41493-27MSD*	78-87-5	1,2-Dichloropropane	MSD	RPD	3	%	20
MC41493-27MSD*	142-28-9	1,3-Dichloropropane	MSD	REC	97	%	80-119
MC41493-27MSD*	142-28-9	1,3-Dichloropropane	MSD	RPD	4	%	20
MC41493-27MSD*	594-20-7	2,2-Dichloropropane	MSD	REC	98	%	60-139
MC41493-27MSD*	594-20-7	2,2-Dichloropropane	MSD	RPD	6	%	20
MC41493-27MSD*	563-58-6	1,1-Dichloropropene	MSD	REC	93	%	79-125
MC41493-27MSD*	563-58-6	1,1-Dichloropropene	MSD	RPD	3	%	20
MC41493-27MSD*	10061-01-5	cis-1,3-Dichloropropene	MSD	REC	88	%	75-124
MC41493-27MSD*	10061-01-5	cis-1,3-Dichloropropene	MSD	RPD	6	%	20
MC41493-27MSD*	10061-02-6	trans-1,3-Dichloropropene	MSD	REC	85	%	73-127
MC41493-27MSD*	10061-02-6	trans-1,3-Dichloropropene	MSD	RPD	11	%	20
MC41493-27MSD*	100-41-4	Ethylbenzene	MSD	REC	103	%	79-121
MC41493-27MSD*	100-41-4	Ethylbenzene	MSD	RPD	2	%	20
MC41493-27MSD*	87-68-3	Hexachlorobutadiene	MSD	REC	123	%	66-134
MC41493-27MSD*	87-68-3	Hexachlorobutadiene	MSD	RPD	1	%	20
MC41493-27MSD*	591-78-6	2-Hexanone	MSD	REC	91	%	57-139
MC41493-27MSD*	591-78-6	2-Hexanone	MSD	RPD	5	%	20

* Sample used for QC is not from job MC41544

QC Evaluation: DOD QSM5 Limits

Job Number: MC41544
Account: EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Collected: 09/14/15

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MC41493-27MSD*	74-88-4	Iodomethane	MSD	REC	90	%	69-131
MC41493-27MSD*	74-88-4	Iodomethane	MSD	RPD	3	%	20
MC41493-27MSD*	98-82-8	Isopropylbenzene	MSD	REC	97	%	72-131
MC41493-27MSD*	98-82-8	Isopropylbenzene	MSD	RPD	0	%	20
MC41493-27MSD*	99-87-6	p-Isopropyltoluene	MSD	REC	101	%	77-127
MC41493-27MSD*	99-87-6	p-Isopropyltoluene	MSD	RPD	2	%	20
MC41493-27MSD*	1634-04-4	Methyl Tert Butyl Ether	MSD	REC	104	%	71-124
MC41493-27MSD*	1634-04-4	Methyl Tert Butyl Ether	MSD	RPD	3	%	20
MC41493-27MSD*	108-10-1	4-Methyl-2-pentanone (MIBK)	MSD	REC	105	%	67-130
MC41493-27MSD*	108-10-1	4-Methyl-2-pentanone (MIBK)	MSD	RPD	2	%	20
MC41493-27MSD*	74-95-3	Methylene bromide	MSD	REC	106	%	79-123
MC41493-27MSD*	74-95-3	Methylene bromide	MSD	RPD	2	%	20
MC41493-27MSD*	75-09-2	Methylene chloride	MSD	REC	91	%	74-124
MC41493-27MSD*	75-09-2	Methylene chloride	MSD	RPD	2	%	20
MC41493-27MSD*	91-20-3	Naphthalene	MSD	REC	102	%	61-128
MC41493-27MSD*	91-20-3	Naphthalene	MSD	RPD	5	%	20
MC41493-27MSD*	103-65-1	n-Propylbenzene	MSD	REC	92	%	76-126
MC41493-27MSD*	103-65-1	n-Propylbenzene	MSD	RPD	3	%	20
MC41493-27MSD*	100-42-5	Styrene	MSD	REC	69	%	78-123
MC41493-27MSD*	100-42-5	Styrene	MSD	RPD	1	%	20
MC41493-27MSD*	630-20-6	1,1,1,2-Tetrachloroethane	MSD	REC	117	%	78-124
MC41493-27MSD*	630-20-6	1,1,1,2-Tetrachloroethane	MSD	RPD	2	%	20
MC41493-27MSD*	79-34-5	1,1,2,2-Tetrachloroethane	MSD	REC	114	%	71-121
MC41493-27MSD*	79-34-5	1,1,2,2-Tetrachloroethane	MSD	RPD	0	%	20
MC41493-27MSD*	127-18-4	Tetrachloroethene	MSD	REC	108	%	74-129
MC41493-27MSD*	127-18-4	Tetrachloroethene	MSD	RPD	1	%	20
MC41493-27MSD*	108-88-3	Toluene	MSD	REC	95	%	80-121
MC41493-27MSD*	108-88-3	Toluene	MSD	RPD	5	%	20
MC41493-27MSD*	87-61-6	1,2,3-Trichlorobenzene	MSD	REC	116	%	69-129
MC41493-27MSD*	87-61-6	1,2,3-Trichlorobenzene	MSD	RPD	4	%	20
MC41493-27MSD*	120-82-1	1,2,4-Trichlorobenzene	MSD	REC	113	%	69-130
MC41493-27MSD*	120-82-1	1,2,4-Trichlorobenzene	MSD	RPD	2	%	20
MC41493-27MSD*	71-55-6	1,1,1-Trichloroethane	MSD	REC	109	%	74-131
MC41493-27MSD*	71-55-6	1,1,1-Trichloroethane	MSD	RPD	3	%	20
MC41493-27MSD*	79-00-5	1,1,2-Trichloroethane	MSD	REC	97	%	80-119
MC41493-27MSD*	79-00-5	1,1,2-Trichloroethane	MSD	RPD	7	%	20
MC41493-27MSD*	79-01-6	Trichloroethene	MSD	REC	20 [a]	%	79-123
MC41493-27MSD*	79-01-6	Trichloroethene	MSD	RPD	3	%	20
MC41493-27MSD*	75-69-4	Trichlorofluoromethane	MSD	REC	118	%	65-141
MC41493-27MSD*	75-69-4	Trichlorofluoromethane	MSD	RPD	2	%	20
MC41493-27MSD*	96-18-4	1,2,3-Trichloropropane	MSD	REC	95	%	73-122
MC41493-27MSD*	96-18-4	1,2,3-Trichloropropane	MSD	RPD	1	%	20
MC41493-27MSD*	95-63-6	1,2,4-Trimethylbenzene	MSD	REC	87	%	76-124
MC41493-27MSD*	95-63-6	1,2,4-Trimethylbenzene	MSD	RPD	1	%	20
MC41493-27MSD*	108-67-8	1,3,5-Trimethylbenzene	MSD	REC	85	%	75-124

* Sample used for QC is not from job MC41544

QC Evaluation: DOD QSM5 Limits

Job Number: MC41544
Account: EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Collected: 09/14/15

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MC41493-27MSD*	108-67-8	1,3,5-Trimethylbenzene	MSD	RPD	2	%	20
MC41493-27MSD*	108-05-4	Vinyl Acetate	MSD	REC	106	%	54-146
MC41493-27MSD*	108-05-4	Vinyl Acetate	MSD	RPD	2	%	20
MC41493-27MSD*	75-01-4	Vinyl chloride	MSD	REC	114	%	58-137
MC41493-27MSD*	75-01-4	Vinyl chloride	MSD	RPD	6	%	20
MC41493-27MSD*		m,p-Xylene	MSD	REC	96	%	80-121
MC41493-27MSD*		m,p-Xylene	MSD	RPD	1	%	20
MC41493-27MSD*	95-47-6	o-Xylene	MSD	REC	98	%	78-122
MC41493-27MSD*	95-47-6	o-Xylene	MSD	RPD	2	%	20
MC41493-27MSD*	1330-20-7	Xylene (total)	MSD	REC	96	%	79-121
MC41493-27MSD*	1330-20-7	Xylene (total)	MSD	RPD	0	%	20
MC41493-27MSD*	1868-53-7	Dibromofluoromethane	MSD	SURR	109	%	80-119
MC41493-27MSD*	2037-26-5	Toluene-D8	MSD	SURR	100	%	89-112
MC41493-27MSD*	460-00-4	4-Bromofluorobenzene	MSD	SURR	92	%	85-114
MSU1329-MB	1868-53-7	Dibromofluoromethane	MB	SURR	105	%	80-119
MSU1329-MB	2037-26-5	Toluene-D8	MB	SURR	98	%	89-112
MSU1329-MB	460-00-4	4-Bromofluorobenzene	MB	SURR	91	%	85-114
MC41544-1	1868-53-7	Dibromofluoromethane	SAMP	SURR	112	%	80-119
MC41544-1	2037-26-5	Toluene-D8	SAMP	SURR	99	%	89-112
MC41544-1	460-00-4	4-Bromofluorobenzene	SAMP	SURR	90	%	85-114
MC41544-2	1868-53-7	Dibromofluoromethane	SAMP	SURR	98	%	80-119
MC41544-2	2037-26-5	Toluene-D8	SAMP	SURR	92	%	89-112
MC41544-2	460-00-4	4-Bromofluorobenzene	SAMP	SURR	94	%	85-114
MC41544-3	1868-53-7	Dibromofluoromethane	SAMP	SURR	106	%	80-119
MC41544-3	2037-26-5	Toluene-D8	SAMP	SURR	94	%	89-112
MC41544-3	460-00-4	4-Bromofluorobenzene	SAMP	SURR	92	%	85-114

(a) Outside control limits due to high level in sample relative to spike amount.

* Sample used for QC is not from job MC41544

New England ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: MC41544
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSU1329-MB	U32348.D	1	09/27/15	AD	n/a	n/a	MSU1329

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC41544-1, MC41544-2, MC41544-3

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	0.50	0.27	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.26	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.37	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.18	ug/l	
75-25-2	Bromoform	ND	1.0	0.39	ug/l	
74-83-9	Bromomethane	ND	2.0	0.79	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	3.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.57	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.19	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.34	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane	ND	2.0	0.49	ug/l	
67-66-3	Chloroform	ND	1.0	0.40	ug/l	
74-87-3	Chloromethane	ND	2.0	0.49	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.60	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.46	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.83	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.33	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.37	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.53	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.28	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.48	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.21	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.29	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.7	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.23	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.27	ug/l	

Method Blank Summary

Job Number: MC41544
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSU1329-MB	U32348.D	1	09/27/15	AD	n/a	n/a	MSU1329

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC41544-1, MC41544-2, MC41544-3

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.24	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.45	ug/l	
591-78-6	2-Hexanone	ND	10	2.7	ug/l	
74-88-4	Iodomethane	ND	5.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.27	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.32	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.35	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.77	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.30	ug/l	
75-09-2	Methylene chloride	0.39	2.0	0.27	ug/l	J
91-20-3	Naphthalene	ND	5.0	0.61	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.29	ug/l	
100-42-5	Styrene	ND	5.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.29	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.21	ug/l	
108-88-3	Toluene	ND	1.0	0.29	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.78	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.74	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.42	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.25	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.47	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.39	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.29	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.20	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	1.4	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.45	ug/l	
	m,p-Xylene	ND	1.0	0.47	ug/l	
95-47-6	o-Xylene	ND	1.0	0.22	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.22	ug/l	

Method Blank Summary

Job Number: MC41544
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSU1329-MB	U32348.D	1	09/27/15	AD	n/a	n/a	MSU1329

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC41544-1, MC41544-2, MC41544-3

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	105%	79-127%
2037-26-5	Toluene-D8	98%	80-116%
460-00-4	4-Bromofluorobenzene	91%	77-124%

Blank Spike Summary

Job Number: MC41544
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSU1329-BS	U32344.D	1	09/27/15	AD	n/a	n/a	MSU1329

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC41544-1, MC41544-2, MC41544-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	37.2	74	10-200
71-43-2	Benzene	50	48.0	96	74-124
108-86-1	Bromobenzene	50	52.7	105	80-117
74-97-5	Bromochloromethane	50	49.3	99	73-130
75-27-4	Bromodichloromethane	50	53.8	108	76-136
75-25-2	Bromoform	50	55.8	112	63-139
74-83-9	Bromomethane	50	60.2	120	49-161
78-93-3	2-Butanone (MEK)	50	44.9	90	44-191
104-51-8	n-Butylbenzene	50	53.1	106	84-134
135-98-8	sec-Butylbenzene	50	54.6	109	76-125
98-06-6	tert-Butylbenzene	50	55.2	110	74-123
75-15-0	Carbon disulfide	50	40.3	81	45-138
56-23-5	Carbon tetrachloride	50	57.6	115	64-149
108-90-7	Chlorobenzene	50	51.8	104	73-114
75-00-3	Chloroethane	50	52.6	105	43-165
67-66-3	Chloroform	50	49.7	99	72-132
74-87-3	Chloromethane	50	28.2	56	30-173
95-49-8	o-Chlorotoluene	50	51.6	103	75-116
106-43-4	p-Chlorotoluene	50	51.2	102	78-116
96-12-8	1,2-Dibromo-3-chloropropane	50	54.1	108	50-157
124-48-1	Dibromochloromethane	50	57.5	115	75-133
106-93-4	1,2-Dibromoethane	50	56.5	113	72-133
95-50-1	1,2-Dichlorobenzene	50	58.1	116	73-122
541-73-1	1,3-Dichlorobenzene	50	51.9	104	76-117
106-46-7	1,4-Dichlorobenzene	50	52.4	105	74-120
75-71-8	Dichlorodifluoromethane	50	65.9	132	30-180
75-34-3	1,1-Dichloroethane	50	43.1	86	62-130
107-06-2	1,2-Dichloroethane	50	53.6	107	65-140
75-35-4	1,1-Dichloroethene	50	45.0	90	57-132
156-59-2	cis-1,2-Dichloroethene	50	50.0	100	72-131
156-60-5	trans-1,2-Dichloroethene	50	47.8	96	69-127
78-87-5	1,2-Dichloropropane	50	49.8	100	74-130
142-28-9	1,3-Dichloropropane	50	54.8	110	80-129
594-20-7	2,2-Dichloropropane	50	50.4	101	54-162
563-58-6	1,1-Dichloropropene	50	47.9	96	75-116
10061-01-5	cis-1,3-Dichloropropene	50	53.2	106	86-141

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC41544
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSU1329-BS	U32344.D	1	09/27/15	AD	n/a	n/a	MSU1329

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC41544-1, MC41544-2, MC41544-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	50	55.0	110	80-134
100-41-4	Ethylbenzene	50	53.6	107	76-125
87-68-3	Hexachlorobutadiene	50	65.0	130	64-154
591-78-6	2-Hexanone	50	50.2	100	35-200
74-88-4	Iodomethane	50	45.7	91	50-154
98-82-8	Isopropylbenzene	50	51.0	102	74-121
99-87-6	p-Isopropyltoluene	50	54.9	110	84-128
1634-04-4	Methyl Tert Butyl Ether	50	52.2	104	67-145
108-10-1	4-Methyl-2-pentanone (MIBK)	50	52.9	106	61-155
74-95-3	Methylene bromide	50	54.8	110	75-124
75-09-2	Methylene chloride	50	46.4	93	62-137
91-20-3	Naphthalene	50	51.7	103	24-164
103-65-1	n-Propylbenzene	50	49.4	99	76-120
100-42-5	Styrene	50	51.2	102	74-132
630-20-6	1,1,1,2-Tetrachloroethane	50	56.7	113	71-136
79-34-5	1,1,2,2-Tetrachloroethane	50	57.5	115	65-145
127-18-4	Tetrachloroethene	50	57.4	115	73-122
108-88-3	Toluene	50	52.5	105	80-122
87-61-6	1,2,3-Trichlorobenzene	50	58.9	118	33-170
120-82-1	1,2,4-Trichlorobenzene	50	57.7	115	43-159
71-55-6	1,1,1-Trichloroethane	50	53.0	106	68-137
79-00-5	1,1,2-Trichloroethane	50	55.7	111	76-134
79-01-6	Trichloroethene	50	49.6	99	80-125
75-69-4	Trichlorofluoromethane	50	54.8	110	56-166
96-18-4	1,2,3-Trichloropropane	50	51.2	102	65-147
95-63-6	1,2,4-Trimethylbenzene	50	52.2	104	79-124
108-67-8	1,3,5-Trimethylbenzene	50	55.5	111	80-130
108-05-4	Vinyl Acetate	50	60.4	121	72-200
75-01-4	Vinyl chloride	50	55.0	110	39-176
	m,p-Xylene	100	106	106	75-121
95-47-6	o-Xylene	50	50.7	101	71-123
1330-20-7	Xylene (total)	150	157	105	74-122

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC41544
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSU1329-BS	U32344.D	1	09/27/15	AD	n/a	n/a	MSU1329

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC41544-1, MC41544-2, MC41544-3

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	98%	79-127%
2037-26-5	Toluene-D8	103%	80-116%
460-00-4	4-Bromofluorobenzene	96%	77-124%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC41544
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC41493-27MS	U32365.D	1	09/27/15	AD	n/a	n/a	MSU1329
MC41493-27MSD	U32366.D	1	09/27/15	AD	n/a	n/a	MSU1329
MC41493-27	U32359.D	1	09/27/15	AD	n/a	n/a	MSU1329

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC41544-1, MC41544-2, MC41544-3

CAS No.	Compound	MC41493-27 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	10 U		50	39.0	78	50	42.8	86	9	10-156/30
71-43-2	Benzene	0.50 U		50	48.3	97	50	47.0	94	3	63-135/30
108-86-1	Bromobenzene	5.0 U		50	50.9	102	50	48.9	98	4	75-116/30
74-97-5	Bromochloromethane	5.0 U		50	51.1	102	50	51.0	102	0	67-136/30
75-27-4	Bromodichloromethane	1.0 U		50	52.3	105	50	50.2	100	4	69-140/30
75-25-2	Bromoform	1.0 U		50	45.6	91	50	45.0	90	1	57-138/30
74-83-9	Bromomethane	2.0 U		50	65.9	132	50	66.4	133	1	25-169/30
78-93-3	2-Butanone (MEK)	10 U		50	34.2	68	50	37.1	74	8	23-159/30
104-51-8	n-Butylbenzene	5.0 U		50	51.0	102	50	50.0	100	2	75-135/30
135-98-8	sec-Butylbenzene	5.0 U		50	53.1	106	50	52.2	104	2	70-125/30
98-06-6	tert-Butylbenzene	5.0 U		50	55.3	111	50	54.1	108	2	64-128/30
75-15-0	Carbon disulfide	0.41		50	37.9	75	50	37.1	73	2	40-139/30
56-23-5	Carbon tetrachloride	1.0 U		50	58.8	118	50	57.1	114	3	60-149/30
108-90-7	Chlorobenzene	1.0 U		50	51.0	102	50	49.5	99	3	70-115/30
75-00-3	Chloroethane	2.0 U		50	57.9	116	50	56.0	112	3	37-175/30
67-66-3	Chloroform	1.0 U		50	52.6	105	50	50.8	102	3	64-141/30
74-87-3	Chloromethane	2.0 U		50	41.5	83	50	46.4	93	11	21-178/30
95-49-8	o-Chlorotoluene	5.0 U		50	49.7	99	50	48.4	97	3	60-130/30
106-43-4	p-Chlorotoluene	5.0 U		50	49.3	99	50	47.2	94	4	70-120/30
96-12-8	1,2-Dibromo-3-chloropropane	5.0 U		50	50.6	101	50	51.6	103	2	51-156/30
124-48-1	Dibromochloromethane	1.0 U		50	49.8	100	50	48.5	97	3	70-131/30
106-93-4	1,2-Dibromoethane	1.0 U		50	52.3	105	50	50.4	101	4	72-131/30
95-50-1	1,2-Dichlorobenzene	1.0 U		50	57.7	115	50	56.8	114	2	68-122/30
541-73-1	1,3-Dichlorobenzene	1.0 U		50	51.0	102	50	49.4	99	3	71-117/30
106-46-7	1,4-Dichlorobenzene	1.0 U		50	51.2	102	50	49.6	99	3	69-120/30
75-71-8	Dichlorodifluoromethane	2.0 U		50	70.7	141	50	71.9	144	2	28-181/30
75-34-3	1,1-Dichloroethane	1.0 U		50	44.3	89	50	43.4	87	2	56-138/30
107-06-2	1,2-Dichloroethane	1.0 U		50	54.3	109	50	52.4	105	4	60-146/30
75-35-4	1,1-Dichloroethene	2.9		50	45.0	84	50	43.9	82	2	52-137/30
156-59-2	cis-1,2-Dichloroethene	612	E	50	589	-46* [a]	50	581	-62* [a]	1	64-139/30
156-60-5	trans-1,2-Dichloroethene	5.7		50	53.2	95	50	52.4	93	2	63-132/30
78-87-5	1,2-Dichloropropane	2.0 U		50	48.8	98	50	47.5	95	3	67-137/30
142-28-9	1,3-Dichloropropane	5.0 U		50	50.2	100	50	48.3	97	4	78-130/30
594-20-7	2,2-Dichloropropane	5.0 U		50	51.7	103	50	48.8	98	6	36-166/30
563-58-6	1,1-Dichloropropene	5.0 U		50	47.6	95	50	46.4	93	3	68-123/30
10061-01-5	cis-1,3-Dichloropropene	0.50 U		50	47.1	94	50	44.2	88	6	77-142/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC41544
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC41493-27MS	U32365.D	1	09/27/15	AD	n/a	n/a	MSU1329
MC41493-27MSD	U32366.D	1	09/27/15	AD	n/a	n/a	MSU1329
MC41493-27	U32359.D	1	09/27/15	AD	n/a	n/a	MSU1329

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC41544-1, MC41544-2, MC41544-3

CAS No.	Compound	MC41493-27 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	0.50 U		50	47.2	94	50	42.3	85	11	73-136/30
100-41-4	Ethylbenzene	1.0 U		50	52.1	104	50	51.3	103	2	60-136/30
87-68-3	Hexachlorobutadiene	5.0 U		50	60.9	122	50	61.3	123	1	63-143/30
591-78-6	2-Hexanone	10 U		50	43.3	87	50	45.3	91	5	29-151/30
74-88-4	Iodomethane	5.0 U		50	46.3	93	50	45.0	90	3	37-158/30
98-82-8	Isopropylbenzene	5.0 U		50	48.7	97	50	48.6	97	0	67-123/30
99-87-6	p-Isopropyltoluene	5.0 U		50	51.8	104	50	50.6	101	2	78-126/30
1634-04-4	Methyl Tert Butyl Ether	1.0 U		50	50.7	101	50	52.2	104	3	60-156/30
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U		50	51.5	103	50	52.6	105	2	47-167/30
74-95-3	Methylene bromide	5.0 U		50	53.9	108	50	53.0	106	2	70-130/30
75-09-2	Methylene chloride	2.0 U		50	46.4	93	50	45.3	91	2	55-144/30
91-20-3	Naphthalene	5.0 U		50	48.7	97	50	51.2	102	5	23-167/30
103-65-1	n-Propylbenzene	5.0 U		50	47.5	95	50	46.2	92	3	66-124/30
100-42-5	Styrene	5.0 U		50	34.9	70	50	34.4	69	1	61-137/30
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U		50	57.4	115	50	58.7	117	2	71-132/30
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U		50	57.2	114	50	57.0	114	0	62-149/30
127-18-4	Tetrachloroethene	1.0 U		50	54.3	109	50	54.0	108	1	65-124/30
108-88-3	Toluene	1.0 U		50	49.8	100	50	47.4	95	5	69-134/30
87-61-6	1,2,3-Trichlorobenzene	5.0 U		50	56.1	112	50	58.1	116	4	41-157/30
120-82-1	1,2,4-Trichlorobenzene	5.0 U		50	55.6	111	50	56.5	113	2	46-147/30
71-55-6	1,1,1-Trichloroethane	1.0 U		50	56.3	113	50	54.6	109	3	61-144/30
79-00-5	1,1,2-Trichloroethane	1.0 U		50	51.8	104	50	48.5	97	7	69-142/30
79-01-6	Trichloroethene	172		50	188	32* [a]	50	182	20* [a]	3	69-133/30
75-69-4	Trichlorofluoromethane	1.0 U		50	59.7	119	50	58.8	118	2	60-163/30
96-18-4	1,2,3-Trichloropropane	5.0 U		50	48.0	96	50	47.5	95	1	57-150/30
95-63-6	1,2,4-Trimethylbenzene	5.0 U		50	44.0	88	50	43.4	87	1	67-130/30
108-67-8	1,3,5-Trimethylbenzene	5.0 U		50	43.7	87	50	42.7	85	2	66-137/30
108-05-4	Vinyl Acetate	5.0 U		50	52.4	105	50	53.2	106	2	48-200/30
75-01-4	Vinyl chloride	55.2		50	106	102	50	112	114	6	39-176/30
	m,p-Xylene	1.0 U		100	96.3	96	100	95.7	96	1	64-128/30
95-47-6	o-Xylene	1.0 U		50	47.7	95	50	48.8	98	2	64-126/30
1330-20-7	Xylene (total)	1.0 U		150	144	96	150	144	96	0	65-127/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC41544
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC41493-27MS	U32365.D	1	09/27/15	AD	n/a	n/a	MSU1329
MC41493-27MSD	U32366.D	1	09/27/15	AD	n/a	n/a	MSU1329
MC41493-27	U32359.D	1	09/27/15	AD	n/a	n/a	MSU1329

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC41544-1, MC41544-2, MC41544-3

CAS No.	Surrogate Recoveries	MS	MSD	MC41493-27	Limits
1868-53-7	Dibromofluoromethane	109%	109%	108%	79-127%
2037-26-5	Toluene-D8	101%	100%	89%	80-116%
460-00-4	4-Bromofluorobenzene	94%	92%	91%	77-124%

(a) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: MC41544
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Sample: MSU1316-BFB
Lab File ID: U31970.D
Instrument ID: GCMSU
Injection Date: 09/17/15
Injection Time: 13:33

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	223936	20.5		Pass
75	30.0 - 60.0% of mass 95	519104	47.5		Pass
95	Base peak, 100% relative abundance	1092501	100.0		Pass
96	5.0 - 9.0% of mass 95	73503	6.73		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 150.0% of mass 95	941909	86.2		Pass
175	5.0 - 9.0% of mass 174	70200	6.43	(7.45) [a]	Pass
176	95.0 - 101.0% of mass 174	923541	84.5	(98.0) [a]	Pass
177	5.0 - 9.0% of mass 176	62205	5.69	(6.74) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
MSU1316-IC1316	U31971.D	09/17/15	14:00	00:27	Initial cal 0.5
MSU1316-IC1316	U31972.D	09/17/15	14:27	00:54	Initial cal 1
MSU1316-IC1316	U31973.D	09/17/15	14:54	01:21	Initial cal 2
MSU1316-IC1316	U31974.D	09/17/15	15:21	01:48	Initial cal 5
MSU1316-IC1316	U31975.D	09/17/15	15:48	02:15	Initial cal 10
MSU1316-IC1316	U31976.D	09/17/15	16:15	02:42	Initial cal 20
MSU1316-ICC1316	U31977.D	09/17/15	16:42	03:09	Initial cal 50
MSU1316-IC1316	U31978.D	09/17/15	17:10	03:37	Initial cal 100
MSU1316-IC1316	U31979.D	09/17/15	17:37	04:04	Initial cal 200
MSU1316-ICV1316	U31983.D	09/17/15	19:26	05:53	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: MC41544
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Sample: MSU1317-BFB
Lab File ID: U31989.D
Instrument ID: GCMSU
Injection Date: 09/18/15
Injection Time: 12:19

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	214951	20.1		Pass
75	30.0 - 60.0% of mass 95	499554	46.7		Pass
95	Base peak, 100% relative abundance	1070528	100.0		Pass
96	5.0 - 9.0% of mass 95	72116	6.74		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 150.0% of mass 95	937728	87.6		Pass
175	5.0 - 9.0% of mass 174	70856	6.62	(7.56) [a]	Pass
176	95.0 - 101.0% of mass 174	926464	86.5	(98.8) [a]	Pass
177	5.0 - 9.0% of mass 176	62216	5.81	(6.72) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
MSU1317-ICV1316	U31989.D	09/18/15	12:19	00:00	Initial cal verification 50
MSU1317-CC1316	U31989.D	09/18/15	12:19	00:00	Continuing cal 50
MSU1317-BS	U31989.D	09/18/15	12:19	00:00	Blank Spike
MSU1317-MB	U31993.D	09/18/15	14:08	01:49	Method Blank
ZZZZZZ	U31994.D	09/18/15	14:35	02:16	(unrelated sample)
ZZZZZZ	U31995.D	09/18/15	15:02	02:43	(unrelated sample)
ZZZZZZ	U31996.D	09/18/15	15:30	03:11	(unrelated sample)
ZZZZZZ	U31997.D	09/18/15	15:58	03:39	(unrelated sample)
ZZZZZZ	U31998.D	09/18/15	16:25	04:06	(unrelated sample)
ZZZZZZ	U31999.D	09/18/15	16:52	04:33	(unrelated sample)
ZZZZZZ	U32000.D	09/18/15	17:39	05:20	(unrelated sample)
ZZZZZZ	U32001.D	09/18/15	18:07	05:48	(unrelated sample)
MC41366-4	U32002.D	09/18/15	18:34	06:15	(used for QC only; not part of job MC41544)
ZZZZZZ	U32003.D	09/18/15	19:01	06:42	(unrelated sample)
ZZZZZZ	U32004.D	09/18/15	19:29	07:10	(unrelated sample)
ZZZZZZ	U32005.D	09/18/15	19:56	07:37	(unrelated sample)
ZZZZZZ	U32006.D	09/18/15	20:23	08:04	(unrelated sample)
ZZZZZZ	U32007.D	09/18/15	20:50	08:31	(unrelated sample)
ZZZZZZ	U32008.D	09/18/15	21:17	08:58	(unrelated sample)
ZZZZZZ	U32009.D	09/18/15	21:44	09:25	(unrelated sample)
ZZZZZZ	U32010.D	09/18/15	22:12	09:53	(unrelated sample)
MC41366-4MS	U32011.D	09/18/15	22:39	10:20	Matrix Spike
MC41366-4MSD	U32012.D	09/18/15	23:06	10:47	Matrix Spike Duplicate
MSU1317-ECC1316	U32013.D	09/18/15	23:33	11:14	Ending cal 50

Instrument Performance Check (BFB)

Job Number: MC41544
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Sample: MSU1329-BFB
Lab File ID: U32343.D
Instrument ID: GCMSU
Injection Date: 09/27/15
Injection Time: 12:02

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	162726	20.6		Pass
75	30.0 - 60.0% of mass 95	392555	49.6		Pass
95	Base peak, 100% relative abundance	790933	100.0		Pass
96	5.0 - 9.0% of mass 95	54208	6.85		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 150.0% of mass 95	750016	94.8		Pass
175	5.0 - 9.0% of mass 174	54651	6.91	(7.29) [a]	Pass
176	95.0 - 101.0% of mass 174	741461	93.7	(98.9) [a]	Pass
177	5.0 - 9.0% of mass 176	49043	6.20	(6.61) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
MSU1329-CC1316	U32343.D	09/27/15	12:02	00:00	Continuing cal 50
MSU1329-BS	U32344.D	09/27/15	12:29	00:27	Blank Spike
MSU1329-MB	U32348.D	09/27/15	14:19	02:17	Method Blank
ZZZZZZ	U32349.D	09/27/15	14:45	02:43	(unrelated sample)
MC41544-3	U32350.D	09/27/15	15:13	03:11	TRIP BLANK
MC41544-2	U32351.D	09/27/15	15:40	03:38	FIELD BLANK
ZZZZZZ	U32355.D	09/27/15	17:29	05:27	(unrelated sample)
ZZZZZZ	U32356.D	09/27/15	17:56	05:54	(unrelated sample)
ZZZZZZ	U32357.D	09/27/15	18:23	06:21	(unrelated sample)
ZZZZZZ	U32358.D	09/27/15	18:51	06:49	(unrelated sample)
MC41493-27	U32359.D	09/27/15	19:18	07:16	(used for QC only; not part of job MC41544)
ZZZZZZ	U32360.D	09/27/15	19:45	07:43	(unrelated sample)
ZZZZZZ	U32362.D	09/27/15	20:40	08:38	(unrelated sample)
MC41544-1	U32363.D	09/27/15	21:07	09:05	W611-3
ZZZZZZ	U32364.D	09/27/15	21:34	09:32	(unrelated sample)
MC41493-27MS	U32365.D	09/27/15	22:01	09:59	Matrix Spike
MC41493-27MSD	U32366.D	09/27/15	22:29	10:27	Matrix Spike Duplicate
MSU1329-ECC1316	U32367.D	09/27/15	22:56	10:54	Ending cal 50
ZZZZZZ	U32369.D	09/27/15	23:50	11:48	(unrelated sample)
ZZZZZZ	U32370.D	09/28/15	00:17	12:15	(unrelated sample)
ZZZZZZ	U32371.D	09/28/15	00:44	12:42	(unrelated sample)

Volatile Internal Standard Area Summary

Job Number: MC41544
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Check Std:	MSU1329-CC1316	**Injection Date:**	09/27/15
Lab File ID:	U32343.D	**Injection Time:**	12:02
Instrument ID:	GCMSU	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	2466250	9.50	3669193	10.39	1703828	13.60	2403680	16.18	1247749	7.47
Upper Limit [a]	4932500	10.00	7338386	10.89	3407656	14.10	4807360	16.68	2495498	7.97
Lower Limit [b]	1233125	9.00	1834597	9.89	851914	13.10	1201840	15.68	623875	6.97

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSU1329-BS	2729161	9.50	3964798	10.39	1913205	13.60	2557488	16.18	1389108	7.48
MSU1329-MB	2490126	9.50	3484469	10.39	1568136	13.60	2330526	16.17	1256082	7.46
ZZZZZZ	2516808	9.50	3436849	10.39	1496368	13.60	2303205	16.17	1278876	7.49
MC41544-3	2469899	9.50	3467588	10.39	1487579	13.60	2222154	16.18	1208088	7.47
MC41544-2	2726472	9.50	3848283	10.39	1568065	13.60	2201778	16.18	889422	7.52
ZZZZZZ	2323830	9.50	3252333	10.39	1447307	13.60	2219833	16.18	1098635	7.46
ZZZZZZ	2330959	9.50	3329977	10.39	1507012	13.60	2157494	16.18	1137979	7.49
ZZZZZZ	2178141	9.50	3056369	10.39	1447960	13.60	2161250	16.17	1178606	7.47
ZZZZZZ	2385388	9.50	3327092	10.39	1375292	13.60	2131998	16.17	1068903	7.47
MC41493-27	2349804	9.50	3300462	10.39	1374047	13.60	2125714	16.17	1006404	7.49
ZZZZZZ	2386245	9.50	3428546	10.39	1482573	13.60	2168496	16.17	1299978	7.47
ZZZZZZ	2565399	9.50	3513198	10.39	1486138	13.60	2199786	16.17	1199956	7.49
MC41544-1	2168216	9.50	3065965	10.39	1422489	13.60	2110955	16.17	1129308	7.47
ZZZZZZ	2182304	9.50	3072980	10.39	1361162	13.60	1998939	16.18	873822	7.49
MC41493-27MS	2263349	9.50	3372680	10.39	1651114	13.60	2323923	16.17	1203150	7.47
MC41493-27MSD	2369563	9.50	3530413	10.39	1668948	13.60	2399553	16.17	1362354	7.47
MSU1329-ECC1316	2572464	9.50	3809866	10.39	1767285	13.60	2480995	16.18	1333884	7.48

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: MC41544
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Method: SW846 8260C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC41544-1	U32363.D	112	99	90
MC41544-2	U32351.D	98	92	94
MC41544-3	U32350.D	106	94	92
MC41493-27MS	U32365.D	109	101	94
MC41493-27MSD	U32366.D	109	100	92
MSU1329-BS	U32344.D	98	103	96
MSU1329-MB	U32348.D	105	98	91

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	79-127%
S2 = Toluene-D8	80-116%
S3 = 4-Bromofluorobenzene	77-124%

Initial Calibration Summary

Job Number: MC41544 **Sample:** MSU1316-ICC1316
Account: EAENYS EA Engineering **Lab FileID:** U31977.D
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

```
                         Response Factor Report  MSU

 Method       : D:\msdchem\1\methods\U150917.m (RTE Integrator)
 Title        : SW-846 Method 8260
 Last Update  : Fri Sep 18 10:56:47 2015
 Response via : Initial Calibration

 Calibration Files
 0.5 =U31971.D    1.0 =U31972.D    2.0 =U31973.D    5.0 =U31974.D
 10  =U31975.D    20  =U31976.D    50  =U31977.D    100 =U31978.D
 200 =U31979.D        =

  Compound
            0.5   1.0   2.0   5.0   10    20    50    100   200     Avg    %RSD
 ---------------------------------------------------------------------------

 1) I   tert butyl alcohol-d9 ----------------ISTD---------------------
 2)  tertiary butyl alcohol
                       0.740 0.942 0.931 0.855 0.830 0.860 0.896   0.865    7.95
 3)  Ethanol
                                                                   0.000#  -1.00

 4) I   pentafluorobenzene    ----------------ISTD---------------------
 5)  dichlorodifluoromethane
                       0.339 0.411 0.431 0.568 0.655 0.510 0.585   0.500   22.32
            ---- Linear regression ----  Coefficient =  0.9919
              Response Ratio = -0.01228 + 0.57737 *A

 6)  chloromethane
                       0.709 0.715 0.669 0.745 0.710 0.602 0.559   0.673   10.07
 7)  vinyl chloride
                 0.544 0.514 0.559 0.524 0.605 0.656 0.548 0.597   0.569    8.40
 8)  bromomethane
                       0.315 0.313 0.336 0.364 0.399 0.332 0.351   0.344    8.79
 9)  chloroethane
                       0.333 0.308 0.322 0.329 0.326 0.297 0.284   0.314    5.81
10)  ethyl ether
                             0.475 0.426 0.405 0.388 0.376 0.377   0.408    9.37
11)  acetonitrile
                             1.058 0.935 0.880 0.824 0.772 0.804   0.879   11.98
12)  trichlorofluoromethane
                 0.703 0.705 0.760 0.736 0.837 0.907 0.804 0.791   0.780    8.92
13)  freon-113
                             0.685 0.555 0.558 0.517 0.498 0.540   0.559   11.81
14)  acrolein
                                                                   0.000#  -1.00
15)  1,1-dichloroethene
                 0.570 0.388 0.568 0.481 0.468 0.434 0.421 0.463   0.474   13.80
16)  acetone
                             0.110 0.094 0.076 0.066 0.060 0.065   0.078#  25.07
            ---- Linear regression ----  Coefficient =  0.9945
              Response Ratio = 0.00513 + 0.06197 *A

17)  Methyl Acetate
                             0.334 0.263 0.226 0.214 0.175 0.190   0.234   24.70
            ---- Linear regression ----  Coefficient =  0.9960
              Response Ratio = 0.01594 + 0.18255 *A

18)  methylene chloride
                       0.454 0.641 0.571 0.541 0.499 0.474 0.513   0.528   12.07
```

Initial Calibration Summary

Job Number: MC41544 **Sample:** MSU1316-ICC1316
Account: EAENYS EA Engineering **Lab FileID:** U31977.D
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

```
19)  methyl tert butyl ether
                1.566 1.058 1.511 1.367 1.240 1.189 1.127 1.134   1.274   14.73
20)  acrylonitrile
                            0.293 0.257 0.241 0.226 0.207 0.222   0.241   12.74
21)  allyl chloride
                            1.092 0.991 0.921 0.865 0.804 0.841   0.919   11.65
22)  trans-1,2-dichloroethene
                0.609 0.392 0.593 0.516 0.483 0.454 0.427 0.458   0.491   15.65
            ---- Linear regression ----  Coefficient =  0.9971
              Response Ratio = 0.00346 + 0.45067 *A

23)  iodomethane
                            1.115 1.018 0.963 0.881 0.848 0.911   0.956   10.31
24)  carbon disulfide
                            2.274 2.033 1.985 1.824 1.739 1.894   1.958    9.58
25)  propionitrile
                            0.045 0.036 0.037 0.035 0.034 0.036   0.037#  10.71
26)  vinyl acetate
                            0.755 0.704 0.630 0.653 0.604 0.573   0.653   10.22
27)  chloroprene
                            0.979 0.813 0.814 0.759 0.751 0.790   0.818   10.23
28)  di-isopropyl ether
                      1.354 2.025 1.841 1.702 1.622 1.559 1.465   1.653   13.76
29)  methacrylonitrile
                            0.343 0.330 0.315 0.298 0.287 0.321   0.315    6.45
30)  2-butanone
                            0.072 0.064 0.063 0.059 0.056 0.062   0.063#   8.71
31)  Ethyl Acetate
                            0.545 0.433 0.443 0.411 0.425 0.431   0.448   10.90
32)  Hexane
                            0.622 0.498 0.502 0.467 0.484 0.492   0.511   10.97
33)  1,1-dichloroethane
                1.141 0.758 1.123 0.998 0.945 0.879 0.841 0.870   0.944   14.36
34)  tert-butyl ethyl ether
                      1.256 1.860 1.682 1.568 1.507 1.454 1.410   1.534   12.75
35)  isobutyl alcohol
                            0.040 0.036 0.032 0.031 0.030 0.030   0.033#  12.22
36)  2,2-dichloropropane
                            0.809 0.698 0.663 0.617 0.567 0.618   0.662   12.80
37)  cis-1,2-dichloroethene
                0.698 0.460 0.654 0.570 0.539 0.505 0.484 0.508   0.552   15.23
            ---- Linear regression ----  Coefficient =  0.9979
              Response Ratio = 0.00424 + 0.50249 *A

38)  bromochloromethane
                            0.314 0.286 0.272 0.254 0.248 0.263   0.273    8.85
39)  chloroform
                1.061 0.688 1.038 0.913 0.878 0.820 0.797 0.827   0.878   14.22
40)  dibromofluoromethane (s)
          0.553 0.534 0.540 0.548 0.522 0.544 0.522 0.501 0.509   0.530    3.41
41)  Tetrahydrofuran
                            0.207 0.186 0.177 0.162 0.149 0.165   0.174   11.81
42)  1,1,1-trichloroethane
                0.884 0.580 0.886 0.782 0.748 0.711 0.696 0.746   0.754   13.32

43) I   1,4-difluorobenzene   ----------------ISTD---------------------
44)  Cyclohexane
                            0.816 0.646 0.655 0.599 0.582 0.595   0.649   13.43
45)  carbon tetrachloride
                0.471 0.303 0.486 0.402 0.410 0.385 0.380 0.398   0.404   13.97
```

Initial Calibration Summary

Job Number: MC41544 **Sample:** MSU1316-ICC1316
Account: EAENYS EA Engineering **Lab FileID:** U31977.D
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

```
46)  1,1-dichloropropene
                                0.499 0.408 0.415 0.377 0.386 0.391   0.413   10.86
47)  benzene
           1.581 1.724 1.053 1.466 1.240 1.175 1.077 1.060 0.913   1.254   21.94
            ---- Quadratic regression ----  Coefficient =  0.9983
              Response Ratio = 0.00602 + 1.18291 *A + -0.06799 *A^2

48)  1,2-dichloroethane
                      0.538 0.341 0.521 0.460 0.440 0.407 0.403 0.403   0.439   14.93
49)  tert-amyl methyl ether
                            0.765 1.126 0.980 0.930 0.885 0.847 0.788   0.903   13.71
50)  heptane
                                0.491 0.402 0.399 0.372 0.384 0.386   0.406   10.64
51)  trichloroethene
           0.284 0.390 0.249 0.385 0.339 0.325 0.306 0.314 0.321   0.324   13.83
52)  1,2-dichloropropane
                            0.241 0.331 0.317 0.293 0.280 0.279 0.284   0.289   10.14
53)  dibromomethane
                            0.156 0.216 0.201 0.188 0.177 0.175 0.183   0.185   10.39
54)  bromodichloromethane
                      0.446 0.290 0.420 0.398 0.370 0.364 0.373 0.392   0.382   12.11
55)  Methylcyclohexane
                                0.660 0.519 0.533 0.489 0.476 0.486   0.527   12.99
56)  2-chloroethyl vinyl ether
                                0.078 0.115 0.111 0.139 0.119 0.134   0.116   18.55
            ---- Linear regression ----  Coefficient =  0.9954
              Response Ratio = -0.00508 + 0.13234 *A

57)  methyl methacrylate
                                0.130 0.167 0.134 0.146 0.135 0.157   0.145   10.12
58)  1,4-dioxane
                                0.002 0.002 0.001 0.001 0.001 0.001   0.001#  34.10
            ---- Quadratic regression ----  Coefficient =  0.9907
              Response Ratio = 0.00013 + 0.00130 *A + -0.00003 *A^2

59)  cis-1,3-dichloropropene
           0.305 0.430 0.349 0.397 0.452 0.397 0.405 0.404 0.437   0.397   11.42
60)  toluene-d8 (s)
           1.023 1.024 1.102 1.014 1.120 1.080 1.124 1.080 1.123   1.077    4.21
61)  4-methyl-2-pentanone
                                0.335 0.335 0.308 0.305 0.285 0.301   0.312    6.38
62)  toluene
                      0.688 0.473 0.659 0.656 0.588 0.593 0.583 0.607   0.606   10.93
63)  trans-1,3-dichloropropene
           0.239 0.332 0.263 0.305 0.380 0.319 0.334 0.311 0.346   0.314   13.52
64)  1,1,2-trichloroethane
                      0.194 0.153 0.174 0.205 0.176 0.178 0.167 0.185   0.179    9.01
65)  ethyl methacrylate
                                0.282 0.317 0.270 0.279 0.249 0.269   0.278    8.10

66) I   chlorobenzene-d5      ----------------ISTD---------------------
67)  tetrachloroethene
           0.499 0.700 0.451 0.710 0.582 0.587 0.555 0.598 0.625   0.590   14.30
68)  1,3-dichloropropane
                                0.747 0.770 0.700 0.684 0.687 0.715   0.717    4.87
69)  dibromochloromethane
           0.458 0.590 0.396 0.583 0.558 0.533 0.534 0.566 0.587   0.534   12.38
70)  1,2-dibromoethane
                            0.377 0.505 0.507 0.468 0.455 0.452 0.467   0.461    9.45
71)  2-hexanone
```

```
                                0.627 0.471 0.433 0.395 0.379 0.369   0.446   21.66
             ---- Linear regression ----  Coefficient =  0.9998
               Response Ratio = 0.02528 + 0.36446 *A

72)  chlorobenzene
                  1.811 1.160 1.701 1.577 1.468 1.401 1.449 1.401   1.496   13.41
73)  1,1,1,2-tetrachloroethane
                  0.825 0.495 0.821 0.645 0.658 0.612 0.662 0.638   0.669   16.23
             ---- Linear regression ----  Coefficient =  0.9979
               Response Ratio = 0.00237 + 0.64147 *A

74)  ethylbenzene
            2.376 3.203 2.054 3.176 2.680 2.578 2.397 2.384         2.606   15.47
             ---- Quadratic regression ----  Coefficient =  0.9969
               Response Ratio = 0.00189 + 2.62166 *A + -0.13017 *A^2

75)  m,p-xylene
            0.842 1.265 0.791 1.248 1.074 1.022 0.954 0.978 0.915   1.010   16.22
             ---- Quadratic regression ----  Coefficient =  0.9983
               Response Ratio = 0.00070 + 1.02647 *A + -0.01403 *A^2

76)  o-xylene
            1.003 1.424 0.912 1.475 1.208 1.188 1.097 1.140 1.084   1.170   15.64
             ---- Quadratic regression ----  Coefficient =  0.9981
               Response Ratio = 0.00064 + 1.17649 *A + -0.02330 *A^2

77)  styrene
                                1.981 1.772 1.649 1.583 1.570 1.434   1.665   11.42
78)  bromoform
                  0.392 0.274 0.407 0.376 0.364 0.374 0.387 0.410   0.373   11.59
79)  trans-1,4-dichloro-2-butene
                                0.258 0.265 0.251 0.241 0.231 0.230   0.246    5.85

80) I   1,4-dichlorobenzene-d ----------------ISTD---------------------
81)  isopropylbenzene
                                2.595 2.403 2.379 2.232 2.331         2.388    5.58
82)  bromofluorobenzene (s)
            0.678 0.699 0.723 0.670 0.740 0.727 0.728 0.729 0.765   0.718    4.21
83)  bromobenzene
                                0.618 0.627 0.578 0.562 0.589 0.624   0.599    4.54
84)  1,1,2,2-tetrachloroethane
            0.432 0.589 0.416 0.571 0.534 0.506 0.487 0.485 0.519   0.505   11.40
85)  1,2,3-trichloropropane
                                0.585 0.583 0.533 0.517 0.511 0.530   0.543    6.02
86)  n-propylbenzene
                                3.068 2.826 2.721 2.538 2.438         2.718    9.10
87)  2-chlorotoluene
                                2.174 2.036 1.934 1.817 1.877 1.473   1.885   12.63
88)  4-chlorotoluene
                                1.802 1.763 1.611 1.542 1.569 1.337   1.604   10.48
89)  1,3,5-trimethylbenzene
                  2.376 1.560 2.408 2.244 2.190 2.074 2.153         2.144   13.22
90)  tert-butylbenzene
                                1.156 1.171 1.193 1.181 1.359 1.289   1.225    6.59
91)  1,2,4-trimethylbenzene
                  2.587 1.681 2.641 2.428 2.351 2.202 2.214         2.300   13.95
92)  sec-butylbenzene
                                3.077 2.849 2.844 2.691 2.585         2.809    6.64
93)  1,3-dichlorobenzene
                  1.577 1.032 1.509 1.399 1.291 1.238 1.273 1.178   1.312   13.52
```

Initial Calibration Summary

Job Number: MC41544 **Sample:** MSU1316-ICC1316
Account: EAENYS EA Engineering **Lab FileID:** U31977.D
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

```
 94)  p-isopropyltoluene
                                2.739 2.526 2.503 2.356 2.332         2.491    6.55
 95)  1,4-dichlorobenzene
                  1.615 1.076 1.545 1.426 1.316 1.266 1.298 1.176   1.340   13.52
 96)  1,2-dichlorobenzene
                  1.828 1.122 1.740 1.569 1.468 1.388 1.422 1.238   1.472   16.15
              ---- Linear regression ----  Coefficient =  0.9934
                Response Ratio = 0.01296 + 1.31912 *A

 97)  n-butylbenzene
                                2.916 2.512 2.485 2.270 2.210         2.479   11.21
 98)  1,2-dibromo-3-chloropropane
                                0.177 0.157 0.156 0.154 0.155 0.158   0.160    5.56
 99)  1,3,5-trichlorobenzene
                                1.789 1.477 1.493 1.340 1.390 1.177   1.444   14.10
100)  1,2,4-trichlorobenzene
                                1.589 1.332 1.378 1.234 1.272 1.128   1.322   11.81
101)  hexachlorobutadiene
                                0.653 0.524 0.554 0.497 0.518 0.516   0.544   10.42
102)  naphthalene
                                3.567 3.097 3.130 2.903 2.673         3.074   10.75
103)  2-Methylnaphthalene
                                1.929 1.675 1.842 1.711 1.687 1.577   1.737    7.30
104)  1-Methylnaphthalene
                                1.453 1.237 1.360 1.265 1.211 1.147   1.279    8.63
105)  1,2,3-trichlorobenzene
                                1.423 1.179 1.231 1.108 1.144 1.043   1.188   11.06
 ------------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           U150917.m         Fri Sep 18 13:03:39 2015
```

6.7.1

6

Initial Calibration Verification

Job Number: MC41544 **Sample:** MSU1316-ICV1316
Account: EAENYS EA Engineering **Lab FileID:** U31983.D
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Evaluate Continuing Calibration Report

```
Data File : D:\msdchem\1\data\U150917\U31983.D          Vial: 15
Acq On    : 17 Sep 2015   7:26 pm                   Operator: andrewd1
Sample    : icv1316-50                              Inst    : MSU
Misc      : ms35192,msu1316,,,,5,1                  Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : D:\msdchem\1\methods\U150917.m (RTE Integrator)
Title        : SW-846 Method 8260
Last Update  : Fri Sep 18 10:56:47 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%

       Compound                    AvgRF   CCRF      %Dev Area%  Dev(min)R.T.
-----------------------------------------------------------------------------
1 I   tert butyl alcohol-d9        1.000   1.000      0.0  100   0.00    7.52
2 P   tertiary butyl alcohol              ----------NA----------
3 P   Ethanol                             ----------NA----------

4 I   pentafluorobenzene           1.000   1.000      0.0  108   0.00    9.50

          ----------------------- Amount  Calc.    %Drift   -------------
5 P   dichlorodifluoromethane             ----------NA----------

          ----------------------- AvgRF   CCRF      %Dev   --------------
6 P   chloromethane                       ----------NA----------
7 P   vinyl chloride                      ----------NA----------
8 P   bromomethane                        ----------NA----------
9 P   chloroethane                        ----------NA----------
10 P  ethyl ether                         ----------NA----------
11 P  acetonitrile                        ----------NA----------
12 P  trichlorofluoromethane              ----------NA----------
13 P  freon-113                           ----------NA----------
14 P  acrolein                            ----------NA----------
15 P  1,1-dichloroethene                  ----------NA----------

          ----------------------- Amount  Calc.    %Drift   -------------
16 P  acetone                             ----------NA----------
17 P  Methyl Acetate                      ----------NA----------

          ----------------------- AvgRF   CCRF      %Dev   --------------
18 P  methylene chloride                  ----------NA----------
19 P  methyl tert butyl ether             ----------NA----------
20 P  acrylonitrile                       ----------NA----------
21 P  allyl chloride                      ----------NA----------

          ----------------------- Amount  Calc.    %Drift   -------------
22 P  trans-1,2-dichloroethene            ----------NA----------

          ----------------------- AvgRF   CCRF      %Dev   --------------
23 P  iodomethane                         ----------NA----------
24 P  carbon disulfide                    ----------NA----------
25 P  propionitrile                       ----------NA----------
26 P  vinyl acetate                       ----------NA----------
27 P  chloroprene                         ----------NA----------
28 P  di-isopropyl ether                  ----------NA----------
29 P  methacrylonitrile                   ----------NA----------
```

Initial Calibration Verification

Job Number: MC41544 **Sample:** MSU1316-ICV1316
Account: EAENYS EA Engineering **Lab FileID:** U31983.D
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

30	P	2-butanone		----------NA----------				
31	P	Ethyl Acetate		----------NA----------				
32	P	Hexane		----------NA----------				
33	P	1,1-dichloroethane		----------NA----------				
34	P	tert-butyl ethyl ether		----------NA----------				
35	P	isobutyl alcohol		----------NA----------				
36	P	2,2-dichloropropane		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
37	P	cis-1,2-dichloroethene		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
38	P	bromochloromethane		----------NA----------				
39	P	chloroform		----------NA----------				
40	S	dibromofluoromethane (s)	0.530	0.510	3.8	106	0.00	9.56
41	P	Tetrahydrofuran		----------NA----------				
42	P	1,1,1-trichloroethane		----------NA----------				
43	I	1,4-difluorobenzene	1.000	1.000	0.0	110	0.00	10.39
44	P	Cyclohexane		----------NA----------				
45	P	carbon tetrachloride		----------NA----------				
46	P	1,1-dichloropropene		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
47	P	benzene		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
48	P	1,2-dichloroethane		----------NA----------				
49	P	tert-amyl methyl ether		----------NA----------				
50	P	heptane		----------NA----------				
51	P	trichloroethene		----------NA----------				
52	P	1,2-dichloropropane		----------NA----------				
53	P	dibromomethane		----------NA----------				
54	P	bromodichloromethane		----------NA----------				
55	P	Methylcyclohexane		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
56	P	2-chloroethyl vinyl ether	50.000	58.940	-17.9	120	0.00	11.44
		----------	AvgRF	CCRF	%Dev	----------		
57	P	methyl methacrylate		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
58	P	1,4-dioxane		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
59	P	cis-1,3-dichloropropene		----------NA----------				
60	S	toluene-d8 (s)	1.077	1.143	-6.1	112	0.00	12.00
61	P	4-methyl-2-pentanone		----------NA----------				
62	P	toluene		----------NA----------				
63	P	trans-1,3-dichloropropene		----------NA----------				
64	P	1,1,2-trichloroethane		----------NA----------				
65	P	ethyl methacrylate		----------NA----------				
66	I	chlorobenzene-d5	1.000	1.000	0.0	113	0.00	13.60
67	P	tetrachloroethene		----------NA----------				
68	P	1,3-dichloropropane		----------NA----------				
69	P	dibromochloromethane		----------NA----------				
70	P	1,2-dibromoethane		----------NA----------				

Initial Calibration Verification

Job Number: MC41544 **Sample:** MSU1316-ICV1316
Account: EAENYS EA Engineering **Lab FileID:** U31983.D
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

			Amount	Calc.	%Drift		
71	P	2-hexanone		NA			
			AvgRF	CCRF	%Dev		
72	P	chlorobenzene		NA			
			Amount	Calc.	%Drift		
73	P	1,1,1,2-tetrachloroethane		NA			
74	P	ethylbenzene		NA			
75	P	m,p-xylene		NA			
76	P	o-xylene		NA			
			AvgRF	CCRF	%Dev		
77	P	styrene		NA			
78	P	bromoform		NA			
79	P	trans-1,4-dichloro-2-bute		NA			
80	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	110	0.00	16.18
81	P	isopropylbenzene		NA			
82	S	bromofluorobenzene (s)	0.718	0.739	-2.9	111	0.00	14.88
83	P	bromobenzene		NA			
84	P	1,1,2,2-tetrachloroethane		NA			
85	P	1,2,3-trichloropropane		NA			
86	P	n-propylbenzene		NA			
87	P	2-chlorotoluene		NA			
88	P	4-chlorotoluene		NA			
89	P	1,3,5-trimethylbenzene		NA			
90	P	tert-butylbenzene		NA			
91	P	1,2,4-trimethylbenzene		NA			
92	P	sec-butylbenzene		NA			
93	P	1,3-dichlorobenzene		NA			
94	P	p-isopropyltoluene		NA			
95	P	1,4-dichlorobenzene		NA			
			Amount	Calc.	%Drift		
96	P	1,2-dichlorobenzene		NA			
			AvgRF	CCRF	%Dev		
97	P	n-butylbenzene		NA			
98	P	1,2-dibromo-3-chloropropa		NA			
99	P	1,3,5-trichlorobenzene		NA			
100	P	1,2,4-trichlorobenzene		NA			
101	P	hexachlorobutadiene		NA			
102	P	naphthalene		NA			
103	P	2-Methylnaphthalene		NA			
104	P	1-Methylnaphthalene		NA			
105	P	1,2,3-trichlorobenzene		NA			

(#) = Out of Range SPCC's out = 82 CCC's out = 0
U31977.D U150917.m Fri Sep 18 13:03:29 2015

6.7.2

6

Initial Calibration Verification

Job Number: MC41544 **Sample:** MSU1317-ICV1316
Account: EAENYS EA Engineering **Lab FileID:** U31989.D
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Evaluate Continuing Calibration Report

```
Data File : D:\msdchem\1\data\U150918\U31989.D          Vial: 3
Acq On    : 18 Sep 2015  12:19 pm                   Operator: andrewd1
Sample    : cc1316-50                               Inst    : MSU
Misc      : ms35192,msu1317,,,,5,1                  Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : D:\msdchem\1\methods\U150917.m (RTE Integrator)
Title        : SW-846 Method 8260
Last Update  : Fri Sep 18 10:56:47 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	93	0.00	7.52
2	P	tertiary butyl alcohol	0.865	0.904	-4.5	102	0.00	7.60
3	P	Ethanol		----------NA----------				
4	I	pentafluorobenzene	1.000	1.000	0.0	98	0.00	9.50
		----------	Amount	Calc.	%Drift		----------	
5	P	dichlorodifluoromethane	50.000	50.468	-0.9	86	-0.01	4.38
		----------	AvgRF	CCRF	%Dev		----------	
6	P	chloromethane	0.673	0.723	-7.4	100	0.00	4.75
7	P	vinyl chloride	0.569	0.625	-9.8	94	-0.01	5.01
8	P	bromomethane	0.344	0.372	-8.1	92	0.00	5.61
9	P	chloroethane	0.314	0.350	-11.5	106	0.00	5.75
10	P	ethyl ether	0.408	0.386	5.4	98	0.00	6.52
11	P	acetonitrile	0.879	0.839	4.6	100	0.00	7.37
12	P	trichlorofluoromethane	0.780	0.794	-1.8	86	0.00	6.18
13	P	freon-113	0.559	0.565	-1.1	108	0.00	6.91
14	P	acrolein		----------NA----------				
15	P	1,1-dichloroethene	0.474	0.469	1.1	106	0.00	6.91
		----------	Amount	Calc.	%Drift		----------	
16	P	acetone	50.000	40.418	19.2	82	-0.01	6.97
17	P	Methyl Acetate	50.000	44.266	11.5	82	0.01	6.96
		----------	AvgRF	CCRF	%Dev		----------	
18	P	methylene chloride	0.528	0.539	-2.1	106	0.00	7.54
19	P	methyl tert butyl ether	1.274	1.354	-6.3	112	0.02	7.86
20	P	acrylonitrile	0.241	0.243	-0.8	106	0.00	7.82
21	P	allyl chloride	0.919	0.849	7.6	97	0.00	7.37
		----------	Amount	Calc.	%Drift		----------	
22	P	trans-1,2-dichloroethene	50.000	52.694	-5.4	104	0.00	7.88
		----------	AvgRF	CCRF	%Dev		----------	
23	P	iodomethane	0.956	0.963	-0.7	108	0.00	7.17
24	P	carbon disulfide	1.958	1.910	2.5	103	0.00	7.31
25	P	propionitrile	0.037	0.034#	8.1	95	0.00	8.49
26	P	vinyl acetate	0.653	0.818	-25.3#	123	0.00	8.31
27	P	chloroprene	0.818	0.746	8.8	97	0.00	8.49
28	P	di-isopropyl ether	1.653	1.686	-2.0	102	0.00	8.35
29	P	methacrylonitrile	0.315	0.310	1.6	102	0.00	9.23

Initial Calibration Verification

Job Number: MC41544 **Sample:** MSU1317-ICV1316
Account: EAENYS EA Engineering **Lab FileID:** U31989.D
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

30	P	2-butanone	0.063	0.059#	6.3	99	0.00	9.00
31	P	Ethyl Acetate	0.448	0.414	7.6	99	0.00	8.18
32	P	Hexane	0.511	0.466	8.8	98	0.00	8.18
33	P	1,1-dichloroethane	0.944	0.897	5.0	100	0.00	8.40
34	P	tert-butyl ethyl ether	1.534	1.512	1.4	99	0.00	8.77
35	P	isobutyl alcohol	0.033	0.030#	9.1	97	0.00	8.77
36	P	2,2-dichloropropane	0.662	0.684	-3.3	109	0.00	9.08
		----------	Amount	Calc.	%Drift		----------	
37	P	cis-1,2-dichloroethene	50.000	54.435	-8.9	107	0.00	9.04
		----------	AvgRF	CCRF	%Dev		----------	
38	P	bromochloromethane	0.273	0.279	-2.2	108	0.00	9.32
39	P	chloroform	0.878	0.870	0.9	104	0.00	9.38
40	S	dibromofluoromethane (s)	0.530	0.552	-4.2	104	0.00	9.56
41	P	Tetrahydrofuran	0.174	0.172	1.1	104	0.00	9.35
42	P	1,1,1-trichloroethane	0.754	0.766	-1.6	106	0.00	9.64
43	I	1,4-difluorobenzene	1.000	1.000	0.0	98	0.00	10.39
44	P	Cyclohexane	0.649	0.597	8.0	98	0.00	9.75
45	P	carbon tetrachloride	0.404	0.417	-3.2	107	0.00	9.82
46	P	1,1-dichloropropene	0.413	0.401	2.9	105	0.00	9.79
		----------	Amount	Calc.	%Drift		----------	
47	P	benzene	50.000	50.896	-1.8	104	0.00	10.03
		----------	AvgRF	CCRF	%Dev		----------	
48	P	1,2-dichloroethane	0.439	0.423	3.6	102	0.00	10.05
49	P	tert-amyl methyl ether	0.903	0.916	-1.4	102	0.00	10.07
50	P	heptane	0.406	0.415	-2.2	110	0.00	10.22
51	P	trichloroethene	0.324	0.312	3.7	100	0.00	10.70
52	P	1,2-dichloropropane	0.289	0.288	0.3	101	0.00	10.99
53	P	dibromomethane	0.185	0.188	-1.6	104	0.00	11.10
54	P	bromodichloromethane	0.382	0.372	2.6	100	0.00	11.23
55	P	Methylcyclohexane	0.527	0.525	0.4	106	0.00	10.99
		----------	Amount	Calc.	%Drift		----------	
56	P	2-chloroethyl vinyl ether		----------NA----------				
		----------	AvgRF	CCRF	%Dev		----------	
57	P	methyl methacrylate	0.145	0.132	9.0	88	0.00	10.91
		----------	Amount	Calc.	%Drift		----------	
58	P	1,4-dioxane	250.000	194.979	22.0#	70	-0.01	11.03
		----------	AvgRF	CCRF	%Dev		----------	
59	P	cis-1,3-dichloropropene	0.397	0.372	6.3	90	0.00	11.68
60	S	toluene-d8 (s)	1.077	1.061	1.5	93	0.00	12.00
61	P	4-methyl-2-pentanone	0.312	0.318	-1.9	103	0.00	11.77
62	P	toluene	0.606	0.583	3.8	97	0.00	12.08
63	P	trans-1,3-dichloropropene	0.314	0.269	14.3	79	0.00	12.25
64	P	1,1,2-trichloroethane	0.179	0.165	7.8	91	0.00	12.49
65	P	ethyl methacrylate	0.278	0.258	7.2	91	0.00	12.22
66	I	chlorobenzene-d5	1.000	1.000	0.0	88	0.00	13.60
67	P	tetrachloroethene	0.590	0.617	-4.6	98	0.00	12.65
68	P	1,3-dichloropropane	0.717	0.703	2.0	90	0.00	12.69
69	P	dibromochloromethane	0.534	0.553	-3.6	91	0.00	12.96
70	P	1,2-dibromoethane	0.461	0.460	0.2	89	0.00	13.13

Initial Calibration Verification

Job Number: MC41544 **Sample:** MSU1317-ICV1316
Account: EAENYS EA Engineering **Lab FileID:** U31989.D
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

			Amount	Calc.	%Drift			
71	P	2-hexanone	50.000	49.377	1.2	86	0.00	12.65
			AvgRF	CCRF	%Dev			
72	P	chlorobenzene	1.496	1.440	3.7	90	0.00	13.64
			Amount	Calc.	%Drift			
73	P	1,1,1,2-tetrachloroethane	50.000	56.233	-12.5	104	0.00	13.70
74	P	ethylbenzene	50.000	52.274	-4.5	95	0.00	13.69
75	P	m,p-xylene	100.000	103.479	-3.5	95	0.00	13.82
76	P	o-xylene	50.000	52.181	-4.4	96	0.00	14.26
			AvgRF	CCRF	%Dev			
77	P	styrene	1.665	1.642	1.4	91	0.00	14.28
78	P	bromoform	0.373	0.396	-6.2	93	0.00	14.55
79	P	trans-1,4-dichloro-2-bute	0.246	0.260	-5.7	95	0.00	14.68
80	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	89	0.00	16.18
81	P	isopropylbenzene	2.388	2.483	-4.0	100	0.00	14.64
82	S	bromofluorobenzene (s)	0.718	0.709	1.3	87	0.00	14.88
83	P	bromobenzene	0.599	0.580	3.2	92	0.00	15.09
84	P	1,1,2,2-tetrachloroethane	0.505	0.575	-13.9	106	0.00	14.95
85	P	1,2,3-trichloropropane	0.543	0.536	1.3	93	0.00	15.06
86	P	n-propylbenzene	2.718	2.689	1.1	95	0.00	15.10
87	P	2-chlorotoluene	1.885	1.952	-3.6	96	0.00	15.26
88	P	4-chlorotoluene	1.604	1.576	1.7	91	0.00	15.39
89	P	1,3,5-trimethylbenzene	2.144	2.393	-11.6	103	0.00	15.27
90	P	tert-butylbenzene	1.225	1.337	-9.1	101	0.00	15.66
91	P	1,2,4-trimethylbenzene	2.300	2.388	-3.8	97	0.00	15.71
92	P	sec-butylbenzene	2.809	2.987	-6.3	99	0.00	15.90
93	P	1,3-dichlorobenzene	1.312	1.285	2.1	93	0.00	16.10
94	P	p-isopropyltoluene	2.491	2.638	-5.9	100	0.00	16.04
95	P	1,4-dichlorobenzene	1.340	1.305	2.6	92	0.00	16.21
			Amount	Calc.	%Drift			
96	P	1,2-dichlorobenzene	50.000	55.805	-11.6	96	0.00	16.62
			AvgRF	CCRF	%Dev			
97	P	n-butylbenzene	2.479	2.558	-3.2	101	0.00	16.50
98	P	1,2-dibromo-3-chloropropa	0.160	0.174	-8.7	101	0.00	17.46
99	P	1,3,5-trichlorobenzene	1.444	1.494	-3.5	100	0.00	17.66
100	P	1,2,4-trichlorobenzene	1.322	1.480	-12.0	107	0.00	18.37
101	P	hexachlorobutadiene	0.544	0.621	-14.2	112	0.00	18.49
102	P	naphthalene	3.074	3.119	-1.5	96	0.00	18.72
103	P	2-Methylnaphthalene	1.737	1.963	-13.0	103	0.00	20.11
104	P	1-Methylnaphthalene	1.279	1.498	-17.1	106	0.00	20.38
105	P	1,2,3-trichlorobenzene	1.188	1.324	-11.4	107	0.00	18.96

(#) = Out of Range SPCC's out = 5 CCC's out = 0
U31977.D U150917.m Fri Sep 18 13:15:10 2015

6.7.3

6

Continuing Calibration Summary

Job Number: MC41544 **Sample:** MSU1329-CC1316
Account: EAENYS EA Engineering **Lab FileID:** U32343.D
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Evaluate Continuing Calibration Report

```
Data File : R:\1\data\U150927\U32343.D                    Vial: 2
Acq On    : 27 Sep 2015  12:02 pm                     Operator: andrewd1
Sample    : cc1316-50                                 Inst    : MSU
Misc      : ms35292,msu1329,,,,5,1                    Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : R:\1\methods\U150917.m (RTE Integrator)
Title        : SW-846 Method 8260
Last Update  : Fri Sep 18 10:56:47 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	65	-0.06	7.47
2	P	tertiary butyl alcohol	0.865	1.021	-18.0	80	-0.05	7.56
3	P	Ethanol	0.000	0.089	0.0	0#	-0.01	6.33
4	I	pentafluorobenzene	1.000	1.000	0.0	71	0.00	9.50
		----------	Amount	Calc.	%Drift		----------	
5	P	dichlorodifluoromethane	50.000	56.357	-12.7	69	-0.02	4.37
		----------	AvgRF	CCRF	%Dev		----------	
6	P	chloromethane	0.673	0.316	53.0#	31#	-0.02	4.74
7	P	vinyl chloride	0.569	0.491	13.7	53	-0.02	5.00
8	P	bromomethane	0.344	0.334	2.9	59	-0.01	5.60
9	P	chloroethane	0.314	0.265	15.6	57	-0.01	5.75
10	P	ethyl ether	0.408	0.337	17.4	62	0.00	6.51
11	P	acetonitrile	0.879	0.728	17.2	63	0.00	7.37
12	P	trichlorofluoromethane	0.780	0.798	-2.3	62	0.00	6.17
13	P	freon-113	0.559	0.586	-4.8	80	0.00	6.90
14	P	acrolein		----------NA----------				
15	P	1,1-dichloroethene	0.474	0.440	7.2	72	0.00	6.91
		----------	Amount	Calc.	%Drift		----------	
16	P	acetone	50.000	53.489	-7.0	77	-0.05	6.93
17	P	Methyl Acetate	50.000	67.982	-36.0#	87	-0.02	6.92
		----------	AvgRF	CCRF	%Dev		----------	
18	P	methylene chloride	0.528	0.495	6.3	70	0.00	7.53
19	P	methyl tert butyl ether	1.274	1.247	2.1	74	0.00	7.84
20	P	acrylonitrile	0.241	0.200	17.0	63	-0.03	7.79
21	P	allyl chloride	0.919	0.754	18.0	62	0.00	7.37
		----------	Amount	Calc.	%Drift		----------	
22	P	trans-1,2-dichloroethene	50.000	49.215	1.6	70	0.00	7.88
		----------	AvgRF	CCRF	%Dev		----------	
23	P	iodomethane	0.956	0.911	4.7	73	0.00	7.16
24	P	carbon disulfide	1.958	1.795	8.3	70	0.00	7.31
25	P	propionitrile	0.037	0.034#	8.1	69	0.00	8.48
26	P	vinyl acetate	0.653	0.815	-24.8#	88	0.00	8.31
27	P	chloroprene	0.818	0.773	5.5	72	0.00	8.49
28	P	di-isopropyl ether	1.653	1.483	10.3	65	0.00	8.35
29	P	methacrylonitrile	0.315	0.292	7.3	69	0.00	9.22

Continuing Calibration Summary

Job Number: MC41544 **Sample:** MSU1329-CC1316
Account: EAENYS EA Engineering **Lab FileID:** U32343.D
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

30	P	2-butanone	0.063	0.056#	11.1	67	-0.02	8.98
31	P	Ethyl Acetate	0.448	0.398	11.2	69	0.00	8.18
32	P	Hexane	0.511	0.483	5.5	73	0.00	8.18
33	P	1,1-dichloroethane	0.944	0.856	9.3	69	0.00	8.40
34	P	tert-butyl ethyl ether	1.534	1.434	6.5	67	0.00	8.77
35	P	isobutyl alcohol	0.033	0.033#	0.0	76	0.00	8.77
36	P	2,2-dichloropropane	0.662	0.717	-8.3	82	0.00	9.08
		----------	Amount	Calc.	%Drift		----------	
37	P	cis-1,2-dichloroethene	50.000	50.092	-0.2	71	0.00	9.04
		----------	AvgRF	CCRF	%Dev		----------	
38	P	bromochloromethane	0.273	0.275	-0.7	77	0.00	9.32
39	P	chloroform	0.878	0.898	-2.3	78	0.00	9.38
40	S	dibromofluoromethane (s)	0.530	0.540	-1.9	73	0.00	9.56
41	P	Tetrahydrofuran	0.174	0.143	17.8	63	-0.01	9.34
42	P	1,1,1-trichloroethane	0.754	0.827	-9.7	82	0.00	9.64
43	I	1,4-difluorobenzene	1.000	1.000	0.0	69	0.00	10.39
44	P	Cyclohexane	0.649	0.593	8.6	68	0.00	9.75
45	P	carbon tetrachloride	0.404	0.470	-16.3	84	0.00	9.82
46	P	1,1-dichloropropene	0.413	0.415	-0.5	76	0.00	9.79
		----------	Amount	Calc.	%Drift		----------	
47	P	benzene	50.000	49.505	1.0	71	0.00	10.03
		----------	AvgRF	CCRF	%Dev		----------	
48	P	1,2-dichloroethane	0.439	0.482	-9.8	82	0.00	10.05
49	P	tert-amyl methyl ether	0.903	0.890	1.4	69	0.00	10.07
50	P	heptane	0.406	0.395	2.7	73	0.00	10.22
51	P	trichloroethene	0.324	0.324	0.0	73	0.00	10.69
52	P	1,2-dichloropropane	0.289	0.280	3.1	69	0.00	10.98
53	P	dibromomethane	0.185	0.197	-6.5	77	0.00	11.09
54	P	bromodichloromethane	0.382	0.418	-9.4	79	0.00	11.23
55	P	Methylcyclohexane	0.527	0.518	1.7	73	0.00	10.99
		----------	Amount	Calc.	%Drift		----------	
56	P	2-chloroethyl vinyl ether	50.000	39.209	21.6#	49	0.00	11.44
		----------	AvgRF	CCRF	%Dev		----------	
57	P	methyl methacrylate	0.145	0.135	6.9	64	0.00	10.90
		----------	Amount	Calc.	%Drift		----------	
58	P	1,4-dioxane	250.000	335.924	-34.4#	78	-0.03	11.02
		----------	AvgRF	CCRF	%Dev		----------	
59	P	cis-1,3-dichloropropene	0.397	0.417	-5.0	71	0.00	11.68
60	S	toluene-d8 (s)	1.077	1.083	-0.6	66	0.00	12.00
61	P	4-methyl-2-pentanone	0.312	0.280	10.3	63	0.00	11.76
62	P	toluene	0.606	0.612	-1.0	71	0.00	12.07
63	P	trans-1,3-dichloropropene	0.314	0.345	-9.9	71	0.00	12.25
64	P	1,1,2-trichloroethane	0.179	0.181	-1.1	70	0.00	12.49
65	P	ethyl methacrylate	0.278	0.244	12.2	60	0.00	12.22
66	I	chlorobenzene-d5	1.000	1.000	0.0	66	0.00	13.60
67	P	tetrachloroethene	0.590	0.683	-15.8	81	0.00	12.65
68	P	1,3-dichloropropane	0.717	0.704	1.8	68	0.00	12.68
69	P	dibromochloromethane	0.534	0.602	-12.7	74	0.00	12.95
70	P	1,2-dibromoethane	0.461	0.487	-5.6	71	0.00	13.13

Continuing Calibration Summary

Job Number: MC41544 **Sample:** MSU1329-CC1316
Account: EAENYS EA Engineering **Lab FileID:** U32343.D
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

			Amount	Calc.	%Drift			
71	P	2-hexanone	50.000	42.522	15.0	56	0.00	12.64
			AvgRF	CCRF	%Dev			
72	P	chlorobenzene	1.496	1.565	-4.6	74	0.00	13.63
			Amount	Calc.	%Drift			
73	P	1,1,1,2-tetrachloroethane	50.000	57.453	-14.9	80	0.00	13.70
74	P	ethylbenzene	50.000	53.342	-6.7	73	0.00	13.69
75	P	m,p-xylene	100.000	106.216	-6.2	73	0.00	13.82
76	P	o-xylene	50.000	53.747	-7.5	74	0.00	14.26
			AvgRF	CCRF	%Dev			
77	P	styrene	1.665	1.690	-1.5	70	0.00	14.27
78	P	bromoform	0.373	0.385	-3.2	68	0.00	14.55
79	P	trans-1,4-dichloro-2-bute	0.246	0.213	13.4	58	0.00	14.67
80	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	73	0.00	16.18
81	P	isopropylbenzene	2.388	2.421	-1.4	79	0.00	14.64
82	S	bromofluorobenzene (s)	0.718	0.657	8.5	66	0.00	14.88
83	P	bromobenzene	0.599	0.598	0.2	77	0.00	15.09
84	P	1,1,2,2-tetrachloroethane	0.505	0.516	-2.2	77	0.00	14.95
85	P	1,2,3-trichloropropane	0.543	0.495	8.8	70	0.00	15.06
86	P	n-propylbenzene	2.718	2.681	1.4	77	0.00	15.10
87	P	2-chlorotoluene	1.885	1.929	-2.3	77	0.00	15.26
88	P	4-chlorotoluene	1.604	1.602	0.1	76	0.00	15.38
89	P	1,3,5-trimethylbenzene	2.144	2.291	-6.9	80	0.00	15.27
90	P	tert-butylbenzene	1.225	1.393	-13.7	86	0.00	15.65
91	P	1,2,4-trimethylbenzene	2.300	2.388	-3.8	79	0.00	15.71
92	P	sec-butylbenzene	2.809	3.069	-9.3	83	0.00	15.90
93	P	1,3-dichlorobenzene	1.312	1.356	-3.4	80	0.00	16.10
94	P	p-isopropyltoluene	2.491	2.695	-8.2	83	0.00	16.04
95	P	1,4-dichlorobenzene	1.340	1.390	-3.7	80	0.00	16.20
			Amount	Calc.	%Drift			
96	P	1,2-dichlorobenzene	50.000	58.628	-17.3	82	0.00	16.62
			AvgRF	CCRF	%Dev			
97	P	n-butylbenzene	2.479	2.591	-4.5	83	0.00	16.50
98	P	1,2-dibromo-3-chloropropa	0.160	0.157	1.9	74	0.00	17.46
99	P	1,3,5-trichlorobenzene	1.444	1.663	-15.2	90	0.00	17.66
100	P	1,2,4-trichlorobenzene	1.322	1.547	-17.0	91	0.00	18.37
101	P	hexachlorobutadiene	0.544	0.686	-26.1#	100	0.00	18.49
102	P	naphthalene	3.074	3.351	-9.0	84	0.00	18.71
103	P	2-Methylnaphthalene	1.737	1.859	-7.0	79	0.00	20.11
104	P	1-Methylnaphthalene	1.279	1.378	-7.7	79	0.00	20.38
105	P	1,2,3-trichlorobenzene	1.188	1.396	-17.5	92	0.00	18.96

(#) = Out of Range SPCC's out = 4 CCC's out = 0
U31977.D U150917.m Sun Sep 27 12:54:59 2015

Continuing Calibration Summary

Job Number: MC41544 **Sample:** MSU1329-ECC1316
Account: EAENYS EA Engineering **Lab FileID:** U32367.D
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Evaluate Continuing Calibration Report

```
Data File : R:\1\data\U150927\U32367.D                    Vial: 26
Acq On    : 27 Sep 2015  10:56 pm                     Operator: andrewd1
Sample    : ecc1316-50                                Inst    : MSU
Misc      : ms35302,msu1329,,,,5,1                    Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : R:\1\methods\U150917.m (RTE Integrator)
Title        : SW-846 Method 8260
Last Update  : Fri Sep 18 10:56:47 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	70	-0.05	7.48
2	P	tertiary butyl alcohol	0.865	1.021	-18.0	86	-0.04	7.57
3	P	Ethanol	0.000	0.069	0.0	0#	0.00	6.36
4	I	pentafluorobenzene	1.000	1.000	0.0	74	0.00	9.50
		----------	Amount	Calc.	%Drift		----------	
5	P	dichlorodifluoromethane	50.000	57.084	-14.2	73	-0.02	4.37
		----------	AvgRF	CCRF	%Dev		----------	
6	P	chloromethane	0.673	0.543	19.3	56	-0.02	4.74
7	P	vinyl chloride	0.569	0.566	0.5	64	-0.03	4.99
8	P	bromomethane	0.344	0.356	-3.5	66	-0.02	5.60
9	P	chloroethane	0.314	0.279	11.1	63	-0.01	5.75
10	P	ethyl ether	0.408	0.342	16.2	65	0.00	6.51
11	P	acetonitrile	0.879	0.718	18.3	64	0.00	7.37
12	P	trichlorofluoromethane	0.780	0.762	2.3	62	-0.01	6.16
13	P	freon-113	0.559	0.577	-3.2	82	-0.01	6.90
14	P	acrolein		----------NA----------				
15	P	1,1-dichloroethene	0.474	0.429	9.5	73	0.00	6.91
		----------	Amount	Calc.	%Drift		----------	
16	P	acetone	50.000	37.487	25.0#	58	-0.04	6.94
17	P	Methyl Acetate	50.000	45.998	8.0	64	-0.01	6.93
		----------	AvgRF	CCRF	%Dev		----------	
18	P	methylene chloride	0.528	0.489	7.4	72	0.00	7.53
19	P	methyl tert butyl ether	1.274	1.267	0.5	79	0.00	7.83
20	P	acrylonitrile	0.241	0.215	10.8	70	-0.02	7.80
21	P	allyl chloride	0.919	0.723	21.3#	62	0.00	7.37
		----------	Amount	Calc.	%Drift		----------	
22	P	trans-1,2-dichloroethene	50.000	50.468	-0.9	75	0.00	7.88
		----------	AvgRF	CCRF	%Dev		----------	
23	P	iodomethane	0.956	0.918	4.0	77	-0.01	7.16
24	P	carbon disulfide	1.958	1.721	12.1	70	0.00	7.31
25	P	propionitrile	0.037	0.034#	8.1	72	0.00	8.48
26	P	vinyl acetate	0.653	0.757	-15.9	85	0.00	8.31
27	P	chloroprene	0.818	0.761	7.0	74	0.00	8.49
28	P	di-isopropyl ether	1.653	1.496	9.5	68	0.00	8.35
29	P	methacrylonitrile	0.315	0.291	7.6	72	0.00	9.23

Continuing Calibration Summary

Job Number: MC41544 **Sample:** MSU1329-ECC1316
Account: EAENYS EA Engineering **Lab FileID:** U32367.D
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

30	P	2-butanone	0.063	0.054#	14.3	68	-0.02	8.99
31	P	Ethyl Acetate	0.448	0.363	19.0	65	0.00	8.18
32	P	Hexane	0.511	0.429	16.0	68	0.00	8.18
33	P	1,1-dichloroethane	0.944	0.864	8.5	73	0.00	8.40
34	P	tert-butyl ethyl ether	1.534	1.451	5.4	71	0.00	8.77
35	P	isobutyl alcohol	0.033	0.032#	3.0	77	0.00	8.76
36	P	2,2-dichloropropane	0.662	0.636	3.9	76	0.00	9.08
		----------	Amount	Calc.	%Drift		----------	
37	P	cis-1,2-dichloroethene	50.000	51.575	-3.2	76	0.00	9.04
		----------	AvgRF	CCRF	%Dev		----------	
38	P	bromochloromethane	0.273	0.278	-1.8	81	0.00	9.32
39	P	chloroform	0.878	0.893	-1.7	80	0.00	9.38
40	S	dibromofluoromethane (s)	0.530	0.557	-5.1	79	0.00	9.56
41	P	Tetrahydrofuran	0.174	0.151	13.2	69	-0.01	9.34
42	P	1,1,1-trichloroethane	0.754	0.802	-6.4	83	0.00	9.64
43	I	1,4-difluorobenzene	1.000	1.000	0.0	72	0.00	10.39
44	P	Cyclohexane	0.649	0.597	8.0	71	0.00	9.75
45	P	carbon tetrachloride	0.404	0.457	-13.1	85	0.00	9.82
46	P	1,1-dichloropropene	0.413	0.404	2.2	77	0.00	9.79
		----------	Amount	Calc.	%Drift		----------	
47	P	benzene	50.000	49.098	1.8	73	0.00	10.03
		----------	AvgRF	CCRF	%Dev		----------	
48	P	1,2-dichloroethane	0.439	0.460	-4.8	81	0.00	10.05
49	P	tert-amyl methyl ether	0.903	0.886	1.9	72	0.00	10.07
50	P	heptane	0.406	0.357	12.1	69	0.00	10.22
51	P	trichloroethene	0.324	0.313	3.4	73	0.00	10.69
52	P	1,2-dichloropropane	0.289	0.276	4.5	71	0.00	10.98
53	P	dibromomethane	0.185	0.194	-4.9	78	0.00	11.09
54	P	bromodichloromethane	0.382	0.398	-4.2	78	0.00	11.23
55	P	Methylcyclohexane	0.527	0.517	1.9	76	0.00	10.99
		----------	Amount	Calc.	%Drift		----------	
56	P	2-chloroethyl vinyl ether	50.000	39.050	21.9#	51	0.00	11.44
		----------	AvgRF	CCRF	%Dev		----------	
57	P	methyl methacrylate	0.145	0.133	8.3	65	0.00	10.90
		----------	Amount	Calc.	%Drift		----------	
58	P	1,4-dioxane	250.000	235.096	6.0	60	-0.02	11.03
		----------	AvgRF	CCRF	%Dev		----------	
59	P	cis-1,3-dichloropropene	0.397	0.381	4.0	67	0.00	11.68
60	S	toluene-d8 (s)	1.077	1.086	-0.8	69	0.00	12.00
61	P	4-methyl-2-pentanone	0.312	0.298	4.5	70	0.00	11.76
62	P	toluene	0.606	0.603	0.5	73	0.00	12.07
63	P	trans-1,3-dichloropropene	0.314	0.303	3.5	65	0.00	12.25
64	P	1,1,2-trichloroethane	0.179	0.176	1.7	71	0.00	12.49
65	P	ethyl methacrylate	0.278	0.253	9.0	65	0.00	12.22
66	I	chlorobenzene-d5	1.000	1.000	0.0	68	0.00	13.60
67	P	tetrachloroethene	0.590	0.658	-11.5	81	0.00	12.65
68	P	1,3-dichloropropane	0.717	0.683	4.7	68	0.00	12.68
69	P	dibromochloromethane	0.534	0.570	-6.7	73	0.00	12.95
70	P	1,2-dibromoethane	0.461	0.474	-2.8	71	0.00	13.13

Continuing Calibration Summary

Job Number: MC41544 **Sample:** MSU1329-ECC1316
Account: EAENYS EA Engineering **Lab FileID:** U32367.D
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

			Amount	Calc.	%Drift			
71	P	2-hexanone	50.000	44.473	11.1	60	0.00	12.64
			AvgRF	CCRF	%Dev			
72	P	chlorobenzene	1.496	1.539	-2.9	75	0.00	13.63
			Amount	Calc.	%Drift			
73	P	1,1,1,2-tetrachloroethane	50.000	57.574	-15.1	83	0.00	13.70
74	P	ethylbenzene	50.000	53.462	-6.9	76	0.00	13.69
75	P	m,p-xylene	100.000	106.752	-6.8	76	0.00	13.82
76	P	o-xylene	50.000	54.626	-9.3	78	0.00	14.26
			AvgRF	CCRF	%Dev			
77	P	styrene	1.665	1.696	-1.9	73	0.00	14.27
78	P	bromoform	0.373	0.378	-1.3	69	0.00	14.55
79	P	trans-1,4-dichloro-2-bute	0.246	0.106	56.9#	30#	0.00	14.68
80	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	75	0.00	16.18
81	P	isopropylbenzene	2.388	2.443	-2.3	82	0.00	14.64
82	S	bromofluorobenzene (s)	0.718	0.670	6.7	69	0.00	14.88
83	P	bromobenzene	0.599	0.599	0.0	80	0.00	15.09
84	P	1,1,2,2-tetrachloroethane	0.505	0.542	-7.3	84	0.00	14.95
85	P	1,2,3-trichloropropane	0.543	0.517	4.8	75	0.00	15.06
86	P	n-propylbenzene	2.718	2.679	1.4	79	0.00	15.10
87	P	2-chlorotoluene	1.885	1.926	-2.2	80	0.00	15.26
88	P	4-chlorotoluene	1.604	1.583	1.3	77	0.00	15.38
89	P	1,3,5-trimethylbenzene	2.144	2.285	-6.6	83	0.00	15.27
90	P	tert-butylbenzene	1.225	1.356	-10.7	86	0.00	15.65
91	P	1,2,4-trimethylbenzene	2.300	2.394	-4.1	82	0.00	15.71
92	P	sec-butylbenzene	2.809	3.025	-7.7	84	0.00	15.90
93	P	1,3-dichlorobenzene	1.312	1.353	-3.1	82	0.00	16.10
94	P	p-isopropyltoluene	2.491	2.658	-6.7	85	0.00	16.04
95	P	1,4-dichlorobenzene	1.340	1.380	-3.0	82	0.00	16.20
			Amount	Calc.	%Drift			
96	P	1,2-dichlorobenzene	50.000	58.926	-17.9	85	0.00	16.62
			AvgRF	CCRF	%Dev			
97	P	n-butylbenzene	2.479	2.519	-1.6	83	0.00	16.50
98	P	1,2-dibromo-3-chloropropa	0.160	0.158	1.3	77	0.00	17.46
99	P	1,3,5-trichlorobenzene	1.444	1.614	-11.8	90	0.00	17.66
100	P	1,2,4-trichlorobenzene	1.322	1.499	-13.4	91	0.00	18.37
101	P	hexachlorobutadiene	0.544	0.648	-19.1	98	0.00	18.49
102	P	naphthalene	3.074	3.319	-8.0	86	0.00	18.71
103	P	2-Methylnaphthalene	1.737	1.975	-13.7	87	0.00	20.11
104	P	1-Methylnaphthalene	1.279	1.502	-17.4	89	0.00	20.37
105	P	1,2,3-trichlorobenzene	1.188	1.367	-15.1	93	0.00	18.96

(#) = Out of Range SPCC's out = 4 CCC's out = 0
U31977.D U150917.m Mon Sep 28 12:58:14 2015

New England ACCUTEST LABORATORIES

GC/MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data File: R:\1\data\U150927\U32363.D
Sample : mc41544-1
Misc : ms35302,msu1329,,,,5,1
ALS Vial : 22 Sample Multiplier: 1
Acq On : 27 Sep 2015 9:07 pm Operator: andrewd1

Quant Time: Sep 28 12:51:47 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260

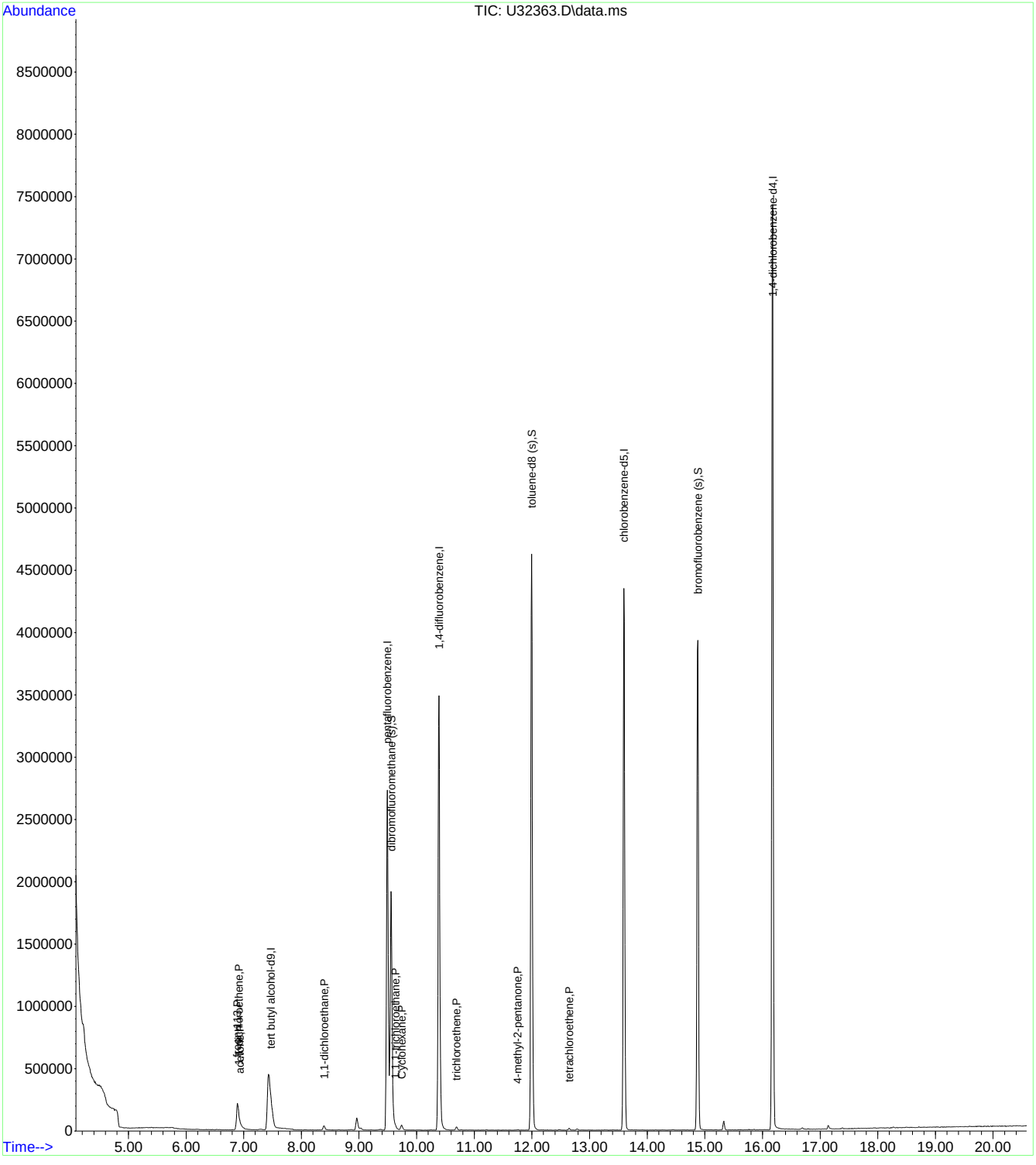
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.471	65	1129308	500.00	ppb	-0.06
4) pentafluorobenzene	9.496	168	2168216	50.00	ppb	0.00
43) 1,4-difluorobenzene	10.390	114	3065965	50.00	ppb	0.00
66) chlorobenzene-d5	13.597	82	1422489	50.00	ppb	0.00
80) 1,4-dichlorobenzene-d4	16.175	152	2110955	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	9.561	113	1288869	56.05	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery	= 112.10%		
60) toluene-d8 (s)	11.995	98	3281101	49.69	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery	= 99.38%		
82) bromofluorobenzene (s)	14.876	95	1367213	45.12	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery	= 90.24%		
Target Compounds						Qvalue
13) freon-113	6.893	101	15310	0.632	ppb	91
15) 1,1-dichloroethene	6.908	96	57633	2.803	ppb	95
16) acetone	6.932	58	75689	24.022	ppb #	67
33) 1,1-dichloroethane	8.398	63	42300	1.033	ppb	97
42) 1,1,1-trichloroethane	9.635	97	13723	0.420	ppb	95
44) Cyclohexane	9.743	56	21619	0.543	ppb	98
51) trichloroethene	10.693	95	9734	0.490	ppb	86
61) 4-methyl-2-pentanone	11.756	43	4118	0.216	ppb	86
67) tetrachloroethene	12.646	166	4371	0.261	ppb	89

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

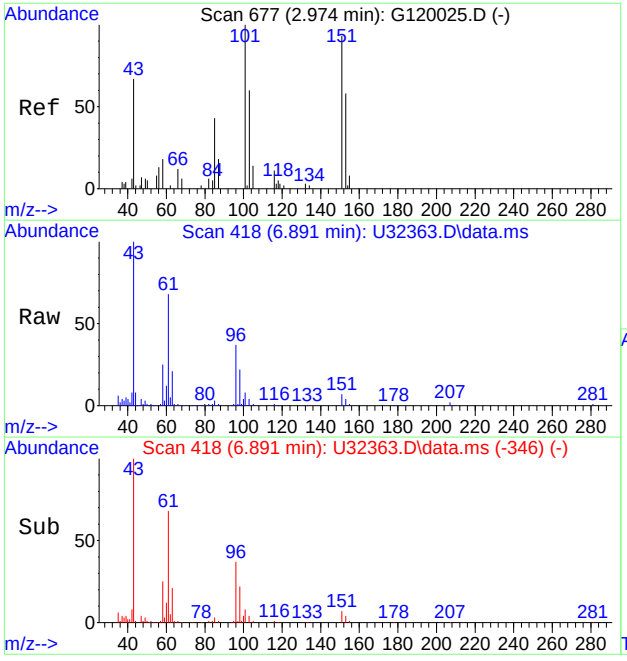
Quantitation Report (QT Reviewed)

Data File: R:\1\data\U150927\U32363.D
Sample : mc41544-1
Misc : ms35302,msu1329,,,,5,1
ALS Vial : 22 Sample Multiplier: 1
Acq On : 27 Sep 2015 9:07 pm Operator: andrewd1

Quant Time: Sep 28 12:51:47 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260



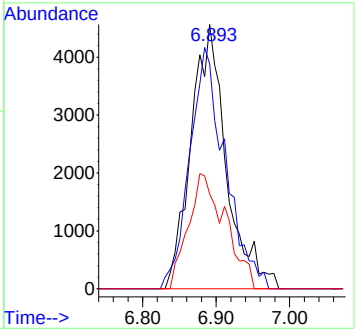
U150917.m Mon Sep 28 12:51:53 2015 Page: 2

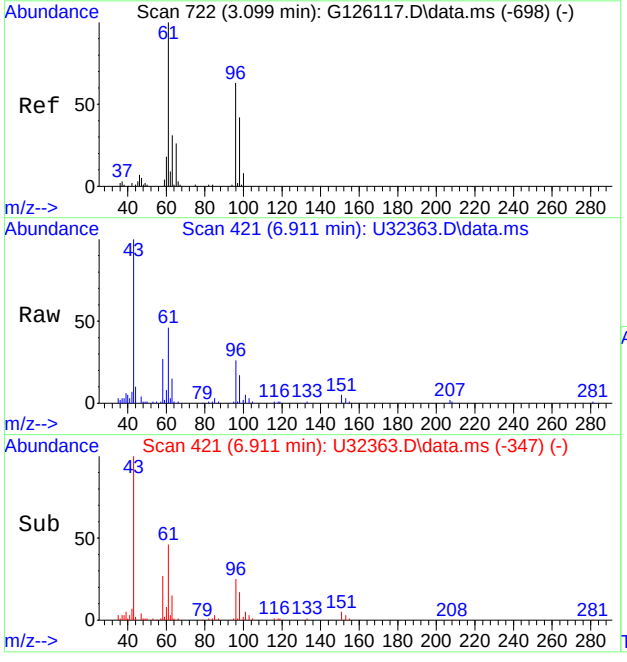


#13
freon-113
Concen: 0.632 ppb
RT: 6.893 min Scan# 418
Delta R.T. -0.017 min
Lab File: U32363.D
Acq: 27 Sep 2015 9:07 pm

Tgt Ion:101 Resp: 15310

Ion	Ratio	Lower	Upper
101	100		
151	85.0	49.4	109.4
85	35.9	15.0	75.0

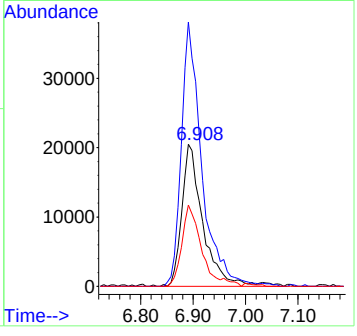


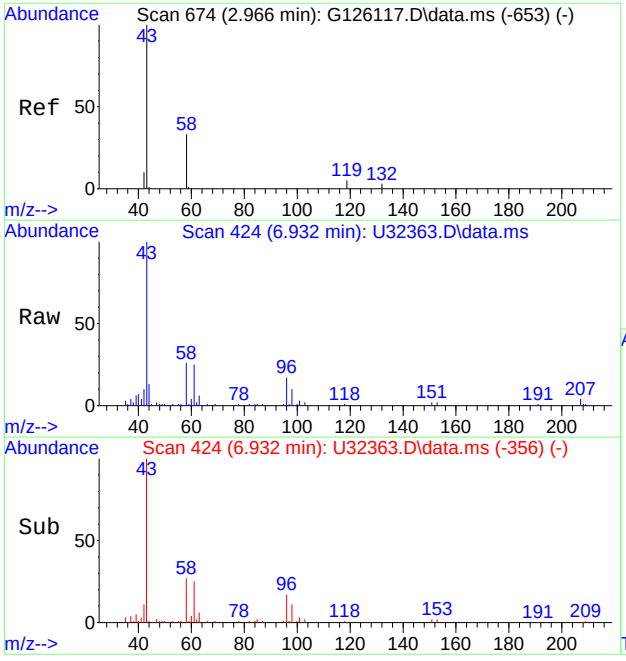


#15
1,1-dichloroethene
Concen: 2.803 ppb
RT: 6.908 min Scan# 421
Delta R.T. -0.006 min
Lab File: U32363.D
Acq: 27 Sep 2015 9:07 pm

Tgt Ion: 96 Resp: 57633

Ion	Ratio	Lower	Upper
96	100		
61	179.0	158.7	218.7
63	56.7	27.6	87.6

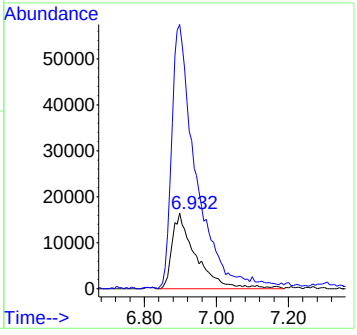


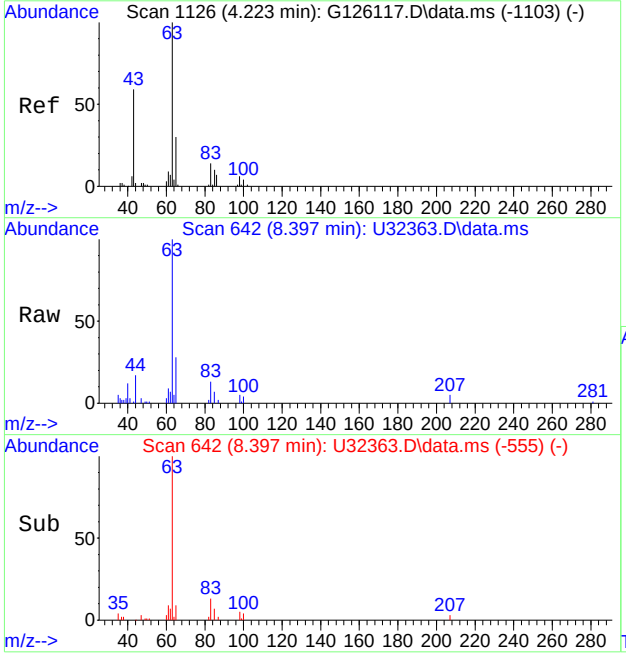


#16
acetone
Concen: 24.022 ppb
RT: 6.932 min Scan# 424
Delta R.T. -0.044 min
Lab File: U32363.D
Acq: 27 Sep 2015 9:07 pm

Tgt Ion: 58 Resp: 75689

Ion	Ratio	Lower	Upper
58	100		
43	374.2	278.8	338.8#

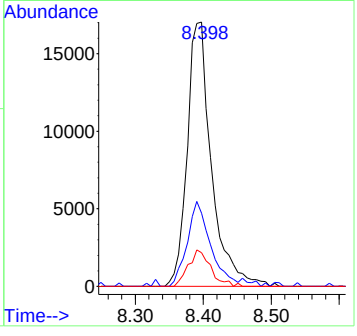


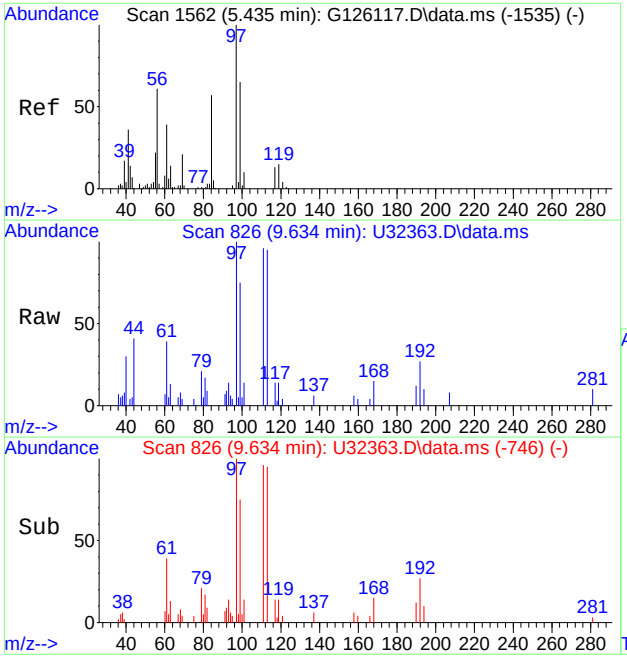


#33
1,1-dichloroethane
Concen: 1.033 ppb
RT: 8.398 min Scan# 642
Delta R.T. -0.005 min
Lab File: U32363.D
Acq: 27 Sep 2015 9:07 pm

Tgt Ion: 63 Resp: 42300

Ion	Ratio	Lower	Upper
63	100		
65	27.7	0.0	59.7
83	12.7	0.0	41.8

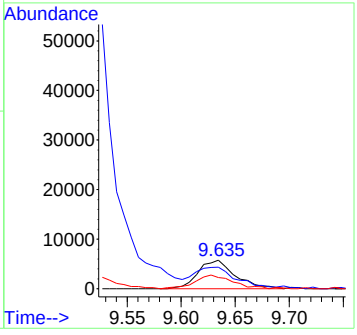


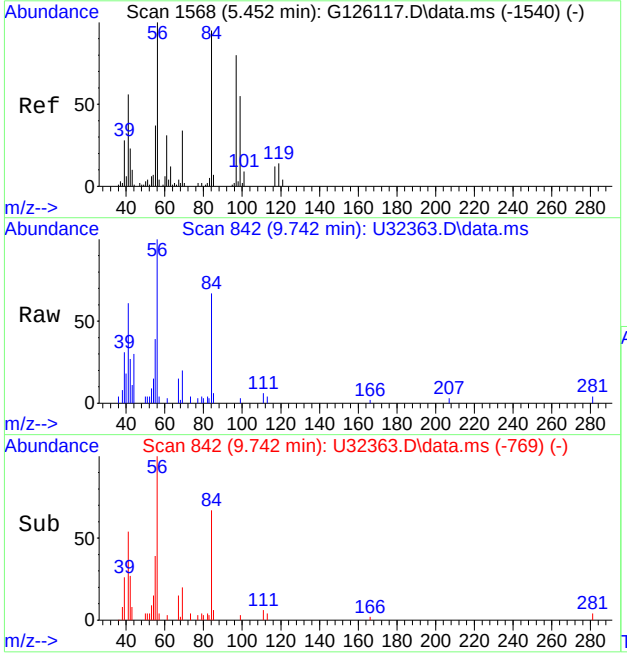


#42
1,1,1-trichloroethane
Concen: 0.420 ppb
RT: 9.635 min Scan# 826
Delta R.T. -0.009 min
Lab File: U32363.D
Acq: 27 Sep 2015 9:07 pm

Tgt Ion: 97 Resp: 13723

Ion	Ratio	Lower	Upper
97	100		
99	65.4	33.0	93.0
61	39.3	14.2	74.2

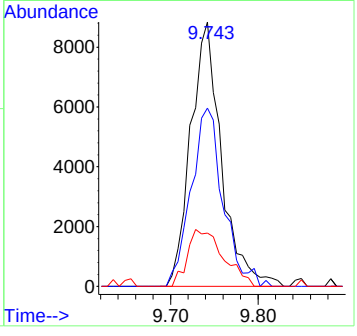


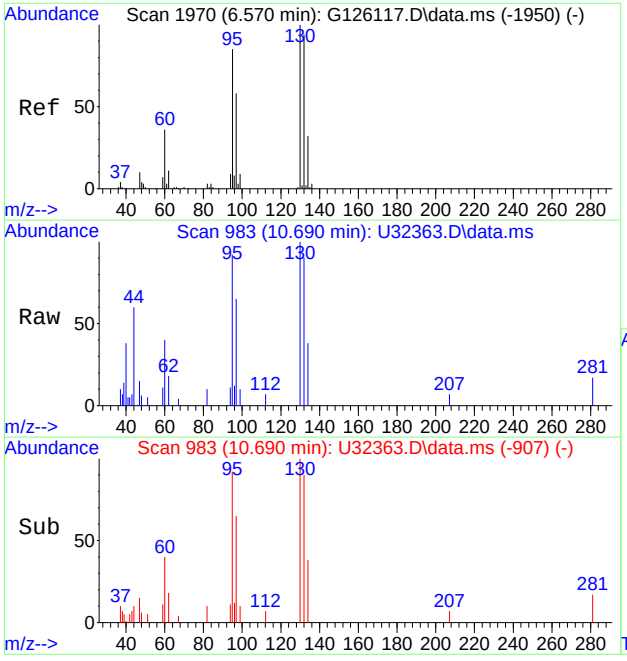


#44
Cyclohexane
Concen: 0.543 ppb
RT: 9.743 min Scan# 842
Delta R.T. -0.006 min
Lab File: U32363.D
Acq: 27 Sep 2015 9:07 pm

Tgt Ion: 56 Resp: 21619

Ion	Ratio	Lower	Upper
56	100		
84	67.4	54.2	81.2
69	20.2	18.3	27.5

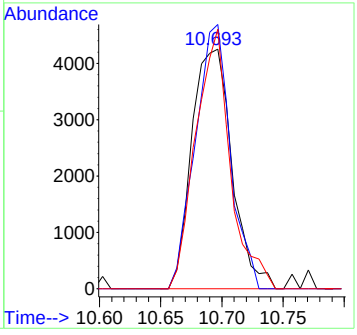


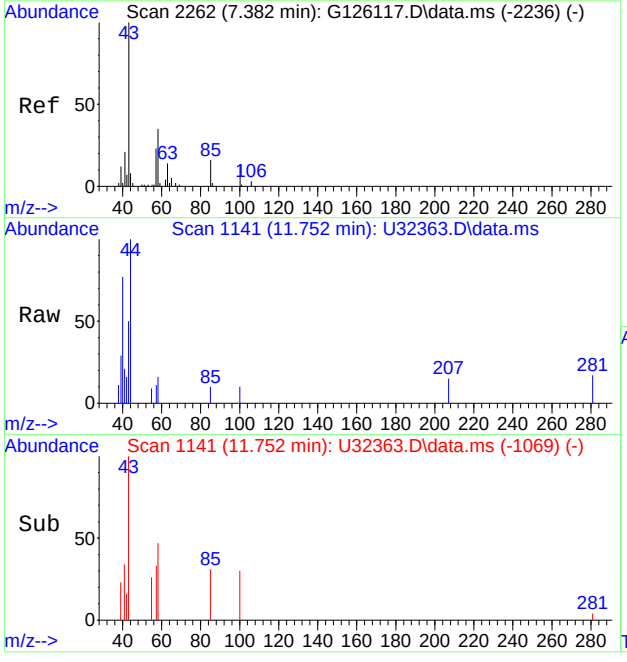


#51
trichloroethene
Concen: 0.490 ppb
RT: 10.693 min Scan# 983
Delta R.T. -0.003 min
Lab File: U32363.D
Acq: 27 Sep 2015 9:07 pm

Tgt Ion: 95 Resp: 9734

Ion	Ratio	Lower	Upper
95	100		
130	109.0	58.8	118.8
132	98.0	62.5	122.5

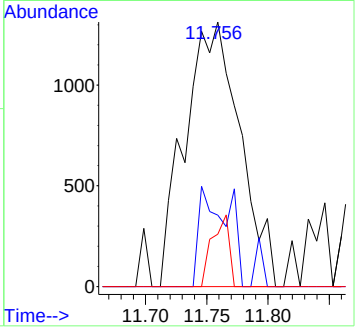


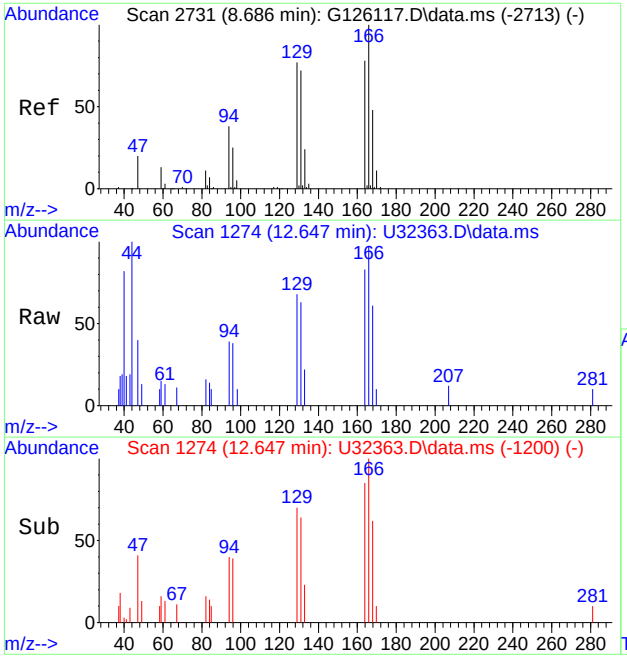


#61
4-methyl-2-pentanone
Concen: 0.216 ppb
RT: 11.756 min Scan# 1141
Delta R.T. -0.013 min
Lab File: U32363.D
Acq: 27 Sep 2015 9:07 pm

Tgt Ion: 43 Resp: 4118

Ion	Ratio	Lower	Upper
43	100		
58	32.2	8.2	68.2
100	20.2	0.0	39.6

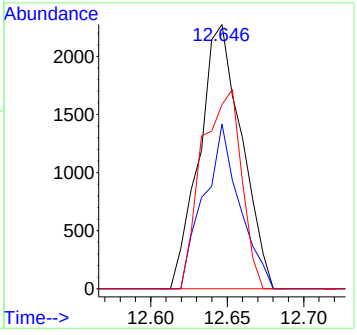




#67
tetrachloroethene
Concen: 0.261 ppb
RT: 12.646 min Scan# 1274
Delta R.T. -0.003 min
Lab File: U32363.D
Acq: 27 Sep 2015 9:07 pm

Tgt Ion:166 Resp: 4371

Ion	Ratio	Lower	Upper
166	100		
168	62.3	19.2	79.2
129	69.7	43.8	103.8



7.1.1

7

Quantitation Report (QT Reviewed)

Data File: R:\1\data\U150927\U32351.D
Sample : mc41544-2
Misc : ms35302,msu1329,,,,5,1
ALS Vial : 10 Sample Multiplier: 1
Acq On : 27 Sep 2015 3:40 pm Operator: andrewd1

Quant Time: Sep 28 12:34:37 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.522	65	889422	500.00	ppb	0.00
4) pentafluorobenzene	9.496	168	2726472	50.00	ppb	0.00
43) 1,4-difluorobenzene	10.390	114	3848283	50.00	ppb	0.00
66) chlorobenzene-d5	13.598	82	1568065	50.00	ppb	0.00
80) 1,4-dichlorobenzene-d4	16.175	152	2201778	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	9.561	113	1422799	49.20	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 98.40%			
60) toluene-d8 (s)	11.995	98	3799586	45.85	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 91.70%			
82) bromofluorobenzene (s)	14.877	95	1486521	47.03	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 94.06%			
Target Compounds						Qvalue
6) chloromethane	4.754	50	22983	0.626	ppb	74

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

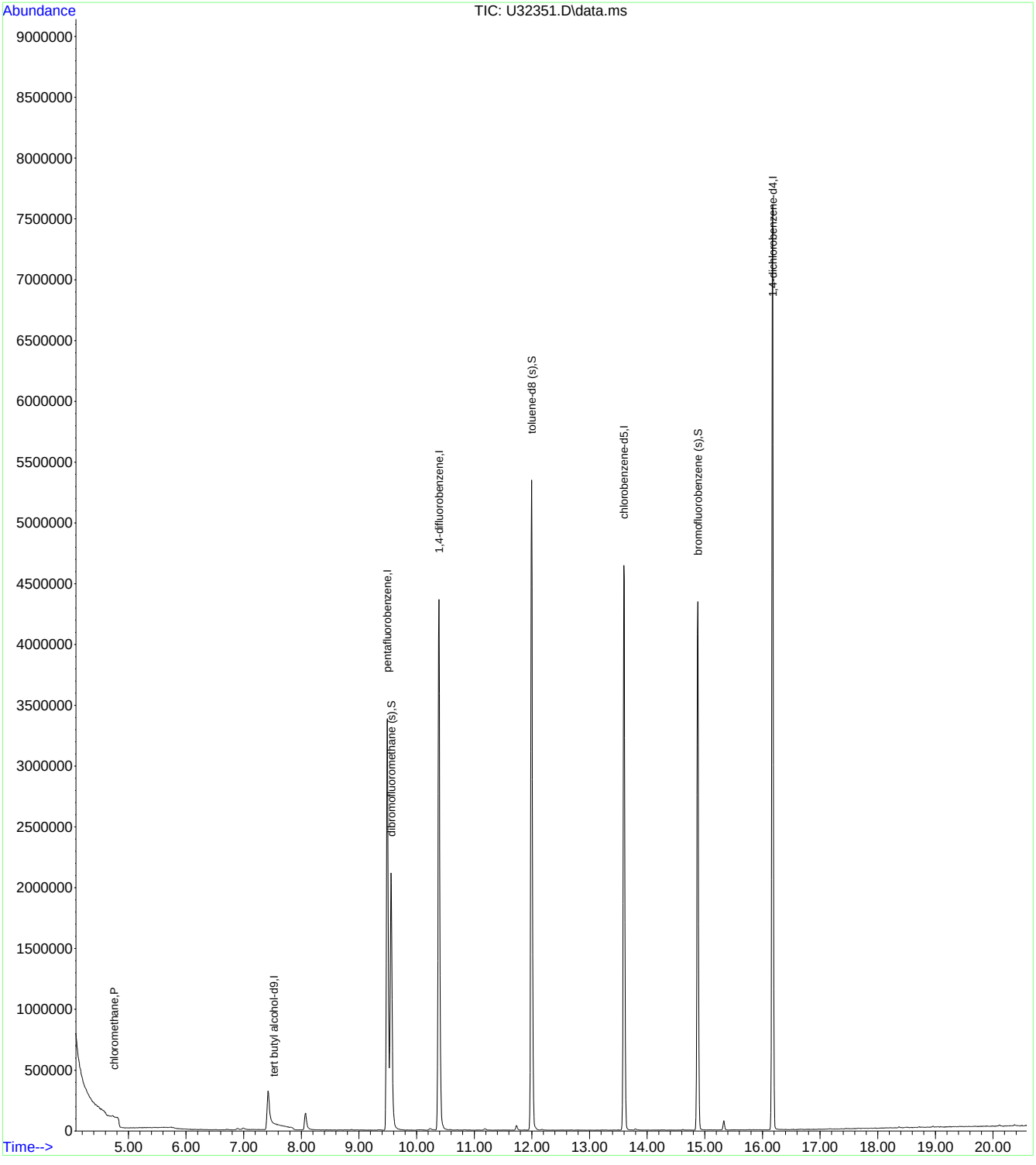
7.1.2

7

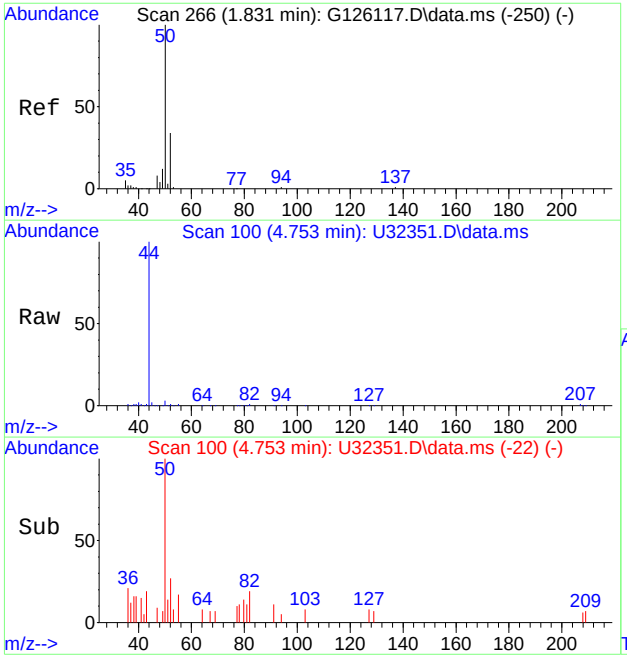
Quantitation Report (QT Reviewed)

Data File: R:\1\data\U150927\U32351.D
Sample : mc41544-2
Misc : ms35302,msu1329,,,,5,1
ALS Vial : 10 Sample Multiplier: 1
Acq On : 27 Sep 2015 3:40 pm Operator: andrewd1

Quant Time: Sep 28 12:34:37 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260



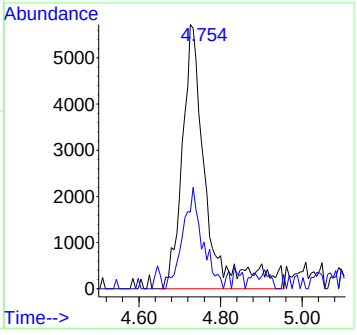
U150917.m Mon Sep 28 12:34:42 2015 Page: 2



#6
chloromethane
Concen: 0.626 ppb
RT: 4.754 min Scan# 100
Delta R.T. -0.007 min
Lab File: U32351.D
Acq: 27 Sep 2015 3:40 pm

Tgt Ion: 50 Resp: 22983

Ion	Ratio	Lower	Upper
50	100		
52	17.9	2.6	62.6



Quantitation Report (QT Reviewed)

Data File: R:\1\data\U150927\U32350.D
Sample : mc41544-3
Misc : ms35302,msu1329,,,,5,1
ALS Vial : 9 Sample Multiplier: 1
Acq On : 27 Sep 2015 3:13 pm Operator: andrewd1

Quant Time: Sep 28 12:34:15 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.474	65	1208088	500.00	ppb	-0.05
4) pentafluorobenzene	9.496	168	2469899	50.00	ppb	0.00
43) 1,4-difluorobenzene	10.389	114	3467588	50.00	ppb	0.00
66) chlorobenzene-d5	13.598	82	1487579	50.00	ppb	0.00
80) 1,4-dichlorobenzene-d4	16.175	152	2222154	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	9.561	113	1384209	52.84	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 105.68%			
60) toluene-d8 (s)	11.995	98	3517750	47.10	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 94.20%			
82) bromofluorobenzene (s)	14.876	95	1474657	46.23	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 92.46%			

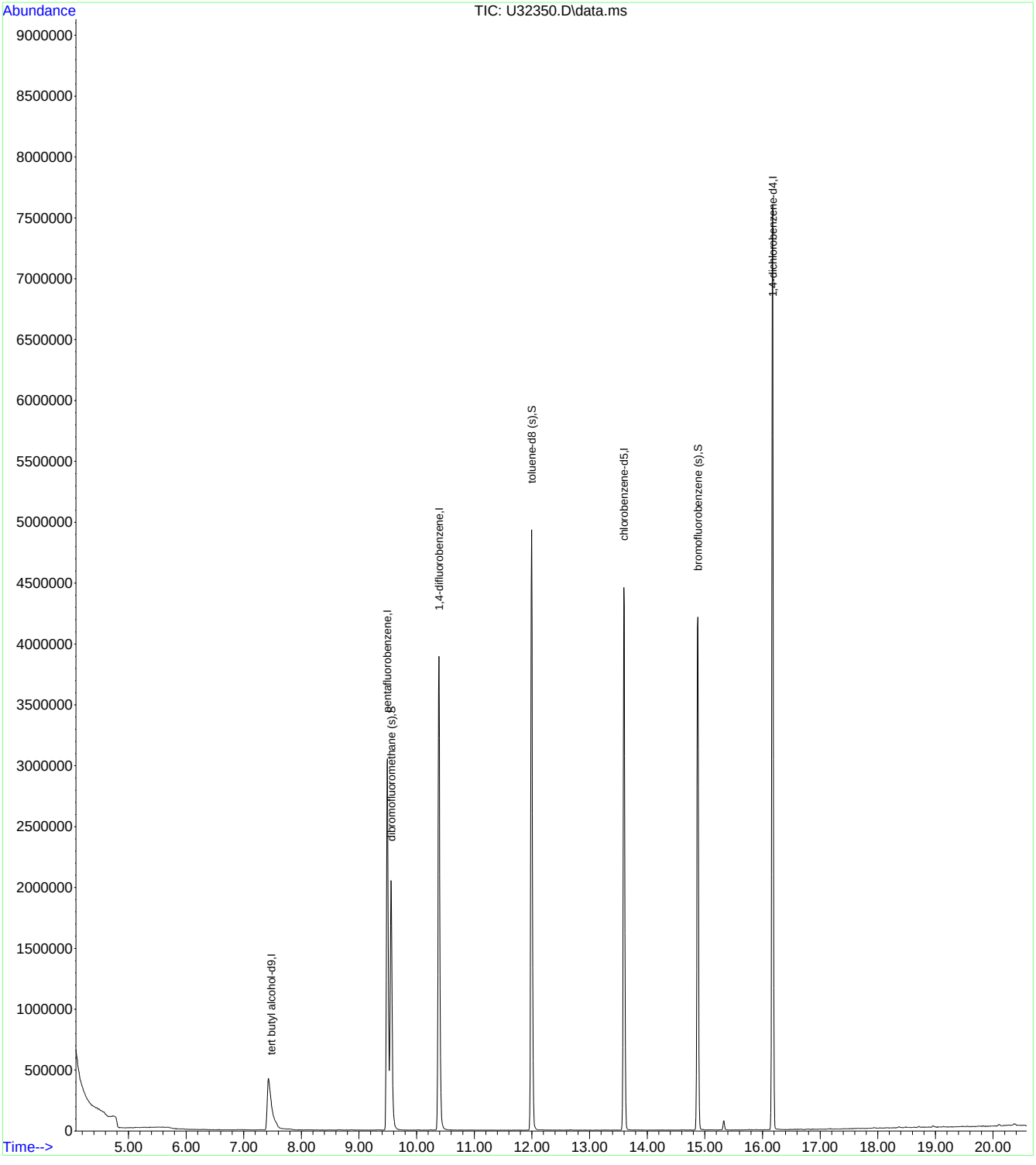
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data File: R:\1\data\U150927\U32350.D
Sample : mc41544-3
Misc : ms35302,msu1329,,,,5,1
ALS Vial : 9 Sample Multiplier: 1
Acq On : 27 Sep 2015 3:13 pm Operator: andrewd1

Quant Time: Sep 28 12:34:15 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260



U150917.m Mon Sep 28 12:34:20 2015 Page: 2

Quantitation Report (QT Reviewed)

Data File: R:\1\data\U150927\U32348.D
Sample : mb
Misc : ms35292,msu1329,,,,5,1
ALS Vial : 7 Sample Multiplier: 1
Acq On : 27 Sep 2015 2:19 pm Operator: andrewd1

Quant Time: Sep 28 12:11:04 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.463	65	1256082	500.00	ppb	-0.06
4) pentafluorobenzene	9.495	168	2490126	50.00	ppb	0.00
43) 1,4-difluorobenzene	10.389	114	3484469	50.00	ppb	0.00
66) chlorobenzene-d5	13.597	82	1568136	50.00	ppb	0.00
80) 1,4-dichlorobenzene-d4	16.175	152	2330526	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	9.561	113	1380309	52.26	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 104.52%			
60) toluene-d8 (s)	11.995	98	3662761	48.81	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 97.62%			
82) bromofluorobenzene (s)	14.875	95	1523140	45.53	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 91.06%			
Target Compounds						Qvalue
6) chloromethane	4.729	50	8051	0.240	ppb	76
18) methylene chloride	7.528	84	10176	0.387	ppb #	72
103) 2-Methylnaphthalene	20.109	142	22508	0.278	ppb	91
104) 1-Methylnaphthalene	20.374	142	22367	0.375	ppb #	93

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

7.2.1

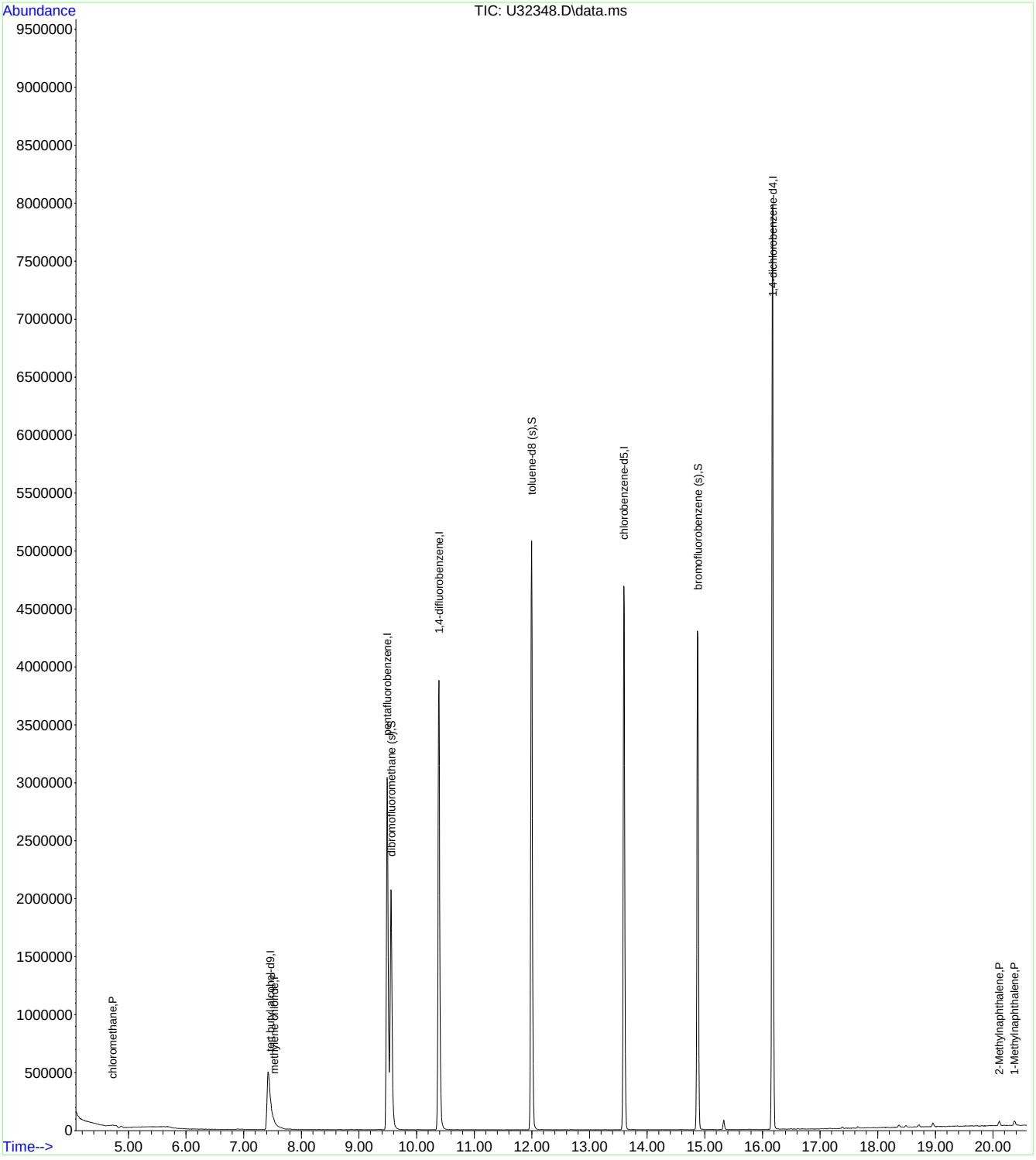
7

ACCUTEST LABORATORIES MC41544

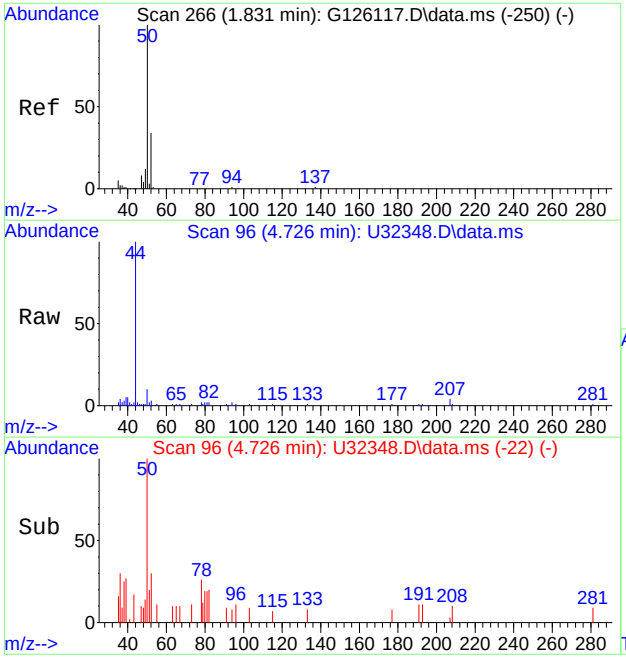
Quantitation Report (QT Reviewed)

Data File: R:\1\data\U150927\U32348.D
Sample : mb
Misc : ms35292,msu1329,,,,5,1
ALS Vial : 7 Sample Multiplier: 1
Acq On : 27 Sep 2015 2:19 pm Operator: andrewd1

Quant Time: Sep 28 12:11:04 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260



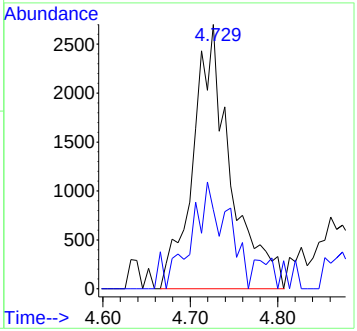
U150917.m Mon Sep 28 12:11:11 2015 Page: 2

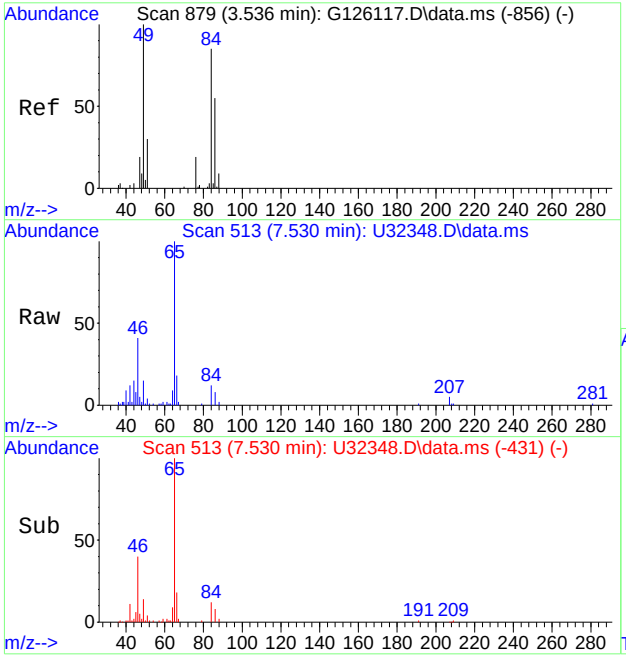


#6
chloromethane
Concen: 0.240 ppb
RT: 4.729 min Scan# 96
Delta R.T. -0.032 min
Lab File: U32348.D
Acq: 27 Sep 2015 2:19 pm

Tgt Ion: 50 Resp: 8051

Ion	Ratio	Lower	Upper
50	100		
52	19.3	2.6	62.6

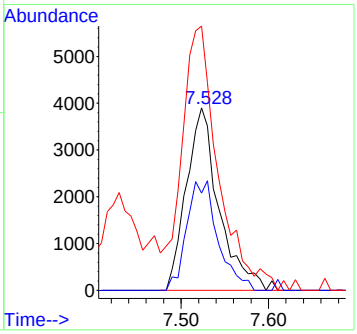




#18
methylene chloride
Concen: 0.387 ppb
RT: 7.528 min Scan# 513
Delta R.T. -0.012 min
Lab File: U32348.D
Acq: 27 Sep 2015 2:19 pm

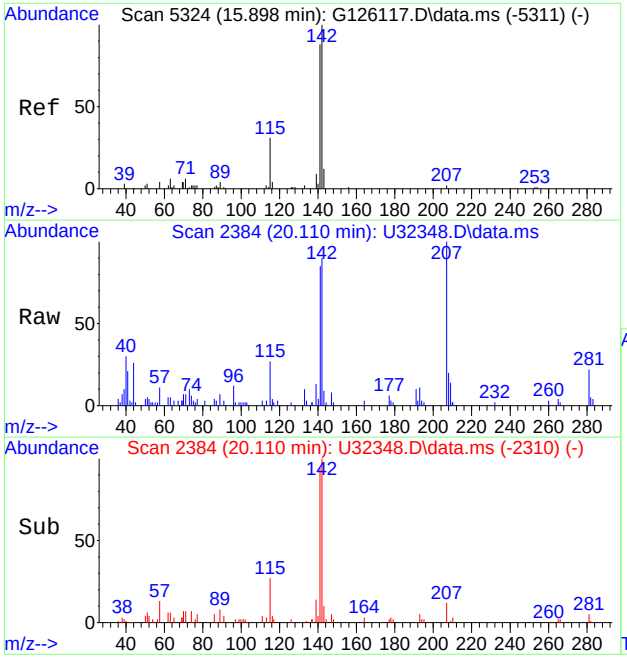
Tgt Ion: 84 Resp: 10176

Ion	Ratio	Lower	Upper
84	100		
86	66.7	36.8	96.8
49	120.4	143.4	203.4#



7.2.1

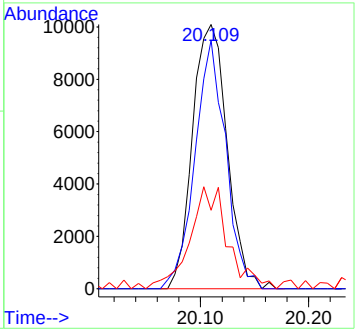
7

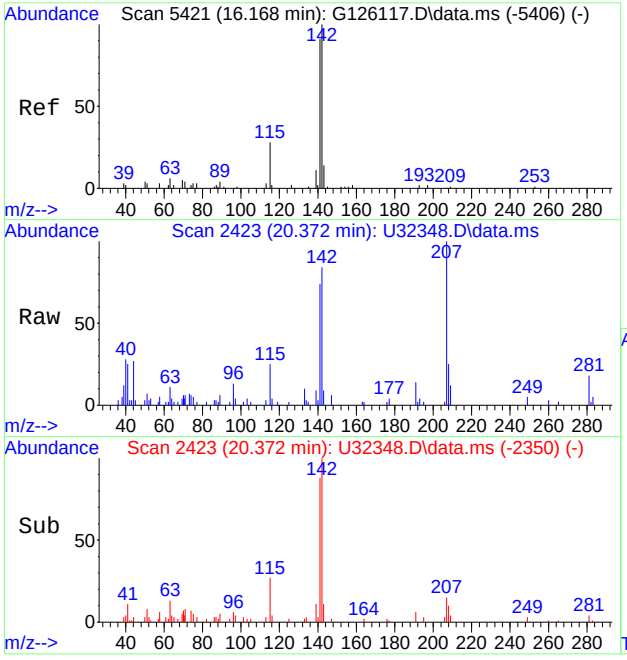


#103
2-Methylnaphthalene
Concen: 0.278 ppb
RT: 20.109 min Scan# 2384
Delta R.T. -0.004 min
Lab File: U32348.D
Acq: 27 Sep 2015 2:19 pm

Tgt Ion:142 Resp: 22508

Ion	Ratio	Lower	Upper
142	100		
141	94.0	67.9	107.9
115	26.9	15.5	55.5

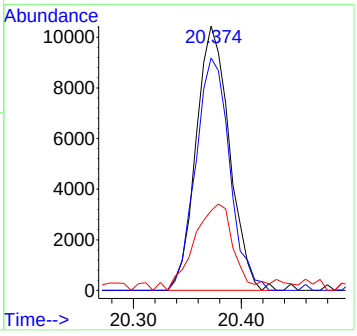




#104
1-Methylnaphthalene
Concen: 0.375 ppb
RT: 20.374 min Scan# 2423
Delta R.T. -0.004 min
Lab File: U32348.D
Acq: 27 Sep 2015 2:19 pm

Tgt Ion:142 Resp: 22367

Ion	Ratio	Lower	Upper
142	100		
141	87.8	72.6	108.8
115	27.3	29.2	43.8#



7.2.1

7

Manual Integrations APPROVED (compounds with "m" flag)
Sona Liskova
09/29/15 15:21

Quantitation Report (QT Reviewed)

Data Path : R:\1\data\U150927\
Data File : U32344.D
Acq On : 27 Sep 2015 12:29 pm
Operator : andrewd1
Sample : bs
Misc : ms35292,msu1329,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 27 12:53:27 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 10:56:47 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	7.485	65	1389108	500.00	ppb		-0.04
4) pentafluorobenzene	9.496	168	2729161	50.00	ppb		0.00
43) 1,4-difluorobenzene	10.390	114	3964798	50.00	ppb		0.00
66) chlorobenzene-d5	13.598	82	1913205	50.00	ppb		0.00
80) 1,4-dichlorobenzene-d4	16.175	152	2557488	50.00	ppb		0.00
System Monitoring Compounds							
40) dibromofluoromethane (s)	9.562	113	1421178	49.10	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 98.20%				
60) toluene-d8 (s)	11.995	98	4403725	51.57	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.14%				
82) bromofluorobenzene (s)	14.876	95	1768060	48.16	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 96.32%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.576	59	1454295	605.24	ppb		95
5) dichlorodifluoromethane	4.380	85	2043349	65.90	ppb		96
6) chloromethane	4.742	50	1036957	28.23	ppb		96
7) vinyl chloride	5.004	62	1706540	54.99	ppb		96
8) bromomethane	5.605	96	1131798	60.22	ppb		95
9) chloroethane	5.750	64	903204	52.65	ppb		99
10) ethyl ether	6.513	59	915255	41.13	ppb		94
11) acetonitrile	7.367	41	1922547	40.08	ppb	#	14
12) trichlorofluoromethane	6.170	101	2332353	54.76	ppb		100
13) freon-113	6.903	101	1466002	48.06	ppb		95
15) 1,1-dichloroethene	6.915	96	1164620	45.01	ppb		92
16) acetone	6.951	58	139890m	37.21	ppb		
17) Methyl Acetate	6.955	43	547575	50.59	ppb	#	74
18) methylene chloride	7.536	84	1334767	46.35	ppb		84
19) methyl tert butyl ether	7.843	73	3630344	52.20	ppb		95
20) acrylonitrile	7.808	53	590831	44.87	ppb		87
21) allyl chloride	7.367	41	1931232	38.51	ppb		71
22) trans-1,2-dichloroethene	7.882	96	1184347	47.76	ppb		86
23) iodomethane	7.165	142	2382036	45.66	ppb		95
24) carbon disulfide	7.322	76	4304782	40.28	ppb		98
25) propionitrile	8.485	54	84850	41.70	ppb		100
26) vinyl acetate	8.310	43	2152455m	60.37	ppb		
27) chloroprene	8.486	53	1883083	42.20	ppb		94
28) di-isopropyl ether	8.348	45	4143859	45.94	ppb		93
29) methacrylonitrile	9.229	41	824908	47.90	ppb		96
30) 2-butanone	8.988	72	153270	44.87	ppb	#	8
31) Ethyl Acetate	8.176	43	964907	39.46	ppb	#	1
32) Hexane	8.177	41	1159449	41.58	ppb	#	70
33) 1,1-dichloroethane	8.401	63	2220439	43.07	ppb		96
34) tert-butyl ethyl ether	8.768	59	3885755	46.42	ppb		92
35) isobutyl alcohol	8.766	43	435093	240.40	ppb	#	66
36) 2,2-dichloropropane	9.079	77	1819519	50.36	ppb		95
37) cis-1,2-dichloroethene	9.040	96	1384188	50.05	ppb		90
38) bromochloromethane	9.321	128	734143	49.27	ppb	#	66

Quantitation Report (QT Reviewed)

Data Path : R:\1\data\U150927\
Data File : U32344.D
Acq On : 27 Sep 2015 12:29 pm
Operator : andrewd1
Sample : bs
Misc : ms35292,msu1329,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 27 12:53:27 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 10:56:47 2015
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39)	chloroform	9.381	83	2382380	49.72	ppb		97
41)	Tetrahydrofuran	9.345	42	423086	44.46	ppb		94
42)	1,1,1-trichloroethane	9.640	97	2181154	52.99	ppb		98
44)	Cyclohexane	9.747	56	2168643	42.15	ppb	#	88
45)	carbon tetrachloride	9.822	117	1846454	57.59	ppb		99
46)	1,1-dichloropropene	9.787	75	1567539	47.92	ppb		93
47)	benzene	10.027	78	4274727	47.96	ppb		98
48)	1,2-dichloroethane	10.050	62	1866082	53.57	ppb		99
49)	tert-amyl methyl ether	10.068	73	3617977	50.53	ppb		98
50)	heptane	10.219	43	1647836m	51.21	ppb		
51)	trichloroethene	10.694	95	1272316	49.56	ppb		84
52)	1,2-dichloropropane	10.985	63	1141134	49.75	ppb		99
53)	dibromomethane	11.095	93	803691	54.75	ppb		91
54)	bromodichloromethane	11.229	83	1628713	53.83	ppb		95
55)	Methylcyclohexane	10.989	83	2009245	48.08	ppb		90
56)	2-chloroethyl vinyl ether	11.441	63	11521	3.02	ppb		92
57)	methyl methacrylate	10.904	69	595218	51.86	ppb		92
58)	1,4-dioxane	11.026	88	24172m	256.57	ppb		
59)	cis-1,3-dichloropropene	11.679	75	1676952	53.20	ppb		95
61)	4-methyl-2-pentanone	11.763	43	1307782	52.94	ppb		95
62)	toluene	12.073	92	2522189	52.51	ppb		100
63)	trans-1,3-dichloropropene	12.252	75	1370678	54.97	ppb		96
64)	1,1,2-trichloroethane	12.492	83	791249	55.71	ppb		99
65)	ethyl methacrylate	12.216	69	1136922	51.64	ppb		87
67)	tetrachloroethene	12.648	166	1295105	57.41	ppb		97
68)	1,3-dichloropropane	12.685	76	1503825	54.81	ppb		95
69)	dibromochloromethane	12.953	129	1175164	57.54	ppb		96
70)	1,2-dibromoethane	13.131	107	997726	56.51	ppb		98
71)	2-hexanone	12.640	43	747983m	50.17	ppb		
72)	chlorobenzene	13.634	112	2966340	51.82	ppb		94
73)	1,1,1,2-tetrachloroethane	13.700	131	1397055	56.73	ppb		99
74)	ethylbenzene	13.688	91	5094637	53.60	ppb		94
75)	m,p-xylene	13.817	106	4053412	106.25	ppb		91
76)	o-xylene	14.260	106	2236887	50.68	ppb		95
77)	styrene	14.274	104	3260435	51.18	ppb		91
78)	bromoform	14.547	173	796261	55.77	ppb		97
79)	trans-1,4-dichloro-2-b...	14.674	53	490143	52.08	ppb	#	2
81)	isopropylbenzene	14.641	105	6230918	51.01	ppb		97
83)	bromobenzene	15.087	156	1617078	52.74	ppb		87
84)	1,1,2,2-tetrachloroethane	14.949	83	1482881	57.45	ppb		99
85)	1,2,3-trichloropropane	15.060	75	1421832	51.16	ppb		65
86)	n-propylbenzene	15.103	91	6875615	49.45	ppb		95
87)	2-chlorotoluene	15.261	91	4977866	51.62	ppb		97
88)	4-chlorotoluene	15.384	91	4199056	51.17	ppb		94
89)	1,3,5-trimethylbenzene	15.272	105	6086284	55.50	ppb		95
90)	tert-butylbenzene	15.654	91	3458396	55.21	ppb		96
91)	1,2,4-trimethylbenzene	15.710	105	6139852	52.18	ppb		98
92)	sec-butylbenzene	15.898	105	7851046	54.64	ppb		95
93)	1,3-dichlorobenzene	16.098	146	3480460	51.86	ppb		97
94)	p-isopropyltoluene	16.040	119	6990264	54.86	ppb		97

Quantitation Report (QT Reviewed)

Data Path : R:\1\data\U150927\
Data File : U32344.D
Acq On : 27 Sep 2015 12:29 pm
Operator : andrewd1
Sample : bs
Misc : ms35292,msu1329,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 27 12:53:27 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 10:56:47 2015
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95)	1,4-dichlorobenzene	16.205	146	3591802	52.41	ppb	99
96)	1,2-dichlorobenzene	16.619	146	3956443	58.15	ppb	97
97)	n-butylbenzene	16.496	91	6730513	53.09	ppb	92
98)	1,2-dibromo-3-chloropr...	17.463	75	441875	54.15	ppb	94
99)	1,3,5-trichlorobenzene	17.658	180	3965893	53.69	ppb	95
100)	1,2,4-trichlorobenzene	18.371	180	3899668	57.66	ppb	93
101)	hexachlorobutadiene	18.486	225	1808726	65.03	ppb	99
102)	naphthalene	18.715	128	8121721	51.65	ppb	100
103)	2-Methylnaphthalene	20.111	142	2469404	27.79	ppb	97
104)	1-Methylnaphthalene	20.375	142	1947642	29.78	ppb	97
105)	1,2,3-trichlorobenzene	18.961	180	3577730	58.88	ppb	96

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

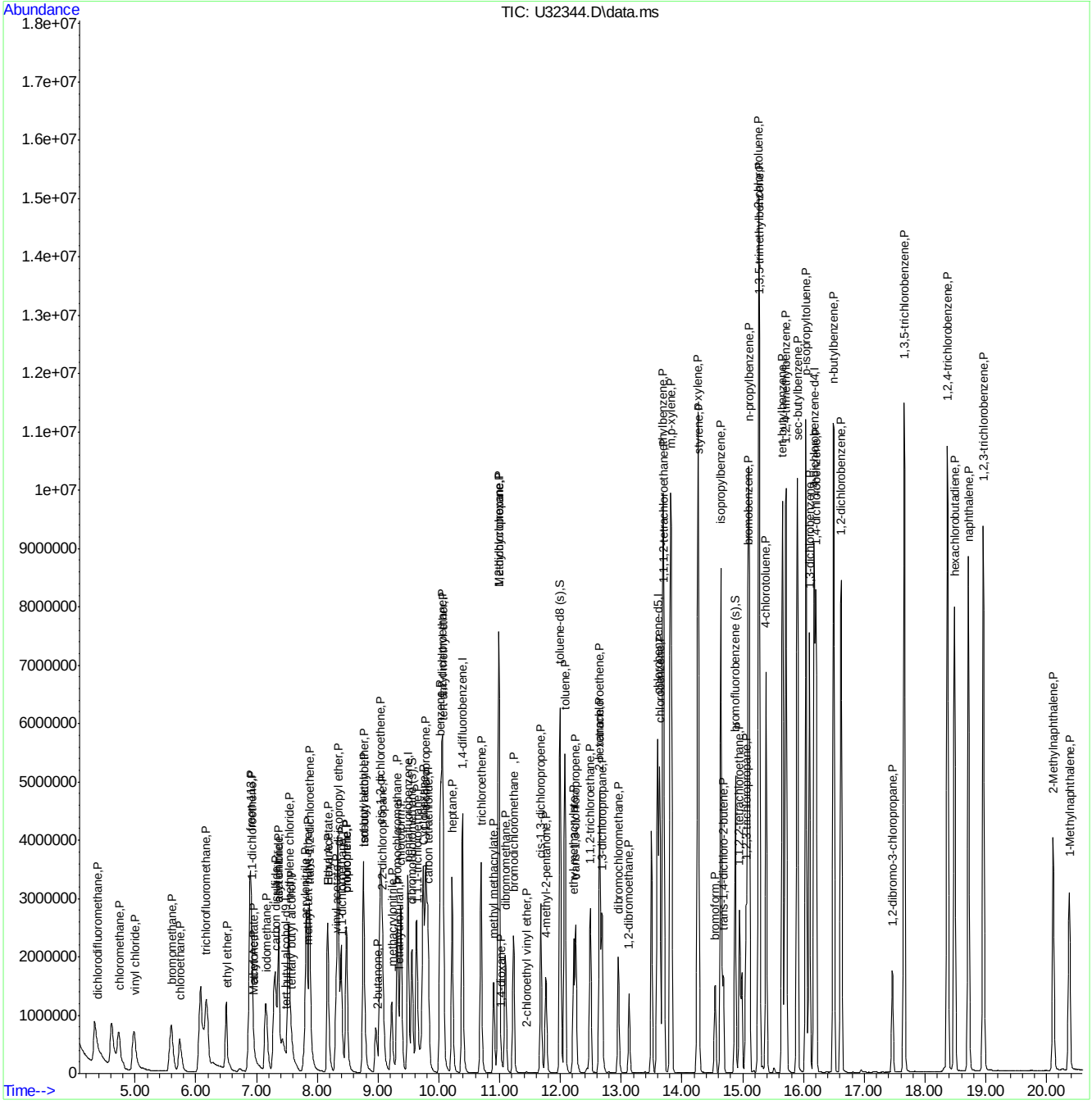
7.3.1

7

Quantitation Report (QT Reviewed)

Data Path : R:\1\data\U150927\
Data File : U32344.D
Acq On : 27 Sep 2015 12:29 pm
Operator : andrewd1
Sample : bs
Misc : ms35292,msu1329,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 27 12:53:27 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 10:56:47 2015
Response via : Initial Calibration

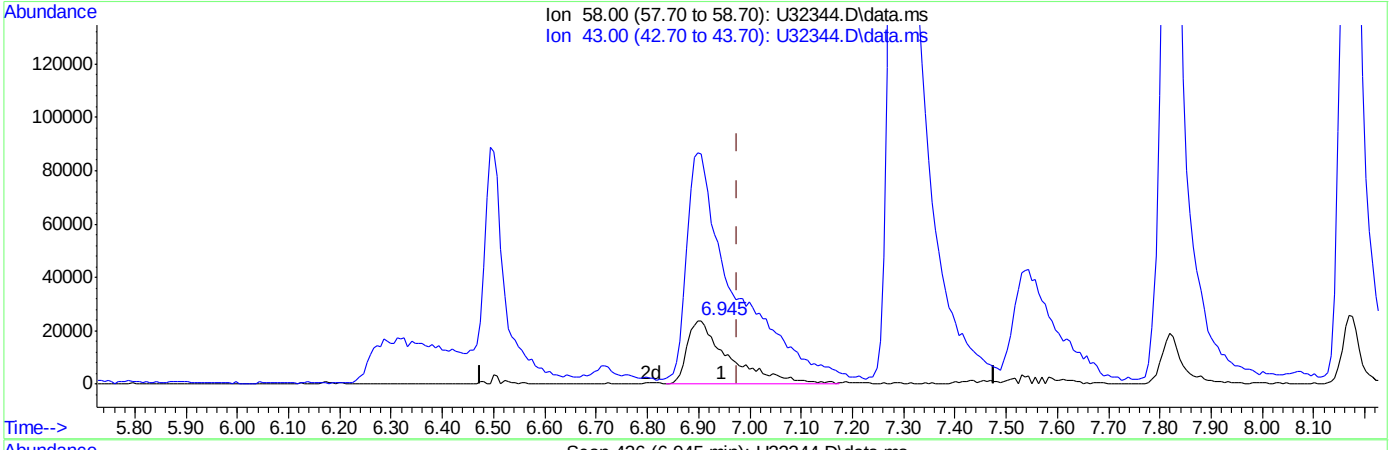


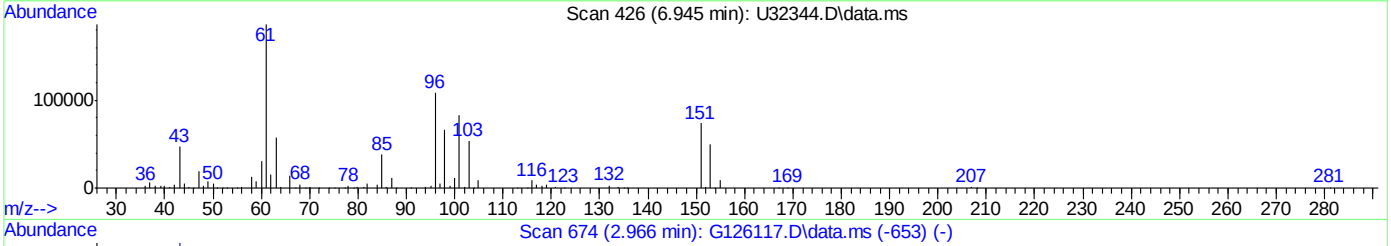
ACCUTEST LABORATORIES MC41544

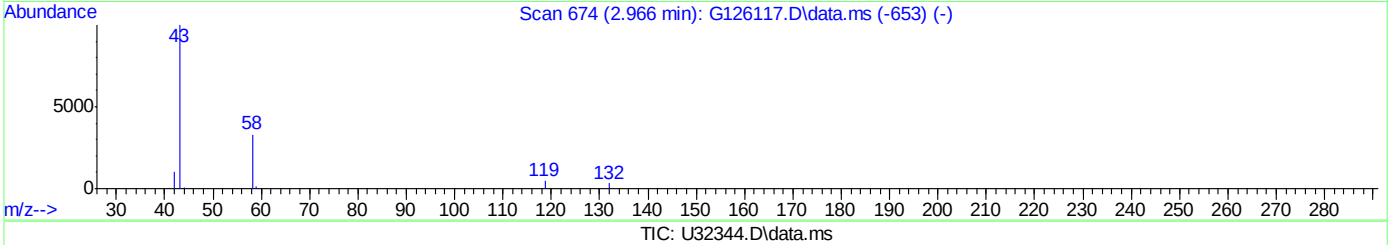
Quantitation Report (Qedit)

Data Path : R:\1\data\U150927\
Data File : U32344.D
Acq On : 27 Sep 2015 12:29 pm
Operator : andrewd1
Sample : bs
Misc : ms35292,msu1329,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 27 12:50:52 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 10:56:47 2015
Response via : Initial Calibration







TIC: U32344.D\data.ms

(16) acetone (P)

6.945min (-0.031) 36.53 ppb

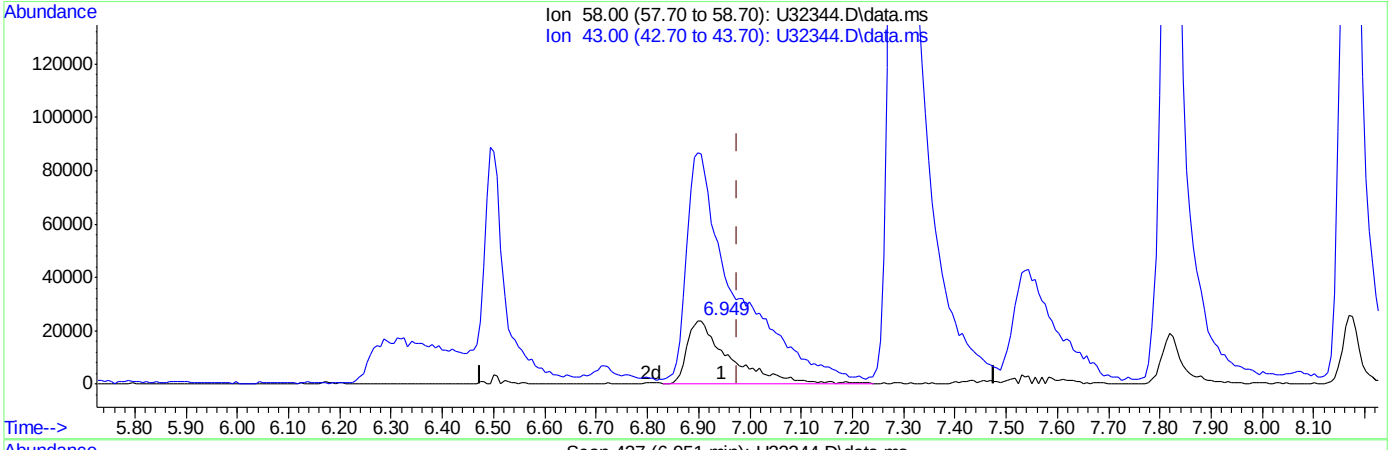
response 137582

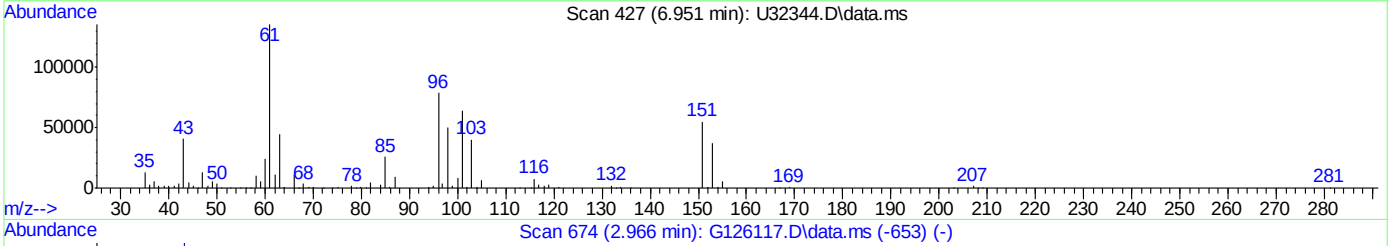
Ion	Exp%	Act%
58.00	100.00	100.00
43.00	308.80	398.00#
0.00	0.00	0.00
0.00	0.00	0.00

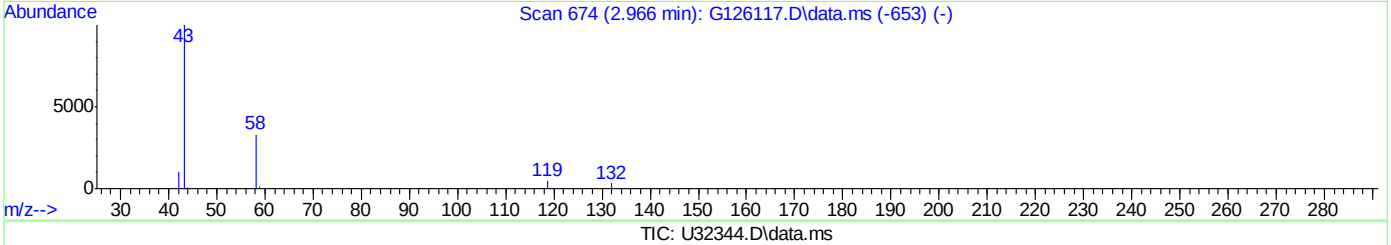
Quantitation Report (Qedit)

Data Path : R:\1\data\U150927\
Data File : U32344.D
Acq On : 27 Sep 2015 12:29 pm
Operator : andrewd1
Sample : bs
Misc : ms35292,msu1329,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 27 12:50:52 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 10:56:47 2015
Response via : Initial Calibration







TIC: U32344.D\data.ms

(16) acetone (P)

6.951min (-0.025) 37.21 ppb m

response 139890

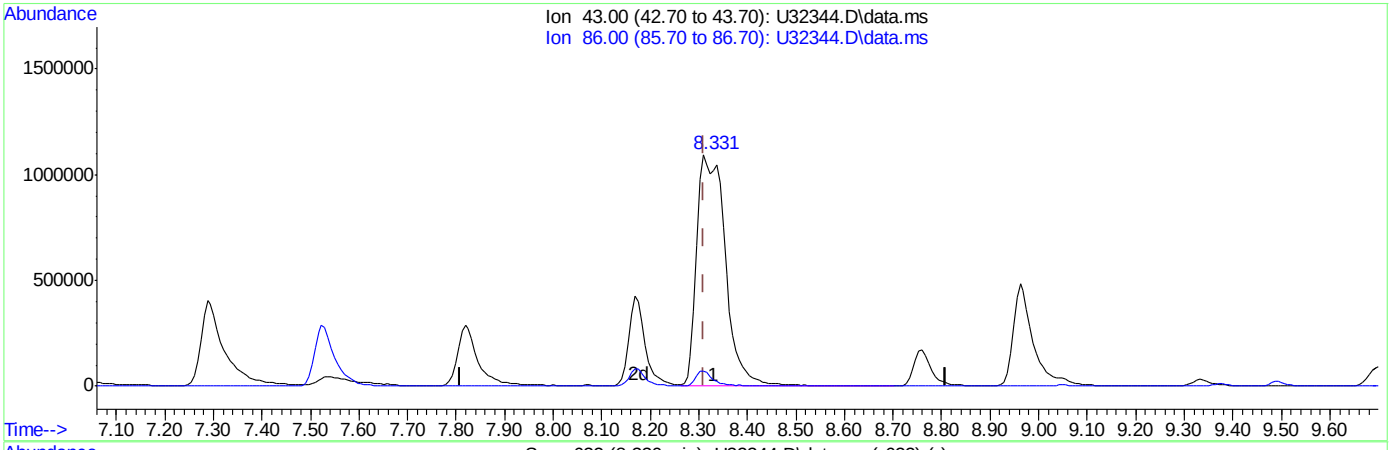
Ion	Exp%	Act%
58.00	100.00	100.00
43.00	308.80	391.43#
0.00	0.00	0.00
0.00	0.00	0.00

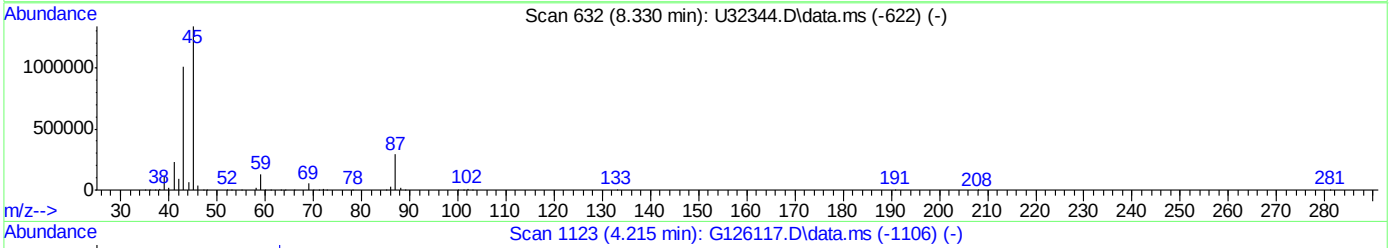
ACCUTEST LABORATORIES MC41544

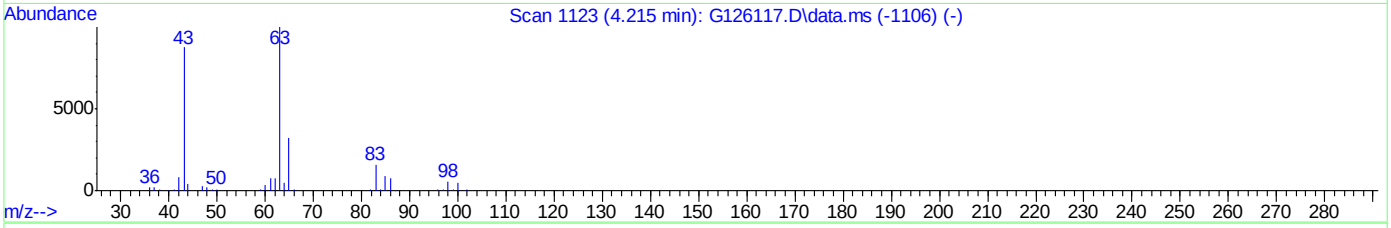
Quantitation Report (Qedit)

Data Path : R:\1\data\U150927\
Data File : U32344.D
Acq On : 27 Sep 2015 12:29 pm
Operator : andrewd1
Sample : bs
Misc : ms35292,msu1329,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 27 12:50:52 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 10:56:47 2015
Response via : Initial Calibration







TIC: U32344.D\data.ms

(26) vinyl acetate (P)

8.331min (+ 0.021) 124.48 ppb

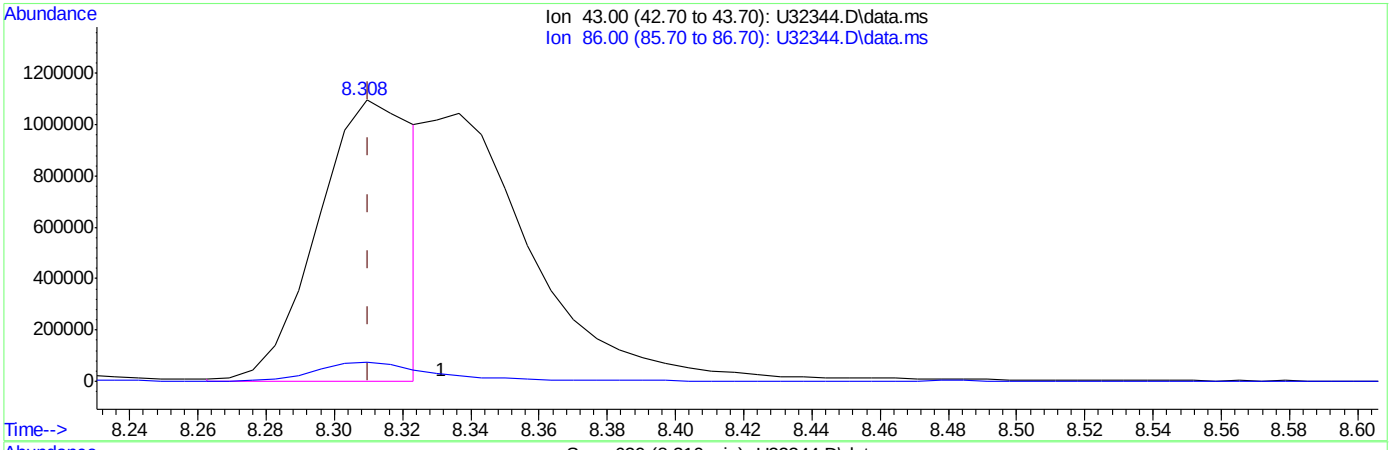
response 4438513

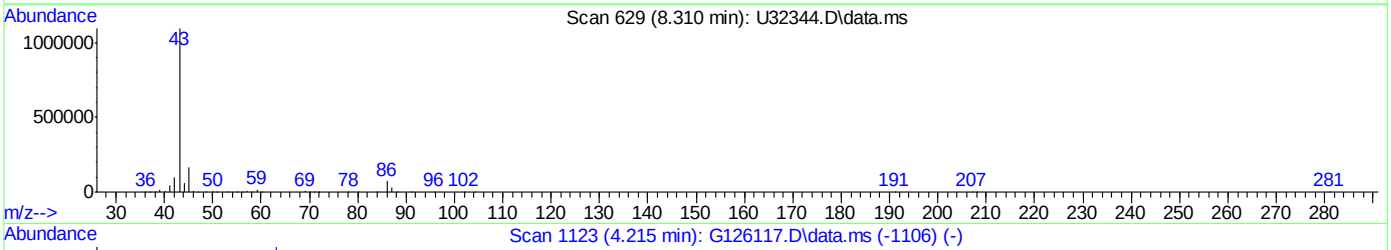
Ion	Exp%	Act%
43.00	100.00	100.00
86.00	6.40	3.03
0.00	0.00	0.00
0.00	0.00	0.00

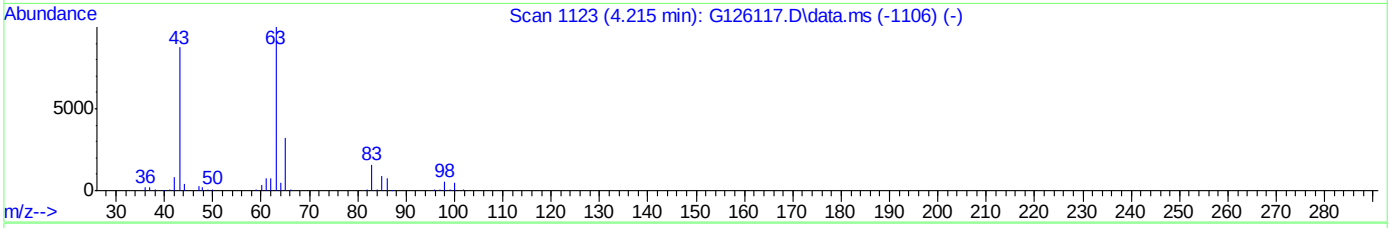
Quantitation Report (Qedit)

Data Path : R:\1\data\U150927\
Data File : U32344.D
Acq On : 27 Sep 2015 12:29 pm
Operator : andrewd1
Sample : bs
Misc : ms35292,msu1329,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 27 12:50:52 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 10:56:47 2015
Response via : Initial Calibration







TIC: U32344.D\data.ms

(26) vinyl acetate (P)

8.310min (-0.000) 60.37 ppb m

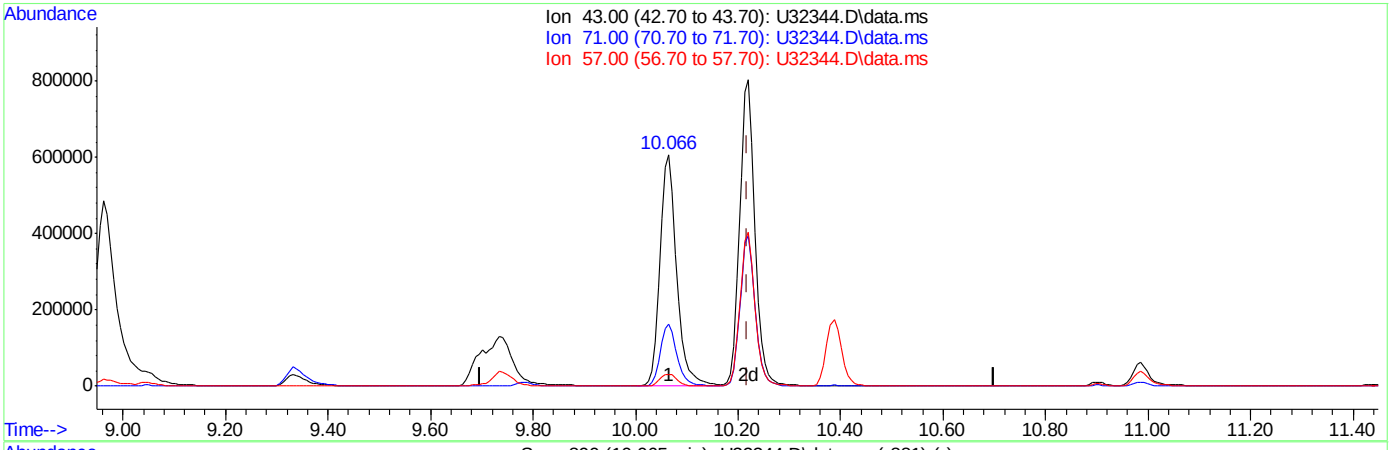
response 2152455

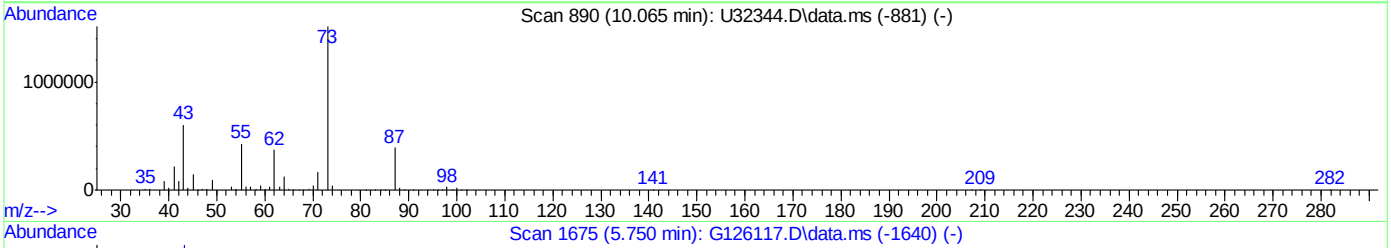
Ion	Exp%	Act%
43.00	100.00	100.00
86.00	6.40	6.65
0.00	0.00	0.00
0.00	0.00	0.00

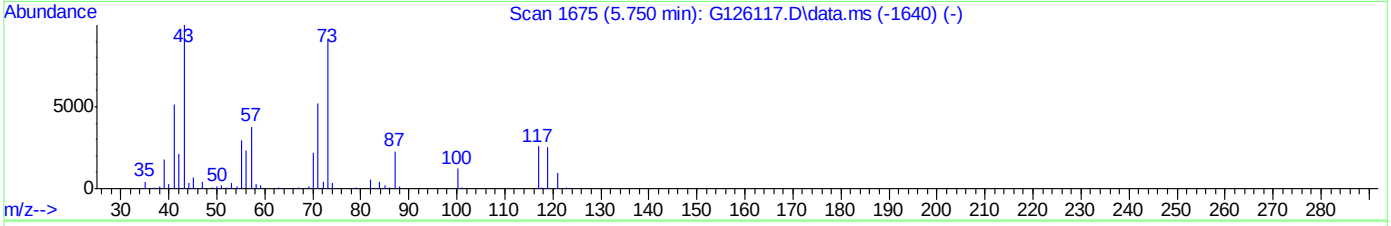
Quantitation Report (Qedit)

Data Path : R:\1\data\U150927\
Data File : U32344.D
Acq On : 27 Sep 2015 12:29 pm
Operator : andrewd1
Sample : bs
Misc : ms35292,msu1329,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 27 12:50:52 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 10:56:47 2015
Response via : Initial Calibration







TIC: U32344.D\data.ms

(50) heptane (P)

10.066min (-0.153) 43.27 ppb

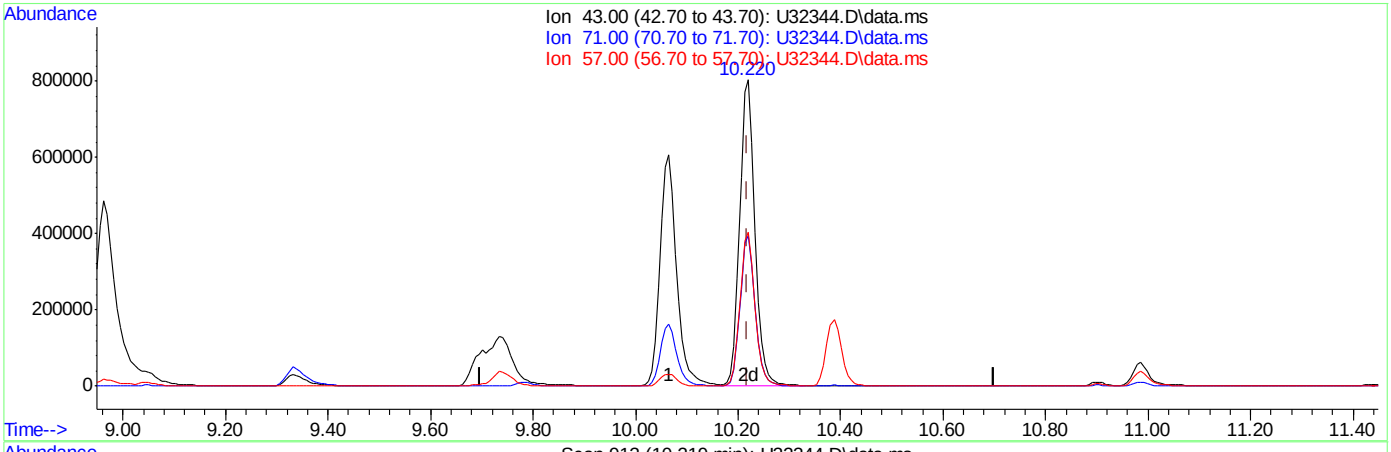
response 1392362

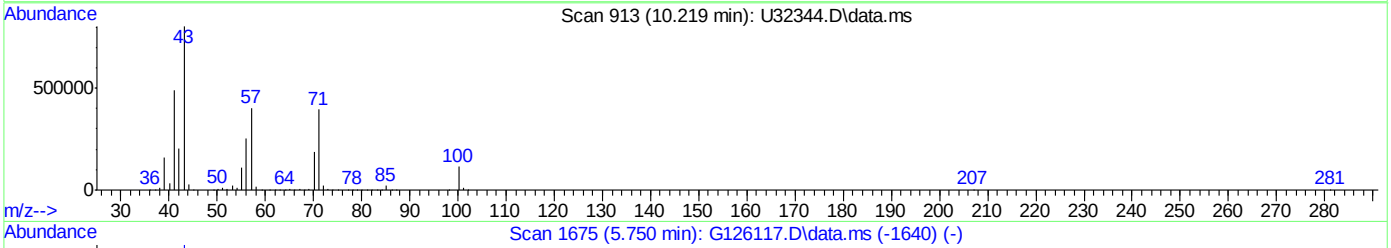
Ion	Exp%	Act%
43.00	100.00	100.00
71.00	26.10	26.70
57.00	5.80	5.20
0.00	0.00	0.00

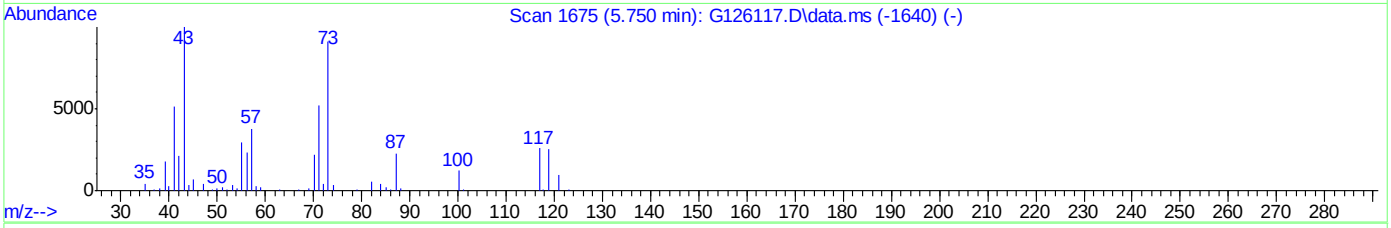
Quantitation Report (Qedit)

Data Path : R:\1\data\U150927\
Data File : U32344.D
Acq On : 27 Sep 2015 12:29 pm
Operator : andrewd1
Sample : bs
Misc : ms35292,msu1329,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 27 12:50:52 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 10:56:47 2015
Response via : Initial Calibration







TIC: U32344.D\data.ms

(50) heptane (P)

10.219min (+ 0.000) 51.21 ppb m

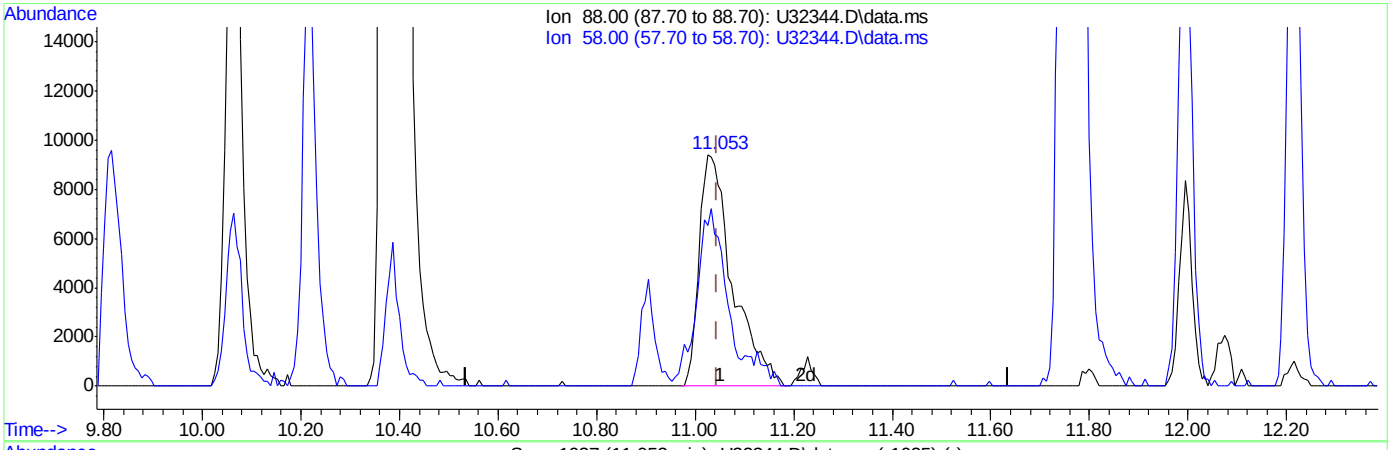
response 1647836

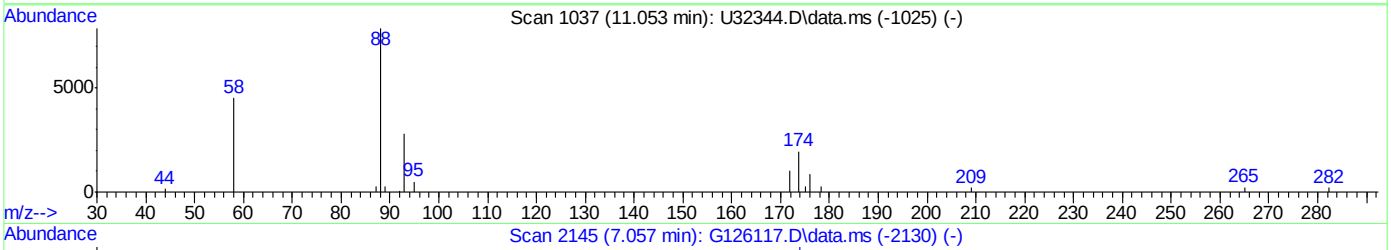
Ion	Exp%	Act%
43.00	100.00	100.00
71.00	26.10	49.31
57.00	5.80	50.21#
0.00	0.00	0.00

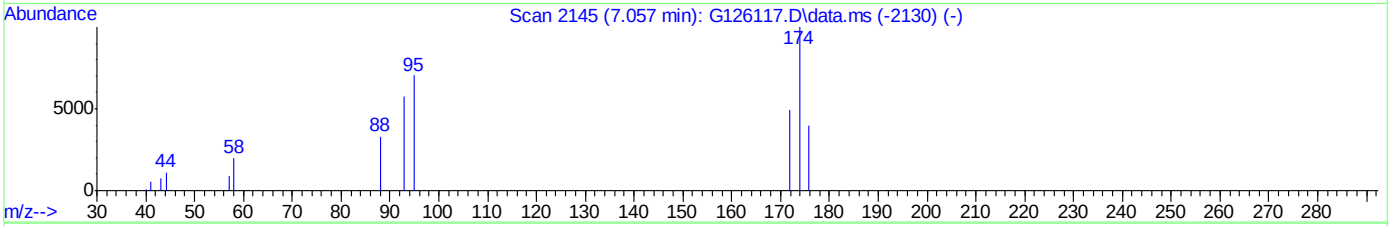
Quantitation Report (Qedit)

Data Path : R:\1\data\U150927\
Data File : U32344.D
Acq On : 27 Sep 2015 12:29 pm
Operator : andrewd1
Sample : bs
Misc : ms35292,msu1329,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 27 12:50:52 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 10:56:47 2015
Response via : Initial Calibration







TIC: U32344.D\data.ms

(58) 1,4-dioxane (P)

11.053min (+ 0.007) 535.22 ppb

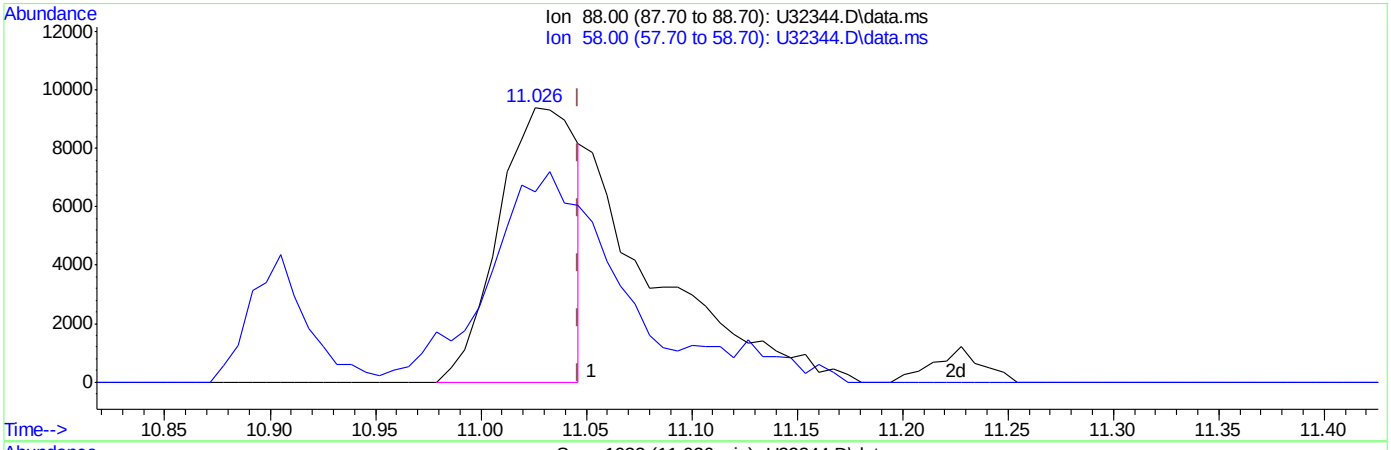
response 43687

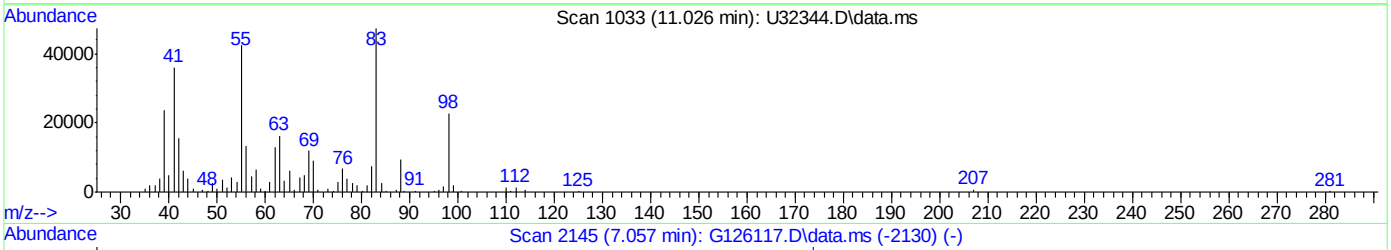
Ion	Exp%	Act%
88.00	100.00	100.00
58.00	109.20	69.65#
0.00	0.00	0.00
0.00	0.00	0.00

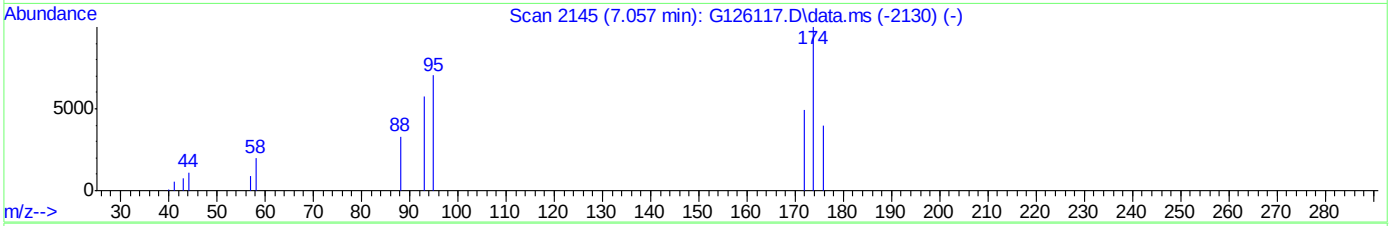
Quantitation Report (Qedit)

Data Path : R:\1\data\U150927\
Data File : U32344.D
Acq On : 27 Sep 2015 12:29 pm
Operator : andrewd1
Sample : bs
Misc : ms35292,msu1329,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 27 12:50:52 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 10:56:47 2015
Response via : Initial Calibration







TIC: U32344.D\data.ms

(58) 1,4-dioxane (P)

11.026min (-0.020) 256.57 ppb m

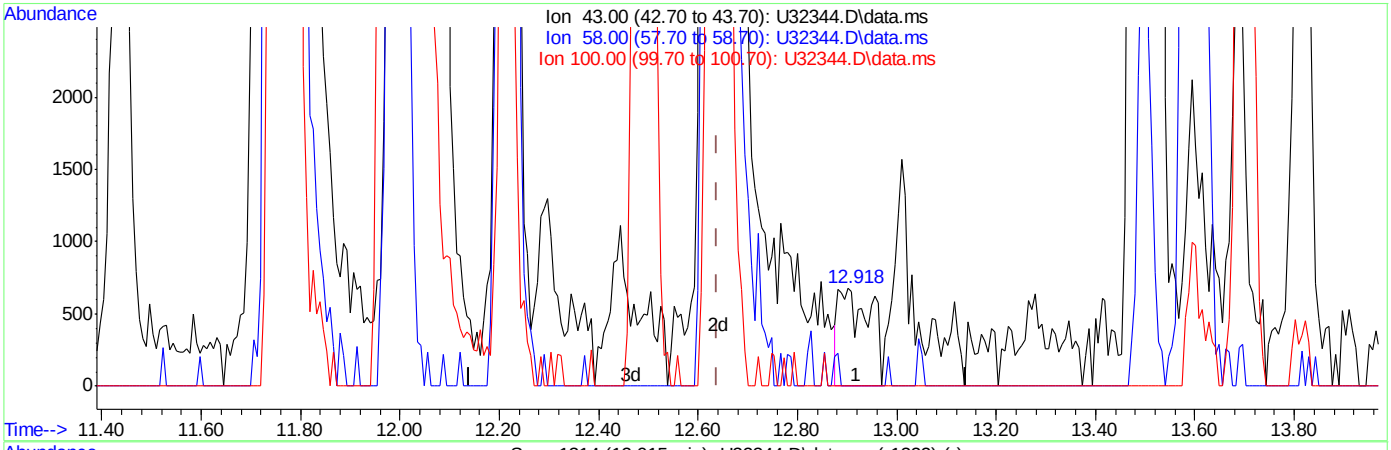
response 24172

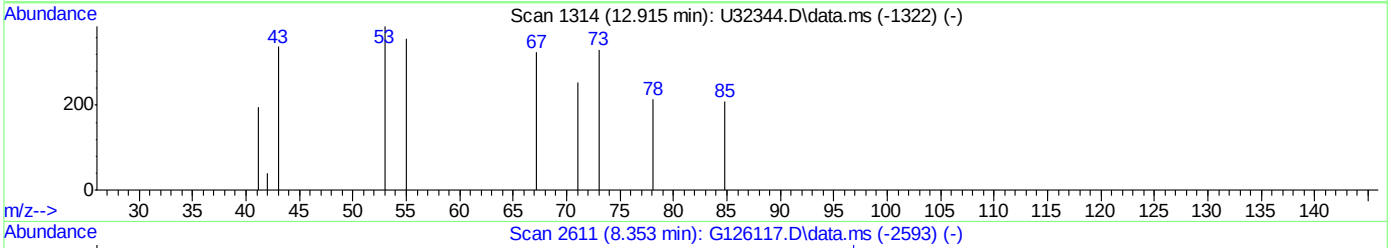
Ion	Exp%	Act%
88.00	100.00	100.00
58.00	109.20	69.45#
0.00	0.00	0.00
0.00	0.00	0.00

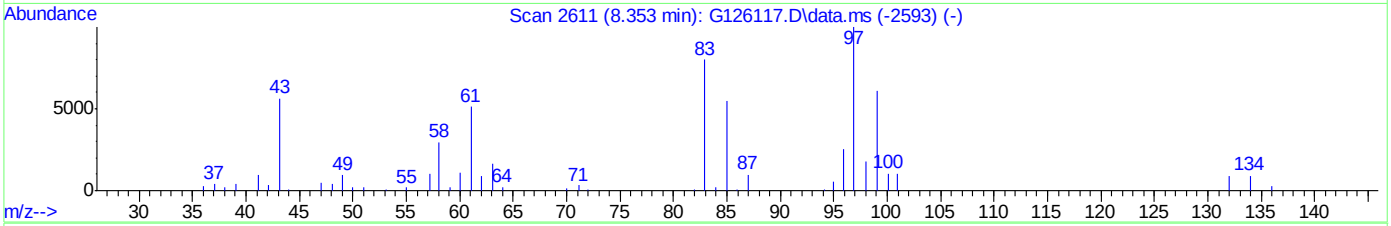
Quantitation Report (Qedit)

Data Path : R:\1\data\U150927\
Data File : U32344.D
Acq On : 27 Sep 2015 12:29 pm
Operator : andrewd1
Sample : bs
Misc : ms35292,msu1329,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 27 12:50:52 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 10:56:47 2015
Response via : Initial Calibration







TIC: U32344.D\data.ms

(71) 2-hexanone (P)

12.918min (+ 0.278) -3.26 ppb

response 2938

Ion	Exp%	Act%
43.00	100.00	100.00
58.00	16.30	0.00
100.00	0.00	0.00
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Sona Liskova
09/29/15 15:21

Quantitation Report (QT Reviewed)

Data File: R:\1\data\U150927\U32365.D
Sample : mc41493-27ms
Misc : ms35302,msu1329,,,,5,1
ALS Vial : 24 Sample Multiplier: 1
Acq On : 27 Sep 2015 10:01 pm Operator: andrewd1

Quant Time: Sep 28 12:54:27 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	7.468	65	1203150	500.00	ppb		-0.06
4) pentafluorobenzene	9.497	168	2263349	50.00	ppb		0.00
43) 1,4-difluorobenzene	10.390	114	3372680	50.00	ppb		0.00
66) chlorobenzene-d5	13.597	82	1651114	50.00	ppb		0.00
80) 1,4-dichlorobenzene-d4	16.175	152	2323923	50.00	ppb		0.00
System Monitoring Compounds							
40) dibromofluoromethane (s)	9.562	113	1304739	54.35	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 108.70%				
60) toluene-d8 (s)	11.995	98	3668527	50.51	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.02%				
82) bromofluorobenzene (s)	14.875	95	1560585	46.78	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 93.56%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.560	59	1152785	553.914	ppb		91
5) dichlorodifluoromethane	4.368	85	1820291	70.711	ppb		98
6) chloromethane	4.738	50	1263168	41.470	ppb		99
7) vinyl chloride	4.997	62	2730839	106.105	ppb		100
8) bromomethane	5.597	96	1027853	65.948	ppb		98
9) chloroethane	5.749	64	823559	57.886	ppb		99
10) ethyl ether	6.513	59	702783	38.079	ppb		90
11) acetonitrile	7.367	41	1500076	37.711	ppb	#	12
12) trichlorofluoromethane	6.165	101	2109429	59.716	ppb		99
13) freon-113	6.899	101	1272678	50.309	ppb		92
15) 1,1-dichloroethene	6.908	96	966155	45.021	ppb		92
16) acetone	6.932	58	120918	38.960	ppb	#	45
17) Methyl Acetate	6.942	43	505944	56.860	ppb	#	74
18) methylene chloride	7.532	84	1108184	46.403	ppb		87
19) methyl tert butyl ether	7.836	73	2926059	50.736	ppb		95
20) acrylonitrile	7.801	53	460535	42.174	ppb		98
21) allyl chloride	7.367	41	1516233	36.456	ppb		85
22) trans-1,2-dichloroethene	7.881	96	1094022	53.244	ppb		88
23) iodomethane	7.158	142	2004664	46.333	ppb		94
24) carbon disulfide	7.309	76	3362666	37.939	ppb		97
25) propionitrile	8.485	54	61590	36.502	ppb		100
26) vinyl acetate	8.310	43	1549857m	52.413	ppb		
27) chloroprene	8.487	53	1386808	37.475	ppb		97
28) di-isopropyl ether	8.347	45	3440888	45.998	ppb		92
29) methacrylonitrile	9.226	41	664033	46.499	ppb		96
30) 2-butanone	8.969	72	97002	34.243	ppb	#	34
31) Ethyl Acetate	8.177	43	723875	35.698	ppb	#	1
32) Hexane	8.178	41	881232	38.106	ppb	#	75
33) 1,1-dichloroethane	8.401	63	1892094	44.259	ppb		96
34) tert-butyl ethyl ether	8.766	59	3132238	45.115	ppb		92
35) isobutyl alcohol	8.765	43	364198	242.646	ppb	#	61
36) 2,2-dichloropropane	9.082	77	1550171	51.740	ppb		88
37) cis-1,2-dichloroethene	9.040	96	13399712	588.671	ppb		86
38) bromochloromethane	9.320	128	632021	51.142	ppb	#	70
39) chloroform	9.381	83	2089806	52.593	ppb		96
41) Tetrahydrofuran	9.340	42	334837	42.430	ppb		91
42) 1,1,1-trichloroethane	9.639	97	1922917	56.330	ppb		98
44) Cyclohexane	9.746	56	1858253	42.454	ppb		89
45) carbon tetrachloride	9.821	117	1603318	58.789	ppb		98
46) 1,1-dichloropropene	9.787	75	1324184	47.583	ppb		95
47) benzene	10.027	78	3661063	48.311	ppb		98
48) 1,2-dichloroethane	10.049	62	1609657	54.324	ppb		100
49) tert-amyl methyl ether	10.066	73	2926424	48.045	ppb		98
50) heptane	10.219	43	1206554m	44.080	ppb		
51) trichloroethene	10.694	95	4099972	187.758	ppb		82
52) 1,2-dichloropropane	10.984	63	951713	48.780	ppb		99

Quantitation Report (QT Reviewed)

Data File: R:\1\data\U150927\U32365.D
Sample : mc41493-27ms
Misc : ms35302,msu1329,,,,5,1
ALS Vial : 24 Sample Multiplier: 1
Acq On : 27 Sep 2015 10:01 pm Operator: andrewd1

Quant Time: Sep 28 12:54:27 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
53)	dibromomethane	11.094	93	672874	53.889	ppb		89
54)	bromodichloromethane	11.228	83	1346376	52.314	ppb		97
55)	Methylcyclohexane	10.988	83	1671213	47.009	ppb		89
57)	methyl methacrylate	10.903	69	405156	41.497	ppb		93
58)	1,4-dioxane	11.019	88	24418m	313.801	ppb		
59)	cis-1,3-dichloropropene	11.678	75	1262744	47.097	ppb		96
61)	4-methyl-2-pentanone	11.762	43	1082327	51.509	ppb		96
62)	toluene	12.073	92	2034524	49.797	ppb		99
63)	trans-1,3-dichloropropene	12.252	75	1001809	47.234	ppb		97
64)	1,1,2-trichloroethane	12.492	83	626102	51.821	ppb		98
65)	ethyl methacrylate	12.216	69	821897	43.885	ppb		90
67)	tetrachloroethene	12.648	166	1057917	54.343	ppb		98
68)	1,3-dichloropropane	12.684	76	1187628	50.155	ppb		95
69)	dibromochloromethane	12.953	129	877475	49.781	ppb		95
70)	1,2-dibromoethane	13.131	107	797135	52.314	ppb		99
71)	2-hexanone	12.640	43	562514m	43.271	ppb		
72)	chlorobenzene	13.633	112	2517317	50.956	ppb		93
73)	1,1,1,2-tetrachloroethane	13.699	131	1218950	57.360	ppb		99
74)	ethylbenzene	13.688	91	4276976	52.058	ppb		96
75)	m,p-xylene	13.817	106	3180427	96.331	ppb		91
76)	o-xylene	14.260	106	1818243	47.674	ppb		93
77)	styrene	14.274	104	1921107	34.945	ppb		89
78)	bromoform	14.546	173	561372	45.563	ppb		100
79)	trans-1,4-dichloro-2-b...	14.679	53	150536	18.535	ppb	#	1
81)	isopropylbenzene	14.641	105	5402371	48.670	ppb		98
83)	bromobenzene	15.087	156	1416826	50.852	ppb		87
84)	1,1,2,2-tetrachloroethane	14.948	83	1342252	57.232	ppb		100
85)	1,2,3-trichloropropane	15.059	75	1212669	48.023	ppb		60
86)	n-propylbenzene	15.102	91	5995981	47.457	ppb		95
87)	2-chlorotoluene	15.260	91	4356749	49.723	ppb		96
88)	4-chlorotoluene	15.384	91	3677027	49.317	ppb		93
89)	1,3,5-trimethylbenzene	15.272	105	4354111	43.699	ppb		96
90)	tert-butylbenzene	15.654	91	3146504	55.276	ppb		96
91)	1,2,4-trimethylbenzene	15.709	105	4705021	44.004	ppb		99
92)	sec-butylbenzene	15.897	105	6938547	53.143	ppb		96
93)	1,3-dichlorobenzene	16.097	146	3112485	51.036	ppb		98
94)	p-isopropyltoluene	16.040	119	5999277	51.814	ppb		97
95)	1,4-dichlorobenzene	16.204	146	3188016	51.198	ppb		99
96)	1,2-dichlorobenzene	16.618	146	3566488	57.679	ppb		97
97)	n-butylbenzene	16.495	91	5876162	51.005	ppb		94
98)	1,2-dibromo-3-chloropr...	17.462	75	375130	50.589	ppb		95
99)	1,3,5-trichlorobenzene	17.658	180	3501974	52.172	ppb		96
100)	1,2,4-trichlorobenzene	18.371	180	3416063	55.587	ppb		94
101)	hexachlorobutadiene	18.485	225	1538175	60.860	ppb		99
102)	naphthalene	18.714	128	6964365	48.745	ppb		100
103)	2-Methylnaphthalene	20.110	142	1942251	24.058	ppb		96
104)	1-Methylnaphthalene	20.375	142	1489492	25.060	ppb		96
105)	1,2,3-trichlorobenzene	18.961	180	3095022	56.056	ppb		95

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

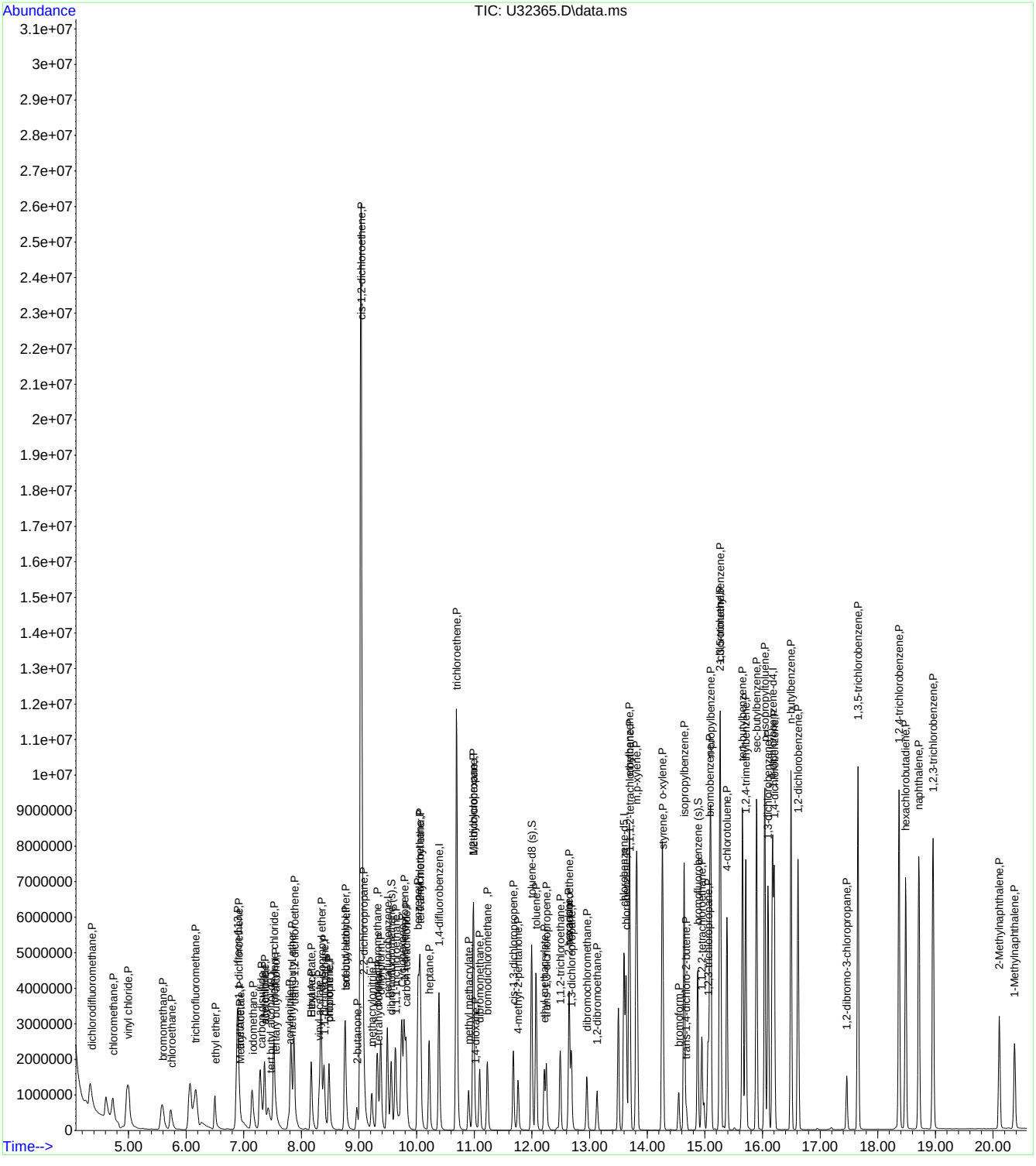
7.4.1

7

Quantitation Report (QT Reviewed)

Data File: R:\1\data\U150927\U32365.D
Sample : mc41493-27ms
Misc : ms35302,msu1329,,,,5,1
ALS Vial : 24 Sample Multiplier: 1
Acq On : 27 Sep 2015 10:01 pm Operator: andrewd1

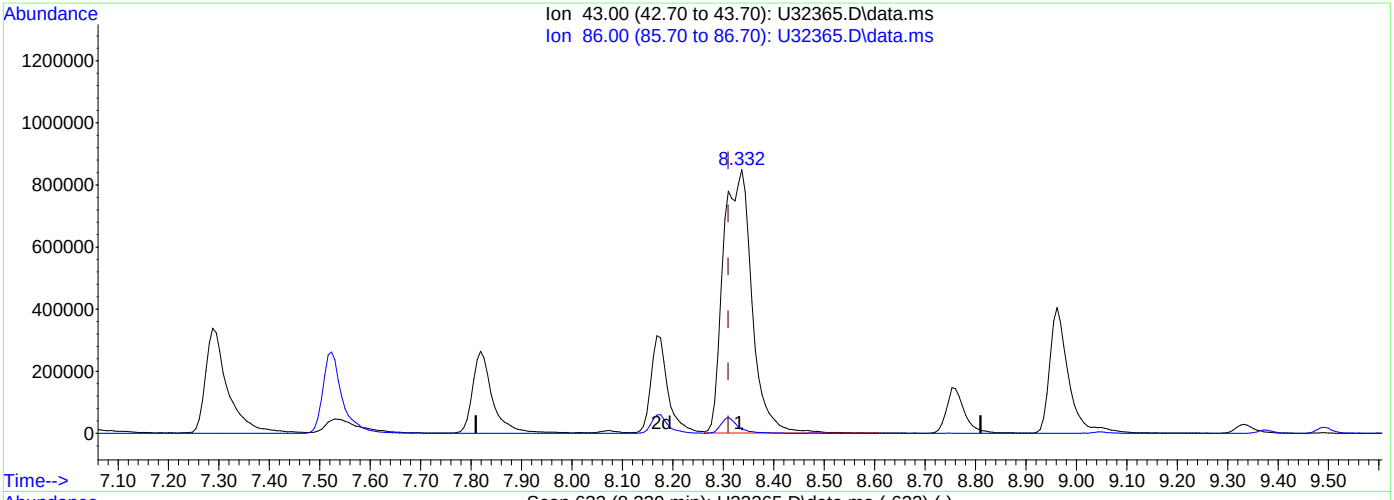
Quant Time: Sep 28 12:54:27 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260

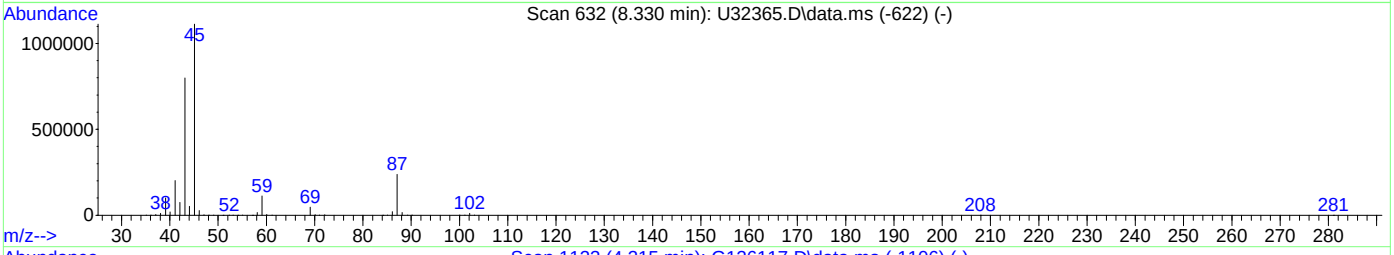


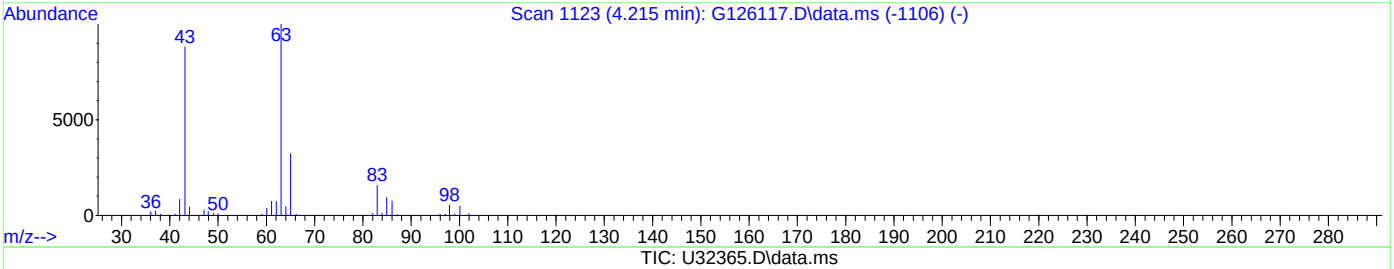
Quantitation Report (Qedit)

Data File: R:\1\data\U150927\U32365.D
Sample : mc41493-27ms
Misc : ms35302,msu1329,,,,5,1
ALS Vial : 24 Sample Multiplier: 1
Acq On : 27 Sep 2015 10:01 pm Operator: andrewd1

Quant Time: Sep 28 12:53:10 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260







TIC: U32365.D\data.ms

(26) vinyl acetate (P)

8.332min (+ 0.022) 113.15 ppb

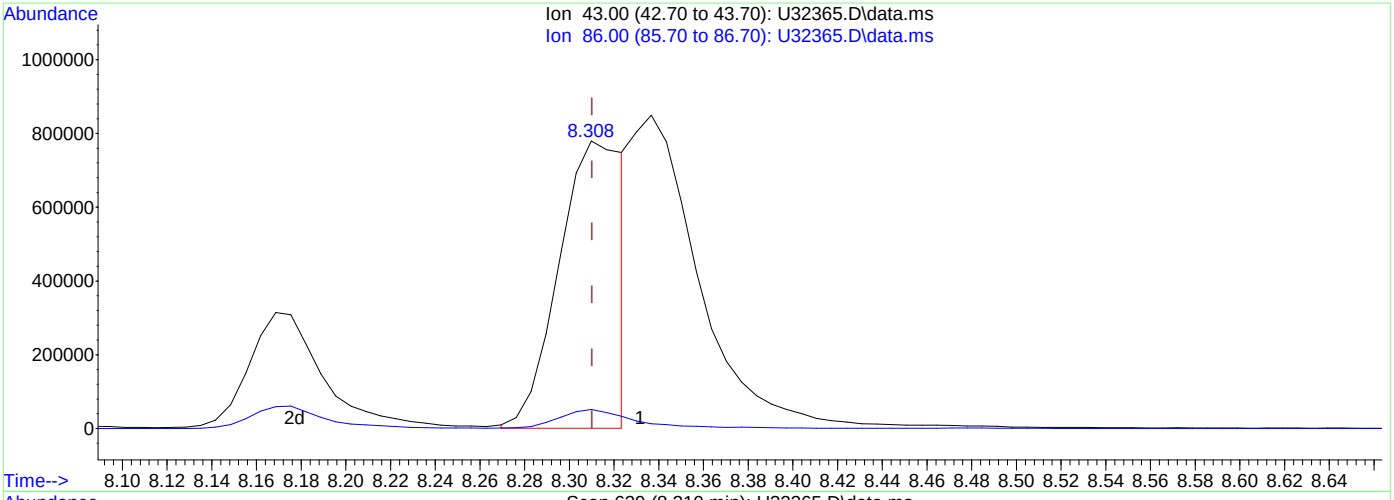
response 3345818

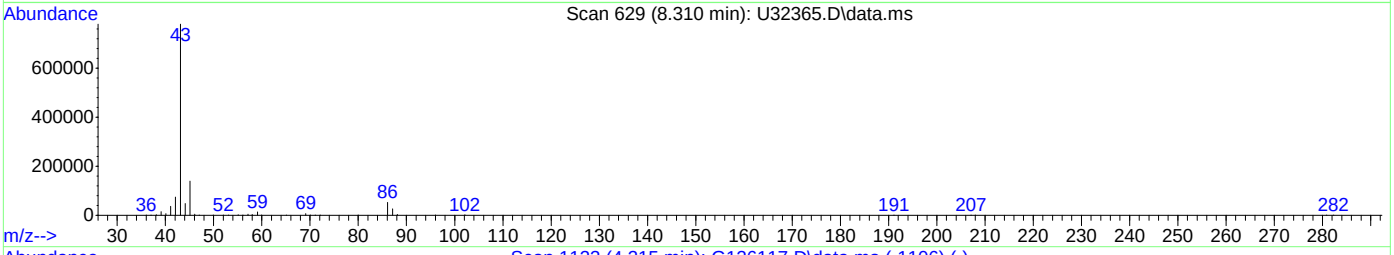
Ion	Exp%	Act%
43.00	100.00	100.00
86.00	6.40	2.57
0.00	0.00	0.00
0.00	0.00	0.00

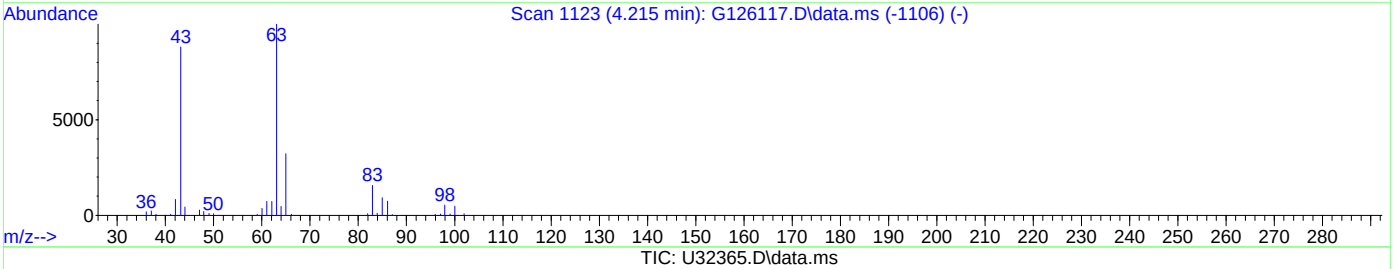
Quantitation Report (Qedit)

Data File: R:\1\data\U150927\U32365.D
Sample : mc41493-27ms
Misc : ms35302,msu1329,,,,5,1
ALS Vial : 24 Sample Multiplier: 1
Acq On : 27 Sep 2015 10:01 pm Operator: andrewd1

Quant Time: Sep 28 12:53:10 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260







TIC: U32365.D\data.ms

(26) vinyl acetate (P)

8.310min (-0.000) 52.41 ppb m

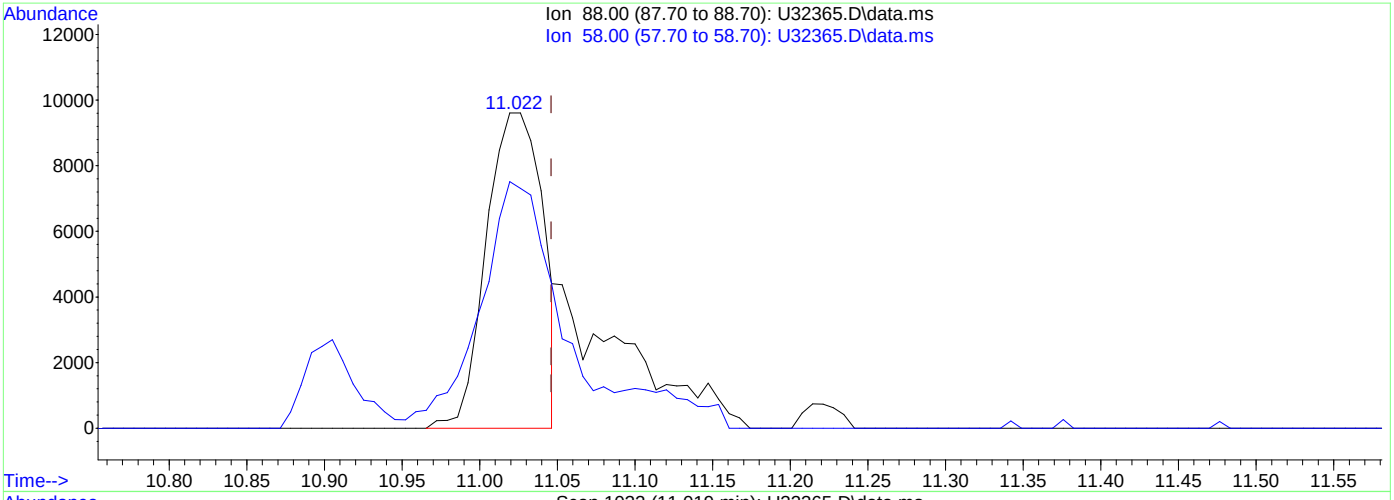
response 1549857

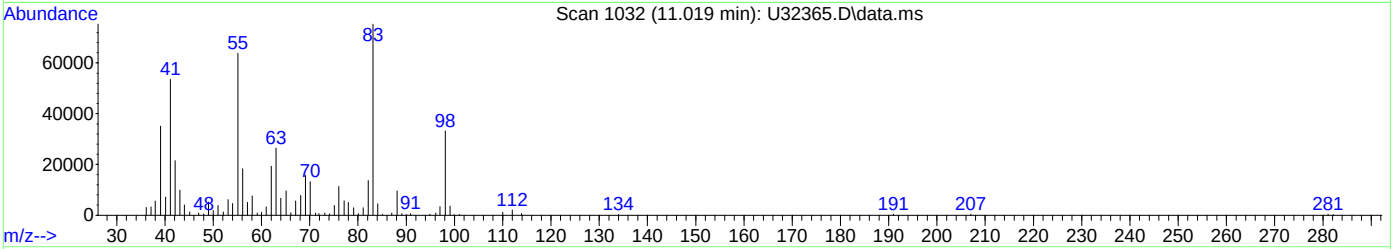
Ion	Exp%	Act%
43.00	100.00	100.00
86.00	6.40	6.61
0.00	0.00	0.00
0.00	0.00	0.00

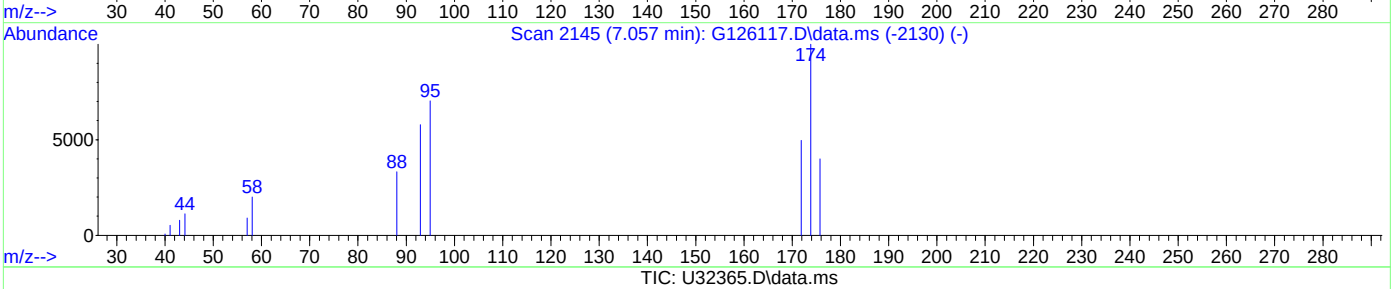
Quantitation Report (Qedit)

Data File: R:\1\data\U150927\U32365.D
Sample : mc41493-27ms
Misc : ms35302,msu1329,,,,5,1
ALS Vial : 24 Sample Multiplier: 1
Acq On : 27 Sep 2015 10:01 pm Operator: andrewd1

Quant Time: Sep 28 12:53:10 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260







TIC: U32365.D\data.ms

(58) 1,4-dioxane (P)

11.019min (-0.027) 313.80 ppb m

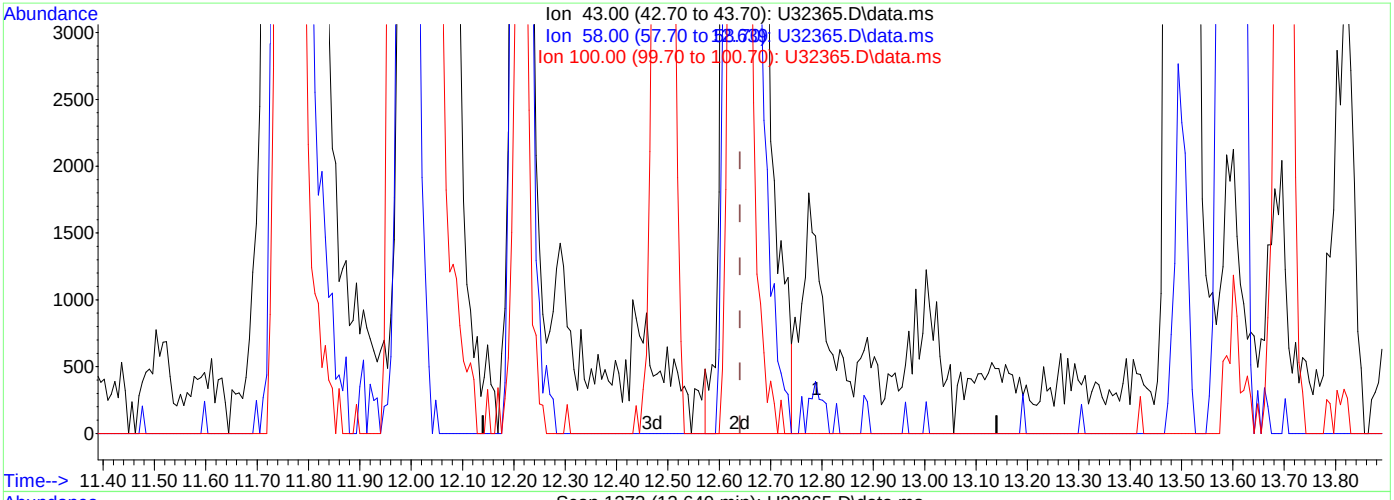
response 24418

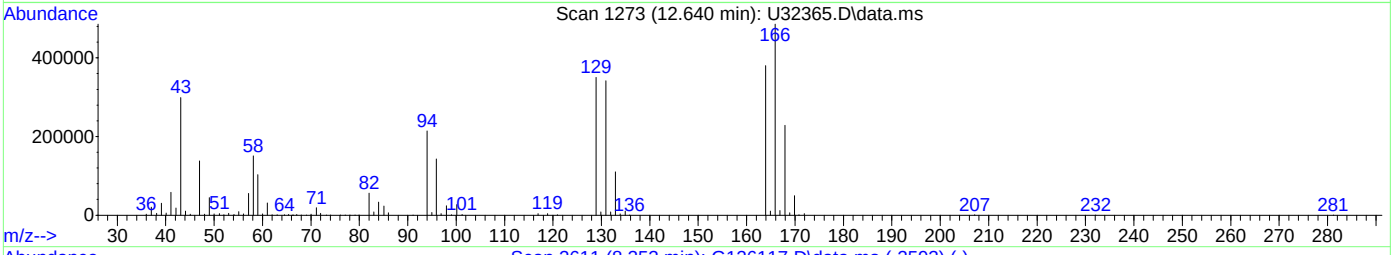
Ion	Exp%	Act%
88.00	100.00	100.00
58.00	109.20	78.26#
0.00	0.00	0.00
0.00	0.00	0.00

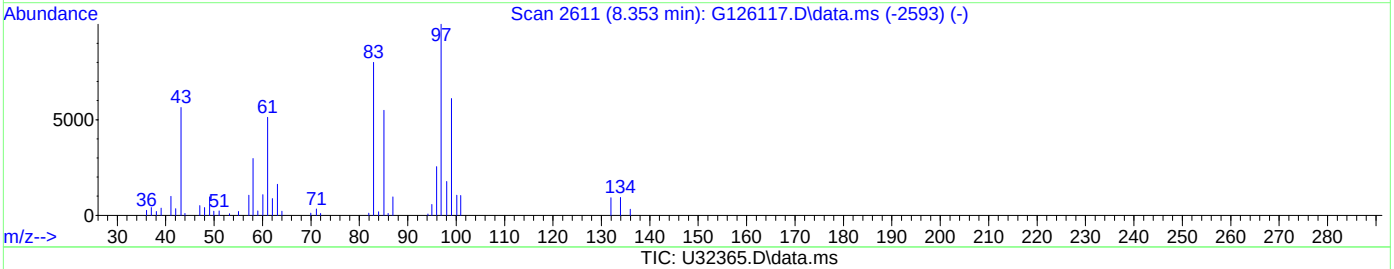
Quantitation Report (Qedit)

Data File: R:\1\data\U150927\U32365.D
Sample : mc41493-27ms
Misc : ms35302,msu1329,,,,5,1
ALS Vial : 24 Sample Multiplier: 1
Acq On : 27 Sep 2015 10:01 pm Operator: andrewd1

Quant Time: Sep 28 12:53:10 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260







TIC: U32365.D\data.ms

(71) 2-hexanone (P)

12.640min (-0.000) 43.27 ppb m

response 562514

Ion	Exp%	Act%
43.00	100.00	100.00
58.00	16.30	50.40#
100.00	0.00	8.91
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Sona Liskova
09/29/15 15:21

Quantitation Report (QT Reviewed)

Data File: R:\1\data\U150927\U32366.D
Sample : mc41493-27msd
Misc : ms35302,msu1329,,,,5,1
ALS Vial : 25 Sample Multiplier: 1
Acq On : 27 Sep 2015 10:29 pm Operator: andrewd1

Quant Time: Sep 28 12:56:12 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	7.465	65	1362354	500.00	ppb		-0.06
4) pentafluorobenzene	9.496	168	2369563	50.00	ppb		0.00
43) 1,4-difluorobenzene	10.390	114	3530413	50.00	ppb		0.00
66) chlorobenzene-d5	13.597	82	1668948	50.00	ppb		0.00
80) 1,4-dichlorobenzene-d4	16.175	152	2399553	50.00	ppb		0.00
System Monitoring Compounds							
40) dibromofluoromethane (s)	9.561	113	1368679	54.46	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 108.92%				
60) toluene-d8 (s)	11.995	98	3787746	49.82	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.64%				
82) bromofluorobenzene (s)	14.875	95	1582022	45.93	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 91.86%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.558	59	1359220	576.784	ppb		90
5) dichlorodifluoromethane	4.363	85	1938502	71.910	ppb		97
6) chloromethane	4.733	50	1479164	46.385	ppb		99
7) vinyl chloride	4.990	62	3005457	111.541	ppb		99
8) bromomethane	5.588	96	1082945	66.368	ppb		94
9) chloroethane	5.743	64	834112	56.000	ppb		95
10) ethyl ether	6.512	59	736411	38.113	ppb		89
11) acetonitrile	7.366	41	1505400	36.149	ppb	#	13
12) trichlorofluoromethane	6.161	101	2174711	58.805	ppb		100
13) freon-113	6.894	101	1319894	49.837	ppb		94
15) 1,1-dichloroethene	6.906	96	985710	43.874	ppb		93
16) acetone	6.932	58	137991	42.841	ppb	#	48
17) Methyl Acetate	6.941	43	569705	61.486	ppb	#	74
18) methylene chloride	7.529	84	1133637	45.341	ppb		86
19) methyl tert butyl ether	7.836	73	3152165	52.206	ppb		94
20) acrylonitrile	7.799	53	507099	44.356	ppb		88
21) allyl chloride	7.366	41	1506328	34.595	ppb		84
22) trans-1,2-dichloroethene	7.881	96	1127370	52.401	ppb		87
23) iodomethane	7.153	142	2036518	44.960	ppb		96
24) carbon disulfide	7.305	76	3440993	37.082	ppb		98
25) propionitrile	8.487	54	62679	35.482	ppb		100
26) vinyl acetate	8.310	43	1646112m	53.173	ppb		
27) chloroprene	8.486	53	1408508	36.355	ppb		95
28) di-isopropyl ether	8.346	45	3551192	45.345	ppb		91
29) methacrylonitrile	9.225	41	681544	45.586	ppb		95
30) 2-butanone	8.969	72	110099	37.125	ppb	#	23
31) Ethyl Acetate	8.176	43	744815	35.084	ppb	#	1
32) Hexane	8.176	41	898688	37.119	ppb	#	73
33) 1,1-dichloroethane	8.400	63	1942318	43.397	ppb		96
34) tert-butyl ethyl ether	8.766	59	3302093	45.430	ppb		91
35) isobutyl alcohol	8.765	43	377156	240.016	ppb	#	63
36) 2,2-dichloropropane	9.077	77	1531322	48.820	ppb		88
37) cis-1,2-dichloroethene	9.039	96	13841211	580.805	ppb		86
38) bromochloromethane	9.320	128	659647	50.985	ppb	#	69
39) chloroform	9.380	83	2113293	50.800	ppb		97
41) Tetrahydrofuran	9.339	42	363679	44.019	ppb		92
42) 1,1,1-trichloroethane	9.637	97	1951913	54.616	ppb		99
44) Cyclohexane	9.744	56	1903951	41.554	ppb		89
45) carbon tetrachloride	9.820	117	1631398	57.146	ppb		99
46) 1,1-dichloropropene	9.786	75	1352835	46.440	ppb		94
47) benzene	10.027	78	3736495	47.023	ppb		97
48) 1,2-dichloroethane	10.049	62	1624276	52.368	ppb		99
49) tert-amyl methyl ether	10.066	73	3090632	48.474	ppb		98
50) heptane	10.219	43	1254390m	43.780	ppb		
51) trichloroethene	10.694	95	4159434	181.971	ppb		83
52) 1,2-dichloropropane	10.984	63	969778	47.486	ppb		98

Quantitation Report (QT Reviewed)

Data File: R:\1\data\U150927\U32366.D
Sample : mc41493-27msd
Misc : ms35302,msu1329,,,,5,1
ALS Vial : 25 Sample Multiplier: 1
Acq On : 27 Sep 2015 10:29 pm Operator: andrewd1

Quant Time: Sep 28 12:56:12 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
53)	dibromomethane	11.094	93	692088	52.951	ppb		92
54)	bromodichloromethane	11.228	83	1353223	50.231	ppb		97
55)	Methylcyclohexane	10.988	83	1754694	47.152	ppb		89
57)	methyl methacrylate	10.903	69	419818	41.077	ppb		92
58)	1,4-dioxane	11.026	88	34449m	454.380	ppb		
59)	cis-1,3-dichloropropene	11.678	75	1239789	44.175	ppb		94
61)	4-methyl-2-pentanone	11.762	43	1156779	52.592	ppb		93
62)	toluene	12.073	92	2027468	47.407	ppb		99
63)	trans-1,3-dichloropropene	12.251	75	939151	42.302	ppb		96
64)	1,1,2-trichloroethane	12.491	83	613286	48.492	ppb		97
65)	ethyl methacrylate	12.215	69	836876	42.688	ppb		87
67)	tetrachloroethene	12.647	166	1063509	54.047	ppb		97
68)	1,3-dichloropropane	12.684	76	1155448	48.274	ppb		96
69)	dibromochloromethane	12.953	129	864029	48.494	ppb		98
70)	1,2-dibromoethane	13.130	107	776155	50.393	ppb		98
71)	2-hexanone	12.640	43	593366m	45.308	ppb		
72)	chlorobenzene	13.633	112	2473702	49.538	ppb		94
73)	1,1,1,2-tetrachloroethane	13.699	131	1260102	58.667	ppb		97
74)	ethylbenzene	13.688	91	4266648	51.338	ppb		96
75)	m,p-xylene	13.817	106	3194632	95.711	ppb		90
76)	o-xylene	14.260	106	1878607	48.752	ppb		90
77)	styrene	14.273	104	1909720	34.367	ppb		90
78)	bromoform	14.546	173	559844	44.954	ppb		100
79)	trans-1,4-dichloro-2-b...	14.679	53	115931	14.122	ppb	#	1
81)	isopropylbenzene	14.641	105	5573147	48.626	ppb		98
83)	bromobenzene	15.087	156	1407500	48.925	ppb		87
84)	1,1,2,2-tetrachloroethane	14.948	83	1379978	56.986	ppb		100
85)	1,2,3-trichloropropane	15.059	75	1239213	47.528	ppb		62
86)	n-propylbenzene	15.102	91	6025160	46.185	ppb		95
87)	2-chlorotoluene	15.260	91	4377864	48.389	ppb		95
88)	4-chlorotoluene	15.384	91	3636737	47.239	ppb		93
89)	1,3,5-trimethylbenzene	15.272	105	4389939	42.670	ppb		95
90)	tert-butylbenzene	15.654	91	3182545	54.147	ppb		95
91)	1,2,4-trimethylbenzene	15.710	105	4791446	43.400	ppb		98
92)	sec-butylbenzene	15.897	105	7033092	52.169	ppb		95
93)	1,3-dichlorobenzene	16.098	146	3109928	49.387	ppb		98
94)	p-isopropyltoluene	16.040	119	6053090	50.631	ppb		97
95)	1,4-dichlorobenzene	16.204	146	3186170	49.556	ppb		99
96)	1,2-dichlorobenzene	16.618	146	3624200	56.758	ppb		97
97)	n-butylbenzene	16.495	91	5950366	50.022	ppb		94
98)	1,2-dibromo-3-chloropr...	17.462	75	395352	51.636	ppb		94
99)	1,3,5-trichlorobenzene	17.658	180	3584468	51.718	ppb		96
100)	1,2,4-trichlorobenzene	18.371	180	3582070	56.452	ppb		94
101)	hexachlorobutadiene	18.485	225	1598479	61.253	ppb		100
102)	naphthalene	18.714	128	7554958	51.212	ppb		100
103)	2-Methylnaphthalene	20.110	142	2343195	28.110	ppb		96
104)	1-Methylnaphthalene	20.375	142	1821243	29.676	ppb		99
105)	1,2,3-trichlorobenzene	18.961	180	3310982	58.077	ppb		95

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

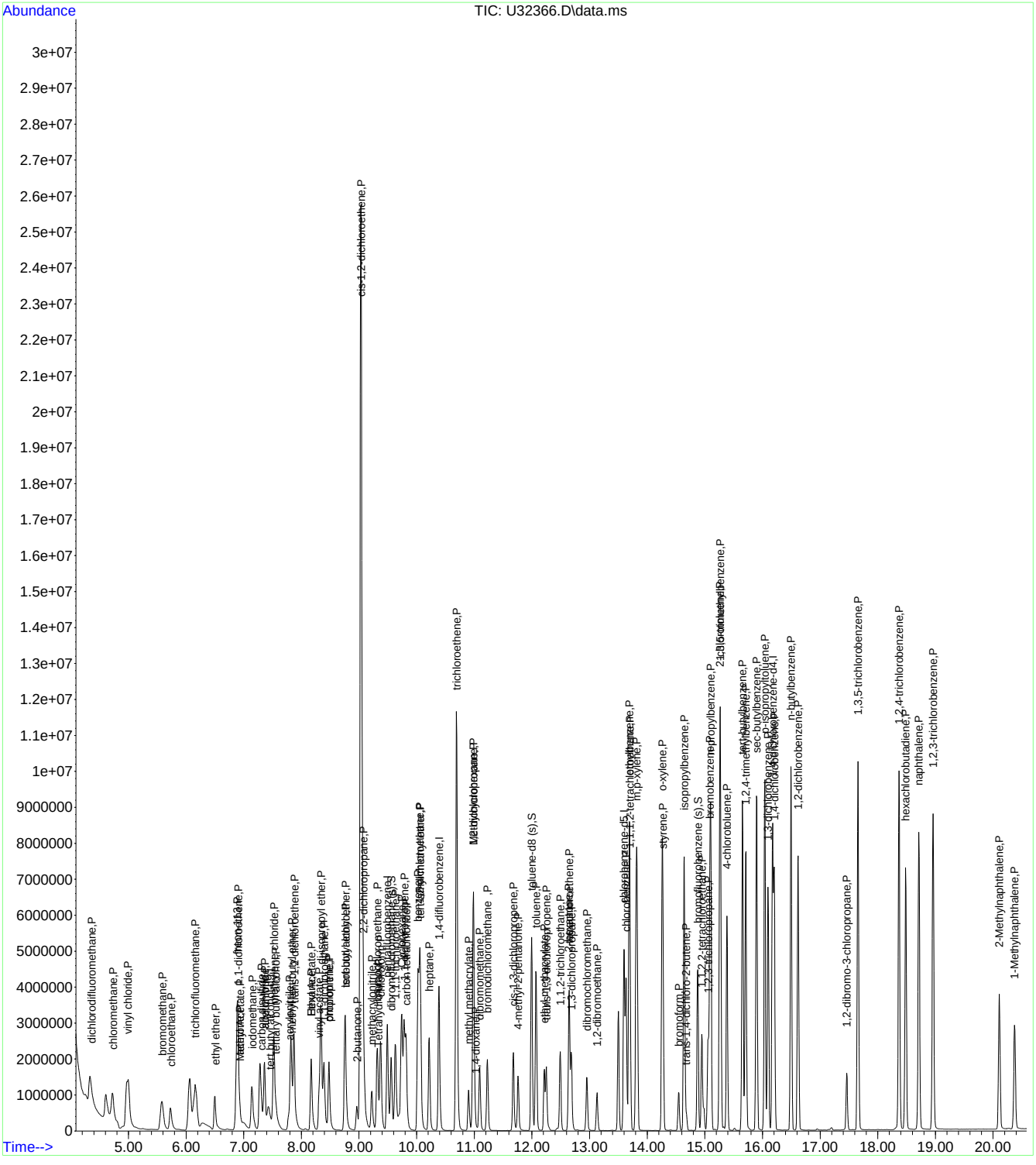
7.4.2

7

Quantitation Report (QT Reviewed)

Data File: R:\1\data\U150927\U32366.D
Sample : mc41493-27msd
Misc : ms35302,msu1329,,,,5,1
ALS Vial : 25 Sample Multiplier: 1
Acq On : 27 Sep 2015 10:29 pm Operator: andrewd1

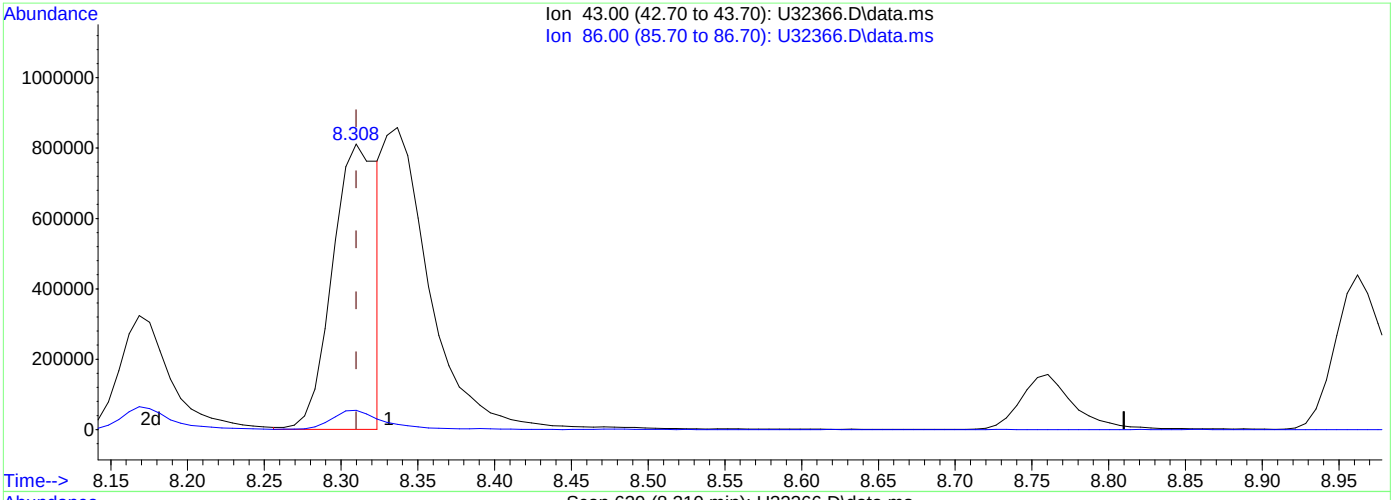
Quant Time: Sep 28 12:56:12 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260

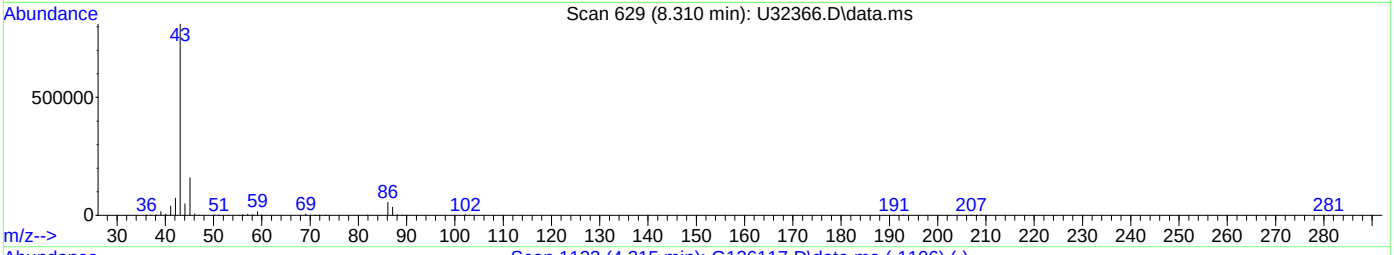


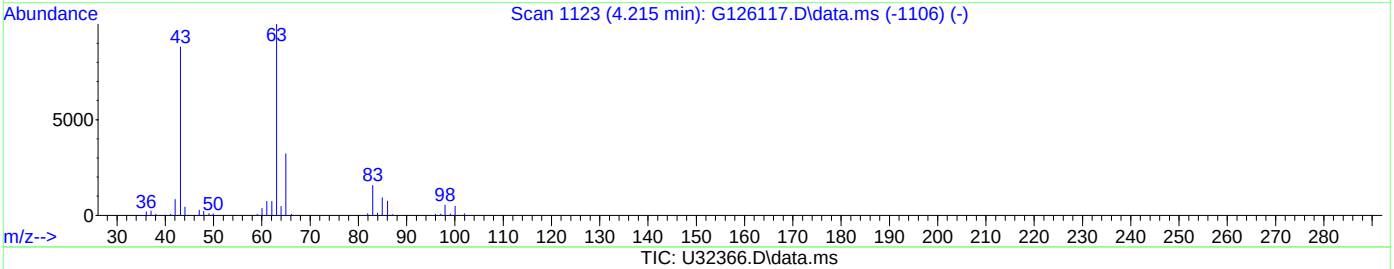
Quantitation Report (Qedit)

Data File: R:\1\data\U150927\U32366.D
Sample : mc41493-27msd
Misc : ms35302,msu1329,,,,5,1
ALS Vial : 25 Sample Multiplier: 1
Acq On : 27 Sep 2015 10:29 pm Operator: andrewd1

Quant Time: Sep 28 12:55:02 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260







TIC: U32366.D\data.ms

(26) vinyl acetate (P)

8.310min (-0.000) 53.17 ppb m

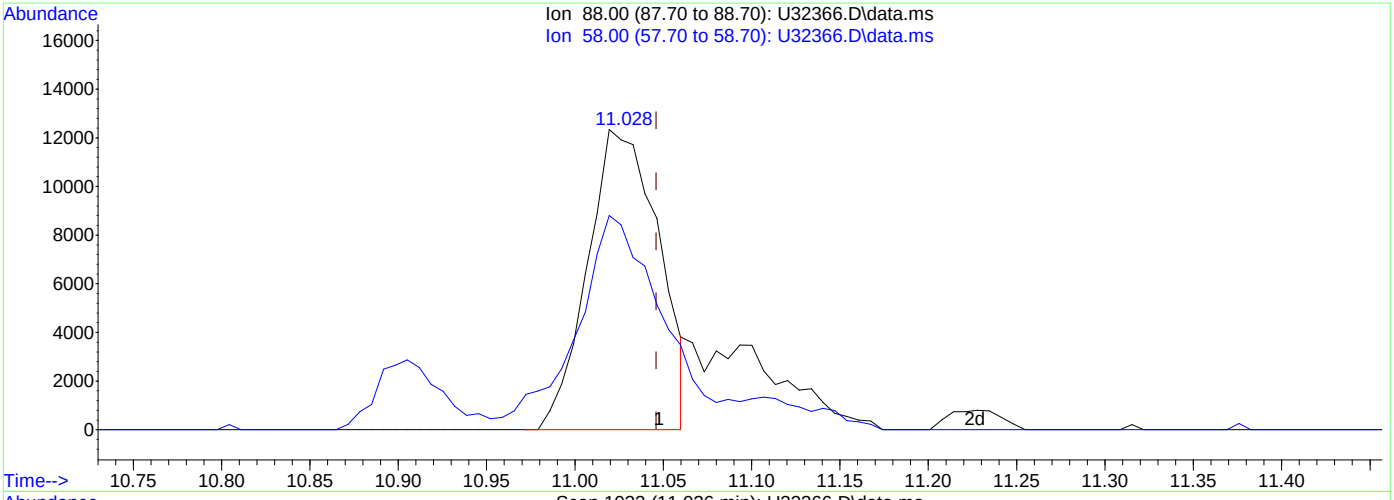
response 1646112

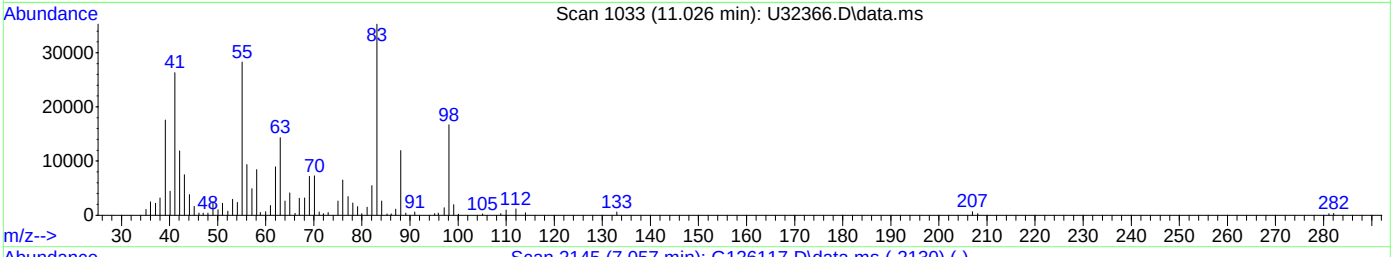
Ion	Exp%	Act%
43.00	100.00	100.00
86.00	6.40	6.74
0.00	0.00	0.00
0.00	0.00	0.00

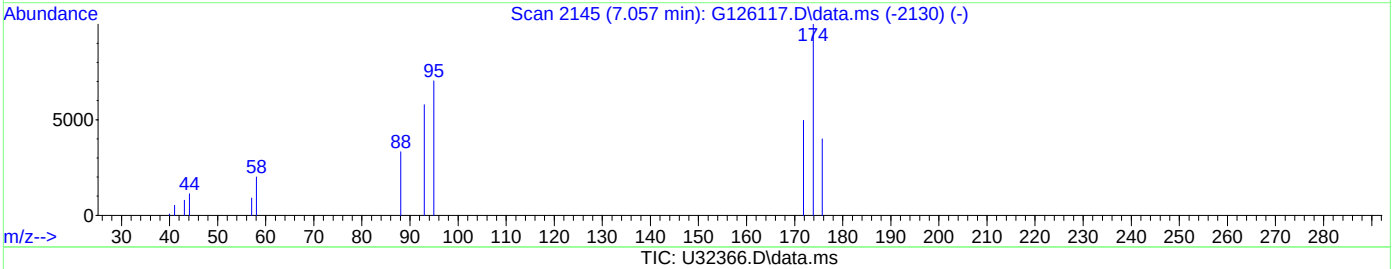
Quantitation Report (Qedit)

Data File: R:\1\data\U150927\U32366.D
Sample : mc41493-27msd
Misc : ms35302,msu1329,,,,5,1
ALS Vial : 25 Sample Multiplier: 1
Acq On : 27 Sep 2015 10:29 pm Operator: andrewd1

Quant Time: Sep 28 12:55:02 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260







TIC: U32366.D\data.ms

(58) 1,4-dioxane (P)

11.026min (-0.020) 454.38 ppb m

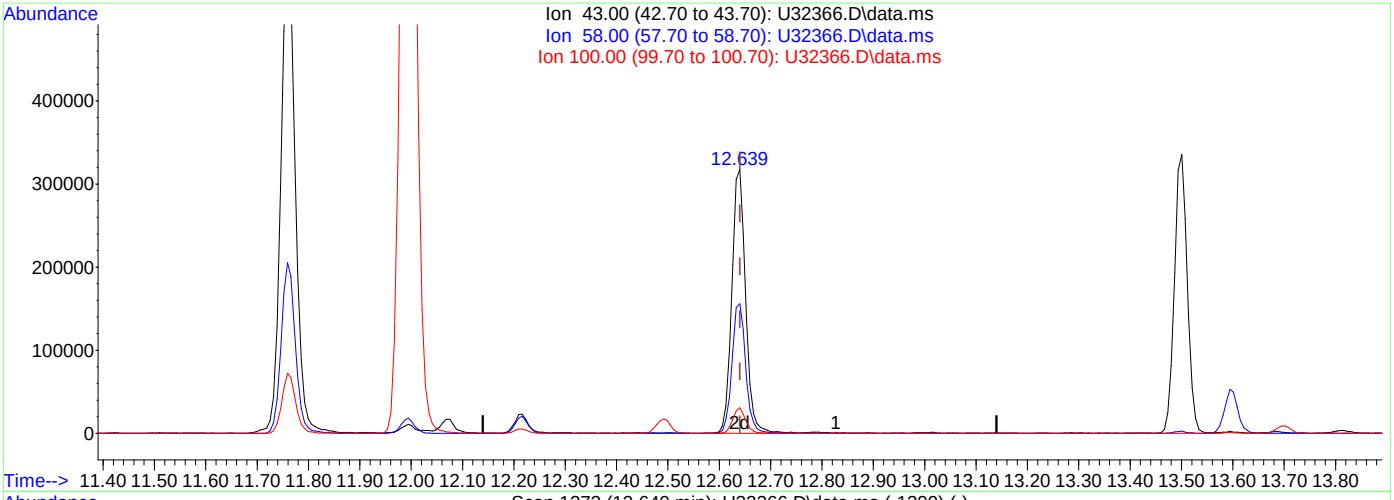
response 34449

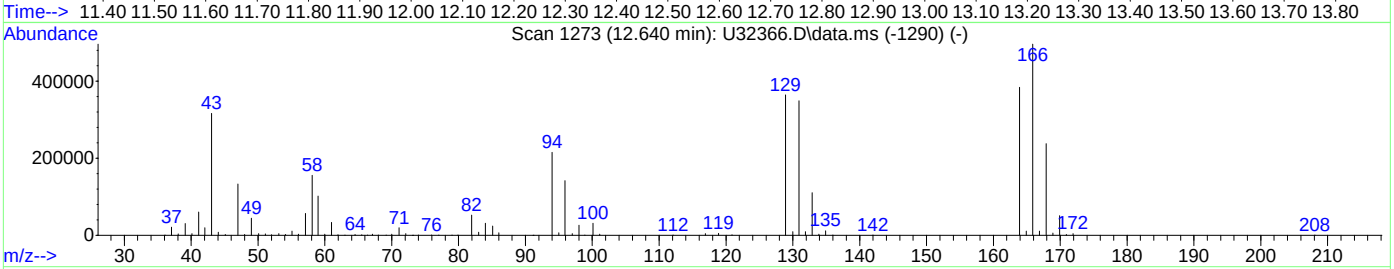
Ion	Exp%	Act%
88.00	100.00	100.00
58.00	109.20	70.72#
0.00	0.00	0.00
0.00	0.00	0.00

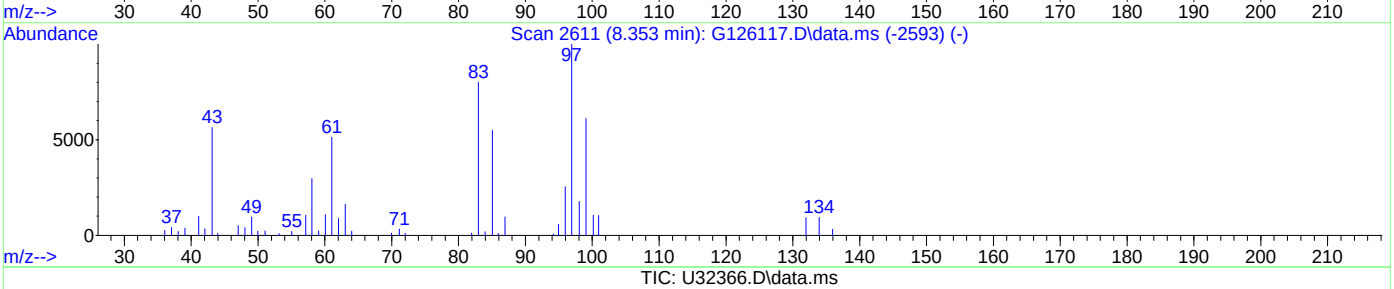
Quantitation Report (Qedit)

Data File: R:\1\data\U150927\U32366.D
Sample : mc41493-27msd
Misc : ms35302,msu1329,,,,5,1
ALS Vial : 25 Sample Multiplier: 1
Acq On : 27 Sep 2015 10:29 pm Operator: andrewd1

Quant Time: Sep 28 12:55:02 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260







TIC: U32366.D\data.ms

(71) 2-hexanone (P)

12.640min (-0.000) 45.31 ppb m

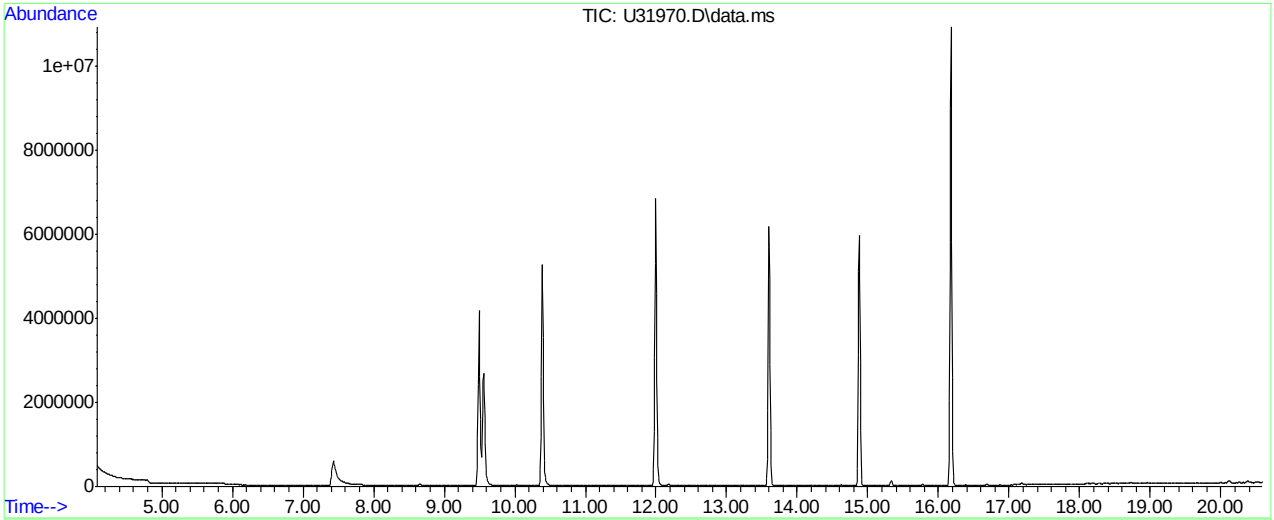
response 593366

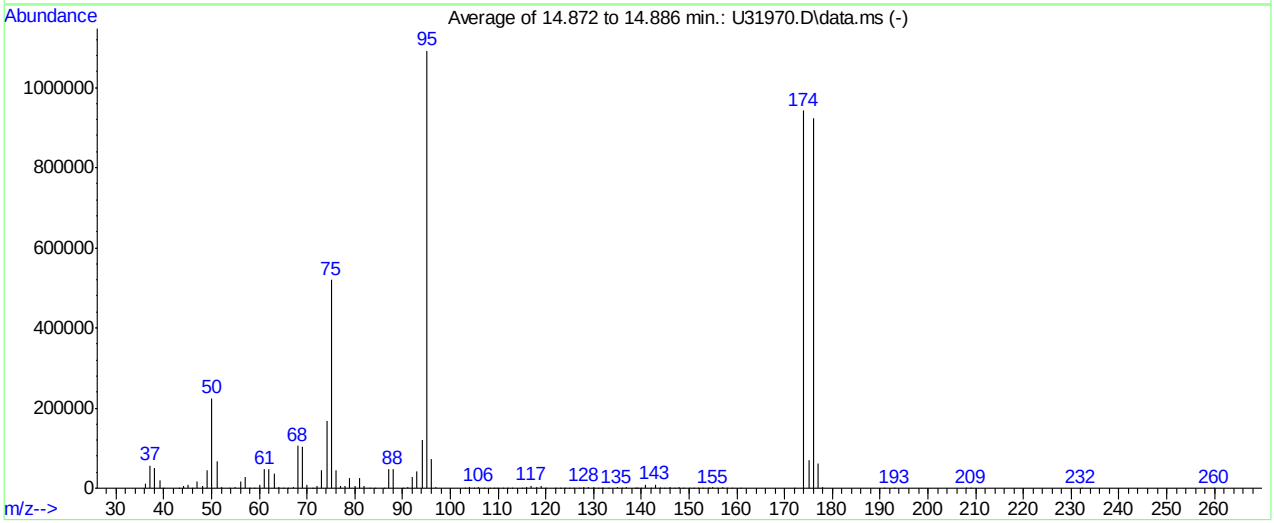
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	16.30	49.09#
100.00	0.00	9.71
0.00	0.00	0.00

SW-846 Method 8260

Data File : L:\1\data\U150917\U31970.D Vial: 2
Acq On : 17 Sep 2015 1:33 pm Operator: andrewd1
Sample : bfb Inst : MSU
Misc : ms35192,msu1316,,,,5,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\METHODS\v150903s.m (RTE Integrator)
Title : SW-846 Method 8260





Spectrum Information: Average of 14.872 to 14.886 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.5	223936	PASS
75	95	30	60	47.5	519104	PASS
95	95	100	100	100.0	1092501	PASS
96	95	5	9	6.7	73503	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	86.2	941909	PASS
175	174	5	9	7.5	70200	PASS
176	174	95	101	98.0	923541	PASS
177	176	5	9	6.7	62205	PASS

U31970.D v150903s.m Fri Sep 18 13:08:31 2015

Average of 14.872 to 14.886 min.: U31970.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	10450	49.10	45656	61.05	47963	72.05	5590
37.10	57109	50.10	223936	62.00	47101	73.05	43505
38.10	49518	51.10	66920	63.05	35483	74.05	167851
39.10	19871	52.05	3005	64.05	3257	75.10	519104
40.00	222	53.80	69	64.90	169	76.10	44784
43.20	267	55.00	2535	66.00	80	76.95	6243
44.10	5183	56.05	15610	67.05	2257	77.95	4431
45.10	9905	57.10	29343	68.00	105640	78.95	24258
46.05	353	58.05	1260	69.05	104753	80.00	6517
47.05	16237	58.80	168	70.00	7527	81.00	24313
48.00	6562	60.05	9686	71.05	43	82.00	4731

Average of 14.872 to 14.886 min.: U31970.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
83.05	549	96.10	73503	111.90	448	124.95	276
84.15	188	97.05	2610	112.85	721	125.90	481
86.05	1055	102.95	590	114.95	928	126.95	386
87.00	47773	104.00	4165	115.95	3283	127.95	3705
88.00	48600	104.95	1260	116.95	6491	128.95	1559
90.20	85	105.90	4213	117.95	3367	129.95	3648
90.95	3182	106.95	894	118.90	4990	130.90	1314
92.00	27923	108.10	71	119.90	147	131.70	75
93.05	42275	109.10	73	121.95	192	132.00	69
94.05	119213	109.85	316	122.90	292	133.00	70
95.10	1.0925e+006	110.95	765	123.95	680	134.90	1721

Average of 14.872 to 14.886 min.: U31970.D\data.ms
bfb
Modified:subtracted

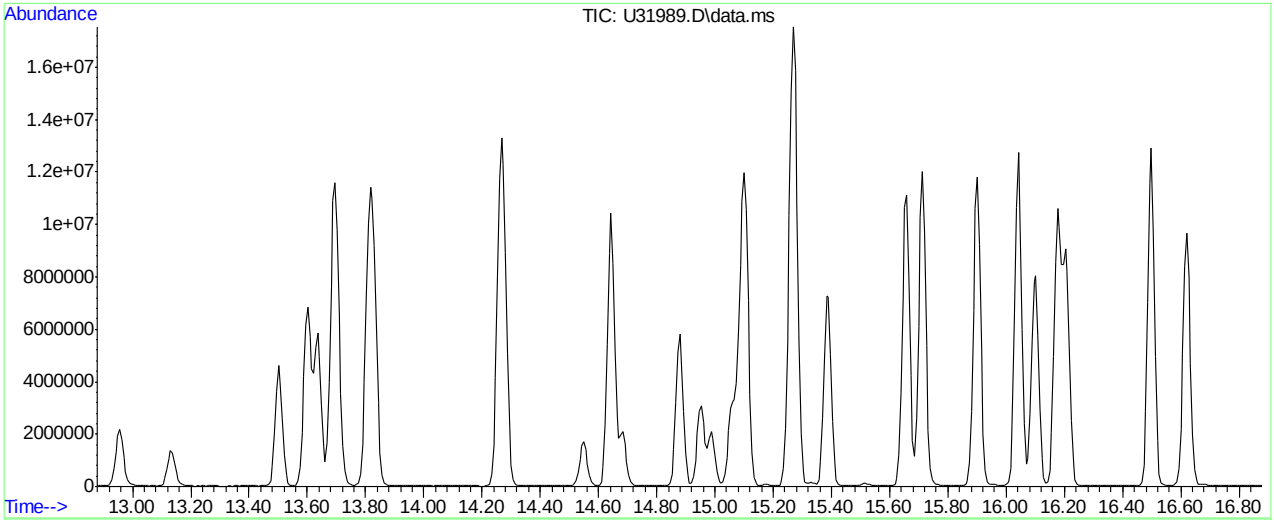
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
135.95	385	144.90	867	154.95	2778	177.95	1575
136.95	1787	145.90	1537	155.90	371	190.95	43
138.80	75	146.95	697	156.95	2028	193.05	258
139.00	156	147.95	2532	158.05	215	208.05	7
139.20	89	148.90	635	158.95	1095	209.00	395
139.95	571	149.95	1221	160.90	1300	232.10	123
140.95	8686	150.90	90	172.00	379	259.95	80
141.95	1107	151.85	523	174.00	941909		
142.95	9877	152.90	763	175.00	70200		
143.80	222	153.90	450	176.00	923541		
143.95	397	154.10	217	177.00	62205		

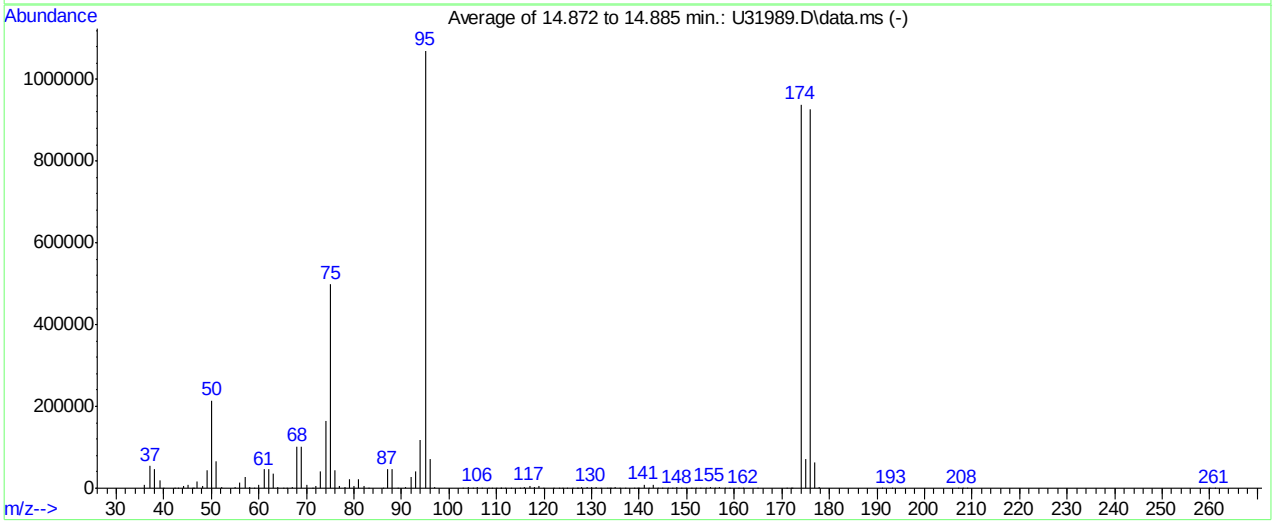
SW-846 Method 8260

Data File : R:\1\data\U150918\U31989.D
Acq On : 18 Sep 2015 12:19 pm
Sample : bfb
Misc : ms35192,msu1317,,,,5,1
MS Integration Params: RTEINT.P

Vial: 3
Operator: andrewd1
Inst : MSU
Multiplr: 1.00

Method : R:\1\methods\U150917.m (RTE Integrator)
Title : SW-846 Method 8260





Spectrum Information: Average of 14.872 to 14.885 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.1	214951	PASS
75	95	30	60	46.7	499554	PASS
95	95	100	100	100.0	1070528	PASS
96	95	5	9	6.7	72116	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	150	87.6	937728	PASS
175	174	5	9	7.6	70856	PASS
176	174	95	101	98.8	926464	PASS
177	176	5	9	6.7	62216	PASS

U31989.D U150917.m Mon Sep 21 11:18:26 2015

Average of 14.872 to 14.885 min.: U31989.D\data.ms
bs
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	9377	47.05	15470	60.00	9296	71.15	533
37.10	53849	48.05	6493	61.05	46379	72.05	5088
38.10	47182	49.10	43653	62.10	46445	73.00	41962
39.10	17957	50.10	214951	63.10	34461	74.05	163392
40.00	1035	51.05	65217	64.05	2884	75.05	499554
42.20	150	52.05	2741	65.05	387	76.10	43227
43.05	258	55.10	2202	65.95	18	77.00	5907
44.05	5368	56.05	14832	67.05	2344	78.05	4222
45.05	9294	57.10	27950	68.00	101779	78.95	22411
46.00	204	58.05	1476	69.00	101733	80.00	6230
46.20	213	58.90	202	70.05	7587	81.00	22519

Average of 14.872 to 14.885 min.: U31989.D\data.ms
bs
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
82.00	4770	96.10	72116	110.95	394	123.95	705
83.00	628	96.95	2287	111.90	555	124.90	354
86.05	995	102.95	377	112.95	621	125.90	484
87.00	47323	103.95	3729	114.95	985	126.80	197
88.00	45765	104.95	1353	115.90	3233	127.10	71
89.30	98	106.00	4090	116.95	6193	127.90	3411
90.95	3128	106.90	959	117.90	3700	128.95	1791
92.00	26731	108.40	79	118.90	4575	129.95	3572
93.00	40627	108.90	89	119.95	301	130.90	1541
94.00	117339	110.00	514	121.95	205	131.95	169
95.05	1.07053e+006	110.80	163	123.05	176	133.20	123

Average of 14.872 to 14.885 min.: U31989.D\data.ms
bs
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
133.80	104	143.95	611	154.90	3063	174.00	937728
133.95	258	144.95	761	155.95	330	175.00	70856
134.95	1826	145.90	1462	156.95	1711	176.00	926464
135.95	360	146.95	528	157.95	229	177.00	62216
136.95	1436	147.95	2408	158.90	1195	177.95	2033
138.90	377	148.90	615	160.90	1145	190.95	118
139.70	181	149.85	980	161.90	82	193.10	250
139.95	505	150.90	79	164.90	67	207.05	181
140.95	8960	151.95	600	170.90	67	208.00	275
141.90	1338	152.85	684	171.90	99	209.00	135
142.90	8938	153.95	617	172.10	13	260.00	30

Average of 14.872 to 14.885 min.: U31989.D\data.ms
bs
Modified:subtracted

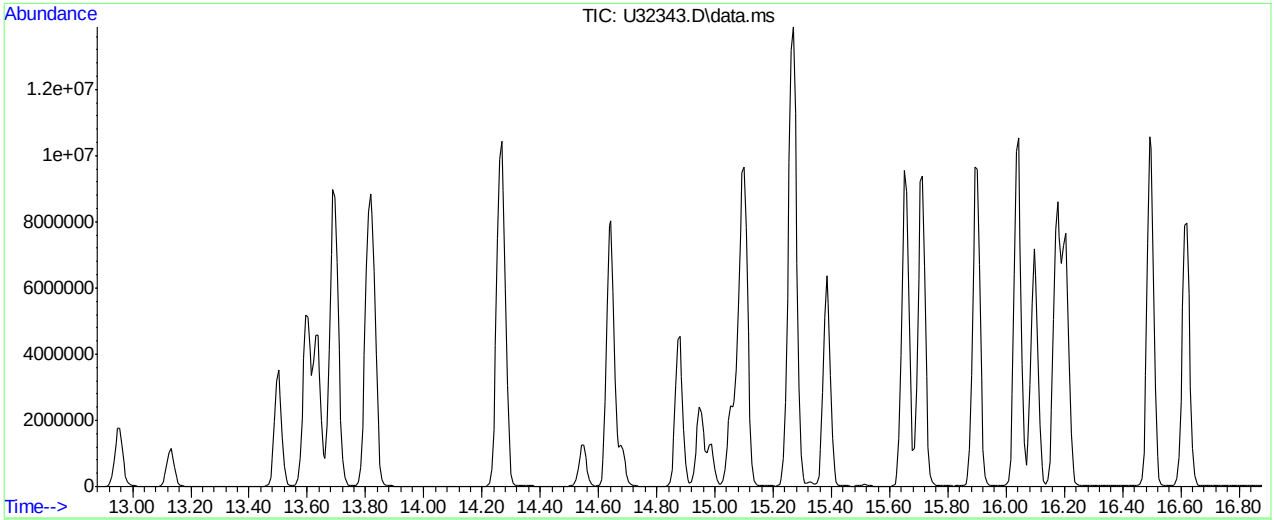
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
261.00	83						

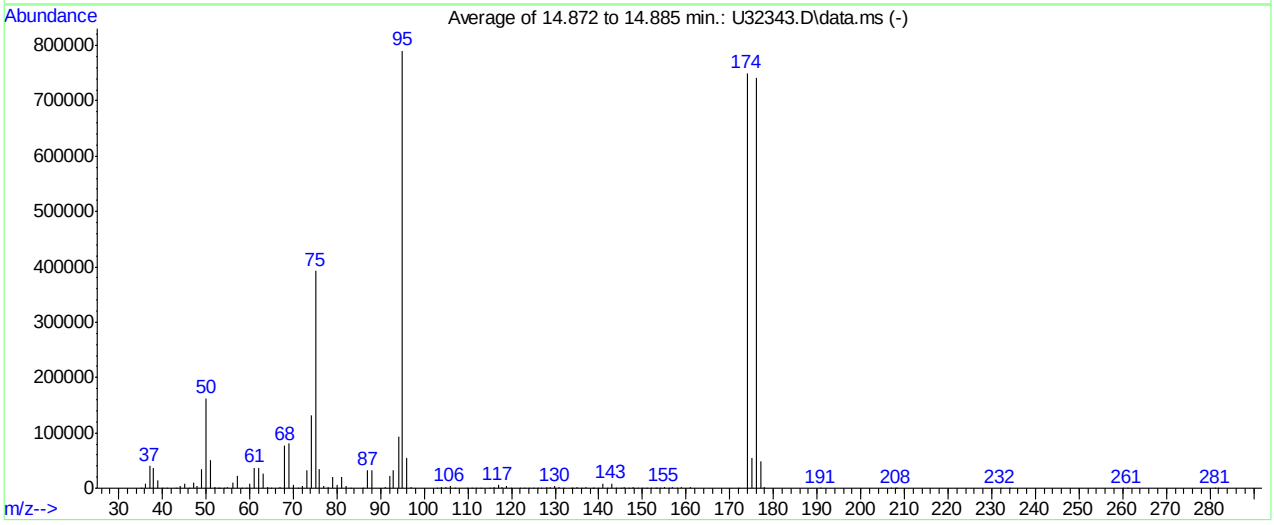
SW-846 Method 8260

Data File : R:\1\data\U150927\U32343.D
Acq On : 27 Sep 2015 12:02 pm
Sample : bfb
Misc : ms35292,msu1329,,,,5,1
MS Integration Params: RTEINT.P

Vial: 2
Operator: andrewd1
Inst : MSU
Multiplr: 1.00

Method : R:\1\methods\U150917.m (RTE Integrator)
Title : SW-846 Method 8260





Spectrum Information: Average of 14.872 to 14.885 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.6	162726	PASS
75	95	30	60	49.6	392555	PASS
95	95	100	100	100.0	790933	PASS
96	95	5	9	6.9	54208	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	150	94.8	750016	PASS
175	174	5	9	7.3	54651	PASS
176	174	95	101	98.9	741461	PASS
177	176	5	9	6.6	49043	PASS

U32343.D U150917.m Sun Sep 27 12:54:10 2015

Average of 14.872 to 14.885 min.: U32343.D\data.ms
cc1316-50
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.10	245	47.05	10769	57.10	22613	69.00	80947
36.10	7394	48.05	5081	58.10	914	70.05	6372
37.05	40362	49.10	34187	59.30	84	71.05	320
38.05	36086	50.05	162726	60.05	7550	72.05	3757
39.05	13724	51.10	50162	61.10	37245	73.05	31724
40.00	673	52.05	2515	62.10	35675	74.05	131000
41.05	136	52.85	143	63.10	27213	75.10	392555
43.10	227	53.15	217	64.10	2642	76.05	33584
44.00	4064	54.00	78	65.00	711	77.00	4696
45.10	7596	55.00	1642	67.05	1728	78.00	2091
46.05	692	56.05	11221	68.05	77763	78.95	20494

Average of 14.872 to 14.885 min.: U32343.D\data.ms
cc1316-50
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
80.00	5728	95.05	790933	112.95	830	125.95	264
81.00	20778	96.05	54208	114.90	859	126.90	243
82.00	3854	97.10	1492	115.90	2921	127.95	3063
83.05	517	102.90	277	116.95	5206	128.90	1535
85.90	512	104.00	3032	117.90	2500	129.95	3334
87.00	32547	105.00	1297	118.90	4145	130.95	1391
88.00	31736	105.90	3477	119.95	238	131.90	151
91.00	2881	106.95	727	121.90	172	133.80	98
92.00	21453	109.90	614	122.90	104	134.00	71
93.00	33357	110.85	539	123.95	610	134.95	1643
94.05	92600	111.90	445	125.00	353	136.05	223

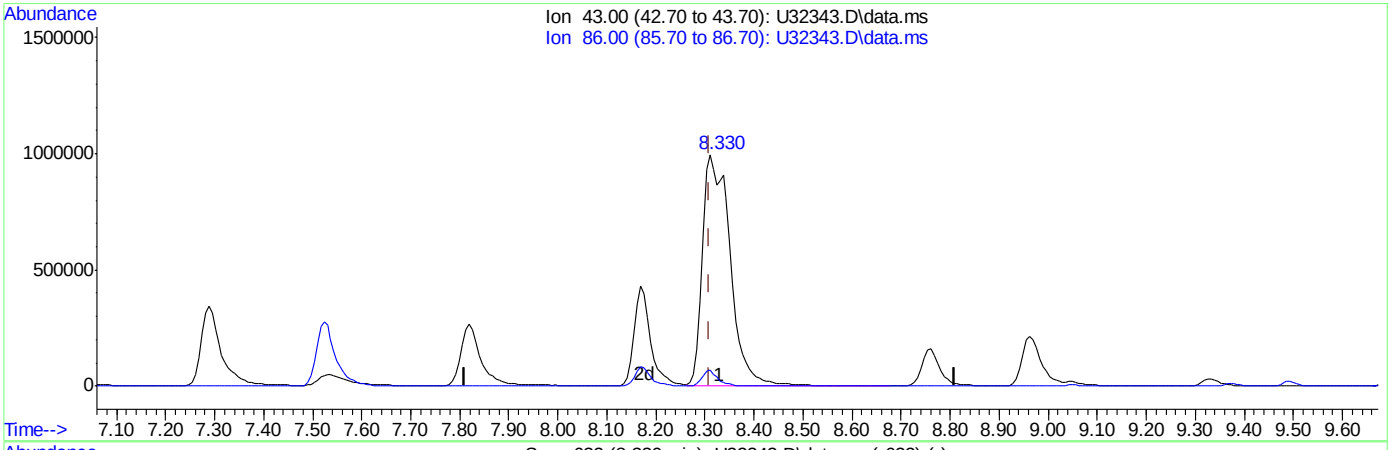
Average of 14.872 to 14.885 min.: U32343.D\data.ms
cc1316-50
Modified:subtracted

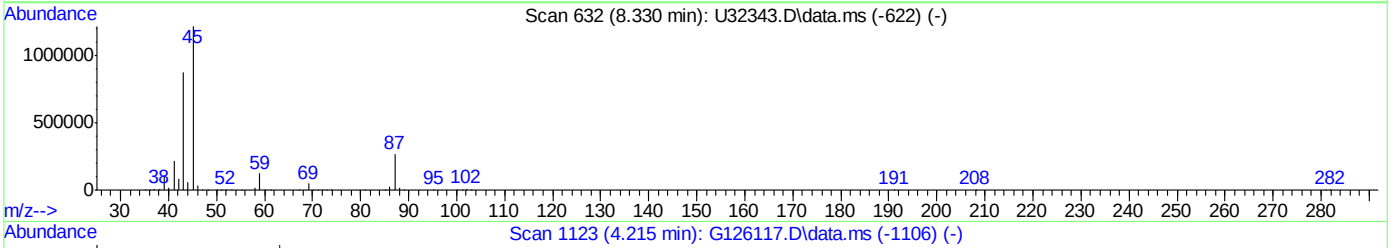
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
136.95	1624	147.90	2271	157.95	464	207.90	70
138.60	92	148.95	484	158.90	1105	208.10	231
138.85	247	149.90	875	160.95	1211	232.00	141
139.95	652	150.90	90	171.90	1086	234.20	69
140.95	8403	151.95	521	174.00	750016	260.10	70
142.00	948	152.85	447	175.00	54651	261.00	98
142.95	9123	153.10	152	176.00	741461	281.20	91
143.90	446	153.95	518	177.00	49043	281.90	76
144.95	879	154.90	2197	177.95	1469		
145.90	1369	156.00	570	190.80	98		
146.90	633	156.95	1510	207.00	170		

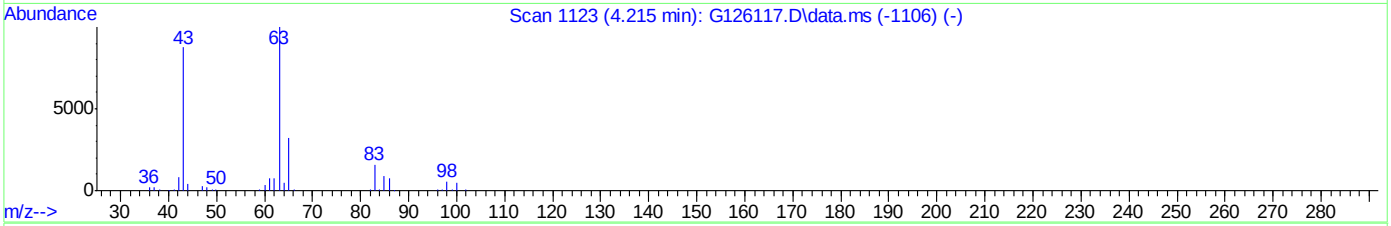
Quantitation Report (Qedit)

Data Path : R:\1\data\U150927\
Data File : U32343.D
Acq On : 27 Sep 2015 12:02 pm
Operator : andrewd1
Sample : cc1316-50
Misc : ms35292,msu1329,,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 27 12:26:29 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 10:56:47 2015
Response via : Initial Calibration







TIC: U32343.D\data.ms

(26) vinyl acetate (P)

8.330min (+ 0.020) 122.03 ppb

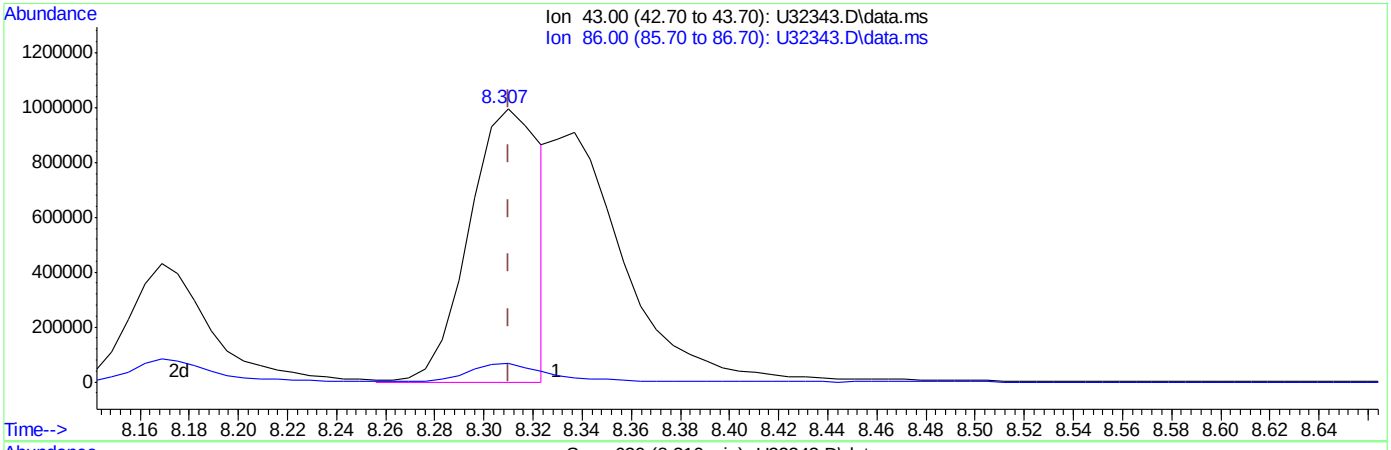
response 3931790

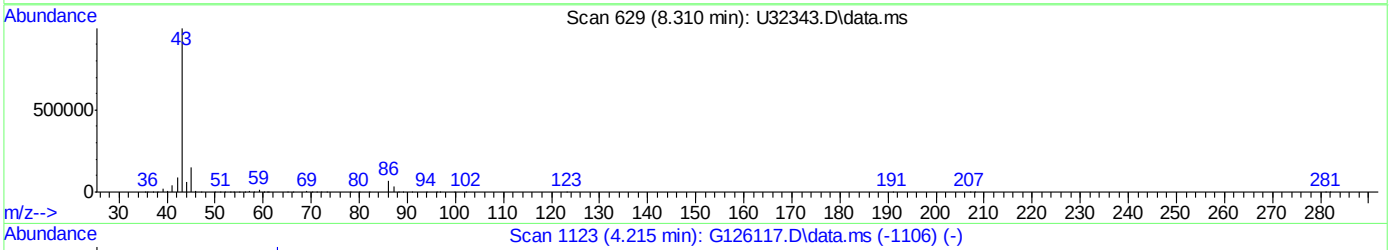
Ion	Exp%	Act%
43.00	100.00	100.00
86.00	6.40	2.61
0.00	0.00	0.00
0.00	0.00	0.00

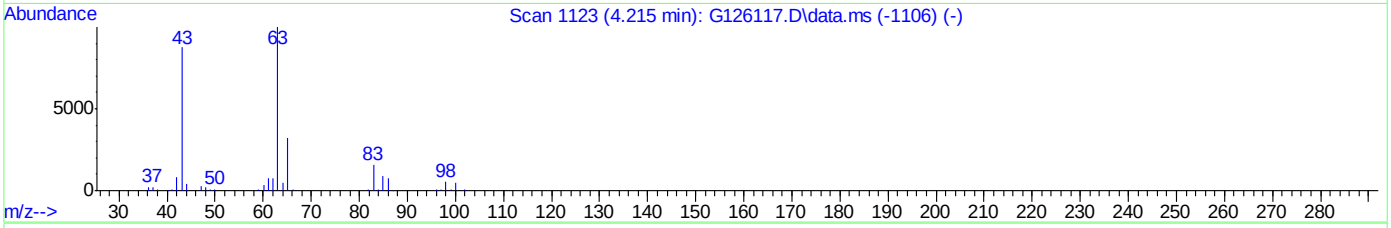
Quantitation Report (Qedit)

Data Path : R:\1\data\U150927\
Data File : U32343.D
Acq On : 27 Sep 2015 12:02 pm
Operator : andrewd1
Sample : cc1316-50
Misc : ms35292,msu1329,,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 27 12:26:29 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 10:56:47 2015
Response via : Initial Calibration







TIC: U32343.D\data.ms

(26) vinyl acetate (P)

8.310min (-0.000) 62.42 ppb m

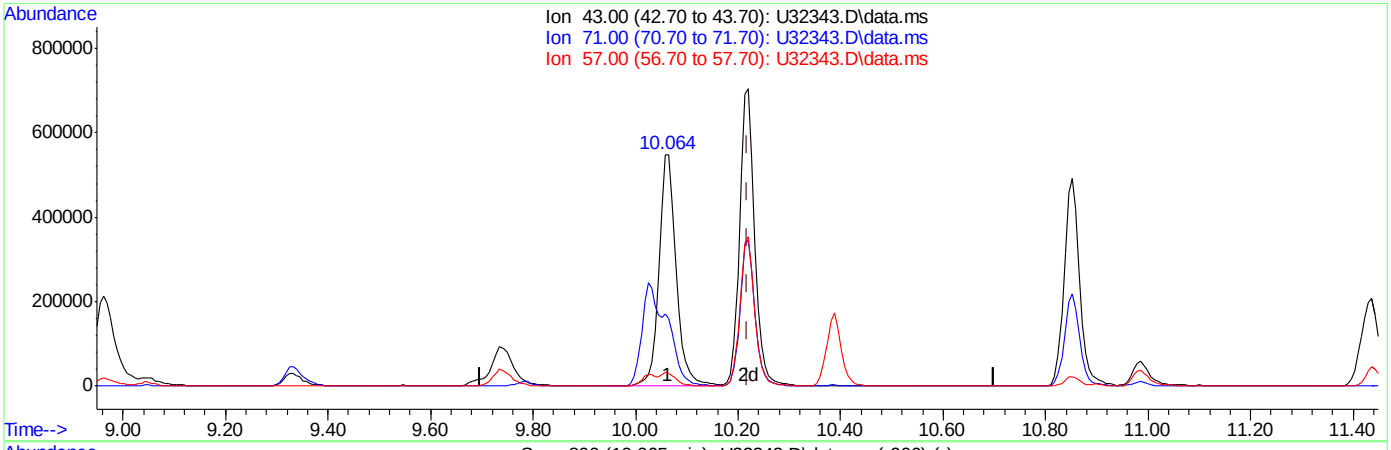
response 2011113

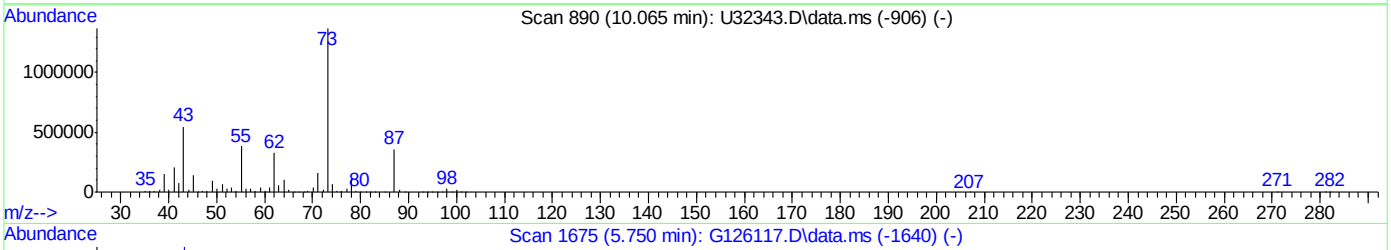
Ion	Exp%	Act%
43.00	100.00	100.00
86.00	6.40	6.91
0.00	0.00	0.00
0.00	0.00	0.00

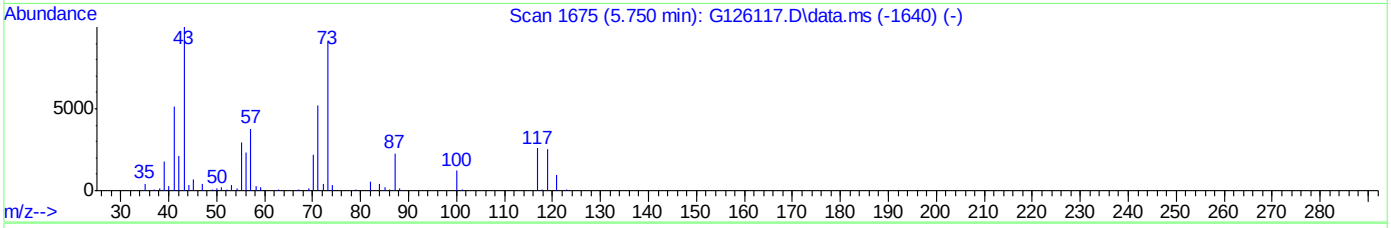
Quantitation Report (Qedit)

Data Path : R:\1\data\U150927\
Data File : U32343.D
Acq On : 27 Sep 2015 12:02 pm
Operator : andrewd1
Sample : cc1316-50
Misc : ms35292,msu1329,,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 27 12:26:29 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 10:56:47 2015
Response via : Initial Calibration







TIC: U32343.D\data.ms

(50) heptane (P)

10.064min (-0.155) 43.80 ppb

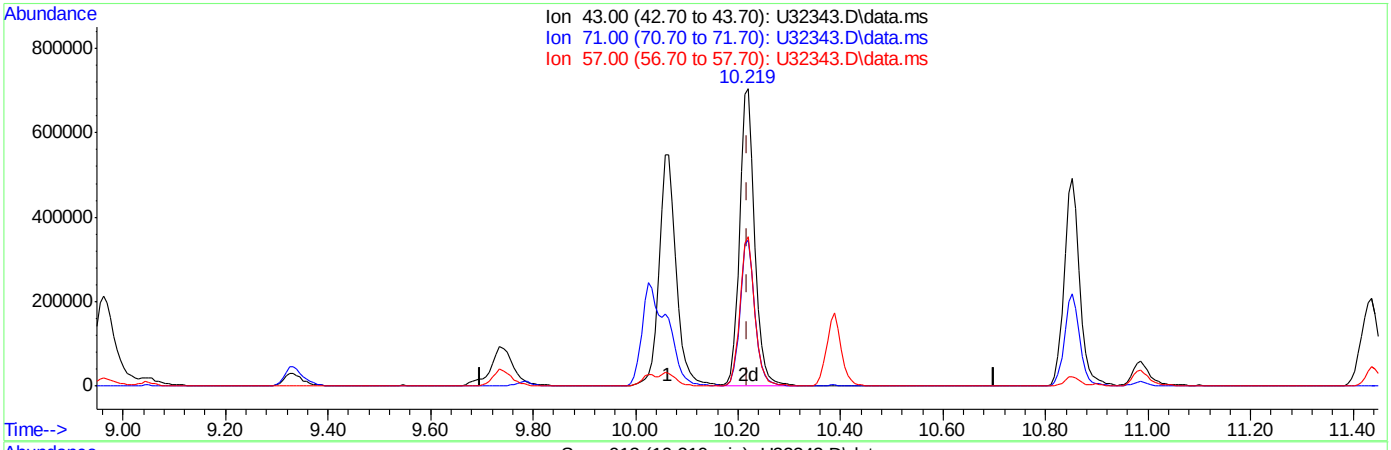
response 1304378

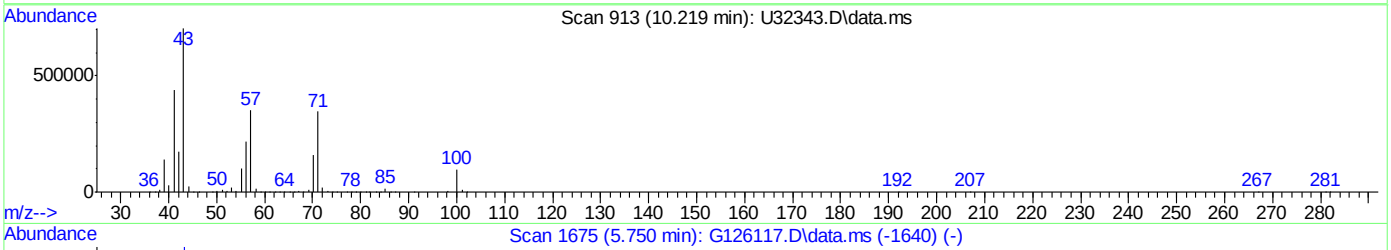
Ion	Exp%	Act%
43.00	100.00	100.00
71.00	26.10	29.21
57.00	5.80	5.53
0.00	0.00	0.00

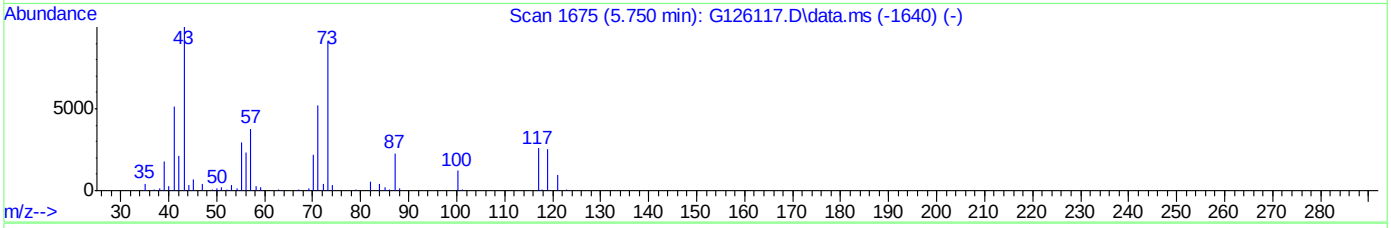
Quantitation Report (Qedit)

Data Path : R:\1\data\U150927\
Data File : U32343.D
Acq On : 27 Sep 2015 12:02 pm
Operator : andrewd1
Sample : cc1316-50
Misc : ms35292,msu1329,,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 27 12:26:29 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 10:56:47 2015
Response via : Initial Calibration







TIC: U32343.D\data.ms

(50) heptane (P)

10.219min (+ 0.000) 48.62 ppb m

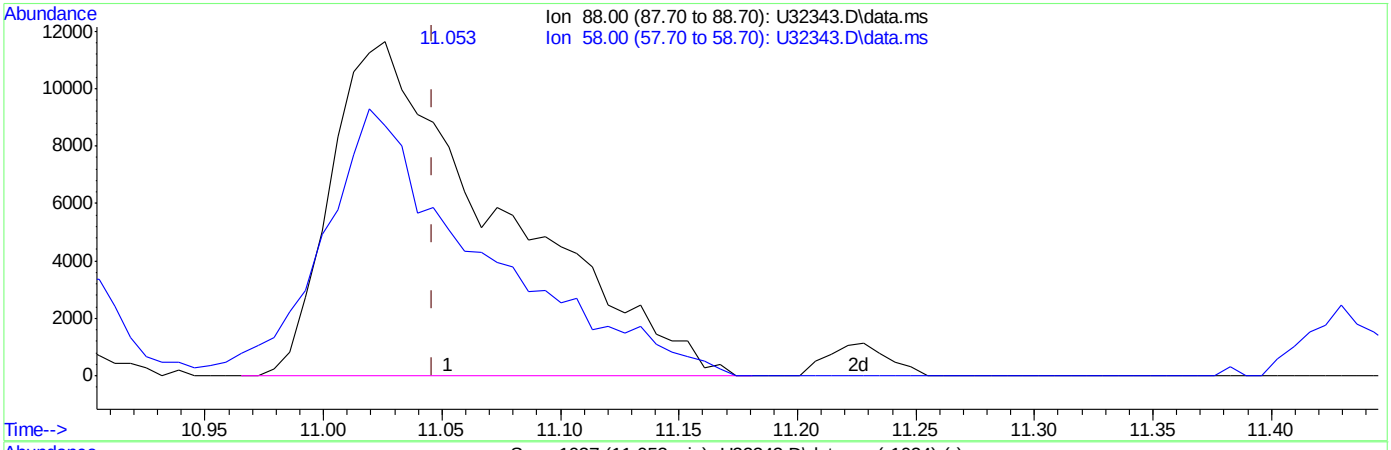
response 1447823

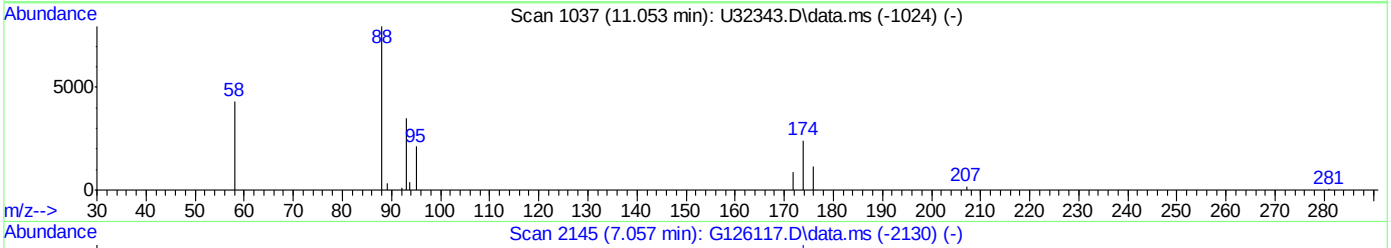
Ion	Exp%	Act%
43.00	100.00	100.00
71.00	26.10	49.26
57.00	5.80	50.19#
0.00	0.00	0.00

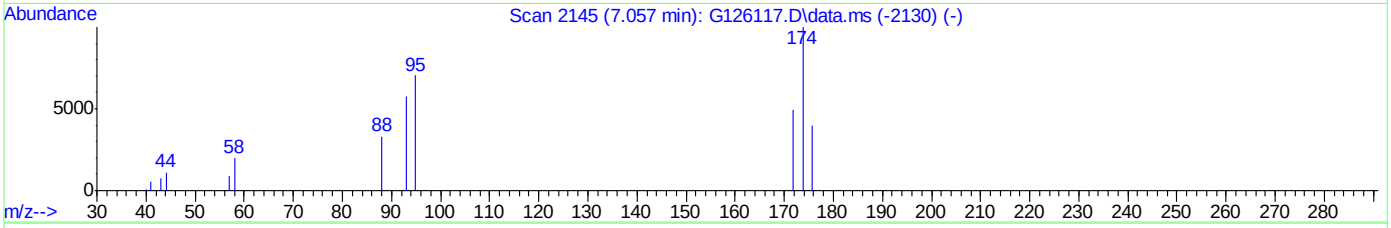
Quantitation Report (Qedit)

Data Path : R:\1\data\U150927\
Data File : U32343.D
Acq On : 27 Sep 2015 12:02 pm
Operator : andrewd1
Sample : cc1316-50
Misc : ms35292,msu1329,,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 27 12:26:29 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 10:56:47 2015
Response via : Initial Calibration







TIC: U32343.D\data.ms

(58) 1,4-dioxane (P)

11.053min (+ 0.007) 1030.02 ppb

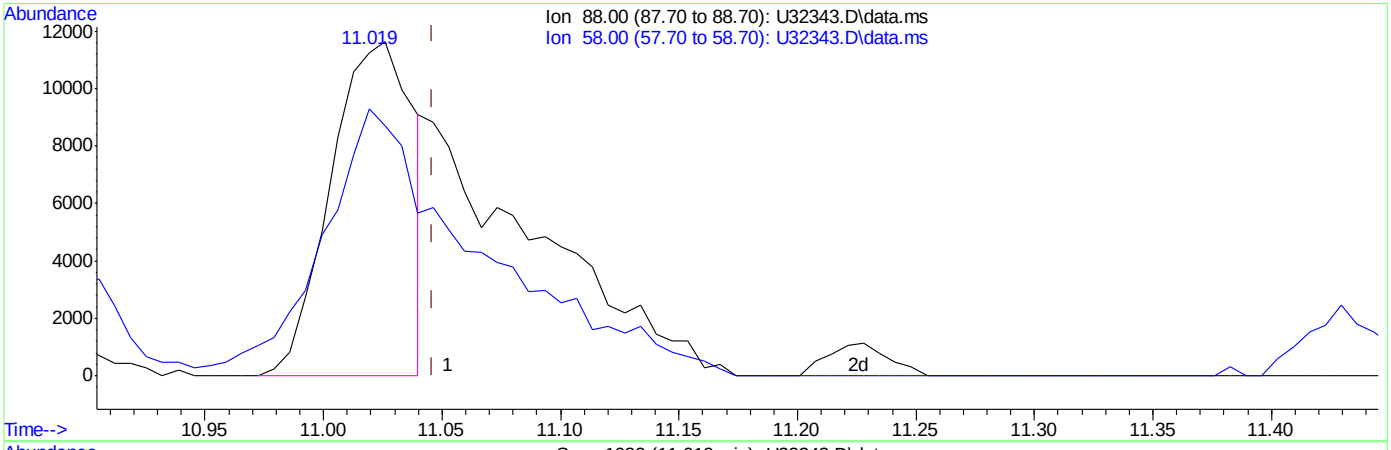
response 57835

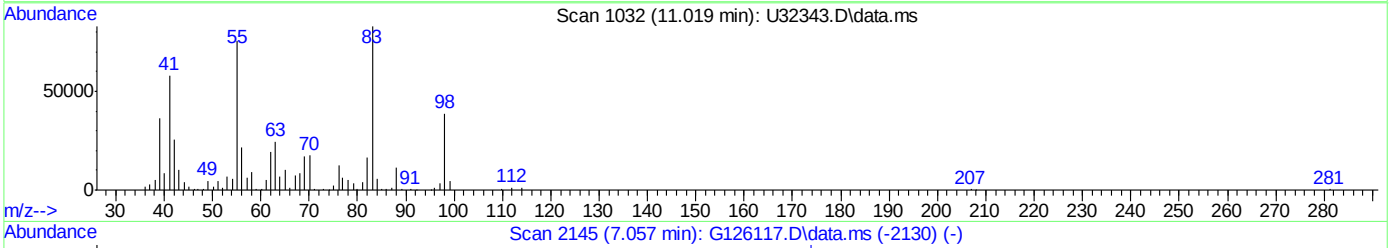
Ion	Exp%	Act%
88.00	100.00	100.00
58.00	109.20	63.86#
0.00	0.00	0.00
0.00	0.00	0.00

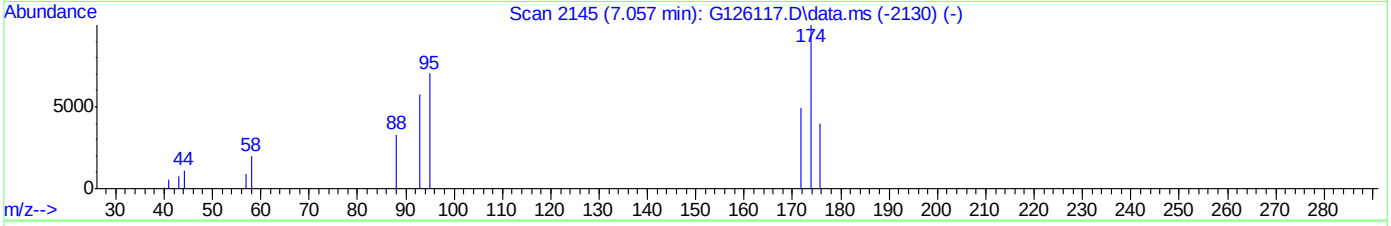
Quantitation Report (Qedit)

Data Path : R:\1\data\U150927\
Data File : U32343.D
Acq On : 27 Sep 2015 12:02 pm
Operator : andrewd1
Sample : cc1316-50
Misc : ms35292,msu1329,,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 27 12:26:29 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 10:56:47 2015
Response via : Initial Calibration







TIC: U32343.D\data.ms

(58) 1,4-dioxane (P)

11.019min (-0.027) 335.92 ppb m

response 28119

Ion	Exp%	Act%
88.00	100.00	100.00
58.00	109.20	82.73
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integrations
APPROVED
(compounds with "m" flag)
Sona Liskova
09/21/15 11:03

Quantitation Report (QT Reviewed)

Data Path : L:\1\data\U150917\
Data File : U31971.D
Acq On : 17 Sep 2015 2:00 pm
Operator : andrewd1
Sample : ic1316-0.5
Misc : ms35192,msu1316,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 18 09:26:57 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 08:57:12 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.497	65	1766313	500.00	ppb	-0.01
4) pentafluorobenzene	9.499	168	3355172	50.00	ppb	0.00
43) 1,4-difluorobenzene	10.393	114	4855197	50.00	ppb	0.00
66) chlorobenzene-d5	13.600	82	2063403	50.00	ppb	0.00
80) 1,4-dichlorobenzene-d4	16.177	152	3082659	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	9.566	113	1854871	52.91	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 105.82%			
60) toluene-d8 (s)	11.998	98	4968100	45.50	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 91.00%			
82) bromofluorobenzene (s)	14.878	95	2091427	46.60	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 93.20%			
Target Compounds						Qvalue
5) dichlorodifluoromethane	4.357	85	8504	0.19	ppb	94
11) acetonitrile	7.290	41	1909	0.03	ppb	91
47) benzene	10.033	78	76774	0.73	ppb	95
51) trichloroethene	10.696	95	13779	0.46	ppb	83
59) cis-1,3-dichloropropene	11.681	75	14826	0.38	ppb	99
63) trans-1,3-dichloropropene	12.256	75	11593	0.36	ppb	90
67) tetrachloroethene	12.650	166	10287	0.45	ppb	78
69) dibromochloromethane	12.955	129	9445	0.43	ppb	93
74) ethylbenzene	13.689	91	49036m	0.50	ppb	
75) m,p-xylene	13.819	106	34763	0.88	ppb	99
76) o-xylene	14.262	106	20689	0.46	ppb	92
84) 1,1,2,2-tetrachloroethane	14.950	83	13332	0.44	ppb	98

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

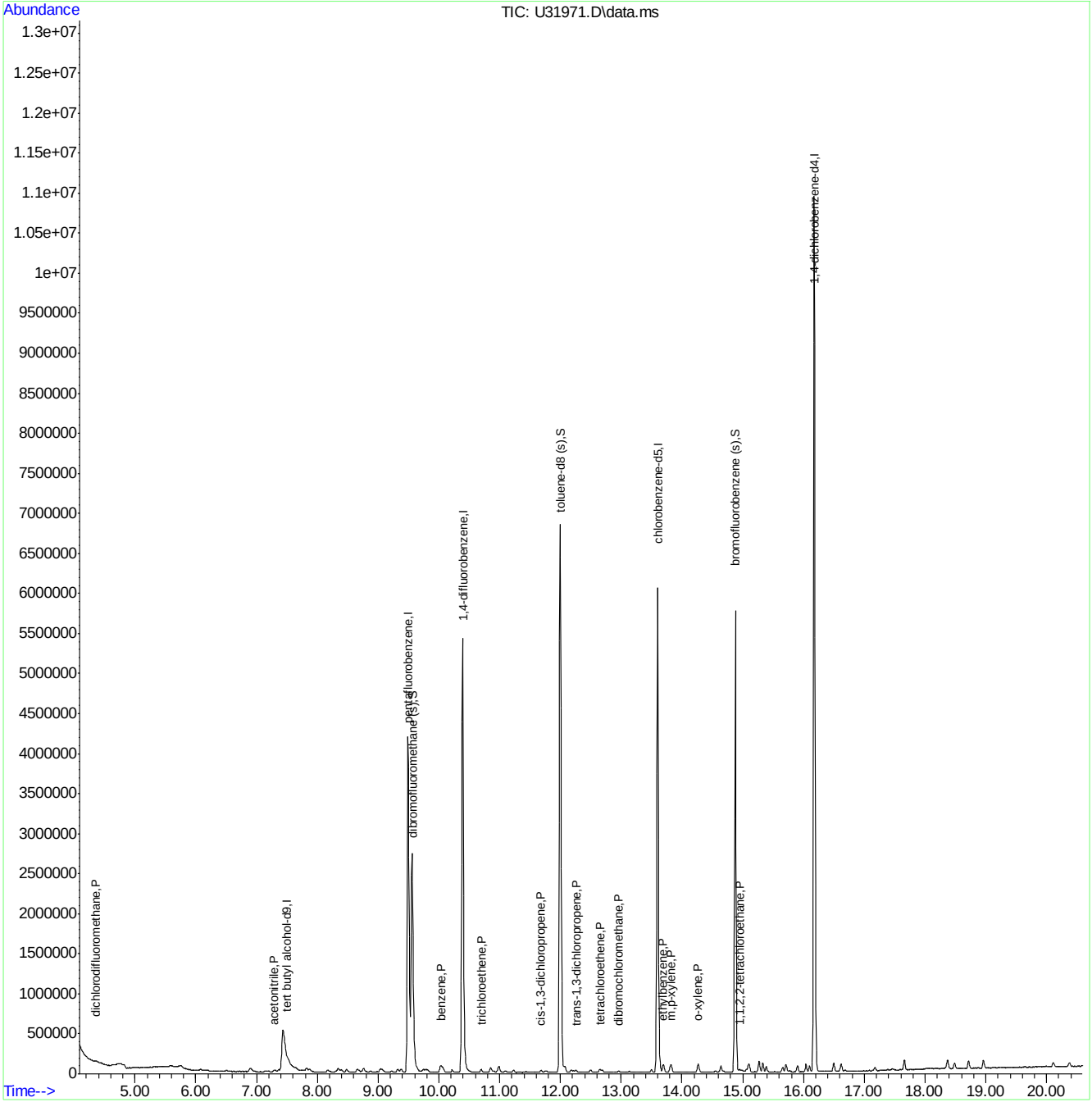
7.6.1

7

Quantitation Report (QT Reviewed)

Data Path : L:\1\data\U150917\
Data File : U31971.D
Acq On : 17 Sep 2015 2:00 pm
Operator : andrewd1
Sample : ic1316-0.5
Misc : ms35192,msu1316,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 18 09:26:57 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 08:57:12 2015
Response via : Initial Calibration



v150903s.m Fri Sep 18 13:08:37 2015 Page: 2

Quantitation Report (QT Reviewed)

Data Path : L:\1\data\U150917\
Data File : U31972.D
Acq On : 17 Sep 2015 2:27 pm
Operator : andrewd1
Sample : ic1316-1
Misc : ms35192,msu1316,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 18 09:08:28 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 09:04:19 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	7.490	65	1739157	500.00	ppb		-0.02
4) pentafluorobenzene	9.498	168	3468045	50.00	ppb		0.00
43) 1,4-difluorobenzene	10.392	114	5029962	50.00	ppb		0.00
66) chlorobenzene-d5	13.600	82	2145070	50.00	ppb		0.00
80) 1,4-dichlorobenzene-d4	16.177	152	3020460	50.00	ppb		0.00
System Monitoring Compounds							
40) dibromofluoromethane (s)	9.564	113	1852816	49.69	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.38%				
60) toluene-d8 (s)	11.998	98	5153181	47.70	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 95.40%				
82) bromofluorobenzene (s)	14.878	95	2110206	49.67	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.34%				
Target Compounds							Qvalue
7) vinyl chloride	5.001	62	37758	0.83	ppb		89
12) trichlorofluoromethane	6.178	101	48788	0.78	ppb		96
15) 1,1-dichloroethene	6.910	96	39547	1.31	ppb	#	76
19) methyl tert butyl ether	7.834	73	108625	1.25	ppb		99
22) trans-1,2-dichloroethene	7.884	96	42266	1.34	ppb	#	82
33) 1,1-dichloroethane	8.403	63	79129	1.30	ppb		92
37) cis-1,2-dichloroethene	9.045	96	48433	1.38	ppb		93
39) chloroform	9.382	83	73575	1.29	ppb		93
42) 1,1,1-trichloroethane	9.644	97	61342	1.24	ppb		95
45) carbon tetrachloride	9.823	117	47333	1.22	ppb		97
47) benzene	10.030	78	173447	1.30	ppb		95
48) 1,2-dichloroethane	10.051	62	54089	1.32	ppb		98
51) trichloroethene	10.696	95	39249	1.32	ppb		85
54) bromodichloromethane	11.231	83	44870	1.23	ppb		96
59) cis-1,3-dichloropropene	11.681	75	43210	1.21	ppb		97
62) toluene	12.075	92	69222	1.16	ppb		96
63) trans-1,3-dichloropropene	12.254	75	33413	1.16	ppb		98
64) 1,1,2-trichloroethane	12.494	83	19519	1.09	ppb		81
67) tetrachloroethene	12.649	166	30016	1.33	ppb		98
69) dibromochloromethane	12.956	129	25321	1.19	ppb		92
72) chlorobenzene	13.636	112	77706	1.29	ppb		94
73) 1,1,1,2-tetrachloroethane	13.702	131	35389	1.35	ppb		94
74) ethylbenzene	13.690	91	137420	1.34	ppb		98
75) m,p-xylene	13.819	106	108503	2.82	ppb		82
76) o-xylene	14.262	106	61110	1.36	ppb		98
78) bromoform	14.548	173	16826	1.05	ppb		98
84) 1,1,2,2-tetrachloroethane	14.950	83	35602	1.28	ppb		89
89) 1,3,5-trimethylbenzene	15.274	105	143559	1.15	ppb		96
91) 1,2,4-trimethylbenzene	15.711	105	156291	1.17	ppb		99
93) 1,3-dichlorobenzene	16.099	146	95292	1.27	ppb		97
95) 1,4-dichlorobenzene	16.206	146	97547	1.28	ppb		93
96) 1,2-dichlorobenzene	16.620	146	110442	1.32	ppb		98

Quantitation Report (QT Reviewed)

Data Path : L:\1\data\U150917\
Data File : U31972.D
Acq On : 17 Sep 2015 2:27 pm
Operator : andrewd1
Sample : ic1316-1
Misc : ms35192,msu1316,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 18 09:08:28 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 09:04:19 2015
Response via : Initial Calibration

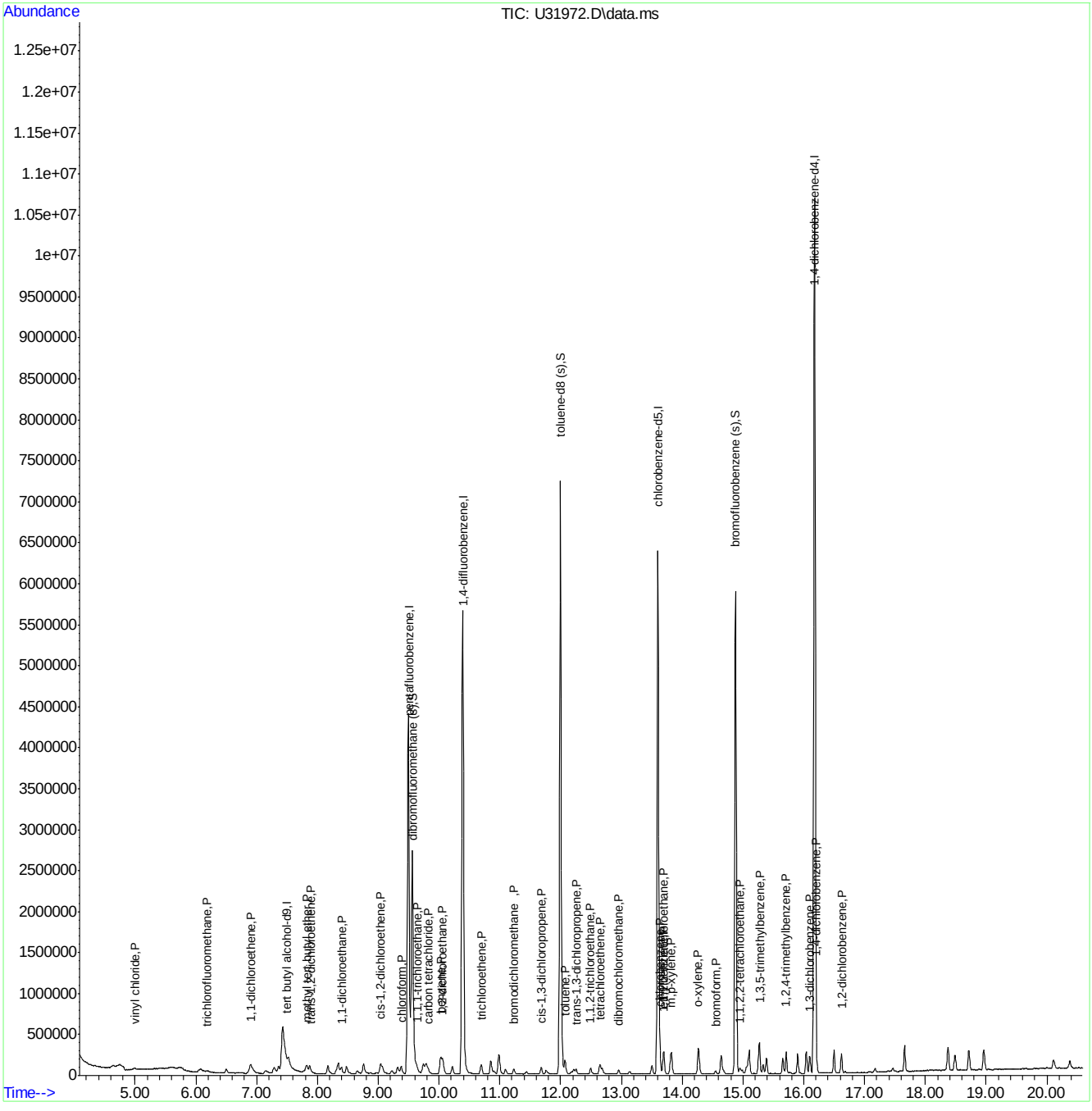
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : L:\1\data\U150917\
Data File : U31972.D
Acq On : 17 Sep 2015 2:27 pm
Operator : andrewd1
Sample : ic1316-1
Misc : ms35192,msu1316,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 18 09:08:28 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 09:04:19 2015
Response via : Initial Calibration



ACCUTEST LABORATORIES MC41544

Manual Integrations APPROVED (compounds with "m" flag)
Sona Liskova
09/21/15 11:03

Quantitation Report (QT Reviewed)

Data Path : L:\1\data\U150917\
Data File : U31973.D
Acq On : 17 Sep 2015 2:54 pm
Operator : andrewd1
Sample : ic1316-2
Misc : ms35192,msu1316,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 18 10:24:30 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 09:10:31 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.576	65	1710736	500.00	ppb	0.07
4) pentafluorobenzene	9.499	168	3359871	50.00	ppb	0.00
43) 1,4-difluorobenzene	10.393	114	5006604	50.00	ppb	0.00
66) chlorobenzene-d5	13.600	82	2377668	50.00	ppb	0.00
80) 1,4-dichlorobenzene-d4	16.177	152	3152074	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	9.566	113	1815504	50.36	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.72%			
60) toluene-d8 (s)	11.998	98	5518471	52.12	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 104.24%			
82) bromofluorobenzene (s)	14.878	95	2278117	51.50	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.00%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.649	59	50626	18.20	ppb	51
5) dichlorodifluoromethane	4.369	85	45496	1.49	ppb	86
6) chloromethane	4.762	50	95232	2.01	ppb	98
7) vinyl chloride	4.999	62	69046	1.71	ppb	90
8) bromomethane	5.603	96	42376	1.58	ppb	99
9) chloroethane	5.769	64	44750	2.04	ppb	88
12) trichlorofluoromethane	6.172	101	94790m	1.75	ppb	
15) 1,1-dichloroethene	6.927	96	52168	1.55	ppb	83
18) methylene chloride	7.538	84	61004	1.82	ppb	85
19) methyl tert butyl ether	7.832	73	142197m	1.50	ppb	
22) trans-1,2-dichloroethene	7.884	96	52635	1.47	ppb	89
28) di-isopropyl ether	8.352	45	182028	1.67	ppb	92
33) 1,1-dichloroethane	8.406	63	101824	1.50	ppb	97
34) tert-butyl ethyl ether	8.770	59	168738	1.67	ppb	94
37) cis-1,2-dichloroethene	9.045	96	61830	1.53	ppb	88
39) chloroform	9.383	83	92439	1.46	ppb	96
42) 1,1,1-trichloroethane	9.642	97	77992	1.46	ppb	96
45) carbon tetrachloride	9.824	117	60707	1.42	ppb	93
47) benzene	10.031	78	210813	1.44	ppb	100
48) 1,2-dichloroethane	10.055	62	68263	1.44	ppb	98
49) tert-amyl methyl ether	10.073	73	153120	1.73	ppb	93
51) trichloroethene	10.696	95	49918	1.53	ppb	84
52) 1,2-dichloropropane	10.988	63	48183	1.72	ppb	97
53) dibromomethane	11.100	93	31278	1.77	ppb	97
54) bromodichloromethane	11.232	83	58038	1.43	ppb	94
59) cis-1,3-dichloropropene	11.688	75	69953	1.84	ppb	97
62) toluene	12.076	92	94745	1.48	ppb	99
63) trans-1,3-dichloropropene	12.255	75	52654	1.74	ppb	99
64) 1,1,2-trichloroethane	12.496	83	30596	1.64	ppb	82
67) tetrachloroethene	12.650	166	42856	1.54	ppb	97
69) dibromochloromethane	12.956	129	37619	1.50	ppb	92
70) 1,2-dibromoethane	13.135	107	35817	1.66	ppb	93
72) chlorobenzene	13.636	112	110314	1.44	ppb	87
73) 1,1,1,2-tetrachloroethane	13.702	131	47068	1.38	ppb	97

Quantitation Report (QT Reviewed)

Data Path : L:\1\data\U150917\
Data File : U31973.D
Acq On : 17 Sep 2015 2:54 pm
Operator : andrewd1
Sample : ic1316-2
Misc : ms35192,msu1316,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 18 10:24:30 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 09:10:31 2015
Response via : Initial Calibration

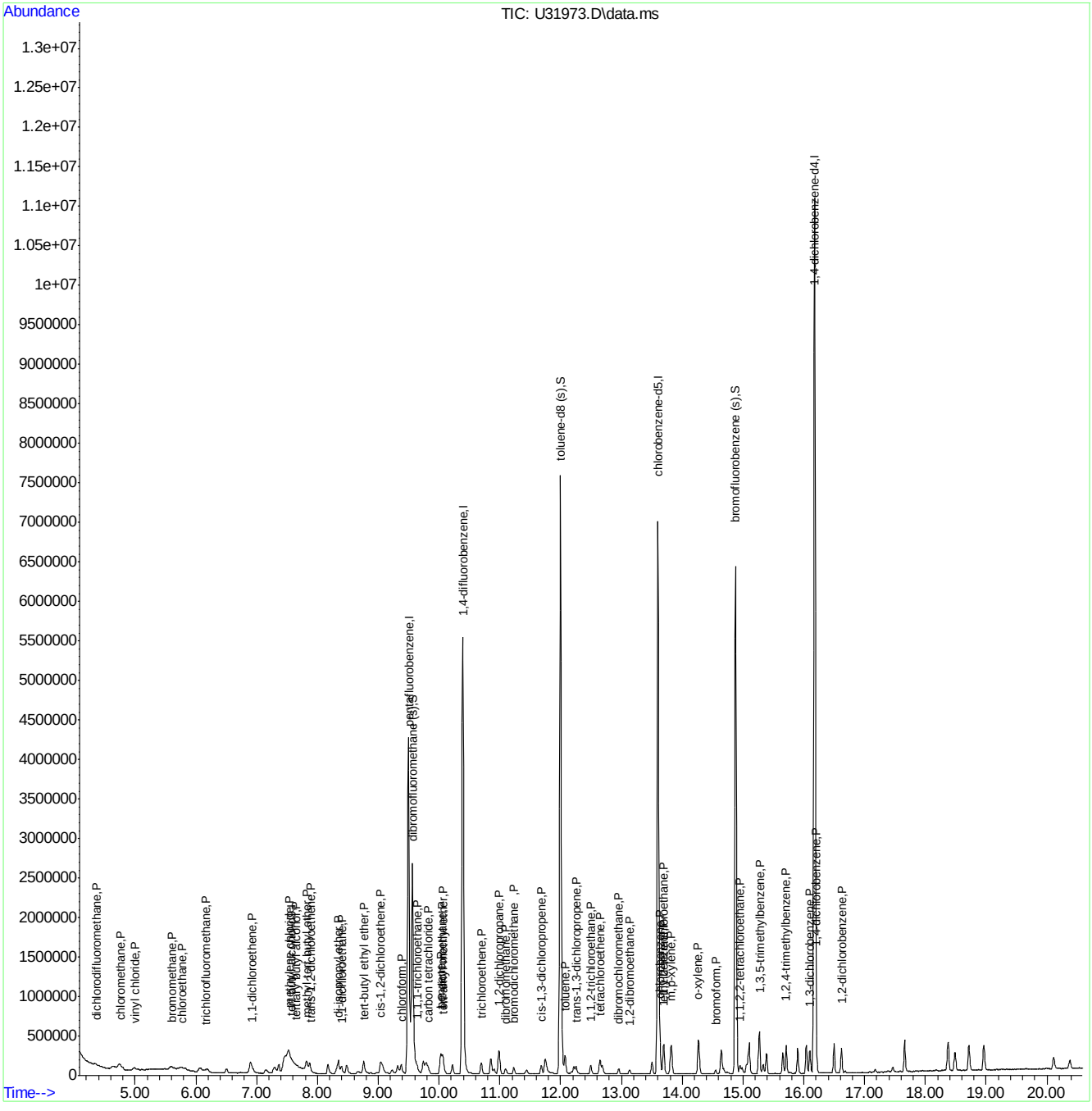
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
74) ethylbenzene	13.691	91	195386	1.47 ppb	98
75) m,p-xylene	13.820	106	150466	3.10 ppb	94
76) o-xylene	14.263	106	86742	1.55 ppb	90
78) bromoform	14.549	173	26021	1.43 ppb	91
84) 1,1,2,2-tetrachloroethane	14.951	83	52458	1.65 ppb	99
89) 1,3,5-trimethylbenzene	15.274	105	196707	1.40 ppb	97
91) 1,2,4-trimethylbenzene	15.712	105	211935	1.40 ppb	98
93) 1,3-dichlorobenzene	16.100	146	130072	1.47 ppb	95
95) 1,4-dichlorobenzene	16.206	146	135640	1.49 ppb	93
96) 1,2-dichlorobenzene	16.621	146	141406	1.40 ppb	96

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

Quantitation Report (QT Reviewed)

Data Path : L:\1\data\U150917\
Data File : U31973.D
Acq On : 17 Sep 2015 2:54 pm
Operator : andrewd1
Sample : ic1316-2
Misc : ms35192,msu1316,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 18 10:24:30 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 09:10:31 2015
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Sona Liskova
09/21/15 11:03

Quantitation Report (QT Reviewed)

Data Path : L:\1\data\U150917\
Data File : U31974.D
Acq On : 17 Sep 2015 3:21 pm
Operator : andrewd1
Sample : ic1316-5
Misc : ms35192,msu1316,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 18 10:23:38 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 09:17:59 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	7.519	65	1824009	500.00	ppb		0.01
4) pentafluorobenzene	9.498	168	3298454	50.00	ppb		0.00
43) 1,4-difluorobenzene	10.392	114	4803762	50.00	ppb		0.00
66) chlorobenzene-d5	13.599	82	2006139	50.00	ppb		0.00
80) 1,4-dichlorobenzene-d4	16.177	152	2975927	50.00	ppb		0.00
System Monitoring Compounds							
40) dibromofluoromethane (s)	9.565	113	1807631	50.98	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.96%				
60) toluene-d8 (s)	11.997	98	4870429	47.44	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 94.88%				
82) bromofluorobenzene (s)	14.877	95	1993722	47.38	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 94.76%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.600	59	171906	60.69	ppb		55
3) Ethanol	6.364	45	71720	886.83	ppb		93
5) dichlorodifluoromethane	4.370	85	135449	4.94	ppb		99
6) chloromethane	4.751	50	235928	5.06	ppb		92
7) vinyl chloride	4.997	62	184530	4.90	ppb		97
8) bromomethane	5.595	96	103211	4.38	ppb		89
9) chloroethane	5.767	64	101602	4.67	ppb		89
10) ethyl ether	6.515	59	156789	6.13	ppb		93
11) acetonitrile	7.369	41	348936	12.01	ppb	#	14
12) trichlorofluoromethane	6.170	101	250529	4.92	ppb		99
13) freon-113	6.907	101	225975	6.62	ppb		93
15) 1,1-dichloroethene	6.915	96	187198	6.11	ppb		95
16) acetone	6.960	58	36395	8.37	ppb		97
17) Methyl Acetate	6.955	43	110101	7.81	ppb	#	71
18) methylene chloride	7.536	84	211472	6.73	ppb		89
19) methyl tert butyl ether	7.832	73	498382m	5.76	ppb		
20) acrylonitrile	7.828	53	96722	6.48	ppb		86
21) allyl chloride	7.370	41	360097	6.31	ppb		85
22) trans-1,2-dichloroethene	7.885	96	195474	6.11	ppb		91
23) iodomethane	7.164	142	367680	6.33	ppb		99
24) carbon disulfide	7.310	76	749976	6.23	ppb		97
25) propionitrile	8.486	54	14868	6.45	ppb		100
26) vinyl acetate	8.310	43	248878m	2.54	ppb		
27) chloroprene	8.489	53	323047	6.45	ppb		92
28) di-isopropyl ether	8.350	45	667811	6.80	ppb		87
29) methacrylonitrile	9.229	41	112976	5.77	ppb		93
30) 2-butanone	9.000	72	23724	6.12	ppb	#	1
31) Ethyl Acetate	8.178	43	179812	6.64	ppb	#	1
32) Hexane	8.178	41	205304	6.67	ppb	#	68
33) 1,1-dichloroethane	8.403	63	370454	6.06	ppb		97
34) tert-butyl ethyl ether	8.768	59	613383	6.73	ppb		94
35) isobutyl alcohol	8.768	43	66533	32.84	ppb	#	71
36) 2,2-dichloropropane	9.088	77	266851	6.56	ppb		92
37) cis-1,2-dichloroethene	9.044	96	215846	5.90	ppb		89

Quantitation Report (QT Reviewed)

Data Path : L:\1\data\U150917\
Data File : U31974.D
Acq On : 17 Sep 2015 3:21 pm
Operator : andrewd1
Sample : ic1316-5
Misc : ms35192,msu1316,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 18 10:23:38 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 09:17:59 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) bromochloromethane	9.323	128	103539	6.18	ppb	#	75
39) chloroform	9.383	83	342435	6.06	ppb		98
41) Tetrahydrofuran	9.351	42	68342	6.40	ppb		89
42) 1,1,1-trichloroethane	9.642	97	292134	6.11	ppb		99
44) Cyclohexane	9.749	56	392157	6.81	ppb		91
45) carbon tetrachloride	9.822	117	233483	6.29	ppb		99
46) 1,1-dichloropropene	9.789	75	239846	6.63	ppb		91
47) benzene	10.030	78	704337	5.40	ppb		98
48) 1,2-dichloroethane	10.054	62	250304	6.08	ppb		98
49) tert-amyl methyl ether	10.070	73	540671	6.82	ppb		97
50) heptane	10.219	43	235925m	6.59	ppb		
51) trichloroethene	10.696	95	185153	6.27	ppb		90
52) 1,2-dichloropropane	10.987	63	159184	6.37	ppb		99
53) dibromomethane	11.098	93	103668	6.48	ppb		86
54) bromodichloromethane	11.231	83	201819	5.73	ppb		99
55) Methylcyclohexane	10.989	83	316881	6.75	ppb		88
56) 2-chloroethyl vinyl ether	11.445	63	37511	2.82	ppb		96
57) methyl methacrylate	10.906	69	62363	4.43	ppb		83
58) 1,4-dioxane	11.046	88	4399m	18.67	ppb		
59) cis-1,3-dichloropropene	11.681	75	190947	5.34	ppb		98
61) 4-methyl-2-pentanone	11.768	43	161018	5.50	ppb		92
62) toluene	12.075	92	316408	5.63	ppb		100
63) trans-1,3-dichloropropene	12.254	75	146731	5.23	ppb		100
64) 1,1,2-trichloroethane	12.495	83	83502	4.97	ppb		98
65) ethyl methacrylate	12.219	69	135672	5.07	ppb		90
67) tetrachloroethene	12.649	166	142509	6.45	ppb		98
68) 1,3-dichloropropane	12.687	76	149924	5.47	ppb		94
69) dibromochloromethane	12.955	129	116929	5.90	ppb		94
70) 1,2-dibromoethane	13.133	107	101391	6.08	ppb		91
71) 2-hexanone	12.681	43	125752	7.90	ppb	#	28
72) chlorobenzene	13.635	112	341165	5.83	ppb		96
73) 1,1,1,2-tetrachloroethane	13.701	131	164669	6.37	ppb		98
74) ethylbenzene	13.690	91	637130	6.22	ppb		98
75) m,p-xylene	13.819	106	500587	12.96	ppb		95
76) o-xylene	14.262	106	295998	6.65	ppb		93
77) styrene	14.275	104	397465	6.26	ppb		92
78) bromoform	14.548	173	81702	5.87	ppb		97
79) trans-1,4-dichloro-2-b...	14.683	53	51811	5.36	ppb	#	1
81) isopropylbenzene	14.643	105	772353	5.81	ppb		99
83) bromobenzene	15.089	156	183998	5.50	ppb		97
84) 1,1,2,2-tetrachloroethane	14.950	83	170013	5.94	ppb		99
85) 1,2,3-trichloropropane	15.061	75	174167	5.66	ppb		67
86) n-propylbenzene	15.104	91	913020	6.04	ppb		97
87) 2-chlorotoluene	15.262	91	646930	5.99	ppb		100
88) 4-chlorotoluene	15.386	91	536387	5.84	ppb		95
89) 1,3,5-trimethylbenzene	15.273	105	716644	6.01	ppb		96
90) tert-butylbenzene	15.656	91	343900	4.89	ppb		90
91) 1,2,4-trimethylbenzene	15.712	105	785805	6.12	ppb		99
92) sec-butylbenzene	15.899	105	915837	5.72	ppb		98
93) 1,3-dichlorobenzene	16.100	146	448937	5.88	ppb		99

Quantitation Report (QT Reviewed)

Data Path : L:\1\data\U150917\
Data File : U31974.D
Acq On : 17 Sep 2015 3:21 pm
Operator : andrewd1
Sample : ic1316-5
Misc : ms35192,msu1316,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 18 10:23:38 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 09:17:59 2015
Response via : Initial Calibration

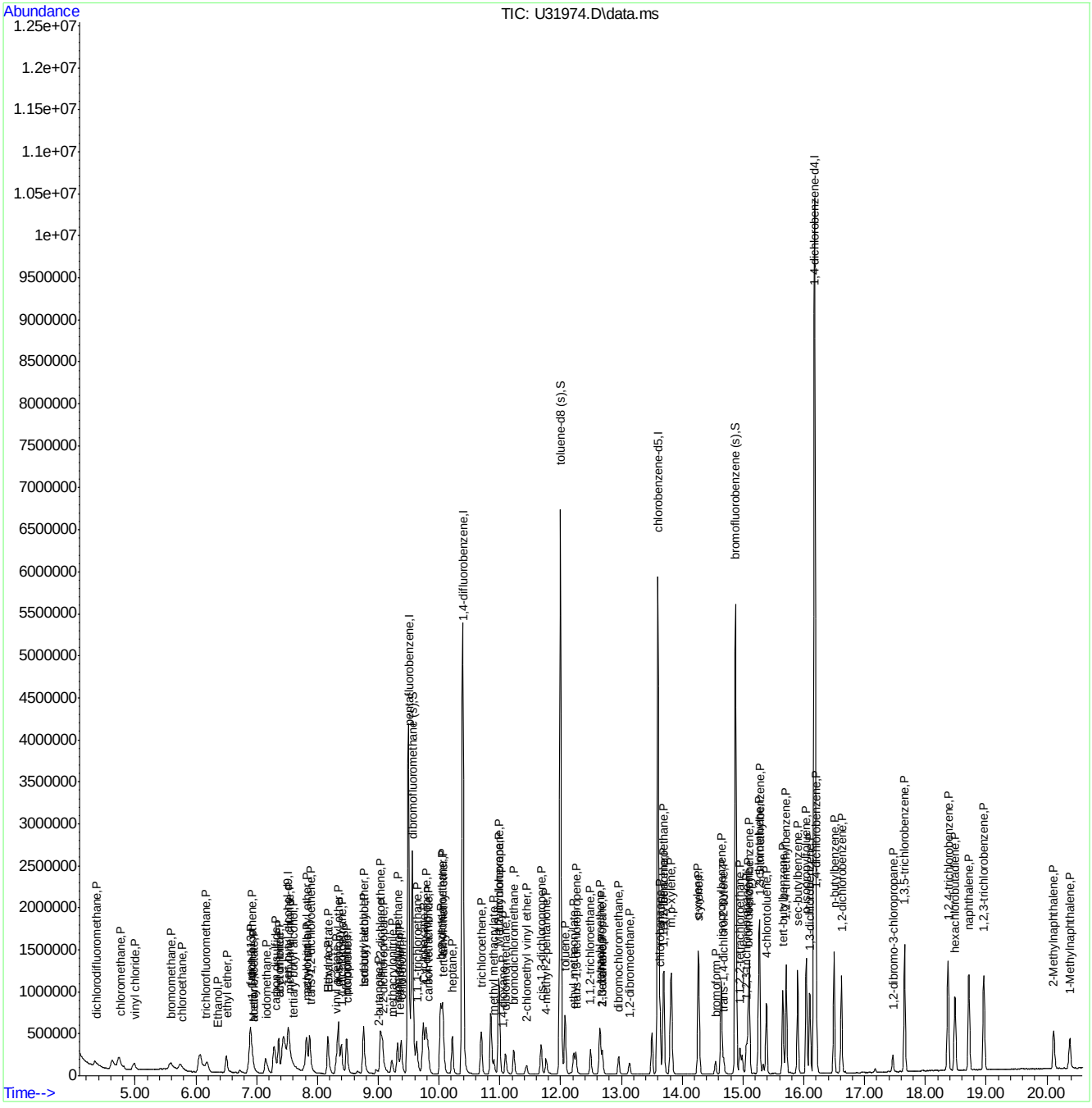
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
94)	p-isopropyltoluene	16.042	119	815196	5.81	ppb	96
95)	1,4-dichlorobenzene	16.206	146	459929	5.86	ppb	98
96)	1,2-dichlorobenzene	16.620	146	517811	6.02	ppb	96
97)	n-butylbenzene	16.497	91	867892	6.42	ppb	97
98)	1,2-dibromo-3-chloropr...	17.465	75	52797	5.77	ppb	91
99)	1,3,5-trichlorobenzene	17.659	180	532316	6.68	ppb	95
100)	1,2,4-trichlorobenzene	18.373	180	472768	6.44	ppb	95
101)	hexachlorobutadiene	18.487	225	194389	6.57	ppb	98
102)	naphthalene	18.716	128	1061435	6.14	ppb	100
103)	2-Methylnaphthalene	20.113	142	287037	2.82	ppb	97
104)	1-Methylnaphthalene	20.378	142	216178	2.87	ppb	95
105)	1,2,3-trichlorobenzene	18.963	180	423424	6.42	ppb	95

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

Quantitation Report (QT Reviewed)

Data Path : L:\1\data\U150917\
Data File : U31974.D
Acq On : 17 Sep 2015 3:21 pm
Operator : andrewd1
Sample : ic1316-5
Misc : ms35192,msu1316,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 18 10:23:38 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 09:17:59 2015
Response via : Initial Calibration



ACCUTEST LABORATORIES MC41544

Manual Integrations APPROVED (compounds with "m" flag)
Sona Liskova
09/21/15 11:03

Quantitation Report (QT Reviewed)

Data Path : L:\1\data\U150917\
Data File : U31975.D
Acq On : 17 Sep 2015 3:48 pm
Operator : andrewd1
Sample : ic1316-10
Misc : ms35192,msu1316,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 18 10:46:54 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 09:27:43 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	7.516	65	1829669	500.00	ppb		0.00
4) pentafluorobenzene	9.499	168	3377445	50.00	ppb		0.00
43) 1,4-difluorobenzene	10.393	114	5150085	50.00	ppb		0.00
66) chlorobenzene-d5	13.600	82	2539804	50.00	ppb		0.00
80) 1,4-dichlorobenzene-d4	16.177	152	3249488	50.00	ppb		0.00
System Monitoring Compounds							
40) dibromofluoromethane (s)	9.565	113	1762074	48.35	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 96.70%				
60) toluene-d8 (s)	11.998	98	5767574	52.94	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 105.88%				
82) bromofluorobenzene (s)	14.878	95	2405396	52.91	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 105.82%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.598	59	340563	111.89	ppb		59
3) Ethanol	6.362	45	165174	919.05	ppb		89
5) dichlorodifluoromethane	4.372	85	291327	10.41	ppb		99
6) chloromethane	4.752	50	451969	9.43	ppb		99
7) vinyl chloride	5.003	62	353922	9.22	ppb		99
8) bromomethane	5.606	96	227208	9.82	ppb		92
9) chloroethane	5.758	64	217657	9.99	ppb		97
10) ethyl ether	6.517	59	287493	9.86	ppb		91
11) acetonitrile	7.369	41	631718	14.47	ppb	#	15
12) trichlorofluoromethane	6.175	101	496922	9.57	ppb		100
13) freon-113	6.908	101	375175	9.24	ppb		94
15) 1,1-dichloroethene	6.913	96	324998	9.82	ppb		90
16) acetone	6.979	58	63295	10.63	ppb	#	1
17) Methyl Acetate	6.948	43	177603	9.60	ppb	#	74
18) methylene chloride	7.538	84	385793	10.75	ppb		87
19) methyl tert butyl ether	7.832	73	923725m	10.16	ppb		
20) acrylonitrile	7.824	53	173864	9.91	ppb		86
21) allyl chloride	7.370	41	669165	10.13	ppb		82
22) trans-1,2-dichloroethene	7.884	96	348562	10.08	ppb		85
23) iodomethane	7.167	142	687815	10.21	ppb		98
24) carbon disulfide	7.313	76	1373336	9.92	ppb		99
25) propionitrile	8.488	54	24553	9.09	ppb		100
26) vinyl acetate	8.310	43	475843m	4.27	ppb		
27) chloroprene	8.488	53	548860	9.35	ppb		95
28) di-isopropyl ether	8.350	45	1243747	11.05	ppb		90
29) methacrylonitrile	9.231	41	222725	10.31	ppb		89
30) 2-butanone	8.998	72	43073	9.76	ppb	#	1
31) Ethyl Acetate	8.177	43	292460	9.06	ppb	#	1
32) Hexane	8.178	41	336403	9.14	ppb	#	67
33) 1,1-dichloroethane	8.403	63	674160	10.23	ppb		96
34) tert-butyl ethyl ether	8.770	59	1136370	10.92	ppb		94
35) isobutyl alcohol	8.768	43	120056	50.03	ppb	#	56
36) 2,2-dichloropropane	9.089	77	471212	9.79	ppb		97
37) cis-1,2-dichloroethene	9.043	96	384903	9.83	ppb		93

Quantitation Report (QT Reviewed)

Data Path : L:\1\data\U150917\
Data File : U31975.D
Acq On : 17 Sep 2015 3:48 pm
Operator : andrewd1
Sample : ic1316-10
Misc : ms35192,msu1316,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 18 10:46:54 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 09:27:43 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) bromochloromethane	9.323	128	193307	10.08	ppb	#	74
39) chloroform	9.383	83	617007	10.13	ppb		97
41) Tetrahydrofuran	9.359	42	125956	10.10	ppb		92
42) 1,1,1-trichloroethane	9.643	97	527973	10.21	ppb		99
44) Cyclohexane	9.749	56	665076	9.12	ppb	#	93
45) carbon tetrachloride	9.824	117	414257	9.78	ppb		100
46) 1,1-dichloropropene	9.789	75	420374	9.32	ppb		94
47) benzene	10.030	78	1276899	8.98	ppb		99
48) 1,2-dichloroethane	10.054	62	474179	10.19	ppb		97
49) tert-amyl methyl ether	10.070	73	1009186	10.59	ppb		100
50) heptane	10.219	43	414146m	9.31	ppb		
51) trichloroethene	10.696	95	349506	10.51	ppb		87
52) 1,2-dichloropropane	10.988	63	326654	11.17	ppb		99
53) dibromomethane	11.098	93	207083	10.99	ppb		93
54) bromodichloromethane	11.231	83	409471	10.46	ppb		96
55) Methylcyclohexane	10.990	83	535062	9.05	ppb		88
56) 2-chloroethyl vinyl ether	11.447	63	118930	10.65	ppb		94
57) methyl methacrylate	10.905	69	171608	12.06	ppb		91
58) 1,4-dioxane	11.046	88	8359m	27.02	ppb		
59) cis-1,3-dichloropropene	11.681	75	465835	11.98	ppb		97
61) 4-methyl-2-pentanone	11.769	43	345251	10.48	ppb		96
62) toluene	12.075	92	675289	10.87	ppb		99
63) trans-1,3-dichloropropene	12.254	75	390919	12.88	ppb		99
64) 1,1,2-trichloroethane	12.495	83	211547	11.75	ppb		98
65) ethyl methacrylate	12.219	69	326384	11.29	ppb		89
67) tetrachloroethene	12.649	166	295879	9.99	ppb		98
68) 1,3-dichloropropane	12.688	76	391322	10.77	ppb		94
69) dibromochloromethane	12.956	129	283519	10.90	ppb		99
70) 1,2-dibromoethane	13.134	107	257489	11.38	ppb		97
71) 2-hexanone	12.647	43	239229m	9.20	ppb		
72) chlorobenzene	13.636	112	801208	10.39	ppb		93
73) 1,1,1,2-tetrachloroethane	13.702	131	327668	9.37	ppb		96
74) ethylbenzene	13.690	91	1361181	10.15	ppb		97
75) m,p-xylene	13.819	106	1091106	21.06	ppb		90
76) o-xylene	14.263	106	613754	10.22	ppb		93
77) styrene	14.276	104	899974	9.94	ppb		92
78) bromoform	14.549	173	191099	10.40	ppb		99
79) trans-1,4-dichloro-2-b...	14.677	53	134513	10.61	ppb	#	1
81) isopropylbenzene	14.644	105	1561940	9.96	ppb		99
83) bromobenzene	15.089	156	407205	10.62	ppb		96
84) 1,1,2,2-tetrachloroethane	14.951	83	347366	10.71	ppb		99
85) 1,2,3-trichloropropane	15.062	75	379067	10.58	ppb		78
86) n-propylbenzene	15.105	91	1836715	10.08	ppb		96
87) 2-chlorotoluene	15.263	91	1323423	10.21	ppb		99
88) 4-chlorotoluene	15.386	91	1145919	10.54	ppb		96
89) 1,3,5-trimethylbenzene	15.274	105	1458148	10.66	ppb		95
90) tert-butylbenzene	15.656	91	760919	10.02	ppb		91
91) 1,2,4-trimethylbenzene	15.712	105	1577905	10.66	ppb		97
92) sec-butylbenzene	15.900	105	1851404	9.88	ppb		97
93) 1,3-dichlorobenzene	16.100	146	909058	10.45	ppb		99

Quantitation Report (QT Reviewed)

Data Path : L:\1\data\U150917\
Data File : U31975.D
Acq On : 17 Sep 2015 3:48 pm
Operator : andrewd1
Sample : ic1316-10
Misc : ms35192,msu1316,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 18 10:46:54 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 09:27:43 2015
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
94)	p-isopropyltoluene	16.042	119	1641534	9.91	ppb	98
95)	1,4-dichlorobenzene	16.206	146	926493	10.36	ppb	99
96)	1,2-dichlorobenzene	16.620	146	1019887	10.33	ppb	98
97)	n-butylbenzene	16.498	91	1632866	9.69	ppb	96
98)	1,2-dibromo-3-chloropr...	17.466	75	101865	9.47	ppb	95
99)	1,3,5-trichlorobenzene	17.660	180	959919	9.44	ppb	96
100)	1,2,4-trichlorobenzene	18.373	180	865757	9.44	ppb	94
101)	hexachlorobutadiene	18.488	225	340727	9.12	ppb	99
102)	naphthalene	18.717	128	2012564	9.57	ppb	100
103)	2-Methylnaphthalene	20.114	142	544288	4.60	ppb	96
104)	1-Methylnaphthalene	20.379	142	402067	4.55	ppb	96
105)	1,2,3-trichlorobenzene	18.964	180	766169	9.32	ppb	95

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

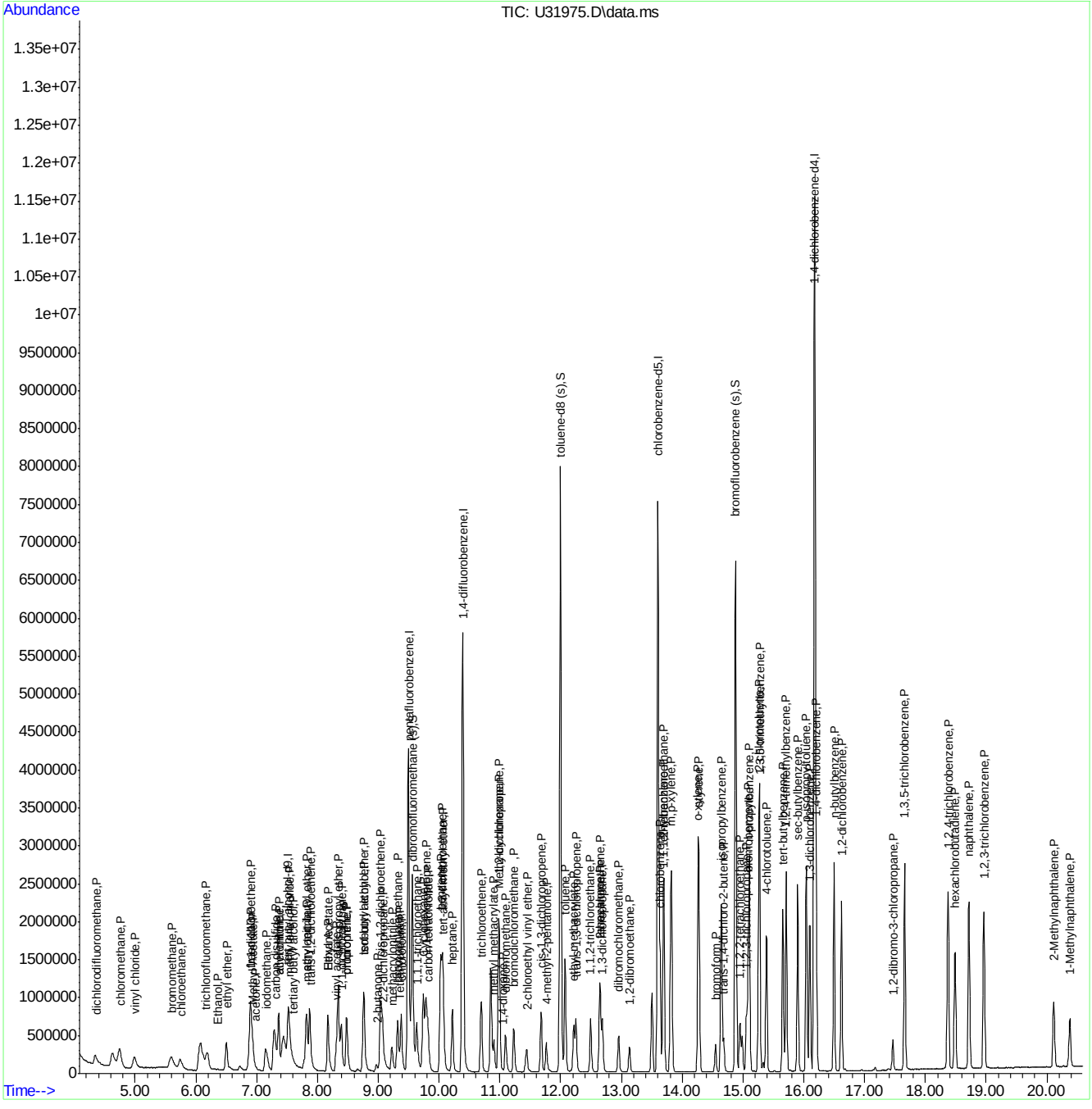
7.6.5

7

Quantitation Report (QT Reviewed)

Data Path : L:\1\data\U150917\
Data File : U31975.D
Acq On : 17 Sep 2015 3:48 pm
Operator : andrewd1
Sample : ic1316-10
Misc : ms35192,msu1316,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 18 10:46:54 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 09:27:43 2015
Response via : Initial Calibration



v150903s.m Fri Sep 18 13:09:50 2015 Page: 4

Manual Integrations APPROVED (compounds with "m" flag)
Sona Liskova
09/21/15 11:03

Quantitation Report (QT Reviewed)

Data Path : L:\1\data\U150917\
Data File : U31976.D
Acq On : 17 Sep 2015 4:15 pm
Operator : andrewd1
Sample : ic1316-20
Misc : ms35192,msu1316,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 18 10:20:10 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 09:29:43 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	7.533	65	1750858	500.00	ppb		0.02
4) pentafluorobenzene	9.499	168	3358490	50.00	ppb		0.00
43) 1,4-difluorobenzene	10.393	114	5033519	50.00	ppb		0.00
66) chlorobenzene-d5	13.600	82	2309857	50.00	ppb		0.00
80) 1,4-dichlorobenzene-d4	16.177	152	3006548	50.00	ppb		0.00
System Monitoring Compounds							
40) dibromofluoromethane (s)	9.565	113	1826741	50.68	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.36%				
60) toluene-d8 (s)	11.998	98	5438280	50.58	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.16%				
82) bromofluorobenzene (s)	14.878	95	2186596	51.48	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.96%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.612	59	598688	199.61	ppb		51
3) Ethanol	6.366	45	210426	1248.81	ppb		100
5) dichlorodifluoromethane	4.374	85	762994	27.19	ppb		96
6) chloromethane	4.752	50	1001464	21.31	ppb		99
7) vinyl chloride	5.004	62	813391	21.64	ppb		98
8) bromomethane	5.603	96	489304	21.37	ppb		98
9) chloroethane	5.760	64	441822	20.40	ppb		100
10) ethyl ether	6.518	59	544468	18.87	ppb		92
11) acetonitrile	7.370	41	1182527	24.50	ppb	#	15
12) trichlorofluoromethane	6.179	101	1124683	21.97	ppb		100
13) freon-113	6.911	101	749467	19.05	ppb		95
15) 1,1-dichloroethene	6.915	96	628513	19.16	ppb		90
16) acetone	6.977	58	101754	16.83	ppb		95
17) Methyl Acetate	6.955	43	304163	16.76	ppb	#	72
18) methylene chloride	7.540	84	727123	20.00	ppb		88
19) methyl tert butyl ether	7.839	73	1665432m	18.36	ppb		
20) acrylonitrile	7.831	53	324115	18.64	ppb		84
21) allyl chloride	7.371	41	1237657	18.76	ppb		82
22) trans-1,2-dichloroethene	7.885	96	648391	18.83	ppb		86
23) iodomethane	7.170	142	1293178	19.17	ppb		100
24) carbon disulfide	7.316	76	2666045	19.42	ppb		98
25) propionitrile	8.489	54	50266	19.30	ppb		100
26) vinyl acetate	8.310	43	846115m	7.59	ppb		
27) chloroprene	8.489	53	1093748	19.15	ppb		91
28) di-isopropyl ether	8.353	45	2286334	19.90	ppb		90
29) methacrylonitrile	9.231	41	422654	19.48	ppb		94
30) 2-butanone	9.009	72	85202	19.57	ppb	#	1
31) Ethyl Acetate	8.178	43	595655	19.16	ppb	#	1
32) Hexane	8.179	41	674781	18.99	ppb	#	65
33) 1,1-dichloroethane	8.405	63	1269789	19.29	ppb		99
34) tert-butyl ethyl ether	8.771	59	2106968	19.90	ppb		92
35) isobutyl alcohol	8.767	43	214217	89.75	ppb	#	62
36) 2,2-dichloropropane	9.092	77	890830	18.74	ppb		89
37) cis-1,2-dichloroethene	9.043	96	724537	18.68	ppb		91

Quantitation Report (QT Reviewed)

Data Path : L:\1\data\U150917\
Data File : U31976.D
Acq On : 17 Sep 2015 4:15 pm
Operator : andrewd1
Sample : ic1316-20
Misc : ms35192,msu1316,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 18 10:20:10 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 09:29:43 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) bromochloromethane	9.326	128	365948	19.14	ppb	#	73
39) chloroform	9.384	83	1179888	19.43	ppb		96
41) Tetrahydrofuran	9.360	42	237146	19.07	ppb		89
42) 1,1,1-trichloroethane	9.645	97	1004699	19.46	ppb		99
44) Cyclohexane	9.750	56	1319778	19.08	ppb	#	92
45) carbon tetrachloride	9.824	117	825169	20.02	ppb		99
46) 1,1-dichloropropene	9.789	75	835294	19.39	ppb		95
47) benzene	10.030	78	2365173	17.32	ppb		98
48) 1,2-dichloroethane	10.055	62	886860	19.43	ppb		96
49) tert-amyl methyl ether	10.071	73	1873246	19.82	ppb		98
50) heptane	10.219	43	802869m	19.09	ppb		
51) trichloroethene	10.697	95	654105	19.96	ppb		87
52) 1,2-dichloropropane	10.988	63	589967	20.06	ppb		99
53) dibromomethane	11.099	93	378268	20.04	ppb		91
54) bromodichloromethane	11.232	83	744787	19.29	ppb		96
55) Methylcyclohexane	10.990	83	1072176	19.16	ppb		89
56) 2-chloroethyl vinyl ether	11.446	63	223681	20.07	ppb		95
57) methyl methacrylate	10.906	69	269514	18.14	ppb		89
58) 1,4-dioxane	11.039	88	8799m	29.04	ppb		
59) cis-1,3-dichloropropene	11.681	75	799585	20.37	ppb		95
61) 4-methyl-2-pentanone	11.770	43	619210	18.93	ppb		95
62) toluene	12.075	92	1182941	19.15	ppb		99
63) trans-1,3-dichloropropene	12.255	75	643265	20.69	ppb		97
64) 1,1,2-trichloroethane	12.495	83	354889	19.49	ppb		98
65) ethyl methacrylate	12.220	69	543134	18.43	ppb		86
67) tetrachloroethene	12.649	166	541933	20.13	ppb		98
68) 1,3-dichloropropane	12.688	76	646511	19.07	ppb		92
69) dibromochloromethane	12.956	129	492092	20.50	ppb		98
70) 1,2-dibromoethane	13.134	107	432164	20.30	ppb		96
71) 2-hexanone	12.646	43	399840m	17.37	ppb		
72) chlorobenzene	13.636	112	1356321	19.19	ppb		95
73) 1,1,1,2-tetrachloroethane	13.702	131	607800	19.36	ppb		97
74) ethylbenzene	13.690	91	2382309	19.48	ppb		97
75) m,p-xylene	13.819	106	1888233	39.72	ppb		90
76) o-xylene	14.262	106	1097570	20.02	ppb		95
77) styrene	14.276	104	1523403	18.54	ppb		90
78) bromoform	14.549	173	336229	19.96	ppb		99
79) trans-1,4-dichloro-2-b...	14.677	53	231651	19.69	ppb	#	3
81) isopropylbenzene	14.643	105	2861294	19.74	ppb		98
83) bromobenzene	15.089	156	694808	19.19	ppb		95
84) 1,1,2,2-tetrachloroethane	14.951	83	609106	20.05	ppb		98
85) 1,2,3-trichloropropane	15.062	75	641130	18.98	ppb		77
86) n-propylbenzene	15.104	91	3272797	19.36	ppb		96
87) 2-chlorotoluene	15.263	91	2325912	19.26	ppb		97
88) 4-chlorotoluene	15.386	91	1937202	18.92	ppb		97
89) 1,3,5-trimethylbenzene	15.274	105	2634196	20.54	ppb		95
90) tert-butylbenzene	15.656	91	1434926	20.41	ppb		92
91) 1,2,4-trimethylbenzene	15.712	105	2827010	20.37	ppb		99
92) sec-butylbenzene	15.900	105	3419882	19.80	ppb		97
93) 1,3-dichlorobenzene	16.100	146	1552095	19.11	ppb		99

Quantitation Report (QT Reviewed)

Data Path : L:\1\data\U150917\
Data File : U31976.D
Acq On : 17 Sep 2015 4:15 pm
Operator : andrewd1
Sample : ic1316-20
Misc : ms35192,msu1316,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 18 10:20:10 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 09:29:43 2015
Response via : Initial Calibration

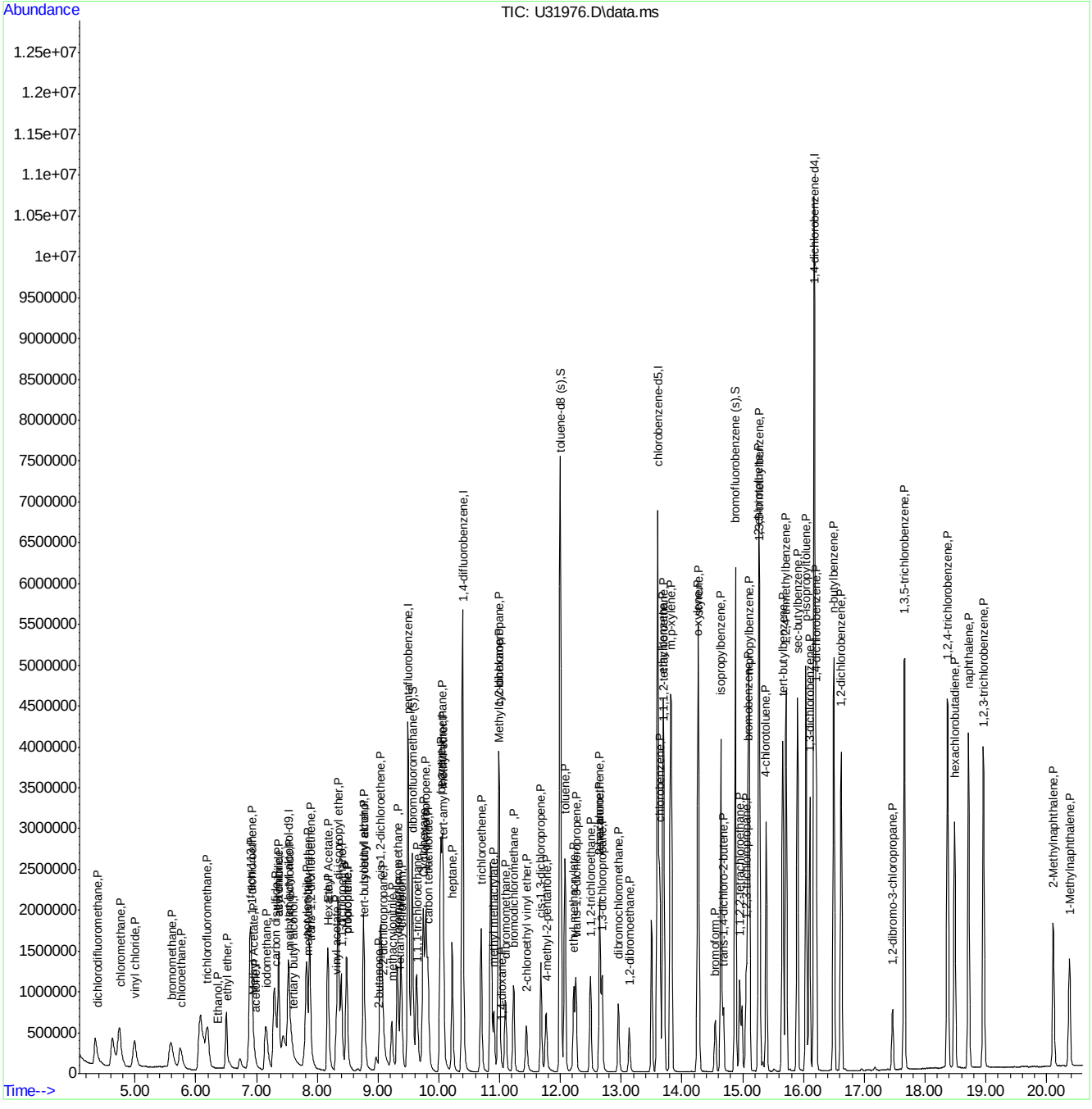
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
94)	p-isopropyltoluene	16.042	119	3009954	19.70	ppb	97
95)	1,4-dichlorobenzene	16.206	146	1583051	19.00	ppb	99
96)	1,2-dichlorobenzene	16.620	146	1765108	19.19	ppb	97
97)	n-butylbenzene	16.498	91	2988698	19.37	ppb	94
98)	1,2-dibromo-3-chloropr...	17.465	75	187879	19.21	ppb	95
99)	1,3,5-trichlorobenzene	17.660	180	1795153	19.45	ppb	96
100)	1,2,4-trichlorobenzene	18.373	180	1656999	19.90	ppb	92
101)	hexachlorobutadiene	18.488	225	665842	19.84	ppb	98
102)	naphthalene	18.717	128	3764647	19.63	ppb	100
103)	2-Methylnaphthalene	20.114	142	1107711	10.40	ppb	95
104)	1-Methylnaphthalene	20.378	142	818013	10.32	ppb	97
105)	1,2,3-trichlorobenzene	18.963	180	1480060	19.90	ppb	94

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

Quantitation Report (QT Reviewed)

Data Path : L:\1\data\U150917\
Data File : U31976.D
Acq On : 17 Sep 2015 4:15 pm
Operator : andrewd1
Sample : ic1316-20
Misc : ms35192,msu1316,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 18 10:20:10 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 09:29:43 2015
Response via : Initial Calibration



U31977.D

Manual Integrations APPROVED (compounds with "m" flag)

Sona Liskova 09/21/15 11:03

Quantitation Report (QT Reviewed)

Data Path : L:\1\data\U150917\
Data File : U31977.D
Acq On : 17 Sep 2015 4:42 pm
Operator : andrewd1
Sample : icc1316-50
Misc : ms35192,msu1316,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 18 10:18:31 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 09:31:51 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	7.508	65	1911731	500.00	ppb		0.00
4) pentafluorobenzene	9.498	168	3484465	50.00	ppb		0.00
43) 1,4-difluorobenzene	10.392	114	5322498	50.00	ppb		0.00
66) chlorobenzene-d5	13.599	82	2586129	50.00	ppb		0.00
80) 1,4-dichlorobenzene-d4	16.177	152	3304271	50.00	ppb		0.00
System Monitoring Compounds							
40) dibromofluoromethane (s)	9.564	113	1820256	48.58	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 97.16%				
60) toluene-d8 (s)	11.997	98	5985141	52.56	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 105.12%				
82) bromofluorobenzene (s)	14.878	95	2405555	51.32	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.64%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.591	59	1585993	484.48	ppb		61
3) Ethanol	6.360	45	798807	4694.37	ppb		97
5) dichlorodifluoromethane	4.380	85	2280786	73.92	ppb		95
6) chloromethane	4.758	50	2473659	50.08	ppb		99
7) vinyl chloride	5.012	62	2286711	57.85	ppb		99
8) bromomethane	5.610	96	1390982	57.75	ppb		98
9) chloroethane	5.759	64	1137127	50.41	ppb		97
10) ethyl ether	6.514	59	1351211	45.78	ppb		91
11) acetonitrile	7.368	41	2870746	54.86	ppb	#	15
12) trichlorofluoromethane	6.175	101	3160008	58.53	ppb		99
13) freon-113	6.909	101	1801701	44.66	ppb		94
15) 1,1-dichloroethene	6.913	96	1513319	44.79	ppb		92
16) acetone	6.953	58	229708	38.14	ppb		92
17) Methyl Acetate	6.939	43	744720	41.23	ppb	#	72
18) methylene chloride	7.537	84	1739193	46.10	ppb		87
19) methyl tert butyl ether	7.832	73	4143101m	44.63	ppb		
20) acrylonitrile	7.816	53	788165	44.44	ppb		80
21) allyl chloride	7.369	41	3012352	44.70	ppb		81
22) trans-1,2-dichloroethene	7.882	96	1580629	44.68	ppb		86
23) iodomethane	7.165	142	3069267	44.30	ppb		99
24) carbon disulfide	7.312	76	6355357	44.95	ppb		98
25) propionitrile	8.488	54	121704	45.43	ppb		100
26) vinyl acetate	8.310	43	2277070m	19.97	ppb		
27) chloroprene	8.487	53	2644419	45.11	ppb		93
28) di-isopropyl ether	8.350	45	5650551	47.45	ppb		89
29) methacrylonitrile	9.228	41	1037466	46.39	ppb		94
30) 2-butanone	8.998	72	204894	45.60	ppb	#	1
31) Ethyl Acetate	8.177	43	1430906	44.83	ppb	#	1
32) Hexane	8.178	41	1626701	44.68	ppb	#	65
33) 1,1-dichloroethane	8.403	63	3064020	45.14	ppb		96
34) tert-butyl ethyl ether	8.770	59	5249592	47.84	ppb		93
35) isobutyl alcohol	8.767	43	535114	221.77	ppb	#	64
36) 2,2-dichloropropane	9.088	77	2148740	44.26	ppb		94
37) cis-1,2-dichloroethene	9.042	96	1760060	44.22	ppb		92

Quantitation Report (QT Reviewed)

Data Path : L:\1\data\U150917\
Data File : U31977.D
Acq On : 17 Sep 2015 4:42 pm
Operator : andrewd1
Sample : icc1316-50
Misc : ms35192,msu1316,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 18 10:18:31 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 09:31:51 2015
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38)	bromochloromethane	9.323	128	884618	45.08	ppb	#	73
39)	chloroform	9.383	83	2857457	45.57	ppb		96
41)	Tetrahydrofuran	9.352	42	564111	44.23	ppb		99
42)	1,1,1-trichloroethane	9.643	97	2477166	46.46	ppb		98
44)	Cyclohexane	9.749	56	3188517	44.10	ppb	#	92
45)	carbon tetrachloride	9.823	117	2050008	47.03	ppb		99
46)	1,1-dichloropropene	9.788	75	2004402	44.33	ppb		94
47)	benzene	10.029	78	5730898	40.45	ppb		98
48)	1,2-dichloroethane	10.052	62	2167619	45.12	ppb		98
49)	tert-amyl methyl ether	10.070	73	4712101	47.24	ppb		98
50)	heptane	10.219	43	1980505m	45.88	ppb		
51)	trichloroethene	10.696	95	1626481	46.94	ppb		88
52)	1,2-dichloropropane	10.987	63	1488431	47.83	ppb		99
53)	dibromomethane	11.097	93	941564	47.16	ppb		92
54)	bromodichloromethane	11.230	83	1937739	47.75	ppb		97
55)	Methylcyclohexane	10.990	83	2601168	44.42	ppb		89
56)	2-chloroethyl vinyl ether	11.445	63	737945	62.55	ppb		95
57)	methyl methacrylate	10.903	69	779347	50.78	ppb		97
58)	1,4-dioxane	11.040	88	36054m	120.45	ppb		
59)	cis-1,3-dichloropropene	11.680	75	2156912	51.83	ppb		95
61)	4-methyl-2-pentanone	11.767	43	1621503	47.51	ppb		96
62)	toluene	12.074	92	3156309	48.66	ppb		100
63)	trans-1,3-dichloropropene	12.254	75	1779024	53.85	ppb		99
64)	1,1,2-trichloroethane	12.494	83	949047	49.50	ppb		99
65)	ethyl methacrylate	12.218	69	1483475	48.57	ppb		88
67)	tetrachloroethene	12.649	166	1435025	47.57	ppb		99
68)	1,3-dichloropropane	12.687	76	1767995	47.13	ppb		95
69)	dibromochloromethane	12.955	129	1380539	51.18	ppb		100
70)	1,2-dibromoethane	13.133	107	1175918	49.18	ppb		96
71)	2-hexanone	12.640	43	1022289m	41.02	ppb		
72)	chlorobenzene	13.636	112	3623759	46.10	ppb		95
73)	1,1,1,2-tetrachloroethane	13.701	131	1583752	45.30	ppb		98
74)	ethylbenzene	13.690	91	6198141	45.43	ppb		95
75)	m,p-xylene	13.819	106	4934627	92.81	ppb		89
76)	o-xylene	14.262	106	2838230	46.23	ppb		92
77)	styrene	14.275	104	4093152	45.32	ppb		91
78)	bromoform	14.548	173	967970	51.33	ppb		100
79)	trans-1,4-dichloro-2-b...	14.676	53	622984	47.48	ppb	#	6
81)	isopropylbenzene	14.643	105	7374517	46.45	ppb		98
83)	bromobenzene	15.089	156	1856020	47.12	ppb		92
84)	1,1,2,2-tetrachloroethane	14.950	83	1608979	48.18	ppb		100
85)	1,2,3-trichloropropane	15.062	75	1708152	46.60	ppb		75
86)	n-propylbenzene	15.104	91	8387481	45.52	ppb		95
87)	2-chlorotoluene	15.263	91	6002771	45.64	ppb		97
88)	4-chlorotoluene	15.386	91	5096420	45.91	ppb		96
89)	1,3,5-trimethylbenzene	15.274	105	6854558	48.42	ppb		94
90)	tert-butylbenzene	15.656	91	3903093	50.26	ppb		92
91)	1,2,4-trimethylbenzene	15.711	105	7276725	47.57	ppb		97
92)	sec-butylbenzene	15.900	105	8891882	46.96	ppb		95
93)	1,3-dichlorobenzene	16.100	146	4091440	46.17	ppb		98

Quantitation Report (QT Reviewed)

Data Path : L:\1\data\U150917\
Data File : U31977.D
Acq On : 17 Sep 2015 4:42 pm
Operator : andrewd1
Sample : icc1316-50
Misc : ms35192,msu1316,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 18 10:18:31 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 09:31:51 2015
Response via : Initial Calibration

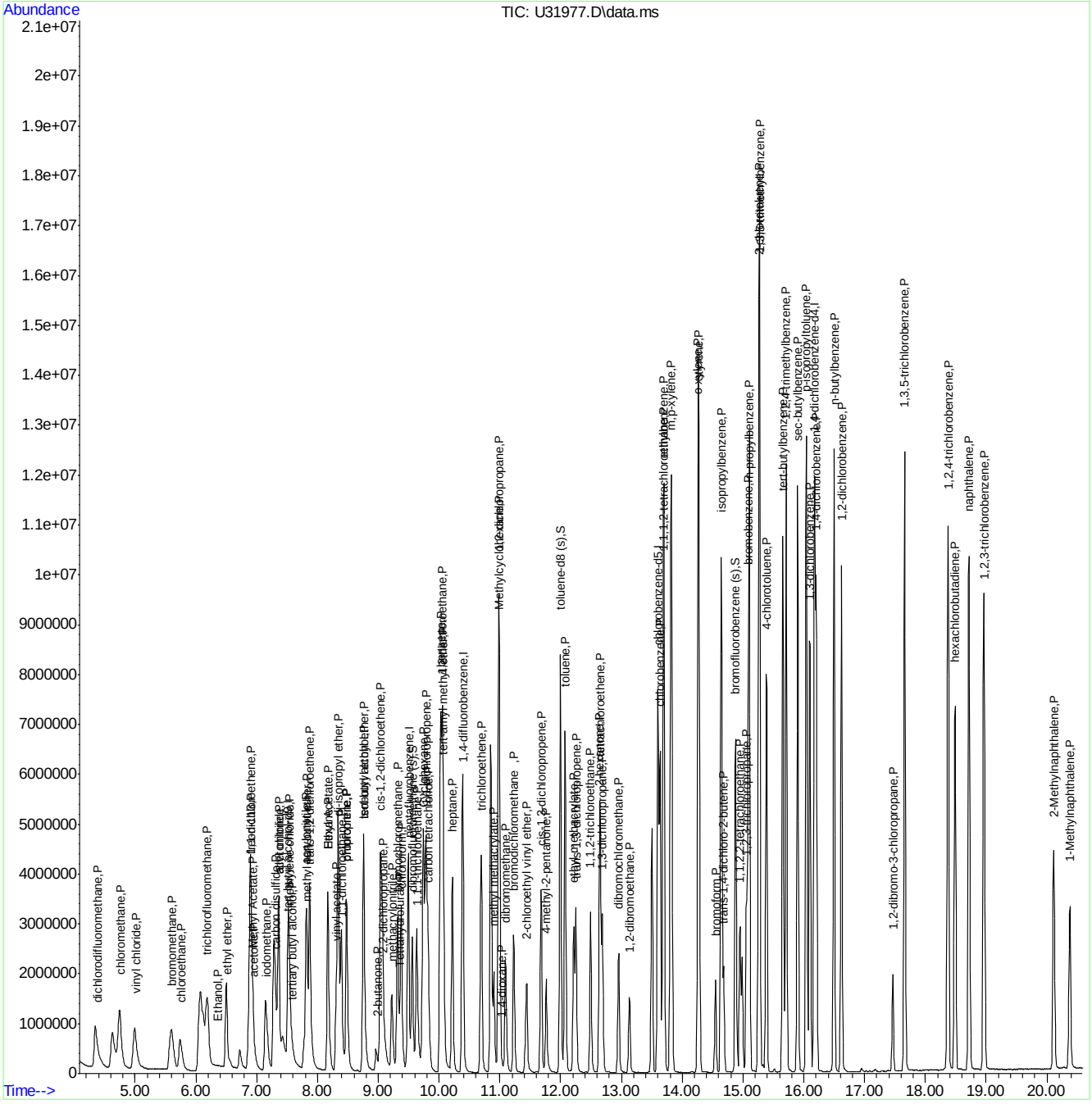
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
94)	p-isopropyltoluene	16.042	119	7785264	46.54	ppb	97
95)	1,4-dichlorobenzene	16.206	146	4183483	46.07	ppb	99
96)	1,2-dichlorobenzene	16.620	146	4585025	45.67	ppb	96
97)	n-butylbenzene	16.497	91	7500242	44.58	ppb	94
98)	1,2-dibromo-3-chloropr...	17.465	75	507948	47.73	ppb	94
99)	1,3,5-trichlorobenzene	17.660	180	4426928	43.94	ppb	96
100)	1,2,4-trichlorobenzene	18.373	180	4078257	44.61	ppb	93
101)	hexachlorobutadiene	18.488	225	1642670	44.62	ppb	99
102)	naphthalene	18.717	128	9591486	45.72	ppb	100
103)	2-Methylnaphthalene	20.113	142	2826490	23.90	ppb	95
104)	1-Methylnaphthalene	20.378	142	2089275	23.79	ppb	97
105)	1,2,3-trichlorobenzene	18.964	180	3661828	44.86	ppb	95

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

Quantitation Report (QT Reviewed)

Data Path : L:\1\data\U150917\
Data File : U31977.D
Acq On : 17 Sep 2015 4:42 pm
Operator : andrewd1
Sample : icc1316-50
Misc : ms35192,msu1316,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 18 10:18:31 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 09:31:51 2015
Response via : Initial Calibration



ACCUTEST LABORATORIES MC41544

Manual Integrations APPROVED (compounds with "m" flag)
Sona Liskova
09/21/15 11:03

Quantitation Report (QT Reviewed)

Data Path : L:\1\data\U150917\
Data File : U31978.D
Acq On : 17 Sep 2015 5:10 pm
Operator : andrewd1
Sample : ic1316-100
Misc : ms35192,msu1316,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 18 10:16:22 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 09:34:22 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	7.527	65	1783944	500.00	ppb		0.02
4) pentafluorobenzene	9.498	168	3898103	50.00	ppb		0.00
43) 1,4-difluorobenzene	10.392	114	6010523	50.00	ppb		0.00
66) chlorobenzene-d5	13.600	82	2685746	50.00	ppb		0.00
80) 1,4-dichlorobenzene-d4	16.177	152	3330430	50.00	ppb		0.00
System Monitoring Compounds							
40) dibromofluoromethane (s)	9.564	113	1951257	46.55	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 93.10%				
60) toluene-d8 (s)	11.997	98	6491612	50.48	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.96%				
82) bromofluorobenzene (s)	14.878	95	2427807	51.38	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.76%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.608	59	3069288	1000.90	ppb		64
3) Ethanol	6.347	45	872674m	5495.83	ppb		
5) dichlorodifluoromethane	4.391	85	3976123	115.19	ppb		98
6) chloromethane	4.761	50	4696298	84.88	ppb		100
7) vinyl chloride	5.023	62	4272314	96.61	ppb		98
8) bromomethane	5.614	96	2585074	95.94	ppb		97
9) chloroethane	5.762	64	2317951m	91.85	ppb		
10) ethyl ether	6.514	59	2928596	88.70	ppb		93
11) acetonitrile	7.367	41	6016328	102.78	ppb	#	15
12) trichlorofluoromethane	6.177	101	6268471	103.79	ppb		99
13) freon-113	6.910	101	3881487	86.01	ppb		94
15) 1,1-dichloroethene	6.914	96	3281468	86.81	ppb		90
16) acetone	6.976	58	469926	69.74	ppb	#	1
17) Methyl Acetate	6.945	43	1364664	67.53	ppb	#	70
18) methylene chloride	7.540	84	3692804	87.50	ppb		87
19) methyl tert butyl ether	7.839	73	8785395m	85.25	ppb		
20) acrylonitrile	7.821	53	1613823	81.33	ppb		83
21) allyl chloride	7.368	41	6268549	83.15	ppb		77
22) trans-1,2-dichloroethene	7.882	96	3331296	84.17	ppb		89
23) iodomethane	7.168	142	6607969	85.26	ppb		99
24) carbon disulfide	7.315	76	13556834	85.71	ppb		97
25) propionitrile	8.487	54	265663	88.64	ppb		100
26) vinyl acetate	8.310	43	4707790m	36.91	ppb		
27) chloroprene	8.487	53	5851555	89.22	ppb		91
28) di-isopropyl ether	8.350	45	12151201	91.21	ppb		89
29) methacrylonitrile	9.229	41	2240559	89.49	ppb		92
30) 2-butanone	9.001	72	436164	86.77	ppb	#	1
31) Ethyl Acetate	8.176	43	3310351	92.70	ppb	#	1
32) Hexane	8.177	41	3773140	92.64	ppb	#	67
33) 1,1-dichloroethane	8.403	63	6557175	86.35	ppb		96
34) tert-butyl ethyl ether	8.771	59	11337232	92.36	ppb		93
35) isobutyl alcohol	8.767	43	1179604	437.00	ppb	#	66
36) 2,2-dichloropropane	9.087	77	4421208	81.41	ppb		92
37) cis-1,2-dichloroethene	9.042	96	3775393	84.78	ppb		90

Quantitation Report (QT Reviewed)

Data Path : L:\1\data\U150917\
Data File : U31978.D
Acq On : 17 Sep 2015 5:10 pm
Operator : andrewd1
Sample : ic1316-100
Misc : ms35192,msu1316,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 18 10:16:22 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 09:34:22 2015
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38)	bromochloromethane	9.324	128	1935707	88.17	ppb	#	72
39)	chloroform	9.383	83	6211927	88.56	ppb		97
41)	Tetrahydrofuran	9.352	42	1161139	81.38	ppb		91
42)	1,1,1-trichloroethane	9.644	97	5426342	90.97	ppb		99
44)	Cyclohexane	9.749	56	6992569	85.65	ppb	#	90
45)	carbon tetrachloride	9.824	117	4566620	92.77	ppb		98
46)	1,1-dichloropropene	9.788	75	4636234	90.81	ppb		95
47)	benzene	10.029	78	12740805	79.64	ppb		99
48)	1,2-dichloroethane	10.053	62	4847739	89.36	ppb		97
49)	tert-amyl methyl ether	10.071	73	10182405	90.39	ppb		98
50)	heptane	10.219	43	4619971m	94.81	ppb		
51)	trichloroethene	10.696	95	3775639	96.50	ppb		87
52)	1,2-dichloropropane	10.987	63	3353283	95.42	ppb		99
53)	dibromomethane	11.098	93	2100907	93.18	ppb		90
54)	bromodichloromethane	11.231	83	4482873	97.82	ppb		96
55)	Methylcyclohexane	10.991	83	5716769	86.45	ppb		90
56)	2-chloroethyl vinyl ether	11.445	63	1425979	107.04	ppb		94
57)	methyl methacrylate	10.906	69	1619751	93.46	ppb		84
58)	1,4-dioxane	11.046	88	60911m	180.20	ppb		
59)	cis-1,3-dichloropropene	11.681	75	4860594	103.44	ppb		96
61)	4-methyl-2-pentanone	11.768	43	3429710	88.98	ppb		96
62)	toluene	12.075	92	7008259	95.68	ppb		97
63)	trans-1,3-dichloropropene	12.254	75	3738615	100.21	ppb		99
64)	1,1,2-trichloroethane	12.495	83	2009253	92.81	ppb		99
65)	ethyl methacrylate	12.218	69	2989416	86.67	ppb		88
67)	tetrachloroethene	12.649	166	3211277	102.49	ppb		99
68)	1,3-dichloropropane	12.687	76	3688069	94.67	ppb		94
69)	dibromochloromethane	12.956	129	3042488	108.60	ppb		97
70)	1,2-dibromoethane	13.134	107	2426955	97.74	ppb		98
71)	2-hexanone	12.640	43	2033478m	78.63	ppb		
72)	chlorobenzene	13.636	112	7783608	95.35	ppb		95
73)	1,1,1,2-tetrachloroethane	13.702	131	3555371	97.92	ppb		97
74)	ethylbenzene	13.690	91	12807568	90.39	ppb		92
75)	m,p-xylene	13.820	106	10508051	190.31	ppb		81
76)	o-xylene	14.262	106	6121618	96.02	ppb		87
77)	styrene	14.276	104	8435725	89.94	ppb		88
78)	bromoform	14.549	173	2080299	106.23	ppb		99
79)	trans-1,4-dichloro-2-b...	14.676	53	1242246	91.17	ppb	#	4
81)	isopropylbenzene	14.643	105	15527687	97.03	ppb		91
83)	bromobenzene	15.089	156	3920404	98.74	ppb		91
84)	1,1,2,2-tetrachloroethane	14.951	83	3230742	95.99	ppb		100
85)	1,2,3-trichloropropane	15.062	75	3406194	92.20	ppb		76
86)	n-propylbenzene	15.105	91	16237833	87.42	ppb		83
87)	2-chlorotoluene	15.263	91	12504039	94.32	ppb		95
88)	4-chlorotoluene	15.386	91	10453968	93.44	ppb		94
89)	1,3,5-trimethylbenzene	15.274	105	14342305	100.51	ppb		88
90)	tert-butylbenzene	15.657	91	9048847	115.60	ppb		98
91)	1,2,4-trimethylbenzene	15.712	105	14746268	95.63	ppb		91
92)	sec-butylbenzene	15.900	105	17215727	90.21	ppb		79
93)	1,3-dichlorobenzene	16.100	146	8481786	94.97	ppb		99

Quantitation Report (QT Reviewed)

Data Path : L:\1\data\U150917\
Data File : U31978.D
Acq On : 17 Sep 2015 5:10 pm
Operator : andrewd1
Sample : ic1316-100
Misc : ms35192,msu1316,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 18 10:16:22 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 09:34:22 2015
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
94)	p-isopropyltoluene	16.042	119	15530946	92.12	ppb	90
95)	1,4-dichlorobenzene	16.207	146	8646576	94.48	ppb	99
96)	1,2-dichlorobenzene	16.621	146	9472557	93.62	ppb	95
97)	n-butylbenzene	16.498	91	14718239	86.79	ppb	86
98)	1,2-dibromo-3-chloropr...	17.465	75	1034474	96.45	ppb	93
99)	1,3,5-trichlorobenzene	17.660	180	9255808	91.15	ppb	96
100)	1,2,4-trichlorobenzene	18.373	180	8472125	91.95	ppb	93
101)	hexachlorobutadiene	18.488	225	3453502	93.07	ppb	100
102)	naphthalene	18.717	128	17805610	84.22	ppb	100
103)	2-Methylnaphthalene	20.113	142	5619514	47.15	ppb	96
104)	1-Methylnaphthalene	20.378	142	4033618	45.57	ppb	97
105)	1,2,3-trichlorobenzene	18.964	180	7619029	92.61	ppb	95

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

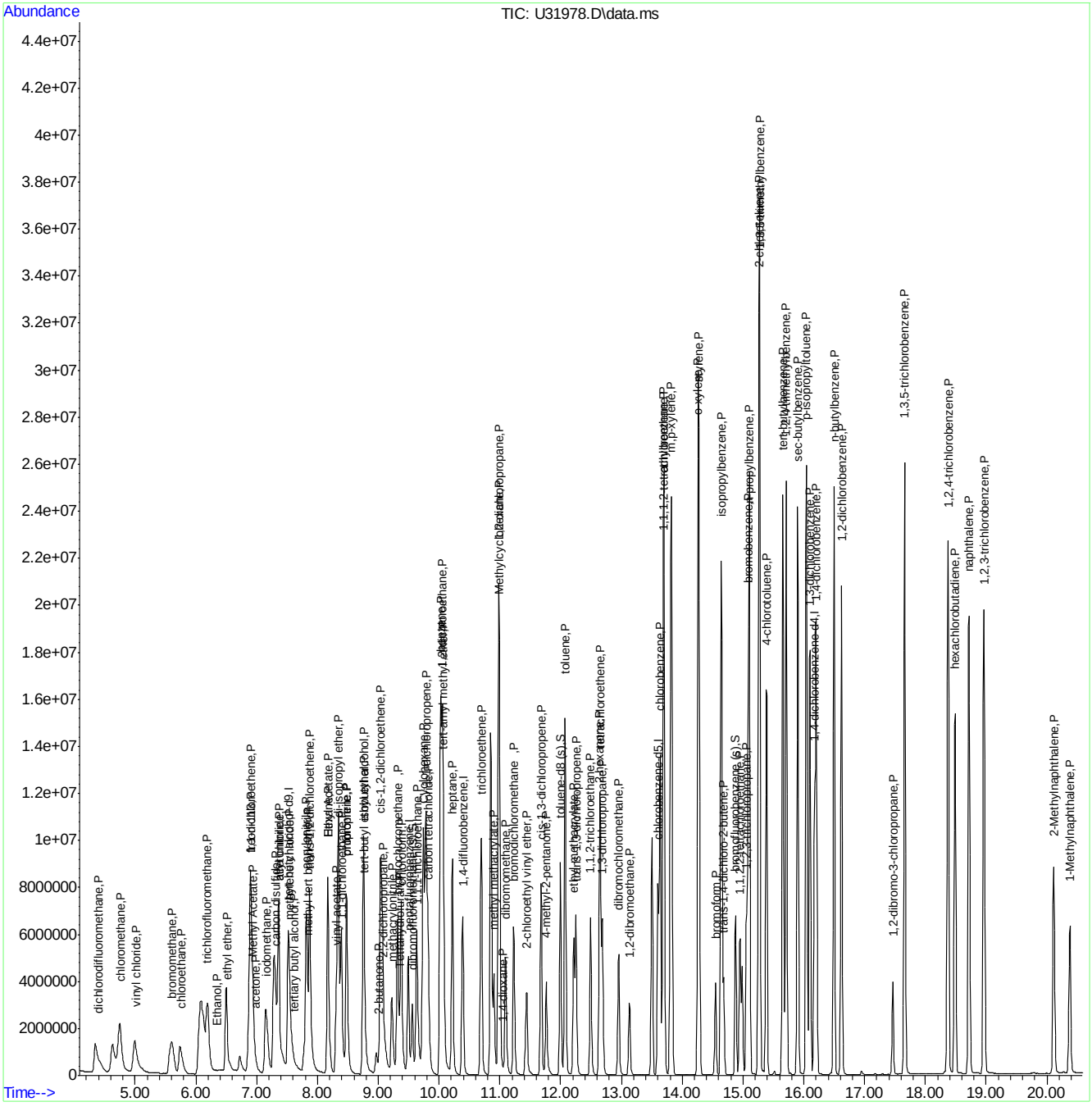
7.6.8

7

Quantitation Report (QT Reviewed)

Data Path : L:\1\data\U150917\
Data File : U31978.D
Acq On : 17 Sep 2015 5:10 pm
Operator : andrewd1
Sample : ic1316-100
Misc : ms35192,msu1316,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 18 10:16:22 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 09:34:22 2015
Response via : Initial Calibration



ACCUTEST LABORATORIES MC41544

Manual Integrations APPROVED (compounds with "m" flag)
Sona Liskova
09/21/15 11:03

Quantitation Report (QT Reviewed)

Data Path : L:\1\data\U150917\
Data File : U31979.D
Acq On : 17 Sep 2015 5:37 pm
Operator : andrewd1
Sample : ic1316-200
Misc : ms35192,msu1316,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 18 10:17:26 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 09:38:39 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	7.530	65	1956218	500.00	ppb		0.02
4) pentafluorobenzene	9.499	168	3992099	50.00	ppb		0.00
43) 1,4-difluorobenzene	10.393	114	6407126	50.00	ppb		0.00
66) chlorobenzene-d5	13.600	82	3062390	50.00	ppb		0.00
80) 1,4-dichlorobenzene-d4	16.178	152	3647468	50.00	ppb		0.00
System Monitoring Compounds							
40) dibromofluoromethane (s)	9.565	113	2030378	47.71	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 95.42%				
60) toluene-d8 (s)	11.998	98	7193365	52.41	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 104.82%				
82) bromofluorobenzene (s)	14.878	95	2791008	53.75	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 107.50%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.614	59	7014959	2085.81	ppb		58
3) Ethanol	6.360	45	2060740m	10162.97	ppb		
5) dichlorodifluoromethane	4.385	85	9342440	258.68	ppb		98
6) chloromethane	4.762	50	8934002	161.75	ppb		99
7) vinyl chloride	5.020	62	9536959	211.61	ppb		99
8) bromomethane	5.615	96	5598205	204.26	ppb		96
9) chloroethane	5.762	64	4539636m	178.07	ppb		
10) ethyl ether	6.517	59	6013792	181.96	ppb		91
11) acetonitrile	7.370	41	12831774	213.06	ppb	#	14
12) trichlorofluoromethane	6.180	101	12627985	203.07	ppb		99
13) freon-113	6.914	101	8618346	191.84	ppb		95
15) 1,1-dichloroethene	6.919	96	7386001	194.46	ppb		87
16) acetone	6.965	58	1032833m	159.32	ppb		
17) Methyl Acetate	6.946	43	3037761	156.97	ppb	#	69
18) methylene chloride	7.543	84	8189021	193.51	ppb		86
19) methyl tert butyl ether	7.839	73	18112083m	175.30	ppb		
20) acrylonitrile	7.819	53	3550044	181.47	ppb		83
21) allyl chloride	7.371	41	13421548	179.90	ppb		72
22) trans-1,2-dichloroethene	7.884	96	7318598	184.74	ppb		85
23) iodomethane	7.172	142	14543609	188.80	ppb		99
24) carbon disulfide	7.319	76	30243746	192.20	ppb		97
25) propionitrile	8.488	54	571689	190.59	ppb		100
26) vinyl acetate	8.310	43	9153830m	72.06	ppb		
27) chloroprene	8.489	53	12607147	191.83	ppb		89
28) di-isopropyl ether	8.354	45	23397497	174.05	ppb		90
29) methacrylonitrile	9.231	41	5123930	204.12	ppb		92
30) 2-butanone	9.000	72	983760	196.29	ppb	#	1
31) Ethyl Acetate	8.179	43	6882763	190.99	ppb	#	1
32) Hexane	8.179	41	7851936	191.07	ppb	#	65
33) 1,1-dichloroethane	8.405	63	13892722	182.20	ppb		95
34) tert-butyl ethyl ether	8.775	59	22508969	181.36	ppb		92
35) isobutyl alcohol	8.771	43	2410431	894.49	ppb	#	71
36) 2,2-dichloropropane	9.095	77	9864083	184.20	ppb		92
37) cis-1,2-dichloroethene	9.043	96	8112371	181.84	ppb		89

Quantitation Report (QT Reviewed)

Data Path : L:\1\data\U150917\
Data File : U31979.D
Acq On : 17 Sep 2015 5:37 pm
Operator : andrewd1
Sample : ic1316-200
Misc : ms35192,msu1316,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 18 10:17:26 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 09:38:39 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) bromochloromethane	9.325	128	4205901	191.61	ppb	#	70
39) chloroform	9.384	83	13208192	186.92	ppb		99
41) Tetrahydrofuran	9.357	42	2634356	187.25	ppb		88
42) 1,1,1-trichloroethane	9.648	97	11914306	197.58	ppb		98
44) Cyclohexane	9.753	56	15252682	180.44	ppb	#	89
45) carbon tetrachloride	9.827	117	10193464	196.29	ppb		98
46) 1,1-dichloropropene	9.790	75	10017245	187.51	ppb		94
47) benzene	10.031	78	23386044	140.72	ppb		83
48) 1,2-dichloroethane	10.054	62	10335121	181.48	ppb		97
49) tert-amyl methyl ether	10.074	73	20201809	170.97	ppb		98
50) heptane	10.219	43	9902033m	192.63	ppb		
51) trichloroethene	10.697	95	8227087	198.12	ppb		87
52) 1,2-dichloropropane	10.988	63	7276966	195.74	ppb		98
53) dibromomethane	11.098	93	4694832	197.58	ppb		90
54) bromodichloromethane	11.232	83	10045461	206.27	ppb		98
55) Methylcyclohexane	10.994	83	12463836	181.74	ppb		89
56) 2-chloroethyl vinyl ether	11.445	63	3442517	239.05	ppb		93
57) methyl methacrylate	10.905	69	4024096	220.70	ppb		91
58) 1,4-dioxane	11.040	88	100371m	298.32	ppb		
59) cis-1,3-dichloropropene	11.681	75	11191841	222.47	ppb		93
61) 4-methyl-2-pentanone	11.768	43	7718891	192.10	ppb		97
62) toluene	12.076	92	15545879	200.33	ppb	#	56
63) trans-1,3-dichloropropene	12.254	75	8874905	223.09	ppb		100
64) 1,1,2-trichloroethane	12.495	83	4746521	207.81	ppb		99
65) ethyl methacrylate	12.219	69	6905493	192.95	ppb		86
67) tetrachloroethene	12.650	166	7652960	213.55	ppb		97
68) 1,3-dichloropropane	12.688	76	8755380	199.22	ppb		92
69) dibromochloromethane	12.956	129	7186708	222.58	ppb		98
70) 1,2-dibromoethane	13.134	107	5718703	202.75	ppb		99
71) 2-hexanone	12.640	43	4518784m	160.08	ppb		
72) chlorobenzene	13.637	112	17159106	185.58	ppb		90
73) 1,1,1,2-tetrachloroethane	13.703	131	7809194	189.18	ppb		96
74) ethylbenzene	13.692	91	21056838	131.92	ppb	#	38
75) m,p-xylene	13.821	106	22413771	358.18	ppb	#	29
76) o-xylene	14.263	106	13280575	183.60	ppb	#	39
77) styrene	14.277	104	17562867	167.59	ppb		69
78) bromoform	14.549	173	5023306	222.98	ppb		99
79) trans-1,4-dichloro-2-b...	14.676	53	2813750	184.36	ppb	#	7
81) isopropylbenzene	14.643	105	22381681m	128.47	ppb		
83) bromobenzene	15.090	156	9102149	209.85	ppb		87
84) 1,1,2,2-tetrachloroethane	14.951	83	7574905	206.53	ppb		100
85) 1,2,3-trichloropropane	15.063	75	7730252	194.08	ppb		77
86) n-propylbenzene	15.107	91	22523035m	113.58	ppb		
87) 2-chlorotoluene	15.264	91	21488780	149.71	ppb		50
88) 4-chlorotoluene	15.387	91	19502551	161.28	ppb		51
89) 1,3,5-trimethylbenzene	15.275	105	21549979m	137.80	ppb		
90) tert-butylbenzene	15.659	91	18806445m	212.73	ppb		
91) 1,2,4-trimethylbenzene	15.712	105	21594063m	128.67	ppb		
92) sec-butylbenzene	15.901	105	23068732m	112.57	ppb		
93) 1,3-dichlorobenzene	16.101	146	17194107	177.05	ppb		81

Quantitation Report (QT Reviewed)

Data Path : L:\1\data\U150917\
Data File : U31979.D
Acq On : 17 Sep 2015 5:37 pm
Operator : andrewd1
Sample : ic1316-200
Misc : ms35192,msu1316,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 18 10:17:26 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 09:38:39 2015
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
94)	p-isopropyltoluene	16.042	119	21812008m	120.03	ppb		
95)	1,4-dichlorobenzene	16.208	146	17151028	172.47	ppb		78
96)	1,2-dichlorobenzene	16.621	146	18061667	164.49	ppb		70
97)	n-butylbenzene	16.499	91	20956278	115.90	ppb	#	14
98)	1,2-dibromo-3-chloropr...	17.465	75	2302811	197.44	ppb		90
99)	1,3,5-trichlorobenzene	17.662	180	17176317	157.23	ppb		100
100)	1,2,4-trichlorobenzene	18.374	180	16463561	165.83	ppb		94
101)	hexachlorobutadiene	18.488	225	7526933	187.82	ppb		98
102)	naphthalene	18.719	128	24095953	107.45	ppb		100
103)	2-Methylnaphthalene	20.114	142	11507286	89.18	ppb		98
104)	1-Methylnaphthalene	20.378	142	8364124	87.84	ppb		97
105)	1,2,3-trichlorobenzene	18.965	180	15218774	171.44	ppb		95

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

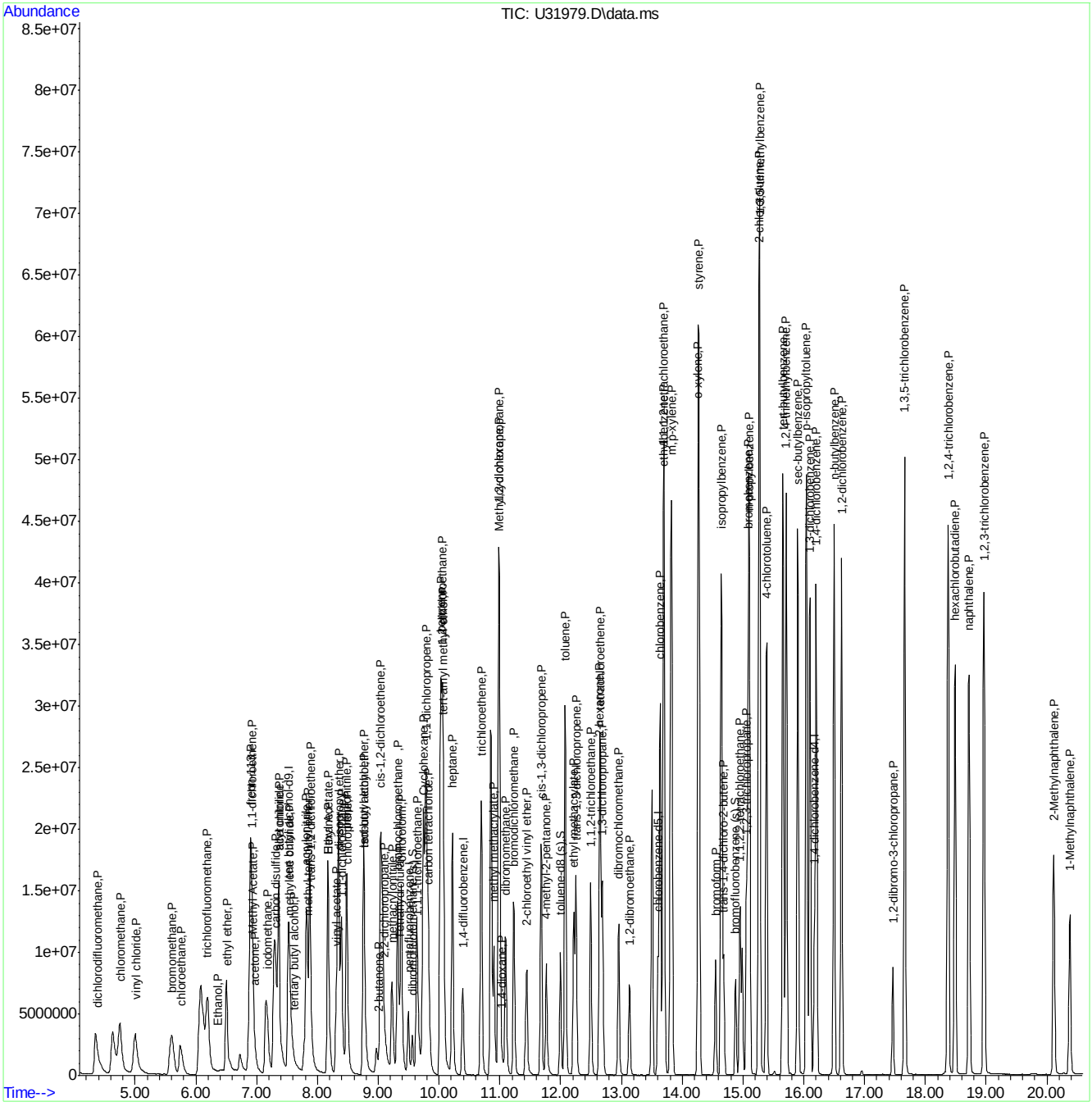
7.6.9

7

Quantitation Report (QT Reviewed)

Data Path : L:\1\data\U150917\
Data File : U31979.D
Acq On : 17 Sep 2015 5:37 pm
Operator : andrewd1
Sample : ic1316-200
Misc : ms35192,msu1316,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 18 10:17:26 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 09:38:39 2015
Response via : Initial Calibration



ACCUTEST LABORATORIES MC41544

Quantitation Report (QT Reviewed)

Data Path : L:\1\data\U150917\
Data File : U31983.D
Acq On : 17 Sep 2015 7:26 pm
Operator : andrewd1
Sample : icv1316-50
Misc : ms35192,msu1316,,,,5,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 18 13:03:17 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 10:56:47 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.523	65	1919505	500.00	ppb	0.00
4) pentafluorobenzene	9.498	168	3764255	50.00	ppb	0.00
43) 1,4-difluorobenzene	10.392	114	5861776	50.00	ppb	0.00
66) chlorobenzene-d5	13.599	82	2913974	50.00	ppb	0.00
80) 1,4-dichlorobenzene-d4	16.177	152	3622892	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	9.564	113	1921168	48.12	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 96.24%			
60) toluene-d8 (s)	11.997	98	6701326	53.08	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 106.16%			
82) bromofluorobenzene (s)	14.878	95	2678791	51.51	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.02%			
Target Compounds						Qvalue
56) 2-chloroethyl vinyl ether	11.445	63	884672	58.94	ppb	93

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

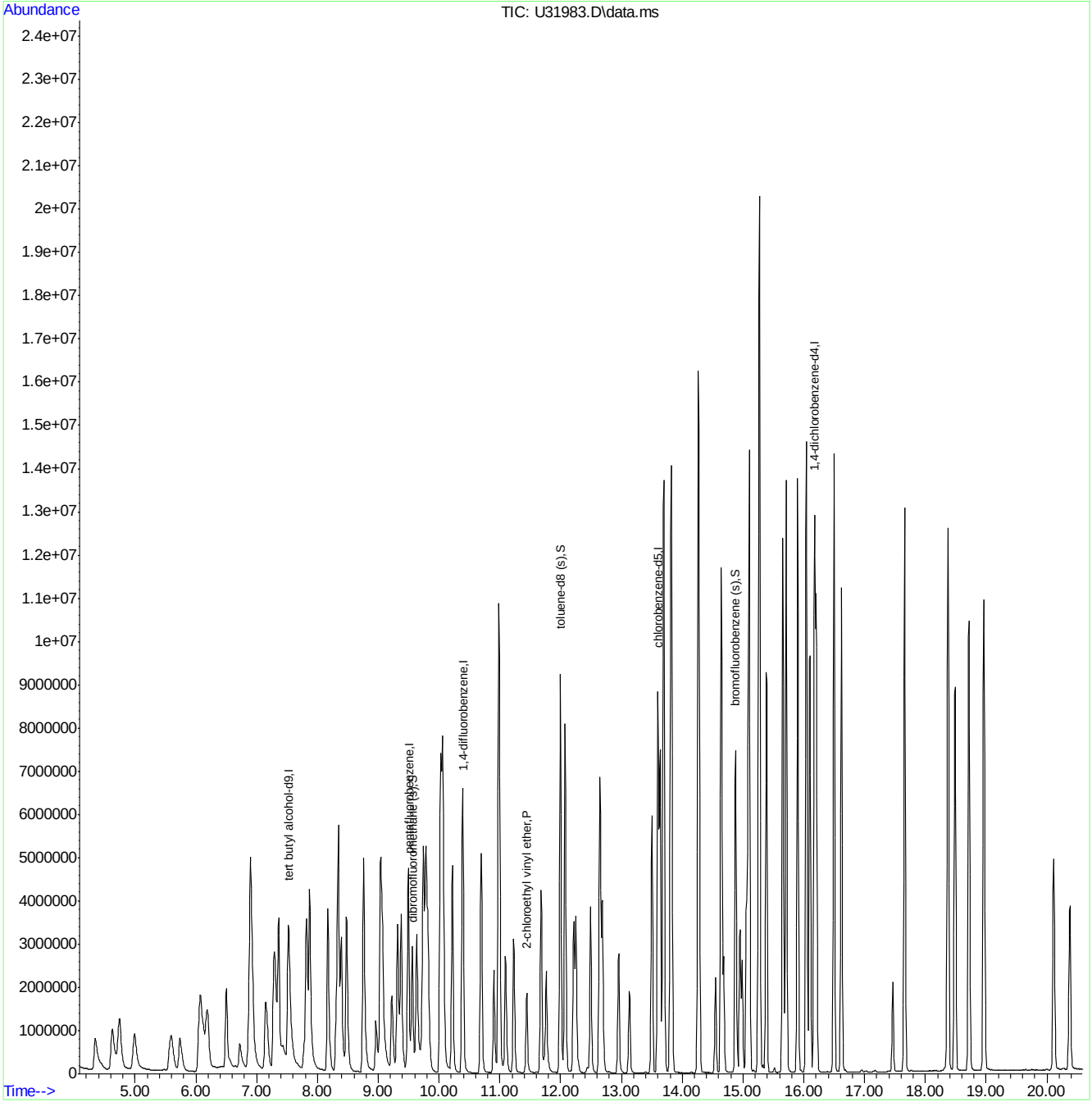
7.6.10

7

Quantitation Report (QT Reviewed)

Data Path : L:\1\data\U150917\
Data File : U31983.D
Acq On : 17 Sep 2015 7:26 pm
Operator : andrewd1
Sample : icv1316-50
Misc : ms35192,msu1316,,,,5,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 18 13:03:17 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 10:56:47 2015
Response via : Initial Calibration



v150903s.m Fri Sep 18 13:10:35 2015

ACCUTEST LABORATORIES MC41544

Manual Integrations APPROVED (compounds with "m" flag)
Sona Liskova
09/21/15 16:21

Quantitation Report (QT Reviewed)

Data Path : R:\1\data\U150918\
Data File : U31989.D
Acq On : 18 Sep 2015 12:19 pm
Operator : andrewd1
Sample : bs
Misc : ms35192,msu1317,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 18 12:45:30 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 10:56:47 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	7.519	65	1785459	500.00	ppb		0.00
4) pentafluorobenzene	9.499	168	3429389	50.00	ppb		0.00
43) 1,4-difluorobenzene	10.393	114	5234147	50.00	ppb		0.00
66) chlorobenzene-d5	13.600	82	2273249	50.00	ppb		0.00
80) 1,4-dichlorobenzene-d4	16.178	152	2957101	50.00	ppb		0.00
System Monitoring Compounds							
40) dibromofluoromethane (s)	9.565	113	1892762	52.04	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 104.08%				
60) toluene-d8 (s)	11.998	98	5552751	49.26	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 98.52%				
82) bromofluorobenzene (s)	14.878	95	2095290	49.36	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 98.72%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.602	59	1613719	522.51	ppb		62
5) dichlorodifluoromethane	4.379	85	1956413	50.47	ppb		96
6) chloromethane	4.755	50	2480619	53.75	ppb		100
7) vinyl chloride	5.009	62	2144478	54.99	ppb		100
8) bromomethane	5.607	96	1274582	53.97	ppb		96
9) chloroethane	5.755	64	1201879	55.75	ppb		99
10) ethyl ether	6.516	59	1324483	47.36	ppb		87
11) acetonitrile	7.369	41	2876116	47.72	ppb	#	15
12) trichlorofluoromethane	6.175	101	2721900	50.86	ppb		100
13) freon-113	6.907	101	1938328	50.57	ppb		94
15) 1,1-dichloroethene	6.914	96	1609051	49.49	ppb		88
16) acetone	6.965	58	189408	40.42	ppb		94
17) Methyl Acetate	6.959	43	608914	44.27	ppb	#	75
18) methylene chloride	7.537	84	1848230	51.08	ppb		84
19) methyl tert butyl ether	7.855	73	4641810	53.12	ppb		97
20) acrylonitrile	7.819	53	833299	50.36	ppb		86
21) allyl chloride	7.369	41	2911139	46.20	ppb		81
22) trans-1,2-dichloroethene	7.884	96	1640639	52.69	ppb		85
23) iodomethane	7.165	142	3304041	50.40	ppb		99
24) carbon disulfide	7.314	76	6551167	48.78	ppb		99
25) propionitrile	8.490	54	115128	45.03	ppb		100
26) vinyl acetate	8.310	43	2803869m	62.58	ppb		
27) chloroprene	8.489	53	2557303	45.61	ppb		90
28) di-isopropyl ether	8.352	45	5782124	51.01	ppb		91
29) methacrylonitrile	9.230	41	1061837	49.07	ppb		92
30) 2-butanone	9.001	72	202340	47.14	ppb	#	2
31) Ethyl Acetate	8.178	43	1418391	46.16	ppb	#	1
32) Hexane	8.179	41	1597578	45.59	ppb	#	63
33) 1,1-dichloroethane	8.404	63	3077402	47.51	ppb		96
34) tert-butyl ethyl ether	8.773	59	5186126	49.30	ppb		93
35) isobutyl alcohol	8.770	43	518416	227.95	ppb	#	66
36) 2,2-dichloropropane	9.084	77	2346891	51.70	ppb		92
37) cis-1,2-dichloroethene	9.043	96	1890637	54.44	ppb		90
38) bromochloromethane	9.325	128	956599	51.09	ppb	#	72

Quantitation Report (QT Reviewed)

Data Path : R:\1\data\U150918\
Data File : U31989.D
Acq On : 18 Sep 2015 12:19 pm
Operator : andrewd1
Sample : bs
Misc : ms35192,msu1317,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 18 12:45:30 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 10:56:47 2015
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39)	chloroform	9.384	83	2982786	49.54	ppb		98
41)	Tetrahydrofuran	9.354	42	588524	49.22	ppb		94
42)	1,1,1-trichloroethane	9.643	97	2627882	50.81	ppb		99
44)	Cyclohexane	9.749	56	3125619	46.01	ppb		92
45)	carbon tetrachloride	9.824	117	2185199	51.63	ppb		97
46)	1,1-dichloropropene	9.789	75	2099879	48.62	ppb		95
47)	benzene	10.030	78	5965298	50.90	ppb		98
48)	1,2-dichloroethane	10.054	62	2215748	48.18	ppb		97
49)	tert-amyl methyl ether	10.071	73	4793619	50.71	ppb		97
50)	heptane	10.219	43	2174405m	51.19	ppb		
51)	trichloroethene	10.697	95	1632272	48.17	ppb		85
52)	1,2-dichloropropane	10.988	63	1506857	49.77	ppb		99
53)	dibromomethane	11.098	93	983146	50.74	ppb		89
54)	bromodichloromethane	11.231	83	1947275	48.75	ppb		95
55)	Methylcyclohexane	10.991	83	2746367	49.78	ppb		89
57)	methyl methacrylate	10.907	69	689150	45.48	ppb		91
58)	1,4-dioxane	11.033	88	25071m	194.98	ppb		
59)	cis-1,3-dichloropropene	11.681	75	1948738	46.83	ppb		96
61)	4-methyl-2-pentanone	11.767	43	1665593	51.08	ppb		97
62)	toluene	12.075	92	3050204	48.11	ppb		100
63)	trans-1,3-dichloropropene	12.254	75	1407286	42.75	ppb		99
64)	1,1,2-trichloroethane	12.495	83	863804	46.07	ppb		99
65)	ethyl methacrylate	12.219	69	1349000	46.41	ppb		86
67)	tetrachloroethene	12.650	166	1402630	52.33	ppb		97
68)	1,3-dichloropropane	12.688	76	1598860	49.04	ppb		94
69)	dibromochloromethane	12.956	129	1257895	51.83	ppb		98
70)	1,2-dibromoethane	13.134	107	1045005	49.81	ppb		100
71)	2-hexanone	12.647	43	875642m	49.38	ppb		
72)	chlorobenzene	13.636	112	3272647	48.12	ppb		96
73)	1,1,1,2-tetrachloroethane	13.702	131	1645388	56.23	ppb		96
74)	ethylbenzene	13.691	91	5911591	52.27	ppb		95
75)	m,p-xylene	13.820	106	4694167	103.48	ppb		90
76)	o-xylene	14.263	106	2734901	52.18	ppb		93
77)	styrene	14.276	104	3731720	49.30	ppb		92
78)	bromoform	14.549	173	899953	53.05	ppb		100
79)	trans-1,4-dichloro-2-b...	14.677	53	591959	52.94	ppb	#	4
81)	isopropylbenzene	14.644	105	7343016	51.99	ppb		97
83)	bromobenzene	15.089	156	1715165	48.38	ppb		91
84)	1,1,2,2-tetrachloroethane	14.951	83	1699784	56.96	ppb		99
85)	1,2,3-trichloropropane	15.062	75	1585176	49.33	ppb		79
86)	n-propylbenzene	15.105	91	7950439	49.45	ppb		94
87)	2-chlorotoluene	15.263	91	5773686	51.79	ppb		97
88)	4-chlorotoluene	15.386	91	4660759	49.13	ppb		93
89)	1,3,5-trimethylbenzene	15.274	105	7074918	55.80	ppb		94
90)	tert-butylbenzene	15.656	91	3954412	54.59	ppb		91
91)	1,2,4-trimethylbenzene	15.712	105	7060709	51.90	ppb		97
92)	sec-butylbenzene	15.900	105	8831817	53.16	ppb		95
93)	1,3-dichlorobenzene	16.100	146	3798941	48.95	ppb		98
94)	p-isopropyltoluene	16.042	119	7800877	52.95	ppb		96
95)	1,4-dichlorobenzene	16.207	146	3859187	48.71	ppb		99

Quantitation Report (QT Reviewed)

Data Path : R:\1\data\U150918\
Data File : U31989.D
Acq On : 18 Sep 2015 12:19 pm
Operator : andrewd1
Sample : bs
Misc : ms35192,msu1317,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 18 12:45:30 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 10:56:47 2015
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
96)	1,2-dichlorobenzene	16.621	146	4392006	55.81	ppb	97
97)	n-butylbenzene	16.498	91	7565151	51.61	ppb	93
98)	1,2-dibromo-3-chloropr...	17.465	75	513253	54.40	ppb	89
99)	1,3,5-trichlorobenzene	17.660	180	4418554	51.73	ppb	98
100)	1,2,4-trichlorobenzene	18.373	180	4376948	55.97	ppb	93
101)	hexachlorobutadiene	18.488	225	1836874	57.12	ppb	99
102)	naphthalene	18.717	128	9223905	50.74	ppb	100
103)	2-Methylnaphthalene	20.114	142	2901807	28.25	ppb	97
104)	1-Methylnaphthalene	20.378	142	2214282	29.28	ppb	97
105)	1,2,3-trichlorobenzene	18.964	180	3915823	55.74	ppb	94

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

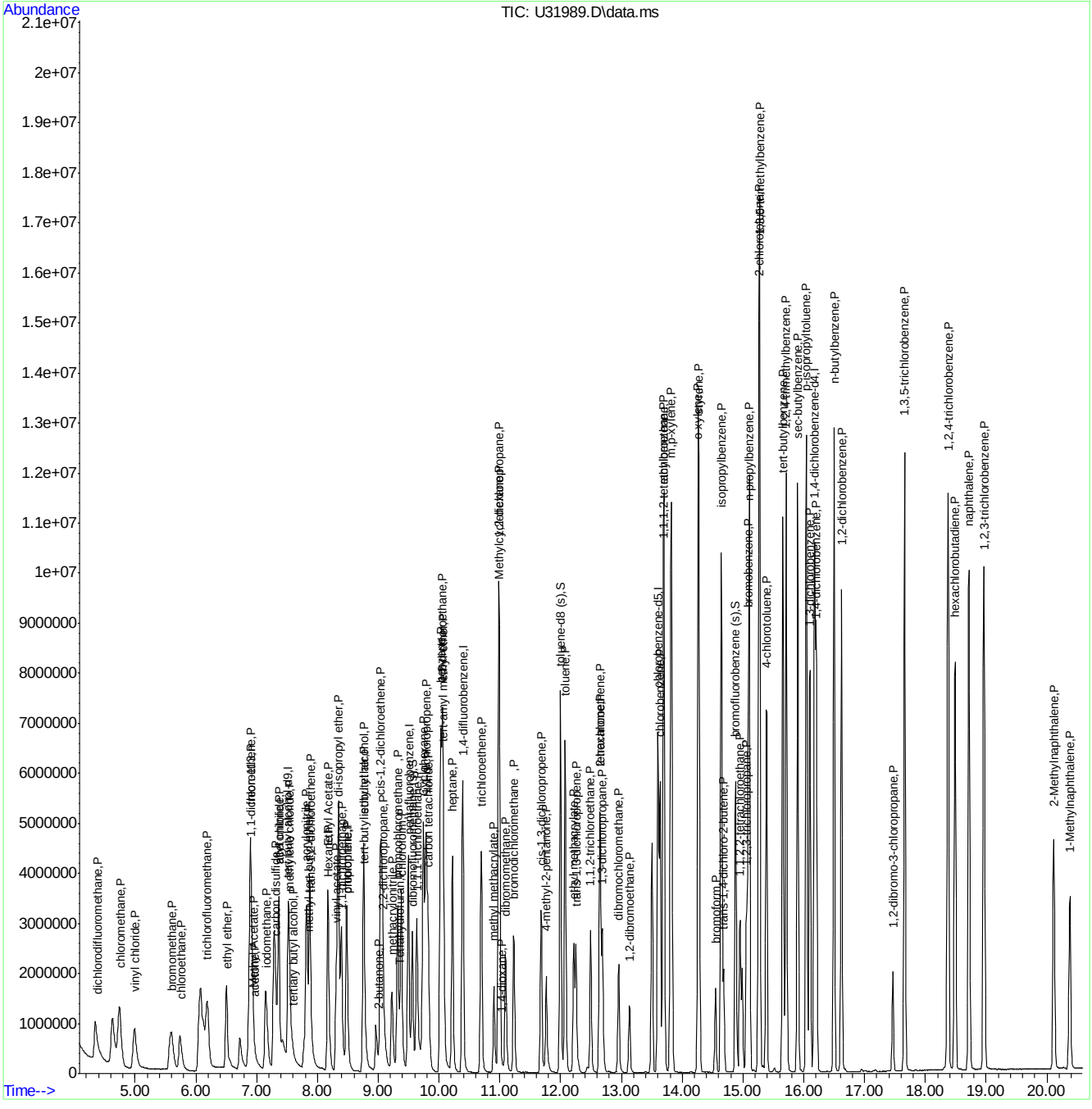
7.6.11

7

Quantitation Report (QT Reviewed)

Data Path : R:\1\data\U150918\
Data File : U31989.D
Acq On : 18 Sep 2015 12:19 pm
Operator : andrewd1
Sample : bs
Misc : ms35192,msu1317,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 18 12:45:30 2015
Quant Method : D:\msdchem\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 10:56:47 2015
Response via : Initial Calibration



ACCUTEST LABORATORIES MC41544

Manual Integrations APPROVED (compounds with "m" flag)
Sona Liskova
09/29/15 15:21

Quantitation Report (QT Reviewed)

Data Path : R:\1\data\U150927\
Data File : U32343.D
Acq On : 27 Sep 2015 12:02 pm
Operator : andrewd1
Sample : cc1316-50
Misc : ms35292,msu1329,,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 27 12:28:15 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 10:56:47 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	7.470	65	1247749	500.00	ppb		-0.06
4) pentafluorobenzene	9.496	168	2466250	50.00	ppb		0.00
43) 1,4-difluorobenzene	10.390	114	3669193	50.00	ppb		0.00
66) chlorobenzene-d5	13.597	82	1703828	50.00	ppb		0.00
80) 1,4-dichlorobenzene-d4	16.175	152	2403680	50.00	ppb		0.00
System Monitoring Compounds							
40) dibromofluoromethane (s)	9.561	113	1332503	50.94	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.88%				
60) toluene-d8 (s)	11.995	98	3975384	50.31	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.62%				
82) bromofluorobenzene (s)	14.876	95	1579324	45.77	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 91.54%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.563	59	1274536	590.53	ppb		95
5) dichlorodifluoromethane	4.374	85	1574680	56.36	ppb		95
6) chloromethane	4.740	50	778195	23.45	ppb		97
7) vinyl chloride	4.998	62	1210794	43.17	ppb		100
8) bromomethane	5.603	96	823600	48.50	ppb		96
9) chloroethane	5.749	64	652648	42.10	ppb		98
10) ethyl ether	6.512	59	832050	41.37	ppb		88
11) acetonitrile	7.367	41	1795099	41.42	ppb	#	13
12) trichlorofluoromethane	6.167	101	1969035	51.16	ppb		99
13) freon-113	6.901	101	1445426	52.44	ppb		93
15) 1,1-dichloroethene	6.912	96	1086035	46.44	ppb		90
16) acetone	6.926	58	176171	53.49	ppb	#	69
17) Methyl Acetate	6.921	43	651445	67.98	ppb	#	67
18) methylene chloride	7.534	84	1221765	46.95	ppb		84
19) methyl tert butyl ether	7.840	73	3076045	48.95	ppb		94
20) acrylonitrile	7.795	53	493189	41.45	ppb		96
21) allyl chloride	7.367	41	1860369	41.05	ppb		75
22) trans-1,2-dichloroethene	7.881	96	1102540	49.21	ppb		86
23) iodomethane	7.161	142	2246319	47.65	ppb		93
24) carbon disulfide	7.315	76	4427727	45.85	ppb		98
25) propionitrile	8.484	54	84279	45.84	ppb		100
26) vinyl acetate	8.310	43	2011113m	62.42	ppb		
27) chloroprene	8.486	53	1905335	47.25	ppb		94
28) di-isopropyl ether	8.347	45	3656585	44.86	ppb		92
29) methacrylonitrile	9.224	41	720157	46.28	ppb		98
30) 2-butanone	8.982	72	136885	44.35	ppb	#	1
31) Ethyl Acetate	8.176	43	980395	44.37	ppb	#	1
32) Hexane	8.176	41	1190825	47.26	ppb	#	71
33) 1,1-dichloroethane	8.401	63	2111597	45.33	ppb		96
34) tert-butyl ethyl ether	8.767	59	3537425	46.76	ppb		91
35) isobutyl alcohol	8.765	43	407134	248.94	ppb	#	67
36) 2,2-dichloropropane	9.080	77	1769515	54.20	ppb		94
37) cis-1,2-dichloroethene	9.039	96	1252000	50.09	ppb		92
38) bromochloromethane	9.320	128	678154	50.36	ppb	#	67

Quantitation Report (QT Reviewed)

Data Path : R:\1\data\U150927\
Data File : U32343.D
Acq On : 27 Sep 2015 12:02 pm
Operator : andrewd1
Sample : cc1316-50
Misc : ms35292,msu1329,,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 27 12:28:15 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 10:56:47 2015
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39)	chloroform	9.380	83	2215432	51.17	ppb		96
41)	Tetrahydrofuran	9.337	42	353227	41.08	ppb		95
42)	1,1,1-trichloroethane	9.639	97	2040684	54.86	ppb		98
44)	Cyclohexane	9.747	56	2175272	45.68	ppb	#	88
45)	carbon tetrachloride	9.821	117	1723079	58.07	ppb		98
46)	1,1-dichloropropene	9.786	75	1521883	50.27	ppb		95
47)	benzene	10.027	78	4074920	49.50	ppb		97
48)	1,2-dichloroethane	10.049	62	1768908	54.87	ppb		99
49)	tert-amyl methyl ether	10.066	73	3266617	49.30	ppb		98
50)	heptane	10.219	43	1447823m	48.62	ppb		
51)	trichloroethene	10.694	95	1189693	50.08	ppb		83
52)	1,2-dichloropropane	10.984	63	1026327	48.35	ppb		99
53)	dibromomethane	11.094	93	724351	53.32	ppb		91
54)	bromodichloromethane	11.228	83	1532802	54.74	ppb		96
55)	Methylcyclohexane	10.989	83	1902441	49.19	ppb		88
56)	2-chloroethyl vinyl ether	11.441	63	362136	39.21	ppb		93
57)	methyl methacrylate	10.900	69	496123	46.71	ppb		97
58)	1,4-dioxane	11.019	88	28119m	335.92	ppb		
59)	cis-1,3-dichloropropene	11.678	75	1530663	52.48	ppb		94
61)	4-methyl-2-pentanone	11.762	43	1027181	44.93	ppb		95
62)	toluene	12.072	92	2244539	50.50	ppb		97
63)	trans-1,3-dichloropropene	12.251	75	1265364	54.84	ppb		97
64)	1,1,2-trichloroethane	12.492	83	663248	50.46	ppb		97
65)	ethyl methacrylate	12.216	69	893725	43.86	ppb		91
67)	tetrachloroethene	12.647	166	1163790	57.93	ppb		97
68)	1,3-dichloropropane	12.684	76	1199522	49.09	ppb		93
69)	dibromochloromethane	12.953	129	1026547	56.44	ppb		99
70)	1,2-dibromoethane	13.130	107	829291	52.74	ppb		99
71)	2-hexanone	12.639	43	571165	42.52	ppb	#	26
72)	chlorobenzene	13.633	112	2666010	52.30	ppb		93
73)	1,1,1,2-tetrachloroethane	13.699	131	1259908	57.45	ppb		97
74)	ethylbenzene	13.688	91	4516210	53.34	ppb		95
75)	m,p-xylene	13.817	106	3608586	106.22	ppb		93
76)	o-xylene	14.260	106	2109956	53.75	ppb		94
77)	styrene	14.274	104	2878653	50.74	ppb		91
78)	bromoform	14.546	173	655583	51.56	ppb		98
79)	trans-1,4-dichloro-2-b...	14.672	53	363350	43.35	ppb	#	1
81)	isopropylbenzene	14.641	105	5818425	50.68	ppb		97
83)	bromobenzene	15.087	156	1437087	49.87	ppb		88
84)	1,1,2,2-tetrachloroethane	14.948	83	1239862	51.11	ppb		97
85)	1,2,3-trichloropropane	15.060	75	1188895	45.52	ppb		59
86)	n-propylbenzene	15.102	91	6445418	49.32	ppb		95
87)	2-chlorotoluene	15.261	91	4635622	51.15	ppb		96
88)	4-chlorotoluene	15.384	91	3851264	49.94	ppb		95
89)	1,3,5-trimethylbenzene	15.272	105	5505867	53.42	ppb		97
90)	tert-butylbenzene	15.654	91	3348892	56.88	ppb		94
91)	1,2,4-trimethylbenzene	15.710	105	5740580	51.91	ppb		99
92)	sec-butylbenzene	15.898	105	7376347	54.62	ppb		95
93)	1,3-dichlorobenzene	16.098	146	3260234	51.68	ppb		97
94)	p-isopropyltoluene	16.040	119	6477243	54.09	ppb		96

Quantitation Report (QT Reviewed)

Data Path : R:\1\data\U150927\
Data File : U32343.D
Acq On : 27 Sep 2015 12:02 pm
Operator : andrewd1
Sample : cc1316-50
Misc : ms35292,msu1329,,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 27 12:28:15 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 10:56:47 2015
Response via : Initial Calibration

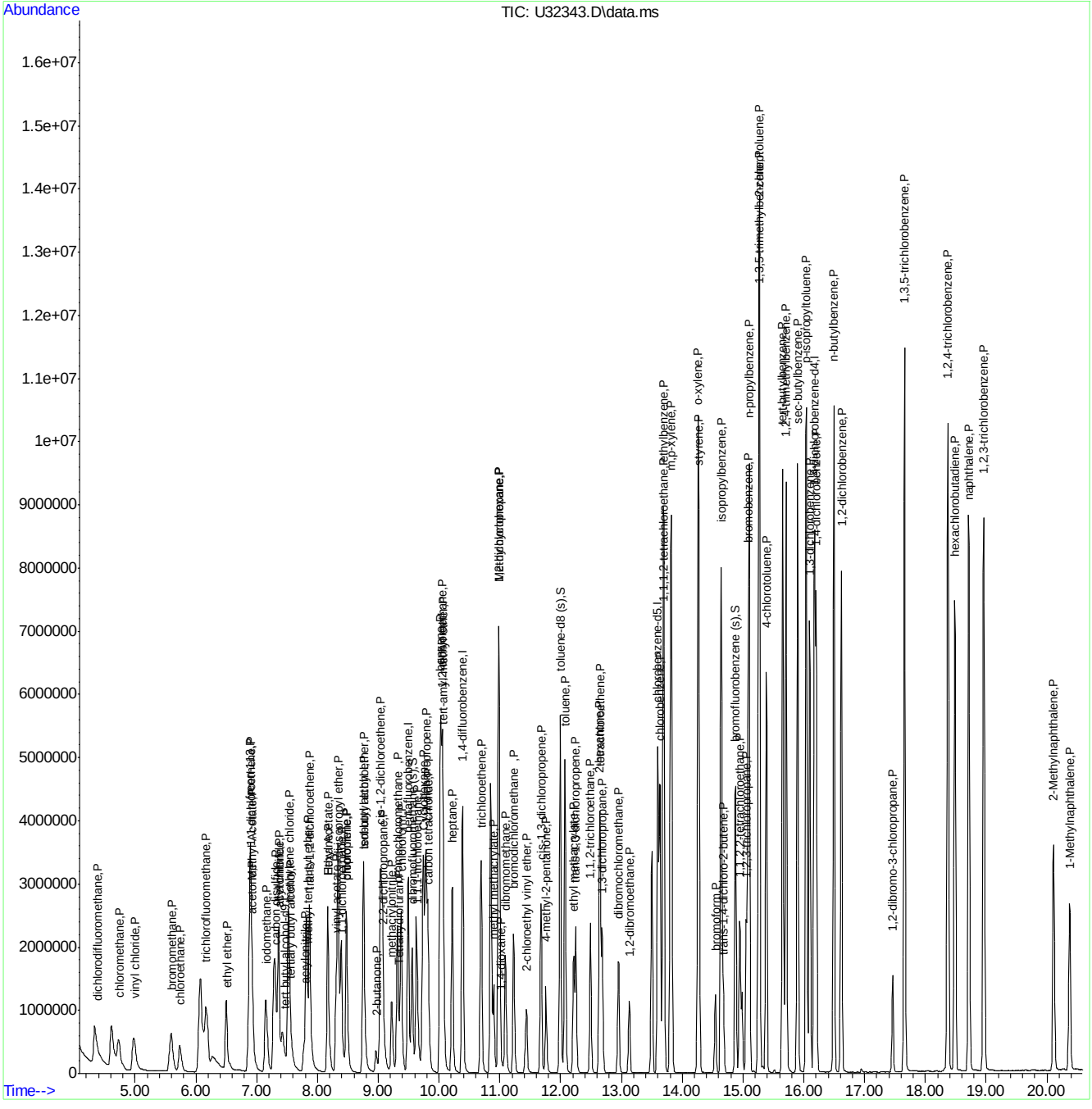
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) 1,4-dichlorobenzene	16.204	146	3341150	51.88	ppb	99
96) 1,2-dichlorobenzene	16.618	146	3749020	58.63	ppb	96
97) n-butylbenzene	16.495	91	6228644	52.27	ppb	94
98) 1,2-dibromo-3-chloropr...	17.462	75	378325	49.33	ppb	96
99) 1,3,5-trichlorobenzene	17.658	180	3998205	57.59	ppb	95
100) 1,2,4-trichlorobenzene	18.371	180	3718363	58.50	ppb	93
101) hexachlorobutadiene	18.486	225	1649767	63.11	ppb	99
102) naphthalene	18.715	128	8055591	54.51	ppb	100
103) 2-Methylnaphthalene	20.111	142	2234340	26.76	ppb	96
104) 1-Methylnaphthalene	20.375	142	1656389	26.94	ppb	97
105) 1,2,3-trichlorobenzene	18.961	180	3356277	58.77	ppb	94

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

Quantitation Report (QT Reviewed)

Data Path : R:\1\data\U150927\
Data File : U32343.D
Acq On : 27 Sep 2015 12:02 pm
Operator : andrewd1
Sample : cc1316-50
Misc : ms35292,msu1329,,,,5,1
ALS Vial : 2 Sample Multiplier: 1

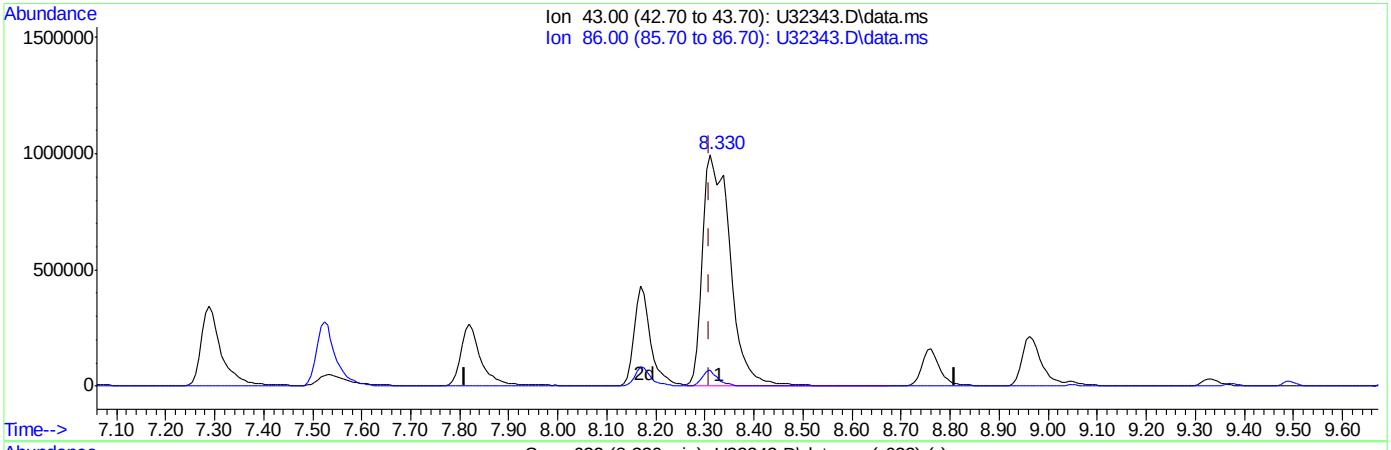
Quant Time: Sep 27 12:28:15 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 10:56:47 2015
Response via : Initial Calibration

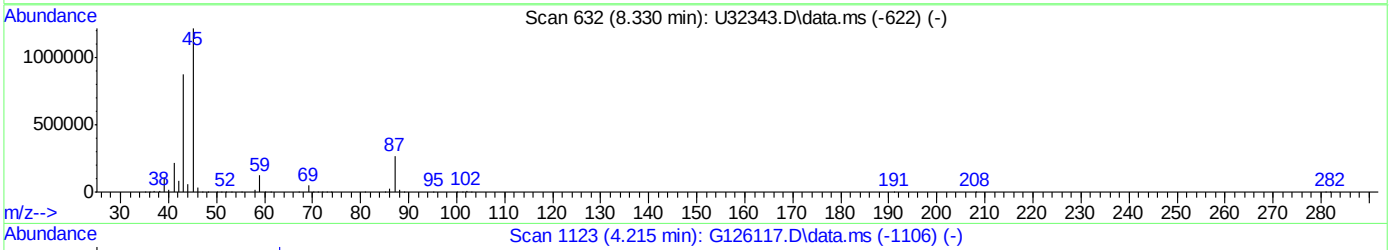


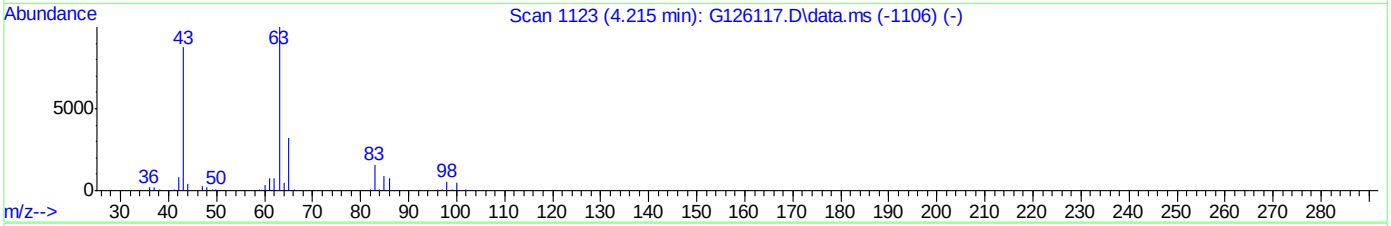
Quantitation Report (Qedit)

Data Path : R:\1\data\U150927\
Data File : U32343.D
Acq On : 27 Sep 2015 12:02 pm
Operator : andrewd1
Sample : cc1316-50
Misc : ms35292,msu1329,,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 27 12:26:29 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 10:56:47 2015
Response via : Initial Calibration







TIC: U32343.D\data.ms

(26) vinyl acetate (P)

8.330min (+ 0.020) 122.03 ppb

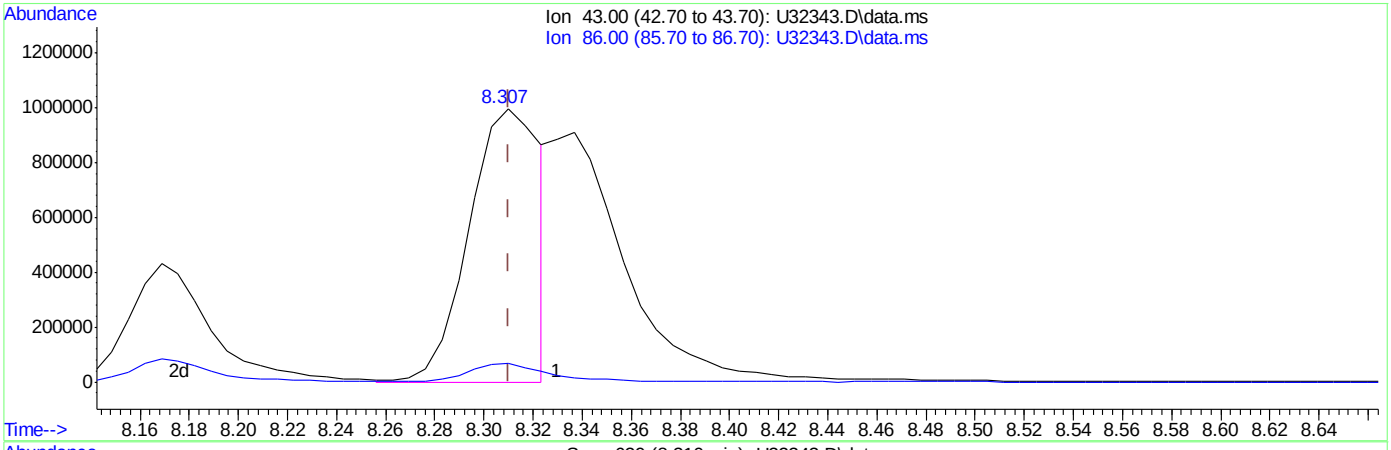
response 3931790

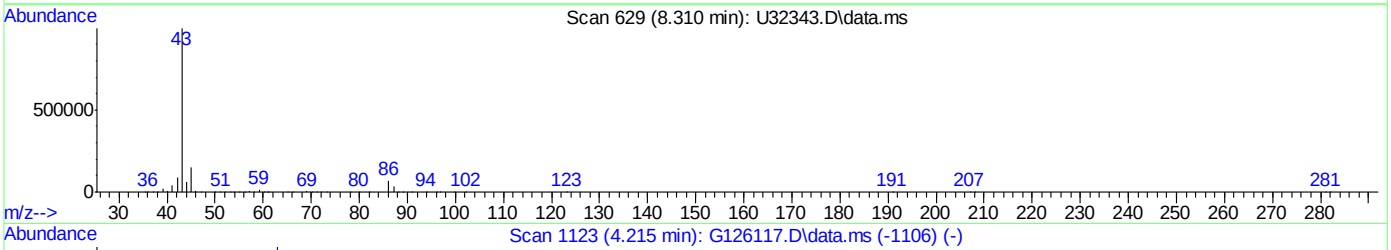
Ion	Exp%	Act%
43.00	100.00	100.00
86.00	6.40	2.61
0.00	0.00	0.00
0.00	0.00	0.00

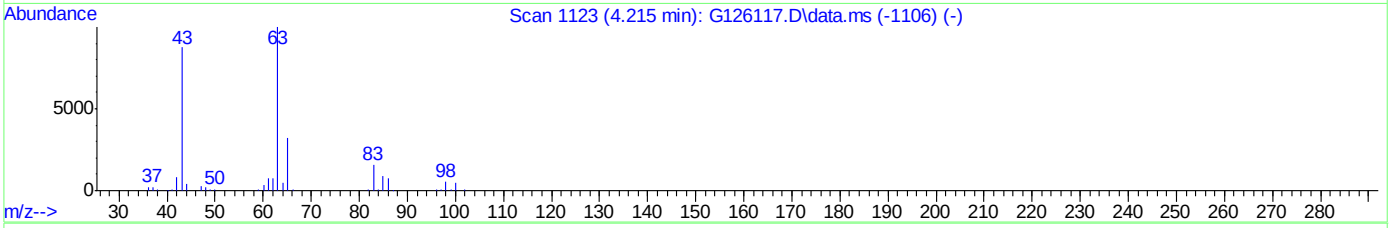
Quantitation Report (Qedit)

Data Path : R:\1\data\U150927\
Data File : U32343.D
Acq On : 27 Sep 2015 12:02 pm
Operator : andrewd1
Sample : cc1316-50
Misc : ms35292,msu1329,,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 27 12:26:29 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 10:56:47 2015
Response via : Initial Calibration







TIC: U32343.D\data.ms

(26) vinyl acetate (P)

8.310min (-0.000) 62.42 ppb m

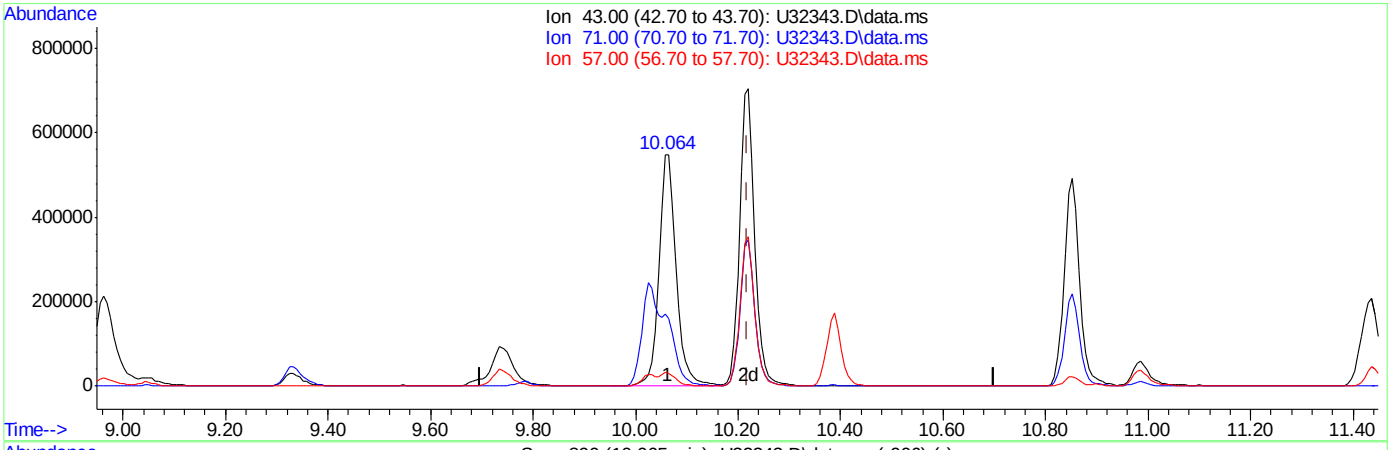
response 2011113

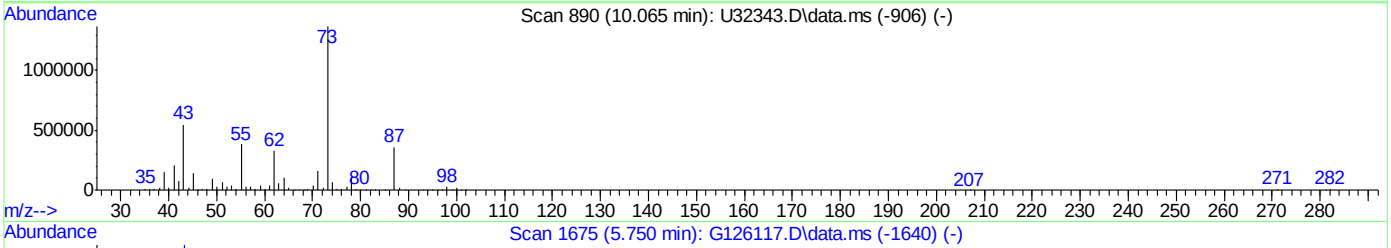
Ion	Exp%	Act%
43.00	100.00	100.00
86.00	6.40	6.91
0.00	0.00	0.00
0.00	0.00	0.00

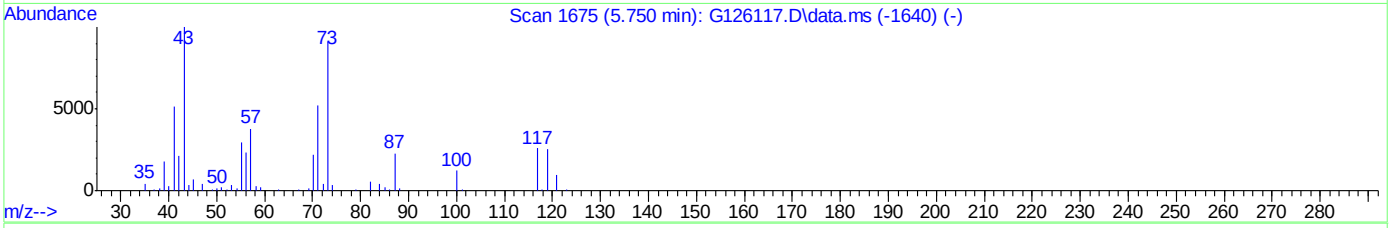
Quantitation Report (Qedit)

Data Path : R:\1\data\U150927\
Data File : U32343.D
Acq On : 27 Sep 2015 12:02 pm
Operator : andrewd1
Sample : cc1316-50
Misc : ms35292,msu1329,,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 27 12:26:29 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 10:56:47 2015
Response via : Initial Calibration







TIC: U32343.D\data.ms

(50) heptane (P)

10.064min (-0.155) 43.80 ppb

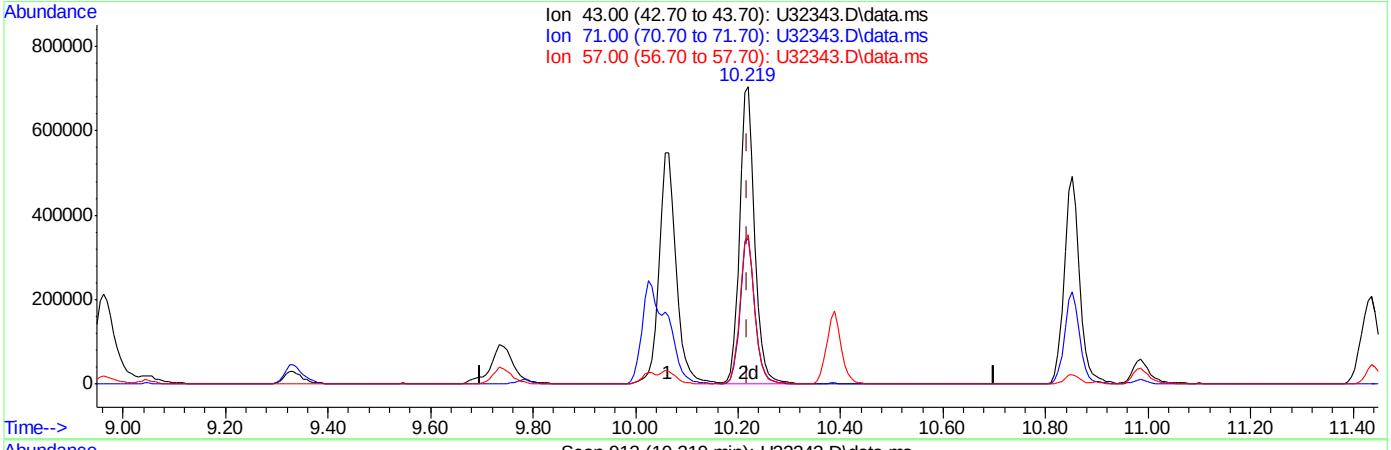
response 1304378

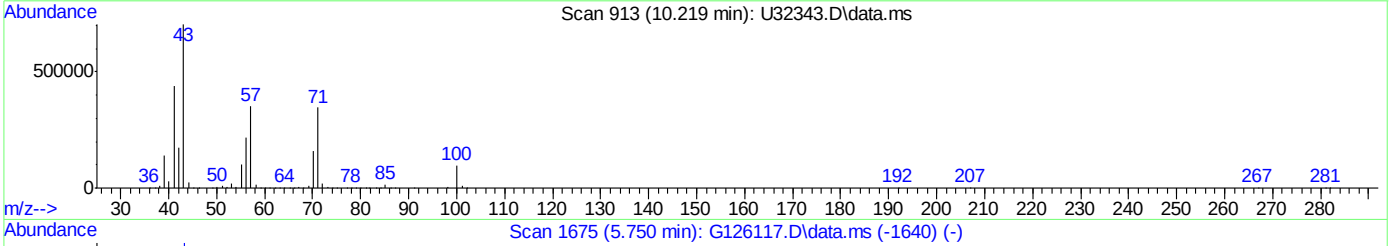
Ion	Exp%	Act%
43.00	100.00	100.00
71.00	26.10	29.21
57.00	5.80	5.53
0.00	0.00	0.00

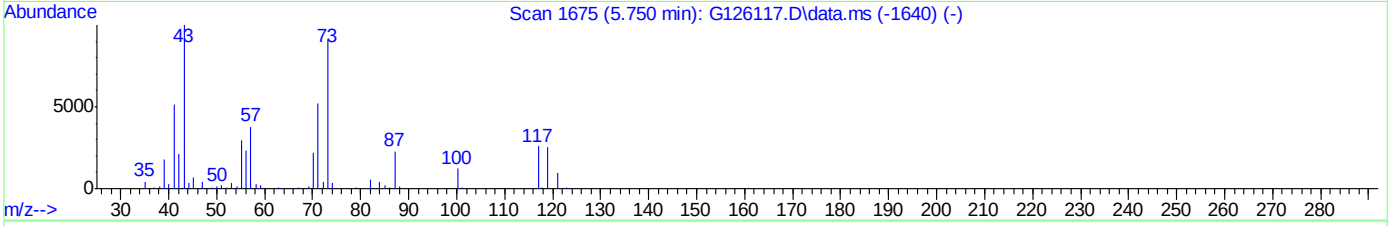
Quantitation Report (Qedit)

Data Path : R:\1\data\U150927\
Data File : U32343.D
Acq On : 27 Sep 2015 12:02 pm
Operator : andrewd1
Sample : cc1316-50
Misc : ms35292,msu1329,,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 27 12:26:29 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 10:56:47 2015
Response via : Initial Calibration







TIC: U32343.D\data.ms

(50) heptane (P)

10.219min (+ 0.000) 48.62 ppb m

response 1447823

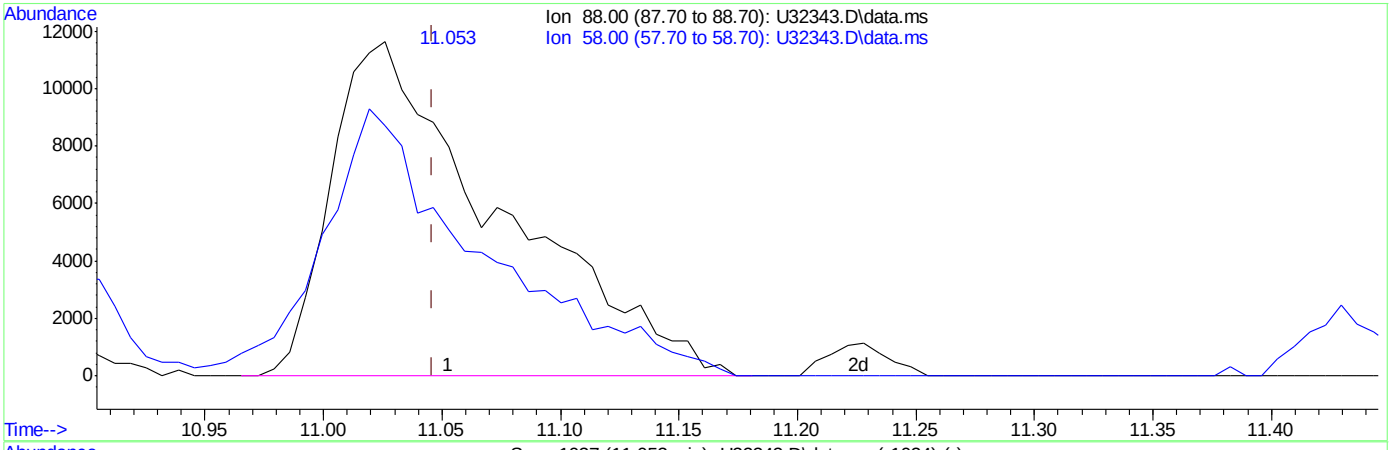
Ion	Exp%	Act%
43.00	100.00	100.00
71.00	26.10	49.26
57.00	5.80	50.19#
0.00	0.00	0.00

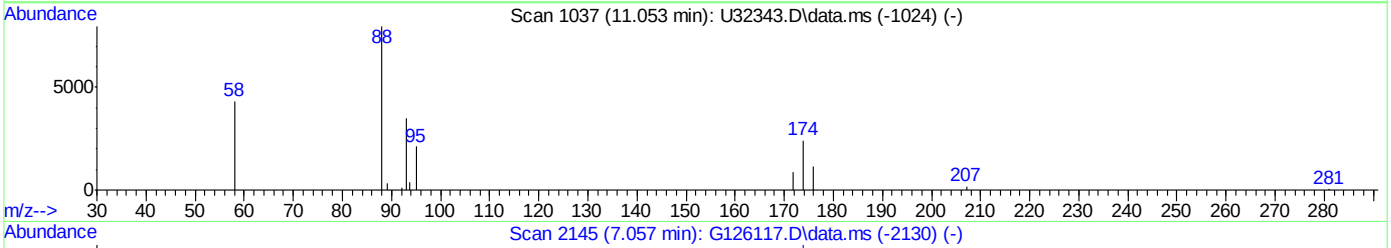
ACCUTEST LABORATORIES MC41544

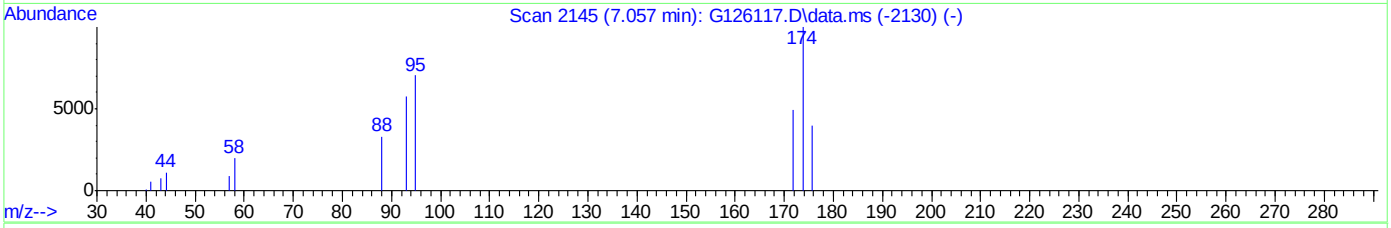
Quantitation Report (Qedit)

Data Path : R:\1\data\U150927\
Data File : U32343.D
Acq On : 27 Sep 2015 12:02 pm
Operator : andrewd1
Sample : cc1316-50
Misc : ms35292,msu1329,,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 27 12:26:29 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 10:56:47 2015
Response via : Initial Calibration







TIC: U32343.D\data.ms

(58) 1,4-dioxane (P)

11.053min (+ 0.007) 1030.02 ppb

response 57835

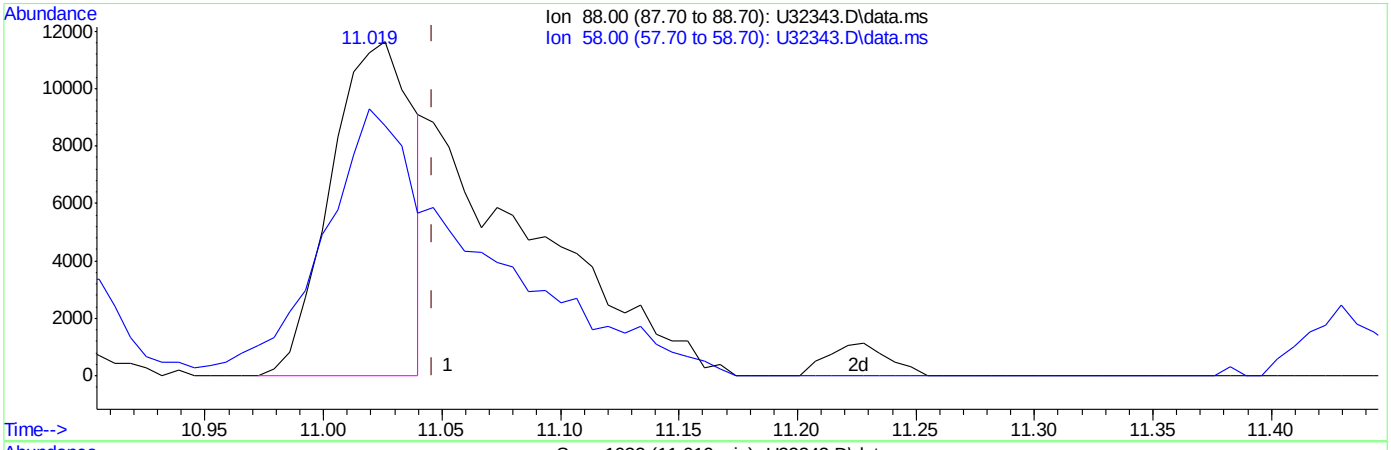
Ion	Exp%	Act%
88.00	100.00	100.00
58.00	109.20	63.86#
0.00	0.00	0.00
0.00	0.00	0.00

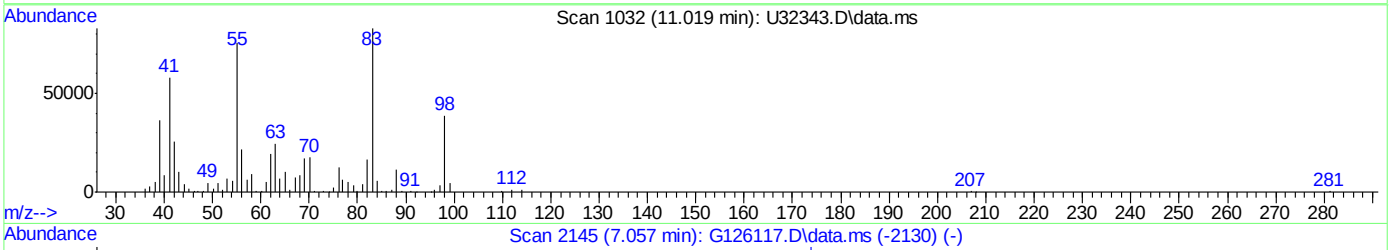
ACCUTEST LABORATORIES MC41544

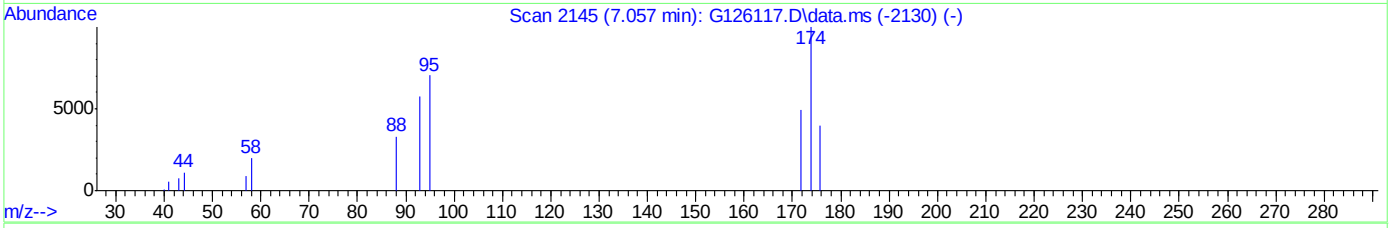
Quantitation Report (Qedit)

Data Path : R:\1\data\U150927\
Data File : U32343.D
Acq On : 27 Sep 2015 12:02 pm
Operator : andrewd1
Sample : cc1316-50
Misc : ms35292,msu1329,,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 27 12:26:29 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 18 10:56:47 2015
Response via : Initial Calibration







TIC: U32343.D\data.ms

(58) 1,4-dioxane (P)

11.019min (-0.027) 335.92 ppb m

response 28119

Ion	Exp%	Act%
88.00	100.00	100.00
58.00	109.20	82.73
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integrations
APPROVED
(compounds with "m" flag)
Sona Liskova
09/29/15 15:21

Quantitation Report (QT Reviewed)

Data File: R:\1\data\U150927\U32367.D
Sample : ecc1316-50
Misc : ms35302,msu1329,,,,5,1
ALS Vial : 26 Sample Multiplier: 1
Acq On : 27 Sep 2015 10:56 pm Operator: andrewd1

Quant Time: Sep 28 12:57:52 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	7.476	65	1333884	500.00	ppb		-0.05
4) pentafluorobenzene	9.496	168	2572464	50.00	ppb		0.00
43) 1,4-difluorobenzene	10.390	114	3809866	50.00	ppb		0.00
66) chlorobenzene-d5	13.597	82	1767285	50.00	ppb		0.00
80) 1,4-dichlorobenzene-d4	16.175	152	2480995	50.00	ppb		0.00
System Monitoring Compounds							
40) dibromofluoromethane (s)	9.561	113	1433192	52.53	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery	= 105.06%			
60) toluene-d8 (s)	11.995	98	4135759	50.40	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery	= 100.80%			
82) bromofluorobenzene (s)	14.876	95	1661172	46.64	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery	= 93.28%			
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.570	59	1361626	590.138	ppb		98
5) dichlorodifluoromethane	4.370	85	1664088	57.084	ppb		96
6) chloromethane	4.737	50	1396310	40.333	ppb		99
7) vinyl chloride	4.995	62	1455256	49.749	ppb		100
8) bromomethane	5.596	96	916345	51.729	ppb		96
9) chloroethane	5.749	64	716665	44.320	ppb		98
10) ethyl ether	6.512	59	880954	41.997	ppb		90
11) acetonitrile	7.366	41	1847707	40.869	ppb	#	14
12) trichlorofluoromethane	6.164	101	1959067	48.795	ppb		99
13) freon-113	6.898	101	1484476	51.630	ppb		91
15) 1,1-dichloroethene	6.908	96	1102464	45.200	ppb		90
16) acetone	6.936	58	132735	37.487	ppb	#	76
17) Methyl Acetate	6.933	43	473027	45.998	ppb	#	73
18) methylene chloride	7.531	84	1256708	46.299	ppb		84
19) methyl tert butyl ether	7.834	73	3259159	49.721	ppb		94
20) acrylonitrile	7.802	53	552196	44.491	ppb		89
21) allyl chloride	7.366	41	1860985	39.369	ppb		83
22) trans-1,2-dichloroethene	7.881	96	1179088	50.468	ppb		84
23) iodomethane	7.156	142	2360882	48.010	ppb		97
24) carbon disulfide	7.305	76	4427646	43.952	ppb		99
25) propionitrile	8.485	54	87385	45.567	ppb		100
26) vinyl acetate	8.310	43	1946639m	57.921	ppb		
27) chloroprene	8.485	53	1958713	46.569	ppb		94
28) di-isopropyl ether	8.346	45	3848307	45.263	ppb		93
29) methacrylonitrile	9.226	41	749209	46.159	ppb		95
30) 2-butanone	8.985	72	138683	43.075	ppb	#	1
31) Ethyl Acetate	8.176	43	934615	40.552	ppb	#	1
32) Hexane	8.176	41	1102566	41.948	ppb	#	69
33) 1,1-dichloroethane	8.400	63	2223292	45.757	ppb		96
34) tert-butyl ethyl ether	8.765	59	3733295	47.311	ppb		91
35) isobutyl alcohol	8.764	43	410584	240.680	ppb	#	60
36) 2,2-dichloropropane	9.080	77	1634808	48.008	ppb		95
37) cis-1,2-dichloroethene	9.039	96	1344272	51.575	ppb		90
38) bromochloromethane	9.320	128	716055	50.980	ppb	#	68
39) chloroform	9.380	83	2296847	50.857	ppb		98
41) Tetrahydrofuran	9.341	42	389713	43.450	ppb		98
42) 1,1,1-trichloroethane	9.639	97	2064225	53.203	ppb		98
44) Cyclohexane	9.746	56	2273599	45.982	ppb	#	87
45) carbon tetrachloride	9.821	117	1739689	56.470	ppb		98
46) 1,1-dichloropropene	9.786	75	1538147	48.929	ppb		95
47) benzene	10.026	78	4198658	49.098	ppb		98
48) 1,2-dichloroethane	10.049	62	1751040	52.314	ppb		99
49) tert-amyl methyl ether	10.066	73	3374193	49.040	ppb		97
50) heptane	10.219	43	1360342m	43.995	ppb		
51) trichloroethene	10.694	95	1194246	48.415	ppb		80
52) 1,2-dichloropropane	10.984	63	1049788	47.633	ppb		99

Quantitation Report (QT Reviewed)

Data File: R:\1\data\U150927\U32367.D
Sample : ecc1316-50
Misc : ms35302,msu1329,,,,5,1
ALS Vial : 26 Sample Multiplier: 1
Acq On : 27 Sep 2015 10:56 pm Operator: andrewd1

Quant Time: Sep 28 12:57:52 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
53)	dibromomethane	11.094	93	738565	52.362	ppb		89
54)	bromodichloromethane	11.228	83	1515625	52.132	ppb		95
55)	Methylcyclohexane	10.988	83	1967890	49.002	ppb		88
56)	2-chloroethyl vinyl ether	11.441	63	374416	39.050	ppb		91
57)	methyl methacrylate	10.903	69	505925	45.871	ppb		87
58)	1,4-dioxane	11.026	88	21526m	235.096	ppb		
59)	cis-1,3-dichloropropene	11.678	75	1450965	47.907	ppb		93
61)	4-methyl-2-pentanone	11.762	43	1137037	47.903	ppb		97
62)	toluene	12.072	92	2298530	49.803	ppb		99
63)	trans-1,3-dichloropropene	12.251	75	1152659	48.111	ppb		98
64)	1,1,2-trichloroethane	12.492	83	671306	49.186	ppb		98
65)	ethyl methacrylate	12.216	69	965163	45.621	ppb		88
67)	tetrachloroethene	12.647	166	1163209	55.824	ppb		97
68)	1,3-dichloropropane	12.684	76	1207552	47.644	ppb		94
69)	dibromochloromethane	12.953	129	1007447	53.398	ppb		97
70)	1,2-dibromoethane	13.130	107	838573	51.416	ppb		97
71)	2-hexanone	12.640	43	617575m	44.473	ppb		
72)	chlorobenzene	13.633	112	2719159	51.424	ppb		93
73)	1,1,1,2-tetrachloroethane	13.699	131	1309562	57.574	ppb		98
74)	ethylbenzene	13.688	91	4694323	53.462	ppb		96
75)	m,p-xylene	13.817	106	3761270	106.752	ppb		90
76)	o-xylene	14.260	106	2223537	54.626	ppb		93
77)	styrene	14.274	104	2996498	50.923	ppb		92
78)	bromoform	14.546	173	667869	50.644	ppb		98
79)	trans-1,4-dichloro-2-b...	14.679	53	188118	21.640	ppb	#	1
81)	isopropylbenzene	14.641	105	6061509	51.151	ppb		97
83)	bromobenzene	15.087	156	1486930	49.989	ppb		87
84)	1,1,2,2-tetrachloroethane	14.948	83	1345182	53.726	ppb		100
85)	1,2,3-trichloropropane	15.059	75	1281609	47.540	ppb		63
86)	n-propylbenzene	15.102	91	6646525	49.276	ppb		94
87)	2-chlorotoluene	15.261	91	4778157	51.080	ppb		96
88)	4-chlorotoluene	15.384	91	3928601	49.355	ppb		93
89)	1,3,5-trimethylbenzene	15.272	105	5668539	53.289	ppb		96
90)	tert-butylbenzene	15.654	91	3364419	55.363	ppb		95
91)	1,2,4-trimethylbenzene	15.709	105	5940231	52.039	ppb		98
92)	sec-butylbenzene	15.897	105	7505710	53.848	ppb		94
93)	1,3-dichlorobenzene	16.098	146	3356408	51.551	ppb		98
94)	p-isopropyltoluene	16.040	119	6595311	53.355	ppb		96
95)	1,4-dichlorobenzene	16.204	146	3424666	51.517	ppb		99
96)	1,2-dichlorobenzene	16.618	146	3889112	58.926	ppb		97
97)	n-butylbenzene	16.495	91	6249302	50.810	ppb		94
98)	1,2-dibromo-3-chloropr...	17.462	75	391202	49.417	ppb		95
99)	1,3,5-trichlorobenzene	17.658	180	4004755	55.885	ppb		96
100)	1,2,4-trichlorobenzene	18.371	180	3720021	56.701	ppb		93
101)	hexachlorobutadiene	18.485	225	1608474	59.613	ppb		99
102)	naphthalene	18.714	128	8234229	53.985	ppb		100
103)	2-Methylnaphthalene	20.111	142	2450111	28.428	ppb		97
104)	1-Methylnaphthalene	20.375	142	1862739	29.356	ppb		96
105)	1,2,3-trichlorobenzene	18.961	180	3391831	57.542	ppb		96

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

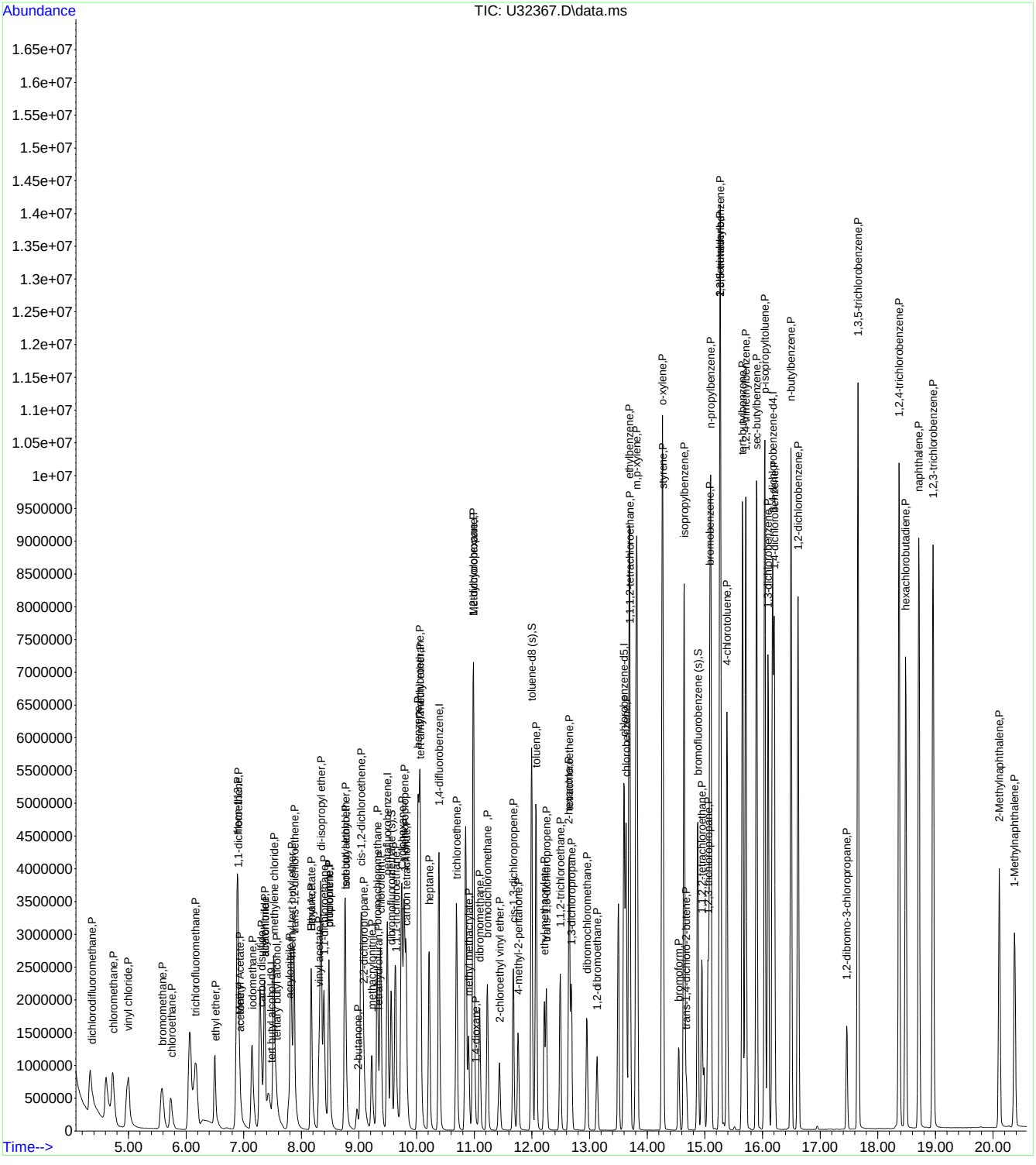
7.6.13

7

Quantitation Report (QT Reviewed)

Data File: R:\1\data\U150927\U32367.D
Sample : ecc1316-50
Misc : ms35302,msu1329,,,,5,1
ALS Vial : 26 Sample Multiplier: 1
Acq On : 27 Sep 2015 10:56 pm Operator: andrewd1

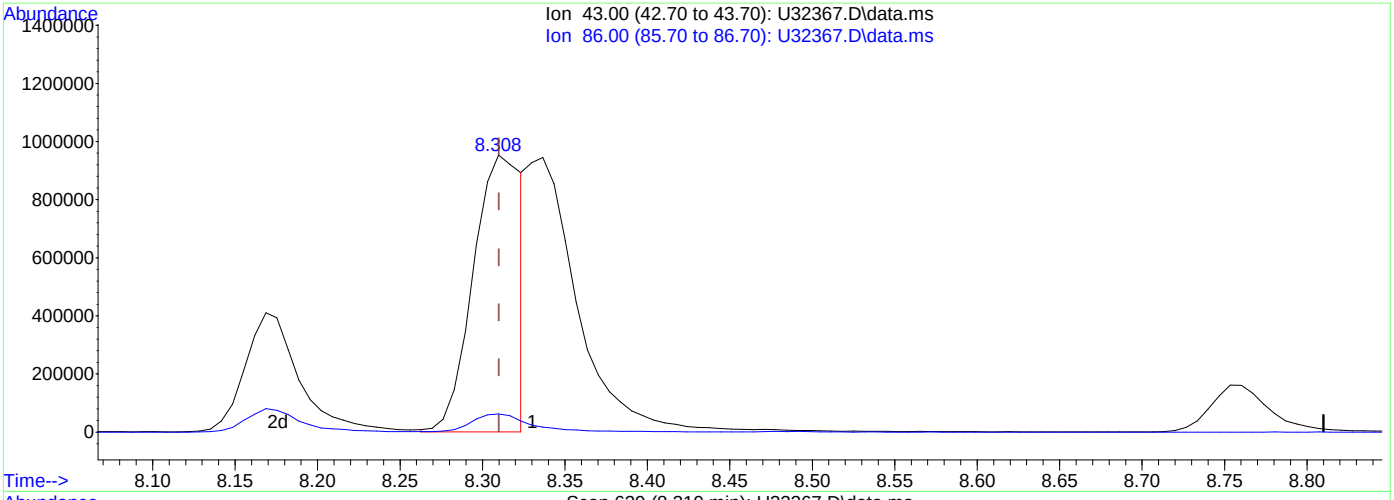
Quant Time: Sep 28 12:57:52 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260

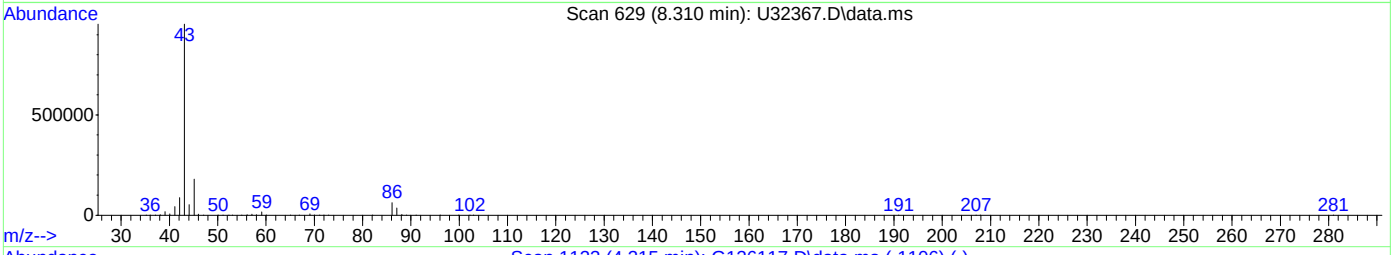


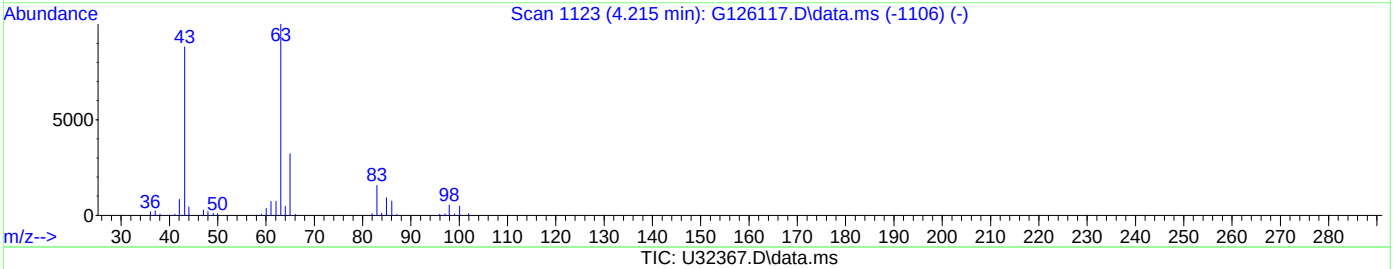
Quantitation Report (Qedit)

Data File: R:\1\data\U150927\U32367.D
Sample : ecc1316-50
Misc : ms35302,msu1329,,,,5,1
ALS Vial : 26 Sample Multiplier: 1
Acq On : 27 Sep 2015 10:56 pm Operator: andrewd1

Quant Time: Sep 28 12:56:46 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260







TIC: U32367.D\data.ms

(26) vinyl acetate (P)

8.310min (-0.000) 57.92 ppb m

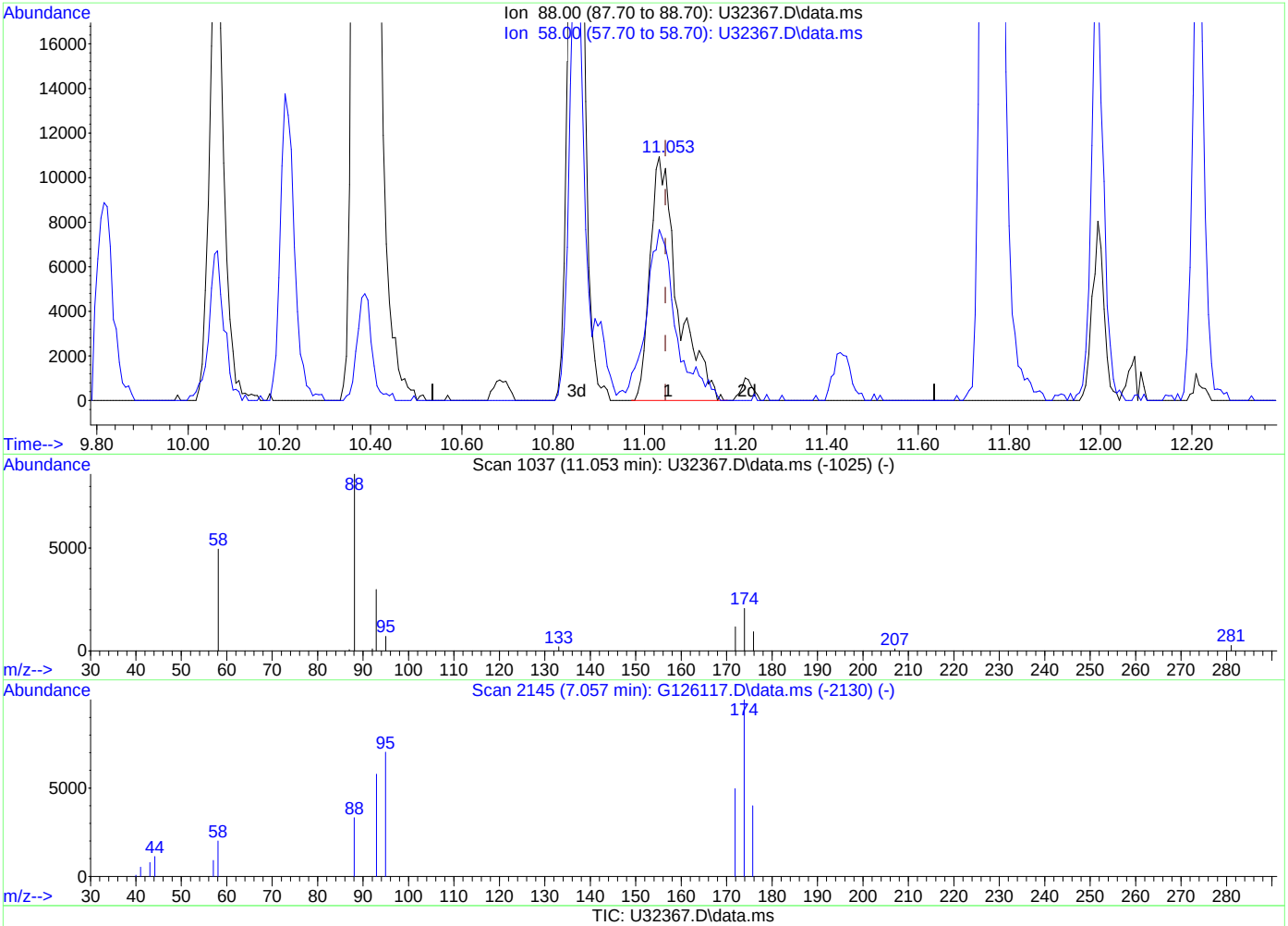
response 1946639

Ion	Exp%	Act%
43.00	100.00	100.00
86.00	6.40	6.55
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: R:\1\data\U150927\U32367.D
Sample : ecc1316-50
Misc : ms35302,msu1329,,,,5,1
ALS Vial : 26 Sample Multiplier: 1
Acq On : 27 Sep 2015 10:56 pm Operator: andrewd1

Quant Time: Sep 28 12:56:46 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260



(58) 1,4-dioxane (P)

11.053min (+ 0.007) 611.82 ppb

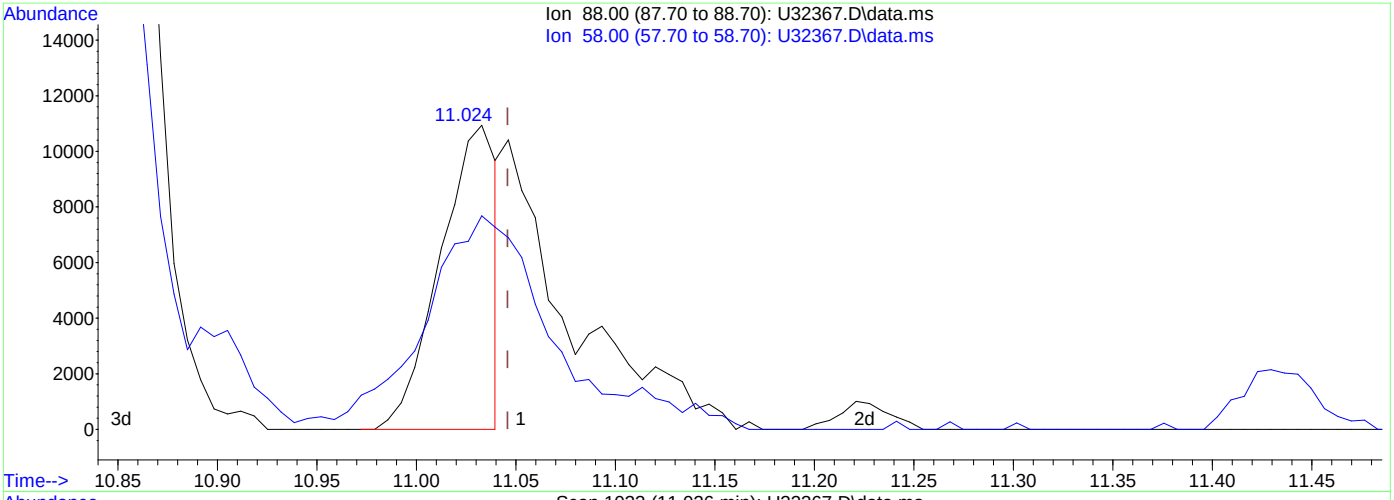
response 46052

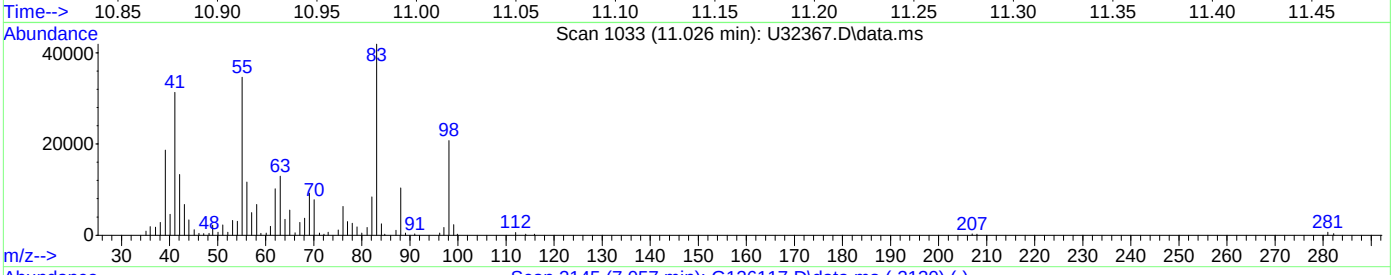
Ion	Exp%	Act%
88.00	100.00	100.00
58.00	109.20	71.95#
0.00	0.00	0.00
0.00	0.00	0.00

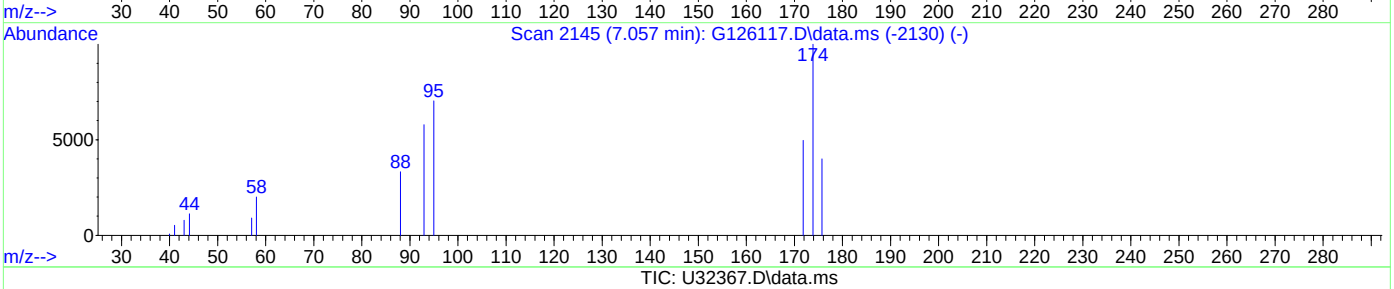
Quantitation Report (Qedit)

Data File: R:\1\data\U150927\U32367.D
Sample : ecc1316-50
Misc : ms35302,msu1329,,,,5,1
ALS Vial : 26 Sample Multiplier: 1
Acq On : 27 Sep 2015 10:56 pm Operator: andrewd1

Quant Time: Sep 28 12:56:46 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260







TIC: U32367.D\data.ms

(58) 1,4-dioxane (P)

11.026min (-0.020) 235.10 ppb m

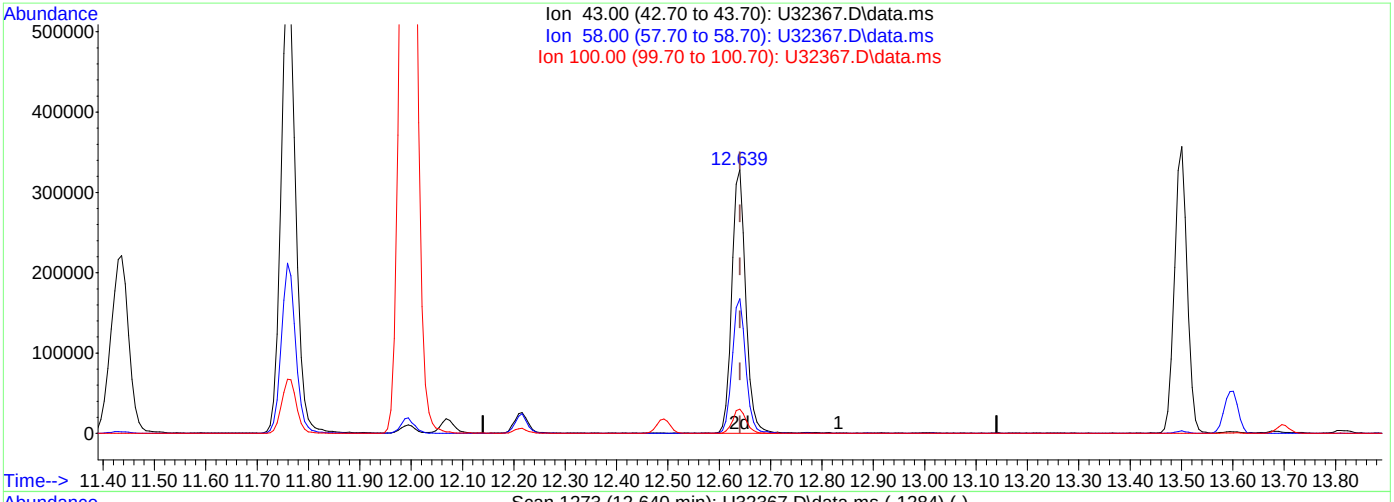
response 21526

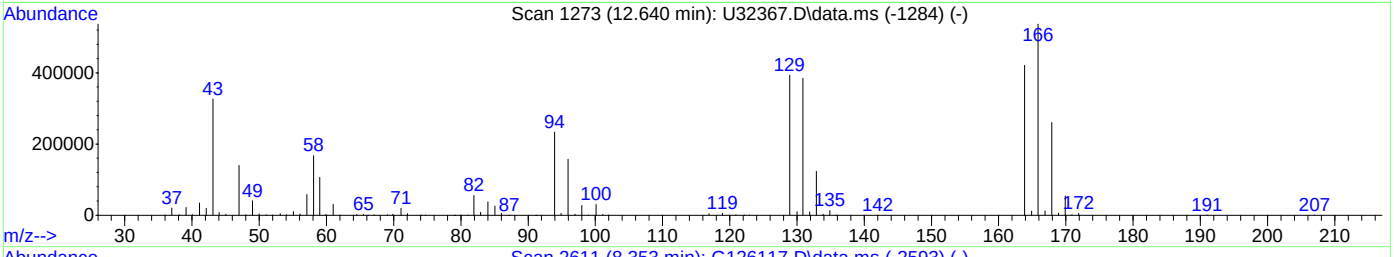
Ion	Exp%	Act%
88.00	100.00	100.00
58.00	109.20	65.18#
0.00	0.00	0.00
0.00	0.00	0.00

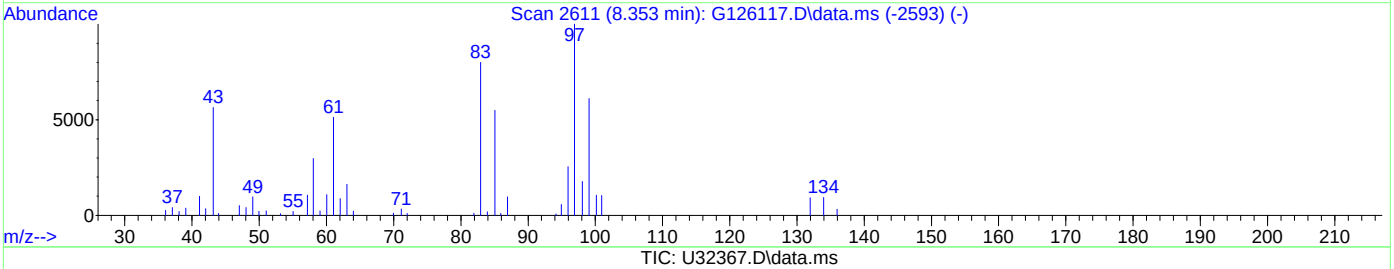
Quantitation Report (Qedit)

Data File: R:\1\data\U150927\U32367.D
Sample : ecc1316-50
Misc : ms35302,msu1329,,,,5,1
ALS Vial : 26 Sample Multiplier: 1
Acq On : 27 Sep 2015 10:56 pm Operator: andrewd1

Quant Time: Sep 28 12:56:46 2015
Quant Method : R:\1\methods\U150917.m
Quant Title : SW-846 Method 8260







TIC: U32367.D\data.ms

(71) 2-hexanone (P)

12.640min (-0.000) 44.47 ppb m

response 617575

Ion	Exp%	Act%
43.00	100.00	100.00
58.00	16.30	51.00#
100.00	0.00	9.22
0.00	0.00	0.00

Accutest Laboratories of New England, Inc. **Instrument: GCMS U**

VOLATILE ORGANICS BY GC/MS ANALYSIS LOG

Standards Data

Lot #	Description	Conc
M510345	8260 cc	200 µg/mL
338	cc gas	
329	BS	
330	BS gas	
315	IS/SS	250 µg/mL

Daily Saved File

Tune file 1:	U31970
Tune file 2:	IJA
Initial Cal:	9/17/15
ID File:	U150917.M
ICAL Verified:	KH
Sequence verified:	KH

Date: 9/17/15

Batch ID: MSU1316

Analysts KP

Signature:

*Note: If sample matrix is soil – method SW846 5035 used for preparation. SW846 5030 is purge and trap method for soil and water

pH paper LOT# exp:

Data File	Sample ID	Bot No.	Work Group	Test	ALS #	*MTX	Samp Amt.	% Sol	Dil. Fact.	pH	Comments
U31969	blank	NA	NA	8260W	1	W	5mL	NA	1:1	NA	
70	↓	↓			2						(Bfb) ✓✓
✓71	IC1316-0.5	1,2			3						✓✓
✓72	-1				4						✓✓
✓73	-2				5						✓✓
✓74	-5				6						✓✓
✓75	-10				7						✓✓
✓76	-20				8						✓✓
✓77	-50				9						✓✓
✓78	-100				10						✓✓
79	-200				11						✓✓
80	-400	↓			12						* Peaks Saturated
81	blank	NA			13						
82	↓	↓			14						
83	CV1316-50	3,2			15						✓✓ (2-CVE)
84	↓	↓			16						
85	blank	NA			17						
86	↓	↓			18						

KH 9/18/15

MTX = Matrix: Designate W for water, S for soil, O for oil.
Sample amount is reported in grams (wet) for soil and oil, mls for water.

MS001-06 Date: 11/20/14

Review:

Accutest Laboratories of New England, Inc.

Instrument: GCMS U

VOLATILE ORGANICS BY GC/MS ANALYSIS LOG

Standards Data

Lot #	Description	Conc
MS10345	8260 cc	200µg/mL
338	cc gas	
329	BS	
330	BS gas	
315	IS/SS	250µg/mL

Daily Saved File

Tune file 1:	U31984
Tune file 2:	N/A
Initial Cal:	9/17/15
ID File:	U150917.M
ICAL Verified:	KH
Sequence verified:	AD

Date: 9/18/15

Batch ID: MSU1317

Analysts CB

Signature: CB

*Note: If sample matrix is soil – method SW846 5035 used for preparation. SW846 5030 is purge and trap method for soil and water

Data File	Sample ID	Bot No.	Work Group	Test	ALS #	*MTX	Samp Amt.	% Sol	Dil. Fact.	pH (pH paper LOT# exp:)	Comments
U31987	Blank	N/A	~~8~~ N/A	8260	1	N/A	5mL	N/A	1:1	N/A	
988	cc1316-50	1,2			2						
989	BS (CCV 1316-50)	2,2			3						*use as ICV* (KH) b/b/cc
990	BSD				4						
991	blk				5						
992	blk				6						
993	mb				7						
994	MC41337-4	2	MS35195 245	NHF	8	GW				LC	
995	-3	1			9						
996	-1	1			10						
997	-5	1			1						
998	-2	1			2		250µL	~~250µL~~	1:20		
999	MC41366-1	2		STD	3	SW	5mL		1:1		
U32000	-2	2			4						
001	-3	1			5						
002	-4	4			6						
003	-5	2			7						
004	-6	1			8	GW					
005	-7	2			9						
006	-9	2			10						
007	-10	1			11						
008	-11	1			12						
009	-12	1			13						
010	-13	1			14						OCL pH 1:1 ACE
011	MC41366-4MS	5,6,3		STD	15	SW			1:1		
012	-4MSD				16						
013	cc ~~41337-9~~ 1316	1/2	N/A	8260	17	N/A	5mL		1:1	N/A	

MTX = Matrix: Designate W for water, S for soil, O for oil.
Sample amount is reported in grams (wet) for soil and oil, mls for water.

MS001-06 Date: 11/20/14

Review:

Instrument Run Log MSU1317 page 1 of 1

Accutest Laboratories of New England, Inc. **Instrument: GCMS U**

VOLATILE ORGANICS BY GC/MS ANALYSIS LOG

Standards Data

Lot #	Description	Conc
MS10348	8260 cc	200ug/mL
338	cc gas	
329	bs	
330	bs gas	
315	IS/SS	250ug/mL

Daily Saved File

Tune file 1:	u32343
Tune file 2:	N/A
Initial Cal:	9/17/15
ID File:	u150917.M
ICAL Verified:	KH
Sequence verified:	LB

Date: 9-27-15

Batch ID: MS41329

Analysts KH

Signature: [signature]

*Note: If sample matrix is soil – method SW846 5035 used for preparation. SW846 5030 is purge and trap method for soil and water

pH paper LOT# exp:

Data File	Sample ID	Bot No.	Work Group	*Test	ALS #	*MTX	Samp Amt.	% Sol	Dil. Fact.	pH	Comments
u32342	iblk	N/A	N/A	8260	1	N/A	5mL	N/A	1:1		✓
343	cc1316-50	1,2			2						✓
344	bs	3,1			3						✓
345	bsl 13650				4						✓
346	~~MC41432~~ 9-27-15	1,2			5						RLV-2LV
347	~~MB~~ 9-29-15 iblk	N/A			6						
348	MB				7						✓✓
349	MC41432-1	1	MS35302	STD	8	WB				L2	✓✓
350	MC41432-3	1		STD	9						✓✓
351	MC41432-2	1			10	WB					✓✓
352	MC41470-1	5		SL	11	LW					RR NO ACROLEIN ✓
353	MC41471-1	4		SL	12						RR NO ACROLEIN ✓
354	-2	4			13						LV/RV
355	MC41432-2	1		STD	14						✓✓
356	-3	1			15						✓✓
357	-5	2			16						✓✓
358	-6	2			17						✓✓
359	MC41498-27	21			18						RR 1:10 ocae
360	-26	7			19						RR 1:10 ocae
361	-29	6			20						RR 1:1 CO?
362	-30	7			21						✓✓
363	MC41544-1	1			22						✓✓
364	MC41432-1	1			23		2.5mL		1:2		foamy ✓✓
365	MC41432-4	14,15,16			24		5mL		1:1		✓✓
366	-4 MSD	14,15,16			25						✓✓
367	cc1316-50	1,2	N/A	N/A	26	N/A					✓✓
368	iblk	N/A			27						
369	MC41477-2	2	MS35302	STD	28	WW				L2	✓✓
370	-8	1			29						✓✓
371	-9	1			30						✓✓
372-375	iblk	N/A			31-34	N/A					

MST (28)

MSH (28)

MTX = Matrix: Designate **W** for water, **S** for soil, **O** for oil.

Sample amount is reported in grams (wet) for soil and oil, mls for water.

MS001-06 Date: 11/20/14 **Review:**_____

ACCUTEST LABORATORIES MC41544

New England ACCUTEST LABORATORIES

09/24/15

Technical Report for

EA Engineering

SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

RB577

Accutest Job Number: MC41356

Sampling Date: 09/08/15

Report to:

EA Engineering
6712 Brooklawn Parkway Suite 104
Syracuse, NY 13211
tlamond@eaest.com; hwilliams@eaest.com;
fdesantis@eaest.com
ATTN: Tara Lamond

Total number of pages in report: **487**

NELAP ACCREDITED TNI LABORATORY

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Reza Tand
Lab Director

Client Service contact: Frank DAgostino 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO MN (11546AA) NC (653) IL (002337) WI (399080220) DoD ELAP (L-A-B L2235)

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Accutest Laboratories

Sample Summary

EA Engineering

Job No: MC41356

SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Project No: RB577

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
MC41356-1	09/08/15	15:10	MCJU	09/10/15	AQ	Ground Water	E-MW-01
MC41356-2	09/08/15	14:40	MCJU	09/10/15	AQ	Surface Water	D-SW-5
MC41356-2D	09/08/15	14:40	MCJU	09/10/15	AQ	Water Dup/MSD	D-SW-5
MC41356-2S	09/08/15	14:40	MCJU	09/10/15	AQ	Water Matrix Spike	D-SW-5
MC41356-3	09/08/15	14:15	MCJU	09/10/15	AQ	Surface Water	E-38SW-1
MC41356-4	09/08/15	14:00	MCJU	09/10/15	AQ	Surface Water	E-38SW-4
MC41356-5	09/08/15	00:00	MCJU	09/10/15	AQ	Surface Water	DUP-D090815SW
MC41356-6	09/08/15	00:00	MCJU	09/10/15	AQ	Trip Blank Water	TRIP BLANK
MC41356-7	09/08/15	15:40	MCJU	09/10/15	AQ	Field Blank Water	FIELD BLANK
MC41356-8	09/08/15	13:10	MCJU	09/10/15	AQ	Ground Water	12-H
MC41356-9	09/08/15	14:20	MCJU	09/10/15	AQ	Ground Water	WG11-1
MC41356-10	09/08/15	14:15	MCJU	09/10/15	AQ	Ground Water	WG11-2
MC41356-11	09/08/15	15:25	MCJU	09/10/15	AQ	Ground Water	E80-3

Accutest Laboratories

Sample Summary
(continued)

EA Engineering

Job No: MC41356

SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Project No: RB577

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
MC41356-12	09/08/15	15:20	MCJU	09/10/15	AQ	Ground Water	E82-2
MC41356-13	09/08/15	15:15	MCJU	09/10/15	AQ	Ground Water	E82-1
MC41356-14	09/08/15	13:30	MCJU	09/10/15	AQ	Ground Water	70-2
MC41356-15	09/08/15	13:35	MCJU	09/10/15	AQ	Ground Water	70-3
MC41356-16	09/08/15	13:40	MCJU	09/10/15	AQ	Ground Water	70-4
MC41356-17	09/08/15	13:20	MCJU	09/10/15	AQ	Ground Water	D12-1
MC41356-18	09/08/15	00:00	MCJU	09/10/15	AQ	Ground Water	DUP1 AREA E
MC41356-19	09/08/15	00:00	MCJU	09/10/15	AQ	Ground Water	DUP2 AREA E
MC41356-20	09/08/15	13:25	MCJU	09/10/15	AQ	Ground Water	D12-D
MC41356-20D	09/08/15	13:25	MCJU	09/10/15	AQ	Water Dup/MSD	D12-D
MC41356-20S	09/08/15	13:25	MCJU	09/10/15	AQ	Water Matrix Spike	D12-D
MC41356-21	09/08/15	14:00	MCJU	09/10/15	AQ	Ground Water	W63-1
MC41356-22	09/08/15	14:05	MCJU	09/10/15	AQ	Ground Water	W63-2

Accutest Laboratories

Sample Summary
(continued)

EA Engineering

Job No: MC41356

SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Project No: RB577

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
MC41356-23	09/08/15	14:10	MCJU	09/10/15	AQ	Ground Water	W63-3
MC41356-24	09/08/15	14:25	MCJU	09/10/15	AQ	Ground Water	95-3
MC41356-25	09/08/15	14:30	MCJU	09/10/15	AQ	Ground Water	MW-11
MC41356-26	09/08/15	14:35	MCJU	09/10/15	AQ	Ground Water	E-MW-02

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client:	EA Engineering	**Job No**	MC41356
Site:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ	**Report Date**	9/24/2015 11:19:08 AM

24 Sample(s), 1 Trip Blank(s) and 1 Field Blank(s) were collected on 09/08/2015 and were received at Accutest on 09/10/2015 properly preserved, at 0.5 Deg. C and intact. These Samples received an Accutest job number of MC41356. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260C

Matrix: AQ **Batch ID:** MSG5455

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC41356-2MS, MC41356-2MSD were used as the QC samples indicated.
- Initial calibration verification MSG5447-ICV5447 for dichlorodifluoromethane exceed 20% Difference. Reporting Limit Response verified by low-level standard.
- MC41356-1 through MC41356-15 for Naphthalene: Continuing Calibration outside of DOD acceptance criteria. Reporting Limit response verified by low-level standard.
- MC41356-1 through MC41356-15 for Dichlorodifluoromethane: Initial Calibration Confirmation outside of DOD acceptance criteria.Reporting Limit Response verified by low-level standard.
- Continuing calibration check standard MSG5455-CC5447 for naphthalene exceed 20% Difference. Reporting Limit response verified by low-level standard.
- MC41356-2MS/MSD for Styrene: Outside DoD control limits, but within in-house control limits.

Matrix: AQ **Batch ID:** MSG5457

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC41356-20MS, MC41356-20MSD were used as the QC samples indicated.
- MC41356-16 through MC41356-26 for Dichlorodifluoromethane: Initial Calibration Confirmation outside of DOD acceptance criteria.Reporting Limit Response verified by low-level standard.
- MC41356-16 through MC41356-26 for Naphthalene: Continuing Calibration outside of DOD acceptance criteria. Reporting Limit response verified by low-level standard.
- Continuing calibration check standard MSG5457-CC5447 for naphthalene exceed 20% Difference. Reporting Limit response verified by low-level standard.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety.The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(MC41356).

Summary of Hits

Job Number: MC41356
Account: EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Collected: 09/08/15

3

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
MC41356-1	**E-MW-01**					
Acetone		17.9	10	5.0	ug/l	SW846 8260C
1,1-Dichloroethane		0.73 J	1.0	0.50	ug/l	SW846 8260C
MC41356-2	**D-SW-5**					
No hits reported in this sample.						
MC41356-3	**E-38SW-1**					
No hits reported in this sample.						
MC41356-4	**E-38SW-4**					
No hits reported in this sample.						
MC41356-5	**DUP-D090815SW**					
No hits reported in this sample.						
MC41356-6	**TRIP BLANK**					
No hits reported in this sample.						
MC41356-7	**FIELD BLANK**					
No hits reported in this sample.						
MC41356-8	**12-H**					
Acetone		26.1	10	5.0	ug/l	SW846 8260C
cis-1,2-Dichloroethene		1.2	1.0	0.50	ug/l	SW846 8260C
Trichloroethene		11.3	1.0	0.50	ug/l	SW846 8260C
MC41356-9	**WG11-1**					
Acetone		19.2	10	5.0	ug/l	SW846 8260C
1,1-Dichloroethane		1.3	1.0	0.50	ug/l	SW846 8260C
cis-1,2-Dichloroethene		1.6	1.0	0.50	ug/l	SW846 8260C
Tetrachloroethene		13.4	1.0	0.50	ug/l	SW846 8260C
1,1,1-Trichloroethane		1.8	1.0	0.50	ug/l	SW846 8260C
Trichloroethene		4.6	1.0	0.50	ug/l	SW846 8260C

Summary of Hits

Job Number: MC41356
Account: EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Collected: 09/08/15

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
MC41356-10	**WG11-2**					
Acetone		23.2	10	5.0	ug/l	SW846 8260C
1,1-Dichloroethane		1.5	1.0	0.50	ug/l	SW846 8260C
cis-1,2-Dichloroethene		2.4	1.0	0.50	ug/l	SW846 8260C
Tetrachloroethene		7.7	1.0	0.50	ug/l	SW846 8260C
1,1,1-Trichloroethane		1.6	1.0	0.50	ug/l	SW846 8260C
Trichloroethene		8.2	1.0	0.50	ug/l	SW846 8260C
MC41356-11	**E80-3**					
Acetone		13.4	10	5.0	ug/l	SW846 8260C
1,1-Dichloroethane		9.4	1.0	0.50	ug/l	SW846 8260C
1,1-Dichloroethene		2.4	1.0	0.50	ug/l	SW846 8260C
MC41356-12	**E82-2**					
Acetone		18.0	10	5.0	ug/l	SW846 8260C
1,1-Dichloroethane		2.1	1.0	0.50	ug/l	SW846 8260C
MC41356-13	**E82-1**					
Acetone		16.6	10	5.0	ug/l	SW846 8260C
1,1-Dichloroethane		2.0	1.0	0.50	ug/l	SW846 8260C
1,1-Dichloroethene		16.3	1.0	0.50	ug/l	SW846 8260C
cis-1,2-Dichloroethene		25.6	1.0	0.50	ug/l	SW846 8260C
Trichloroethene		1.1	1.0	0.50	ug/l	SW846 8260C
MC41356-14	**70-2**					
Acetone		19.7	10	5.0	ug/l	SW846 8260C
MC41356-15	**70-3**					
Acetone		20.6	10	5.0	ug/l	SW846 8260C
1,1-Dichloroethane		2.2	1.0	0.50	ug/l	SW846 8260C
Vinyl chloride		2.6	1.0	0.50	ug/l	SW846 8260C
MC41356-16	**70-4**					
Acetone		90.5	50	25	ug/l	SW846 8260C
1,1-Dichloroethane		24.2	5.0	2.5	ug/l	SW846 8260C
1,1-Dichloroethene		6.4	5.0	2.5	ug/l	SW846 8260C
cis-1,2-Dichloroethene		13.5	5.0	2.5	ug/l	SW846 8260C
Vinyl chloride		14.3	5.0	2.5	ug/l	SW846 8260C

Summary of Hits

Job Number: MC41356
Account: EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Collected: 09/08/15

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
MC41356-17	**D12-1**					
Acetone		24.9	10	5.0	ug/l	SW846 8260C
Tetrachloroethene		1.9	1.0	0.50	ug/l	SW846 8260C
Trichloroethene		15.5	1.0	0.50	ug/l	SW846 8260C
MC41356-18	**DUP1 AREA E**					
Acetone		26.1	10	5.0	ug/l	SW846 8260C
Trichloroethene		9.2	1.0	0.50	ug/l	SW846 8260C
MC41356-19	**DUP2 AREA E**					
Acetone		19.6	10	5.0	ug/l	SW846 8260C
1,1-Dichloroethane		5.0	1.0	0.50	ug/l	SW846 8260C
1,1-Dichloroethene		1.3	1.0	0.50	ug/l	SW846 8260C
cis-1,2-Dichloroethene		2.8	1.0	0.50	ug/l	SW846 8260C
Vinyl chloride		2.9	1.0	0.50	ug/l	SW846 8260C
MC41356-20	**D12-D**					
Acetone		27.3	10	5.0	ug/l	SW846 8260C
Trichloroethene		9.7	1.0	0.50	ug/l	SW846 8260C
MC41356-21	**W63-1**					
Acetone		32.8	10	5.0	ug/l	SW846 8260C
1,1-Dichloroethane		1.9	1.0	0.50	ug/l	SW846 8260C
1,1,1-Trichloroethane		1.1	1.0	0.50	ug/l	SW846 8260C
MC41356-22	**W63-2**					
Acetone		18.9	10	5.0	ug/l	SW846 8260C
1,1-Dichloroethane		1.2	1.0	0.50	ug/l	SW846 8260C
1,1-Dichloroethene		6.1	1.0	0.50	ug/l	SW846 8260C
cis-1,2-Dichloroethene		15.9	1.0	0.50	ug/l	SW846 8260C
Tetrachloroethene		4.2	1.0	0.50	ug/l	SW846 8260C
1,1,1-Trichloroethane		4.0	1.0	0.50	ug/l	SW846 8260C
Trichloroethene		7.7	1.0	0.50	ug/l	SW846 8260C
Vinyl chloride		2.0	1.0	0.50	ug/l	SW846 8260C
MC41356-23	**W63-3**					
Acetone		20.6	10	5.0	ug/l	SW846 8260C

Summary of Hits

Job Number: MC41356
Account: EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Collected: 09/08/15

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
cis-1,2-Dichloroethene		1.6	1.0	0.50	ug/l	SW846 8260C
MC41356-24	**95-3**					
Acetone		20.6	10	5.0	ug/l	SW846 8260C
1,1-Dichloroethane		1.1	1.0	0.50	ug/l	SW846 8260C
Tetrachloroethene		4.1	1.0	0.50	ug/l	SW846 8260C
1,1,1-Trichloroethane		2.3	1.0	0.50	ug/l	SW846 8260C
MC41356-25	**MW-11**					
Acetone		22.6	10	5.0	ug/l	SW846 8260C
Trichloroethene		2.9	1.0	0.50	ug/l	SW846 8260C
MC41356-26	**E-MW-02**					
Acetone		20.5	10	5.0	ug/l	SW846 8260C
Chloroform		1.3	1.0	0.50	ug/l	SW846 8260C
Trichloroethene		1.5	1.0	0.50	ug/l	SW846 8260C

New England ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID:	E-MW-01		
Lab Sample ID:	MC41356-1	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G145658.D	1	09/18/15	AD	n/a	n/a	MSG5455
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	17.9	10	5.0	ug/l	
71-43-2	Benzene	0.50 U	0.50	0.50	ug/l	
108-86-1	Bromobenzene	1.0 U	5.0	1.0	ug/l	
74-97-5	Bromochloromethane	0.50 U	5.0	0.50	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	ug/l	
74-83-9	Bromomethane	1.0 U	2.0	1.0	ug/l	
78-93-3	2-Butanone (MEK)	5.0 U	10	5.0	ug/l	
104-51-8	n-Butylbenzene	1.0 U	5.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	1.0 U	5.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	0.50 U	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	0.50 U	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	ug/l	
75-00-3	Chloroethane	0.50 U	2.0	0.50	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	ug/l	
74-87-3	Chloromethane	1.0 U	2.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.0 U	5.0	1.0	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	1.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane [a]	1.0 U	2.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	0.73	1.0	0.50	ug/l	J
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	2.0	0.50	ug/l	

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	E-MW-01		
Lab Sample ID:	MC41356-1	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
142-28-9	1,3-Dichloropropane	1.0 U	5.0	1.0	ug/l	
594-20-7	2,2-Dichloropropane	2.0 U	5.0	2.0	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	5.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	5.0	1.0	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	ug/l	
74-88-4	Iodomethane	1.0 U	5.0	1.0	ug/l	
98-82-8	Isopropylbenzene	1.0 U	5.0	1.0	ug/l	
99-87-6	p-Isopropyltoluene	1.0 U	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	ug/l	
74-95-3	Methylene bromide	1.0 U	5.0	1.0	ug/l	
75-09-2	Methylene chloride	1.0 U	2.0	1.0	ug/l	
91-20-3	Naphthalene [b]	2.0 U	5.0	2.0	ug/l	
103-65-1	n-Propylbenzene	1.0 U	5.0	1.0	ug/l	
100-42-5	Styrene	0.50 U	5.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	0.50	0.50	ug/l	
127-18-4	Tetrachloroethene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	2.0 U	5.0	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	5.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-01-6	Trichloroethene	0.50 U	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	1.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	5.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-05-4	Vinyl Acetate	2.0 U	5.0	2.0	ug/l	
75-01-4	Vinyl chloride	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	1.0 U	1.0	1.0	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		79-127%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	E-MW-01		
Lab Sample ID:	MC41356-1	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	102%		80-116%
460-00-4	4-Bromofluorobenzene	106%		77-124%

(a) Initial Calibration Confirmation outside of DOD acceptance criteria.Reporting Limit Response verified by low-level standard.
(b) Continuing Calibration outside of DOD acceptance criteria. Reporting Limit response verified by low-level standard.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	D-SW-5		
Lab Sample ID:	MC41356-2	**Date Sampled:**	09/08/15
Matrix:	AQ - Surface Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G145659.D	1	09/18/15	AD	n/a	n/a	MSG5455
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	5.0 U	10	5.0	ug/l	
71-43-2	Benzene	0.50 U	0.50	0.50	ug/l	
108-86-1	Bromobenzene	1.0 U	5.0	1.0	ug/l	
74-97-5	Bromochloromethane	0.50 U	5.0	0.50	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	ug/l	
74-83-9	Bromomethane	1.0 U	2.0	1.0	ug/l	
78-93-3	2-Butanone (MEK)	5.0 U	10	5.0	ug/l	
104-51-8	n-Butylbenzene	1.0 U	5.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	1.0 U	5.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	0.50 U	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	0.50 U	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	ug/l	
75-00-3	Chloroethane	0.50 U	2.0	0.50	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	ug/l	
74-87-3	Chloromethane	1.0 U	2.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.0 U	5.0	1.0	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	1.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane [a]	1.0 U	2.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	0.50 U	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	2.0	0.50	ug/l	

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D-SW-5		
Lab Sample ID:	MC41356-2	**Date Sampled:**	09/08/15
Matrix:	AQ - Surface Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
142-28-9	1,3-Dichloropropane	1.0 U	5.0	1.0	ug/l	
594-20-7	2,2-Dichloropropane	2.0 U	5.0	2.0	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	5.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	5.0	1.0	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	ug/l	
74-88-4	Iodomethane	1.0 U	5.0	1.0	ug/l	
98-82-8	Isopropylbenzene	1.0 U	5.0	1.0	ug/l	
99-87-6	p-Isopropyltoluene	1.0 U	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	ug/l	
74-95-3	Methylene bromide	1.0 U	5.0	1.0	ug/l	
75-09-2	Methylene chloride	1.0 U	2.0	1.0	ug/l	
91-20-3	Naphthalene [b]	2.0 U	5.0	2.0	ug/l	
103-65-1	n-Propylbenzene	1.0 U	5.0	1.0	ug/l	
100-42-5	Styrene	0.50 U	5.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	0.50	0.50	ug/l	
127-18-4	Tetrachloroethene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	2.0 U	5.0	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	5.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-01-6	Trichloroethene	0.50 U	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	1.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	5.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-05-4	Vinyl Acetate	2.0 U	5.0	2.0	ug/l	
75-01-4	Vinyl chloride	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	1.0 U	1.0	1.0	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		79-127%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D-SW-5		
Lab Sample ID:	MC41356-2	**Date Sampled:**	09/08/15
Matrix:	AQ - Surface Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	101%		80-116%
460-00-4	4-Bromofluorobenzene	106%		77-124%

(a) Initial Calibration Confirmation outside of DOD acceptance criteria.Reporting Limit Response verified by low-level standard.
(b) Continuing Calibration outside of DOD acceptance criteria. Reporting Limit response verified by low-level standard.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	E-38SW-1		
Lab Sample ID:	MC41356-3	**Date Sampled:**	09/08/15
Matrix:	AQ - Surface Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G145660.D	1	09/18/15	AD	n/a	n/a	MSG5455
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	5.0 U	10	5.0	ug/l	
71-43-2	Benzene	0.50 U	0.50	0.50	ug/l	
108-86-1	Bromobenzene	1.0 U	5.0	1.0	ug/l	
74-97-5	Bromochloromethane	0.50 U	5.0	0.50	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	ug/l	
74-83-9	Bromomethane	1.0 U	2.0	1.0	ug/l	
78-93-3	2-Butanone (MEK)	5.0 U	10	5.0	ug/l	
104-51-8	n-Butylbenzene	1.0 U	5.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	1.0 U	5.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	0.50 U	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	0.50 U	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	ug/l	
75-00-3	Chloroethane	0.50 U	2.0	0.50	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	ug/l	
74-87-3	Chloromethane	1.0 U	2.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.0 U	5.0	1.0	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	1.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane [a]	1.0 U	2.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	0.50 U	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	2.0	0.50	ug/l	

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	E-38SW-1		
Lab Sample ID:	MC41356-3	**Date Sampled:**	09/08/15
Matrix:	AQ - Surface Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
142-28-9	1,3-Dichloropropane	1.0 U	5.0	1.0	ug/l	
594-20-7	2,2-Dichloropropane	2.0 U	5.0	2.0	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	5.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	5.0	1.0	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	ug/l	
74-88-4	Iodomethane	1.0 U	5.0	1.0	ug/l	
98-82-8	Isopropylbenzene	1.0 U	5.0	1.0	ug/l	
99-87-6	p-Isopropyltoluene	1.0 U	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	ug/l	
74-95-3	Methylene bromide	1.0 U	5.0	1.0	ug/l	
75-09-2	Methylene chloride	1.0 U	2.0	1.0	ug/l	
91-20-3	Naphthalene [b]	2.0 U	5.0	2.0	ug/l	
103-65-1	n-Propylbenzene	1.0 U	5.0	1.0	ug/l	
100-42-5	Styrene	0.50 U	5.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	0.50	0.50	ug/l	
127-18-4	Tetrachloroethene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	2.0 U	5.0	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	5.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-01-6	Trichloroethene	0.50 U	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	1.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	5.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-05-4	Vinyl Acetate	2.0 U	5.0	2.0	ug/l	
75-01-4	Vinyl chloride	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	1.0 U	1.0	1.0	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		79-127%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	E-38SW-1		
Lab Sample ID:	MC41356-3	**Date Sampled:**	09/08/15
Matrix:	AQ - Surface Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	100%		80-116%
460-00-4	4-Bromofluorobenzene	106%		77-124%

(a) Initial Calibration Confirmation outside of DOD acceptance criteria.Reporting Limit Response verified by low-level standard.
(b) Continuing Calibration outside of DOD acceptance criteria. Reporting Limit response verified by low-level standard.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	E-38SW-4		
Lab Sample ID:	MC41356-4	**Date Sampled:**	09/08/15
Matrix:	AQ - Surface Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G145661.D	1	09/18/15	AD	n/a	n/a	MSG5455
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	5.0 U	10	5.0	ug/l	
71-43-2	Benzene	0.50 U	0.50	0.50	ug/l	
108-86-1	Bromobenzene	1.0 U	5.0	1.0	ug/l	
74-97-5	Bromochloromethane	0.50 U	5.0	0.50	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	ug/l	
74-83-9	Bromomethane	1.0 U	2.0	1.0	ug/l	
78-93-3	2-Butanone (MEK)	5.0 U	10	5.0	ug/l	
104-51-8	n-Butylbenzene	1.0 U	5.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	1.0 U	5.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	0.50 U	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	0.50 U	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	ug/l	
75-00-3	Chloroethane	0.50 U	2.0	0.50	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	ug/l	
74-87-3	Chloromethane	1.0 U	2.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.0 U	5.0	1.0	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	1.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane [a]	1.0 U	2.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	0.50 U	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	2.0	0.50	ug/l	

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	E-38SW-4		
Lab Sample ID:	MC41356-4	**Date Sampled:**	09/08/15
Matrix:	AQ - Surface Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
142-28-9	1,3-Dichloropropane	1.0 U	5.0	1.0	ug/l	
594-20-7	2,2-Dichloropropane	2.0 U	5.0	2.0	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	5.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	5.0	1.0	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	ug/l	
74-88-4	Iodomethane	1.0 U	5.0	1.0	ug/l	
98-82-8	Isopropylbenzene	1.0 U	5.0	1.0	ug/l	
99-87-6	p-Isopropyltoluene	1.0 U	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	ug/l	
74-95-3	Methylene bromide	1.0 U	5.0	1.0	ug/l	
75-09-2	Methylene chloride	1.0 U	2.0	1.0	ug/l	
91-20-3	Naphthalene [b]	2.0 U	5.0	2.0	ug/l	
103-65-1	n-Propylbenzene	1.0 U	5.0	1.0	ug/l	
100-42-5	Styrene	0.50 U	5.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	0.50	0.50	ug/l	
127-18-4	Tetrachloroethene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	2.0 U	5.0	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	5.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-01-6	Trichloroethene	0.50 U	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	1.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	5.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-05-4	Vinyl Acetate	2.0 U	5.0	2.0	ug/l	
75-01-4	Vinyl chloride	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	1.0 U	1.0	1.0	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		79-127%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	E-38SW-4		
Lab Sample ID:	MC41356-4	**Date Sampled:**	09/08/15
Matrix:	AQ - Surface Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	99%		80-116%
460-00-4	4-Bromofluorobenzene	108%		77-124%

(a) Initial Calibration Confirmation outside of DOD acceptance criteria.Reporting Limit Response verified by low-level standard.
(b) Continuing Calibration outside of DOD acceptance criteria. Reporting Limit response verified by low-level standard.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	DUP-D090815SW		
Lab Sample ID:	MC41356-5	**Date Sampled:**	09/08/15
Matrix:	AQ - Surface Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G145662.D	1	09/18/15	AD	n/a	n/a	MSG5455
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	5.0 U	10	5.0	ug/l	
71-43-2	Benzene	0.50 U	0.50	0.50	ug/l	
108-86-1	Bromobenzene	1.0 U	5.0	1.0	ug/l	
74-97-5	Bromochloromethane	0.50 U	5.0	0.50	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	ug/l	
74-83-9	Bromomethane	1.0 U	2.0	1.0	ug/l	
78-93-3	2-Butanone (MEK)	5.0 U	10	5.0	ug/l	
104-51-8	n-Butylbenzene	1.0 U	5.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	1.0 U	5.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	0.50 U	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	0.50 U	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	ug/l	
75-00-3	Chloroethane	0.50 U	2.0	0.50	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	ug/l	
74-87-3	Chloromethane	1.0 U	2.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.0 U	5.0	1.0	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	1.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane [a]	1.0 U	2.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	0.50 U	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	2.0	0.50	ug/l	

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-D090815SW		
Lab Sample ID:	MC41356-5	**Date Sampled:**	09/08/15
Matrix:	AQ - Surface Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
142-28-9	1,3-Dichloropropane	1.0 U	5.0	1.0	ug/l	
594-20-7	2,2-Dichloropropane	2.0 U	5.0	2.0	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	5.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	5.0	1.0	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	ug/l	
74-88-4	Iodomethane	1.0 U	5.0	1.0	ug/l	
98-82-8	Isopropylbenzene	1.0 U	5.0	1.0	ug/l	
99-87-6	p-Isopropyltoluene	1.0 U	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	ug/l	
74-95-3	Methylene bromide	1.0 U	5.0	1.0	ug/l	
75-09-2	Methylene chloride	1.0 U	2.0	1.0	ug/l	
91-20-3	Naphthalene [b]	2.0 U	5.0	2.0	ug/l	
103-65-1	n-Propylbenzene	1.0 U	5.0	1.0	ug/l	
100-42-5	Styrene	0.50 U	5.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	0.50	0.50	ug/l	
127-18-4	Tetrachloroethene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	2.0 U	5.0	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	5.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-01-6	Trichloroethene	0.50 U	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	1.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	5.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-05-4	Vinyl Acetate	2.0 U	5.0	2.0	ug/l	
75-01-4	Vinyl chloride	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	1.0 U	1.0	1.0	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		79-127%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-D090815SW		
Lab Sample ID:	MC41356-5	**Date Sampled:**	09/08/15
Matrix:	AQ - Surface Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	101%		80-116%
460-00-4	4-Bromofluorobenzene	108%		77-124%

(a) Initial Calibration Confirmation outside of DOD acceptance criteria.Reporting Limit Response verified by low-level standard.
(b) Continuing Calibration outside of DOD acceptance criteria. Reporting Limit response verified by low-level standard.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	MC41356-6	**Date Sampled:**	09/08/15
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G145653.D	1	09/18/15	AD	n/a	n/a	MSG5455
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	5.0 U	10	5.0	ug/l	
71-43-2	Benzene	0.50 U	0.50	0.50	ug/l	
108-86-1	Bromobenzene	1.0 U	5.0	1.0	ug/l	
74-97-5	Bromochloromethane	0.50 U	5.0	0.50	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	ug/l	
74-83-9	Bromomethane	1.0 U	2.0	1.0	ug/l	
78-93-3	2-Butanone (MEK)	5.0 U	10	5.0	ug/l	
104-51-8	n-Butylbenzene	1.0 U	5.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	1.0 U	5.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	0.50 U	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	0.50 U	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	ug/l	
75-00-3	Chloroethane	0.50 U	2.0	0.50	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	ug/l	
74-87-3	Chloromethane	1.0 U	2.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.0 U	5.0	1.0	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	1.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane [a]	1.0 U	2.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	0.50 U	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	2.0	0.50	ug/l	

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	MC41356-6	**Date Sampled:**	09/08/15
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
142-28-9	1,3-Dichloropropane	1.0 U	5.0	1.0	ug/l	
594-20-7	2,2-Dichloropropane	2.0 U	5.0	2.0	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	5.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	5.0	1.0	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	ug/l	
74-88-4	Iodomethane	1.0 U	5.0	1.0	ug/l	
98-82-8	Isopropylbenzene	1.0 U	5.0	1.0	ug/l	
99-87-6	p-Isopropyltoluene	1.0 U	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	ug/l	
74-95-3	Methylene bromide	1.0 U	5.0	1.0	ug/l	
75-09-2	Methylene chloride	1.0 U	2.0	1.0	ug/l	
91-20-3	Naphthalene [b]	2.0 U	5.0	2.0	ug/l	
103-65-1	n-Propylbenzene	1.0 U	5.0	1.0	ug/l	
100-42-5	Styrene	0.50 U	5.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	0.50	0.50	ug/l	
127-18-4	Tetrachloroethene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	2.0 U	5.0	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	5.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-01-6	Trichloroethene	0.50 U	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	1.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	5.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-05-4	Vinyl Acetate	2.0 U	5.0	2.0	ug/l	
75-01-4	Vinyl chloride	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	1.0 U	1.0	1.0	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		79-127%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	MC41356-6	**Date Sampled:**	09/08/15
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	103%		80-116%
460-00-4	4-Bromofluorobenzene	108%		77-124%

(a) Initial Calibration Confirmation outside of DOD acceptance criteria.Reporting Limit Response verified by low-level standard.
(b) Continuing Calibration outside of acceptance criteria. Reporting Limit response verified by low-level standard.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FIELD BLANK		
Lab Sample ID:	MC41356-7	**Date Sampled:**	09/08/15
Matrix:	AQ - Field Blank Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G145654.D	1	09/18/15	AD	n/a	n/a	MSG5455
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	5.0 U	10	5.0	ug/l	
71-43-2	Benzene	0.50 U	0.50	0.50	ug/l	
108-86-1	Bromobenzene	1.0 U	5.0	1.0	ug/l	
74-97-5	Bromochloromethane	0.50 U	5.0	0.50	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	ug/l	
74-83-9	Bromomethane	1.0 U	2.0	1.0	ug/l	
78-93-3	2-Butanone (MEK)	5.0 U	10	5.0	ug/l	
104-51-8	n-Butylbenzene	1.0 U	5.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	1.0 U	5.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	0.50 U	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	0.50 U	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	ug/l	
75-00-3	Chloroethane	0.50 U	2.0	0.50	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	ug/l	
74-87-3	Chloromethane	1.0 U	2.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.0 U	5.0	1.0	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	1.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane [a]	1.0 U	2.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	0.50 U	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	2.0	0.50	ug/l	

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD BLANK		
Lab Sample ID:	MC41356-7	**Date Sampled:**	09/08/15
Matrix:	AQ - Field Blank Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
142-28-9	1,3-Dichloropropane	1.0 U	5.0	1.0	ug/l	
594-20-7	2,2-Dichloropropane	2.0 U	5.0	2.0	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	5.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	5.0	1.0	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	ug/l	
74-88-4	Iodomethane	1.0 U	5.0	1.0	ug/l	
98-82-8	Isopropylbenzene	1.0 U	5.0	1.0	ug/l	
99-87-6	p-Isopropyltoluene	1.0 U	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	ug/l	
74-95-3	Methylene bromide	1.0 U	5.0	1.0	ug/l	
75-09-2	Methylene chloride	1.0 U	2.0	1.0	ug/l	
91-20-3	Naphthalene [b]	2.0 U	5.0	2.0	ug/l	
103-65-1	n-Propylbenzene	1.0 U	5.0	1.0	ug/l	
100-42-5	Styrene	0.50 U	5.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	0.50	0.50	ug/l	
127-18-4	Tetrachloroethene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	2.0 U	5.0	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	5.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-01-6	Trichloroethene	0.50 U	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	1.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	5.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-05-4	Vinyl Acetate	2.0 U	5.0	2.0	ug/l	
75-01-4	Vinyl chloride	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	1.0 U	1.0	1.0	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		79-127%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD BLANK		
Lab Sample ID:	MC41356-7	**Date Sampled:**	09/08/15
Matrix:	AQ - Field Blank Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	102%		80-116%
460-00-4	4-Bromofluorobenzene	107%		77-124%

(a) Initial Calibration Confirmation outside of DOD acceptance criteria.Reporting Limit Response verified by low-level standard.
(b) Continuing Calibration outside of acceptance criteria. Reporting Limit response verified by low-level standard.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	12-H		
Lab Sample ID:	MC41356-8	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G145663.D	1	09/18/15	AD	n/a	n/a	MSG5455
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	26.1	10	5.0	ug/l	
71-43-2	Benzene	0.50 U	0.50	0.50	ug/l	
108-86-1	Bromobenzene	1.0 U	5.0	1.0	ug/l	
74-97-5	Bromochloromethane	0.50 U	5.0	0.50	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	ug/l	
74-83-9	Bromomethane	1.0 U	2.0	1.0	ug/l	
78-93-3	2-Butanone (MEK)	5.0 U	10	5.0	ug/l	
104-51-8	n-Butylbenzene	1.0 U	5.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	1.0 U	5.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	0.50 U	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	0.50 U	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	ug/l	
75-00-3	Chloroethane	0.50 U	2.0	0.50	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	ug/l	
74-87-3	Chloromethane	1.0 U	2.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.0 U	5.0	1.0	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	1.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane [a]	1.0 U	2.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	0.50 U	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	1.2	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	2.0	0.50	ug/l	

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	12-H		
Lab Sample ID:	MC41356-8	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
142-28-9	1,3-Dichloropropane	1.0 U	5.0	1.0	ug/l	
594-20-7	2,2-Dichloropropane	2.0 U	5.0	2.0	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	5.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	5.0	1.0	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	ug/l	
74-88-4	Iodomethane	1.0 U	5.0	1.0	ug/l	
98-82-8	Isopropylbenzene	1.0 U	5.0	1.0	ug/l	
99-87-6	p-Isopropyltoluene	1.0 U	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	ug/l	
74-95-3	Methylene bromide	1.0 U	5.0	1.0	ug/l	
75-09-2	Methylene chloride	1.0 U	2.0	1.0	ug/l	
91-20-3	Naphthalene [b]	2.0 U	5.0	2.0	ug/l	
103-65-1	n-Propylbenzene	1.0 U	5.0	1.0	ug/l	
100-42-5	Styrene	0.50 U	5.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	0.50	0.50	ug/l	
127-18-4	Tetrachloroethene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	2.0 U	5.0	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	5.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-01-6	Trichloroethene	11.3	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	1.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	5.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-05-4	Vinyl Acetate	2.0 U	5.0	2.0	ug/l	
75-01-4	Vinyl chloride	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	1.0 U	1.0	1.0	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		79-127%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	12-H		
Lab Sample ID:	MC41356-8	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	102%		80-116%
460-00-4	4-Bromofluorobenzene	106%		77-124%

(a) Initial Calibration Confirmation outside of DOD acceptance criteria.Reporting Limit Response verified by low-level standard.
(b) Continuing Calibration outside of DOD acceptance criteria. Reporting Limit response verified by low-level standard.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	WG11-1		
Lab Sample ID:	MC41356-9	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G145664.D	1	09/18/15	AD	n/a	n/a	MSG5455
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	19.2	10	5.0	ug/l	
71-43-2	Benzene	0.50 U	0.50	0.50	ug/l	
108-86-1	Bromobenzene	1.0 U	5.0	1.0	ug/l	
74-97-5	Bromochloromethane	0.50 U	5.0	0.50	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	ug/l	
74-83-9	Bromomethane	1.0 U	2.0	1.0	ug/l	
78-93-3	2-Butanone (MEK)	5.0 U	10	5.0	ug/l	
104-51-8	n-Butylbenzene	1.0 U	5.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	1.0 U	5.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	0.50 U	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	0.50 U	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	ug/l	
75-00-3	Chloroethane	0.50 U	2.0	0.50	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	ug/l	
74-87-3	Chloromethane	1.0 U	2.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.0 U	5.0	1.0	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	1.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane [a]	1.0 U	2.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	1.3	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	1.6	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	2.0	0.50	ug/l	

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WG11-1		
Lab Sample ID:	MC41356-9	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
142-28-9	1,3-Dichloropropane	1.0 U	5.0	1.0	ug/l	
594-20-7	2,2-Dichloropropane	2.0 U	5.0	2.0	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	5.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	5.0	1.0	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	ug/l	
74-88-4	Iodomethane	1.0 U	5.0	1.0	ug/l	
98-82-8	Isopropylbenzene	1.0 U	5.0	1.0	ug/l	
99-87-6	p-Isopropyltoluene	1.0 U	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	ug/l	
74-95-3	Methylene bromide	1.0 U	5.0	1.0	ug/l	
75-09-2	Methylene chloride	1.0 U	2.0	1.0	ug/l	
91-20-3	Naphthalene [b]	2.0 U	5.0	2.0	ug/l	
103-65-1	n-Propylbenzene	1.0 U	5.0	1.0	ug/l	
100-42-5	Styrene	0.50 U	5.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	0.50	0.50	ug/l	
127-18-4	Tetrachloroethene	13.4	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	2.0 U	5.0	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	5.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	1.8	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-01-6	Trichloroethene	4.6	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	1.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	5.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-05-4	Vinyl Acetate	2.0 U	5.0	2.0	ug/l	
75-01-4	Vinyl chloride	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	1.0 U	1.0	1.0	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		79-127%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WG11-1		
Lab Sample ID:	MC41356-9	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	103%		80-116%
460-00-4	4-Bromofluorobenzene	107%		77-124%

(a) Initial Calibration Confirmation outside of DOD acceptance criteria.Reporting Limit Response verified by low-level standard.
(b) Continuing Calibration outside of DOD acceptance criteria. Reporting Limit response verified by low-level standard.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	WG11-2		
Lab Sample ID:	MC41356-10	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G145665.D	1	09/18/15	AD	n/a	n/a	MSG5455
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	23.2	10	5.0	ug/l	
71-43-2	Benzene	0.50 U	0.50	0.50	ug/l	
108-86-1	Bromobenzene	1.0 U	5.0	1.0	ug/l	
74-97-5	Bromochloromethane	0.50 U	5.0	0.50	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	ug/l	
74-83-9	Bromomethane	1.0 U	2.0	1.0	ug/l	
78-93-3	2-Butanone (MEK)	5.0 U	10	5.0	ug/l	
104-51-8	n-Butylbenzene	1.0 U	5.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	1.0 U	5.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	0.50 U	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	0.50 U	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	ug/l	
75-00-3	Chloroethane	0.50 U	2.0	0.50	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	ug/l	
74-87-3	Chloromethane	1.0 U	2.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.0 U	5.0	1.0	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	1.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane [a]	1.0 U	2.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	1.5	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	2.4	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	2.0	0.50	ug/l	

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WG11-2		
Lab Sample ID:	MC41356-10	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
142-28-9	1,3-Dichloropropane	1.0 U	5.0	1.0	ug/l	
594-20-7	2,2-Dichloropropane	2.0 U	5.0	2.0	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	5.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	5.0	1.0	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	ug/l	
74-88-4	Iodomethane	1.0 U	5.0	1.0	ug/l	
98-82-8	Isopropylbenzene	1.0 U	5.0	1.0	ug/l	
99-87-6	p-Isopropyltoluene	1.0 U	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	ug/l	
74-95-3	Methylene bromide	1.0 U	5.0	1.0	ug/l	
75-09-2	Methylene chloride	1.0 U	2.0	1.0	ug/l	
91-20-3	Naphthalene [b]	2.0 U	5.0	2.0	ug/l	
103-65-1	n-Propylbenzene	1.0 U	5.0	1.0	ug/l	
100-42-5	Styrene	0.50 U	5.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	0.50	0.50	ug/l	
127-18-4	Tetrachloroethene	7.7	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	2.0 U	5.0	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	5.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	1.6	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-01-6	Trichloroethene	8.2	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	1.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	5.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-05-4	Vinyl Acetate	2.0 U	5.0	2.0	ug/l	
75-01-4	Vinyl chloride	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	1.0 U	1.0	1.0	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		79-127%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WG11-2		
Lab Sample ID:	MC41356-10	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	102%		80-116%
460-00-4	4-Bromofluorobenzene	107%		77-124%

(a) Initial Calibration Confirmation outside of DOD acceptance criteria.Reporting Limit Response verified by low-level standard.
(b) Continuing Calibration outside of DOD acceptance criteria. Reporting Limit response verified by low-level standard.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	E80-3		
Lab Sample ID:	MC41356-11	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G145666.D	1	09/18/15	AD	n/a	n/a	MSG5455
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	13.4	10	5.0	ug/l	
71-43-2	Benzene	0.50 U	0.50	0.50	ug/l	
108-86-1	Bromobenzene	1.0 U	5.0	1.0	ug/l	
74-97-5	Bromochloromethane	0.50 U	5.0	0.50	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	ug/l	
74-83-9	Bromomethane	1.0 U	2.0	1.0	ug/l	
78-93-3	2-Butanone (MEK)	5.0 U	10	5.0	ug/l	
104-51-8	n-Butylbenzene	1.0 U	5.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	1.0 U	5.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	0.50 U	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	0.50 U	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	ug/l	
75-00-3	Chloroethane	0.50 U	2.0	0.50	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	ug/l	
74-87-3	Chloromethane	1.0 U	2.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.0 U	5.0	1.0	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	1.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane [a]	1.0 U	2.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	9.4	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	2.4	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	2.0	0.50	ug/l	

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	E80-3		
Lab Sample ID:	MC41356-11	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
142-28-9	1,3-Dichloropropane	1.0 U	5.0	1.0	ug/l	
594-20-7	2,2-Dichloropropane	2.0 U	5.0	2.0	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	5.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	5.0	1.0	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	ug/l	
74-88-4	Iodomethane	1.0 U	5.0	1.0	ug/l	
98-82-8	Isopropylbenzene	1.0 U	5.0	1.0	ug/l	
99-87-6	p-Isopropyltoluene	1.0 U	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	ug/l	
74-95-3	Methylene bromide	1.0 U	5.0	1.0	ug/l	
75-09-2	Methylene chloride	1.0 U	2.0	1.0	ug/l	
91-20-3	Naphthalene [b]	2.0 U	5.0	2.0	ug/l	
103-65-1	n-Propylbenzene	1.0 U	5.0	1.0	ug/l	
100-42-5	Styrene	0.50 U	5.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	0.50	0.50	ug/l	
127-18-4	Tetrachloroethene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	2.0 U	5.0	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	5.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-01-6	Trichloroethene	0.50 U	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	1.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	5.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-05-4	Vinyl Acetate	2.0 U	5.0	2.0	ug/l	
75-01-4	Vinyl chloride	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	1.0 U	1.0	1.0	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		79-127%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	E80-3		
Lab Sample ID:	MC41356-11	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	103%		80-116%
460-00-4	4-Bromofluorobenzene	104%		77-124%

(a) Initial Calibration Confirmation outside of DOD acceptance criteria.Reporting Limit Response verified by low-level standard.
(b) Continuing Calibration outside of DOD acceptance criteria. Reporting Limit response verified by low-level standard.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	E82-2		
Lab Sample ID:	MC41356-12	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G145667.D	1	09/18/15	AD	n/a	n/a	MSG5455
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	18.0	10	5.0	ug/l	
71-43-2	Benzene	0.50 U	0.50	0.50	ug/l	
108-86-1	Bromobenzene	1.0 U	5.0	1.0	ug/l	
74-97-5	Bromochloromethane	0.50 U	5.0	0.50	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	ug/l	
74-83-9	Bromomethane	1.0 U	2.0	1.0	ug/l	
78-93-3	2-Butanone (MEK)	5.0 U	10	5.0	ug/l	
104-51-8	n-Butylbenzene	1.0 U	5.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	1.0 U	5.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	0.50 U	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	0.50 U	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	ug/l	
75-00-3	Chloroethane	0.50 U	2.0	0.50	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	ug/l	
74-87-3	Chloromethane	1.0 U	2.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.0 U	5.0	1.0	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	1.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane [a]	1.0 U	2.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	2.1	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	2.0	0.50	ug/l	

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	E82-2		
Lab Sample ID:	MC41356-12	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
142-28-9	1,3-Dichloropropane	1.0 U	5.0	1.0	ug/l	
594-20-7	2,2-Dichloropropane	2.0 U	5.0	2.0	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	5.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	5.0	1.0	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	ug/l	
74-88-4	Iodomethane	1.0 U	5.0	1.0	ug/l	
98-82-8	Isopropylbenzene	1.0 U	5.0	1.0	ug/l	
99-87-6	p-Isopropyltoluene	1.0 U	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	ug/l	
74-95-3	Methylene bromide	1.0 U	5.0	1.0	ug/l	
75-09-2	Methylene chloride	1.0 U	2.0	1.0	ug/l	
91-20-3	Naphthalene [b]	2.0 U	5.0	2.0	ug/l	
103-65-1	n-Propylbenzene	1.0 U	5.0	1.0	ug/l	
100-42-5	Styrene	0.50 U	5.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	0.50	0.50	ug/l	
127-18-4	Tetrachloroethene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	2.0 U	5.0	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	5.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-01-6	Trichloroethene	0.50 U	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	1.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	5.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-05-4	Vinyl Acetate	2.0 U	5.0	2.0	ug/l	
75-01-4	Vinyl chloride	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	1.0 U	1.0	1.0	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		79-127%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	E82-2		
Lab Sample ID:	MC41356-12	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	103%		80-116%
460-00-4	4-Bromofluorobenzene	108%		77-124%

(a) Initial Calibration Confirmation outside of DOD acceptance criteria.Reporting Limit Response verified by low-level standard.
(b) Continuing Calibration outside of DOD acceptance criteria. Reporting Limit response verified by low-level standard.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	E82-1		
Lab Sample ID:	MC41356-13	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G145668.D	1	09/18/15	AD	n/a	n/a	MSG5455
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	16.6	10	5.0	ug/l	
71-43-2	Benzene	0.50 U	0.50	0.50	ug/l	
108-86-1	Bromobenzene	1.0 U	5.0	1.0	ug/l	
74-97-5	Bromochloromethane	0.50 U	5.0	0.50	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	ug/l	
74-83-9	Bromomethane	1.0 U	2.0	1.0	ug/l	
78-93-3	2-Butanone (MEK)	5.0 U	10	5.0	ug/l	
104-51-8	n-Butylbenzene	1.0 U	5.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	1.0 U	5.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	0.50 U	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	0.50 U	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	ug/l	
75-00-3	Chloroethane	0.50 U	2.0	0.50	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	ug/l	
74-87-3	Chloromethane	1.0 U	2.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.0 U	5.0	1.0	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	1.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane [a]	1.0 U	2.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	2.0	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	16.3	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	25.6	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	2.0	0.50	ug/l	

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	E82-1		
Lab Sample ID:	MC41356-13	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
142-28-9	1,3-Dichloropropane	1.0 U	5.0	1.0	ug/l	
594-20-7	2,2-Dichloropropane	2.0 U	5.0	2.0	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	5.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	5.0	1.0	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	ug/l	
74-88-4	Iodomethane	1.0 U	5.0	1.0	ug/l	
98-82-8	Isopropylbenzene	1.0 U	5.0	1.0	ug/l	
99-87-6	p-Isopropyltoluene	1.0 U	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	ug/l	
74-95-3	Methylene bromide	1.0 U	5.0	1.0	ug/l	
75-09-2	Methylene chloride	1.0 U	2.0	1.0	ug/l	
91-20-3	Naphthalene [b]	2.0 U	5.0	2.0	ug/l	
103-65-1	n-Propylbenzene	1.0 U	5.0	1.0	ug/l	
100-42-5	Styrene	0.50 U	5.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	0.50	0.50	ug/l	
127-18-4	Tetrachloroethene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	2.0 U	5.0	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	5.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-01-6	Trichloroethene	1.1	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	1.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	5.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-05-4	Vinyl Acetate	2.0 U	5.0	2.0	ug/l	
75-01-4	Vinyl chloride	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	1.0 U	1.0	1.0	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		79-127%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	E82-1		
Lab Sample ID:	MC41356-13	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	102%		80-116%
460-00-4	4-Bromofluorobenzene	106%		77-124%

(a) Initial Calibration Confirmation outside of DOD acceptance criteria.Reporting Limit Response verified by low-level standard.
(b) Continuing Calibration outside of DOD acceptance criteria. Reporting Limit response verified by low-level standard.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	70-2		
Lab Sample ID:	MC41356-14	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G145669.D	1	09/18/15	AD	n/a	n/a	MSG5455
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	19.7	10	5.0	ug/l	
71-43-2	Benzene	0.50 U	0.50	0.50	ug/l	
108-86-1	Bromobenzene	1.0 U	5.0	1.0	ug/l	
74-97-5	Bromochloromethane	0.50 U	5.0	0.50	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	ug/l	
74-83-9	Bromomethane	1.0 U	2.0	1.0	ug/l	
78-93-3	2-Butanone (MEK)	5.0 U	10	5.0	ug/l	
104-51-8	n-Butylbenzene	1.0 U	5.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	1.0 U	5.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	0.50 U	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	0.50 U	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	ug/l	
75-00-3	Chloroethane	0.50 U	2.0	0.50	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	ug/l	
74-87-3	Chloromethane	1.0 U	2.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.0 U	5.0	1.0	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	1.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane [a]	1.0 U	2.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	0.50 U	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	2.0	0.50	ug/l	

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	70-2		
Lab Sample ID:	MC41356-14	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
142-28-9	1,3-Dichloropropane	1.0 U	5.0	1.0	ug/l	
594-20-7	2,2-Dichloropropane	2.0 U	5.0	2.0	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	5.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	5.0	1.0	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	ug/l	
74-88-4	Iodomethane	1.0 U	5.0	1.0	ug/l	
98-82-8	Isopropylbenzene	1.0 U	5.0	1.0	ug/l	
99-87-6	p-Isopropyltoluene	1.0 U	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	ug/l	
74-95-3	Methylene bromide	1.0 U	5.0	1.0	ug/l	
75-09-2	Methylene chloride	1.0 U	2.0	1.0	ug/l	
91-20-3	Naphthalene [b]	2.0 U	5.0	2.0	ug/l	
103-65-1	n-Propylbenzene	1.0 U	5.0	1.0	ug/l	
100-42-5	Styrene	0.50 U	5.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	0.50	0.50	ug/l	
127-18-4	Tetrachloroethene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	2.0 U	5.0	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	5.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-01-6	Trichloroethene	0.50 U	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	1.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	5.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-05-4	Vinyl Acetate	2.0 U	5.0	2.0	ug/l	
75-01-4	Vinyl chloride	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	1.0 U	1.0	1.0	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		79-127%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	70-2		
Lab Sample ID:	MC41356-14	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	102%		80-116%
460-00-4	4-Bromofluorobenzene	107%		77-124%

(a) Initial Calibration Confirmation outside of DOD acceptance criteria.Reporting Limit Response verified by low-level standard.
(b) Continuing Calibration outside of DOD acceptance criteria. Reporting Limit response verified by low-level standard.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	70-3		
Lab Sample ID:	MC41356-15	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G145670.D	1	09/18/15	AD	n/a	n/a	MSG5455
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	20.6	10	5.0	ug/l	
71-43-2	Benzene	0.50 U	0.50	0.50	ug/l	
108-86-1	Bromobenzene	1.0 U	5.0	1.0	ug/l	
74-97-5	Bromochloromethane	0.50 U	5.0	0.50	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	ug/l	
74-83-9	Bromomethane	1.0 U	2.0	1.0	ug/l	
78-93-3	2-Butanone (MEK)	5.0 U	10	5.0	ug/l	
104-51-8	n-Butylbenzene	1.0 U	5.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	1.0 U	5.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	0.50 U	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	0.50 U	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	ug/l	
75-00-3	Chloroethane	0.50 U	2.0	0.50	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	ug/l	
74-87-3	Chloromethane	1.0 U	2.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.0 U	5.0	1.0	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	1.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane [a]	1.0 U	2.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	2.2	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	2.0	0.50	ug/l	

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	70-3		
Lab Sample ID:	MC41356-15	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
142-28-9	1,3-Dichloropropane	1.0 U	5.0	1.0	ug/l	
594-20-7	2,2-Dichloropropane	2.0 U	5.0	2.0	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	5.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	5.0	1.0	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	ug/l	
74-88-4	Iodomethane	1.0 U	5.0	1.0	ug/l	
98-82-8	Isopropylbenzene	1.0 U	5.0	1.0	ug/l	
99-87-6	p-Isopropyltoluene	1.0 U	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	ug/l	
74-95-3	Methylene bromide	1.0 U	5.0	1.0	ug/l	
75-09-2	Methylene chloride	1.0 U	2.0	1.0	ug/l	
91-20-3	Naphthalene [b]	2.0 U	5.0	2.0	ug/l	
103-65-1	n-Propylbenzene	1.0 U	5.0	1.0	ug/l	
100-42-5	Styrene	0.50 U	5.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	0.50	0.50	ug/l	
127-18-4	Tetrachloroethene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	2.0 U	5.0	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	5.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-01-6	Trichloroethene	0.50 U	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	1.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	5.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-05-4	Vinyl Acetate	2.0 U	5.0	2.0	ug/l	
75-01-4	Vinyl chloride	2.6	1.0	0.50	ug/l	
	m,p-Xylene	1.0 U	1.0	1.0	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		79-127%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	70-3		
Lab Sample ID:	MC41356-15	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	104%		80-116%
460-00-4	4-Bromofluorobenzene	106%		77-124%

(a) Initial Calibration Confirmation outside of DOD acceptance criteria.Reporting Limit Response verified by low-level standard.
(b) Continuing Calibration outside of DOD acceptance criteria. Reporting Limit response verified by low-level standard.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	70-4		
Lab Sample ID:	MC41356-16	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G145720.D	5	09/20/15	AD	n/a	n/a	MSG5457
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	90.5	50	25	ug/l	
71-43-2	Benzene	2.5 U	2.5	2.5	ug/l	
108-86-1	Bromobenzene	5.0 U	25	5.0	ug/l	
74-97-5	Bromochloromethane	2.5 U	25	2.5	ug/l	
75-27-4	Bromodichloromethane	2.5 U	5.0	2.5	ug/l	
75-25-2	Bromoform	2.5 U	5.0	2.5	ug/l	
74-83-9	Bromomethane	5.0 U	10	5.0	ug/l	
78-93-3	2-Butanone (MEK)	25 U	50	25	ug/l	
104-51-8	n-Butylbenzene	5.0 U	25	5.0	ug/l	
135-98-8	sec-Butylbenzene	5.0 U	25	5.0	ug/l	
98-06-6	tert-Butylbenzene	5.0 U	25	5.0	ug/l	
75-15-0	Carbon disulfide	2.5 U	25	2.5	ug/l	
56-23-5	Carbon tetrachloride	2.5 U	5.0	2.5	ug/l	
108-90-7	Chlorobenzene	2.5 U	5.0	2.5	ug/l	
75-00-3	Chloroethane	2.5 U	10	2.5	ug/l	
67-66-3	Chloroform	2.5 U	5.0	2.5	ug/l	
74-87-3	Chloromethane	5.0 U	10	5.0	ug/l	
95-49-8	o-Chlorotoluene	5.0 U	25	5.0	ug/l	
106-43-4	p-Chlorotoluene	5.0 U	25	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	5.0 U	25	5.0	ug/l	
124-48-1	Dibromochloromethane	2.5 U	5.0	2.5	ug/l	
106-93-4	1,2-Dibromoethane	5.0 U	5.0	5.0	ug/l	
95-50-1	1,2-Dichlorobenzene	2.5 U	5.0	2.5	ug/l	
541-73-1	1,3-Dichlorobenzene	2.5 U	5.0	2.5	ug/l	
106-46-7	1,4-Dichlorobenzene	2.5 U	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane [a]	5.0 U	10	5.0	ug/l	
75-34-3	1,1-Dichloroethane	24.2	5.0	2.5	ug/l	
107-06-2	1,2-Dichloroethane	2.5 U	5.0	2.5	ug/l	
75-35-4	1,1-Dichloroethene	6.4	5.0	2.5	ug/l	
156-59-2	cis-1,2-Dichloroethene	13.5	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	2.5 U	5.0	2.5	ug/l	
78-87-5	1,2-Dichloropropane	2.5 U	10	2.5	ug/l	

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	70-4		
Lab Sample ID:	MC41356-16	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
142-28-9	1,3-Dichloropropane	5.0 U	25	5.0	ug/l	
594-20-7	2,2-Dichloropropane	10 U	25	10	ug/l	
563-58-6	1,1-Dichloropropene	2.5 U	25	2.5	ug/l	
10061-01-5	cis-1,3-Dichloropropene	2.5 U	2.5	2.5	ug/l	
10061-02-6	trans-1,3-Dichloropropene	2.5 U	2.5	2.5	ug/l	
100-41-4	Ethylbenzene	2.5 U	5.0	2.5	ug/l	
87-68-3	Hexachlorobutadiene	5.0 U	25	5.0	ug/l	
591-78-6	2-Hexanone	25 U	50	25	ug/l	
74-88-4	Iodomethane	5.0 U	25	5.0	ug/l	
98-82-8	Isopropylbenzene	5.0 U	25	5.0	ug/l	
99-87-6	p-Isopropyltoluene	5.0 U	25	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	2.5 U	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	10 U	25	10	ug/l	
74-95-3	Methylene bromide	5.0 U	25	5.0	ug/l	
75-09-2	Methylene chloride	5.0 U	10	5.0	ug/l	
91-20-3	Naphthalene [b]	10 U	25	10	ug/l	
103-65-1	n-Propylbenzene	5.0 U	25	5.0	ug/l	
100-42-5	Styrene	2.5 U	25	2.5	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	2.5 U	5.0	2.5	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	2.5 U	2.5	2.5	ug/l	
127-18-4	Tetrachloroethene	2.5 U	5.0	2.5	ug/l	
108-88-3	Toluene	2.5 U	5.0	2.5	ug/l	
87-61-6	1,2,3-Trichlorobenzene	10 U	25	10	ug/l	
120-82-1	1,2,4-Trichlorobenzene	5.0 U	25	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	2.5 U	5.0	2.5	ug/l	
79-00-5	1,1,2-Trichloroethane	2.5 U	5.0	2.5	ug/l	
79-01-6	Trichloroethene	2.5 U	5.0	2.5	ug/l	
75-69-4	Trichlorofluoromethane	5.0 U	5.0	5.0	ug/l	
96-18-4	1,2,3-Trichloropropane	5.0 U	25	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	2.5 U	25	2.5	ug/l	
108-67-8	1,3,5-Trimethylbenzene	2.5 U	25	2.5	ug/l	
108-05-4	Vinyl Acetate	10 U	25	10	ug/l	
75-01-4	Vinyl chloride	14.3	5.0	2.5	ug/l	
	m,p-Xylene	5.0 U	5.0	5.0	ug/l	
95-47-6	o-Xylene	2.5 U	5.0	2.5	ug/l	
1330-20-7	Xylene (total)	2.5 U	5.0	2.5	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		79-127%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	70-4		
Lab Sample ID:	MC41356-16	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	103%		80-116%
460-00-4	4-Bromofluorobenzene	106%		77-124%

(a) Initial Calibration Confirmation outside of DOD acceptance criteria.Reporting Limit Response verified by low-level standard.
(b) Continuing Calibration outside of DOD acceptance criteria. Reporting Limit response verified by low-level standard.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	D12-1		
Lab Sample ID:	MC41356-17	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G145721.D	1	09/20/15	AD	n/a	n/a	MSG5457
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	24.9	10	5.0	ug/l	
71-43-2	Benzene	0.50 U	0.50	0.50	ug/l	
108-86-1	Bromobenzene	1.0 U	5.0	1.0	ug/l	
74-97-5	Bromochloromethane	0.50 U	5.0	0.50	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	ug/l	
74-83-9	Bromomethane	1.0 U	2.0	1.0	ug/l	
78-93-3	2-Butanone (MEK)	5.0 U	10	5.0	ug/l	
104-51-8	n-Butylbenzene	1.0 U	5.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	1.0 U	5.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	0.50 U	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	0.50 U	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	ug/l	
75-00-3	Chloroethane	0.50 U	2.0	0.50	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	ug/l	
74-87-3	Chloromethane	1.0 U	2.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.0 U	5.0	1.0	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	1.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane [a]	1.0 U	2.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	0.50 U	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	2.0	0.50	ug/l	

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D12-1		
Lab Sample ID:	MC41356-17	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
142-28-9	1,3-Dichloropropane	1.0 U	5.0	1.0	ug/l	
594-20-7	2,2-Dichloropropane	2.0 U	5.0	2.0	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	5.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	5.0	1.0	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	ug/l	
74-88-4	Iodomethane	1.0 U	5.0	1.0	ug/l	
98-82-8	Isopropylbenzene	1.0 U	5.0	1.0	ug/l	
99-87-6	p-Isopropyltoluene	1.0 U	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	ug/l	
74-95-3	Methylene bromide	1.0 U	5.0	1.0	ug/l	
75-09-2	Methylene chloride	1.0 U	2.0	1.0	ug/l	
91-20-3	Naphthalene [b]	2.0 U	5.0	2.0	ug/l	
103-65-1	n-Propylbenzene	1.0 U	5.0	1.0	ug/l	
100-42-5	Styrene	0.50 U	5.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	0.50	0.50	ug/l	
127-18-4	Tetrachloroethene	1.9	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	2.0 U	5.0	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	5.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-01-6	Trichloroethene	15.5	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	1.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	5.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-05-4	Vinyl Acetate	2.0 U	5.0	2.0	ug/l	
75-01-4	Vinyl chloride	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	1.0 U	1.0	1.0	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		79-127%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D12-1		
Lab Sample ID:	MC41356-17	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	102%		80-116%
460-00-4	4-Bromofluorobenzene	105%		77-124%

(a) Initial Calibration Confirmation outside of DOD acceptance criteria.Reporting Limit Response verified by low-level standard.
(b) Continuing Calibration outside of DOD acceptance criteria. Reporting Limit response verified by low-level standard.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	DUP1 AREA E		
Lab Sample ID:	MC41356-18	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G145722.D	1	09/20/15	AD	n/a	n/a	MSG5457
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	26.1	10	5.0	ug/l	
71-43-2	Benzene	0.50 U	0.50	0.50	ug/l	
108-86-1	Bromobenzene	1.0 U	5.0	1.0	ug/l	
74-97-5	Bromochloromethane	0.50 U	5.0	0.50	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	ug/l	
74-83-9	Bromomethane	1.0 U	2.0	1.0	ug/l	
78-93-3	2-Butanone (MEK)	5.0 U	10	5.0	ug/l	
104-51-8	n-Butylbenzene	1.0 U	5.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	1.0 U	5.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	0.50 U	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	0.50 U	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	ug/l	
75-00-3	Chloroethane	0.50 U	2.0	0.50	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	ug/l	
74-87-3	Chloromethane	1.0 U	2.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.0 U	5.0	1.0	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	1.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane [a]	1.0 U	2.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	0.50 U	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	2.0	0.50	ug/l	

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP1 AREA E		
Lab Sample ID:	MC41356-18	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
142-28-9	1,3-Dichloropropane	1.0 U	5.0	1.0	ug/l	
594-20-7	2,2-Dichloropropane	2.0 U	5.0	2.0	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	5.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	5.0	1.0	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	ug/l	
74-88-4	Iodomethane	1.0 U	5.0	1.0	ug/l	
98-82-8	Isopropylbenzene	1.0 U	5.0	1.0	ug/l	
99-87-6	p-Isopropyltoluene	1.0 U	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	ug/l	
74-95-3	Methylene bromide	1.0 U	5.0	1.0	ug/l	
75-09-2	Methylene chloride	1.0 U	2.0	1.0	ug/l	
91-20-3	Naphthalene [b]	2.0 U	5.0	2.0	ug/l	
103-65-1	n-Propylbenzene	1.0 U	5.0	1.0	ug/l	
100-42-5	Styrene	0.50 U	5.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	0.50	0.50	ug/l	
127-18-4	Tetrachloroethene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	2.0 U	5.0	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	5.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-01-6	Trichloroethene	9.2	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	1.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	5.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-05-4	Vinyl Acetate	2.0 U	5.0	2.0	ug/l	
75-01-4	Vinyl chloride	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	1.0 U	1.0	1.0	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		79-127%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP1 AREA E		
Lab Sample ID:	MC41356-18	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	103%		80-116%
460-00-4	4-Bromofluorobenzene	106%		77-124%

(a) Initial Calibration Confirmation outside of DOD acceptance criteria.Reporting Limit Response verified by low-level standard.
(b) Continuing Calibration outside of DOD acceptance criteria. Reporting Limit response verified by low-level standard.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	DUP2 AREA E		
Lab Sample ID:	MC41356-19	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G145723.D	1	09/20/15	AD	n/a	n/a	MSG5457
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	19.6	10	5.0	ug/l	
71-43-2	Benzene	0.50 U	0.50	0.50	ug/l	
108-86-1	Bromobenzene	1.0 U	5.0	1.0	ug/l	
74-97-5	Bromochloromethane	0.50 U	5.0	0.50	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	ug/l	
74-83-9	Bromomethane	1.0 U	2.0	1.0	ug/l	
78-93-3	2-Butanone (MEK)	5.0 U	10	5.0	ug/l	
104-51-8	n-Butylbenzene	1.0 U	5.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	1.0 U	5.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	0.50 U	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	0.50 U	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	ug/l	
75-00-3	Chloroethane	0.50 U	2.0	0.50	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	ug/l	
74-87-3	Chloromethane	1.0 U	2.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.0 U	5.0	1.0	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	1.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane [a]	1.0 U	2.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	5.0	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	1.3	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	2.8	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	2.0	0.50	ug/l	

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP2 AREA E		
Lab Sample ID:	MC41356-19	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
142-28-9	1,3-Dichloropropane	1.0 U	5.0	1.0	ug/l	
594-20-7	2,2-Dichloropropane	2.0 U	5.0	2.0	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	5.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	5.0	1.0	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	ug/l	
74-88-4	Iodomethane	1.0 U	5.0	1.0	ug/l	
98-82-8	Isopropylbenzene	1.0 U	5.0	1.0	ug/l	
99-87-6	p-Isopropyltoluene	1.0 U	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	ug/l	
74-95-3	Methylene bromide	1.0 U	5.0	1.0	ug/l	
75-09-2	Methylene chloride	1.0 U	2.0	1.0	ug/l	
91-20-3	Naphthalene [b]	2.0 U	5.0	2.0	ug/l	
103-65-1	n-Propylbenzene	1.0 U	5.0	1.0	ug/l	
100-42-5	Styrene	0.50 U	5.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	0.50	0.50	ug/l	
127-18-4	Tetrachloroethene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	2.0 U	5.0	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	5.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-01-6	Trichloroethene	0.50 U	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	1.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	5.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-05-4	Vinyl Acetate	2.0 U	5.0	2.0	ug/l	
75-01-4	Vinyl chloride	2.9	1.0	0.50	ug/l	
	m,p-Xylene	1.0 U	1.0	1.0	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		79-127%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP2 AREA E		
Lab Sample ID:	MC41356-19	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	102%		80-116%
460-00-4	4-Bromofluorobenzene	107%		77-124%

(a) Initial Calibration Confirmation outside of DOD acceptance criteria.Reporting Limit Response verified by low-level standard.
(b) Continuing Calibration outside of DOD acceptance criteria. Reporting Limit response verified by low-level standard.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	D12-D		
Lab Sample ID:	MC41356-20	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G145724.D	1	09/20/15	AD	n/a	n/a	MSG5457
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	27.3	10	5.0	ug/l	
71-43-2	Benzene	0.50 U	0.50	0.50	ug/l	
108-86-1	Bromobenzene	1.0 U	5.0	1.0	ug/l	
74-97-5	Bromochloromethane	0.50 U	5.0	0.50	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	ug/l	
74-83-9	Bromomethane	1.0 U	2.0	1.0	ug/l	
78-93-3	2-Butanone (MEK)	5.0 U	10	5.0	ug/l	
104-51-8	n-Butylbenzene	1.0 U	5.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	1.0 U	5.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	0.50 U	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	0.50 U	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	ug/l	
75-00-3	Chloroethane	0.50 U	2.0	0.50	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	ug/l	
74-87-3	Chloromethane	1.0 U	2.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.0 U	5.0	1.0	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	1.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane [a]	1.0 U	2.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	0.50 U	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	2.0	0.50	ug/l	

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D12-D		
Lab Sample ID:	MC41356-20	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
142-28-9	1,3-Dichloropropane	1.0 U	5.0	1.0	ug/l	
594-20-7	2,2-Dichloropropane	2.0 U	5.0	2.0	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	5.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	5.0	1.0	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	ug/l	
74-88-4	Iodomethane	1.0 U	5.0	1.0	ug/l	
98-82-8	Isopropylbenzene	1.0 U	5.0	1.0	ug/l	
99-87-6	p-Isopropyltoluene	1.0 U	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	ug/l	
74-95-3	Methylene bromide	1.0 U	5.0	1.0	ug/l	
75-09-2	Methylene chloride	1.0 U	2.0	1.0	ug/l	
91-20-3	Naphthalene [b]	2.0 U	5.0	2.0	ug/l	
103-65-1	n-Propylbenzene	1.0 U	5.0	1.0	ug/l	
100-42-5	Styrene	0.50 U	5.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	0.50	0.50	ug/l	
127-18-4	Tetrachloroethene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	2.0 U	5.0	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	5.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-01-6	Trichloroethene	9.7	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	1.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	5.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-05-4	Vinyl Acetate	2.0 U	5.0	2.0	ug/l	
75-01-4	Vinyl chloride	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	1.0 U	1.0	1.0	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		79-127%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D12-D		
Lab Sample ID:	MC41356-20	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	103%		80-116%
460-00-4	4-Bromofluorobenzene	106%		77-124%

(a) Initial Calibration Confirmation outside of DOD acceptance criteria.Reporting Limit Response verified by low-level standard.
(b) Continuing Calibration outside of DOD acceptance criteria. Reporting Limit response verified by low-level standard.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W63-1		
Lab Sample ID:	MC41356-21	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G145725.D	1	09/20/15	AD	n/a	n/a	MSG5457
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	32.8	10	5.0	ug/l	
71-43-2	Benzene	0.50 U	0.50	0.50	ug/l	
108-86-1	Bromobenzene	1.0 U	5.0	1.0	ug/l	
74-97-5	Bromochloromethane	0.50 U	5.0	0.50	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	ug/l	
74-83-9	Bromomethane	1.0 U	2.0	1.0	ug/l	
78-93-3	2-Butanone (MEK)	5.0 U	10	5.0	ug/l	
104-51-8	n-Butylbenzene	1.0 U	5.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	1.0 U	5.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	0.50 U	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	0.50 U	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	ug/l	
75-00-3	Chloroethane	0.50 U	2.0	0.50	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	ug/l	
74-87-3	Chloromethane	1.0 U	2.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.0 U	5.0	1.0	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	1.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane [a]	1.0 U	2.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	1.9	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	2.0	0.50	ug/l	

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W63-1		
Lab Sample ID:	MC41356-21	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
142-28-9	1,3-Dichloropropane	1.0 U	5.0	1.0	ug/l	
594-20-7	2,2-Dichloropropane	2.0 U	5.0	2.0	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	5.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	5.0	1.0	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	ug/l	
74-88-4	Iodomethane	1.0 U	5.0	1.0	ug/l	
98-82-8	Isopropylbenzene	1.0 U	5.0	1.0	ug/l	
99-87-6	p-Isopropyltoluene	1.0 U	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	ug/l	
74-95-3	Methylene bromide	1.0 U	5.0	1.0	ug/l	
75-09-2	Methylene chloride	1.0 U	2.0	1.0	ug/l	
91-20-3	Naphthalene [b]	2.0 U	5.0	2.0	ug/l	
103-65-1	n-Propylbenzene	1.0 U	5.0	1.0	ug/l	
100-42-5	Styrene	0.50 U	5.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	0.50	0.50	ug/l	
127-18-4	Tetrachloroethene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	2.0 U	5.0	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	5.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	1.1	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-01-6	Trichloroethene	0.50 U	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	1.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	5.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-05-4	Vinyl Acetate	2.0 U	5.0	2.0	ug/l	
75-01-4	Vinyl chloride	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	1.0 U	1.0	1.0	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		79-127%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W63-1		
Lab Sample ID:	MC41356-21	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	103%		80-116%
460-00-4	4-Bromofluorobenzene	107%		77-124%

(a) Initial Calibration Confirmation outside of DOD acceptance criteria.Reporting Limit Response verified by low-level standard.
(b) Continuing Calibration outside of DOD acceptance criteria. Reporting Limit response verified by low-level standard.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W63-2		
Lab Sample ID:	MC41356-22	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G145726.D	1	09/20/15	AD	n/a	n/a	MSG5457
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	18.9	10	5.0	ug/l	
71-43-2	Benzene	0.50 U	0.50	0.50	ug/l	
108-86-1	Bromobenzene	1.0 U	5.0	1.0	ug/l	
74-97-5	Bromochloromethane	0.50 U	5.0	0.50	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	ug/l	
74-83-9	Bromomethane	1.0 U	2.0	1.0	ug/l	
78-93-3	2-Butanone (MEK)	5.0 U	10	5.0	ug/l	
104-51-8	n-Butylbenzene	1.0 U	5.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	1.0 U	5.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	0.50 U	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	0.50 U	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	ug/l	
75-00-3	Chloroethane	0.50 U	2.0	0.50	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	ug/l	
74-87-3	Chloromethane	1.0 U	2.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.0 U	5.0	1.0	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	1.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane [a]	1.0 U	2.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	1.2	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	6.1	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	15.9	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	2.0	0.50	ug/l	

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W63-2		
Lab Sample ID:	MC41356-22	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
142-28-9	1,3-Dichloropropane	1.0 U	5.0	1.0	ug/l	
594-20-7	2,2-Dichloropropane	2.0 U	5.0	2.0	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	5.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	5.0	1.0	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	ug/l	
74-88-4	Iodomethane	1.0 U	5.0	1.0	ug/l	
98-82-8	Isopropylbenzene	1.0 U	5.0	1.0	ug/l	
99-87-6	p-Isopropyltoluene	1.0 U	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	ug/l	
74-95-3	Methylene bromide	1.0 U	5.0	1.0	ug/l	
75-09-2	Methylene chloride	1.0 U	2.0	1.0	ug/l	
91-20-3	Naphthalene [b]	2.0 U	5.0	2.0	ug/l	
103-65-1	n-Propylbenzene	1.0 U	5.0	1.0	ug/l	
100-42-5	Styrene	0.50 U	5.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	0.50	0.50	ug/l	
127-18-4	Tetrachloroethene	4.2	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	2.0 U	5.0	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	5.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	4.0	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-01-6	Trichloroethene	7.7	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	1.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	5.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-05-4	Vinyl Acetate	2.0 U	5.0	2.0	ug/l	
75-01-4	Vinyl chloride	2.0	1.0	0.50	ug/l	
	m,p-Xylene	1.0 U	1.0	1.0	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		79-127%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W63-2		
Lab Sample ID:	MC41356-22	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	102%		80-116%
460-00-4	4-Bromofluorobenzene	106%		77-124%

(a) Initial Calibration Confirmation outside of DOD acceptance criteria.Reporting Limit Response verified by low-level standard.
(b) Continuing Calibration outside of DOD acceptance criteria. Reporting Limit response verified by low-level standard.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W63-3		
Lab Sample ID:	MC41356-23	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G145727.D	1	09/20/15	AD	n/a	n/a	MSG5457
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	20.6	10	5.0	ug/l	
71-43-2	Benzene	0.50 U	0.50	0.50	ug/l	
108-86-1	Bromobenzene	1.0 U	5.0	1.0	ug/l	
74-97-5	Bromochloromethane	0.50 U	5.0	0.50	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	ug/l	
74-83-9	Bromomethane	1.0 U	2.0	1.0	ug/l	
78-93-3	2-Butanone (MEK)	5.0 U	10	5.0	ug/l	
104-51-8	n-Butylbenzene	1.0 U	5.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	1.0 U	5.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	0.50 U	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	0.50 U	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	ug/l	
75-00-3	Chloroethane	0.50 U	2.0	0.50	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	ug/l	
74-87-3	Chloromethane	1.0 U	2.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.0 U	5.0	1.0	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	1.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane [a]	1.0 U	2.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	0.50 U	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	1.6	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	2.0	0.50	ug/l	

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W63-3		
Lab Sample ID:	MC41356-23	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
142-28-9	1,3-Dichloropropane	1.0 U	5.0	1.0	ug/l	
594-20-7	2,2-Dichloropropane	2.0 U	5.0	2.0	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	5.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	5.0	1.0	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	ug/l	
74-88-4	Iodomethane	1.0 U	5.0	1.0	ug/l	
98-82-8	Isopropylbenzene	1.0 U	5.0	1.0	ug/l	
99-87-6	p-Isopropyltoluene	1.0 U	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	ug/l	
74-95-3	Methylene bromide	1.0 U	5.0	1.0	ug/l	
75-09-2	Methylene chloride	1.0 U	2.0	1.0	ug/l	
91-20-3	Naphthalene [b]	2.0 U	5.0	2.0	ug/l	
103-65-1	n-Propylbenzene	1.0 U	5.0	1.0	ug/l	
100-42-5	Styrene	0.50 U	5.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	0.50	0.50	ug/l	
127-18-4	Tetrachloroethene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	2.0 U	5.0	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	5.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-01-6	Trichloroethene	0.50 U	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	1.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	5.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-05-4	Vinyl Acetate	2.0 U	5.0	2.0	ug/l	
75-01-4	Vinyl chloride	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	1.0 U	1.0	1.0	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		79-127%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W63-3		
Lab Sample ID:	MC41356-23	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	102%		80-116%
460-00-4	4-Bromofluorobenzene	106%		77-124%

(a) Initial Calibration Confirmation outside of DOD acceptance criteria.Reporting Limit Response verified by low-level standard.
(b) Continuing Calibration outside of DOD acceptance criteria. Reporting Limit response verified by low-level standard.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	95-3		
Lab Sample ID:	MC41356-24	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G145728.D	1	09/20/15	AD	n/a	n/a	MSG5457
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	20.6	10	5.0	ug/l	
71-43-2	Benzene	0.50 U	0.50	0.50	ug/l	
108-86-1	Bromobenzene	1.0 U	5.0	1.0	ug/l	
74-97-5	Bromochloromethane	0.50 U	5.0	0.50	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	ug/l	
74-83-9	Bromomethane	1.0 U	2.0	1.0	ug/l	
78-93-3	2-Butanone (MEK)	5.0 U	10	5.0	ug/l	
104-51-8	n-Butylbenzene	1.0 U	5.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	1.0 U	5.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	0.50 U	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	0.50 U	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	ug/l	
75-00-3	Chloroethane	0.50 U	2.0	0.50	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	ug/l	
74-87-3	Chloromethane	1.0 U	2.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.0 U	5.0	1.0	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	1.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane [a]	1.0 U	2.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	1.1	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	2.0	0.50	ug/l	

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	95-3		
Lab Sample ID:	MC41356-24	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
142-28-9	1,3-Dichloropropane	1.0 U	5.0	1.0	ug/l	
594-20-7	2,2-Dichloropropane	2.0 U	5.0	2.0	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	5.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	5.0	1.0	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	ug/l	
74-88-4	Iodomethane	1.0 U	5.0	1.0	ug/l	
98-82-8	Isopropylbenzene	1.0 U	5.0	1.0	ug/l	
99-87-6	p-Isopropyltoluene	1.0 U	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	ug/l	
74-95-3	Methylene bromide	1.0 U	5.0	1.0	ug/l	
75-09-2	Methylene chloride	1.0 U	2.0	1.0	ug/l	
91-20-3	Naphthalene [b]	2.0 U	5.0	2.0	ug/l	
103-65-1	n-Propylbenzene	1.0 U	5.0	1.0	ug/l	
100-42-5	Styrene	0.50 U	5.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	0.50	0.50	ug/l	
127-18-4	Tetrachloroethene	4.1	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	2.0 U	5.0	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	5.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	2.3	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-01-6	Trichloroethene	0.50 U	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	1.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	5.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-05-4	Vinyl Acetate	2.0 U	5.0	2.0	ug/l	
75-01-4	Vinyl chloride	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	1.0 U	1.0	1.0	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		79-127%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	95-3		
Lab Sample ID:	MC41356-24	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	101%		80-116%
460-00-4	4-Bromofluorobenzene	109%		77-124%

(a) Initial Calibration Confirmation outside of DOD acceptance criteria.Reporting Limit Response verified by low-level standard.
(b) Continuing Calibration outside of DOD acceptance criteria. Reporting Limit response verified by low-level standard.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-11		
Lab Sample ID:	MC41356-25	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G145729.D	1	09/20/15	AD	n/a	n/a	MSG5457
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	22.6	10	5.0	ug/l	
71-43-2	Benzene	0.50 U	0.50	0.50	ug/l	
108-86-1	Bromobenzene	1.0 U	5.0	1.0	ug/l	
74-97-5	Bromochloromethane	0.50 U	5.0	0.50	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	ug/l	
74-83-9	Bromomethane	1.0 U	2.0	1.0	ug/l	
78-93-3	2-Butanone (MEK)	5.0 U	10	5.0	ug/l	
104-51-8	n-Butylbenzene	1.0 U	5.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	1.0 U	5.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	0.50 U	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	0.50 U	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	ug/l	
75-00-3	Chloroethane	0.50 U	2.0	0.50	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	ug/l	
74-87-3	Chloromethane	1.0 U	2.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.0 U	5.0	1.0	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	1.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane [a]	1.0 U	2.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	0.50 U	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	2.0	0.50	ug/l	

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-11		
Lab Sample ID:	MC41356-25	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
142-28-9	1,3-Dichloropropane	1.0 U	5.0	1.0	ug/l	
594-20-7	2,2-Dichloropropane	2.0 U	5.0	2.0	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	5.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	5.0	1.0	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	ug/l	
74-88-4	Iodomethane	1.0 U	5.0	1.0	ug/l	
98-82-8	Isopropylbenzene	1.0 U	5.0	1.0	ug/l	
99-87-6	p-Isopropyltoluene	1.0 U	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	ug/l	
74-95-3	Methylene bromide	1.0 U	5.0	1.0	ug/l	
75-09-2	Methylene chloride	1.0 U	2.0	1.0	ug/l	
91-20-3	Naphthalene [b]	2.0 U	5.0	2.0	ug/l	
103-65-1	n-Propylbenzene	1.0 U	5.0	1.0	ug/l	
100-42-5	Styrene	0.50 U	5.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	0.50	0.50	ug/l	
127-18-4	Tetrachloroethene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	2.0 U	5.0	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	5.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-01-6	Trichloroethene	2.9	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	1.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	5.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-05-4	Vinyl Acetate	2.0 U	5.0	2.0	ug/l	
75-01-4	Vinyl chloride	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	1.0 U	1.0	1.0	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		79-127%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-11		
Lab Sample ID:	MC41356-25	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	102%		80-116%
460-00-4	4-Bromofluorobenzene	107%		77-124%

(a) Initial Calibration Confirmation outside of DOD acceptance criteria.Reporting Limit Response verified by low-level standard.
(b) Continuing Calibration outside of DOD acceptance criteria. Reporting Limit response verified by low-level standard.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	E-MW-02		
Lab Sample ID:	MC41356-26	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G145730.D	1	09/20/15	AD	n/a	n/a	MSG5457
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	20.5	10	5.0	ug/l	
71-43-2	Benzene	0.50 U	0.50	0.50	ug/l	
108-86-1	Bromobenzene	1.0 U	5.0	1.0	ug/l	
74-97-5	Bromochloromethane	0.50 U	5.0	0.50	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	ug/l	
74-83-9	Bromomethane	1.0 U	2.0	1.0	ug/l	
78-93-3	2-Butanone (MEK)	5.0 U	10	5.0	ug/l	
104-51-8	n-Butylbenzene	1.0 U	5.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	1.0 U	5.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	0.50 U	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	0.50 U	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	ug/l	
75-00-3	Chloroethane	0.50 U	2.0	0.50	ug/l	
67-66-3	Chloroform	1.3	1.0	0.50	ug/l	
74-87-3	Chloromethane	1.0 U	2.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	5.0	1.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.0 U	5.0	1.0	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	1.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane [a]	1.0 U	2.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	0.50 U	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	2.0	0.50	ug/l	

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	E-MW-02		
Lab Sample ID:	MC41356-26	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
142-28-9	1,3-Dichloropropane	1.0 U	5.0	1.0	ug/l	
594-20-7	2,2-Dichloropropane	2.0 U	5.0	2.0	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	5.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	5.0	1.0	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	ug/l	
74-88-4	Iodomethane	1.0 U	5.0	1.0	ug/l	
98-82-8	Isopropylbenzene	1.0 U	5.0	1.0	ug/l	
99-87-6	p-Isopropyltoluene	1.0 U	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	ug/l	
74-95-3	Methylene bromide	1.0 U	5.0	1.0	ug/l	
75-09-2	Methylene chloride	1.0 U	2.0	1.0	ug/l	
91-20-3	Naphthalene [b]	2.0 U	5.0	2.0	ug/l	
103-65-1	n-Propylbenzene	1.0 U	5.0	1.0	ug/l	
100-42-5	Styrene	0.50 U	5.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	0.50	0.50	ug/l	
127-18-4	Tetrachloroethene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	2.0 U	5.0	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	5.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-01-6	Trichloroethene	1.5	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	1.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	5.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	5.0	0.50	ug/l	
108-05-4	Vinyl Acetate	2.0 U	5.0	2.0	ug/l	
75-01-4	Vinyl chloride	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	1.0 U	1.0	1.0	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		79-127%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	E-MW-02		
Lab Sample ID:	MC41356-26	**Date Sampled:**	09/08/15
Matrix:	AQ - Ground Water	**Date Received:**	09/10/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	101%		80-116%
460-00-4	4-Bromofluorobenzene	107%		77-124%

(a) Initial Calibration Confirmation outside of DOD acceptance criteria.Reporting Limit Response verified by low-level standard.
(b) Continuing Calibration outside of DOD acceptance criteria. Reporting Limit response verified by low-level standard.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

New England ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody
- QC Evaluation: DOD QSM5 Limits

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

Accutest Laboratories of New England
495 Technology Center West, Building One
TEL. 508-481-6200 FAX: 508-481-7753
www.accutest.com

FED-EX Tracking #: | Bottle Order Control #: | Accutest Quote #: | Accutest Job #: MC41356

Client / Reporting Information

Company Name: EA. Science & Technology
Street Address: 6712 Brooklawn Prkway Suite 104
City State Zip: Syracuse, NY 13211
Project Contact: Frank DeSantis Jr | E-mail:
Phone #: 315 - 565 - 6554 | Fax #:
Sampler(s) Name(s): | Phone #:

Project Information

Project Name: Picatinny Arsenal
Street: Rte. 15, Picatinny Arsenal
City:
Project#: RB577
Client PO#:
Project Manager:

Billing Information (If different from Report to)

Company Name:
Street Address:
City State Zip:
Attention: PO#:

Requested Analysis (see TEST CODE sheet): VOC by EPA 524.2 SDWA

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB- Equipment Blank; RB- Rinse Blank; TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	Na2S2O3	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Bisulfate	VOC by EPA 524.2 SDWA	LAB USE ONLY
-1	E-MW-01		9-8-15	1510	MC	GW	2	✓									X	
-2	D-SW-5		9-8-15	1440	MC	SW	2	✓									X	
-2S	D-SW-5-MS		9-8-15	1440	MC	SW	2	✓									X	
-2SD	D-SW-5MSD		9-8-15	1440	MC	SW	2	✓									X	
-3	E-385W-1		9-8-15	1415	MC	SW	2	✓									X	
-4	E-385W-2		9-8-15	1400	MC	SW	2	✓									X	
-5	DUP D090815SW		9-8-15	00:00	✓	SW	2	✓									X	
-6	Trip Blank		9-8-15			TB	2	✓									X	
-7	Equipment Blank		9-8-15	1540	JU	FB	2	✓									X	
-8	1R-H		9-8-15	1310		GW	2	2									X	104, 2A1,
-9	W641-1		9-8-15	1420			2	2									X	
-10	W641-2		9-8-15	1415	↓	↓	2	2									X	

Turnaround Time (Business days)
- ☑ Std. 10 Business Days
- ☐ Std. 5 Business Days (By Contract only)
- ☐ 5 Day *RUSH*
- ☐ 3 Day *EMERGENCY*
- ☐ 2 Day *EMERGENCY*
- ☐ 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:
INITIAL ASSESSMENT HLSB
LABEL VERIFICATION

Data Deliverable Information
- ☐ Commercial "A" (Level 1)
- ☐ Commercial "B" (Level 2)
- ☐ FULLT1 (Level 3+4)
- ☐ CT RCP
- ☐ MA MCP
- ☐ NYASP Category A
- ☐ NYASP Category B
- ☐ State Forms
- ☐ EDD Format
- ☐ Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary

Comments / Special Instructions

SHIP ALL SAMPLES TO MA LAB.

collected by: (SCI - Sovereign Consulting)

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	9/8/15 1800	1	2	9/9/15 1500	2
Relinquished by Sampler:	Date Time: 9-9-15 1700	Received By: FEDEX	Relinquished By:	Date Time:	Received By:
3		3	4		4
Relinquished by: FEDEX	Date Time: 9-10-15 10:00	Received By:	Custody Seal #	☐ Intact ☐ Not Intact	Preserved where applicable ☐
5		5			On Ice ☐ Cooler Temp. 0.5°C

MC41356: Chain of Custody
Page 1 of 5

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

Accutest Laboratories of New England
495 Technology Center West, Building One
TEL. 508-481-6200 FAX: 508-481-7753
www.accutest.com

FED-EX Tracking #:
Bottle Order Control #:
Accutest Quote #:
Accutest Job #: MC41356

Client / Reporting Information

Company Name: EA. Science & Technology
Street Address: 6712 Brooklawn Prkway Suite 104
City / State / Zip: Syracuse, NY 13211
Project Contact / E-mail: Frank DeSantis Jr
Phone # / Fax #: 315 - 565 - 6554
Sampler(s) Name(s) / Phone #:

Project Information

Project Name: Picatinny Arsenal
Street: Rte. 15, Picatinny Arsenal
City:
Project#: RB577
Client PO#:
Project Manager:

Billing Information (If different from Report to)

Company Name:
Street Address:
City / State / Zip:
Attention: PO#:

Requested Analysis (see TEST CODE sheet): VOC by 1,2,3,4 8260B

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB- Equipment Blank; RB- Rinse Blank; TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Date	Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Bisulfate	VOC by 1,2,3,4 8260B	LAB USE ONLY
-11	E 80 - 3			1525	JU	GW	2	2									X	
-12	E 82 - 2			1520			2	2									X	
-13	E 87 - 1			1515			2	2									X	
-14	70 - 2			1330			2	2									X	
-15	70 - 3			1335			2	2									X	
-16	70 - 4			1340			2	2									X	
-17	D12 - [illegible]			1320			2	2									X	
-18	DUP 1 Area E			0000			2	2									X	
-19	DUP 2 Area E			0000			2	2									X	
-20	D12-D #			1325			2	2									X	
-20S	D12-D MS			1325			2	2									X	
-20SD	D12-D MSD			1325			2	2									X	

Turnaround Time (Business days)
- [x] Std. 10 Business Days
- [ ] Std. 5 Business Days (By Contract only)
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

Data Deliverable Information
- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] CT RCP
- [ ] MA MCP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary

Comments / Special Instructions

SHIP ALL SAMPLES TO MA LAB.

collected by: (SCI - Sovereign Consulting)

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date/Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	9/8/15 1800	1	2	9/9/15 1310	2
Relinquished by Sampler: 3	Date Time: 9-9-15 1700	Received By: 3 FEDEX	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5 FEDEX	Date Time: 9-10-15 1000	Received By: 5	Custody Seal #	Intact / Not intact / Preserved where applicable	On Ice: Cooler Temp. 0.5

MC41356: Chain of Custody
Page 2 of 5

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

Accutest Laboratories of New England
495 Technology Center West, Building One
TEL. 508-481-6200 FAX: 508-481-7753
www.accutest.com

FED-EX Tracking #: | Bottle Order Control #:
Accutest Quote #: | Accutest Job #: MC41356

Client / Reporting Information

Company Name: EA. Science & Technology
Street Address: 6712 Brooklawn Prkway Suite 104
City / State / Zip: Syracuse, NY 13211
Project Contact / E-mail: Frank DeSantis Jr
Phone # / Fax #: 315 - 565 - 6554
Sampler(s) Name(s) / Phone #:

Project Information

Project Name: Picatinny Arsenal
Street: Rte. 15, Picatinny Arsenal
City:
Project#: RB577
Client PO#:
Project Manager:

Billing Information (If different from Report to)

Company Name:
Street Address:
City / State / Zip:
Attention: PO#:

Requested Analysis (see TEST CODE sheet): VOC - 524.2 Full Scan

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB- Equipment Blank; RB- Rinse Blank; TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Bisulfate	VOC - 524.2 Full Scan	LAB USE ONLY
-21	W63-1		9/8/15	1400	JV	GW	2	2									X	
-22	W63-2		9-8-15	1405	JV		2	2									X	
-23	W63-3		9-8-15	1410	JV		2	2									X	
-24	95-3		9-8-15	1425	JV		2	2									X	
-25	MW-11		9-8-15	1430	JV	V	2	2									X	
-26	E-MW-01		9815	1435			2											

Turnaround Time (Business days)
- [x] Std. 10 Business Days
- [ ] Std. 5 Business Days (By Contract only)
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

Data Deliverable Information
- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] CT RCP
- [ ] MA MCP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary

Comments / Special Instructions

SHIP ALL SAMPLES TO MA LAB.

collected by: (SCI - Sovereign Consulting)

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	9/8/15 1800	1	2	9/9/15 1305	2
Relinquished by Sampler: 3	9-9-15 1700	Received By: 3 FEDEX	Relinquished By: 4 SEAL 150	Date Time:	Received By: 4
Relinquished by: 5 FEDEX	Date Time: 9-10-15 (10a)	Received By: 5	Custody Seal # 602	Intact / Not intact / Preserved where applicable	On Ice: 0.5°C; Cooler Temp: 23.0°C

MC41356: Chain of Custody
Page 3 of 5

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: MC41356 **Client:** EA **Immediate Client Services Action Required:** No

Date / Time Received: 9/10/2015 10:00:00 AM **Delivery Method:**

Project: PICATINNY ARSENAL **No. Coolers:** 1 **Airbill #'s:**

Cooler Security

	Y	or N
1. Custody Seals Present:	☑	☐
2. Custody Seals Intact:	☑	☐
3. COC Present:	☑	☐
4. Smpl Dates/Time OK	☑	☐

Cooler Temperature

	Y	or N
1. Temp criteria achieved:	☑	☐

2. Cooler temp verification: Infared Gun
3. Cooler media: Ice (Bag)

Quality Control Preservation

	Y	N	N/A
1. Trip Blank present / cooler:	☑	☐	
2. Trip Blank listed on COC:	☑	☐	
3. Samples preserved properly:	☑	☐	
4. VOCs headspace free:	☑	☐	☐

Sample Integrity - Documentation

	Y	or N
1. Sample labels present on bottles:	☑	☐
2. Container labeling complete:	☑	☐
3. Sample container label / COC agree:	☐	☑

Sample Integrity - Condition

	Y	or N
1. Sample rec'd within HT:	☑	☐
2. All containers accounted for:	☑	☐

3. Condition of sample: Intact

Sample Integrity - Instructions

	Y	N	N/A
1. Analysis requested is clear:	☑	☐	
2. Bottles received for unspecified tests	☑	☐	
3. Sufficient volume rec'd for analysis:	☑	☐	
4. Compositing instructions clear:	☐	☐	☑
5. Filtering instructions clear:	☐	☐	☑

Comments

-7 the coc has EQUIPMENT BLANK, but the vials received have FIELD BLANK.. Time matches up with coc and sample.
-26 "E-MW-01" collected 9/8/15 @ 14:35 not listed on original COC. Sample added to COC by sample management.

Accutest Laboratories
V:508.481.6200

495 Technology Center West, Bldg One
F: 508.481.7753

Marlborough, MA
www/accutest.com

Sample Receipt Summary - Problem Resolution

Accutest Job Number: MC41356

CSR: Frank D'Agostino **Response Date:** 9/11/2015

Response: Sample #7 is a Field Blank. See the email for the additional sample

Accutest Laboratories
V:508.481.6200

495 Technology Center West, Bldg One
F: 508.481.7753

Marlborough, MA
www/accutest.com

Internal Sample Tracking Chronicle

EA Engineering

Job No: MC41356

SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Project No: RB577

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC41356-1	Collected: 08-SEP-15 15:10 By: MCJU E-MW-01		Received: 10-SEP-15 By:			
MC41356-1	SW846 8260C	18-SEP-15 13:50	AD			V8260STD
MC41356-2	Collected: 08-SEP-15 14:40 By: MCJU D-SW-5		Received: 10-SEP-15 By:			
MC41356-2	SW846 8260C	18-SEP-15 14:18	AD			V8260STD
MC41356-3	Collected: 08-SEP-15 14:15 By: MCJU E-38SW-1		Received: 10-SEP-15 By:			
MC41356-3	SW846 8260C	18-SEP-15 14:46	AD			V8260STD
MC41356-4	Collected: 08-SEP-15 14:00 By: MCJU E-38SW-4		Received: 10-SEP-15 By:			
MC41356-4	SW846 8260C	18-SEP-15 15:15	AD			V8260STD
MC41356-5	Collected: 08-SEP-15 00:00 By: MCJU DUP-D090815SW		Received: 10-SEP-15 By:			
MC41356-5	SW846 8260C	18-SEP-15 15:44	AD			V8260STD
MC41356-6	Collected: 08-SEP-15 00:00 By: MCJU TRIP BLANK		Received: 10-SEP-15 By:			
MC41356-6	SW846 8260C	18-SEP-15 11:28	AD			V8260STD
MC41356-7	Collected: 08-SEP-15 15:40 By: MCJU FIELD BLANK		Received: 10-SEP-15 By:			
MC41356-7	SW846 8260C	18-SEP-15 11:56	AD			V8260STD
MC41356-8	Collected: 08-SEP-15 13:10 By: MCJU 12-H		Received: 10-SEP-15 By:			
MC41356-8	SW846 8260C	18-SEP-15 16:13	AD			V8260STD

Internal Sample Tracking Chronicle

EA Engineering

Job No: MC41356

SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Project No: RB577

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC41356-9	Collected: 08-SEP-15 14:20 By: MCJU		Received: 10-SEP-15 By:			
WG11-1						
MC41356-9	SW846 8260C	18-SEP-15 16:41	AD			V8260STD
MC41356-10	Collected: 08-SEP-15 14:15 By: MCJU		Received: 10-SEP-15 By:			
WG11-2						
MC41356-10	SW846 8260C	18-SEP-15 17:09	AD			V8260STD
MC41356-11	Collected: 08-SEP-15 15:25 By: MCJU		Received: 10-SEP-15 By:			
E80-3						
MC41356-11	SW846 8260C	18-SEP-15 17:38	AD			V8260STD
MC41356-12	Collected: 08-SEP-15 15:20 By: MCJU		Received: 10-SEP-15 By:			
E82-2						
MC41356-12	SW846 8260C	18-SEP-15 18:06	AD			V8260STD
MC41356-13	Collected: 08-SEP-15 15:15 By: MCJU		Received: 10-SEP-15 By:			
E82-1						
MC41356-13	SW846 8260C	18-SEP-15 18:35	AD			V8260STD
MC41356-14	Collected: 08-SEP-15 13:30 By: MCJU		Received: 10-SEP-15 By:			
70-2						
MC41356-14	SW846 8260C	18-SEP-15 19:03	AD			V8260STD
MC41356-15	Collected: 08-SEP-15 13:35 By: MCJU		Received: 10-SEP-15 By:			
70-3						
MC41356-15	SW846 8260C	18-SEP-15 19:32	AD			V8260STD
MC41356-16	Collected: 08-SEP-15 13:40 By: MCJU		Received: 10-SEP-15 By:			
70-4						
MC41356-16	SW846 8260C	20-SEP-15 13:52	AD			V8260STD

Internal Sample Tracking Chronicle

EA Engineering

Job No: MC41356

SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Project No: RB577

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC41356-17 D12-1	Collected: 08-SEP-15 13:20 By: MCJU		Received: 10-SEP-15 By:			
MC41356-17	SW846 8260C	20-SEP-15 14:21	AD			V8260STD
MC41356-18 DUP1 AREA E	Collected: 08-SEP-15 00:00 By: MCJU		Received: 10-SEP-15 By:			
MC41356-18	SW846 8260C	20-SEP-15 14:50	AD			V8260STD
MC41356-19 DUP2 AREA E	Collected: 08-SEP-15 00:00 By: MCJU		Received: 10-SEP-15 By:			
MC41356-19	SW846 8260C	20-SEP-15 15:18	AD			V8260STD
MC41356-20 D12-D	Collected: 08-SEP-15 13:25 By: MCJU		Received: 10-SEP-15 By:			
MC41356-20	SW846 8260C	20-SEP-15 15:47	AD			V8260STD
MC41356-21 W63-1	Collected: 08-SEP-15 14:00 By: MCJU		Received: 10-SEP-15 By:			
MC41356-21	SW846 8260C	20-SEP-15 16:15	AD			V8260STD
MC41356-22 W63-2	Collected: 08-SEP-15 14:05 By: MCJU		Received: 10-SEP-15 By:			
MC41356-22	SW846 8260C	20-SEP-15 16:44	AD			V8260STD
MC41356-23 W63-3	Collected: 08-SEP-15 14:10 By: MCJU		Received: 10-SEP-15 By:			
MC41356-23	SW846 8260C	20-SEP-15 17:12	AD			V8260STD
MC41356-24 95-3	Collected: 08-SEP-15 14:25 By: MCJU		Received: 10-SEP-15 By:			
MC41356-24	SW846 8260C	20-SEP-15 17:40	AD			V8260STD

Internal Sample Tracking Chronicle

EA Engineering

Job No: MC41356

SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Project No: RB577

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC41356-25 MW-11	Collected: 08-SEP-15 14:30 By: MCJU		Received: 10-SEP-15 By:			
MC41356-25	SW846 8260C	20-SEP-15 18:09	AD			V8260STD
MC41356-26 E-MW-02	Collected: 08-SEP-15 14:35 By: MCJU		Received: 10-SEP-15 By:			
MC41356-26	SW846 8260C	20-SEP-15 18:37	AD			V8260STD

Accutest Internal Chain of Custody

Job Number: MC41356
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Received: 09/10/15

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC41356-1.1	VOC Ref #1	Cara Baker	09/18/15 09:41	Retrieve from Storage
MC41356-1.1	Cara Baker	GCMSG	09/18/15 09:41	Load on Instrument
MC41356-1.1	GCMSG	Andrew Delman	09/20/15 09:49	Unload from Instrument
MC41356-1.1	Andrew Delman	VOC Ref #1	09/20/15 09:51	Return to Storage
MC41356-2.1	VOC Ref #1	Cara Baker	09/18/15 11:18	Retrieve from Storage
MC41356-2.1	Cara Baker	GCMSG	09/18/15 11:18	Load on Instrument
MC41356-2.1	GCMSG	Andrew Delman	09/20/15 09:49	Unload from Instrument
MC41356-2.1	Andrew Delman	VOC Ref #1	09/20/15 09:51	Return to Storage
MC41356-2.2	VOC Ref #1	Cara Baker	09/18/15 11:18	Retrieve from Storage
MC41356-2.2	Cara Baker	GCMSG	09/18/15 11:18	Load on Instrument
MC41356-2.2	GCMSG	Andrew Delman	09/20/15 09:49	Unload from Instrument
MC41356-2.2	Andrew Delman	VOC Ref #1	09/20/15 09:51	Return to Storage
MC41356-2.3	VOC Ref #1	Cara Baker	09/18/15 09:41	Retrieve from Storage
MC41356-2.3	Cara Baker	GCMSG	09/18/15 09:41	Load on Instrument
MC41356-2.3	GCMSG	Andrew Delman	09/20/15 09:49	Unload from Instrument
MC41356-2.3	Andrew Delman	VOC Ref #1	09/20/15 09:51	Return to Storage
MC41356-2.4	VOC Ref #1	Cara Baker	09/18/15 11:18	Retrieve from Storage
MC41356-2.4	Cara Baker	GCMSG	09/18/15 11:18	Load on Instrument
MC41356-2.4	GCMSG	Andrew Delman	09/20/15 09:49	Unload from Instrument
MC41356-2.4	Andrew Delman	VOC Ref #1	09/20/15 09:51	Return to Storage
MC41356-3.1	VOC Ref #1	Cara Baker	09/18/15 09:41	Retrieve from Storage
MC41356-3.1	Cara Baker	GCMSG	09/18/15 09:41	Load on Instrument
MC41356-3.1	GCMSG	Andrew Delman	09/20/15 09:49	Unload from Instrument
MC41356-3.1	Andrew Delman	VOC Ref #1	09/20/15 09:51	Return to Storage
MC41356-4.1	VOC Ref #1	Cara Baker	09/18/15 09:41	Retrieve from Storage
MC41356-4.1	Cara Baker	GCMSG	09/18/15 09:41	Load on Instrument
MC41356-4.1	GCMSG	Andrew Delman	09/20/15 09:49	Unload from Instrument
MC41356-4.1	Andrew Delman	VOC Ref #1	09/20/15 09:51	Return to Storage
MC41356-5.1	VOC Ref #1	Cara Baker	09/18/15 09:41	Retrieve from Storage
MC41356-5.1	Cara Baker	GCMSG	09/18/15 09:41	Load on Instrument
MC41356-5.1	GCMSG	Andrew Delman	09/20/15 09:49	Unload from Instrument
MC41356-5.1	Andrew Delman	VOC Ref #1	09/20/15 09:51	Return to Storage
MC41356-6.2	VOC Ref #1	Cara Baker	09/18/15 09:41	Retrieve from Storage
MC41356-6.2	Cara Baker	GCMSG	09/18/15 09:41	Load on Instrument
MC41356-6.2	GCMSG	Andrew Delman	09/20/15 09:49	Unload from Instrument
MC41356-6.2	Andrew Delman	VOC Ref #1	09/20/15 09:51	Return to Storage

Accutest Internal Chain of Custody

Job Number: MC41356
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Received: 09/10/15

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC41356-7.2	VOC Ref #1	Cara Baker	09/18/15 09:41	Retrieve from Storage
MC41356-7.2	Cara Baker	GCMSG	09/18/15 09:41	Load on Instrument
MC41356-7.2	GCMSG	Andrew Delman	09/20/15 09:49	Unload from Instrument
MC41356-7.2	Andrew Delman	VOC Ref #1	09/20/15 09:51	Return to Storage
MC41356-8.1	VOC Ref #1	Cara Baker	09/18/15 09:41	Retrieve from Storage
MC41356-8.1	Cara Baker	GCMSG	09/18/15 09:41	Load on Instrument
MC41356-8.1	GCMSG	Andrew Delman	09/20/15 09:49	Unload from Instrument
MC41356-8.1	Andrew Delman	VOC Ref #1	09/20/15 09:51	Return to Storage
MC41356-9.2	VOC Ref #1	Cara Baker	09/18/15 09:41	Retrieve from Storage
MC41356-9.2	Cara Baker	GCMSG	09/18/15 09:41	Load on Instrument
MC41356-9.2	GCMSG	Andrew Delman	09/20/15 09:49	Unload from Instrument
MC41356-9.2	Andrew Delman	VOC Ref #1	09/20/15 09:51	Return to Storage
MC41356-11.1	VOC Ref #2	Cara Baker	09/18/15 09:43	Retrieve from Storage
MC41356-11.1	Cara Baker	GCMSG	09/18/15 09:43	Load on Instrument
MC41356-11.1	GCMSG	Andrew Delman	09/20/15 09:49	Unload from Instrument
MC41356-11.1	Andrew Delman	VOC Ref #2	09/20/15 09:51	Return to Storage
MC41356-12.1	VOC Ref #2	Cara Baker	09/18/15 09:43	Retrieve from Storage
MC41356-12.1	Cara Baker	GCMSG	09/18/15 09:43	Load on Instrument
MC41356-12.1	GCMSG	Andrew Delman	09/20/15 09:49	Unload from Instrument
MC41356-12.1	Andrew Delman	VOC Ref #2	09/20/15 09:50	Return to Storage
MC41356-13.1	VOC Ref #2	Cara Baker	09/18/15 09:43	Retrieve from Storage
MC41356-13.1	Cara Baker	GCMSG	09/18/15 09:43	Load on Instrument
MC41356-13.1	GCMSG	Andrew Delman	09/20/15 09:49	Unload from Instrument
MC41356-13.1	Andrew Delman	VOC Ref #2	09/20/15 09:50	Return to Storage
MC41356-14.1	VOC Ref #2	Cara Baker	09/18/15 09:43	Retrieve from Storage
MC41356-14.1	Cara Baker	GCMSG	09/18/15 09:43	Load on Instrument
MC41356-14.1	GCMSG	Andrew Delman	09/20/15 09:49	Unload from Instrument
MC41356-14.1	Andrew Delman	VOC Ref #2	09/20/15 09:50	Return to Storage
MC41356-15.1	VOC Ref #2	Cara Baker	09/18/15 09:43	Retrieve from Storage
MC41356-15.1	Cara Baker	GCMSG	09/18/15 09:43	Load on Instrument
MC41356-15.1	GCMSG	Andrew Delman	09/20/15 09:49	Unload from Instrument
MC41356-15.1	Andrew Delman	VOC Ref #2	09/20/15 09:50	Return to Storage
MC41356-16.1	VOC Ref #2	Cara Baker	09/18/15 09:43	Retrieve from Storage
MC41356-16.1	Cara Baker	GCMSG	09/18/15 09:43	Load on Instrument
MC41356-16.1	GCMSG	Cara Baker	09/18/15 11:15	Unload from Instrument

Accutest Internal Chain of Custody

Job Number: MC41356
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Received: 09/10/15

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC41356-16.1	Cara Baker	VOC Ref #2	09/18/15 11:16	Return to Storage
MC41356-16.2	VOC Ref #2	Andrew Delman	09/20/15 10:17	Retrieve from Storage
MC41356-16.2	Andrew Delman	GCMSG	09/20/15 10:17	Load on Instrument
MC41356-16.2	GCMSG	Cara Baker	09/21/15 08:52	Unload from Instrument
MC41356-16.2	Cara Baker	VOC Ref #2	09/21/15 08:53	Return to Storage
MC41356-17.1	VOC Ref #2	Andrew Delman	09/20/15 10:17	Retrieve from Storage
MC41356-17.1	Andrew Delman	GCMSG	09/20/15 10:17	Load on Instrument
MC41356-17.1	GCMSG	Cara Baker	09/21/15 08:52	Unload from Instrument
MC41356-17.1	Cara Baker	VOC Ref #2	09/21/15 08:53	Return to Storage
MC41356-18.1	VOC Ref #2	Andrew Delman	09/20/15 10:17	Retrieve from Storage
MC41356-18.1	Andrew Delman	GCMSG	09/20/15 10:17	Load on Instrument
MC41356-18.1	GCMSG	Cara Baker	09/21/15 08:52	Unload from Instrument
MC41356-18.1	Cara Baker	VOC Ref #2	09/21/15 08:53	Return to Storage
MC41356-19.2	VOC Ref #2	Andrew Delman	09/20/15 10:17	Retrieve from Storage
MC41356-19.2	Andrew Delman	GCMSG	09/20/15 10:17	Load on Instrument
MC41356-19.2	GCMSG	Cara Baker	09/21/15 08:52	Unload from Instrument
MC41356-19.2	Cara Baker	VOC Ref #2	09/21/15 08:53	Return to Storage
MC41356-20.2	VOC Ref #2	Andrew Delman	09/20/15 10:17	Retrieve from Storage
MC41356-20.2	Andrew Delman	GCMSG	09/20/15 10:17	Load on Instrument
MC41356-20.2	GCMSG	Cara Baker	09/21/15 08:52	Unload from Instrument
MC41356-20.2	Cara Baker	VOC Ref #2	09/21/15 08:53	Return to Storage
MC41356-20.3	VOC Ref #2	Andrew Delman	09/20/15 10:17	Retrieve from Storage
MC41356-20.3	Andrew Delman	GCMSG	09/20/15 10:17	Load on Instrument
MC41356-20.3	GCMSG	Cara Baker	09/21/15 08:52	Unload from Instrument
MC41356-20.3	Cara Baker	VOC Ref #2	09/21/15 08:53	Return to Storage
MC41356-20.4	VOC Ref #2	Andrew Delman	09/20/15 10:17	Retrieve from Storage
MC41356-20.4	Andrew Delman	GCMSG	09/20/15 10:17	Load on Instrument
MC41356-20.4	GCMSG	Cara Baker	09/21/15 08:52	Unload from Instrument
MC41356-20.4	Cara Baker	VOC Ref #2	09/21/15 08:53	Return to Storage
MC41356-20.5	VOC Ref #2	Andrew Delman	09/20/15 10:17	Retrieve from Storage
MC41356-20.5	Andrew Delman	GCMSG	09/20/15 10:17	Load on Instrument
MC41356-20.5	GCMSG	Cara Baker	09/21/15 08:52	Unload from Instrument
MC41356-20.5	Cara Baker	VOC Ref #2	09/21/15 08:53	Return to Storage
MC41356-21.2	VOC Ref #2	Andrew Delman	09/20/15 10:17	Retrieve from Storage
MC41356-21.2	Andrew Delman	GCMSG	09/20/15 10:17	Load on Instrument

Accutest Internal Chain of Custody

Job Number: MC41356
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Received: 09/10/15

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC41356-21.2	GCMSG	Cara Baker	09/21/15 08:52	Unload from Instrument
MC41356-21.2	Cara Baker	VOC Ref #2	09/21/15 08:53	Return to Storage
MC41356-22.2	VOC Ref #2	Andrew Delman	09/20/15 10:17	Retrieve from Storage
MC41356-22.2	Andrew Delman	GCMSG	09/20/15 10:17	Load on Instrument
MC41356-22.2	GCMSG	Cara Baker	09/21/15 08:52	Unload from Instrument
MC41356-22.2	Cara Baker	VOC Ref #2	09/21/15 08:53	Return to Storage
MC41356-23.2	VOC Ref #2	Andrew Delman	09/20/15 10:17	Retrieve from Storage
MC41356-23.2	Andrew Delman	GCMSG	09/20/15 10:17	Load on Instrument
MC41356-23.2	GCMSG	Cara Baker	09/21/15 08:52	Unload from Instrument
MC41356-23.2	Cara Baker	VOC Ref #2	09/21/15 08:53	Return to Storage
MC41356-24.1	VOC Ref #2	Andrew Delman	09/20/15 10:17	Retrieve from Storage
MC41356-24.1	Andrew Delman	GCMSG	09/20/15 10:17	Load on Instrument
MC41356-24.1	GCMSG	Cara Baker	09/21/15 08:52	Unload from Instrument
MC41356-24.1	Cara Baker	VOC Ref #2	09/21/15 08:53	Return to Storage
MC41356-25.2	VOC Ref #2	Andrew Delman	09/20/15 10:17	Retrieve from Storage
MC41356-25.2	Andrew Delman	GCMSG	09/20/15 10:17	Load on Instrument
MC41356-25.2	GCMSG	Cara Baker	09/21/15 08:52	Unload from Instrument
MC41356-25.2	Cara Baker	VOC Ref #2	09/21/15 08:53	Return to Storage
MC41356-26.2	VOC Ref #2	Andrew Delman	09/20/15 10:17	Retrieve from Storage
MC41356-26.2	Andrew Delman	GCMSG	09/20/15 10:17	Load on Instrument
MC41356-26.2	GCMSG	Cara Baker	09/21/15 08:52	Unload from Instrument
MC41356-26.2	Cara Baker	VOC Ref #2	09/21/15 08:53	Return to Storage

QC Evaluation: DOD QSM5 Limits

Job Number: MC41356
Account: EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Collected: 09/08/15

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MSG5455	SW846 8260C						
MSG5455-BS	67-64-1	Acetone	BSP	REC	130	%	39-160
MSG5455-BS	71-43-2	Benzene	BSP	REC	95	%	79-120
MSG5455-BS	108-86-1	Bromobenzene	BSP	REC	95	%	80-120
MSG5455-BS	74-97-5	Bromochloromethane	BSP	REC	101	%	78-123
MSG5455-BS	75-27-4	Bromodichloromethane	BSP	REC	95	%	79-125
MSG5455-BS	75-25-2	Bromoform	BSP	REC	94	%	66-130
MSG5455-BS	74-83-9	Bromomethane	BSP	REC	111	%	53-141
MSG5455-BS	78-93-3	2-Butanone (MEK)	BSP	REC	113	%	56-143
MSG5455-BS	104-51-8	n-Butylbenzene	BSP	REC	98	%	75-128
MSG5455-BS	135-98-8	sec-Butylbenzene	BSP	REC	96	%	77-126
MSG5455-BS	98-06-6	tert-Butylbenzene	BSP	REC	93	%	78-124
MSG5455-BS	75-15-0	Carbon disulfide	BSP	REC	105	%	64-133
MSG5455-BS	56-23-5	Carbon tetrachloride	BSP	REC	98	%	72-136
MSG5455-BS	108-90-7	Chlorobenzene	BSP	REC	91	%	82-118
MSG5455-BS	75-00-3	Chloroethane	BSP	REC	116	%	60-138
MSG5455-BS	67-66-3	Chloroform	BSP	REC	94	%	79-124
MSG5455-BS	74-87-3	Chloromethane	BSP	REC	115	%	50-139
MSG5455-BS	95-49-8	o-Chlorotoluene	BSP	REC	91	%	79-122
MSG5455-BS	106-43-4	p-Chlorotoluene	BSP	REC	94	%	78-122
MSG5455-BS	96-12-8	1,2-Dibromo-3-chloropropane	BSP	REC	87	%	62-128
MSG5455-BS	124-48-1	Dibromochloromethane	BSP	REC	94	%	74-126
MSG5455-BS	106-93-4	1,2-Dibromoethane	BSP	REC	95	%	77-121
MSG5455-BS	95-50-1	1,2-Dichlorobenzene	BSP	REC	92	%	80-119
MSG5455-BS	541-73-1	1,3-Dichlorobenzene	BSP	REC	90	%	80-119
MSG5455-BS	106-46-7	1,4-Dichlorobenzene	BSP	REC	91	%	79-118
MSG5455-BS	75-71-8	Dichlorodifluoromethane	BSP	REC	110	%	32-152
MSG5455-BS	75-34-3	1,1-Dichloroethane	BSP	REC	92	%	77-125
MSG5455-BS	107-06-2	1,2-Dichloroethane	BSP	REC	93	%	73-128
MSG5455-BS	75-35-4	1,1-Dichloroethene	BSP	REC	108	%	71-131
MSG5455-BS	156-59-2	cis-1,2-Dichloroethene	BSP	REC	100	%	78-123
MSG5455-BS	156-60-5	trans-1,2-Dichloroethene	BSP	REC	104	%	75-124
MSG5455-BS	78-87-5	1,2-Dichloropropane	BSP	REC	99	%	78-122
MSG5455-BS	142-28-9	1,3-Dichloropropane	BSP	REC	100	%	80-119
MSG5455-BS	594-20-7	2,2-Dichloropropane	BSP	REC	99	%	60-139
MSG5455-BS	563-58-6	1,1-Dichloropropene	BSP	REC	99	%	79-125
MSG5455-BS	10061-01-5	cis-1,3-Dichloropropene	BSP	REC	98	%	75-124
MSG5455-BS	10061-02-6	trans-1,3-Dichloropropene	BSP	REC	90	%	73-127
MSG5455-BS	100-41-4	Ethylbenzene	BSP	REC	95	%	79-121
MSG5455-BS	87-68-3	Hexachlorobutadiene	BSP	REC	98	%	66-134
MSG5455-BS	591-78-6	2-Hexanone	BSP	REC	113	%	57-139
MSG5455-BS	74-88-4	Iodomethane	BSP	REC	111	%	69-131
MSG5455-BS	98-82-8	Isopropylbenzene	BSP	REC	94	%	72-131

* Sample used for QC is not from job MC41356

QC Evaluation: DOD QSM5 Limits

Job Number: MC41356
Account: EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Collected: 09/08/15

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MSG5455-BS	99-87-6	p-Isopropyltoluene	BSP	REC	96	%	77-127
MSG5455-BS	1634-04-4	Methyl Tert Butyl Ether	BSP	REC	92	%	71-124
MSG5455-BS	108-10-1	4-Methyl-2-pentanone (MIBK)	BSP	REC	93	%	67-130
MSG5455-BS	74-95-3	Methylene bromide	BSP	REC	99	%	79-123
MSG5455-BS	75-09-2	Methylene chloride	BSP	REC	105	%	74-124
MSG5455-BS	91-20-3	Naphthalene	BSP	REC	71	%	61-128
MSG5455-BS	103-65-1	n-Propylbenzene	BSP	REC	92	%	76-126
MSG5455-BS	100-42-5	Styrene	BSP	REC	99	%	78-123
MSG5455-BS	630-20-6	1,1,1,2-Tetrachloroethane	BSP	REC	97	%	78-124
MSG5455-BS	79-34-5	1,1,2,2-Tetrachloroethane	BSP	REC	88	%	71-121
MSG5455-BS	127-18-4	Tetrachloroethene	BSP	REC	98	%	74-129
MSG5455-BS	108-88-3	Toluene	BSP	REC	98	%	80-121
MSG5455-BS	87-61-6	1,2,3-Trichlorobenzene	BSP	REC	85	%	69-129
MSG5455-BS	120-82-1	1,2,4-Trichlorobenzene	BSP	REC	86	%	69-130
MSG5455-BS	71-55-6	1,1,1-Trichloroethane	BSP	REC	101	%	74-131
MSG5455-BS	79-00-5	1,1,2-Trichloroethane	BSP	REC	96	%	80-119
MSG5455-BS	79-01-6	Trichloroethene	BSP	REC	96	%	79-123
MSG5455-BS	75-69-4	Trichlorofluoromethane	BSP	REC	108	%	65-141
MSG5455-BS	96-18-4	1,2,3-Trichloropropane	BSP	REC	87	%	73-122
MSG5455-BS	95-63-6	1,2,4-Trimethylbenzene	BSP	REC	95	%	76-124
MSG5455-BS	108-67-8	1,3,5-Trimethylbenzene	BSP	REC	95	%	75-124
MSG5455-BS	108-05-4	Vinyl Acetate	BSP	REC	86	%	54-146
MSG5455-BS	75-01-4	Vinyl chloride	BSP	REC	106	%	58-137
MSG5455-BS		m,p-Xylene	BSP	REC	95	%	80-121
MSG5455-BS	95-47-6	o-Xylene	BSP	REC	94	%	78-122
MSG5455-BS	1330-20-7	Xylene (total)	BSP	REC	95	%	79-121
MSG5455-BS	1868-53-7	Dibromofluoromethane	BSP	SURR	103	%	80-119
MSG5455-BS	2037-26-5	Toluene-D8	BSP	SURR	105	%	89-112
MSG5455-BS	460-00-4	4-Bromofluorobenzene	BSP	SURR	96	%	85-114
MSG5455-BSD	67-64-1	Acetone	BSD	REC	117	%	39-160
MSG5455-BSD	71-43-2	Benzene	BSD	REC	93	%	79-120
MSG5455-BSD	108-86-1	Bromobenzene	BSD	REC	94	%	80-120
MSG5455-BSD	74-97-5	Bromochloromethane	BSD	REC	100	%	78-123
MSG5455-BSD	75-27-4	Bromodichloromethane	BSD	REC	93	%	79-125
MSG5455-BSD	75-25-2	Bromoform	BSD	REC	94	%	66-130
MSG5455-BSD	74-83-9	Bromomethane	BSD	REC	107	%	53-141
MSG5455-BSD	78-93-3	2-Butanone (MEK)	BSD	REC	111	%	56-143
MSG5455-BSD	104-51-8	n-Butylbenzene	BSD	REC	98	%	75-128
MSG5455-BSD	135-98-8	sec-Butylbenzene	BSD	REC	95	%	77-126
MSG5455-BSD	98-06-6	tert-Butylbenzene	BSD	REC	95	%	78-124
MSG5455-BSD	75-15-0	Carbon disulfide	BSD	REC	105	%	64-133
MSG5455-BSD	56-23-5	Carbon tetrachloride	BSD	REC	97	%	72-136
MSG5455-BSD	108-90-7	Chlorobenzene	BSD	REC	92	%	82-118
MSG5455-BSD	75-00-3	Chloroethane	BSD	REC	113	%	60-138
MSG5455-BSD	67-66-3	Chloroform	BSD	REC	92	%	79-124

* Sample used for QC is not from job MC41356

QC Evaluation: DOD QSM5 Limits

Job Number: MC41356
Account: EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Collected: 09/08/15

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MSG5455-BSD	74-87-3	Chloromethane	BSD	REC	113	%	50-139
MSG5455-BSD	95-49-8	o-Chlorotoluene	BSD	REC	92	%	79-122
MSG5455-BSD	106-43-4	p-Chlorotoluene	BSD	REC	95	%	78-122
MSG5455-BSD	96-12-8	1,2-Dibromo-3-chloropropane	BSD	REC	83	%	62-128
MSG5455-BSD	124-48-1	Dibromochloromethane	BSD	REC	93	%	74-126
MSG5455-BSD	106-93-4	1,2-Dibromoethane	BSD	REC	95	%	77-121
MSG5455-BSD	95-50-1	1,2-Dichlorobenzene	BSD	REC	93	%	80-119
MSG5455-BSD	541-73-1	1,3-Dichlorobenzene	BSD	REC	91	%	80-119
MSG5455-BSD	106-46-7	1,4-Dichlorobenzene	BSD	REC	90	%	79-118
MSG5455-BSD	75-71-8	Dichlorodifluoromethane	BSD	REC	103	%	32-152
MSG5455-BSD	75-34-3	1,1-Dichloroethane	BSD	REC	92	%	77-125
MSG5455-BSD	107-06-2	1,2-Dichloroethane	BSD	REC	90	%	73-128
MSG5455-BSD	75-35-4	1,1-Dichloroethene	BSD	REC	105	%	71-131
MSG5455-BSD	156-59-2	cis-1,2-Dichloroethene	BSD	REC	101	%	78-123
MSG5455-BSD	156-60-5	trans-1,2-Dichloroethene	BSD	REC	102	%	75-124
MSG5455-BSD	78-87-5	1,2-Dichloropropane	BSD	REC	99	%	78-122
MSG5455-BSD	142-28-9	1,3-Dichloropropane	BSD	REC	97	%	80-119
MSG5455-BSD	594-20-7	2,2-Dichloropropane	BSD	REC	93	%	60-139
MSG5455-BSD	563-58-6	1,1-Dichloropropene	BSD	REC	97	%	79-125
MSG5455-BSD	10061-01-5	cis-1,3-Dichloropropene	BSD	REC	97	%	75-124
MSG5455-BSD	10061-02-6	trans-1,3-Dichloropropene	BSD	REC	89	%	73-127
MSG5455-BSD	100-41-4	Ethylbenzene	BSD	REC	97	%	79-121
MSG5455-BSD	87-68-3	Hexachlorobutadiene	BSD	REC	98	%	66-134
MSG5455-BSD	591-78-6	2-Hexanone	BSD	REC	106	%	57-139
MSG5455-BSD	74-88-4	Iodomethane	BSD	REC	110	%	69-131
MSG5455-BSD	98-82-8	Isopropylbenzene	BSD	REC	96	%	72-131
MSG5455-BSD	99-87-6	p-Isopropyltoluene	BSD	REC	98	%	77-127
MSG5455-BSD	1634-04-4	Methyl Tert Butyl Ether	BSD	REC	90	%	71-124
MSG5455-BSD	108-10-1	4-Methyl-2-pentanone (MIBK)	BSD	REC	90	%	67-130
MSG5455-BSD	74-95-3	Methylene bromide	BSD	REC	99	%	79-123
MSG5455-BSD	75-09-2	Methylene chloride	BSD	REC	103	%	74-124
MSG5455-BSD	91-20-3	Naphthalene	BSD	REC	68	%	61-128
MSG5455-BSD	103-65-1	n-Propylbenzene	BSD	REC	93	%	76-126
MSG5455-BSD	100-42-5	Styrene	BSD	REC	99	%	78-123
MSG5455-BSD	630-20-6	1,1,1,2-Tetrachloroethane	BSD	REC	98	%	78-124
MSG5455-BSD	79-34-5	1,1,2,2-Tetrachloroethane	BSD	REC	86	%	71-121
MSG5455-BSD	127-18-4	Tetrachloroethene	BSD	REC	98	%	74-129
MSG5455-BSD	108-88-3	Toluene	BSD	REC	97	%	80-121
MSG5455-BSD	87-61-6	1,2,3-Trichlorobenzene	BSD	REC	81	%	69-129
MSG5455-BSD	120-82-1	1,2,4-Trichlorobenzene	BSD	REC	84	%	69-130
MSG5455-BSD	71-55-6	1,1,1-Trichloroethane	BSD	REC	100	%	74-131
MSG5455-BSD	79-00-5	1,1,2-Trichloroethane	BSD	REC	94	%	80-119
MSG5455-BSD	79-01-6	Trichloroethene	BSD	REC	95	%	79-123
MSG5455-BSD	75-69-4	Trichlorofluoromethane	BSD	REC	104	%	65-141
MSG5455-BSD	96-18-4	1,2,3-Trichloropropane	BSD	REC	88	%	73-122

* Sample used for QC is not from job MC41356

QC Evaluation: DOD QSM5 Limits

Job Number: MC41356
Account: EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Collected: 09/08/15

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MSG5455-BSD	95-63-6	1,2,4-Trimethylbenzene	BSD	REC	96	%	76-124
MSG5455-BSD	108-67-8	1,3,5-Trimethylbenzene	BSD	REC	97	%	75-124
MSG5455-BSD	108-05-4	Vinyl Acetate	BSD	REC	86	%	54-146
MSG5455-BSD	75-01-4	Vinyl chloride	BSD	REC	103	%	58-137
MSG5455-BSD		m,p-Xylene	BSD	REC	97	%	80-121
MSG5455-BSD	95-47-6	o-Xylene	BSD	REC	96	%	78-122
MSG5455-BSD	1330-20-7	Xylene (total)	BSD	REC	97	%	79-121
MSG5455-BSD	1868-53-7	Dibromofluoromethane	BSD	SURR	103	%	80-119
MSG5455-BSD	2037-26-5	Toluene-D8	BSD	SURR	102	%	89-112
MSG5455-BSD	460-00-4	4-Bromofluorobenzene	BSD	SURR	97	%	85-114
MC41356-2MS	67-64-1	Acetone	MS	REC	74	%	39-160
MC41356-2MS	71-43-2	Benzene	MS	REC	96	%	79-120
MC41356-2MS	108-86-1	Bromobenzene	MS	REC	99	%	80-120
MC41356-2MS	74-97-5	Bromochloromethane	MS	REC	103	%	78-123
MC41356-2MS	75-27-4	Bromodichloromethane	MS	REC	98	%	79-125
MC41356-2MS	75-25-2	Bromoform	MS	REC	97	%	66-130
MC41356-2MS	74-83-9	Bromomethane	MS	REC	101	%	53-141
MC41356-2MS	78-93-3	2-Butanone (MEK)	MS	REC	86	%	56-143
MC41356-2MS	104-51-8	n-Butylbenzene	MS	REC	100	%	75-128
MC41356-2MS	135-98-8	sec-Butylbenzene	MS	REC	98	%	77-126
MC41356-2MS	98-06-6	tert-Butylbenzene	MS	REC	95	%	78-124
MC41356-2MS	75-15-0	Carbon disulfide	MS	REC	95	%	64-133
MC41356-2MS	56-23-5	Carbon tetrachloride	MS	REC	101	%	72-136
MC41356-2MS	108-90-7	Chlorobenzene	MS	REC	96	%	82-118
MC41356-2MS	75-00-3	Chloroethane	MS	REC	106	%	60-138
MC41356-2MS	67-66-3	Chloroform	MS	REC	95	%	79-124
MC41356-2MS	74-87-3	Chloromethane	MS	REC	108	%	50-139
MC41356-2MS	95-49-8	o-Chlorotoluene	MS	REC	94	%	79-122
MC41356-2MS	106-43-4	p-Chlorotoluene	MS	REC	96	%	78-122
MC41356-2MS	96-12-8	1,2-Dibromo-3-chloropropane	MS	REC	92	%	62-128
MC41356-2MS	124-48-1	Dibromochloromethane	MS	REC	96	%	74-126
MC41356-2MS	106-93-4	1,2-Dibromoethane	MS	REC	99	%	77-121
MC41356-2MS	95-50-1	1,2-Dichlorobenzene	MS	REC	96	%	80-119
MC41356-2MS	541-73-1	1,3-Dichlorobenzene	MS	REC	93	%	80-119
MC41356-2MS	106-46-7	1,4-Dichlorobenzene	MS	REC	94	%	79-118
MC41356-2MS	75-71-8	Dichlorodifluoromethane	MS	REC	92	%	32-152
MC41356-2MS	75-34-3	1,1-Dichloroethane	MS	REC	92	%	77-125
MC41356-2MS	107-06-2	1,2-Dichloroethane	MS	REC	95	%	73-128
MC41356-2MS	75-35-4	1,1-Dichloroethene	MS	REC	104	%	71-131
MC41356-2MS	156-59-2	cis-1,2-Dichloroethene	MS	REC	102	%	78-123
MC41356-2MS	156-60-5	trans-1,2-Dichloroethene	MS	REC	102	%	75-124
MC41356-2MS	78-87-5	1,2-Dichloropropane	MS	REC	102	%	78-122
MC41356-2MS	142-28-9	1,3-Dichloropropane	MS	REC	105	%	80-119
MC41356-2MS	594-20-7	2,2-Dichloropropane	MS	REC	94	%	60-139
MC41356-2MS	563-58-6	1,1-Dichloropropene	MS	REC	98	%	79-125

* Sample used for QC is not from job MC41356

QC Evaluation: DOD QSM5 Limits

Job Number: MC41356
Account: EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Collected: 09/08/15

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MC41356-2MS	10061-01-5	cis-1,3-Dichloropropene	MS	REC	99	%	75-124
MC41356-2MS	10061-02-6	trans-1,3-Dichloropropene	MS	REC	91	%	73-127
MC41356-2MS	100-41-4	Ethylbenzene	MS	REC	98	%	79-121
MC41356-2MS	87-68-3	Hexachlorobutadiene	MS	REC	101	%	66-134
MC41356-2MS	591-78-6	2-Hexanone	MS	REC	89	%	57-139
MC41356-2MS	74-88-4	Iodomethane	MS	REC	108	%	69-131
MC41356-2MS	98-82-8	Isopropylbenzene	MS	REC	95	%	72-131
MC41356-2MS	99-87-6	p-Isopropyltoluene	MS	REC	96	%	77-127
MC41356-2MS	1634-04-4	Methyl Tert Butyl Ether	MS	REC	93	%	71-124
MC41356-2MS	108-10-1	4-Methyl-2-pentanone (MIBK)	MS	REC	78	%	67-130
MC41356-2MS	74-95-3	Methylene bromide	MS	REC	105	%	79-123
MC41356-2MS	75-09-2	Methylene chloride	MS	REC	103	%	74-124
MC41356-2MS	91-20-3	Naphthalene	MS	REC	73	%	61-128
MC41356-2MS	103-65-1	n-Propylbenzene	MS	REC	94	%	76-126
MC41356-2MS	100-42-5	Styrene	MS	REC	77	%	78-123
MC41356-2MS	630-20-6	1,1,1,2-Tetrachloroethane	MS	REC	101	%	78-124
MC41356-2MS	79-34-5	1,1,2,2-Tetrachloroethane	MS	REC	95	%	71-121
MC41356-2MS	127-18-4	Tetrachloroethene	MS	REC	102	%	74-129
MC41356-2MS	108-88-3	Toluene	MS	REC	100	%	80-121
MC41356-2MS	87-61-6	1,2,3-Trichlorobenzene	MS	REC	87	%	69-129
MC41356-2MS	120-82-1	1,2,4-Trichlorobenzene	MS	REC	87	%	69-130
MC41356-2MS	71-55-6	1,1,1-Trichloroethane	MS	REC	104	%	74-131
MC41356-2MS	79-00-5	1,1,2-Trichloroethane	MS	REC	103	%	80-119
MC41356-2MS	79-01-6	Trichloroethene	MS	REC	99	%	79-123
MC41356-2MS	75-69-4	Trichlorofluoromethane	MS	REC	98	%	65-141
MC41356-2MS	96-18-4	1,2,3-Trichloropropane	MS	REC	95	%	73-122
MC41356-2MS	95-63-6	1,2,4-Trimethylbenzene	MS	REC	84	%	76-124
MC41356-2MS	108-67-8	1,3,5-Trimethylbenzene	MS	REC	81	%	75-124
MC41356-2MS	108-05-4	Vinyl Acetate	MS	REC	83	%	54-146
MC41356-2MS	75-01-4	Vinyl chloride	MS	REC	96	%	58-137
MC41356-2MS		m,p-Xylene	MS	REC	93	%	80-121
MC41356-2MS	95-47-6	o-Xylene	MS	REC	93	%	78-122
MC41356-2MS	1330-20-7	Xylene (total)	MS	REC	93	%	79-121
MC41356-2MS	1868-53-7	Dibromofluoromethane	MS	SURR	104	%	80-119
MC41356-2MS	2037-26-5	Toluene-D8	MS	SURR	103	%	89-112
MC41356-2MS	460-00-4	4-Bromofluorobenzene	MS	SURR	96	%	85-114
MC41356-2MSD	67-64-1	Acetone	MSD	REC	82	%	39-160
MC41356-2MSD	67-64-1	Acetone	MSD	RPD	10	%	20
MC41356-2MSD	71-43-2	Benzene	MSD	REC	97	%	79-120
MC41356-2MSD	71-43-2	Benzene	MSD	RPD	0	%	20
MC41356-2MSD	108-86-1	Bromobenzene	MSD	REC	96	%	80-120
MC41356-2MSD	108-86-1	Bromobenzene	MSD	RPD	2	%	20
MC41356-2MSD	74-97-5	Bromochloromethane	MSD	REC	105	%	78-123
MC41356-2MSD	74-97-5	Bromochloromethane	MSD	RPD	2	%	20
MC41356-2MSD	75-27-4	Bromodichloromethane	MSD	REC	97	%	79-125

* Sample used for QC is not from job MC41356

QC Evaluation: DOD QSM5 Limits

Job Number: MC41356
Account: EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Collected: 09/08/15

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MC41356-2MSD	75-27-4	Bromodichloromethane	MSD	RPD	1	%	20
MC41356-2MSD	75-25-2	Bromoform	MSD	REC	95	%	66-130
MC41356-2MSD	75-25-2	Bromoform	MSD	RPD	2	%	20
MC41356-2MSD	74-83-9	Bromomethane	MSD	REC	107	%	53-141
MC41356-2MSD	74-83-9	Bromomethane	MSD	RPD	6	%	20
MC41356-2MSD	78-93-3	2-Butanone (MEK)	MSD	REC	90	%	56-143
MC41356-2MSD	78-93-3	2-Butanone (MEK)	MSD	RPD	4	%	20
MC41356-2MSD	104-51-8	n-Butylbenzene	MSD	REC	98	%	75-128
MC41356-2MSD	104-51-8	n-Butylbenzene	MSD	RPD	1	%	20
MC41356-2MSD	135-98-8	sec-Butylbenzene	MSD	REC	97	%	77-126
MC41356-2MSD	135-98-8	sec-Butylbenzene	MSD	RPD	1	%	20
MC41356-2MSD	98-06-6	tert-Butylbenzene	MSD	REC	94	%	78-124
MC41356-2MSD	98-06-6	tert-Butylbenzene	MSD	RPD	2	%	20
MC41356-2MSD	75-15-0	Carbon disulfide	MSD	REC	99	%	64-133
MC41356-2MSD	75-15-0	Carbon disulfide	MSD	RPD	4	%	20
MC41356-2MSD	56-23-5	Carbon tetrachloride	MSD	REC	102	%	72-136
MC41356-2MSD	56-23-5	Carbon tetrachloride	MSD	RPD	1	%	20
MC41356-2MSD	108-90-7	Chlorobenzene	MSD	REC	95	%	82-118
MC41356-2MSD	108-90-7	Chlorobenzene	MSD	RPD	1	%	20
MC41356-2MSD	75-00-3	Chloroethane	MSD	REC	111	%	60-138
MC41356-2MSD	75-00-3	Chloroethane	MSD	RPD	4	%	20
MC41356-2MSD	67-66-3	Chloroform	MSD	REC	96	%	79-124
MC41356-2MSD	67-66-3	Chloroform	MSD	RPD	2	%	20
MC41356-2MSD	74-87-3	Chloromethane	MSD	REC	113	%	50-139
MC41356-2MSD	74-87-3	Chloromethane	MSD	RPD	5	%	20
MC41356-2MSD	95-49-8	o-Chlorotoluene	MSD	REC	92	%	79-122
MC41356-2MSD	95-49-8	o-Chlorotoluene	MSD	RPD	2	%	20
MC41356-2MSD	106-43-4	p-Chlorotoluene	MSD	REC	93	%	78-122
MC41356-2MSD	106-43-4	p-Chlorotoluene	MSD	RPD	2	%	20
MC41356-2MSD	96-12-8	1,2-Dibromo-3-chloropropane	MSD	REC	92	%	62-128
MC41356-2MSD	96-12-8	1,2-Dibromo-3-chloropropane	MSD	RPD	0	%	20
MC41356-2MSD	124-48-1	Dibromochloromethane	MSD	REC	95	%	74-126
MC41356-2MSD	124-48-1	Dibromochloromethane	MSD	RPD	1	%	20
MC41356-2MSD	106-93-4	1,2-Dibromoethane	MSD	REC	98	%	77-121
MC41356-2MSD	106-93-4	1,2-Dibromoethane	MSD	RPD	1	%	20
MC41356-2MSD	95-50-1	1,2-Dichlorobenzene	MSD	REC	96	%	80-119
MC41356-2MSD	95-50-1	1,2-Dichlorobenzene	MSD	RPD	0	%	20
MC41356-2MSD	541-73-1	1,3-Dichlorobenzene	MSD	REC	92	%	80-119
MC41356-2MSD	541-73-1	1,3-Dichlorobenzene	MSD	RPD	1	%	20
MC41356-2MSD	106-46-7	1,4-Dichlorobenzene	MSD	REC	93	%	79-118
MC41356-2MSD	106-46-7	1,4-Dichlorobenzene	MSD	RPD	1	%	20
MC41356-2MSD	75-71-8	Dichlorodifluoromethane	MSD	REC	99	%	32-152
MC41356-2MSD	75-71-8	Dichlorodifluoromethane	MSD	RPD	8	%	20
MC41356-2MSD	75-34-3	1,1-Dichloroethane	MSD	REC	94	%	77-125
MC41356-2MSD	75-34-3	1,1-Dichloroethane	MSD	RPD	3	%	20

* Sample used for QC is not from job MC41356

QC Evaluation: DOD QSM5 Limits

Job Number: MC41356
Account: EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Collected: 09/08/15

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MC41356-2MSD	107-06-2	1,2-Dichloroethane	MSD	REC	94	%	73-128
MC41356-2MSD	107-06-2	1,2-Dichloroethane	MSD	RPD	0	%	20
MC41356-2MSD	75-35-4	1,1-Dichloroethene	MSD	REC	110	%	71-131
MC41356-2MSD	75-35-4	1,1-Dichloroethene	MSD	RPD	5	%	20
MC41356-2MSD	156-59-2	cis-1,2-Dichloroethene	MSD	REC	106	%	78-123
MC41356-2MSD	156-59-2	cis-1,2-Dichloroethene	MSD	RPD	3	%	20
MC41356-2MSD	156-60-5	trans-1,2-Dichloroethene	MSD	REC	105	%	75-124
MC41356-2MSD	156-60-5	trans-1,2-Dichloroethene	MSD	RPD	3	%	20
MC41356-2MSD	78-87-5	1,2-Dichloropropane	MSD	REC	102	%	78-122
MC41356-2MSD	78-87-5	1,2-Dichloropropane	MSD	RPD	0	%	20
MC41356-2MSD	142-28-9	1,3-Dichloropropane	MSD	REC	102	%	80-119
MC41356-2MSD	142-28-9	1,3-Dichloropropane	MSD	RPD	3	%	20
MC41356-2MSD	594-20-7	2,2-Dichloropropane	MSD	REC	101	%	60-139
MC41356-2MSD	594-20-7	2,2-Dichloropropane	MSD	RPD	7	%	20
MC41356-2MSD	563-58-6	1,1-Dichloropropene	MSD	REC	99	%	79-125
MC41356-2MSD	563-58-6	1,1-Dichloropropene	MSD	RPD	1	%	20
MC41356-2MSD	10061-01-5	cis-1,3-Dichloropropene	MSD	REC	99	%	75-124
MC41356-2MSD	10061-01-5	cis-1,3-Dichloropropene	MSD	RPD	0	%	20
MC41356-2MSD	10061-02-6	trans-1,3-Dichloropropene	MSD	REC	90	%	73-127
MC41356-2MSD	10061-02-6	trans-1,3-Dichloropropene	MSD	RPD	1	%	20
MC41356-2MSD	100-41-4	Ethylbenzene	MSD	REC	96	%	79-121
MC41356-2MSD	100-41-4	Ethylbenzene	MSD	RPD	1	%	20
MC41356-2MSD	87-68-3	Hexachlorobutadiene	MSD	REC	101	%	66-134
MC41356-2MSD	87-68-3	Hexachlorobutadiene	MSD	RPD	0	%	20
MC41356-2MSD	591-78-6	2-Hexanone	MSD	REC	88	%	57-139
MC41356-2MSD	591-78-6	2-Hexanone	MSD	RPD	0	%	20
MC41356-2MSD	74-88-4	Iodomethane	MSD	REC	112	%	69-131
MC41356-2MSD	74-88-4	Iodomethane	MSD	RPD	4	%	20
MC41356-2MSD	98-82-8	Isopropylbenzene	MSD	REC	94	%	72-131
MC41356-2MSD	98-82-8	Isopropylbenzene	MSD	RPD	1	%	20
MC41356-2MSD	99-87-6	p-Isopropyltoluene	MSD	REC	96	%	77-127
MC41356-2MSD	99-87-6	p-Isopropyltoluene	MSD	RPD	0	%	20
MC41356-2MSD	1634-04-4	Methyl Tert Butyl Ether	MSD	REC	98	%	71-124
MC41356-2MSD	1634-04-4	Methyl Tert Butyl Ether	MSD	RPD	5	%	20
MC41356-2MSD	108-10-1	4-Methyl-2-pentanone (MIBK)	MSD	REC	78	%	67-130
MC41356-2MSD	108-10-1	4-Methyl-2-pentanone (MIBK)	MSD	RPD	0	%	20
MC41356-2MSD	74-95-3	Methylene bromide	MSD	REC	106	%	79-123
MC41356-2MSD	74-95-3	Methylene bromide	MSD	RPD	1	%	20
MC41356-2MSD	75-09-2	Methylene chloride	MSD	REC	108	%	74-124
MC41356-2MSD	75-09-2	Methylene chloride	MSD	RPD	4	%	20
MC41356-2MSD	91-20-3	Naphthalene	MSD	REC	77	%	61-128
MC41356-2MSD	91-20-3	Naphthalene	MSD	RPD	4	%	20
MC41356-2MSD	103-65-1	n-Propylbenzene	MSD	REC	94	%	76-126
MC41356-2MSD	103-65-1	n-Propylbenzene	MSD	RPD	0	%	20
MC41356-2MSD	100-42-5	Styrene	MSD	REC	75	%	78-123

* Sample used for QC is not from job MC41356

QC Evaluation: DOD QSM5 Limits

Job Number: MC41356
Account: EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Collected: 09/08/15

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MC41356-2MSD	100-42-5	Styrene	MSD	RPD	3	%	20
MC41356-2MSD	630-20-6	1,1,1,2-Tetrachloroethane	MSD	REC	100	%	78-124
MC41356-2MSD	630-20-6	1,1,1,2-Tetrachloroethane	MSD	RPD	1	%	20
MC41356-2MSD	79-34-5	1,1,2,2-Tetrachloroethane	MSD	REC	93	%	71-121
MC41356-2MSD	79-34-5	1,1,2,2-Tetrachloroethane	MSD	RPD	2	%	20
MC41356-2MSD	127-18-4	Tetrachloroethene	MSD	REC	99	%	74-129
MC41356-2MSD	127-18-4	Tetrachloroethene	MSD	RPD	2	%	20
MC41356-2MSD	108-88-3	Toluene	MSD	REC	99	%	80-121
MC41356-2MSD	108-88-3	Toluene	MSD	RPD	1	%	20
MC41356-2MSD	87-61-6	1,2,3-Trichlorobenzene	MSD	REC	90	%	69-129
MC41356-2MSD	87-61-6	1,2,3-Trichlorobenzene	MSD	RPD	3	%	20
MC41356-2MSD	120-82-1	1,2,4-Trichlorobenzene	MSD	REC	89	%	69-130
MC41356-2MSD	120-82-1	1,2,4-Trichlorobenzene	MSD	RPD	2	%	20
MC41356-2MSD	71-55-6	1,1,1-Trichloroethane	MSD	REC	105	%	74-131
MC41356-2MSD	71-55-6	1,1,1-Trichloroethane	MSD	RPD	1	%	20
MC41356-2MSD	79-00-5	1,1,2-Trichloroethane	MSD	REC	100	%	80-119
MC41356-2MSD	79-00-5	1,1,2-Trichloroethane	MSD	RPD	3	%	20
MC41356-2MSD	79-01-6	Trichloroethene	MSD	REC	98	%	79-123
MC41356-2MSD	79-01-6	Trichloroethene	MSD	RPD	1	%	20
MC41356-2MSD	75-69-4	Trichlorofluoromethane	MSD	REC	104	%	65-141
MC41356-2MSD	75-69-4	Trichlorofluoromethane	MSD	RPD	5	%	20
MC41356-2MSD	96-18-4	1,2,3-Trichloropropane	MSD	REC	93	%	73-122
MC41356-2MSD	96-18-4	1,2,3-Trichloropropane	MSD	RPD	2	%	20
MC41356-2MSD	95-63-6	1,2,4-Trimethylbenzene	MSD	REC	83	%	76-124
MC41356-2MSD	95-63-6	1,2,4-Trimethylbenzene	MSD	RPD	1	%	20
MC41356-2MSD	108-67-8	1,3,5-Trimethylbenzene	MSD	REC	80	%	75-124
MC41356-2MSD	108-67-8	1,3,5-Trimethylbenzene	MSD	RPD	1	%	20
MC41356-2MSD	108-05-4	Vinyl Acetate	MSD	REC	83	%	54-146
MC41356-2MSD	108-05-4	Vinyl Acetate	MSD	RPD	1	%	20
MC41356-2MSD	75-01-4	Vinyl chloride	MSD	REC	102	%	58-137
MC41356-2MSD	75-01-4	Vinyl chloride	MSD	RPD	6	%	20
MC41356-2MSD		m,p-Xylene	MSD	REC	92	%	80-121
MC41356-2MSD		m,p-Xylene	MSD	RPD	2	%	20
MC41356-2MSD	95-47-6	o-Xylene	MSD	REC	92	%	78-122
MC41356-2MSD	95-47-6	o-Xylene	MSD	RPD	1	%	20
MC41356-2MSD	1330-20-7	Xylene (total)	MSD	REC	92	%	79-121
MC41356-2MSD	1330-20-7	Xylene (total)	MSD	RPD	1	%	20
MC41356-2MSD	1868-53-7	Dibromofluoromethane	MSD	SURR	104	%	80-119
MC41356-2MSD	2037-26-5	Toluene-D8	MSD	SURR	103	%	89-112
MC41356-2MSD	460-00-4	4-Bromofluorobenzene	MSD	SURR	94	%	85-114
MSG5455-MB	1868-53-7	Dibromofluoromethane	MB	SURR	103	%	80-119
MSG5455-MB	2037-26-5	Toluene-D8	MB	SURR	100	%	89-112
MSG5455-MB	460-00-4	4-Bromofluorobenzene	MB	SURR	108	%	85-114
MC41356-1	1868-53-7	Dibromofluoromethane	SAMP	SURR	104	%	80-119
MC41356-1	2037-26-5	Toluene-D8	SAMP	SURR	102	%	89-112

* Sample used for QC is not from job MC41356

QC Evaluation: DOD QSM5 Limits

Job Number: MC41356
Account: EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Collected: 09/08/15

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MC41356-1	460-00-4	4-Bromofluorobenzene	SAMP	SURR	106	%	85-114
MC41356-2	1868-53-7	Dibromofluoromethane	SAMP	SURR	104	%	80-119
MC41356-2	2037-26-5	Toluene-D8	SAMP	SURR	101	%	89-112
MC41356-2	460-00-4	4-Bromofluorobenzene	SAMP	SURR	106	%	85-114
MC41356-3	1868-53-7	Dibromofluoromethane	SAMP	SURR	106	%	80-119
MC41356-3	2037-26-5	Toluene-D8	SAMP	SURR	100	%	89-112
MC41356-3	460-00-4	4-Bromofluorobenzene	SAMP	SURR	106	%	85-114
MC41356-4	1868-53-7	Dibromofluoromethane	SAMP	SURR	104	%	80-119
MC41356-4	2037-26-5	Toluene-D8	SAMP	SURR	99	%	89-112
MC41356-4	460-00-4	4-Bromofluorobenzene	SAMP	SURR	108	%	85-114
MC41356-5	1868-53-7	Dibromofluoromethane	SAMP	SURR	105	%	80-119
MC41356-5	2037-26-5	Toluene-D8	SAMP	SURR	101	%	89-112
MC41356-5	460-00-4	4-Bromofluorobenzene	SAMP	SURR	108	%	85-114
MC41356-6	1868-53-7	Dibromofluoromethane	SAMP	SURR	104	%	80-119
MC41356-6	2037-26-5	Toluene-D8	SAMP	SURR	103	%	89-112
MC41356-6	460-00-4	4-Bromofluorobenzene	SAMP	SURR	108	%	85-114
MC41356-7	1868-53-7	Dibromofluoromethane	SAMP	SURR	104	%	80-119
MC41356-7	2037-26-5	Toluene-D8	SAMP	SURR	102	%	89-112
MC41356-7	460-00-4	4-Bromofluorobenzene	SAMP	SURR	107	%	85-114
MC41356-8	1868-53-7	Dibromofluoromethane	SAMP	SURR	105	%	80-119
MC41356-8	2037-26-5	Toluene-D8	SAMP	SURR	102	%	89-112
MC41356-8	460-00-4	4-Bromofluorobenzene	SAMP	SURR	106	%	85-114
MC41356-9	1868-53-7	Dibromofluoromethane	SAMP	SURR	104	%	80-119
MC41356-9	2037-26-5	Toluene-D8	SAMP	SURR	103	%	89-112
MC41356-9	460-00-4	4-Bromofluorobenzene	SAMP	SURR	107	%	85-114
MC41356-10	1868-53-7	Dibromofluoromethane	SAMP	SURR	104	%	80-119
MC41356-10	2037-26-5	Toluene-D8	SAMP	SURR	102	%	89-112
MC41356-10	460-00-4	4-Bromofluorobenzene	SAMP	SURR	107	%	85-114
MC41356-11	1868-53-7	Dibromofluoromethane	SAMP	SURR	105	%	80-119
MC41356-11	2037-26-5	Toluene-D8	SAMP	SURR	103	%	89-112
MC41356-11	460-00-4	4-Bromofluorobenzene	SAMP	SURR	104	%	85-114
MC41356-12	1868-53-7	Dibromofluoromethane	SAMP	SURR	105	%	80-119
MC41356-12	2037-26-5	Toluene-D8	SAMP	SURR	103	%	89-112
MC41356-12	460-00-4	4-Bromofluorobenzene	SAMP	SURR	108	%	85-114
MC41356-13	1868-53-7	Dibromofluoromethane	SAMP	SURR	103	%	80-119
MC41356-13	2037-26-5	Toluene-D8	SAMP	SURR	102	%	89-112
MC41356-13	460-00-4	4-Bromofluorobenzene	SAMP	SURR	106	%	85-114
MC41356-14	1868-53-7	Dibromofluoromethane	SAMP	SURR	105	%	80-119
MC41356-14	2037-26-5	Toluene-D8	SAMP	SURR	102	%	89-112
MC41356-14	460-00-4	4-Bromofluorobenzene	SAMP	SURR	107	%	85-114
MC41356-15	1868-53-7	Dibromofluoromethane	SAMP	SURR	104	%	80-119
MC41356-15	2037-26-5	Toluene-D8	SAMP	SURR	104	%	89-112
MC41356-15	460-00-4	4-Bromofluorobenzene	SAMP	SURR	106	%	85-114

* Sample used for QC is not from job MC41356

QC Evaluation: DOD QSM5 Limits

Job Number: MC41356
Account: EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Collected: 09/08/15

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MSG5457	SW846 8260C						
MSG5457-BS	67-64-1	Acetone	BSP	REC	119	%	39-160
MSG5457-BS	71-43-2	Benzene	BSP	REC	93	%	79-120
MSG5457-BS	108-86-1	Bromobenzene	BSP	REC	94	%	80-120
MSG5457-BS	74-97-5	Bromochloromethane	BSP	REC	100	%	78-123
MSG5457-BS	75-27-4	Bromodichloromethane	BSP	REC	94	%	79-125
MSG5457-BS	75-25-2	Bromoform	BSP	REC	97	%	66-130
MSG5457-BS	74-83-9	Bromomethane	BSP	REC	102	%	53-141
MSG5457-BS	78-93-3	2-Butanone (MEK)	BSP	REC	121	%	56-143
MSG5457-BS	104-51-8	n-Butylbenzene	BSP	REC	99	%	75-128
MSG5457-BS	135-98-8	sec-Butylbenzene	BSP	REC	95	%	77-126
MSG5457-BS	98-06-6	tert-Butylbenzene	BSP	REC	95	%	78-124
MSG5457-BS	75-15-0	Carbon disulfide	BSP	REC	105	%	64-133
MSG5457-BS	56-23-5	Carbon tetrachloride	BSP	REC	100	%	72-136
MSG5457-BS	108-90-7	Chlorobenzene	BSP	REC	92	%	82-118
MSG5457-BS	75-00-3	Chloroethane	BSP	REC	107	%	60-138
MSG5457-BS	67-66-3	Chloroform	BSP	REC	93	%	79-124
MSG5457-BS	74-87-3	Chloromethane	BSP	REC	107	%	50-139
MSG5457-BS	95-49-8	o-Chlorotoluene	BSP	REC	91	%	79-122
MSG5457-BS	106-43-4	p-Chlorotoluene	BSP	REC	94	%	78-122
MSG5457-BS	96-12-8	1,2-Dibromo-3-chloropropane	BSP	REC	93	%	62-128
MSG5457-BS	124-48-1	Dibromochloromethane	BSP	REC	95	%	74-126
MSG5457-BS	106-93-4	1,2-Dibromoethane	BSP	REC	97	%	77-121
MSG5457-BS	95-50-1	1,2-Dichlorobenzene	BSP	REC	93	%	80-119
MSG5457-BS	541-73-1	1,3-Dichlorobenzene	BSP	REC	90	%	80-119
MSG5457-BS	106-46-7	1,4-Dichlorobenzene	BSP	REC	90	%	79-118
MSG5457-BS	75-71-8	Dichlorodifluoromethane	BSP	REC	99	%	32-152
MSG5457-BS	75-34-3	1,1-Dichloroethane	BSP	REC	91	%	77-125
MSG5457-BS	107-06-2	1,2-Dichloroethane	BSP	REC	93	%	73-128
MSG5457-BS	75-35-4	1,1-Dichloroethene	BSP	REC	105	%	71-131
MSG5457-BS	156-59-2	cis-1,2-Dichloroethene	BSP	REC	100	%	78-123
MSG5457-BS	156-60-5	trans-1,2-Dichloroethene	BSP	REC	101	%	75-124
MSG5457-BS	78-87-5	1,2-Dichloropropane	BSP	REC	98	%	78-122
MSG5457-BS	142-28-9	1,3-Dichloropropane	BSP	REC	100	%	80-119
MSG5457-BS	594-20-7	2,2-Dichloropropane	BSP	REC	102	%	60-139
MSG5457-BS	563-58-6	1,1-Dichloropropene	BSP	REC	98	%	79-125
MSG5457-BS	10061-01-5	cis-1,3-Dichloropropene	BSP	REC	97	%	75-124
MSG5457-BS	10061-02-6	trans-1,3-Dichloropropene	BSP	REC	90	%	73-127
MSG5457-BS	100-41-4	Ethylbenzene	BSP	REC	96	%	79-121
MSG5457-BS	87-68-3	Hexachlorobutadiene	BSP	REC	101	%	66-134
MSG5457-BS	591-78-6	2-Hexanone	BSP	REC	119	%	57-139
MSG5457-BS	74-88-4	Iodomethane	BSP	REC	109	%	69-131
MSG5457-BS	98-82-8	Isopropylbenzene	BSP	REC	94	%	72-131

* Sample used for QC is not from job MC41356

QC Evaluation: DOD QSM5 Limits

Job Number: MC41356
Account: EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Collected: 09/08/15

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MSG5457-BS	99-87-6	p-Isopropyltoluene	BSP	REC	96	%	77-127
MSG5457-BS	1634-04-4	Methyl Tert Butyl Ether	BSP	REC	95	%	71-124
MSG5457-BS	108-10-1	4-Methyl-2-pentanone (MIBK)	BSP	REC	98	%	67-130
MSG5457-BS	74-95-3	Methylene bromide	BSP	REC	100	%	79-123
MSG5457-BS	75-09-2	Methylene chloride	BSP	REC	103	%	74-124
MSG5457-BS	91-20-3	Naphthalene	BSP	REC	76	%	61-128
MSG5457-BS	103-65-1	n-Propylbenzene	BSP	REC	93	%	76-126
MSG5457-BS	100-42-5	Styrene	BSP	REC	97	%	78-123
MSG5457-BS	630-20-6	1,1,1,2-Tetrachloroethane	BSP	REC	97	%	78-124
MSG5457-BS	79-34-5	1,1,2,2-Tetrachloroethane	BSP	REC	91	%	71-121
MSG5457-BS	127-18-4	Tetrachloroethene	BSP	REC	98	%	74-129
MSG5457-BS	108-88-3	Toluene	BSP	REC	96	%	80-121
MSG5457-BS	87-61-6	1,2,3-Trichlorobenzene	BSP	REC	89	%	69-129
MSG5457-BS	120-82-1	1,2,4-Trichlorobenzene	BSP	REC	90	%	69-130
MSG5457-BS	71-55-6	1,1,1-Trichloroethane	BSP	REC	104	%	74-131
MSG5457-BS	79-00-5	1,1,2-Trichloroethane	BSP	REC	97	%	80-119
MSG5457-BS	79-01-6	Trichloroethene	BSP	REC	97	%	79-123
MSG5457-BS	75-69-4	Trichlorofluoromethane	BSP	REC	99	%	65-141
MSG5457-BS	96-18-4	1,2,3-Trichloropropane	BSP	REC	91	%	73-122
MSG5457-BS	95-63-6	1,2,4-Trimethylbenzene	BSP	REC	95	%	76-124
MSG5457-BS	108-67-8	1,3,5-Trimethylbenzene	BSP	REC	96	%	75-124
MSG5457-BS	108-05-4	Vinyl Acetate	BSP	REC	92	%	54-146
MSG5457-BS	75-01-4	Vinyl chloride	BSP	REC	98	%	58-137
MSG5457-BS		m,p-Xylene	BSP	REC	96	%	80-121
MSG5457-BS	95-47-6	o-Xylene	BSP	REC	95	%	78-122
MSG5457-BS	1330-20-7	Xylene (total)	BSP	REC	95	%	79-121
MSG5457-BS	1868-53-7	Dibromofluoromethane	BSP	SURR	102	%	80-119
MSG5457-BS	2037-26-5	Toluene-D8	BSP	SURR	102	%	89-112
MSG5457-BS	460-00-4	4-Bromofluorobenzene	BSP	SURR	96	%	85-114
MSG5457-BSD	67-64-1	Acetone	BSD	REC	117	%	39-160
MSG5457-BSD	71-43-2	Benzene	BSD	REC	92	%	79-120
MSG5457-BSD	108-86-1	Bromobenzene	BSD	REC	95	%	80-120
MSG5457-BSD	74-97-5	Bromochloromethane	BSD	REC	99	%	78-123
MSG5457-BSD	75-27-4	Bromodichloromethane	BSD	REC	94	%	79-125
MSG5457-BSD	75-25-2	Bromoform	BSD	REC	101	%	66-130
MSG5457-BSD	74-83-9	Bromomethane	BSD	REC	100	%	53-141
MSG5457-BSD	78-93-3	2-Butanone (MEK)	BSD	REC	126	%	56-143
MSG5457-BSD	104-51-8	n-Butylbenzene	BSD	REC	100	%	75-128
MSG5457-BSD	135-98-8	sec-Butylbenzene	BSD	REC	96	%	77-126
MSG5457-BSD	98-06-6	tert-Butylbenzene	BSD	REC	94	%	78-124
MSG5457-BSD	75-15-0	Carbon disulfide	BSD	REC	104	%	64-133
MSG5457-BSD	56-23-5	Carbon tetrachloride	BSD	REC	100	%	72-136
MSG5457-BSD	108-90-7	Chlorobenzene	BSD	REC	92	%	82-118
MSG5457-BSD	75-00-3	Chloroethane	BSD	REC	101	%	60-138
MSG5457-BSD	67-66-3	Chloroform	BSD	REC	92	%	79-124

* Sample used for QC is not from job MC41356

QC Evaluation: DOD QSM5 Limits

Job Number: MC41356
Account: EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Collected: 09/08/15

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MSG5457-BSD	74-87-3	Chloromethane	BSD	REC	106	%	50-139
MSG5457-BSD	95-49-8	o-Chlorotoluene	BSD	REC	91	%	79-122
MSG5457-BSD	106-43-4	p-Chlorotoluene	BSD	REC	95	%	78-122
MSG5457-BSD	96-12-8	1,2-Dibromo-3-chloropropane	BSD	REC	96	%	62-128
MSG5457-BSD	124-48-1	Dibromochloromethane	BSD	REC	96	%	74-126
MSG5457-BSD	106-93-4	1,2-Dibromoethane	BSD	REC	98	%	77-121
MSG5457-BSD	95-50-1	1,2-Dichlorobenzene	BSD	REC	94	%	80-119
MSG5457-BSD	541-73-1	1,3-Dichlorobenzene	BSD	REC	90	%	80-119
MSG5457-BSD	106-46-7	1,4-Dichlorobenzene	BSD	REC	91	%	79-118
MSG5457-BSD	75-71-8	Dichlorodifluoromethane	BSD	REC	97	%	32-152
MSG5457-BSD	75-34-3	1,1-Dichloroethane	BSD	REC	90	%	77-125
MSG5457-BSD	107-06-2	1,2-Dichloroethane	BSD	REC	92	%	73-128
MSG5457-BSD	75-35-4	1,1-Dichloroethene	BSD	REC	102	%	71-131
MSG5457-BSD	156-59-2	cis-1,2-Dichloroethene	BSD	REC	99	%	78-123
MSG5457-BSD	156-60-5	trans-1,2-Dichloroethene	BSD	REC	99	%	75-124
MSG5457-BSD	78-87-5	1,2-Dichloropropane	BSD	REC	97	%	78-122
MSG5457-BSD	142-28-9	1,3-Dichloropropane	BSD	REC	103	%	80-119
MSG5457-BSD	594-20-7	2,2-Dichloropropane	BSD	REC	99	%	60-139
MSG5457-BSD	563-58-6	1,1-Dichloropropene	BSD	REC	97	%	79-125
MSG5457-BSD	10061-01-5	cis-1,3-Dichloropropene	BSD	REC	97	%	75-124
MSG5457-BSD	10061-02-6	trans-1,3-Dichloropropene	BSD	REC	89	%	73-127
MSG5457-BSD	100-41-4	Ethylbenzene	BSD	REC	96	%	79-121
MSG5457-BSD	87-68-3	Hexachlorobutadiene	BSD	REC	101	%	66-134
MSG5457-BSD	591-78-6	2-Hexanone	BSD	REC	123	%	57-139
MSG5457-BSD	74-88-4	Iodomethane	BSD	REC	106	%	69-131
MSG5457-BSD	98-82-8	Isopropylbenzene	BSD	REC	95	%	72-131
MSG5457-BSD	99-87-6	p-Isopropyltoluene	BSD	REC	97	%	77-127
MSG5457-BSD	1634-04-4	Methyl Tert Butyl Ether	BSD	REC	95	%	71-124
MSG5457-BSD	108-10-1	4-Methyl-2-pentanone (MIBK)	BSD	REC	98	%	67-130
MSG5457-BSD	74-95-3	Methylene bromide	BSD	REC	100	%	79-123
MSG5457-BSD	75-09-2	Methylene chloride	BSD	REC	101	%	74-124
MSG5457-BSD	91-20-3	Naphthalene	BSD	REC	76	%	61-128
MSG5457-BSD	103-65-1	n-Propylbenzene	BSD	REC	94	%	76-126
MSG5457-BSD	100-42-5	Styrene	BSD	REC	99	%	78-123
MSG5457-BSD	630-20-6	1,1,1,2-Tetrachloroethane	BSD	REC	98	%	78-124
MSG5457-BSD	79-34-5	1,1,2,2-Tetrachloroethane	BSD	REC	93	%	71-121
MSG5457-BSD	127-18-4	Tetrachloroethene	BSD	REC	99	%	74-129
MSG5457-BSD	108-88-3	Toluene	BSD	REC	96	%	80-121
MSG5457-BSD	87-61-6	1,2,3-Trichlorobenzene	BSD	REC	89	%	69-129
MSG5457-BSD	120-82-1	1,2,4-Trichlorobenzene	BSD	REC	88	%	69-130
MSG5457-BSD	71-55-6	1,1,1-Trichloroethane	BSD	REC	102	%	74-131
MSG5457-BSD	79-00-5	1,1,2-Trichloroethane	BSD	REC	96	%	80-119
MSG5457-BSD	79-01-6	Trichloroethene	BSD	REC	95	%	79-123
MSG5457-BSD	75-69-4	Trichlorofluoromethane	BSD	REC	99	%	65-141
MSG5457-BSD	96-18-4	1,2,3-Trichloropropane	BSD	REC	92	%	73-122

* Sample used for QC is not from job MC41356

QC Evaluation: DOD QSM5 Limits

Job Number: MC41356
Account: EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Collected: 09/08/15

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MSG5457-BSD	95-63-6	1,2,4-Trimethylbenzene	BSD	REC	95	%	76-124
MSG5457-BSD	108-67-8	1,3,5-Trimethylbenzene	BSD	REC	97	%	75-124
MSG5457-BSD	108-05-4	Vinyl Acetate	BSD	REC	88	%	54-146
MSG5457-BSD	75-01-4	Vinyl chloride	BSD	REC	96	%	58-137
MSG5457-BSD		m,p-Xylene	BSD	REC	97	%	80-121
MSG5457-BSD	95-47-6	o-Xylene	BSD	REC	95	%	78-122
MSG5457-BSD	1330-20-7	Xylene (total)	BSD	REC	96	%	79-121
MSG5457-BSD	1868-53-7	Dibromofluoromethane	BSD	SURR	102	%	80-119
MSG5457-BSD	2037-26-5	Toluene-D8	BSD	SURR	101	%	89-112
MSG5457-BSD	460-00-4	4-Bromofluorobenzene	BSD	SURR	97	%	85-114
MC41356-20MS	67-64-1	Acetone	MS	REC	53	%	39-160
MC41356-20MS	71-43-2	Benzene	MS	REC	94	%	79-120
MC41356-20MS	108-86-1	Bromobenzene	MS	REC	93	%	80-120
MC41356-20MS	74-97-5	Bromochloromethane	MS	REC	97	%	78-123
MC41356-20MS	75-27-4	Bromodichloromethane	MS	REC	95	%	79-125
MC41356-20MS	75-25-2	Bromoform	MS	REC	94	%	66-130
MC41356-20MS	74-83-9	Bromomethane	MS	REC	103	%	53-141
MC41356-20MS	78-93-3	2-Butanone (MEK)	MS	REC	83	%	56-143
MC41356-20MS	104-51-8	n-Butylbenzene	MS	REC	95	%	75-128
MC41356-20MS	135-98-8	sec-Butylbenzene	MS	REC	93	%	77-126
MC41356-20MS	98-06-6	tert-Butylbenzene	MS	REC	93	%	78-124
MC41356-20MS	75-15-0	Carbon disulfide	MS	REC	95	%	64-133
MC41356-20MS	56-23-5	Carbon tetrachloride	MS	REC	99	%	72-136
MC41356-20MS	108-90-7	Chlorobenzene	MS	REC	91	%	82-118
MC41356-20MS	75-00-3	Chloroethane	MS	REC	107	%	60-138
MC41356-20MS	67-66-3	Chloroform	MS	REC	92	%	79-124
MC41356-20MS	74-87-3	Chloromethane	MS	REC	111	%	50-139
MC41356-20MS	95-49-8	o-Chlorotoluene	MS	REC	90	%	79-122
MC41356-20MS	106-43-4	p-Chlorotoluene	MS	REC	93	%	78-122
MC41356-20MS	96-12-8	1,2-Dibromo-3-chloropropane	MS	REC	93	%	62-128
MC41356-20MS	124-48-1	Dibromochloromethane	MS	REC	94	%	74-126
MC41356-20MS	106-93-4	1,2-Dibromoethane	MS	REC	96	%	77-121
MC41356-20MS	95-50-1	1,2-Dichlorobenzene	MS	REC	91	%	80-119
MC41356-20MS	541-73-1	1,3-Dichlorobenzene	MS	REC	88	%	80-119
MC41356-20MS	106-46-7	1,4-Dichlorobenzene	MS	REC	89	%	79-118
MC41356-20MS	75-71-8	Dichlorodifluoromethane	MS	REC	96	%	32-152
MC41356-20MS	75-34-3	1,1-Dichloroethane	MS	REC	90	%	77-125
MC41356-20MS	107-06-2	1,2-Dichloroethane	MS	REC	95	%	73-128
MC41356-20MS	75-35-4	1,1-Dichloroethene	MS	REC	100	%	71-131
MC41356-20MS	156-59-2	cis-1,2-Dichloroethene	MS	REC	98	%	78-123
MC41356-20MS	156-60-5	trans-1,2-Dichloroethene	MS	REC	98	%	75-124
MC41356-20MS	78-87-5	1,2-Dichloropropane	MS	REC	99	%	78-122
MC41356-20MS	142-28-9	1,3-Dichloropropane	MS	REC	99	%	80-119
MC41356-20MS	594-20-7	2,2-Dichloropropane	MS	REC	88	%	60-139
MC41356-20MS	563-58-6	1,1-Dichloropropene	MS	REC	99	%	79-125

* Sample used for QC is not from job MC41356

QC Evaluation: DOD QSM5 Limits

Job Number: MC41356
Account: EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Collected: 09/08/15

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MC41356-20MS	10061-01-5	cis-1,3-Dichloropropene	MS	REC	93	%	75-124
MC41356-20MS	10061-02-6	trans-1,3-Dichloropropene	MS	REC	89	%	73-127
MC41356-20MS	100-41-4	Ethylbenzene	MS	REC	95	%	79-121
MC41356-20MS	87-68-3	Hexachlorobutadiene	MS	REC	92	%	66-134
MC41356-20MS	591-78-6	2-Hexanone	MS	REC	87	%	57-139
MC41356-20MS	74-88-4	Iodomethane	MS	REC	105	%	69-131
MC41356-20MS	98-82-8	Isopropylbenzene	MS	REC	91	%	72-131
MC41356-20MS	99-87-6	p-Isopropyltoluene	MS	REC	94	%	77-127
MC41356-20MS	1634-04-4	Methyl Tert Butyl Ether	MS	REC	88	%	71-124
MC41356-20MS	108-10-1	4-Methyl-2-pentanone (MIBK)	MS	REC	77	%	67-130
MC41356-20MS	74-95-3	Methylene bromide	MS	REC	102	%	79-123
MC41356-20MS	75-09-2	Methylene chloride	MS	REC	97	%	74-124
MC41356-20MS	91-20-3	Naphthalene	MS	REC	75	%	61-128
MC41356-20MS	103-65-1	n-Propylbenzene	MS	REC	90	%	76-126
MC41356-20MS	100-42-5	Styrene	MS	REC	98	%	78-123
MC41356-20MS	630-20-6	1,1,1,2-Tetrachloroethane	MS	REC	97	%	78-124
MC41356-20MS	79-34-5	1,1,2,2-Tetrachloroethane	MS	REC	89	%	71-121
MC41356-20MS	127-18-4	Tetrachloroethene	MS	REC	97	%	74-129
MC41356-20MS	108-88-3	Toluene	MS	REC	98	%	80-121
MC41356-20MS	87-61-6	1,2,3-Trichlorobenzene	MS	REC	87	%	69-129
MC41356-20MS	120-82-1	1,2,4-Trichlorobenzene	MS	REC	85	%	69-130
MC41356-20MS	71-55-6	1,1,1-Trichloroethane	MS	REC	101	%	74-131
MC41356-20MS	79-00-5	1,1,2-Trichloroethane	MS	REC	98	%	80-119
MC41356-20MS	79-01-6	Trichloroethene	MS	REC	92	%	79-123
MC41356-20MS	75-69-4	Trichlorofluoromethane	MS	REC	100	%	65-141
MC41356-20MS	96-18-4	1,2,3-Trichloropropane	MS	REC	89	%	73-122
MC41356-20MS	95-63-6	1,2,4-Trimethylbenzene	MS	REC	94	%	76-124
MC41356-20MS	108-67-8	1,3,5-Trimethylbenzene	MS	REC	94	%	75-124
MC41356-20MS	108-05-4	Vinyl Acetate	MS	REC	83	%	54-146
MC41356-20MS	75-01-4	Vinyl chloride	MS	REC	99	%	58-137
MC41356-20MS		m,p-Xylene	MS	REC	95	%	80-121
MC41356-20MS	95-47-6	o-Xylene	MS	REC	95	%	78-122
MC41356-20MS	1330-20-7	Xylene (total)	MS	REC	95	%	79-121
MC41356-20MS	1868-53-7	Dibromofluoromethane	MS	SURR	102	%	80-119
MC41356-20MS	2037-26-5	Toluene-D8	MS	SURR	103	%	89-112
MC41356-20MS	460-00-4	4-Bromofluorobenzene	MS	SURR	94	%	85-114
MC41356-20MSD	67-64-1	Acetone	MSD	REC	63	%	39-160
MC41356-20MSD	67-64-1	Acetone	MSD	RPD	9	%	20
MC41356-20MSD	71-43-2	Benzene	MSD	REC	93	%	79-120
MC41356-20MSD	71-43-2	Benzene	MSD	RPD	0	%	20
MC41356-20MSD	108-86-1	Bromobenzene	MSD	REC	94	%	80-120
MC41356-20MSD	108-86-1	Bromobenzene	MSD	RPD	1	%	20
MC41356-20MSD	74-97-5	Bromochloromethane	MSD	REC	99	%	78-123
MC41356-20MSD	74-97-5	Bromochloromethane	MSD	RPD	2	%	20
MC41356-20MSD	75-27-4	Bromodichloromethane	MSD	REC	95	%	79-125

* Sample used for QC is not from job MC41356

QC Evaluation: DOD QSM5 Limits

Job Number: MC41356
Account: EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Collected: 09/08/15

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MC41356-20MSD	75-27-4	Bromodichloromethane	MSD	RPD	0	%	20
MC41356-20MSD	75-25-2	Bromoform	MSD	REC	92	%	66-130
MC41356-20MSD	75-25-2	Bromoform	MSD	RPD	3	%	20
MC41356-20MSD	74-83-9	Bromomethane	MSD	REC	104	%	53-141
MC41356-20MSD	74-83-9	Bromomethane	MSD	RPD	2	%	20
MC41356-20MSD	78-93-3	2-Butanone (MEK)	MSD	REC	85	%	56-143
MC41356-20MSD	78-93-3	2-Butanone (MEK)	MSD	RPD	2	%	20
MC41356-20MSD	104-51-8	n-Butylbenzene	MSD	REC	93	%	75-128
MC41356-20MSD	104-51-8	n-Butylbenzene	MSD	RPD	1	%	20
MC41356-20MSD	135-98-8	sec-Butylbenzene	MSD	REC	91	%	77-126
MC41356-20MSD	135-98-8	sec-Butylbenzene	MSD	RPD	2	%	20
MC41356-20MSD	98-06-6	tert-Butylbenzene	MSD	REC	93	%	78-124
MC41356-20MSD	98-06-6	tert-Butylbenzene	MSD	RPD	0	%	20
MC41356-20MSD	75-15-0	Carbon disulfide	MSD	REC	93	%	64-133
MC41356-20MSD	75-15-0	Carbon disulfide	MSD	RPD	1	%	20
MC41356-20MSD	56-23-5	Carbon tetrachloride	MSD	REC	97	%	72-136
MC41356-20MSD	56-23-5	Carbon tetrachloride	MSD	RPD	2	%	20
MC41356-20MSD	108-90-7	Chlorobenzene	MSD	REC	90	%	82-118
MC41356-20MSD	108-90-7	Chlorobenzene	MSD	RPD	2	%	20
MC41356-20MSD	75-00-3	Chloroethane	MSD	REC	108	%	60-138
MC41356-20MSD	75-00-3	Chloroethane	MSD	RPD	1	%	20
MC41356-20MSD	67-66-3	Chloroform	MSD	REC	92	%	79-124
MC41356-20MSD	67-66-3	Chloroform	MSD	RPD	0	%	20
MC41356-20MSD	74-87-3	Chloromethane	MSD	REC	114	%	50-139
MC41356-20MSD	74-87-3	Chloromethane	MSD	RPD	3	%	20
MC41356-20MSD	95-49-8	o-Chlorotoluene	MSD	REC	91	%	79-122
MC41356-20MSD	95-49-8	o-Chlorotoluene	MSD	RPD	2	%	20
MC41356-20MSD	106-43-4	p-Chlorotoluene	MSD	REC	90	%	78-122
MC41356-20MSD	106-43-4	p-Chlorotoluene	MSD	RPD	3	%	20
MC41356-20MSD	96-12-8	1,2-Dibromo-3-chloropropane	MSD	REC	88	%	62-128
MC41356-20MSD	96-12-8	1,2-Dibromo-3-chloropropane	MSD	RPD	5	%	20
MC41356-20MSD	124-48-1	Dibromochloromethane	MSD	REC	93	%	74-126
MC41356-20MSD	124-48-1	Dibromochloromethane	MSD	RPD	1	%	20
MC41356-20MSD	106-93-4	1,2-Dibromoethane	MSD	REC	96	%	77-121
MC41356-20MSD	106-93-4	1,2-Dibromoethane	MSD	RPD	1	%	20
MC41356-20MSD	95-50-1	1,2-Dichlorobenzene	MSD	REC	91	%	80-119
MC41356-20MSD	95-50-1	1,2-Dichlorobenzene	MSD	RPD	0	%	20
MC41356-20MSD	541-73-1	1,3-Dichlorobenzene	MSD	REC	88	%	80-119
MC41356-20MSD	541-73-1	1,3-Dichlorobenzene	MSD	RPD	0	%	20
MC41356-20MSD	106-46-7	1,4-Dichlorobenzene	MSD	REC	88	%	79-118
MC41356-20MSD	106-46-7	1,4-Dichlorobenzene	MSD	RPD	1	%	20
MC41356-20MSD	75-71-8	Dichlorodifluoromethane	MSD	REC	103	%	32-152
MC41356-20MSD	75-71-8	Dichlorodifluoromethane	MSD	RPD	6	%	20
MC41356-20MSD	75-34-3	1,1-Dichloroethane	MSD	REC	89	%	77-125
MC41356-20MSD	75-34-3	1,1-Dichloroethane	MSD	RPD	1	%	20

* Sample used for QC is not from job MC41356

QC Evaluation: DOD QSM5 Limits

Job Number: MC41356
Account: EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Collected: 09/08/15

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MC41356-20MSD	107-06-2	1,2-Dichloroethane	MSD	REC	93	%	73-128
MC41356-20MSD	107-06-2	1,2-Dichloroethane	MSD	RPD	2	%	20
MC41356-20MSD	75-35-4	1,1-Dichloroethene	MSD	REC	102	%	71-131
MC41356-20MSD	75-35-4	1,1-Dichloroethene	MSD	RPD	2	%	20
MC41356-20MSD	156-59-2	cis-1,2-Dichloroethene	MSD	REC	98	%	78-123
MC41356-20MSD	156-59-2	cis-1,2-Dichloroethene	MSD	RPD	0	%	20
MC41356-20MSD	156-60-5	trans-1,2-Dichloroethene	MSD	REC	97	%	75-124
MC41356-20MSD	156-60-5	trans-1,2-Dichloroethene	MSD	RPD	0	%	20
MC41356-20MSD	78-87-5	1,2-Dichloropropane	MSD	REC	99	%	78-122
MC41356-20MSD	78-87-5	1,2-Dichloropropane	MSD	RPD	1	%	20
MC41356-20MSD	142-28-9	1,3-Dichloropropane	MSD	REC	99	%	80-119
MC41356-20MSD	142-28-9	1,3-Dichloropropane	MSD	RPD	0	%	20
MC41356-20MSD	594-20-7	2,2-Dichloropropane	MSD	REC	87	%	60-139
MC41356-20MSD	594-20-7	2,2-Dichloropropane	MSD	RPD	1	%	20
MC41356-20MSD	563-58-6	1,1-Dichloropropene	MSD	REC	97	%	79-125
MC41356-20MSD	563-58-6	1,1-Dichloropropene	MSD	RPD	2	%	20
MC41356-20MSD	10061-01-5	cis-1,3-Dichloropropene	MSD	REC	94	%	75-124
MC41356-20MSD	10061-01-5	cis-1,3-Dichloropropene	MSD	RPD	0	%	20
MC41356-20MSD	10061-02-6	trans-1,3-Dichloropropene	MSD	REC	86	%	73-127
MC41356-20MSD	10061-02-6	trans-1,3-Dichloropropene	MSD	RPD	4	%	20
MC41356-20MSD	100-41-4	Ethylbenzene	MSD	REC	94	%	79-121
MC41356-20MSD	100-41-4	Ethylbenzene	MSD	RPD	1	%	20
MC41356-20MSD	87-68-3	Hexachlorobutadiene	MSD	REC	89	%	66-134
MC41356-20MSD	87-68-3	Hexachlorobutadiene	MSD	RPD	3	%	20
MC41356-20MSD	591-78-6	2-Hexanone	MSD	REC	87	%	57-139
MC41356-20MSD	591-78-6	2-Hexanone	MSD	RPD	0	%	20
MC41356-20MSD	74-88-4	Iodomethane	MSD	REC	104	%	69-131
MC41356-20MSD	74-88-4	Iodomethane	MSD	RPD	0	%	20
MC41356-20MSD	98-82-8	Isopropylbenzene	MSD	REC	91	%	72-131
MC41356-20MSD	98-82-8	Isopropylbenzene	MSD	RPD	0	%	20
MC41356-20MSD	99-87-6	p-Isopropyltoluene	MSD	REC	92	%	77-127
MC41356-20MSD	99-87-6	p-Isopropyltoluene	MSD	RPD	2	%	20
MC41356-20MSD	1634-04-4	Methyl Tert Butyl Ether	MSD	REC	90	%	71-124
MC41356-20MSD	1634-04-4	Methyl Tert Butyl Ether	MSD	RPD	2	%	20
MC41356-20MSD	108-10-1	4-Methyl-2-pentanone (MIBK)	MSD	REC	75	%	67-130
MC41356-20MSD	108-10-1	4-Methyl-2-pentanone (MIBK)	MSD	RPD	2	%	20
MC41356-20MSD	74-95-3	Methylene bromide	MSD	REC	106	%	79-123
MC41356-20MSD	74-95-3	Methylene bromide	MSD	RPD	3	%	20
MC41356-20MSD	75-09-2	Methylene chloride	MSD	REC	97	%	74-124
MC41356-20MSD	75-09-2	Methylene chloride	MSD	RPD	1	%	20
MC41356-20MSD	91-20-3	Naphthalene	MSD	REC	74	%	61-128
MC41356-20MSD	91-20-3	Naphthalene	MSD	RPD	2	%	20
MC41356-20MSD	103-65-1	n-Propylbenzene	MSD	REC	90	%	76-126
MC41356-20MSD	103-65-1	n-Propylbenzene	MSD	RPD	0	%	20
MC41356-20MSD	100-42-5	Styrene	MSD	REC	96	%	78-123

* Sample used for QC is not from job MC41356

QC Evaluation: DOD QSM5 Limits

Job Number: MC41356
Account: EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Collected: 09/08/15

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MC41356-20MSD	100-42-5	Styrene	MSD	RPD	1	%	20
MC41356-20MSD	630-20-6	1,1,1,2-Tetrachloroethane	MSD	REC	96	%	78-124
MC41356-20MSD	630-20-6	1,1,1,2-Tetrachloroethane	MSD	RPD	1	%	20
MC41356-20MSD	79-34-5	1,1,2,2-Tetrachloroethane	MSD	REC	89	%	71-121
MC41356-20MSD	79-34-5	1,1,2,2-Tetrachloroethane	MSD	RPD	0	%	20
MC41356-20MSD	127-18-4	Tetrachloroethene	MSD	REC	97	%	74-129
MC41356-20MSD	127-18-4	Tetrachloroethene	MSD	RPD	0	%	20
MC41356-20MSD	108-88-3	Toluene	MSD	REC	95	%	80-121
MC41356-20MSD	108-88-3	Toluene	MSD	RPD	3	%	20
MC41356-20MSD	87-61-6	1,2,3-Trichlorobenzene	MSD	REC	84	%	69-129
MC41356-20MSD	87-61-6	1,2,3-Trichlorobenzene	MSD	RPD	3	%	20
MC41356-20MSD	120-82-1	1,2,4-Trichlorobenzene	MSD	REC	84	%	69-130
MC41356-20MSD	120-82-1	1,2,4-Trichlorobenzene	MSD	RPD	1	%	20
MC41356-20MSD	71-55-6	1,1,1-Trichloroethane	MSD	REC	100	%	74-131
MC41356-20MSD	71-55-6	1,1,1-Trichloroethane	MSD	RPD	1	%	20
MC41356-20MSD	79-00-5	1,1,2-Trichloroethane	MSD	REC	93	%	80-119
MC41356-20MSD	79-00-5	1,1,2-Trichloroethane	MSD	RPD	5	%	20
MC41356-20MSD	79-01-6	Trichloroethene	MSD	REC	92	%	79-123
MC41356-20MSD	79-01-6	Trichloroethene	MSD	RPD	1	%	20
MC41356-20MSD	75-69-4	Trichlorofluoromethane	MSD	REC	104	%	65-141
MC41356-20MSD	75-69-4	Trichlorofluoromethane	MSD	RPD	4	%	20
MC41356-20MSD	96-18-4	1,2,3-Trichloropropane	MSD	REC	91	%	73-122
MC41356-20MSD	96-18-4	1,2,3-Trichloropropane	MSD	RPD	2	%	20
MC41356-20MSD	95-63-6	1,2,4-Trimethylbenzene	MSD	REC	93	%	76-124
MC41356-20MSD	95-63-6	1,2,4-Trimethylbenzene	MSD	RPD	1	%	20
MC41356-20MSD	108-67-8	1,3,5-Trimethylbenzene	MSD	REC	94	%	75-124
MC41356-20MSD	108-67-8	1,3,5-Trimethylbenzene	MSD	RPD	1	%	20
MC41356-20MSD	108-05-4	Vinyl Acetate	MSD	REC	83	%	54-146
MC41356-20MSD	108-05-4	Vinyl Acetate	MSD	RPD	0	%	20
MC41356-20MSD	75-01-4	Vinyl chloride	MSD	REC	101	%	58-137
MC41356-20MSD	75-01-4	Vinyl chloride	MSD	RPD	2	%	20
MC41356-20MSD		m,p-Xylene	MSD	REC	94	%	80-121
MC41356-20MSD		m,p-Xylene	MSD	RPD	1	%	20
MC41356-20MSD	95-47-6	o-Xylene	MSD	REC	94	%	78-122
MC41356-20MSD	95-47-6	o-Xylene	MSD	RPD	1	%	20
MC41356-20MSD	1330-20-7	Xylene (total)	MSD	REC	94	%	79-121
MC41356-20MSD	1330-20-7	Xylene (total)	MSD	RPD	1	%	20
MC41356-20MSD	1868-53-7	Dibromofluoromethane	MSD	SURR	101	%	80-119
MC41356-20MSD	2037-26-5	Toluene-D8	MSD	SURR	103	%	89-112
MC41356-20MSD	460-00-4	4-Bromofluorobenzene	MSD	SURR	96	%	85-114
MSG5457-MB	1868-53-7	Dibromofluoromethane	MB	SURR	103	%	80-119
MSG5457-MB	2037-26-5	Toluene-D8	MB	SURR	101	%	89-112
MSG5457-MB	460-00-4	4-Bromofluorobenzene	MB	SURR	110	%	85-114
MC41356-16	1868-53-7	Dibromofluoromethane	SAMP	SURR	103	%	80-119
MC41356-16	2037-26-5	Toluene-D8	SAMP	SURR	103	%	89-112

* Sample used for QC is not from job MC41356

QC Evaluation: DOD QSM5 Limits

Job Number: MC41356
Account: EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ
Collected: 09/08/15

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MC41356-16	460-00-4	4-Bromofluorobenzene	SAMP	SURR	106	%	85-114
MC41356-17	1868-53-7	Dibromofluoromethane	SAMP	SURR	103	%	80-119
MC41356-17	2037-26-5	Toluene-D8	SAMP	SURR	102	%	89-112
MC41356-17	460-00-4	4-Bromofluorobenzene	SAMP	SURR	105	%	85-114
MC41356-18	1868-53-7	Dibromofluoromethane	SAMP	SURR	103	%	80-119
MC41356-18	2037-26-5	Toluene-D8	SAMP	SURR	103	%	89-112
MC41356-18	460-00-4	4-Bromofluorobenzene	SAMP	SURR	106	%	85-114
MC41356-19	1868-53-7	Dibromofluoromethane	SAMP	SURR	104	%	80-119
MC41356-19	2037-26-5	Toluene-D8	SAMP	SURR	102	%	89-112
MC41356-19	460-00-4	4-Bromofluorobenzene	SAMP	SURR	107	%	85-114
MC41356-20	1868-53-7	Dibromofluoromethane	SAMP	SURR	104	%	80-119
MC41356-20	2037-26-5	Toluene-D8	SAMP	SURR	103	%	89-112
MC41356-20	460-00-4	4-Bromofluorobenzene	SAMP	SURR	106	%	85-114
MC41356-21	1868-53-7	Dibromofluoromethane	SAMP	SURR	102	%	80-119
MC41356-21	2037-26-5	Toluene-D8	SAMP	SURR	103	%	89-112
MC41356-21	460-00-4	4-Bromofluorobenzene	SAMP	SURR	107	%	85-114
MC41356-22	1868-53-7	Dibromofluoromethane	SAMP	SURR	102	%	80-119
MC41356-22	2037-26-5	Toluene-D8	SAMP	SURR	102	%	89-112
MC41356-22	460-00-4	4-Bromofluorobenzene	SAMP	SURR	106	%	85-114
MC41356-23	1868-53-7	Dibromofluoromethane	SAMP	SURR	104	%	80-119
MC41356-23	2037-26-5	Toluene-D8	SAMP	SURR	102	%	89-112
MC41356-23	460-00-4	4-Bromofluorobenzene	SAMP	SURR	106	%	85-114
MC41356-24	1868-53-7	Dibromofluoromethane	SAMP	SURR	104	%	80-119
MC41356-24	2037-26-5	Toluene-D8	SAMP	SURR	101	%	89-112
MC41356-24	460-00-4	4-Bromofluorobenzene	SAMP	SURR	109	%	85-114
MC41356-25	1868-53-7	Dibromofluoromethane	SAMP	SURR	104	%	80-119
MC41356-25	2037-26-5	Toluene-D8	SAMP	SURR	102	%	89-112
MC41356-25	460-00-4	4-Bromofluorobenzene	SAMP	SURR	107	%	85-114
MC41356-26	1868-53-7	Dibromofluoromethane	SAMP	SURR	102	%	80-119
MC41356-26	2037-26-5	Toluene-D8	SAMP	SURR	101	%	89-112
MC41356-26	460-00-4	4-Bromofluorobenzene	SAMP	SURR	107	%	85-114

* Sample used for QC is not from job MC41356

New England ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: MC41356
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG5455-MB	G145651.D	1	09/18/15	AD	n/a	n/a	MSG5455

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC41356-1, MC41356-2, MC41356-3, MC41356-4, MC41356-5, MC41356-6, MC41356-7, MC41356-8, MC41356-9, MC41356-10, MC41356-11, MC41356-12, MC41356-13, MC41356-14, MC41356-15

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	0.50	0.27	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.26	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.37	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.18	ug/l	
75-25-2	Bromoform	ND	1.0	0.39	ug/l	
74-83-9	Bromomethane	ND	2.0	0.79	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	3.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.57	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.19	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.34	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane	ND	2.0	0.49	ug/l	
67-66-3	Chloroform	ND	1.0	0.40	ug/l	
74-87-3	Chloromethane	ND	2.0	0.49	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.60	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.46	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.83	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.33	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.37	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.53	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.28	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.48	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.21	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.29	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.7	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.23	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.27	ug/l	

Method Blank Summary

Job Number: MC41356
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG5455-MB	G145651.D	1	09/18/15	AD	n/a	n/a	MSG5455

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC41356-1, MC41356-2, MC41356-3, MC41356-4, MC41356-5, MC41356-6, MC41356-7, MC41356-8, MC41356-9, MC41356-10, MC41356-11, MC41356-12, MC41356-13, MC41356-14, MC41356-15

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.24	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.45	ug/l	
591-78-6	2-Hexanone	ND	10	2.7	ug/l	
74-88-4	Iodomethane	ND	5.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.27	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.32	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.35	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.77	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.30	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.27	ug/l	
91-20-3	Naphthalene	ND	5.0	0.61	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.29	ug/l	
100-42-5	Styrene	ND	5.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.29	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.21	ug/l	
108-88-3	Toluene	ND	1.0	0.29	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.78	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.74	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.42	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.25	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.47	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.39	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.29	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.20	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	1.4	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.45	ug/l	
	m,p-Xylene	ND	1.0	0.47	ug/l	
95-47-6	o-Xylene	ND	1.0	0.22	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.22	ug/l	

Method Blank Summary

Job Number: MC41356
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG5455-MB	G145651.D	1	09/18/15	AD	n/a	n/a	MSG5455

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC41356-1, MC41356-2, MC41356-3, MC41356-4, MC41356-5, MC41356-6, MC41356-7, MC41356-8, MC41356-9, MC41356-10, MC41356-11, MC41356-12, MC41356-13, MC41356-14, MC41356-15

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	103%	79-127%
2037-26-5	Toluene-D8	100%	80-116%
460-00-4	4-Bromofluorobenzene	108%	77-124%

Method Blank Summary

Job Number: MC41356
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG5457-MB	G145714.D	1	09/20/15	AD	n/a	n/a	MSG5457

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC41356-16, MC41356-17, MC41356-18, MC41356-19, MC41356-20, MC41356-21, MC41356-22, MC41356-23, MC41356-24, MC41356-25, MC41356-26

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	0.50	0.27	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.26	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.37	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.18	ug/l	
75-25-2	Bromoform	ND	1.0	0.39	ug/l	
74-83-9	Bromomethane	ND	2.0	0.79	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	3.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.57	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.19	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.34	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane	ND	2.0	0.49	ug/l	
67-66-3	Chloroform	ND	1.0	0.40	ug/l	
74-87-3	Chloromethane	ND	2.0	0.49	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.60	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.46	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.83	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.33	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.37	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.53	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.28	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.48	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.21	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.29	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.7	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.23	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.27	ug/l	

Method Blank Summary

Job Number: MC41356
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG5457-MB	G145714.D	1	09/20/15	AD	n/a	n/a	MSG5457

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC41356-16, MC41356-17, MC41356-18, MC41356-19, MC41356-20, MC41356-21, MC41356-22, MC41356-23, MC41356-24, MC41356-25, MC41356-26

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.24	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.45	ug/l	
591-78-6	2-Hexanone	ND	10	2.7	ug/l	
74-88-4	Iodomethane	ND	5.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.27	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.32	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.35	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.77	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.30	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.27	ug/l	
91-20-3	Naphthalene	ND	5.0	0.61	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.29	ug/l	
100-42-5	Styrene	ND	5.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.29	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.21	ug/l	
108-88-3	Toluene	ND	1.0	0.29	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.78	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.74	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.42	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.25	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.47	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.39	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.29	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.20	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	1.4	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.45	ug/l	
	m,p-Xylene	ND	1.0	0.47	ug/l	
95-47-6	o-Xylene	ND	1.0	0.22	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.22	ug/l	

Method Blank Summary

Job Number: MC41356
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG5457-MB	G145714.D	1	09/20/15	AD	n/a	n/a	MSG5457

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC41356-16, MC41356-17, MC41356-18, MC41356-19, MC41356-20, MC41356-21, MC41356-22, MC41356-23, MC41356-24, MC41356-25, MC41356-26

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	103%	79-127%
2037-26-5	Toluene-D8	101%	80-116%
460-00-4	4-Bromofluorobenzene	110%	77-124%

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC41356
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG5455-BS	G145648.D	1	09/18/15	AD	n/a	n/a	MSG5455
MSG5455-BSD	G145649.D	1	09/18/15	AD	n/a	n/a	MSG5455

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC41356-1, MC41356-2, MC41356-3, MC41356-4, MC41356-5, MC41356-6, MC41356-7, MC41356-8, MC41356-9, MC41356-10, MC41356-11, MC41356-12, MC41356-13, MC41356-14, MC41356-15

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50	65.2	130	58.3	117	11	10-200/25
71-43-2	Benzene	50	47.5	95	46.5	93	2	74-124/25
108-86-1	Bromobenzene	50	47.5	95	47.1	94	1	80-117/25
74-97-5	Bromochloromethane	50	50.3	101	49.9	100	1	73-130/25
75-27-4	Bromodichloromethane	50	47.4	95	46.6	93	2	76-136/25
75-25-2	Bromoform	50	47.0	94	47.0	94	0	63-139/25
74-83-9	Bromomethane	50	55.5	111	53.6	107	3	49-161/25
78-93-3	2-Butanone (MEK)	50	56.4	113	55.7	111	1	44-191/25
104-51-8	n-Butylbenzene	50	49.1	98	49.2	98	0	84-134/25
135-98-8	sec-Butylbenzene	50	47.9	96	47.5	95	1	76-125/25
98-06-6	tert-Butylbenzene	50	46.7	93	47.3	95	1	74-123/25
75-15-0	Carbon disulfide	50	52.5	105	52.4	105	0	45-138/25
56-23-5	Carbon tetrachloride	50	49.2	98	48.6	97	1	64-149/25
108-90-7	Chlorobenzene	50	45.7	91	45.8	92	0	73-114/25
75-00-3	Chloroethane	50	58.0	116	56.6	113	2	43-165/25
67-66-3	Chloroform	50	46.9	94	46.1	92	2	72-132/25
74-87-3	Chloromethane	50	57.7	115	56.5	113	2	30-173/25
95-49-8	o-Chlorotoluene	50	45.5	91	45.9	92	1	75-116/25
106-43-4	p-Chlorotoluene	50	46.9	94	47.6	95	1	78-116/25
96-12-8	1,2-Dibromo-3-chloropropane	50	43.3	87	41.7	83	4	50-157/25
124-48-1	Dibromochloromethane	50	47.0	94	46.5	93	1	75-133/25
106-93-4	1,2-Dibromoethane	50	47.7	95	47.4	95	1	72-133/25
95-50-1	1,2-Dichlorobenzene	50	46.0	92	46.5	93	1	73-122/25
541-73-1	1,3-Dichlorobenzene	50	45.1	90	45.4	91	1	76-117/25
106-46-7	1,4-Dichlorobenzene	50	45.5	91	45.2	90	1	74-120/25
75-71-8	Dichlorodifluoromethane	50	54.9	110	51.6	103	6	30-180/25
75-34-3	1,1-Dichloroethane	50	46.0	92	45.9	92	0	62-130/25
107-06-2	1,2-Dichloroethane	50	46.5	93	45.2	90	3	65-140/25
75-35-4	1,1-Dichloroethene	50	54.2	108	52.3	105	4	57-132/25
156-59-2	cis-1,2-Dichloroethene	50	49.9	100	50.5	101	1	72-131/25
156-60-5	trans-1,2-Dichloroethene	50	51.8	104	50.8	102	2	69-127/25
78-87-5	1,2-Dichloropropane	50	49.7	99	49.3	99	1	74-130/25
142-28-9	1,3-Dichloropropane	50	49.9	100	48.7	97	2	80-129/25
594-20-7	2,2-Dichloropropane	50	49.4	99	46.6	93	6	54-162/25
563-58-6	1,1-Dichloropropene	50	49.6	99	48.4	97	2	75-116/25
10061-01-5	cis-1,3-Dichloropropene	50	48.8	98	48.4	97	1	86-141/25

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC41356
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG5455-BS	G145648.D	1	09/18/15	AD	n/a	n/a	MSG5455
MSG5455-BSD	G145649.D	1	09/18/15	AD	n/a	n/a	MSG5455

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC41356-1, MC41356-2, MC41356-3, MC41356-4, MC41356-5, MC41356-6, MC41356-7, MC41356-8, MC41356-9, MC41356-10, MC41356-11, MC41356-12, MC41356-13, MC41356-14, MC41356-15

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	50	44.8	90	44.5	89	1	80-134/25
100-41-4	Ethylbenzene	50	47.7	95	48.4	97	1	76-125/25
87-68-3	Hexachlorobutadiene	50	49.1	98	48.8	98	1	64-154/25
591-78-6	2-Hexanone	50	56.5	113	53.0	106	6	35-200/25
74-88-4	Iodomethane	50	55.4	111	54.8	110	1	50-154/25
98-82-8	Isopropylbenzene	50	47.1	94	47.8	96	1	74-121/25
99-87-6	p-Isopropyltoluene	50	47.9	96	48.8	98	2	84-128/25
1634-04-4	Methyl Tert Butyl Ether	50	45.8	92	45.2	90	1	67-145/25
108-10-1	4-Methyl-2-pentanone (MIBK)	50	46.3	93	44.8	90	3	61-155/25
74-95-3	Methylene bromide	50	49.7	99	49.6	99	0	75-124/25
75-09-2	Methylene chloride	50	52.7	105	51.6	103	2	62-137/25
91-20-3	Naphthalene	50	35.6	71	34.0	68	5	24-164/25
103-65-1	n-Propylbenzene	50	46.0	92	46.5	93	1	76-120/25
100-42-5	Styrene	50	49.3	99	49.4	99	0	74-132/25
630-20-6	1,1,1,2-Tetrachloroethane	50	48.3	97	48.8	98	1	71-136/25
79-34-5	1,1,2,2-Tetrachloroethane	50	44.2	88	43.0	86	3	65-145/25
127-18-4	Tetrachloroethene	50	48.8	98	49.1	98	1	73-122/25
108-88-3	Toluene	50	48.8	98	48.4	97	1	80-122/25
87-61-6	1,2,3-Trichlorobenzene	50	42.3	85	40.6	81	4	33-170/25
120-82-1	1,2,4-Trichlorobenzene	50	42.9	86	41.8	84	3	43-159/25
71-55-6	1,1,1-Trichloroethane	50	50.5	101	50.2	100	1	68-137/25
79-00-5	1,1,2-Trichloroethane	50	48.2	96	47.1	94	2	76-134/25
79-01-6	Trichloroethene	50	48.0	96	47.5	95	1	80-125/25
75-69-4	Trichlorofluoromethane	50	53.9	108	52.1	104	3	56-166/25
96-18-4	1,2,3-Trichloropropane	50	43.7	87	43.9	88	0	65-147/25
95-63-6	1,2,4-Trimethylbenzene	50	47.5	95	48.1	96	1	79-124/25
108-67-8	1,3,5-Trimethylbenzene	50	47.7	95	48.4	97	1	80-130/25
108-05-4	Vinyl Acetate	50	42.9	86	42.8	86	0	72-200/25
75-01-4	Vinyl chloride	50	53.1	106	51.5	103	3	39-176/25
	m,p-Xylene	100	95.3	95	96.7	97	1	75-121/25
95-47-6	o-Xylene	50	47.2	94	48.1	96	2	71-123/25
1330-20-7	Xylene (total)	150	143	95	145	97	1	74-122/25

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC41356
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG5455-BS	G145648.D	1	09/18/15	AD	n/a	n/a	MSG5455
MSG5455-BSD	G145649.D	1	09/18/15	AD	n/a	n/a	MSG5455

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC41356-1, MC41356-2, MC41356-3, MC41356-4, MC41356-5, MC41356-6, MC41356-7, MC41356-8, MC41356-9, MC41356-10, MC41356-11, MC41356-12, MC41356-13, MC41356-14, MC41356-15

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	103%	103%	79-127%
2037-26-5	Toluene-D8	105%	102%	80-116%
460-00-4	4-Bromofluorobenzene	96%	97%	77-124%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC41356
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG5457-BS	G145711.D	1	09/20/15	AD	n/a	n/a	MSG5457
MSG5457-BSD	G145712.D	1	09/20/15	AD	n/a	n/a	MSG5457

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC41356-16, MC41356-17, MC41356-18, MC41356-19, MC41356-20, MC41356-21, MC41356-22, MC41356-23, MC41356-24, MC41356-25, MC41356-26

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50	59.7	119	58.5	117	2	10-200/25
71-43-2	Benzene	50	46.6	93	46.1	92	1	74-124/25
108-86-1	Bromobenzene	50	47.0	94	47.4	95	1	80-117/25
74-97-5	Bromochloromethane	50	50.1	100	49.6	99	1	73-130/25
75-27-4	Bromodichloromethane	50	46.9	94	46.8	94	0	76-136/25
75-25-2	Bromoform	50	48.6	97	50.3	101	3	63-139/25
74-83-9	Bromomethane	50	50.8	102	49.8	100	2	49-161/25
78-93-3	2-Butanone (MEK)	50	60.3	121	62.8	126	4	44-191/25
104-51-8	n-Butylbenzene	50	49.6	99	49.8	100	0	84-134/25
135-98-8	sec-Butylbenzene	50	47.5	95	48.2	96	1	76-125/25
98-06-6	tert-Butylbenzene	50	47.6	95	47.2	94	1	74-123/25
75-15-0	Carbon disulfide	50	52.5	105	52.0	104	1	45-138/25
56-23-5	Carbon tetrachloride	50	49.9	100	49.9	100	0	64-149/25
108-90-7	Chlorobenzene	50	46.0	92	45.9	92	0	73-114/25
75-00-3	Chloroethane	50	53.5	107	50.5	101	6	43-165/25
67-66-3	Chloroform	50	46.6	93	46.2	92	1	72-132/25
74-87-3	Chloromethane	50	53.4	107	52.8	106	1	30-173/25
95-49-8	o-Chlorotoluene	50	45.6	91	45.7	91	0	75-116/25
106-43-4	p-Chlorotoluene	50	46.9	94	47.7	95	2	78-116/25
96-12-8	1,2-Dibromo-3-chloropropane	50	46.6	93	48.1	96	3	50-157/25
124-48-1	Dibromochloromethane	50	47.4	95	47.8	96	1	75-133/25
106-93-4	1,2-Dibromoethane	50	48.7	97	49.0	98	1	72-133/25
95-50-1	1,2-Dichlorobenzene	50	46.5	93	46.8	94	1	73-122/25
541-73-1	1,3-Dichlorobenzene	50	44.9	90	44.9	90	0	76-117/25
106-46-7	1,4-Dichlorobenzene	50	45.1	90	45.5	91	1	74-120/25
75-71-8	Dichlorodifluoromethane	50	49.4	99	48.3	97	2	30-180/25
75-34-3	1,1-Dichloroethane	50	45.4	91	45.0	90	1	62-130/25
107-06-2	1,2-Dichloroethane	50	46.6	93	46.2	92	1	65-140/25
75-35-4	1,1-Dichloroethene	50	52.7	105	51.1	102	3	57-132/25
156-59-2	cis-1,2-Dichloroethene	50	50.1	100	49.5	99	1	72-131/25
156-60-5	trans-1,2-Dichloroethene	50	50.5	101	49.3	99	2	69-127/25
78-87-5	1,2-Dichloropropane	50	48.9	98	48.4	97	1	74-130/25
142-28-9	1,3-Dichloropropane	50	50.1	100	51.3	103	2	80-129/25
594-20-7	2,2-Dichloropropane	50	50.9	102	49.4	99	3	54-162/25
563-58-6	1,1-Dichloropropene	50	48.9	98	48.7	97	0	75-116/25
10061-01-5	cis-1,3-Dichloropropene	50	48.3	97	48.4	97	0	86-141/25

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC41356
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG5457-BS	G145711.D	1	09/20/15	AD	n/a	n/a	MSG5457
MSG5457-BSD	G145712.D	1	09/20/15	AD	n/a	n/a	MSG5457

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC41356-16, MC41356-17, MC41356-18, MC41356-19, MC41356-20, MC41356-21, MC41356-22, MC41356-23, MC41356-24, MC41356-25, MC41356-26

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	50	45.0	90	44.7	89	1	80-134/25
100-41-4	Ethylbenzene	50	48.0	96	48.2	96	0	76-125/25
87-68-3	Hexachlorobutadiene	50	50.3	101	50.4	101	0	64-154/25
591-78-6	2-Hexanone	50	59.3	119	61.4	123	3	35-200/25
74-88-4	Iodomethane	50	54.3	109	53.1	106	2	50-154/25
98-82-8	Isopropylbenzene	50	46.9	94	47.4	95	1	74-121/25
99-87-6	p-Isopropyltoluene	50	48.1	96	48.5	97	1	84-128/25
1634-04-4	Methyl Tert Butyl Ether	50	47.7	95	47.6	95	0	67-145/25
108-10-1	4-Methyl-2-pentanone (MIBK)	50	48.9	98	48.9	98	0	61-155/25
74-95-3	Methylene bromide	50	50.2	100	50.1	100	0	75-124/25
75-09-2	Methylene chloride	50	51.3	103	50.6	101	1	62-137/25
91-20-3	Naphthalene	50	38.2	76	38.1	76	0	24-164/25
103-65-1	n-Propylbenzene	50	46.4	93	46.8	94	1	76-120/25
100-42-5	Styrene	50	48.5	97	49.3	99	2	74-132/25
630-20-6	1,1,1,2-Tetrachloroethane	50	48.6	97	48.8	98	0	71-136/25
79-34-5	1,1,2,2-Tetrachloroethane	50	45.5	91	46.4	93	2	65-145/25
127-18-4	Tetrachloroethene	50	49.0	98	49.6	99	1	73-122/25
108-88-3	Toluene	50	48.2	96	47.8	96	1	80-122/25
87-61-6	1,2,3-Trichlorobenzene	50	44.6	89	44.6	89	0	33-170/25
120-82-1	1,2,4-Trichlorobenzene	50	44.8	90	44.1	88	2	43-159/25
71-55-6	1,1,1-Trichloroethane	50	51.8	104	51.1	102	1	68-137/25
79-00-5	1,1,2-Trichloroethane	50	48.7	97	47.8	96	2	76-134/25
79-01-6	Trichloroethene	50	48.3	97	47.5	95	2	80-125/25
75-69-4	Trichlorofluoromethane	50	49.6	99	49.4	99	0	56-166/25
96-18-4	1,2,3-Trichloropropane	50	45.4	91	46.1	92	2	65-147/25
95-63-6	1,2,4-Trimethylbenzene	50	47.6	95	47.6	95	0	79-124/25
108-67-8	1,3,5-Trimethylbenzene	50	48.2	96	48.7	97	1	80-130/25
108-05-4	Vinyl Acetate	50	45.9	92	43.8	88	5	72-200/25
75-01-4	Vinyl chloride	50	48.8	98	48.1	96	1	39-176/25
	m,p-Xylene	100	95.8	96	96.5	97	1	75-121/25
95-47-6	o-Xylene	50	47.6	95	47.6	95	0	71-123/25
1330-20-7	Xylene (total)	150	143	95	144	96	1	74-122/25

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC41356
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG5457-BS	G145711.D	1	09/20/15	AD	n/a	n/a	MSG5457
MSG5457-BSD	G145712.D	1	09/20/15	AD	n/a	n/a	MSG5457

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC41356-16, MC41356-17, MC41356-18, MC41356-19, MC41356-20, MC41356-21, MC41356-22, MC41356-23, MC41356-24, MC41356-25, MC41356-26

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	102%	102%	79-127%
2037-26-5	Toluene-D8	102%	101%	80-116%
460-00-4	4-Bromofluorobenzene	96%	97%	77-124%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC41356
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC41356-2MS	G145671.D	1	09/18/15	AD	n/a	n/a	MSG5455
MC41356-2MSD	G145672.D	1	09/18/15	AD	n/a	n/a	MSG5455
MC41356-2	G145659.D	1	09/18/15	AD	n/a	n/a	MSG5455

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC41356-1, MC41356-2, MC41356-3, MC41356-4, MC41356-5, MC41356-6, MC41356-7, MC41356-8, MC41356-9, MC41356-10, MC41356-11, MC41356-12, MC41356-13, MC41356-14, MC41356-15

CAS No.	Compound	MC41356-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	10	U	50	36.8	74	50	40.8	82	10	10-156/30
71-43-2	Benzene	0.50	U	50	48.2	96	50	48.4	97	0	63-135/30
108-86-1	Bromobenzene	5.0	U	50	49.3	99	50	48.2	96	2	75-116/30
74-97-5	Bromochloromethane	5.0	U	50	51.6	103	50	52.4	105	2	67-136/30
75-27-4	Bromodichloromethane	1.0	U	50	49.0	98	50	48.6	97	1	69-140/30
75-25-2	Bromoform	1.0	U	50	48.4	97	50	47.3	95	2	57-138/30
74-83-9	Bromomethane	2.0	U	50	50.5	101	50	53.7	107	6	25-169/30
78-93-3	2-Butanone (MEK)	10	U	50	43.0	86	50	44.9	90	4	23-159/30
104-51-8	n-Butylbenzene	5.0	U	50	49.9	100	50	49.2	98	1	75-135/30
135-98-8	sec-Butylbenzene	5.0	U	50	48.8	98	50	48.3	97	1	70-125/30
98-06-6	tert-Butylbenzene	5.0	U	50	47.7	95	50	46.8	94	2	64-128/30
75-15-0	Carbon disulfide	5.0	U	50	47.3	95	50	49.3	99	4	40-139/30
56-23-5	Carbon tetrachloride	1.0	U	50	50.5	101	50	51.2	102	1	60-149/30
108-90-7	Chlorobenzene	1.0	U	50	47.8	96	50	47.4	95	1	70-115/30
75-00-3	Chloroethane	2.0	U	50	53.1	106	50	55.5	111	4	37-175/30
67-66-3	Chloroform	1.0	U	50	47.3	95	50	48.1	96	2	64-141/30
74-87-3	Chloromethane	2.0	U	50	53.8	108	50	56.6	113	5	21-178/30
95-49-8	o-Chlorotoluene	5.0	U	50	46.8	94	50	46.0	92	2	60-130/30
106-43-4	p-Chlorotoluene	5.0	U	50	47.8	96	50	46.7	93	2	70-120/30
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U	50	45.9	92	50	45.8	92	0	51-156/30
124-48-1	Dibromochloromethane	1.0	U	50	48.1	96	50	47.7	95	1	70-131/30
106-93-4	1,2-Dibromoethane	1.0	U	50	49.6	99	50	49.0	98	1	72-131/30
95-50-1	1,2-Dichlorobenzene	1.0	U	50	47.8	96	50	48.0	96	0	68-122/30
541-73-1	1,3-Dichlorobenzene	1.0	U	50	46.6	93	50	46.1	92	1	71-117/30
106-46-7	1,4-Dichlorobenzene	1.0	U	50	46.8	94	50	46.4	93	1	69-120/30
75-71-8	Dichlorodifluoromethane	2.0	U	50	46.1	92	50	49.7	99	8	28-181/30
75-34-3	1,1-Dichloroethane	1.0	U	50	45.9	92	50	47.2	94	3	56-138/30
107-06-2	1,2-Dichloroethane	1.0	U	50	47.3	95	50	47.2	94	0	60-146/30
75-35-4	1,1-Dichloroethene	1.0	U	50	52.2	104	50	54.8	110	5	52-137/30
156-59-2	cis-1,2-Dichloroethene	1.0	U	50	51.2	102	50	52.8	106	3	64-139/30
156-60-5	trans-1,2-Dichloroethene	1.0	U	50	50.8	102	50	52.5	105	3	63-132/30
78-87-5	1,2-Dichloropropane	2.0	U	50	50.9	102	50	50.9	102	0	67-137/30
142-28-9	1,3-Dichloropropane	5.0	U	50	52.5	105	50	51.0	102	3	78-130/30
594-20-7	2,2-Dichloropropane	5.0	U	50	47.2	94	50	50.6	101	7	36-166/30
563-58-6	1,1-Dichloropropene	5.0	U	50	48.8	98	50	49.5	99	1	68-123/30
10061-01-5	cis-1,3-Dichloropropene	0.50	U	50	49.5	99	50	49.3	99	0	77-142/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC41356
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC41356-2MS	G145671.D	1	09/18/15	AD	n/a	n/a	MSG5455
MC41356-2MSD	G145672.D	1	09/18/15	AD	n/a	n/a	MSG5455
MC41356-2	G145659.D	1	09/18/15	AD	n/a	n/a	MSG5455

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC41356-1, MC41356-2, MC41356-3, MC41356-4, MC41356-5, MC41356-6, MC41356-7, MC41356-8, MC41356-9, MC41356-10, MC41356-11, MC41356-12, MC41356-13, MC41356-14, MC41356-15

CAS No.	Compound	MC41356-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	0.50	U	50	45.6	91	50	45.2	90	1	73-136/30
100-41-4	Ethylbenzene	1.0	U	50	48.8	98	50	48.1	96	1	60-136/30
87-68-3	Hexachlorobutadiene	5.0	U	50	50.5	101	50	50.5	101	0	63-143/30
591-78-6	2-Hexanone	10	U	50	44.3	89	50	44.2	88	0	29-151/30
74-88-4	Iodomethane	5.0	U	50	54.2	108	50	56.2	112	4	37-158/30
98-82-8	Isopropylbenzene	5.0	U	50	47.7	95	50	47.2	94	1	67-123/30
99-87-6	p-Isopropyltoluene	5.0	U	50	48.2	96	50	48.1	96	0	78-126/30
1634-04-4	Methyl Tert Butyl Ether	1.0	U	50	46.7	93	50	49.0	98	5	60-156/30
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	50	39.0	78	50	39.1	78	0	47-167/30
74-95-3	Methylene bromide	5.0	U	50	52.5	105	50	53.1	106	1	70-130/30
75-09-2	Methylene chloride	2.0	U	50	51.7	103	50	54.0	108	4	55-144/30
91-20-3	Naphthalene	5.0	U	50	36.7	73	50	38.3	77	4	23-167/30
103-65-1	n-Propylbenzene	5.0	U	50	46.8	94	50	46.8	94	0	66-124/30
100-42-5	Styrene	5.0	U	50	38.5	77	50	37.3	75	3	61-137/30
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	50	50.6	101	50	50.0	100	1	71-132/30
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	50	47.3	95	50	46.5	93	2	62-149/30
127-18-4	Tetrachloroethene	1.0	U	50	50.9	102	50	49.7	99	2	65-124/30
108-88-3	Toluene	1.0	U	50	50.0	100	50	49.4	99	1	69-134/30
87-61-6	1,2,3-Trichlorobenzene	5.0	U	50	43.4	87	50	44.9	90	3	41-157/30
120-82-1	1,2,4-Trichlorobenzene	5.0	U	50	43.7	87	50	44.5	89	2	46-147/30
71-55-6	1,1,1-Trichloroethane	1.0	U	50	51.9	104	50	52.3	105	1	61-144/30
79-00-5	1,1,2-Trichloroethane	1.0	U	50	51.3	103	50	50.0	100	3	69-142/30
79-01-6	Trichloroethene	1.0	U	50	49.6	99	50	48.9	98	1	69-133/30
75-69-4	Trichlorofluoromethane	1.0	U	50	49.1	98	50	51.8	104	5	60-163/30
96-18-4	1,2,3-Trichloropropane	5.0	U	50	47.7	95	50	46.6	93	2	57-150/30
95-63-6	1,2,4-Trimethylbenzene	5.0	U	50	41.8	84	50	41.5	83	1	67-130/30
108-67-8	1,3,5-Trimethylbenzene	5.0	U	50	40.5	81	50	40.2	80	1	66-137/30
108-05-4	Vinyl Acetate	5.0	U	50	41.3	83	50	41.7	83	1	48-200/30
75-01-4	Vinyl chloride	1.0	U	50	48.1	96	50	51.2	102	6	39-176/30
	m,p-Xylene	1.0	U	100	93.4	93	100	91.7	92	2	64-128/30
95-47-6	o-Xylene	1.0	U	50	46.6	93	50	46.0	92	1	64-126/30
1330-20-7	Xylene (total)	1.0	U	150	140	93	150	138	92	1	65-127/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC41356
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC41356-2MS	G145671.D	1	09/18/15	AD	n/a	n/a	MSG5455
MC41356-2MSD	G145672.D	1	09/18/15	AD	n/a	n/a	MSG5455
MC41356-2	G145659.D	1	09/18/15	AD	n/a	n/a	MSG5455

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC41356-1, MC41356-2, MC41356-3, MC41356-4, MC41356-5, MC41356-6, MC41356-7, MC41356-8, MC41356-9, MC41356-10, MC41356-11, MC41356-12, MC41356-13, MC41356-14, MC41356-15

CAS No.	Surrogate Recoveries	MS	MSD	MC41356-2	Limits
1868-53-7	Dibromofluoromethane	104%	104%	104%	79-127%
2037-26-5	Toluene-D8	103%	103%	101%	80-116%
460-00-4	4-Bromofluorobenzene	96%	94%	106%	77-124%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC41356
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC41356-20MS	G145734.D	1	09/20/15	AD	n/a	n/a	MSG5457
MC41356-20MSD	G145735.D	1	09/20/15	AD	n/a	n/a	MSG5457
MC41356-20	G145724.D	1	09/20/15	AD	n/a	n/a	MSG5457

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC41356-16, MC41356-17, MC41356-18, MC41356-19, MC41356-20, MC41356-21, MC41356-22, MC41356-23, MC41356-24, MC41356-25, MC41356-26

CAS No.	Compound	MC41356-20 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	27.3		50	53.7	53	50	58.8	63	9	10-156/30
71-43-2	Benzene	0.50 U		50	46.9	94	50	46.7	93	0	63-135/30
108-86-1	Bromobenzene	5.0 U		50	46.7	93	50	47.1	94	1	75-116/30
74-97-5	Bromochloromethane	5.0 U		50	48.5	97	50	49.3	99	2	67-136/30
75-27-4	Bromodichloromethane	1.0 U		50	47.4	95	50	47.4	95	0	69-140/30
75-25-2	Bromoform	1.0 U		50	47.2	94	50	46.0	92	3	57-138/30
74-83-9	Bromomethane	2.0 U		50	51.3	103	50	52.2	104	2	25-169/30
78-93-3	2-Butanone (MEK)	10 U		50	41.3	83	50	42.3	85	2	23-159/30
104-51-8	n-Butylbenzene	5.0 U		50	47.4	95	50	46.7	93	1	75-135/30
135-98-8	sec-Butylbenzene	5.0 U		50	46.4	93	50	45.6	91	2	70-125/30
98-06-6	tert-Butylbenzene	5.0 U		50	46.6	93	50	46.5	93	0	64-128/30
75-15-0	Carbon disulfide	5.0 U		50	47.3	95	50	46.6	93	1	40-139/30
56-23-5	Carbon tetrachloride	1.0 U		50	49.6	99	50	48.7	97	2	60-149/30
108-90-7	Chlorobenzene	1.0 U		50	45.6	91	50	44.8	90	2	70-115/30
75-00-3	Chloroethane	2.0 U		50	53.5	107	50	54.0	108	1	37-175/30
67-66-3	Chloroform	1.0 U		50	46.0	92	50	46.1	92	0	64-141/30
74-87-3	Chloromethane	2.0 U		50	55.3	111	50	56.8	114	3	21-178/30
95-49-8	o-Chlorotoluene	5.0 U		50	44.8	90	50	45.6	91	2	60-130/30
106-43-4	p-Chlorotoluene	5.0 U		50	46.4	93	50	45.0	90	3	70-120/30
96-12-8	1,2-Dibromo-3-chloropropane	5.0 U		50	46.3	93	50	44.2	88	5	51-156/30
124-48-1	Dibromochloromethane	1.0 U		50	46.9	94	50	46.6	93	1	70-131/30
106-93-4	1,2-Dibromoethane	1.0 U		50	48.1	96	50	47.8	96	1	72-131/30
95-50-1	1,2-Dichlorobenzene	1.0 U		50	45.6	91	50	45.5	91	0	68-122/30
541-73-1	1,3-Dichlorobenzene	1.0 U		50	43.9	88	50	43.8	88	0	71-117/30
106-46-7	1,4-Dichlorobenzene	1.0 U		50	44.6	89	50	44.0	88	1	69-120/30
75-71-8	Dichlorodifluoromethane	2.0 U		50	48.2	96	50	51.3	103	6	28-181/30
75-34-3	1,1-Dichloroethane	1.0 U		50	44.8	90	50	44.4	89	1	56-138/30
107-06-2	1,2-Dichloroethane	1.0 U		50	47.6	95	50	46.6	93	2	60-146/30
75-35-4	1,1-Dichloroethene	1.0 U		50	49.9	100	50	51.0	102	2	52-137/30
156-59-2	cis-1,2-Dichloroethene	1.0 U		50	49.1	98	50	49.2	98	0	64-139/30
156-60-5	trans-1,2-Dichloroethene	1.0 U		50	48.9	98	50	48.7	97	0	63-132/30
78-87-5	1,2-Dichloropropane	2.0 U		50	49.7	99	50	49.3	99	1	67-137/30
142-28-9	1,3-Dichloropropane	5.0 U		50	49.7	99	50	49.5	99	0	78-130/30
594-20-7	2,2-Dichloropropane	5.0 U		50	44.0	88	50	43.6	87	1	36-166/30
563-58-6	1,1-Dichloropropene	5.0 U		50	49.3	99	50	48.3	97	2	68-123/30
10061-01-5	cis-1,3-Dichloropropene	0.50 U		50	46.7	93	50	46.8	94	0	77-142/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC41356
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC41356-20MS	G145734.D	1	09/20/15	AD	n/a	n/a	MSG5457
MC41356-20MSD	G145735.D	1	09/20/15	AD	n/a	n/a	MSG5457
MC41356-20	G145724.D	1	09/20/15	AD	n/a	n/a	MSG5457

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC41356-16, MC41356-17, MC41356-18, MC41356-19, MC41356-20, MC41356-21, MC41356-22, MC41356-23, MC41356-24, MC41356-25, MC41356-26

CAS No.	Compound	MC41356-20 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	0.50 U		50	44.6	89	50	42.9	86	4	73-136/30
100-41-4	Ethylbenzene	1.0 U		50	47.6	95	50	47.1	94	1	60-136/30
87-68-3	Hexachlorobutadiene	5.0 U		50	46.2	92	50	44.7	89	3	63-143/30
591-78-6	2-Hexanone	10 U		50	43.5	87	50	43.5	87	0	29-151/30
74-88-4	Iodomethane	5.0 U		50	52.3	105	50	52.2	104	0	37-158/30
98-82-8	Isopropylbenzene	5.0 U		50	45.7	91	50	45.6	91	0	67-123/30
99-87-6	p-Isopropyltoluene	5.0 U		50	47.0	94	50	46.0	92	2	78-126/30
1634-04-4	Methyl Tert Butyl Ether	1.0 U		50	44.2	88	50	45.2	90	2	60-156/30
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U		50	38.3	77	50	37.5	75	2	47-167/30
74-95-3	Methylene bromide	5.0 U		50	51.2	102	50	52.8	106	3	70-130/30
75-09-2	Methylene chloride	2.0 U		50	48.7	97	50	48.4	97	1	55-144/30
91-20-3	Naphthalene	5.0 U		50	37.5	75	50	36.8	74	2	23-167/30
103-65-1	n-Propylbenzene	5.0 U		50	44.9	90	50	44.9	90	0	66-124/30
100-42-5	Styrene	5.0 U		50	48.8	98	50	48.2	96	1	61-137/30
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U		50	48.5	97	50	47.9	96	1	71-132/30
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U		50	44.4	89	50	44.4	89	0	62-149/30
127-18-4	Tetrachloroethene	1.0 U		50	48.6	97	50	48.5	97	0	65-124/30
108-88-3	Toluene	1.0 U		50	48.8	98	50	47.5	95	3	69-134/30
87-61-6	1,2,3-Trichlorobenzene	5.0 U		50	43.3	87	50	42.2	84	3	41-157/30
120-82-1	1,2,4-Trichlorobenzene	5.0 U		50	42.5	85	50	42.2	84	1	46-147/30
71-55-6	1,1,1-Trichloroethane	1.0 U		50	50.4	101	50	50.1	100	1	61-144/30
79-00-5	1,1,2-Trichloroethane	1.0 U		50	48.9	98	50	46.4	93	5	69-142/30
79-01-6	Trichloroethene	9.7		50	55.9	92	50	55.5	92	1	69-133/30
75-69-4	Trichlorofluoromethane	1.0 U		50	50.1	100	50	51.9	104	4	60-163/30
96-18-4	1,2,3-Trichloropropane	5.0 U		50	44.4	89	50	45.3	91	2	57-150/30
95-63-6	1,2,4-Trimethylbenzene	5.0 U		50	46.9	94	50	46.5	93	1	67-130/30
108-67-8	1,3,5-Trimethylbenzene	5.0 U		50	47.2	94	50	46.9	94	1	66-137/30
108-05-4	Vinyl Acetate	5.0 U		50	41.4	83	50	41.5	83	0	48-200/30
75-01-4	Vinyl chloride	1.0 U		50	49.5	99	50	50.6	101	2	39-176/30
	m,p-Xylene	1.0 U		100	95.1	95	100	93.8	94	1	64-128/30
95-47-6	o-Xylene	1.0 U		50	47.3	95	50	46.8	94	1	64-126/30
1330-20-7	Xylene (total)	1.0 U		150	142	95	150	141	94	1	65-127/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC41356
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC41356-20MS	G145734.D	1	09/20/15	AD	n/a	n/a	MSG5457
MC41356-20MSD	G145735.D	1	09/20/15	AD	n/a	n/a	MSG5457
MC41356-20	G145724.D	1	09/20/15	AD	n/a	n/a	MSG5457

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC41356-16, MC41356-17, MC41356-18, MC41356-19, MC41356-20, MC41356-21, MC41356-22, MC41356-23, MC41356-24, MC41356-25, MC41356-26

CAS No.	Surrogate Recoveries	MS	MSD	MC41356-20	Limits
1868-53-7	Dibromofluoromethane	102%	101%	104%	79-127%
2037-26-5	Toluene-D8	103%	103%	103%	80-116%
460-00-4	4-Bromofluorobenzene	94%	96%	106%	77-124%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: MC41356
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Sample: MSG5447-BFB
Lab File ID: G145449.D
Instrument ID: GCMSG
Injection Date: 09/13/15
Injection Time: 08:11

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	9129	21.2		Pass
75	30.0 - 60.0% of mass 95	20277	47.2		Pass
95	Base peak, 100% relative abundance	42978	100.0		Pass
96	5.0 - 9.0% of mass 95	2891	6.73		Pass
173	Less than 2.0% of mass 174	162	0.38	(0.45) [a]	Pass
174	50.0 - 100.0% of mass 95	36168	84.2		Pass
175	5.0 - 9.0% of mass 174	2673	6.22	(7.39) [a]	Pass
176	95.0 - 101.0% of mass 174	35202	81.9	(97.3) [a]	Pass
177	5.0 - 9.0% of mass 176	2355	5.48	(6.69) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
MSG5447-IC5447	G145450.D	09/13/15	08:39	00:28	Initial cal .5
MSG5447-IC5447	G145451.D	09/13/15	09:08	00:57	Initial cal 1.0
MSG5447-IC5447	G145452.D	09/13/15	09:36	01:25	Initial cal 2.0
MSG5447-IC5447	G145453.D	09/13/15	10:04	01:53	Initial cal 5.0
MSG5447-IC5447	G145454.D	09/13/15	10:33	02:22	Initial cal 10.0
MSG5447-IC5447	G145455.D	09/13/15	11:01	02:50	Initial cal 20.0
MSG5447-ICC5447	G145456.D	09/13/15	11:29	03:18	Initial cal 50.0
MSG5447-IC5447	G145457.D	09/13/15	11:58	03:47	Initial cal 100.0
MSG5447-IC5447	G145458.D	09/13/15	12:26	04:15	Initial cal 200.0
MSG5447-IC5447	G145459.D	09/13/15	12:56	04:45	Initial cal 400.0
MSG5447-ICV5447	G145463.D	09/13/15	14:50	06:39	Initial cal verification 50.0

Instrument Performance Check (BFB)

Job Number: MC41356
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Sample: MSG5455-BFB
Lab File ID: G145647.D
Instrument ID: GCMSG
Injection Date: 09/18/15
Injection Time: 08:37

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	12256	21.1		Pass
75	30.0 - 60.0% of mass 95	28168	48.5		Pass
95	Base peak, 100% relative abundance	58120	100.0		Pass
96	5.0 - 9.0% of mass 95	3677	6.33		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 100.0% of mass 95	46616	80.2		Pass
175	5.0 - 9.0% of mass 174	3523	6.06	(7.56) [a]	Pass
176	95.0 - 101.0% of mass 174	44776	77.0	(96.1) [a]	Pass
177	5.0 - 9.0% of mass 176	3080	5.30	(6.88) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
MSG5455-CC5447	G145647.D	09/18/15	08:37	00:00	Continuing cal 50
MSG5455-BS	G145648.D	09/18/15	09:05	00:28	Blank Spike
MSG5455-BSD	G145649.D	09/18/15	09:33	00:56	Blank Spike Duplicate
MSG5455-MB	G145651.D	09/18/15	10:31	01:54	Method Blank
ZZZZZZ	G145652.D	09/18/15	11:00	02:23	(unrelated sample)
MC41356-6	G145653.D	09/18/15	11:28	02:51	TRIP BLANK
MC41356-7	G145654.D	09/18/15	11:56	03:19	FIELD BLANK
ZZZZZZ	G145655.D	09/18/15	12:25	03:48	(unrelated sample)
ZZZZZZ	G145656.D	09/18/15	12:53	04:16	(unrelated sample)
ZZZZZZ	G145657.D	09/18/15	13:21	04:44	(unrelated sample)
MC41356-1	G145658.D	09/18/15	13:50	05:13	E-MW-01
MC41356-2	G145659.D	09/18/15	14:18	05:41	D-SW-5
MC41356-3	G145660.D	09/18/15	14:46	06:09	E-38SW-1
MC41356-4	G145661.D	09/18/15	15:15	06:38	E-38SW-4
MC41356-5	G145662.D	09/18/15	15:44	07:07	DUP-D090815SW
MC41356-8	G145663.D	09/18/15	16:13	07:36	12-H
MC41356-9	G145664.D	09/18/15	16:41	08:04	WG11-1
MC41356-10	G145665.D	09/18/15	17:09	08:32	WG11-2
MC41356-11	G145666.D	09/18/15	17:38	09:01	E80-3
MC41356-12	G145667.D	09/18/15	18:06	09:29	E82-2
MC41356-13	G145668.D	09/18/15	18:35	09:58	E82-1
MC41356-14	G145669.D	09/18/15	19:03	10:26	70-2
MC41356-15	G145670.D	09/18/15	19:32	10:55	70-3
MC41356-2MS	G145671.D	09/18/15	20:00	11:23	Matrix Spike

Instrument Performance Check (BFB)

Job Number: MC41356
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Sample: MSG5455-BFB
Lab File ID: G145647.D
Instrument ID: GCMSG
Injection Date: 09/18/15
Injection Time: 08:37

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
MC41356-2MSD	G145672.D	09/18/15	20:29	11:52	Matrix Spike Duplicate
MSG5455-ECC5447	G145673.D	09/18/15	20:57	12:20	Ending cal 50

Instrument Performance Check (BFB)

Job Number: MC41356
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Sample: MSG5457-BFB
Lab File ID: G145711.D
Instrument ID: GCMSG
Injection Date: 09/20/15
Injection Time: 09:36

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	11706	20.3		Pass
75	30.0 - 60.0% of mass 95	26768	46.4		Pass
95	Base peak, 100% relative abundance	57736	100.0		Pass
96	5.0 - 9.0% of mass 95	3635	6.30		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 100.0% of mass 95	46088	79.8		Pass
175	5.0 - 9.0% of mass 174	3390	5.87	(7.36) [a]	Pass
176	95.0 - 101.0% of mass 174	44448	77.0	(96.4) [a]	Pass
177	5.0 - 9.0% of mass 176	3250	5.63	(7.31) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
MSG5457-BS	G145711.D	09/20/15	09:36	00:00	Blank Spike
MSG5457-CC5447	G145711.D	09/20/15	09:36	00:00	Continuing cal 50
MSG5457-BSD	G145712.D	09/20/15	10:05	00:29	Blank Spike Duplicate
MSG5457-MB	G145714.D	09/20/15	11:02	01:26	Method Blank
ZZZZZZ	G145715.D	09/20/15	11:30	01:54	(unrelated sample)
ZZZZZZ	G145716.D	09/20/15	11:58	02:22	(unrelated sample)
ZZZZZZ	G145717.D	09/20/15	12:27	02:51	(unrelated sample)
ZZZZZZ	G145719.D	09/20/15	13:24	03:48	(unrelated sample)
MC41356-16	G145720.D	09/20/15	13:52	04:16	70-4
MC41356-17	G145721.D	09/20/15	14:21	04:45	D12-1
MC41356-18	G145722.D	09/20/15	14:50	05:14	DUP1 AREA E
MC41356-19	G145723.D	09/20/15	15:18	05:42	DUP2 AREA E
MC41356-20	G145724.D	09/20/15	15:47	06:11	D12-D
MC41356-21	G145725.D	09/20/15	16:15	06:39	W63-1
MC41356-22	G145726.D	09/20/15	16:44	07:08	W63-2
MC41356-23	G145727.D	09/20/15	17:12	07:36	W63-3
MC41356-24	G145728.D	09/20/15	17:40	08:04	95-3
MC41356-25	G145729.D	09/20/15	18:09	08:33	MW-11
MC41356-26	G145730.D	09/20/15	18:37	09:01	E-MW-02
ZZZZZZ	G145731.D	09/20/15	19:05	09:29	(unrelated sample)
ZZZZZZ	G145732.D	09/20/15	19:33	09:57	(unrelated sample)
ZZZZZZ	G145733.D	09/20/15	20:02	10:26	(unrelated sample)
MC41356-20MS	G145734.D	09/20/15	20:30	10:54	Matrix Spike
MC41356-20MSD	G145735.D	09/20/15	20:58	11:22	Matrix Spike Duplicate

Instrument Performance Check (BFB)

Job Number: MC41356
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Sample:	MSG5457-BFB	**Injection Date:**	09/20/15
Lab File ID:	G145711.D	**Injection Time:**	09:36
Instrument ID:	GCMSG		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
MSG5457-ECC5447	G145736.D	09/20/15	21:27	11:51	Ending cal 50

Volatile Internal Standard Area Summary

Job Number: MC41356
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Check Std:	MSG5455-CC5447	**Injection Date:**	09/18/15
Lab File ID:	G145647.D	**Injection Time:**	08:37
Instrument ID:	GCMSG	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	138849	5.10	232591	6.21	111014	9.54	115072	12.16	70672	3.17
Upper Limit [a]	277698	5.60	465182	6.71	222028	10.04	230144	12.66	141344	3.67
Lower Limit [b]	69425	4.60	116296	5.71	55507	9.04	57536	11.66	35336	2.67

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSG5455-BS	142184	5.10	235325	6.21	113125	9.54	114575	12.16	66247	3.17
MSG5455-BSD	147102	5.10	243993	6.22	116002	9.54	116572	12.16	63617	3.16
MSG5455-MB	140744	5.10	233761	6.22	109165	9.54	93549	12.16	68382	3.18
ZZZZZZ	139440	5.10	227938	6.22	108241	9.54	92521	12.16	67173	3.18
MC41356-6	137578	5.10	224573	6.22	107248	9.54	92025	12.16	66878	3.19
MC41356-7	136638	5.10	222771	6.22	106368	9.54	90845	12.16	64794	3.18
ZZZZZZ	137131	5.10	222100	6.22	106448	9.54	90305	12.16	58854	3.17
ZZZZZZ	138512	5.10	226046	6.22	106127	9.54	90463	12.16	61460	3.18
ZZZZZZ	140742	5.10	228173	6.22	106251	9.54	93212	12.16	57974	3.17
MC41356-1	140243	5.10	227466	6.22	106137	9.54	91034	12.16	61518	3.16
MC41356-2	137806	5.10	220947	6.22	103995	9.54	89180	12.16	61393	3.16
MC41356-3	134700	5.10	218614	6.22	103832	9.54	88534	12.16	64801	3.18
MC41356-4	137886	5.10	222171	6.22	104328	9.54	88001	12.16	64883	3.17
MC41356-5	136545	5.10	217645	6.22	101356	9.54	88609	12.16	65732	3.17
MC41356-8	136666	5.10	222008	6.22	104797	9.54	90617	12.16	62254	3.17
MC41356-9	139073	5.10	222569	6.22	106251	9.54	90056	12.16	62926	3.17
MC41356-10	138017	5.10	222306	6.22	106335	9.54	89976	12.16	64832	3.17
MC41356-11	138331	5.10	223450	6.22	106288	9.54	92025	12.16	62889	3.17
MC41356-12	141150	5.10	227234	6.22	106826	9.54	91551	12.16	63951	3.18
MC41356-13	141028	5.10	226753	6.22	106819	9.54	92173	12.16	63680	3.18
MC41356-14	139796	5.10	226378	6.22	106279	9.54	91562	12.16	63598	3.18
MC41356-15	141572	5.10	226093	6.22	107510	9.54	93320	12.16	64413	3.16
MC41356-2MS	141456	5.10	230379	6.21	109932	9.54	113423	12.16	64953	3.15
MC41356-2MSD	139490	5.10	231242	6.21	111146	9.54	113702	12.16	66466	3.15
MSG5455-ECC5447	143382	5.10	237951	6.21	112135	9.54	115377	12.16	69214	3.16

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Job Number: MC41356
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Check Std:	MSG5457-CC5447	**Injection Date:**	09/20/15
Lab File ID:	G145711.D	**Injection Time:**	09:36
Instrument ID:	GCMSG	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	144520	5.10	237289	6.21	112504	9.54	113821	12.16	71564	3.18
Upper Limit [a]	289040	5.60	474578	6.71	225008	10.04	227642	12.66	143128	3.68
Lower Limit [b]	72260	4.60	118645	5.71	56252	9.04	56911	11.66	35782	2.68

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSG5457-BSD	147763	5.10	243653	6.21	113399	9.54	114545	12.16	73904	3.19
MSG5457-MB	147702	5.10	240266	6.22	111931	9.54	94604	12.16	68813	3.18
ZZZZZZ	148095	5.10	234192	6.22	109087	9.54	91158	12.16	62322	3.17
ZZZZZZ	146617	5.10	237388	6.22	110606	9.54	93937	12.16	69345	3.18
ZZZZZZ	144474	5.10	233928	6.22	110391	9.54	92685	12.16	70149	3.16
ZZZZZZ	145502	5.10	230720	6.22	108703	9.54	94646	12.16	69773	3.17
MC41356-16	141355	5.10	223557	6.22	105622	9.54	91301	12.16	64494	3.16
MC41356-17	142059	5.10	223923	6.22	104845	9.54	90963	12.16	70045	3.18
MC41356-18	143508	5.10	227285	6.22	106895	9.54	91751	12.16	68454	3.18
MC41356-19	139608	5.10	222651	6.22	106183	9.54	89818	12.16	65077	3.18
MC41356-20	141886	5.10	225869	6.22	106844	9.54	91503	12.16	69164	3.17
MC41356-21	143234	5.10	228481	6.22	106205	9.54	90733	12.16	66065	3.17
MC41356-22	145459	5.10	230948	6.22	108993	9.54	92656	12.16	66552	3.17
MC41356-23	140858	5.10	224963	6.22	105943	9.54	90870	12.16	67103	3.17
MC41356-24	139586	5.10	226321	6.22	104893	9.54	88595	12.16	65533	3.17
MC41356-25	137793	5.10	220209	6.22	103877	9.54	88658	12.16	69402	3.18
MC41356-26	140417	5.10	221806	6.22	104833	9.54	89050	12.16	65273	3.17
ZZZZZZ	135477	5.10	217491	6.22	101964	9.54	88361	12.16	69314	3.18
ZZZZZZ	139252	5.10	222088	6.22	106078	9.54	88369	12.16	71330	3.18
ZZZZZZ	136651	5.10	223150	6.22	103351	9.54	99289	12.16	76623	3.19
MC41356-20MS	140685	5.10	226360	6.22	108800	9.54	110701	12.16	62679	3.16
MC41356-20MSD	143742	5.10	236549	6.21	110873	9.54	111708	12.16	66804	3.16
MSG5457-ECC5447	144257	5.10	234848	6.22	110334	9.54	111034	12.16	65337	3.18

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: MC41356
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Method: SW846 8260C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC41356-1	G145658.D	104	102	106
MC41356-2	G145659.D	104	101	106
MC41356-3	G145660.D	106	100	106
MC41356-4	G145661.D	104	99	108
MC41356-5	G145662.D	105	101	108
MC41356-6	G145653.D	104	103	108
MC41356-7	G145654.D	104	102	107
MC41356-8	G145663.D	105	102	106
MC41356-9	G145664.D	104	103	107
MC41356-10	G145665.D	104	102	107
MC41356-11	G145666.D	105	103	104
MC41356-12	G145667.D	105	103	108
MC41356-13	G145668.D	103	102	106
MC41356-14	G145669.D	105	102	107
MC41356-15	G145670.D	104	104	106
MC41356-16	G145720.D	103	103	106
MC41356-17	G145721.D	103	102	105
MC41356-18	G145722.D	103	103	106
MC41356-19	G145723.D	104	102	107
MC41356-20	G145724.D	104	103	106
MC41356-21	G145725.D	102	103	107
MC41356-22	G145726.D	102	102	106
MC41356-23	G145727.D	104	102	106
MC41356-24	G145728.D	104	101	109
MC41356-25	G145729.D	104	102	107
MC41356-26	G145730.D	102	101	107
MC41356-20MS	G145734.D	102	103	94
MC41356-20MSD	G145735.D	101	103	96
MC41356-2MS	G145671.D	104	103	96
MC41356-2MSD	G145672.D	104	103	94
MSG5455-BS	G145648.D	103	105	96
MSG5455-BSD	G145649.D	103	102	97
MSG5455-MB	G145651.D	103	100	108
MSG5457-BS	G145711.D	102	102	96
MSG5457-BSD	G145712.D	102	101	97
MSG5457-MB	G145714.D	103	101	110

Surrogate Compounds **Recovery Limits**

Volatile Surrogate Recovery Summary

Job Number: MC41356
Account: EAENYS EA Engineering
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Method: SW846 8260C **Matrix:** AQ

Samples and QC shown here apply to the above method

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	79-127%
S2 = Toluene-D8	80-116%
S3 = 4-Bromofluorobenzene	77-124%

Initial Calibration Summary

Job Number: MC41356 **Sample:** MSG5447-ICC5447
Account: EAENYS EA Engineering **Lab FileID:** G145456.D
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Response Factor Report MSG

Method : C:\msdchem\1\METHODS\g150913w.m (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

Calibration Files
0.5 =G145450.D 2 =G145452.D 5 =G145453.D 10 =G145454.D
20 =G145455.D 50 =G145456.D 100 =G145457.D 200 =G145458.D
400 =G145459.D 1 =G145451.D = =

Compound

	0.5	2	5	10	20	50	100	200	400	1	Avg	%RSD
1) I tert butyl alcohol-d9 ----------ISTD----------												
2) tertiary butyl alcohol	1.358	1.319	1.315	1.355	1.360	1.232	1.313	1.295			1.318	3.24
3) Ethanol	0.141	0.157	0.152	0.158	0.166	0.149	0.148	0.131			0.150	7.28
4) I pentafluorobenzene ----------ISTD----------												
5) dichlorodifluoromethane	1.088	1.308	1.290	1.367	1.307	1.296	1.252	1.310			1.277	6.48
6) chloromethane	1.002	1.199	1.071	1.131	0.942	1.236	0.872			1.293	1.093	13.55
7) vinyl chloride	0.712	0.808	0.812	0.828	0.712	0.827	0.724	0.707	0.814		0.772	7.15
8) bromomethane	0.341	0.445	0.437	0.463	0.395	0.453	0.413	0.411			0.420	9.40
9) chloroethane	0.328	0.407	0.385	0.396	0.340	0.387	0.355	0.349			0.368	7.86
10) ethyl ether		0.537	0.511	0.537	0.556	0.508	0.530	0.519			0.529	3.20
11) acetonitrile		0.301	0.269	0.270	0.262	0.228	0.240	0.243			0.259	9.43
12) trichlorofluoromethane	0.781	0.980	0.975	0.991	0.850	0.993	0.871	0.909	0.754		0.901	10.22
13) freon-113		0.540	0.679	0.708	0.699	0.690	0.708	0.693			0.674	8.87
14) acrolein		0.058	0.053	0.058	0.055	0.063	0.060	0.063			0.058	6.42
15) 1,1-dichloroethene	0.601	0.529	0.533	0.543	0.548	0.508	0.523	0.515	0.538		0.538	5.05
16) acetone		0.092	0.092	0.096	0.095	0.085	0.084	0.084			0.090#	5.74
17) Methyl Acetate		0.756	0.635	0.668	0.710	0.635	0.661	0.681			0.678	6.40
18) methylene chloride	0.607	0.584	0.585	0.585	0.581	0.539	0.547	0.538	0.599		0.574	4.53
19) methyl tert butyl ether	1.937	1.655	1.584	1.602	1.617	1.688	1.540	1.617	1.601	1.776	1.662	7.00
20) acrylonitrile		0.315	0.323	0.316	0.329	0.335	0.349	0.355			0.332	4.73
21) allyl chloride		1.205	1.187	1.202	1.268	1.147	1.218	1.181			1.201	3.10
22) trans-1,2-dichloroethene	0.587	0.536	0.557	0.567	0.566	0.517	0.528	0.519	0.619		0.555	6.10
23) iodomethane												

Initial Calibration Summary

Job Number: MC41356 **Sample:** MSG5447-ICC5447
Account: EAENYS EA Engineering **Lab FileID:** G145456.D
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

```
                    0.909 0.922 0.944 0.953 0.880 0.889 0.882        0.911    3.25
24)  carbon disulfide
                    1.738 1.728 1.757 1.767 1.646 1.712 1.687        1.719    2.45
25)  propionitrile
                    0.112 0.113 0.109 0.117 0.104 0.113 0.119        0.112    4.26
26)  vinyl acetate
                    1.651 1.641 1.651 1.800 1.615 1.709 1.725        1.685    3.81
27)  chloroprene
                    1.141 1.098 1.143 1.194 1.064 1.139 1.106        1.126    3.70
28)  di-isopropyl ether
          3.037 2.728 2.492 2.496 2.527 2.579 2.324 2.409 2.355 2.718  2.566    8.33
29)  methacrylonitrile
                    0.556 0.541 0.581 0.590 0.527 0.541 0.562        0.557    4.10
30)  2-butanone
                    0.068 0.068 0.063 0.070 0.062 0.068 0.071        0.067#   5.15
31)  Ethyl Acetate
                                                                     0.000#  -1.00
32)  Hexane
                    0.906 0.853 0.872 0.848 0.774 0.810 0.776        0.834    5.93
33)  1,1-dichloroethane
          1.527 1.285 1.226 1.196 1.245 1.264 1.127 1.172 1.166 1.382  1.259    9.41
34)  tert-butyl ethyl ether
          2.374 2.043 2.046 1.948 2.101 2.152 1.942 2.086 2.047 2.058  2.080    5.83
35)  isobutyl alcohol
                                                                     0.000#  -1.00
36)  2,2-dichloropropane
                    0.813 0.829 0.830 0.848 0.772 0.791 0.762        0.806    4.00
37)  cis-1,2-dichloroethene
               0.615 0.598 0.603 0.627 0.624 0.554 0.578 0.572 0.637  0.601    4.65
38)  bromochloromethane
                    0.307 0.306 0.311 0.317 0.285 0.301 0.295        0.303    3.48
39)  chloroform
          1.365 1.118 1.075 1.110 1.140 1.140 1.024 1.064 1.043 1.227  1.131    8.91
40)  dibromofluoromethane (s)
          0.561 0.554 0.559 0.558 0.564 0.579 0.559 0.555 0.549 0.559  0.560    1.44
41)  Tetrahydrofuran
                    0.256 0.252 0.241 0.243 0.221 0.233 0.246        0.242    4.95
42)  1,1,1-trichloroethane
               0.868 0.829 0.858 0.854 0.890 0.828 0.860 0.852 0.798  0.848    3.16

43) I   1,4-difluorobenzene   ----------------ISTD---------------------
44)  Cyclohexane
                    0.770 0.705 0.733 0.728 0.696 0.728 0.687        0.721    3.88
45)  carbon tetrachloride
               0.549 0.508 0.517 0.532 0.523 0.486 0.519 0.487 0.539  0.518    4.16
46)  1,1-dichloropropene
                    0.515 0.486 0.477 0.487 0.434 0.471 0.448        0.474    5.64
47)  benzene
          1.544 1.396 1.291 1.325 1.293 1.282 1.147 1.198 1.190 1.399  1.307    9.02
48)  1,2-dichloroethane
          0.594 0.577 0.565 0.552 0.555 0.555 0.494 0.516 0.502 0.540  0.545    5.92
49)  tert-amyl methyl ether
          1.031 0.903 0.887 0.901 0.945 0.940 0.871 0.930 0.915 0.942  0.926    4.80
50)  heptane
                    1.031 1.023 1.040 1.038 0.941 1.024 0.949        1.007    4.23
51)  trichloroethene
          0.466 0.362 0.354 0.371 0.364 0.357 0.325 0.336 0.324 0.365  0.362   11.03
52)  1,2-dichloropropane
               0.358 0.379 0.389 0.382 0.378 0.343 0.360 0.349 0.397  0.371    5.05
53)  dibromomethane
```

Initial Calibration Summary

Job Number: MC41356 **Sample:** MSG5447-ICC5447
Account: EAENYS EA Engineering **Lab FileID:** G145456.D
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

```
                0.233 0.235 0.236 0.235 0.236 0.208 0.214 0.198        0.225    6.78
54)  bromodichloromethane
                0.502 0.490 0.493 0.492 0.494 0.453 0.478 0.432 0.513  0.483    5.23
55)  Methylcyclohexane
                      0.542 0.578 0.569 0.559 0.512 0.549 0.542        0.550    3.96
56)  2-chloroethyl vinyl ether
                      0.110 0.111 0.121 0.116 0.153 0.161 0.171        0.135   19.30
           ---- Quadratic regression ----  Coefficient =  0.9975
             Response Ratio = -0.00550 + 0.14109 *A + 0.00397 *A^2

57)  methyl methacrylate
                      0.201 0.217 0.209 0.227 0.203 0.219 0.228        0.215    5.03
58)  1,4-dioxane
                            0.003 0.003 0.004 0.004 0.003 0.003        0.003#  11.07
59)  cis-1,3-dichloropropene
          0.498 0.514 0.531 0.537 0.546 0.560 0.513 0.545 0.494 0.515  0.525    4.20
60)  toluene-d8 (s)
          1.013 1.110 1.121 1.128 1.115 1.123 1.126 1.110 1.041 1.115  1.100    3.61
61)  4-methyl-2-pentanone
                      0.479 0.497 0.522 0.531 0.515 0.552 0.548        0.521    5.05
62)  toluene
          0.862 0.784 0.761 0.777 0.782 0.780 0.710 0.749 0.675 0.834  0.772    6.98
63)  trans-1,3-dichloropropene
          0.479 0.502 0.495 0.527 0.519 0.532 0.483 0.518 0.469 0.500  0.502    4.25
64)  1,1,2-trichloroethane
                0.274 0.261 0.268 0.258 0.254 0.233 0.241 0.222 0.263  0.253    6.90
65)  ethyl methacrylate
                      0.349 0.383 0.387 0.400 0.364 0.397 0.374        0.379    4.77

66) I   chlorobenzene-d5      ----------------ISTD---------------------
67)  tetrachloroethene
          0.815 0.737 0.737 0.741 0.752 0.722 0.673 0.665 0.677 0.772  0.729    6.47
68)  1,3-dichloropropane
                      1.045 1.031 1.024 1.027 0.947 0.933 0.985        0.999    4.44
69)  dibromochloromethane
          0.847 0.821 0.804 0.808 0.822 0.847 0.789 0.788 0.828 0.793  0.815    2.70
70)  1,2-dibromoethane
                0.701 0.723 0.706 0.702 0.707 0.647 0.646 0.688        0.690    4.12
71)  2-hexanone
                      0.563 0.624 0.644 0.654 0.608 0.614 0.679        0.626    5.99
72)  chlorobenzene
          2.267 1.990 1.957 1.982 2.000 1.952 1.810 1.932 1.838 2.208  1.994    7.21
73)  1,1,1,2-tetrachloroethane
                0.725 0.703 0.742 0.754 0.745 0.687 0.697 0.684 0.781  0.724    4.65
74)  ethylbenzene
          3.531 3.206 3.002 3.098 3.200 3.189 2.965 3.064 3.054 3.394  3.170    5.60
75)  m,p-xylene
          1.313 1.210 1.196 1.254 1.233 1.226 1.124 1.113 1.193 1.286  1.215    5.22
76)  o-xylene
          1.303 1.203 1.129 1.241 1.241 1.239 1.158 1.149 1.175 1.182  1.202    4.46
77)  styrene
                      2.014 2.071 2.133 2.109 1.973 1.957 2.004        2.037    3.33
78)  bromoform
                0.502 0.489 0.499 0.540 0.533 0.501 0.500 0.534 0.438  0.504    6.13
79)  trans-1,4-dichloro-2-butene
                      0.189 0.240 0.270 0.304 0.290 0.294 0.325        0.273   16.76
           ---- Linear regression ----  Coefficient =  0.9977
             Response Ratio = -0.01501 + 0.31456 *A
```

Initial Calibration Summary

Job Number: MC41356 **Sample:** MSG5447-ICC5447
Account: EAENYS EA Engineering **Lab FileID:** G145456.D
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

```
 80) I   1,4-dichlorobenzene-d ----------------ISTD---------------------
 81)  isopropylbenzene
                        3.150 3.308 3.424 3.356 3.090 3.316 3.095        3.248    4.15
 82)  bromofluorobenzene (s)
              1.018 0.981 0.966 0.955 0.963 0.941 0.950 0.939 0.932 1.012  0.966    3.08
 83)  bromobenzene
                        0.910 0.875 0.896 0.881 0.792 0.836 0.776        0.852    6.12
 84)  1,1,2,2-tetrachloroethane
              1.143 0.964 0.888 0.879 0.865 0.863 0.771 0.831 0.822 0.946  0.897   11.52
 85)  1,2,3-trichloropropane
                        0.646 0.646 0.633 0.627 0.563 0.619 0.613        0.621    4.56
 86)  n-propylbenzene
                        3.915 4.020 4.069 3.971 3.641 3.945 3.694        3.893    4.19
 87)  2-chlorotoluene
                        2.737 2.816 2.850 2.716 2.492 2.712 2.573        2.699    4.71
 88)  4-chlorotoluene
                        2.576 2.559 2.501 2.501 2.261 2.414 2.298        2.444    5.09
 89)  1,3,5-trimethylbenzene
              3.091 2.743 2.875 2.943 2.953 2.944 2.698 2.895 2.726 3.188  2.905    5.41
 90)  tert-butylbenzene
                        1.926 1.999 2.067 2.048 1.891 2.043 1.958        1.990    3.38
 91)  1,2,4-trimethylbenzene
              2.908 2.798 2.919 3.049 3.056 3.041 2.777 2.982 2.852 2.911  2.929    3.47
 92)  sec-butylbenzene
                        3.607 3.782 3.825 3.786 3.476 3.771 3.568        3.688    3.67
 93)  1,3-dichlorobenzene
              2.056 1.684 1.627 1.681 1.702 1.669 1.523 1.628 1.526 1.854  1.695    9.30
 94)  p-isopropyltoluene
                        2.936 3.175 3.307 3.299 3.019 3.288 3.120        3.164    4.64
 95)  1,4-dichlorobenzene
              1.944 1.806 1.713 1.750 1.717 1.719 1.560 1.653 1.562 1.874  1.730    7.12
 96)  1,2-dichlorobenzene
              1.722 1.622 1.649 1.692 1.658 1.669 1.518 1.608 1.510 1.649  1.630    4.23
 97)  n-butylbenzene
                        2.488 2.738 2.937 2.998 2.768 3.026 2.840        2.828    6.58
 98)  1,2-dibromo-3-chloropropane
                        0.154 0.152 0.162 0.184 0.170 0.191 0.197        0.173   10.65
 99)  1,3,5-trichlorobenzene
                        1.076 1.188 1.305 1.371 1.295 1.384 1.265        1.269    8.47
100)  1,2,4-trichlorobenzene
                        0.598 0.694 0.868 1.040 1.033 1.146 1.091        0.924   22.72
             ---- Linear regression ----  Coefficient =  0.9987
               Response Ratio = -0.06723 + 1.11051 *A

101)  hexachlorobutadiene
                        0.504 0.504 0.511 0.528 0.478 0.521 0.480        0.504    3.76
102)  naphthalene
                        1.101 1.469 1.891 2.381 2.419 2.787 2.877        2.132   31.40
             ---- Linear regression ----  Coefficient =  0.9966
               Response Ratio = -0.24872 + 2.82056 *A

103)  2-Methylnaphthalene
                              0.181 0.267 0.434 0.545 0.743 1.038        0.535   59.36
             ---- Quadratic regression ----  Coefficient =  0.9997
               Response Ratio = -0.03195 + 0.43481 *A + 0.15360 *A^2

104)  1-Methylnaphthalene
                              0.175 0.264 0.398 0.455 0.585 0.745        0.437   47.65
             ---- Quadratic regression ----  Coefficient =  0.9997
               Response Ratio = -0.02800 + 0.41382 *A + 0.08512 *A^2
```

Initial Calibration Summary

Job Number: MC41356 **Sample:** MSG5447-ICC5447
Account: EAENYS EA Engineering **Lab FileID:** G145456.D
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

```
105)  1,2,3-trichlorobenzene
                        0.504 0.630 0.754 0.887 0.869 0.979 0.967        0.799   22.34
             ---- Linear regression ----  Coefficient =  0.9986
               Response Ratio = -0.06085 + 0.96711 *A

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

           g150913w.m        Mon Sep 14 15:16:47 2015
```

Initial Calibration Verification

Job Number: MC41356 **Sample:** MSG5447-ICV5447
Account: EAENYS EA Engineering **Lab FileID:** G145463.D
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\G150913\G145463.D Vial: 16
Acq On : 13 Sep 2015 2:50 pm Operator: andrewd1
Sample : icv5447-50.0 Inst : MSG
Misc : MS35214,MSG5447,,,,5,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\METHODS\g150913w.m (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Mon Sep 14 09:18:26 2015
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	108	0.02	3.17
2	p	tertiary butyl alcohol	1.318	1.320	-0.2	105	0.02	3.24
3	p	Ethanol	0.150	0.128	14.7	84	0.00	2.53
4	I	pentafluorobenzene	1.000	1.000	0.0	101	0.00	5.10
5	p	dichlorodifluoromethane	1.277	0.811	36.5#	63	-0.05	1.89
6	p	chloromethane	1.093	0.951	13.0	102	0.00	2.01
7	p	vinyl chloride	0.772	0.663	14.1	94	0.00	2.10
8	p	bromomethane	0.420	0.398	5.2	102	-0.03	2.43
9	p	chloroethane	0.368	0.356	3.3	106	0.00	2.44
10	p	ethyl ether	0.529	0.507	4.2	93	0.00	2.86
11	p	acetonitrile	0.259	0.225	13.1	87	0.00	3.25
12	p	trichlorofluoromethane	0.901	0.800	11.2	96	0.00	2.72
13	p	freon-113	0.674	0.634	5.9	92	-0.03	3.05
14	p	acrolein	0.058	0.086	-48.3#	157	0.00	3.02
15	p	1,1-dichloroethene	0.538	0.503	6.5	93	-0.03	3.22
16	p	acetone	0.090	0.093#	-3.3	100	0.00	3.03
17	p	Methyl Acetate	0.678	0.753	-11.1	108	0.00	3.43
18	p	methylene chloride	0.574	0.531	7.5	93	0.00	3.62
19	p	methyl tert butyl ether	1.662	1.562	6.0	94	0.00	3.72
20	p	acrylonitrile	0.332	0.313	5.7	97	-0.02	3.71
21	p	allyl chloride	1.201	1.103	8.2	88	0.00	3.51
22	p	trans-1,2-dichloroethene	0.555	0.513	7.6	92	0.00	3.88
23	p	iodomethane	0.911	0.855	6.1	91	0.00	3.48
24	p	carbon disulfide	1.719	1.501	12.7	86	0.00	3.72
25	p	propionitrile	0.112	0.113	-0.9	98	0.00	4.77
26	p	vinyl acetate	1.685	1.550	8.0	87	0.00	4.25
27	p	chloroprene	1.126	0.989	12.2	84	0.00	4.36
28	p	di-isopropyl ether	2.566	2.371	7.6	93	0.00	4.14
29	p	methacrylonitrile	0.557	0.656	-17.8	113	0.00	4.96
30	p	2-butanone	0.067	0.066#	1.5	95	0.00	4.68
31	p	Ethyl Acetate	0.000	0.210	0.0	0#	0.00	4.99
32	p	Hexane	0.834	0.740	11.3	88	0.00	3.90
33	p	1,1-dichloroethane	1.259	1.096	12.9	88	0.00	4.28
34	p	tert-butyl ethyl ether	2.080	1.910	8.2	90	0.00	4.55
35	p	isobutyl alcohol	0.000	0.044#	0.0	0#	0.00	5.00
36	p	2,2-dichloropropane	0.806	0.773	4.1	93	0.00	4.85
37	p	cis-1,2-dichloroethene	0.601	0.581	3.3	95	0.00	4.88
38	p	bromochloromethane	0.303	0.294	3.0	94	0.00	5.22
39	p	chloroform	1.131	1.034	8.6	92	0.00	5.04
40	S	dibromofluoromethane (s)	0.560	0.566	-1.1	99	0.00	5.27
41	p	Tetrahydrofuran	0.242	0.238	1.7	100	0.00	5.25

Initial Calibration Verification

Job Number: MC41356 **Sample:** MSG5447-ICV5447
Account: EAENYS EA Engineering **Lab FileID:** G145463.D
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

42	p	1,1,1-trichloroethane	0.848	0.851	-0.4	97	0.00	5.47
43	I	1,4-difluorobenzene	1.000	1.000	0.0	105	0.00	6.22
44	p	Cyclohexane	0.721	0.622	13.7	89	0.00	5.49
45	p	carbon tetrachloride	0.518	0.487	6.0	97	0.00	5.74
46	p	1,1-dichloropropene	0.474	0.443	6.5	95	0.00	5.62
47	p	benzene	1.307	1.190	9.0	97	0.00	5.92
48	p	1,2-dichloroethane	0.545	0.504	7.5	95	0.00	5.90
49	p	tert-amyl methyl ether	0.926	0.919	0.8	102	0.00	5.75
50	p	heptane	1.007	0.999	0.8	101	0.00	5.77
51	p	trichloroethene	0.362	0.328	9.4	96	0.00	6.58
52	p	1,2-dichloropropane	0.371	0.343	7.5	95	0.00	6.77
53	p	dibromomethane	0.225	0.207	8.0	92	0.00	7.09
54	p	bromodichloromethane	0.483	0.443	8.3	94	0.00	7.03
55	p	Methylcyclohexane	0.550	0.499	9.3	93	0.00	6.65
		----------	Amount	Calc.	%Drift	----------		
56	p	2-chloroethyl vinyl ether	50.000	46.915	6.2	118	0.00	7.36
		----------	AvgRF	CCRF	%Dev	----------		
57	p	methyl methacrylate	0.215	0.208	3.3	96	0.00	6.83
58	p	1,4-dioxane	0.003	0.003#	0.0	94	-0.01	7.07
59	p	cis-1,3-dichloropropene	0.525	0.486	7.4	91	0.00	7.62
60	S	toluene-d8 (s)	1.100	1.071	2.6	100	0.00	7.89
61	p	4-methyl-2-pentanone	0.521	0.550	-5.6	108	0.00	7.39
62	p	toluene	0.772	0.694	10.1	93	0.00	7.97
63	p	trans-1,3-dichloropropene	0.502	0.433	13.7	85	0.00	8.17
64	p	1,1,2-trichloroethane	0.253	0.236	6.7	97	0.00	8.34
65	p	ethyl methacrylate	0.379	0.380	-0.3	99	0.00	8.15
66	I	chlorobenzene-d5	1.000	1.000	0.0	100	0.00	9.54
67	p	tetrachloroethene	0.729	0.696	4.5	97	0.00	8.68
68	p	1,3-dichloropropane	0.999	1.009	-1.0	99	0.00	8.61
69	p	dibromochloromethane	0.815	0.762	6.5	90	0.00	8.91
70	p	1,2-dibromoethane	0.690	0.673	2.5	95	0.00	9.13
71	p	2-hexanone	0.626	0.663	-5.9	102	0.00	8.35
72	p	chlorobenzene	1.994	1.787	10.4	92	0.00	9.58
73	p	1,1,1,2-tetrachloroethane	0.724	0.702	3.0	95	0.00	9.63
74	p	ethylbenzene	3.170	3.013	5.0	95	0.00	9.63
75	p	m,p-xylene	1.215	1.152	5.2	94	0.00	9.72
76	p	o-xylene	1.202	1.118	7.0	91	0.00	10.19
77	p	styrene	2.037	1.959	3.8	93	0.00	10.23
78	p	bromoform	0.504	0.524	-4.0	99	0.00	10.61
		----------	Amount	Calc.	%Drift	----------		
79	p	trans-1,4-dichloro-2-bute	50.000	51.913	-3.8	103	0.00	10.64
		----------	AvgRF	CCRF	%Dev	----------		
80	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	101	0.00	12.16
81	p	isopropylbenzene	3.248	3.266	-0.6	98	0.00	10.59
82	S	bromofluorobenzene (s)	0.966	0.939	2.8	101	0.00	10.86
83	p	bromobenzene	0.852	0.804	5.6	92	0.00	11.08
84	p	1,1,2,2-tetrachloroethane	0.897	0.843	6.0	99	0.00	10.78
85	p	1,2,3-trichloropropane	0.621	0.617	0.6	99	0.00	10.94
86	p	n-propylbenzene	3.893	3.633	6.7	92	0.00	11.02
87	p	2-chlorotoluene	2.699	2.504	7.2	93	0.00	11.22
88	p	4-chlorotoluene	2.444	2.266	7.3	91	0.00	11.27
89	p	1,3,5-trimethylbenzene	2.905	2.811	3.2	96	0.00	11.20
90	p	tert-butylbenzene	1.990	1.909	4.1	94	0.00	11.59

Initial Calibration Verification

Job Number: MC41356 **Sample:** MSG5447-ICV5447
Account: EAENYS EA Engineering **Lab FileID:** G145463.D
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

91	p	1,2,4-trimethylbenzene	2.929	2.761	5.7	92	0.00	11.63
92	p	sec-butylbenzene	3.688	3.566	3.3	95	0.00	11.82
93	p	1,3-dichlorobenzene	1.695	1.517	10.5	92	0.00	12.07
94	p	p-isopropyltoluene	3.164	3.099	2.1	95	0.00	11.97
95	p	1,4-dichlorobenzene	1.730	1.566	9.5	92	0.00	12.19
96	p	1,2-dichlorobenzene	1.630	1.524	6.5	92	0.00	12.60
97	p	n-butylbenzene	2.828	2.868	-1.4	97	0.00	12.42
98	p	1,2-dibromo-3-chloropropa	0.173	0.178	-2.9	97	0.00	13.45
99	p	1,3,5-trichlorobenzene	1.269	1.212	4.5	89	0.00	13.71
		----------	Amount	Calc.	%Drift		----------	
100	p	1,2,4-trichlorobenzene	50.000	47.773	4.5	96	0.00	14.41
		----------	AvgRF	CCRF	%Dev		----------	
101	p	hexachlorobutadiene	0.504	0.531	-5.4	101	0.00	14.56
		----------	Amount	Calc.	%Drift		----------	
102	p	naphthalene	50.000	43.051	13.9	92	0.00	14.70
103	p	2-Methylnaphthalene	25.000	24.338	2.6	101	0.00	15.88
104	p	1-Methylnaphthalene	25.000	23.921	4.3	96	0.00	16.15
105	p	1,2,3-trichlorobenzene	50.000	48.307	3.4	99	0.00	14.97

(#) = Out of Range SPCC's out = 4 CCC's out = 0
G145456.D g150913w.m Mon Sep 14 15:16:45 2015

6.7.2

6

Continuing Calibration Summary

Job Number: MC41356 **Sample:** MSG5455-CC5447
Account: EAENYS EA Engineering **Lab FileID:** G145647.D
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\G150918\G145647.D          Vial: 2
Acq On    : 18 Sep 2015   8:37 am                    Operator: andrewd1
Sample    : cc5447-50                                Inst    : MSG
Misc      : MS35241,MSG5455,,,,5,1                   Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\msdchem\1\METHODS\g150913w.m (RTE Integrator)
Title        : SW-846 Method 8260
Last Update  : Mon Sep 14 09:18:26 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	87	0.02	3.17
2	p	tertiary butyl alcohol	1.318	1.200	9.0	77	0.02	3.24
3	p	Ethanol	0.150	0.117	22.0#	62	0.01	2.54
4	I	pentafluorobenzene	1.000	1.000	0.0	92	0.00	5.10
5	p	dichlorodifluoromethane	1.277	1.193	6.6	84	-0.05	1.89
6	p	chloromethane	1.093	0.934	14.5	91	0.00	2.03
7	p	vinyl chloride	0.772	0.691	10.5	89	0.00	2.10
8	p	bromomethane	0.420	0.396	5.7	92	-0.02	2.44
9	p	chloroethane	0.368	0.336	8.7	91	0.00	2.45
10	p	ethyl ether	0.529	0.492	7.0	82	0.00	2.86
11	p	acetonitrile	0.259	0.216	16.6	76	0.00	3.26
12	p	trichlorofluoromethane	0.901	0.871	3.3	95	0.00	2.73
13	p	freon-113	0.674	0.626	7.1	83	0.00	3.07
14	p	acrolein	0.058	0.047#	19.0	78	-0.02	2.99
15	p	1,1-dichloroethene	0.538	0.516	4.1	87	-0.02	3.23
16	p	acetone	0.090	0.081#	10.0	79	0.00	3.04
17	p	Methyl Acetate	0.678	0.591	12.8	77	0.00	3.43
18	p	methylene chloride	0.574	0.550	4.2	87	0.00	3.63
19	p	methyl tert butyl ether	1.662	1.412	15.0	77	0.01	3.73
20	p	acrylonitrile	0.332	0.295	11.1	83	-0.01	3.71
21	p	allyl chloride	1.201	1.110	7.6	81	0.00	3.52
22	p	trans-1,2-dichloroethene	0.555	0.522	5.9	85	0.00	3.88
23	p	iodomethane	0.911	0.905	0.7	88	0.00	3.48
24	p	carbon disulfide	1.719	1.673	2.7	87	0.00	3.72
25	p	propionitrile	0.112	0.099	11.6	78	0.00	4.77
26	p	vinyl acetate	1.685	1.485	11.9	76	0.00	4.25
27	p	chloroprene	1.126	0.994	11.7	77	0.00	4.36
28	p	di-isopropyl ether	2.566	2.124	17.2	76	0.00	4.14
29	p	methacrylonitrile	0.557	0.508	8.8	79	0.00	4.96
30	p	2-butanone	0.067	0.059#	11.9	77	0.00	4.68
31	p	Ethyl Acetate	0.000	0.050	0.0	0#	-0.01	4.98
32	p	Hexane	0.834	0.757	9.2	82	0.00	3.89
33	p	1,1-dichloroethane	1.259	1.095	13.0	80	0.00	4.28
34	p	tert-butyl ethyl ether	2.080	1.809	13.0	78	0.00	4.55
35	p	isobutyl alcohol	0.000	0.010#	0.0	0#	0.00	4.98
36	p	2,2-dichloropropane	0.806	0.710	11.9	77	0.00	4.85
37	p	cis-1,2-dichloroethene	0.601	0.556	7.5	82	0.00	4.88
38	p	bromochloromethane	0.303	0.283	6.6	82	0.00	5.22
39	p	chloroform	1.131	0.993	12.2	80	0.00	5.04
40	S	dibromofluoromethane (s)	0.560	0.583	-4.1	93	0.00	5.27
41	p	Tetrahydrofuran	0.242	0.208	14.0	79	0.00	5.25

Continuing Calibration Summary

Job Number: MC41356 **Sample:** MSG5455-CC5447
Account: EAENYS EA Engineering **Lab FileID:** G145647.D
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

42	p	1,1,1-trichloroethane	0.848	0.775	8.6	80	0.00	5.47
43	I	1,4-difluorobenzene	1.000	1.000	0.0	96	0.00	6.21
44	p	Cyclohexane	0.721	0.626	13.2	82	0.00	5.49
45	p	carbon tetrachloride	0.518	0.459	11.4	84	0.00	5.74
46	p	1,1-dichloropropene	0.474	0.430	9.3	85	0.00	5.62
47	p	benzene	1.307	1.148	12.2	86	0.00	5.92
48	p	1,2-dichloroethane	0.545	0.476	12.7	82	0.00	5.90
49	p	tert-amyl methyl ether	0.926	0.804	13.2	82	0.00	5.75
50	p	heptane	1.007	0.881	12.5	81	0.00	5.77
51	p	trichloroethene	0.362	0.324	10.5	87	0.00	6.58
52	p	1,2-dichloropropane	0.371	0.338	8.9	86	0.00	6.77
53	p	dibromomethane	0.225	0.213	5.3	86	0.00	7.09
54	p	bromodichloromethane	0.483	0.439	9.1	85	0.00	7.03
55	p	Methylcyclohexane	0.550	0.509	7.5	87	0.00	6.65
		----------	Amount	Calc.	%Drift	----------		
56	p	2-chloroethyl vinyl ether	50.000	42.049	15.9	96	0.00	7.36
		----------	AvgRF	CCRF	%Dev	----------		
57	p	methyl methacrylate	0.215	0.196	8.8	83	0.00	6.83
58	p	1,4-dioxane	0.003	0.002#	33.3#	66	-0.01	7.07
59	p	cis-1,3-dichloropropene	0.525	0.495	5.7	85	0.00	7.62
60	S	toluene-d8 (s)	1.100	1.145	-4.1	98	0.00	7.88
61	p	4-methyl-2-pentanone	0.521	0.458	12.1	83	0.00	7.38
62	p	toluene	0.772	0.703	8.9	86	0.00	7.97
63	p	trans-1,3-dichloropropene	0.502	0.466	7.2	84	0.00	8.17
64	p	1,1,2-trichloroethane	0.253	0.239	5.5	90	0.00	8.34
65	p	ethyl methacrylate	0.379	0.346	8.7	83	0.00	8.15
66	I	chlorobenzene-d5	1.000	1.000	0.0	96	0.00	9.54
67	p	tetrachloroethene	0.729	0.660	9.5	88	0.00	8.68
68	p	1,3-dichloropropane	0.999	0.920	7.9	86	0.00	8.61
69	p	dibromochloromethane	0.815	0.747	8.3	85	0.00	8.91
70	p	1,2-dibromoethane	0.690	0.631	8.6	86	0.00	9.13
71	p	2-hexanone	0.626	0.566	9.6	83	0.00	8.35
72	p	chlorobenzene	1.994	1.770	11.2	87	0.00	9.58
73	p	1,1,1,2-tetrachloroethane	0.724	0.653	9.8	84	0.00	9.63
74	p	ethylbenzene	3.170	2.836	10.5	86	0.00	9.63
75	p	m,p-xylene	1.215	1.105	9.1	87	0.00	9.72
76	p	o-xylene	1.202	1.115	7.2	87	0.00	10.20
77	p	styrene	2.037	1.914	6.0	87	0.00	10.23
78	p	bromoform	0.504	0.465	7.7	84	0.00	10.61
		----------	Amount	Calc.	%Drift	----------		
79	p	trans-1,4-dichloro-2-bute	50.000	42.206	15.6	79	0.00	10.64
		----------	AvgRF	CCRF	%Dev	----------		
80	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	101	0.00	12.16
81	p	isopropylbenzene	3.248	2.841	12.5	86	0.00	10.59
82	S	bromofluorobenzene (s)	0.966	0.923	4.5	99	0.00	10.86
83	p	bromobenzene	0.852	0.750	12.0	86	0.00	11.08
84	p	1,1,2,2-tetrachloroethane	0.897	0.751	16.3	88	0.00	10.78
85	p	1,2,3-trichloropropane	0.621	0.536	13.7	87	0.00	10.94
86	p	n-propylbenzene	3.893	3.457	11.2	88	0.00	11.02
87	p	2-chlorotoluene	2.699	2.310	14.4	86	0.00	11.22
88	p	4-chlorotoluene	2.444	2.169	11.3	88	0.00	11.27
89	p	1,3,5-trimethylbenzene	2.905	2.507	13.7	86	0.00	11.20
90	p	tert-butylbenzene	1.990	1.751	12.0	87	0.00	11.59

Continuing Calibration Summary

Job Number: MC41356 **Sample:** MSG5455-CC5447
Account: EAENYS EA Engineering **Lab FileID:** G145647.D
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

91	p	1,2,4-trimethylbenzene	2.929	2.631	10.2	88	0.00	11.63
92	p	sec-butylbenzene	3.688	3.283	11.0	88	0.00	11.82
93	p	1,3-dichlorobenzene	1.695	1.465	13.6	89	0.00	12.07
94	p	p-isopropyltoluene	3.164	2.800	11.5	86	0.00	11.97
95	p	1,4-dichlorobenzene	1.730	1.492	13.8	88	0.00	12.19
96	p	1,2-dichlorobenzene	1.630	1.459	10.5	89	0.00	12.60
97	p	n-butylbenzene	2.828	2.577	8.9	87	0.00	12.42
98	p	1,2-dibromo-3-chloropropa	0.173	0.149	13.9	82	0.00	13.45
99	p	1,3,5-trichlorobenzene	1.269	1.171	7.7	87	0.00	13.71
		----------	Amount	Calc.	%Drift	----------		
100	p	1,2,4-trichlorobenzene	50.000	41.465	17.1	83	0.00	14.41
		----------	AvgRF	CCRF	%Dev	----------		
101	p	hexachlorobutadiene	0.504	0.441	12.5	85	0.00	14.57
		----------	Amount	Calc.	%Drift	----------		
102	p	naphthalene	50.000	37.860	24.3#	80	0.00	14.70
103	p	2-Methylnaphthalene	25.000	17.375	30.5#	64	0.00	15.88
104	p	1-Methylnaphthalene	25.000	17.594	29.6#	65	0.00	16.15
105	p	1,2,3-trichlorobenzene	50.000	41.138	17.7	84	0.00	14.97

(#) = Out of Range SPCC's out = 5 CCC's out = 0
G145456.D g150913w.m Fri Sep 18 09:27:29 2015

Continuing Calibration Summary

Job Number: MC41356 **Sample:** MSG5455-ECC5447
Account: EAENYS EA Engineering **Lab FileID:** G145673.D
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\G150918\G145673.D          Vial: 12
Acq On    : 18 Sep 2015   8:57 pm                    Operator: andrewd1
Sample    : ecc5447-50                               Inst    : MSG
Misc      : MS35242,MSG5455,,,,5,1                   Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\msdchem\1\METHODS\g150913w.m (RTE Integrator)
Title        : SW-846 Method 8260
Last Update  : Mon Sep 14 09:18:26 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	85	0.01	3.16
2	p	tertiary butyl alcohol	1.318	1.278	3.0	80	0.02	3.24
3	p	Ethanol	0.150	0.133	11.3	69	0.02	2.55
4	I	pentafluorobenzene	1.000	1.000	0.0	95	0.00	5.10
5	p	dichlorodifluoromethane	1.277	1.235	3.3	90	-0.04	1.90
6	p	chloromethane	1.093	1.164	-6.5	118	-0.01	2.00
7	p	vinyl chloride	0.772	0.737	4.5	99	0.00	2.11
8	p	bromomethane	0.420	0.425	-1.2	102	-0.02	2.44
9	p	chloroethane	0.368	0.365	0.8	102	0.01	2.46
10	p	ethyl ether	0.529	0.469	11.3	80	0.00	2.85
11	p	acetonitrile	0.259	0.230	11.2	84	0.00	3.26
12	p	trichlorofluoromethane	0.901	0.916	-1.7	103	0.00	2.73
13	p	freon-113	0.674	0.619	8.2	84	0.00	3.08
14	p	acrolein	0.058	0.053	8.6	91	0.00	3.01
15	p	1,1-dichloroethene	0.538	0.512	4.8	89	-0.02	3.23
16	p	acetone	0.090	0.081#	10.0	81	0.00	3.04
17	p	Methyl Acetate	0.678	0.545	19.6	73	0.00	3.43
18	p	methylene chloride	0.574	0.552	3.8	90	0.01	3.63
19	p	methyl tert butyl ether	1.662	1.356	18.4	76	0.01	3.73
20	p	acrylonitrile	0.332	0.279	16.0	81	-0.01	3.71
21	p	allyl chloride	1.201	1.105	8.0	83	0.00	3.51
22	p	trans-1,2-dichloroethene	0.555	0.518	6.7	87	0.00	3.89
23	p	iodomethane	0.911	0.895	1.8	89	0.00	3.49
24	p	carbon disulfide	1.719	1.660	3.4	89	0.00	3.73
25	p	propionitrile	0.112	0.094	16.1	76	0.00	4.77
26	p	vinyl acetate	1.685	1.017	39.6#	54	0.00	4.25
27	p	chloroprene	1.126	0.994	11.7	79	0.00	4.36
28	p	di-isopropyl ether	2.566	2.087	18.7	77	0.00	4.14
29	p	methacrylonitrile	0.557	0.458	17.8	74	0.00	4.96
30	p	2-butanone	0.067	0.055#	17.9	74	0.00	4.68
31	p	Ethyl Acetate	0.000	0.070	0.0	0#	0.00	5.00
32	p	Hexane	0.834	0.697	16.4	78	0.00	3.89
33	p	1,1-dichloroethane	1.259	1.089	13.5	82	0.00	4.28
34	p	tert-butyl ethyl ether	2.080	1.768	15.0	78	0.00	4.55
35	p	isobutyl alcohol	0.000	0.014#	0.0	0#	0.01	5.00
36	p	2,2-dichloropropane	0.806	0.700	13.2	79	0.00	4.85
37	p	cis-1,2-dichloroethene	0.601	0.544	9.5	83	0.00	4.88
38	p	bromochloromethane	0.303	0.287	5.3	86	0.00	5.22
39	p	chloroform	1.131	0.978	13.5	82	0.00	5.04
40	S	dibromofluoromethane (s)	0.560	0.575	-2.7	94	0.00	5.27
41	p	Tetrahydrofuran	0.242	0.196	19.0	77	0.00	5.25

Continuing Calibration Summary

Job Number: MC41356 **Sample:** MSG5455-ECC5447
Account: EAENYS EA Engineering **Lab FileID:** G145673.D
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

42	p	1,1,1-trichloroethane	0.848	0.779	8.1	83	0.00	5.47
43	I	1,4-difluorobenzene	1.000	1.000	0.0	98	0.00	6.21
44	p	Cyclohexane	0.721	0.628	12.9	85	0.00	5.49
45	p	carbon tetrachloride	0.518	0.454	12.4	85	0.00	5.75
46	p	1,1-dichloropropene	0.474	0.426	10.1	86	0.00	5.62
47	p	benzene	1.307	1.148	12.2	88	0.00	5.92
48	p	1,2-dichloroethane	0.545	0.470	13.8	83	0.00	5.90
49	p	tert-amyl methyl ether	0.926	0.808	12.7	84	0.00	5.75
50	p	heptane	1.007	0.842	16.4	80	0.00	5.77
51	p	trichloroethene	0.362	0.334	7.7	92	0.00	6.58
52	p	1,2-dichloropropane	0.371	0.335	9.7	87	0.00	6.77
53	p	dibromomethane	0.225	0.211	6.2	88	0.00	7.09
54	p	bromodichloromethane	0.483	0.434	10.1	86	0.00	7.03
55	p	Methylcyclohexane	0.550	0.489	11.1	86	0.00	6.65
		----------	Amount	Calc.	%Drift	----------		
56	p	2-chloroethyl vinyl ether	50.000	42.949	14.1	101	0.00	7.36
		----------	AvgRF	CCRF	%Dev	----------		
57	p	methyl methacrylate	0.215	0.187	13.0	81	0.00	6.83
58	p	1,4-dioxane	0.003	0.003#	0.0	74	-0.01	7.07
59	p	cis-1,3-dichloropropene	0.525	0.480	8.6	84	0.00	7.62
60	S	toluene-d8 (s)	1.100	1.137	-3.4	99	0.00	7.88
61	p	4-methyl-2-pentanone	0.521	0.441	15.4	81	0.00	7.39
62	p	toluene	0.772	0.697	9.7	88	0.00	7.97
63	p	trans-1,3-dichloropropene	0.502	0.456	9.2	84	0.00	8.17
64	p	1,1,2-trichloroethane	0.253	0.227	10.3	88	0.00	8.34
65	p	ethyl methacrylate	0.379	0.334	11.9	82	0.00	8.15
66	I	chlorobenzene-d5	1.000	1.000	0.0	97	0.00	9.54
67	p	tetrachloroethene	0.729	0.660	9.5	89	0.00	8.68
68	p	1,3-dichloropropane	0.999	0.905	9.4	86	0.00	8.61
69	p	dibromochloromethane	0.815	0.737	9.6	85	0.00	8.91
70	p	1,2-dibromoethane	0.690	0.621	10.0	85	0.00	9.13
71	p	2-hexanone	0.626	0.544	13.1	81	0.00	8.35
72	p	chlorobenzene	1.994	1.770	11.2	88	0.00	9.58
73	p	1,1,1,2-tetrachloroethane	0.724	0.661	8.7	86	0.00	9.63
74	p	ethylbenzene	3.170	2.857	9.9	87	0.00	9.63
75	p	m,p-xylene	1.215	1.105	9.1	88	0.00	9.72
76	p	o-xylene	1.202	1.109	7.7	87	0.00	10.20
77	p	styrene	2.037	1.914	6.0	88	0.00	10.23
78	p	bromoform	0.504	0.455	9.7	83	0.00	10.61
		----------	Amount	Calc.	%Drift	----------		
79	p	trans-1,4-dichloro-2-bute	50.000	38.861	22.3#	73	0.00	10.64
		----------	AvgRF	CCRF	%Dev	----------		
80	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	102	0.00	12.16
81	p	isopropylbenzene	3.248	2.877	11.4	87	0.00	10.59
82	S	bromofluorobenzene (s)	0.966	0.934	3.3	101	0.00	10.86
83	p	bromobenzene	0.852	0.756	11.3	87	0.00	11.08
84	p	1,1,2,2-tetrachloroethane	0.897	0.691	23.0#	81	0.00	10.78
85	p	1,2,3-trichloropropane	0.621	0.515	17.1	84	0.00	10.94
86	p	n-propylbenzene	3.893	3.386	13.0	87	0.00	11.02
87	p	2-chlorotoluene	2.699	2.369	12.2	89	0.00	11.22
88	p	4-chlorotoluene	2.444	2.105	13.9	86	0.00	11.27
89	p	1,3,5-trimethylbenzene	2.905	2.485	14.5	86	0.00	11.20
90	p	tert-butylbenzene	1.990	1.738	12.7	86	0.00	11.59

Continuing Calibration Summary

Job Number: MC41356 **Sample:** MSG5455-ECC5447
Account: EAENYS EA Engineering **Lab FileID:** G145673.D
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

91	p	1,2,4-trimethylbenzene	2.929	2.609	10.9	87	0.00	11.63
92	p	sec-butylbenzene	3.688	3.243	12.1	87	0.00	11.82
93	p	1,3-dichlorobenzene	1.695	1.431	15.6	87	0.00	12.07
94	p	p-isopropyltoluene	3.164	2.770	12.5	85	0.00	11.97
95	p	1,4-dichlorobenzene	1.730	1.474	14.8	87	0.00	12.19
96	p	1,2-dichlorobenzene	1.630	1.436	11.9	87	0.00	12.60
97	p	n-butylbenzene	2.828	2.486	12.1	84	0.00	12.42
98	p	1,2-dibromo-3-chloropropa	0.173	0.142	17.9	78	0.00	13.45
99	p	1,3,5-trichlorobenzene	1.269	1.148	9.5	85	0.00	13.71
		----------	Amount	Calc.	%Drift	----------		
100	p	1,2,4-trichlorobenzene	50.000	40.250	19.5	81	0.00	14.41
		----------	AvgRF	CCRF	%Dev	----------		
101	p	hexachlorobutadiene	0.504	0.430	14.7	83	0.00	14.57
		----------	Amount	Calc.	%Drift	----------		
102	p	naphthalene	50.000	36.723	26.6#	78	0.00	14.70
103	p	2-Methylnaphthalene	25.000	19.212	23.2#	74	0.00	15.88
104	p	1-Methylnaphthalene	25.000	19.759	21.0#	76	0.00	16.15
105	p	1,2,3-trichlorobenzene	50.000	39.865	20.3#	81	0.00	14.97

(#) = Out of Range SPCC's out = 4 CCC's out = 0
G145456.D g150913w.m Sun Sep 20 08:58:47 2015

Continuing Calibration Summary

Job Number: MC41356 **Sample:** MSG5457-CC5447
Account: EAENYS EA Engineering **Lab FileID:** G145711.D
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Evaluate Continuing Calibration Report

```
Data File : G:\1\DATA\G150920\G145711.D                    Vial: 3
Acq On    : 20 Sep 2015   9:36 am                     Operator: andrewd1
Sample    : cc5447-50                                 Inst    : MSG
Misc      : MS35249,MSG5457,,,,5,1                    Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : G:\1\METHODS\g150913w.m (RTE Integrator)
Title        : SW-846 Method 8260
Last Update  : Mon Sep 14 09:18:26 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	88	0.03	3.18
2	p	tertiary butyl alcohol	1.318	1.241	5.8	81	0.02	3.24
3	p	Ethanol	0.150	0.094	37.3#	50#	0.02	2.55
4	I	pentafluorobenzene	1.000	1.000	0.0	96	0.00	5.10
5	p	dichlorodifluoromethane	1.277	1.262	1.2	93	-0.03	1.90
6	p	chloromethane	1.093	1.167	-6.8	119	0.00	2.02
7	p	vinyl chloride	0.772	0.753	2.5	101	0.01	2.11
8	p	bromomethane	0.420	0.426	-1.4	104	0.00	2.45
9	p	chloroethane	0.368	0.394	-7.1	111	0.01	2.46
10	p	ethyl ether	0.529	0.523	1.1	90	0.00	2.86
11	p	acetonitrile	0.259	0.183	29.3#	67	0.00	3.25
12	p	trichlorofluoromethane	0.901	0.894	0.8	101	0.00	2.73
13	p	freon-113	0.674	0.698	-3.6	96	0.00	3.07
14	p	acrolein	0.058	0.081	-39.7#	140	0.00	3.01
15	p	1,1-dichloroethene	0.538	0.567	-5.4	99	-0.02	3.23
16	p	acetone	0.090	0.107	-18.9	109	0.00	3.04
17	p	Methyl Acetate	0.678	0.722	-6.5	98	0.00	3.43
18	p	methylene chloride	0.574	0.589	-2.6	97	0.01	3.63
19	p	methyl tert butyl ether	1.662	1.586	4.6	90	0.03	3.75
20	p	acrylonitrile	0.332	0.309	6.9	90	-0.01	3.71
21	p	allyl chloride	1.201	1.197	0.3	91	0.00	3.52
22	p	trans-1,2-dichloroethene	0.555	0.560	-0.9	95	0.00	3.88
23	p	iodomethane	0.911	0.990	-8.7	100	0.00	3.49
24	p	carbon disulfide	1.719	1.805	-5.0	98	0.01	3.74
25	p	propionitrile	0.112	0.110	1.8	90	0.00	4.77
26	p	vinyl acetate	1.685	1.546	8.2	82	0.00	4.25
27	p	chloroprene	1.126	1.045	7.2	84	0.00	4.36
28	p	di-isopropyl ether	2.566	2.317	9.7	86	0.00	4.15
29	p	methacrylonitrile	0.557	0.615	-10.4	100	0.00	4.96
30	p	2-butanone	0.067	0.081#	-20.9#	111	0.00	4.68
31	p	Ethyl Acetate	0.000	0.172	0.0	0#	0.00	4.99
32	p	Hexane	0.834	0.815	2.3	92	0.00	3.90
33	p	1,1-dichloroethane	1.259	1.142	9.3	87	0.00	4.28
34	p	tert-butyl ethyl ether	2.080	1.917	7.8	86	0.02	4.57
35	p	isobutyl alcohol	0.000	0.034#	0.0	0#	0.00	4.99
36	p	2,2-dichloropropane	0.806	0.820	-1.7	93	0.00	4.85
37	p	cis-1,2-dichloroethene	0.601	0.602	-0.2	93	0.00	4.88
38	p	bromochloromethane	0.303	0.304	-0.3	92	0.00	5.22
39	p	chloroform	1.131	1.054	6.8	89	0.00	5.04
40	S	dibromofluoromethane (s)	0.560	0.570	-1.8	94	0.00	5.27
41	p	Tetrahydrofuran	0.242	0.213	12.0	84	0.00	5.25

Continuing Calibration Summary

Job Number: MC41356 **Sample:** MSG5457-CC5447
Account: EAENYS EA Engineering **Lab FileID:** G145711.D
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

42	p	1,1,1-trichloroethane	0.848	0.879	-3.7	95	0.00	5.47
43	I	1,4-difluorobenzene	1.000	1.000	0.0	98	0.00	6.21
44	p	Cyclohexane	0.721	0.669	7.2	90	0.00	5.49
45	p	carbon tetrachloride	0.518	0.516	0.4	97	0.00	5.75
46	p	1,1-dichloropropene	0.474	0.464	2.1	93	0.00	5.62
47	p	benzene	1.307	1.217	6.9	93	0.00	5.92
48	p	1,2-dichloroethane	0.545	0.508	6.8	90	0.00	5.90
49	p	tert-amyl methyl ether	0.926	0.882	4.8	92	0.00	5.76
50	p	heptane	1.007	1.000	0.7	94	0.00	5.77
51	p	trichloroethene	0.362	0.350	3.3	96	0.00	6.58
52	p	1,2-dichloropropane	0.371	0.363	2.2	94	0.00	6.77
53	p	dibromomethane	0.225	0.226	-0.4	94	0.00	7.09
54	p	bromodichloromethane	0.483	0.453	6.2	90	0.00	7.03
55	p	Methylcyclohexane	0.550	0.548	0.4	96	0.00	6.65
		----------	Amount	Calc.	%Drift		----------	
56	p	2-chloroethyl vinyl ether	50.000	46.421	7.2	109	0.00	7.36
		----------	AvgRF	CCRF	%Dev		----------	
57	p	methyl methacrylate	0.215	0.208	3.3	90	0.00	6.83
58	p	1,4-dioxane	0.003	0.003#	0.0	73	0.00	7.07
59	p	cis-1,3-dichloropropene	0.525	0.507	3.4	89	0.00	7.62
60	S	toluene-d8 (s)	1.100	1.127	-2.5	98	0.00	7.88
61	p	4-methyl-2-pentanone	0.521	0.509	2.3	94	0.00	7.39
62	p	toluene	0.772	0.744	3.6	93	0.00	7.97
63	p	trans-1,3-dichloropropene	0.502	0.452	10.0	83	0.00	8.17
64	p	1,1,2-trichloroethane	0.253	0.247	2.4	95	0.00	8.34
65	p	ethyl methacrylate	0.379	0.362	4.5	89	0.00	8.15
66	I	chlorobenzene-d5	1.000	1.000	0.0	98	0.00	9.54
67	p	tetrachloroethene	0.729	0.714	2.1	96	0.00	8.68
68	p	1,3-dichloropropane	0.999	1.001	-0.2	95	0.00	8.61
69	p	dibromochloromethane	0.815	0.772	5.3	89	0.00	8.91
70	p	1,2-dibromoethane	0.690	0.673	2.5	93	0.00	9.13
71	p	2-hexanone	0.626	0.743	-18.7	111	0.00	8.35
72	p	chlorobenzene	1.994	1.832	8.1	92	0.00	9.58
73	p	1,1,1,2-tetrachloroethane	0.724	0.703	2.9	92	0.00	9.63
74	p	ethylbenzene	3.170	3.043	4.0	93	0.00	9.63
75	p	m,p-xylene	1.215	1.164	4.2	93	0.00	9.72
76	p	o-xylene	1.202	1.144	4.8	90	0.00	10.19
77	p	styrene	2.037	1.978	2.9	91	0.00	10.23
78	p	bromoform	0.504	0.490	2.8	90	0.00	10.61
		----------	Amount	Calc.	%Drift		----------	
79	p	trans-1,4-dichloro-2-bute	50.000	47.897	4.2	92	0.00	10.64
		----------	AvgRF	CCRF	%Dev		----------	
80	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	100	0.00	12.16
81	p	isopropylbenzene	3.248	3.046	6.2	91	0.00	10.59
82	S	bromofluorobenzene (s)	0.966	0.922	4.6	98	0.00	10.86
83	p	bromobenzene	0.852	0.802	5.9	91	0.00	11.08
84	p	1,1,2,2-tetrachloroethane	0.897	0.816	9.0	95	0.00	10.78
85	p	1,2,3-trichloropropane	0.621	0.564	9.2	90	0.00	10.94
86	p	n-propylbenzene	3.893	3.617	7.1	91	0.00	11.02
87	p	2-chlorotoluene	2.699	2.461	8.8	91	0.00	11.22
88	p	4-chlorotoluene	2.444	2.293	6.2	92	0.00	11.27
89	p	1,3,5-trimethylbenzene	2.905	2.800	3.6	95	0.00	11.20
90	p	tert-butylbenzene	1.990	1.893	4.9	93	0.00	11.59

Continuing Calibration Summary

Job Number: MC41356 **Sample:** MSG5457-CC5447
Account: EAENYS EA Engineering **Lab FileID:** G145711.D
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

91	p	1,2,4-trimethylbenzene	2.929	2.787	4.8	92	0.00	11.63
92	p	sec-butylbenzene	3.688	3.504	5.0	93	0.00	11.82
93	p	1,3-dichlorobenzene	1.695	1.521	10.3	91	0.00	12.07
94	p	p-isopropyltoluene	3.164	3.046	3.7	93	0.00	11.97
95	p	1,4-dichlorobenzene	1.730	1.560	9.8	91	0.00	12.19
96	p	1,2-dichlorobenzene	1.630	1.517	6.9	91	0.00	12.60
97	p	n-butylbenzene	2.828	2.803	0.9	94	0.00	12.42
98	p	1,2-dibromo-3-chloropropa	0.173	0.161	6.9	87	0.00	13.45
99	p	1,3,5-trichlorobenzene	1.269	1.183	6.8	87	0.00	13.71
		----------	Amount	Calc.	%Drift		----------	
100	p	1,2,4-trichlorobenzene	50.000	44.807	10.4	89	0.00	14.41
		----------	AvgRF	CCRF	%Dev		----------	
101	p	hexachlorobutadiene	0.504	0.507	-0.6	96	0.00	14.57
		----------	Amount	Calc.	%Drift		----------	
102	p	naphthalene	50.000	38.163	23.7#	80	0.00	14.70
103	p	2-Methylnaphthalene	25.000	20.604	17.6	80	0.00	15.88
104	p	1-Methylnaphthalene	25.000	21.695	13.2	84	0.00	16.15
105	p	1,2,3-trichlorobenzene	50.000	44.623	10.8	91	0.00	14.97

(#) = Out of Range SPCC's out = 3 CCC's out = 0
G145456.D g150913w.m Mon Sep 21 12:48:25 2015

Continuing Calibration Summary

Job Number: MC41356 **Sample:** MSG5457-ECC5447
Account: EAENYS EA Engineering **Lab FileID:** G145736.D
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\G150920\G145736.D Vial: 28
Acq On : 20 Sep 2015 9:27 pm Operator: andrewd1
Sample : ecc5447-50 Inst : MSG
Misc : MS35252,MSG5457,,,,5,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\METHODS\g150913w.m (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Mon Sep 14 09:18:26 2015
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	81	0.03	3.18
2	p	tertiary butyl alcohol	1.318	1.188	9.9	70	0.00	3.22
3	p	Ethanol	0.150	0.102	32.0#	50#	0.00	2.54
4	I	pentafluorobenzene	1.000	1.000	0.0	96	0.00	5.10
5	p	dichlorodifluoromethane	1.277	1.301	-1.9	95	-0.05	1.89
6	p	chloromethane	1.093	1.189	-8.8	121	-0.02	2.00
7	p	vinyl chloride	0.772	0.776	-0.5	104	0.00	2.10
8	p	bromomethane	0.420	0.420	0.0	102	-0.02	2.44
9	p	chloroethane	0.368	0.354	3.8	100	0.00	2.45
10	p	ethyl ether	0.529	0.521	1.5	90	0.01	2.87
11	p	acetonitrile	0.259	0.199	23.2#	73	0.00	3.25
12	p	trichlorofluoromethane	0.901	0.945	-4.9	107	-0.01	2.72
13	p	freon-113	0.674	0.666	1.2	91	-0.01	3.07
14	p	acrolein	0.058	0.056	3.4	97	0.00	3.02
15	p	1,1-dichloroethene	0.538	0.534	0.7	93	-0.02	3.23
16	p	acetone	0.090	0.078#	13.3	79	0.00	3.04
17	p	Methyl Acetate	0.678	0.579	14.6	78	0.00	3.43
18	p	methylene chloride	0.574	0.552	3.8	91	0.00	3.62
19	p	methyl tert butyl ether	1.662	1.480	11.0	84	0.04	3.76
20	p	acrylonitrile	0.332	0.322	3.0	94	0.01	3.74
21	p	allyl chloride	1.201	1.136	5.4	86	0.00	3.51
22	p	trans-1,2-dichloroethene	0.555	0.537	3.2	91	0.00	3.88
23	p	iodomethane	0.911	0.935	-2.6	94	0.00	3.48
24	p	carbon disulfide	1.719	1.763	-2.6	96	0.00	3.72
25	p	propionitrile	0.112	0.097	13.4	79	0.00	4.77
26	p	vinyl acetate	1.685	0.914	45.8#	49#	0.00	4.25
27	p	chloroprene	1.126	1.078	4.3	86	0.00	4.36
28	p	di-isopropyl ether	2.566	2.227	13.2	83	0.00	4.15
29	p	methacrylonitrile	0.557	0.501	10.1	81	0.00	4.96
30	p	2-butanone	0.067	0.060#	10.4	82	0.00	4.68
31	p	Ethyl Acetate	0.000	0.050#	0.0	0#	-0.01	4.98
32	p	Hexane	0.834	0.779	6.6	88	0.00	3.90
33	p	1,1-dichloroethane	1.259	1.168	7.2	88	0.00	4.28
34	p	tert-butyl ethyl ether	2.080	1.920	7.7	85	0.02	4.57
35	p	isobutyl alcohol	0.000	0.010#	0.0	0#	-0.01	4.98
36	p	2,2-dichloropropane	0.806	0.679	15.8	77	0.00	4.85
37	p	cis-1,2-dichloroethene	0.601	0.575	4.3	88	0.00	4.88
38	p	bromochloromethane	0.303	0.294	3.0	89	0.00	5.22
39	p	chloroform	1.131	1.044	7.7	88	0.00	5.04
40	S	dibromofluoromethane (s)	0.560	0.564	-0.7	93	0.00	5.27
41	p	Tetrahydrofuran	0.242	0.212	12.4	84	0.00	5.25

Continuing Calibration Summary

Job Number: MC41356 **Sample:** MSG5457-ECC5447
Account: EAENYS EA Engineering **Lab FileID:** G145736.D
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

42	p	1,1,1-trichloroethane	0.848	0.845	0.4	91	0.00	5.47
43	I	1,4-difluorobenzene	1.000	1.000	0.0	97	0.00	6.22
44	p	Cyclohexane	0.721	0.684	5.1	91	0.00	5.49
45	p	carbon tetrachloride	0.518	0.515	0.6	95	0.00	5.75
46	p	1,1-dichloropropene	0.474	0.469	1.1	93	0.00	5.62
47	p	benzene	1.307	1.221	6.6	92	0.00	5.92
48	p	1,2-dichloroethane	0.545	0.516	5.3	90	0.00	5.90
49	p	tert-amyl methyl ether	0.926	0.872	5.8	90	0.00	5.76
50	p	heptane	1.007	0.909	9.7	85	0.00	5.77
51	p	trichloroethene	0.362	0.366	-1.1	99	0.00	6.58
52	p	1,2-dichloropropane	0.371	0.354	4.6	91	0.00	6.77
53	p	dibromomethane	0.225	0.224	0.4	92	0.00	7.09
54	p	bromodichloromethane	0.483	0.471	2.5	92	0.00	7.03
55	p	Methylcyclohexane	0.550	0.544	1.1	94	0.00	6.65
		----------	Amount	Calc.	%Drift		----------	
56	p	2-chloroethyl vinyl ether	50.000	47.744	4.5	111	0.00	7.36
		----------	AvgRF	CCRF	%Dev		----------	
57	p	methyl methacrylate	0.215	0.201	6.5	86	0.00	6.83
58	p	1,4-dioxane	0.003	0.002#	33.3#	62	-0.02	7.06
59	p	cis-1,3-dichloropropene	0.525	0.513	2.3	89	0.00	7.62
60	S	toluene-d8 (s)	1.100	1.111	-1.0	96	0.00	7.88
61	p	4-methyl-2-pentanone	0.521	0.495	5.0	90	0.00	7.38
62	p	toluene	0.772	0.744	3.6	92	0.00	7.97
63	p	trans-1,3-dichloropropene	0.502	0.484	3.6	88	0.00	8.17
64	p	1,1,2-trichloroethane	0.253	0.246	2.8	94	0.00	8.34
65	p	ethyl methacrylate	0.379	0.359	5.3	87	0.00	8.15
66	I	chlorobenzene-d5	1.000	1.000	0.0	96	0.00	9.54
67	p	tetrachloroethene	0.729	0.722	1.0	96	0.00	8.68
68	p	1,3-dichloropropane	0.999	0.975	2.4	91	0.00	8.61
69	p	dibromochloromethane	0.815	0.821	-0.7	93	0.00	8.91
70	p	1,2-dibromoethane	0.690	0.679	1.6	92	0.00	9.13
71	p	2-hexanone	0.626	0.610	2.6	89	0.00	8.35
72	p	chlorobenzene	1.994	1.882	5.6	92	0.00	9.58
73	p	1,1,1,2-tetrachloroethane	0.724	0.712	1.7	92	0.00	9.63
74	p	ethylbenzene	3.170	3.052	3.7	92	0.00	9.63
75	p	m,p-xylene	1.215	1.183	2.6	92	0.00	9.72
76	p	o-xylene	1.202	1.208	-0.5	93	0.00	10.20
77	p	styrene	2.037	2.030	0.3	92	0.00	10.23
78	p	bromoform	0.504	0.500	0.8	90	0.00	10.61
		----------	Amount	Calc.	%Drift		----------	
79	p	trans-1,4-dichloro-2-bute	50.000	43.597	12.8	82	0.00	10.64
		----------	AvgRF	CCRF	%Dev		----------	
80	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	98	0.00	12.16
81	p	isopropylbenzene	3.248	3.165	2.6	92	0.00	10.59
82	S	bromofluorobenzene (s)	0.966	0.939	2.8	98	0.00	10.86
83	p	bromobenzene	0.852	0.816	4.2	91	0.00	11.08
84	p	1,1,2,2-tetrachloroethane	0.897	0.740	17.5	84	0.00	10.78
85	p	1,2,3-trichloropropane	0.621	0.576	7.2	90	0.00	10.94
86	p	n-propylbenzene	3.893	3.739	4.0	92	0.00	11.02
87	p	2-chlorotoluene	2.699	2.594	3.9	93	0.00	11.22
88	p	4-chlorotoluene	2.444	2.343	4.1	92	0.00	11.27
89	p	1,3,5-trimethylbenzene	2.905	2.725	6.2	91	0.00	11.20
90	p	tert-butylbenzene	1.990	1.932	2.9	92	0.00	11.59

Continuing Calibration Summary

Job Number: MC41356 **Sample:** MSG5457-ECC5447
Account: EAENYS EA Engineering **Lab FileID:** G145736.D
Project: SCNJR: Picatinny Arsenal, Route 15, Picatinny Arsenal, NJ

91	p	1,2,4-trimethylbenzene	2.929	2.870	2.0	92	0.00	11.63
92	p	sec-butylbenzene	3.688	3.602	2.3	93	0.00	11.82
93	p	1,3-dichlorobenzene	1.695	1.573	7.2	92	0.00	12.07
94	p	p-isopropyltoluene	3.164	3.087	2.4	92	0.00	11.97
95	p	1,4-dichlorobenzene	1.730	1.617	6.5	92	0.00	12.19
96	p	1,2-dichlorobenzene	1.630	1.578	3.2	93	0.00	12.60
97	p	n-butylbenzene	2.828	2.739	3.1	89	0.00	12.42
98	p	1,2-dibromo-3-chloropropa	0.173	0.162	6.4	86	0.00	13.45
99	p	1,3,5-trichlorobenzene	1.269	1.243	2.0	89	0.00	13.71
		----------	Amount	Calc.	%Drift		----------	
100	p	1,2,4-trichlorobenzene	50.000	44.848	10.3	87	0.00	14.41
		----------	AvgRF	CCRF	%Dev		----------	
101	p	hexachlorobutadiene	0.504	0.473	6.2	88	0.00	14.57
		----------	Amount	Calc.	%Drift		----------	
102	p	naphthalene	50.000	41.684	16.6	86	0.00	14.70
103	p	2-Methylnaphthalene	25.000	21.889	12.4	85	0.00	15.88
104	p	1-Methylnaphthalene	25.000	23.757	5.0	92	-0.27	15.88
105	p	1,2,3-trichlorobenzene	50.000	45.466	9.1	90	0.00	14.97

(#) = Out of Range SPCC's out = 5 CCC's out = 0
G145456.D g150913w.m Mon Sep 21 09:04:48 2015

New England ACCUTEST LABORATORIES

GC/MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145658.D
Acq On : 18 Sep 2015 1:50 pm
Operator : andrewd1
Sample : mc41356-1
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 20 08:32:30 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

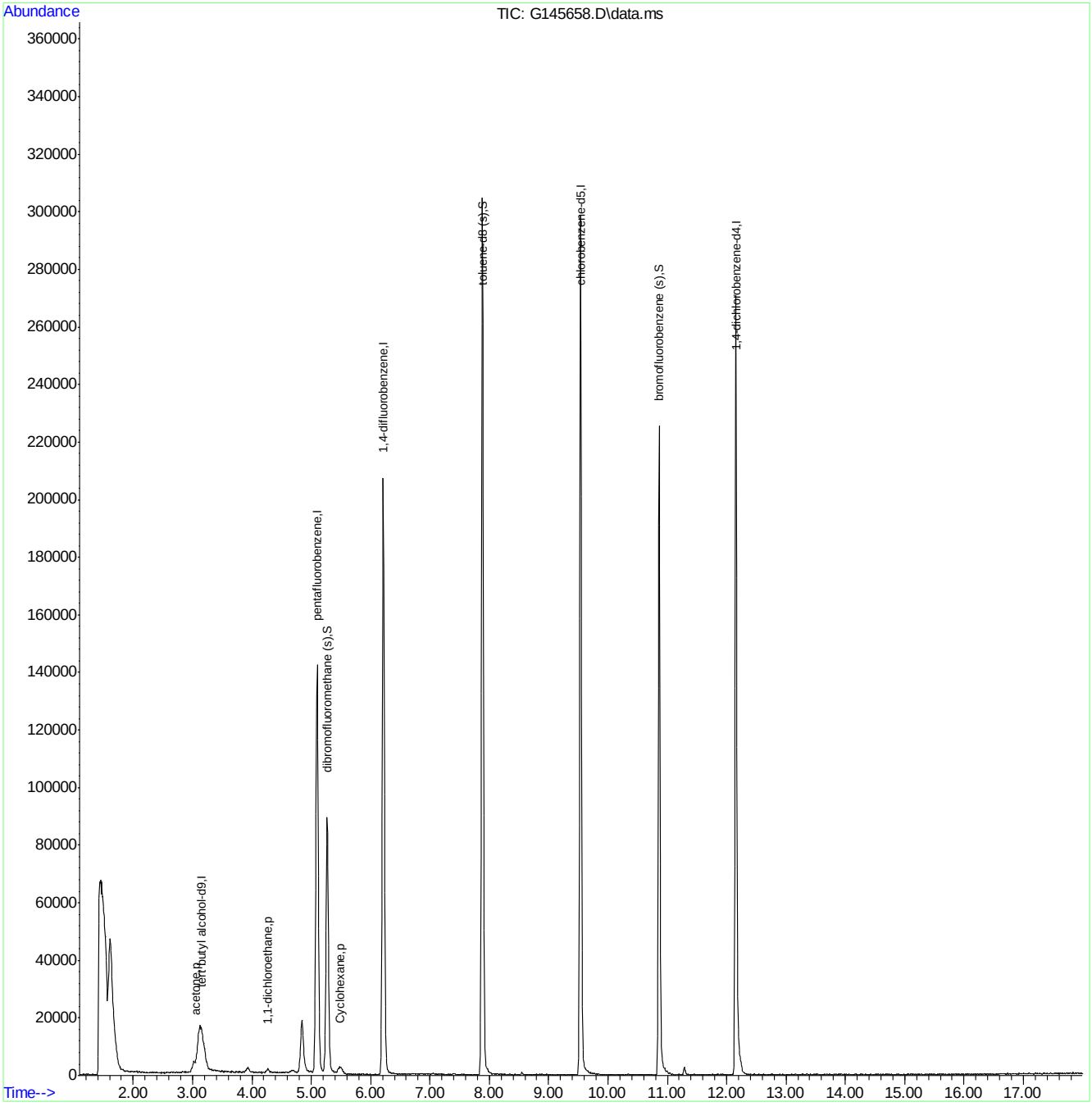
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.158	65	61518	500.00	ppb	0.00
4) pentafluorobenzene	5.101	168	140243	50.00	ppb	0.00
43) 1,4-difluorobenzene	6.217	114	227466	50.00	ppb	0.00
66) chlorobenzene-d5	9.541	82	106137	50.00	ppb	0.00
80) 1,4-dichlorobenzene-d4	12.163	152	91034	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	5.269	113	81409	51.86	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.72%			
60) toluene-d8 (s)	7.888	98	255265	51.01	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.02%			
82) bromofluorobenzene (s)	10.869	95	92938	52.86	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 105.72%			
Target Compounds						Qvalue
16) acetone	3.054	58	4504	17.91	ppb #	72
33) 1,1-dichloroethane	4.268	63	2585	0.73	ppb	86
44) Cyclohexane	5.488	56	2452	0.75	ppb #	80

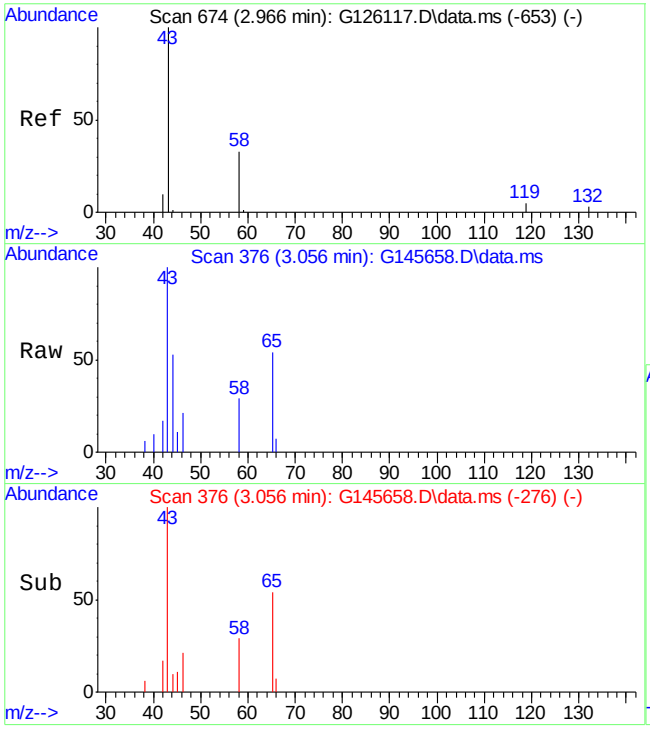
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145658.D
Acq On : 18 Sep 2015 1:50 pm
Operator : andrewd1
Sample : mc41356-1
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 20 08:32:30 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

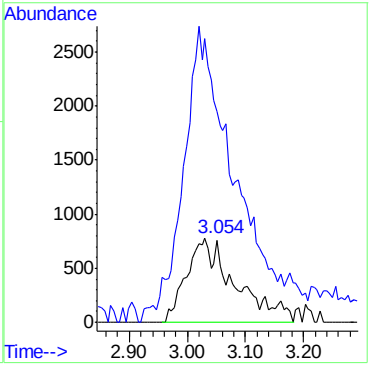


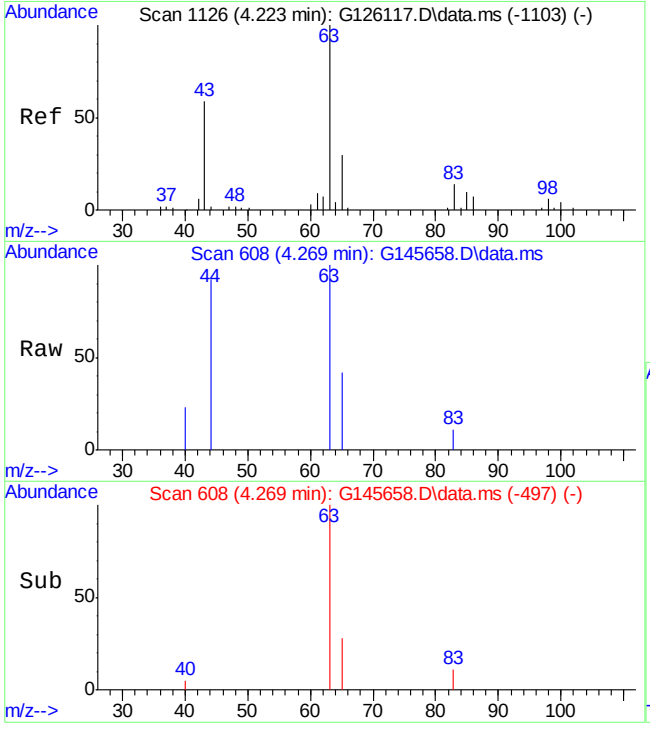


#16
acetone
Concen: 17.91 ppb
RT: 3.054 min Scan# 376
Delta R.T. 0.020 min
Lab File: G145658.D
Acq: 18 Sep 15 1:50 pm

Tgt Ion: 58 Resp: 4504

Ion	Ratio	Lower	Upper
58	100		
43	276.9	306.3	366.3#

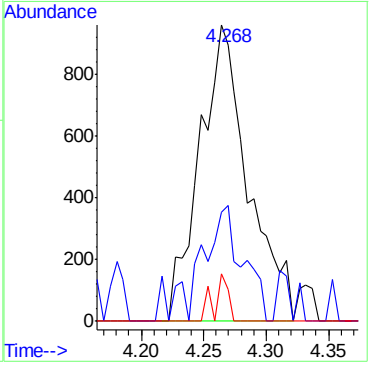


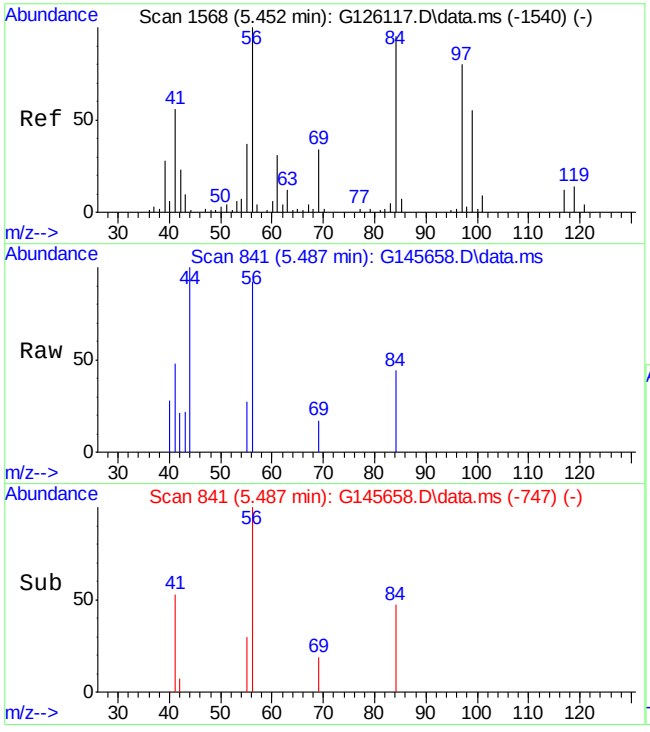


#33
1,1-dichloroethane
Concen: 0.73 ppb
RT: 4.268 min Scan# 608
Delta R.T. -0.013 min
Lab File: G145658.D
Acq: 18 Sep 15 1:50 pm

Tgt Ion: 63 Resp: 2585

Ion	Ratio	Lower	Upper
63	100		
65	41.9	1.5	61.5
83	11.3	0.0	41.1

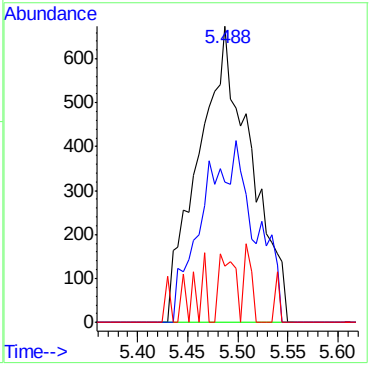




#44
Cyclohexane
Concen: 0.75 ppb
RT: 5.488 min Scan# 841
Delta R.T. -0.008 min
Lab File: G145658.D
Acq: 18 Sep 15 1:50 pm

Tgt Ion: 56 Resp: 2452

Ion	Ratio	Lower	Upper
56	100		
84	47.5	52.2	78.2#
69	19.0	21.0	31.6#



Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145659.D
Acq On : 18 Sep 2015 2:18 pm
Operator : andrewd1
Sample : mc41356-2
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 20 08:33:16 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.164	65	61393	500.00	ppb	0.01
4) pentafluorobenzene	5.101	168	137806	50.00	ppb	0.00
43) 1,4-difluorobenzene	6.217	114	220947	50.00	ppb	0.00
66) chlorobenzene-d5	9.541	82	103995	50.00	ppb	0.00
80) 1,4-dichlorobenzene-d4	12.163	152	89180	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	5.269	113	80050	51.90	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.80%			
60) toluene-d8 (s)	7.887	98	245115	50.43	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.86%			
82) bromofluorobenzene (s)	10.868	95	91238	52.97	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 105.94%			

Target Compounds Qvalue

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

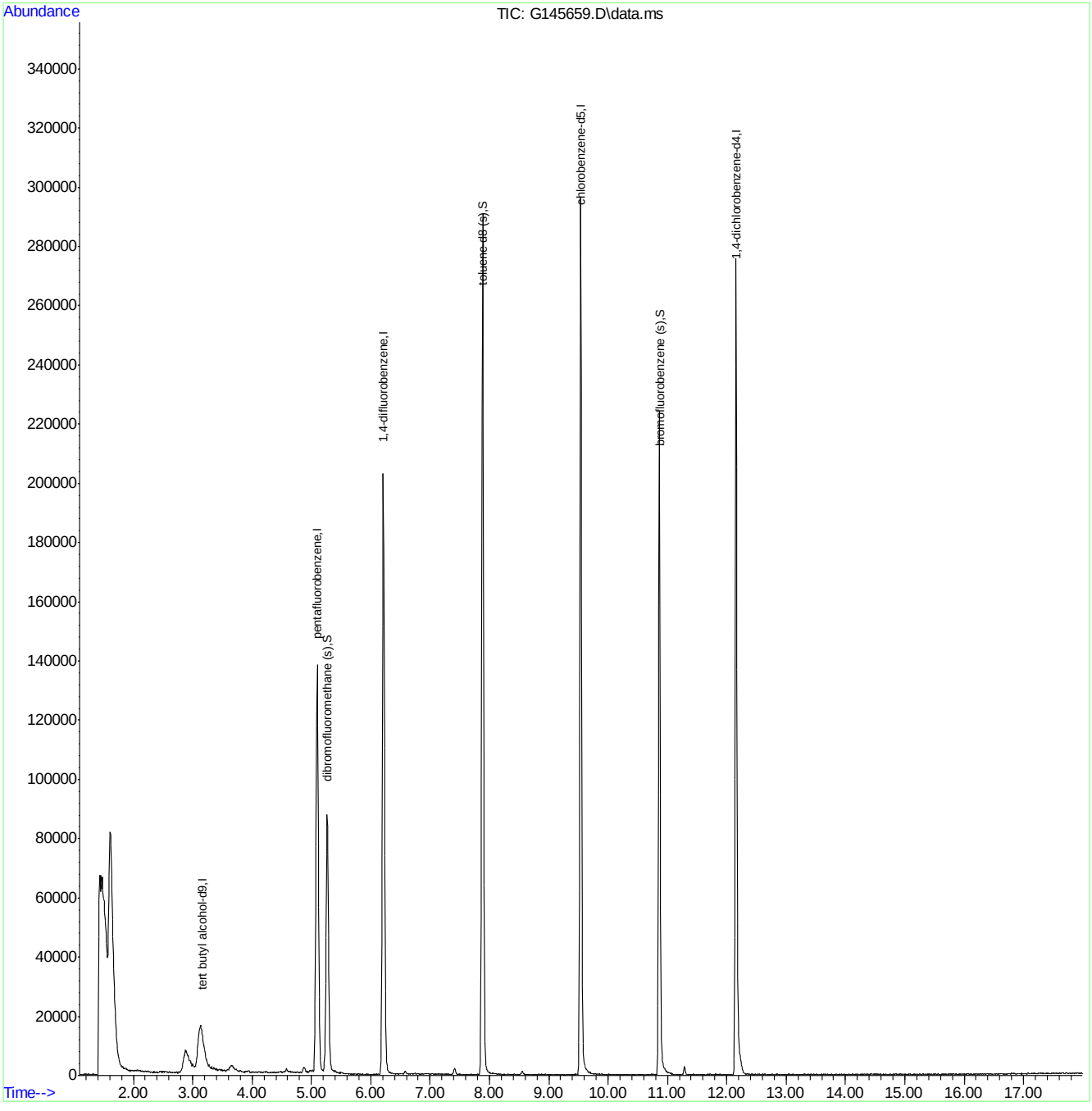
7.1.2

7

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145659.D
Acq On : 18 Sep 2015 2:18 pm
Operator : andrewd1
Sample : mc41356-2
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 20 08:33:16 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145660.D
Acq On : 18 Sep 2015 2:46 pm
Operator : andrewd1
Sample : mc41356-3
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 20 08:33:35 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.175	65	64801	500.00	ppb	0.02
4) pentafluorobenzene	5.101	168	134700	50.00	ppb	0.00
43) 1,4-difluorobenzene	6.217	114	218614	50.00	ppb	0.00
66) chlorobenzene-d5	9.542	82	103832	50.00	ppb	0.00
80) 1,4-dichlorobenzene-d4	12.163	152	88534	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	5.268	113	79581	52.78	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 105.56%			
60) toluene-d8 (s)	7.888	98	239887	49.88	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.76%			
82) bromofluorobenzene (s)	10.869	95	90764	53.08	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 106.16%			

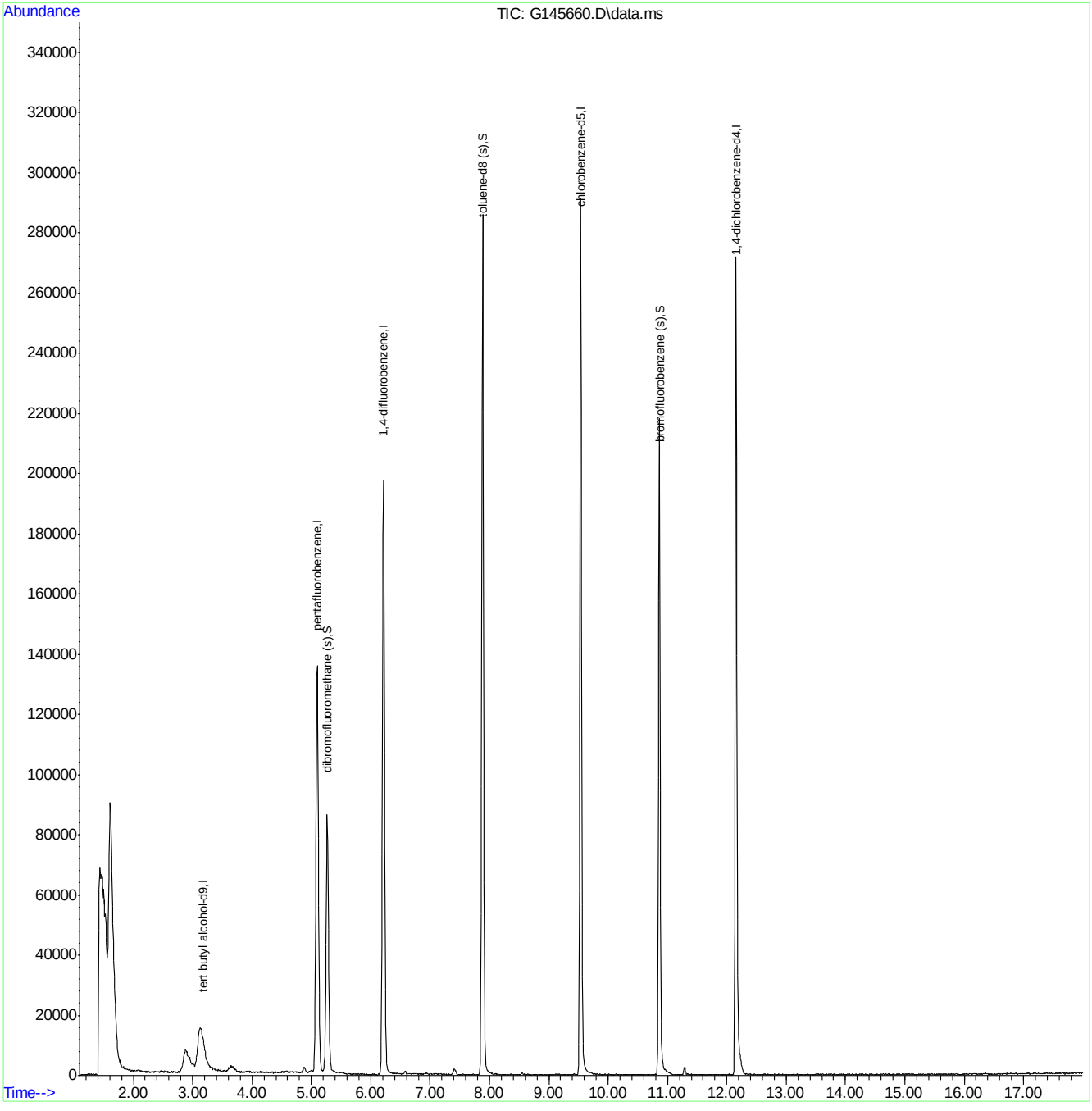
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145660.D
Acq On : 18 Sep 2015 2:46 pm
Operator : andrewd1
Sample : mc41356-3
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 20 08:33:35 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145661.D
Acq On : 18 Sep 2015 3:15 pm
Operator : andrewd1
Sample : mc41356-4
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 20 08:33:57 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.175	65	64883	500.00	ppb	0.02
4) pentafluorobenzene	5.100	168	137886	50.00	ppb	0.00
43) 1,4-difluorobenzene	6.217	114	222171	50.00	ppb	0.00
66) chlorobenzene-d5	9.541	82	104328	50.00	ppb	0.00
80) 1,4-dichlorobenzene-d4	12.163	152	88001	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	5.268	113	80621	52.24	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 104.48%			
60) toluene-d8 (s)	7.887	98	242266	49.57	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.14%			
82) bromofluorobenzene (s)	10.869	95	91622	53.91	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 107.82%			

Target Compounds Qvalue

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

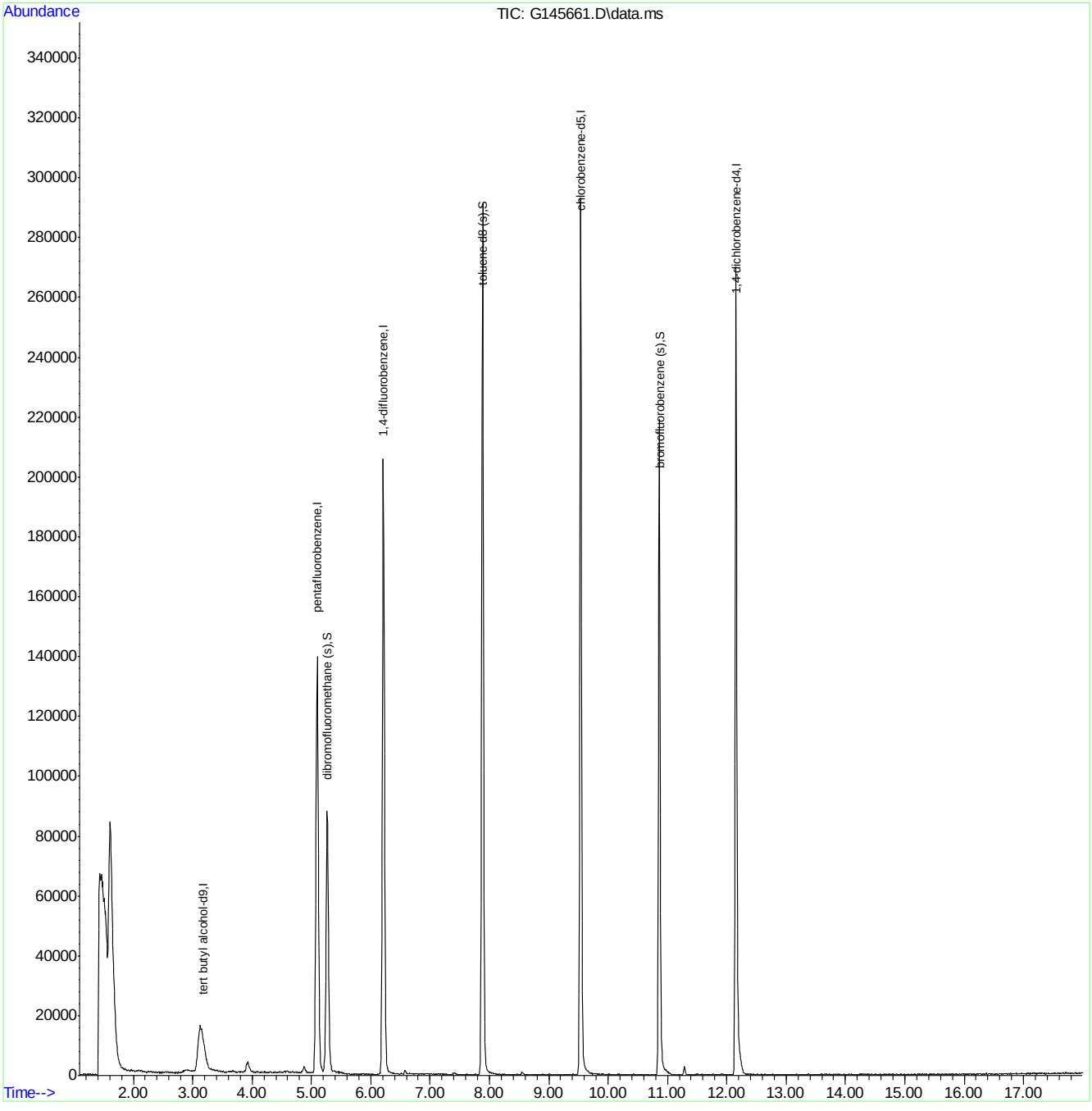
7.1.4

7

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145661.D
Acq On : 18 Sep 2015 3:15 pm
Operator : andrewd1
Sample : mc41356-4
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 20 08:33:57 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145662.D
Acq On : 18 Sep 2015 3:44 pm
Operator : andrewd1
Sample : mc41356-5
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 20 08:34:09 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.170	65	65732	500.00	ppb	0.02
4) pentafluorobenzene	5.100	168	136545	50.00	ppb	0.00
43) 1,4-difluorobenzene	6.217	114	217645	50.00	ppb	0.00
66) chlorobenzene-d5	9.541	82	101356	50.00	ppb	0.00
80) 1,4-dichlorobenzene-d4	12.163	152	88609	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	5.268	113	80020	52.36	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 104.72%			
60) toluene-d8 (s)	7.887	98	241496	50.44	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.88%			
82) bromofluorobenzene (s)	10.869	95	92247	53.90	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 107.80%			
Target Compounds						Qvalue

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

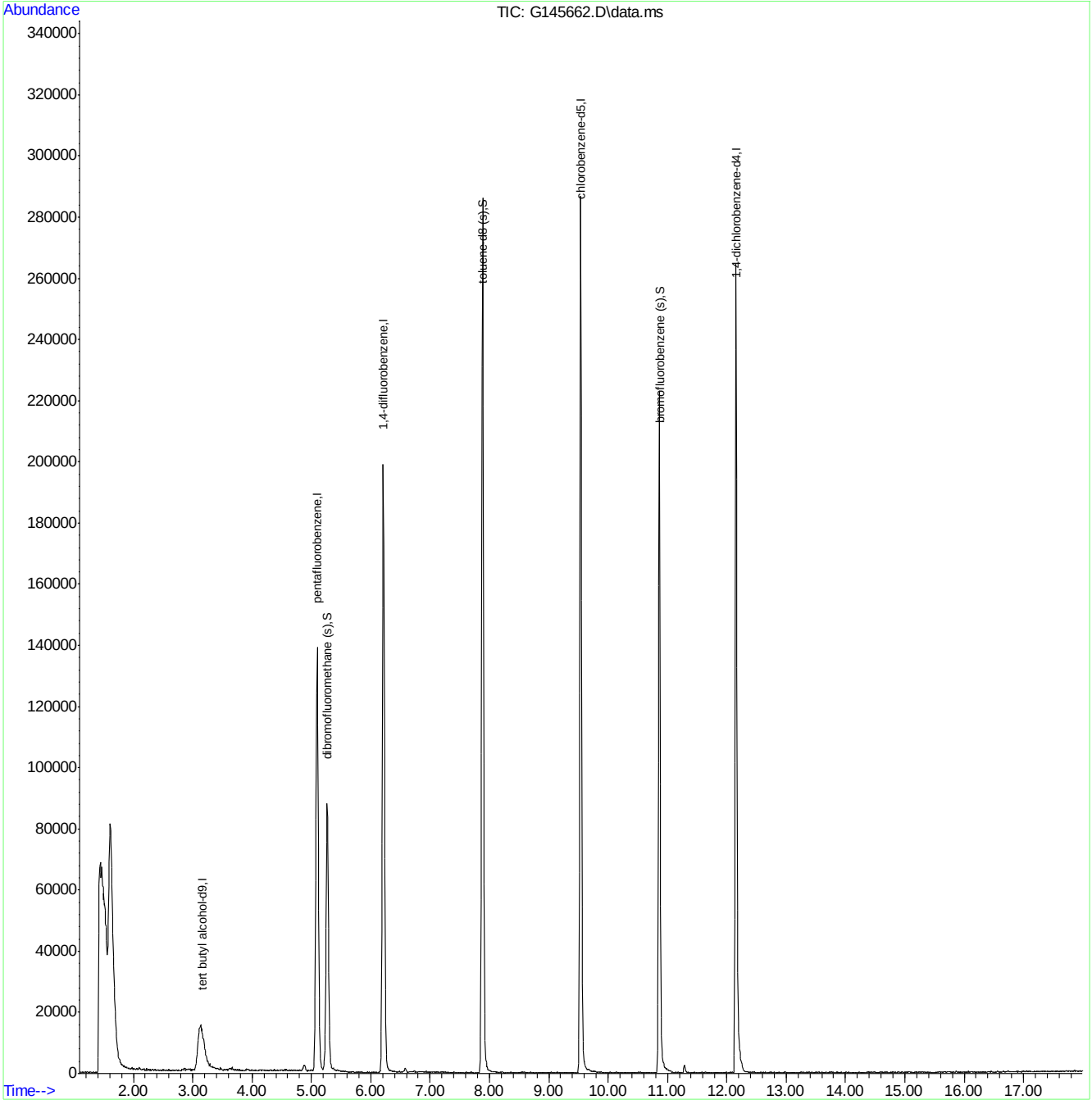
7.1.5

7

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145662.D
Acq On : 18 Sep 2015 3:44 pm
Operator : andrewd1
Sample : mc41356-5
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 20 08:34:09 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration



g150913w.m Sun Sep 20 14:12:35 2015 Page: 2

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145653.D
Acq On : 18 Sep 2015 11:28 am
Operator : andrewd1
Sample : mc41356-6
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 18 11:50:04 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.188	65	66878	500.00	ppb	0.04
4) pentafluorobenzene	5.100	168	137578	50.00	ppb	0.00
43) 1,4-difluorobenzene	6.216	114	224573	50.00	ppb	0.00
66) chlorobenzene-d5	9.541	82	107248	50.00	ppb	0.00
80) 1,4-dichlorobenzene-d4	12.163	152	92025	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	5.268	113	79780	51.81	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.62%			
60) toluene-d8 (s)	7.887	98	254463	51.50	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.00%			
82) bromofluorobenzene (s)	10.869	95	95535	53.75	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 107.50%			

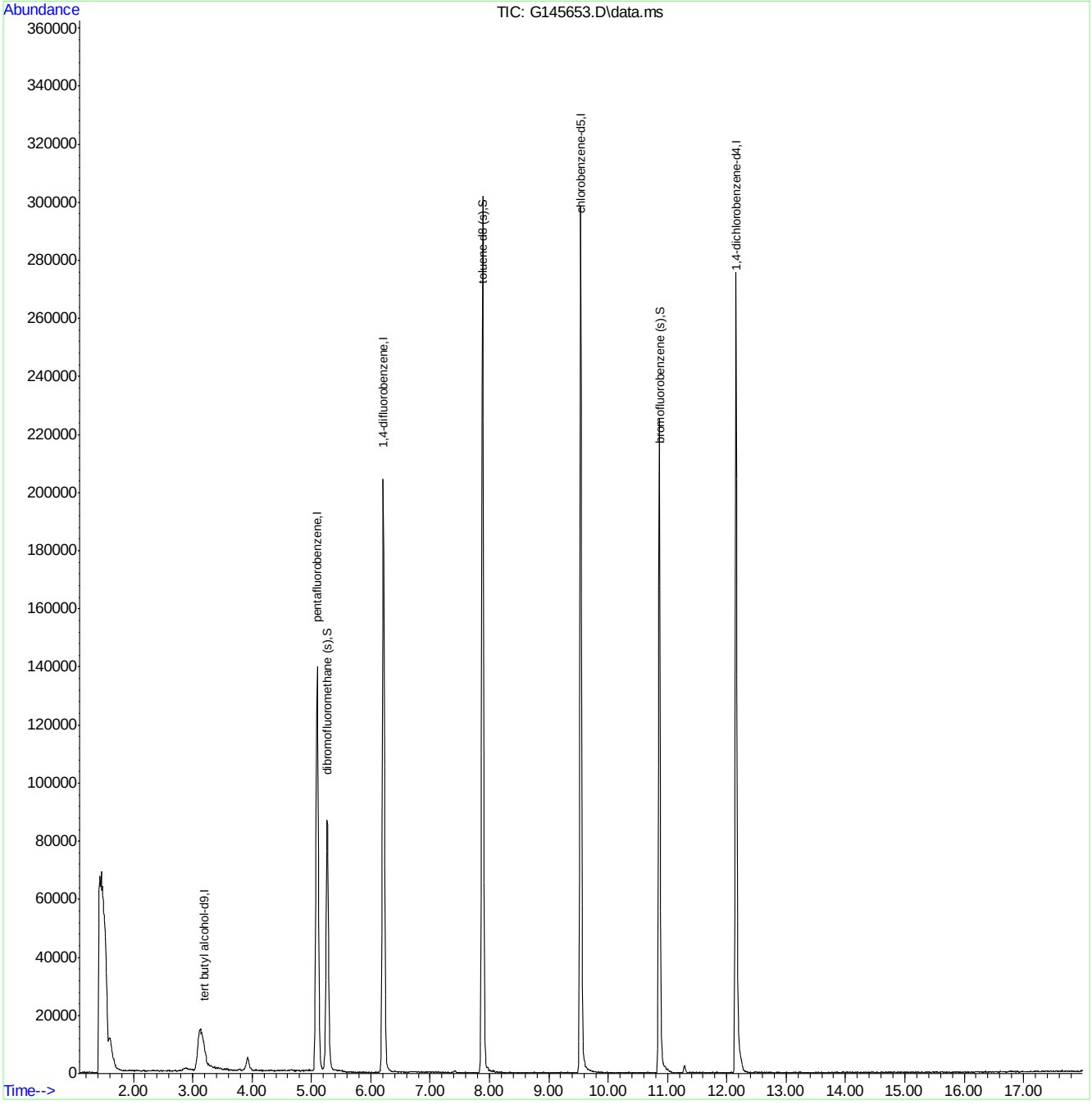
Target Compounds	Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145653.D
Acq On : 18 Sep 2015 11:28 am
Operator : andrewd1
Sample : mc41356-6
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 18 11:50:04 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145654.D
Acq On : 18 Sep 2015 11:56 am
Operator : andrewd1
Sample : mc41356-7
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 18 12:36:05 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.180	65	64794	500.00	ppb	0.03
4) pentafluorobenzene	5.099	168	136638	50.00	ppb	0.00
43) 1,4-difluorobenzene	6.216	114	222771	50.00	ppb	0.00
66) chlorobenzene-d5	9.541	82	106368	50.00	ppb	0.00
80) 1,4-dichlorobenzene-d4	12.163	152	90845	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	5.268	113	79184	51.78	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.56%			
60) toluene-d8 (s)	7.886	98	250329	51.08	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.16%			
82) bromofluorobenzene (s)	10.869	95	93854	53.49	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 106.98%			

Target Compounds Qvalue

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

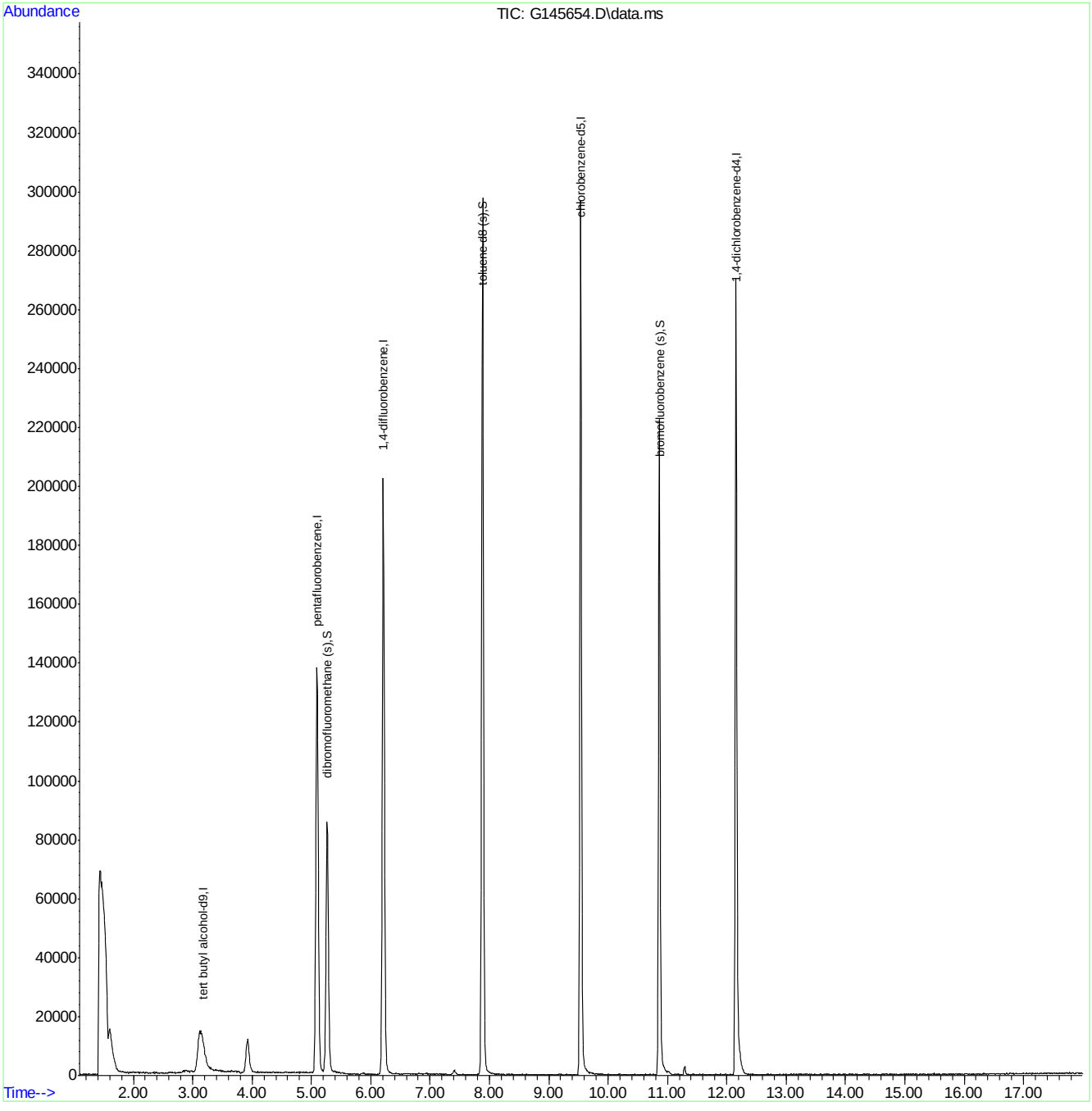
7.1.7

7

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145654.D
Acq On : 18 Sep 2015 11:56 am
Operator : andrewd1
Sample : mc41356-7
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 18 12:36:05 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145663.D
Acq On : 18 Sep 2015 4:13 pm
Operator : andrewd1
Sample : mc41356-8
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 20 08:34:40 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

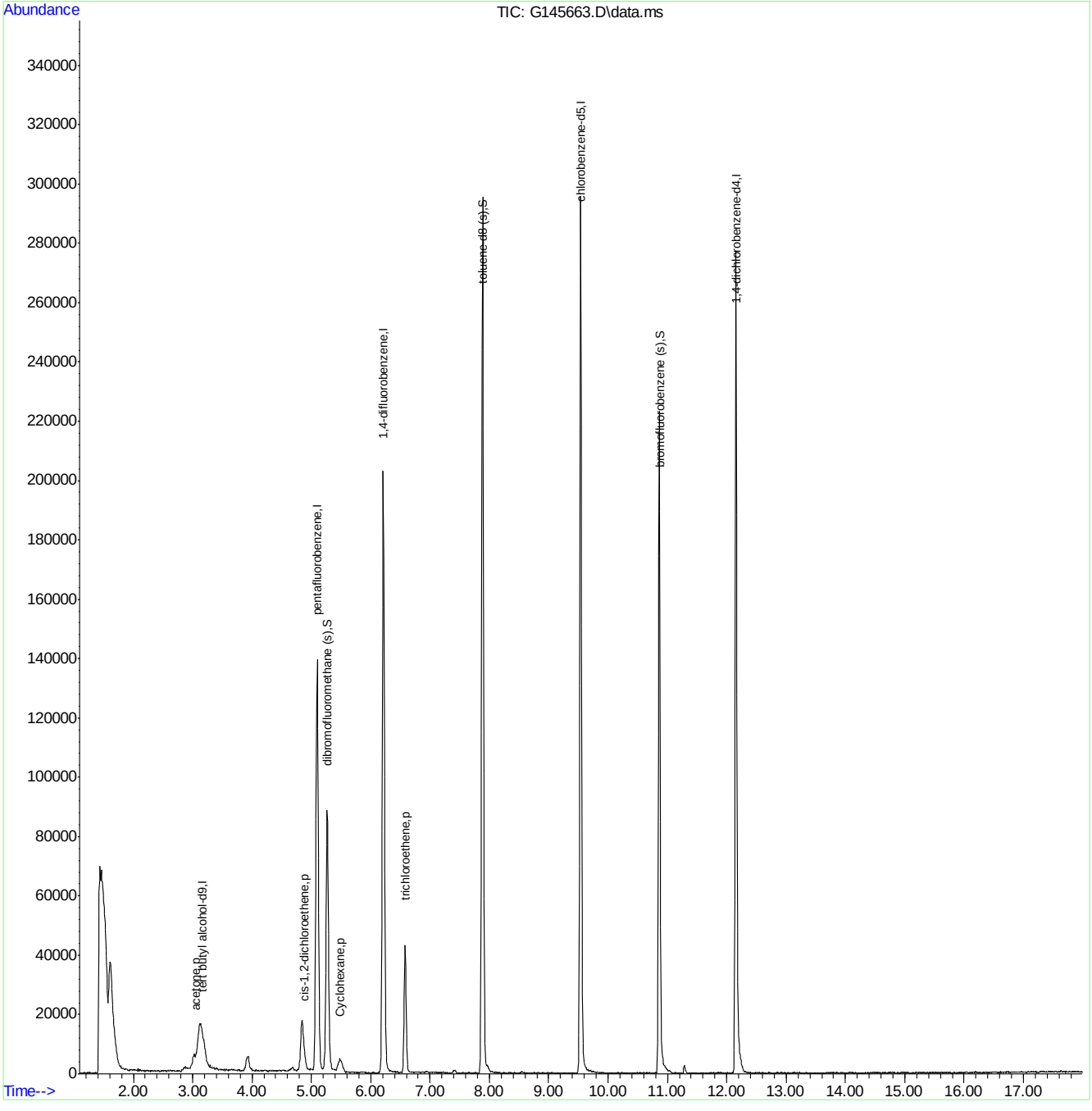
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.172	65	62254	500.00	ppb	0.02
4) pentafluorobenzene	5.101	168	136666	50.00	ppb	0.00
43) 1,4-difluorobenzene	6.216	114	222008	50.00	ppb	0.00
66) chlorobenzene-d5	9.541	82	104797	50.00	ppb	0.00
80) 1,4-dichlorobenzene-d4	12.163	152	90617	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	5.268	113	80086	52.36	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 104.72%			
60) toluene-d8 (s)	7.887	98	249585	51.10	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.20%			
82) bromofluorobenzene (s)	10.869	95	93064	53.18	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 106.36%			
Target Compounds						Qvalue
16) acetone	3.056	58	6399	26.11	ppb #	82
37) cis-1,2-dichloroethene	4.880	96	2012	1.22	ppb #	72
44) Cyclohexane	5.489	56	4661	1.46	ppb	96
51) trichloroethene	6.581	95	18209	11.32	ppb	89

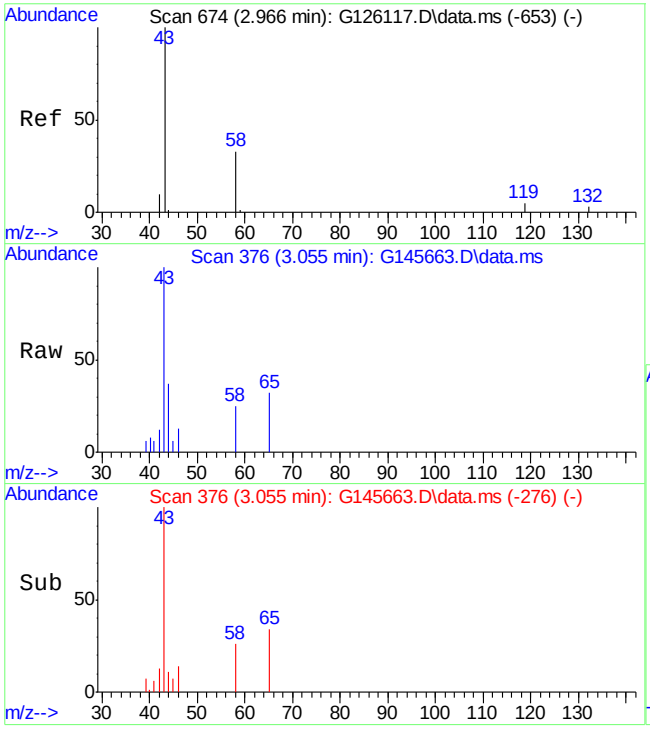
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145663.D
Acq On : 18 Sep 2015 4:13 pm
Operator : andrewd1
Sample : mc41356-8
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 20 08:34:40 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

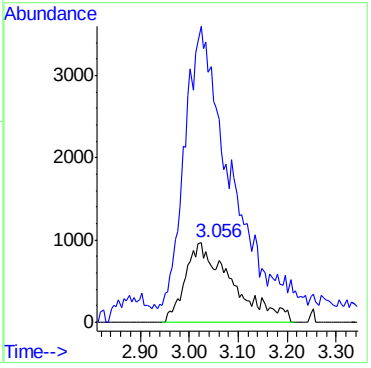


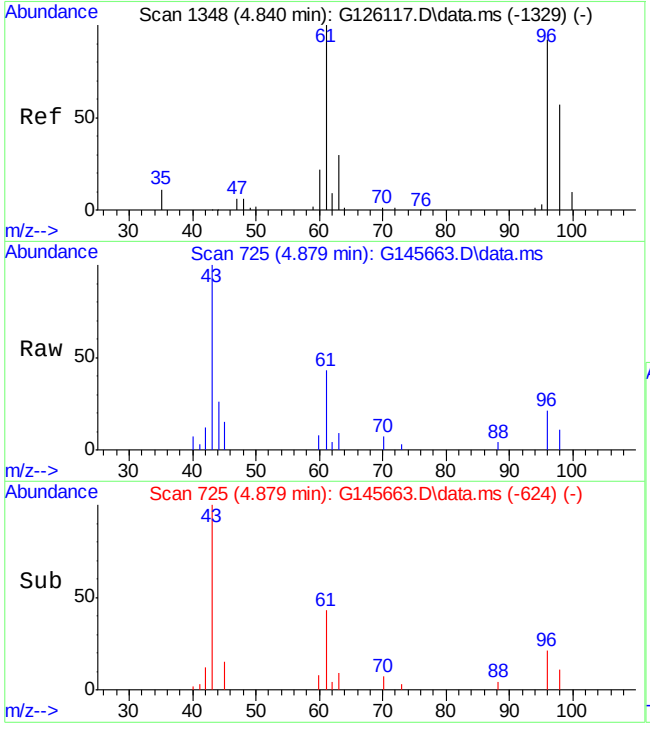


#16
acetone
Concen: 26.11 ppb
RT: 3.056 min Scan# 376
Delta R.T. 0.023 min
Lab File: G145663.D
Acq: 18 Sep 15 4:13 pm

Tgt Ion: 58 Resp: 6399

Ion	Ratio	Lower	Upper
58	100		
43	375.1	306.3	366.3#

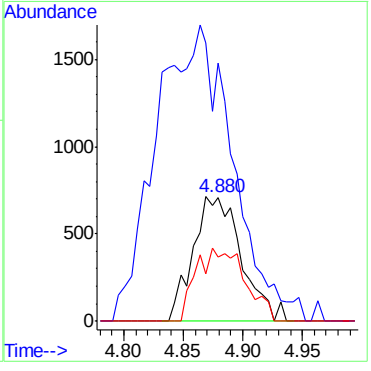


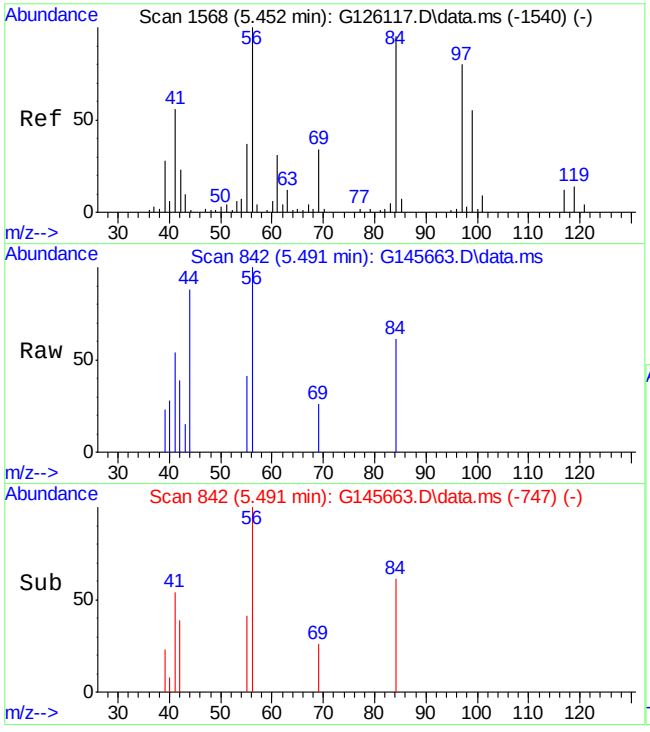


#37
cis-1,2-dichloroethene
Concen: 1.22 ppb
RT: 4.880 min Scan# 725
Delta R.T. -0.003 min
Lab File: G145663.D
Acq: 18 Sep 15 4:13 pm

Tgt Ion: 96 Resp: 2012

Ion	Ratio	Lower	Upper
96	100		
61	193.1	122.1	182.1#
98	51.5	36.9	96.9

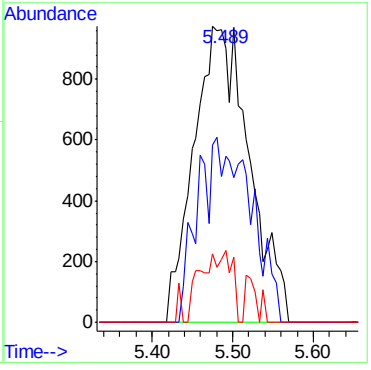


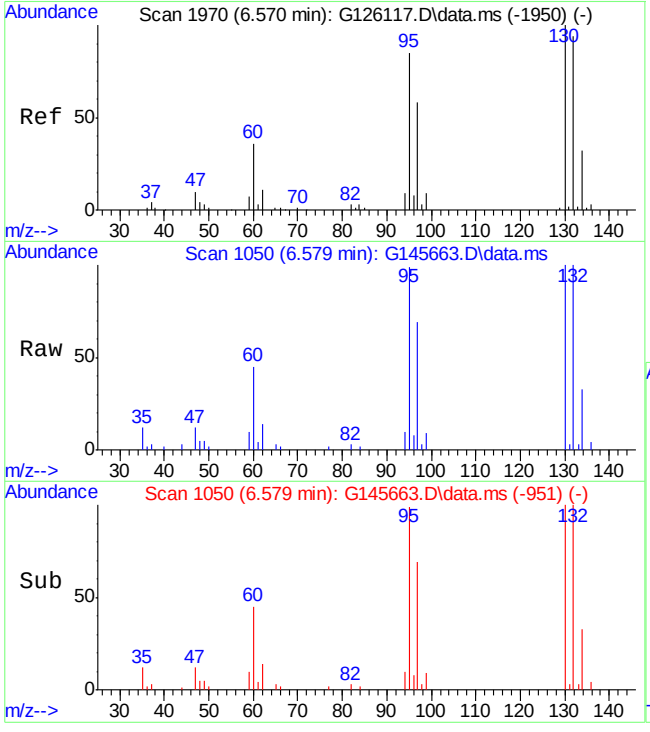


#44
Cyclohexane
Concen: 1.46 ppb
RT: 5.489 min Scan# 842
Delta R.T. -0.008 min
Lab File: G145663.D
Acq: 18 Sep 15 4:13 pm

Tgt Ion: 56 Resp: 4661

Ion	Ratio	Lower	Upper
56	100		
84	60.8	52.2	78.2
69	26.1	21.0	31.6

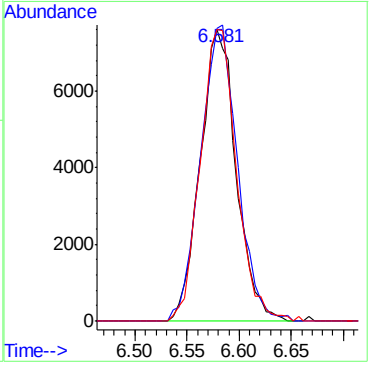




#51
trichloroethene
Concen: 11.32 ppb
RT: 6.581 min Scan# 1050
Delta R.T. 0.000 min
Lab File: G145663.D
Acq: 18 Sep 15 4:13 pm

Tgt Ion: 95 Resp: 18209

Ion	Ratio	Lower	Upper
95	100		
130	100.5	85.7	145.7
132	100.1	78.0	138.0



Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145664.D
Acq On : 18 Sep 2015 4:41 pm
Operator : andrewd1
Sample : mc41356-9
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 20 08:35:36 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

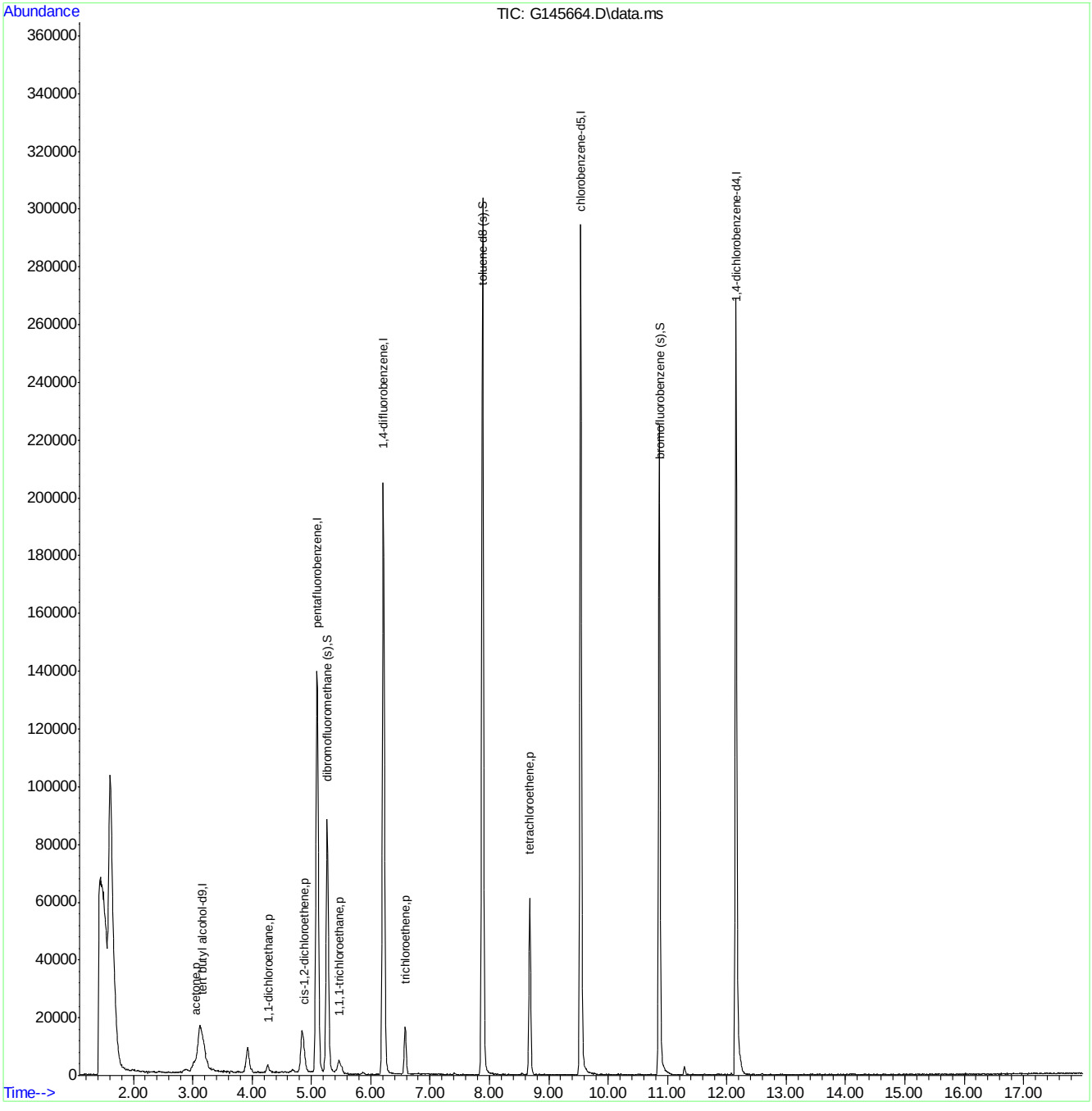
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.171	65	62926	500.00	ppb	0.02
4) pentafluorobenzene	5.101	168	139073	50.00	ppb	0.00
43) 1,4-difluorobenzene	6.217	114	222569	50.00	ppb	0.00
66) chlorobenzene-d5	9.541	82	106251	50.00	ppb	0.00
80) 1,4-dichlorobenzene-d4	12.163	152	90056	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	5.269	113	80716	51.85	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.70%			
60) toluene-d8 (s)	7.887	98	252582	51.58	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.16%			
82) bromofluorobenzene (s)	10.869	95	92898	53.41	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 106.82%			
Target Compounds						Qvalue
16) acetone	3.048	58	4794	19.22	ppb #	71
33) 1,1-dichloroethane	4.272	63	4606	1.32	ppb	95
37) cis-1,2-dichloroethene	4.879	96	2594	1.55	ppb #	70
42) 1,1,1-trichloroethane	5.465	97	4325	1.83	ppb	97
51) trichloroethene	6.581	95	7395	4.58	ppb	89
67) tetrachloroethene	8.682	166	20733	13.38	ppb	97

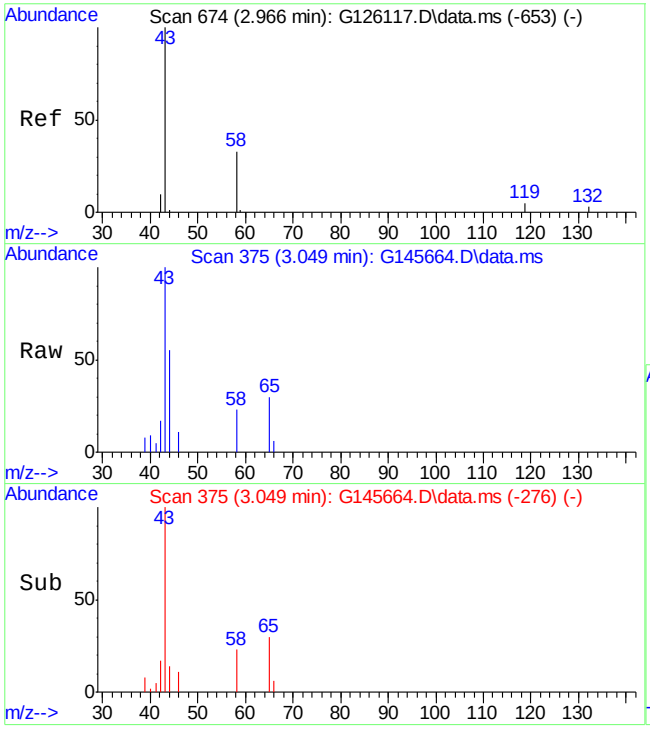
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145664.D
Acq On : 18 Sep 2015 4:41 pm
Operator : andrewd1
Sample : mc41356-9
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 20 08:35:36 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

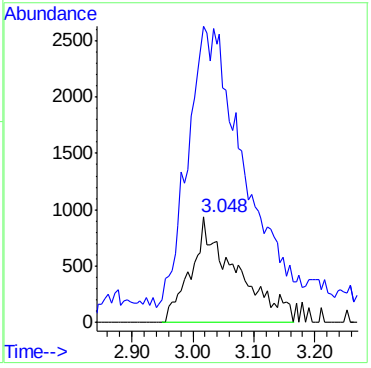


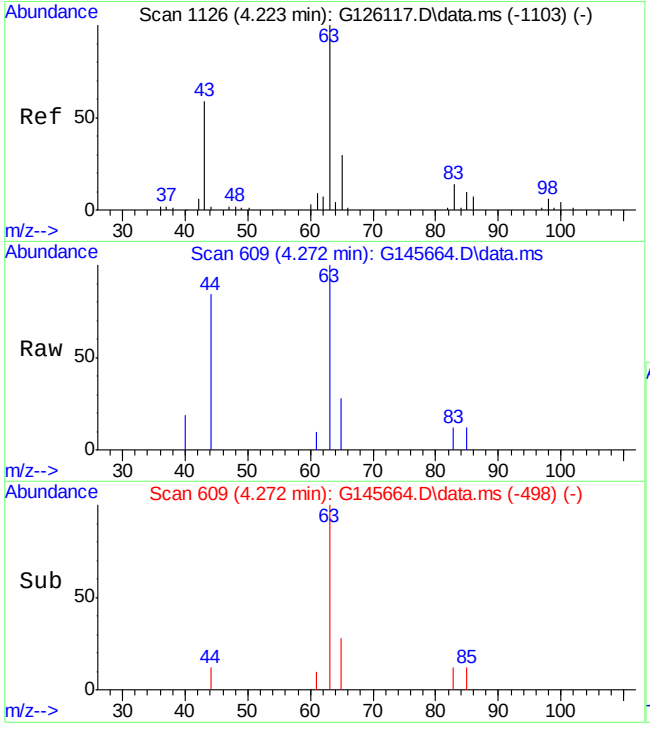


#16
acetone
Concen: 19.22 ppb
RT: 3.048 min Scan# 375
Delta R.T. 0.015 min
Lab File: G145664.D
Acq: 18 Sep 15 4:41 pm

Tgt Ion: 58 Resp: 4794

Ion	Ratio	Lower	Upper
58	100		
43	398.1	306.3	366.3#

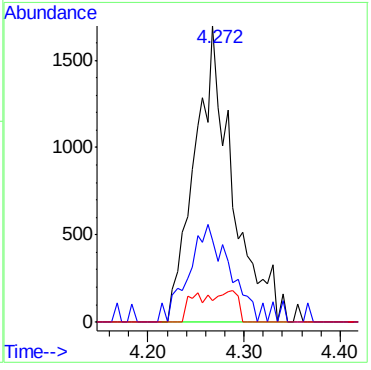


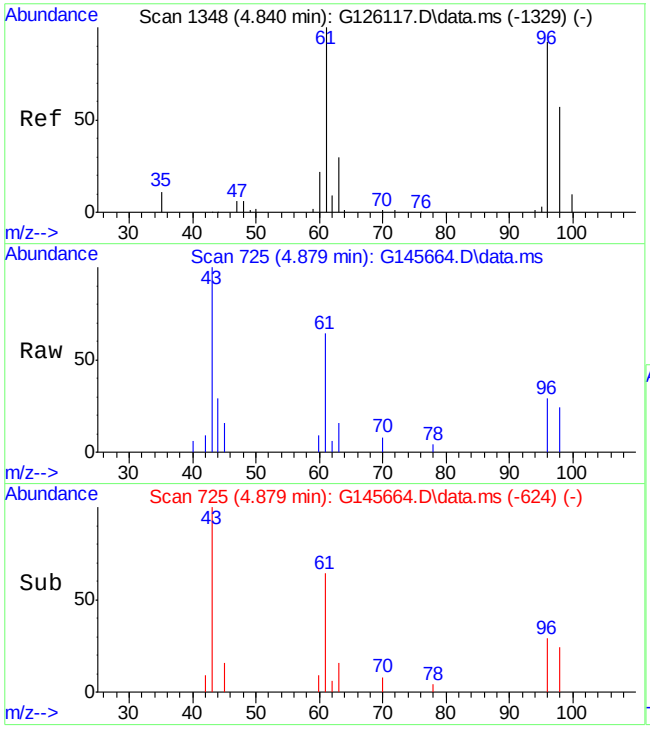


#33
1,1-dichloroethane
Concen: 1.32 ppb
RT: 4.272 min Scan# 609
Delta R.T. -0.009 min
Lab File: G145664.D
Acq: 18 Sep 15 4:41 pm

Tgt Ion: 63 Resp: 4606

Ion	Ratio	Lower	Upper
63	100		
65	28.4	1.5	61.5
83	12.1	0.0	41.1

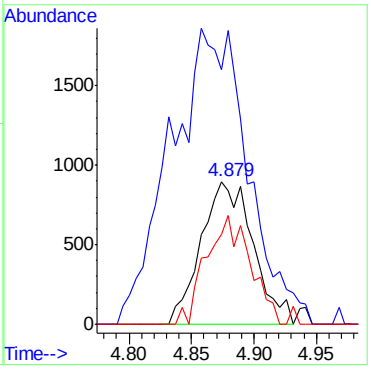


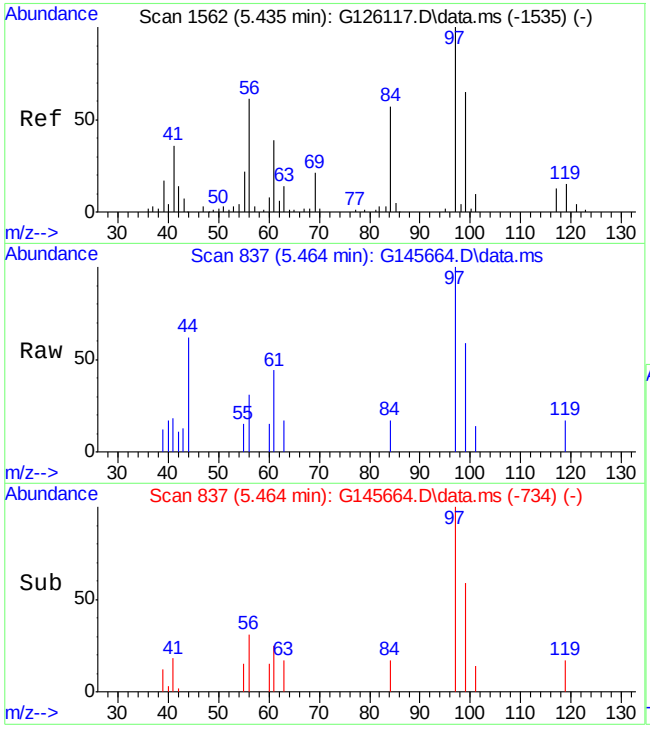


#37
cis-1,2-dichloroethene
Concen: 1.55 ppb
RT: 4.879 min Scan# 725
Delta R.T. -0.004 min
Lab File: G145664.D
Acq: 18 Sep 15 4:41 pm

Tgt Ion: 96 Resp: 2594

Ion	Ratio	Lower	Upper
96	100		
61	196.7	122.1	182.1#
98	81.6	36.9	96.9

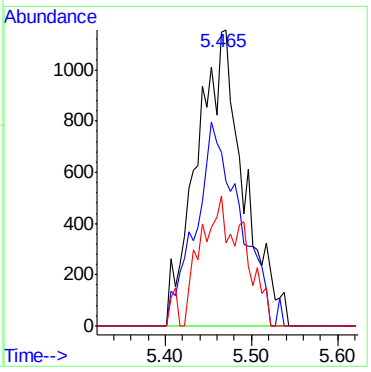


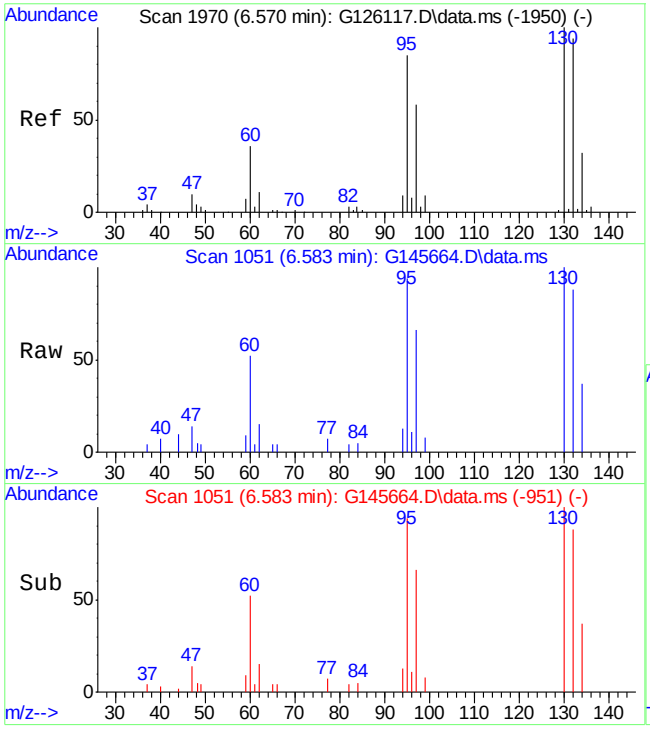


#42
1,1,1-trichloroethane
Concen: 1.83 ppb
RT: 5.465 min Scan# 837
Delta R.T. -0.008 min
Lab File: G145664.D
Acq: 18 Sep 15 4:41 pm

Tgt Ion: 97 Resp: 4325

Ion	Ratio	Lower	Upper
97	100		
99	59.2	30.7	90.7
61	44.4	17.5	77.5

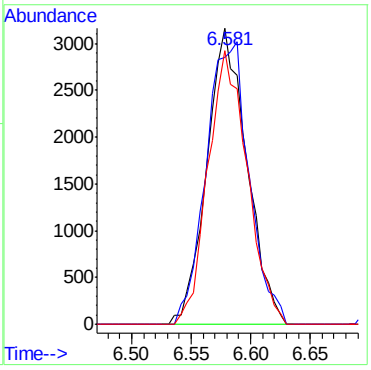


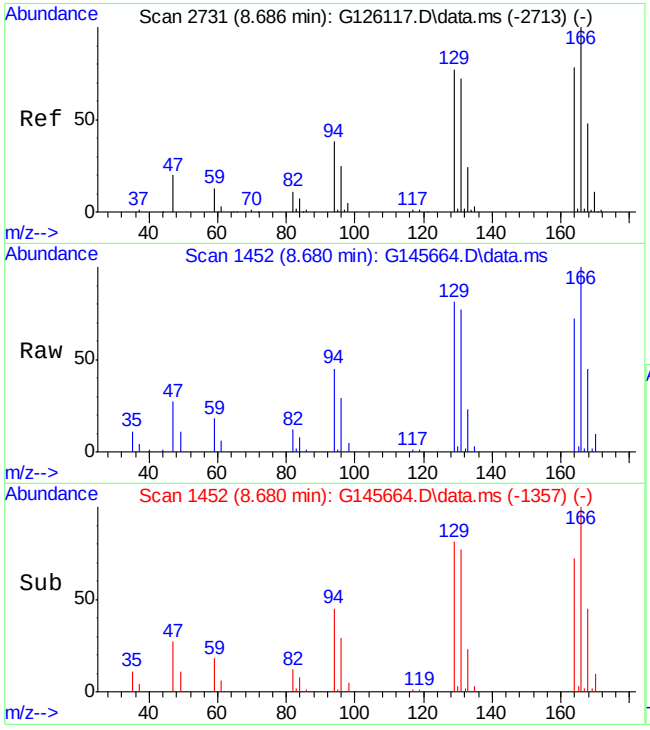


#51
trichloroethene
Concen: 4.58 ppb
RT: 6.581 min Scan# 1051
Delta R.T. 0.001 min
Lab File: G145664.D
Acq: 18 Sep 15 4:41 pm

Tgt Ion: 95 Resp: 7395

Ion	Ratio	Lower	Upper
95	100		
130	106.7	85.7	145.7
132	94.1	78.0	138.0

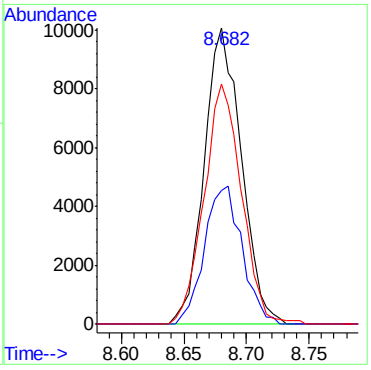




#67
tetrachloroethene
Concen: 13.38 ppb
RT: 8.682 min Scan# 1452
Delta R.T. -0.002 min
Lab File: G145664.D
Acq: 18 Sep 15 4:41 pm

Tgt Ion:166 Resp: 20733

Ion	Ratio	Lower	Upper
166	100		
168	45.2	15.8	75.8
129	81.1	47.3	107.3



Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145665.D
Acq On : 18 Sep 2015 5:09 pm
Operator : andrewd1
Sample : mc41356-10
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 20 08:36:17 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

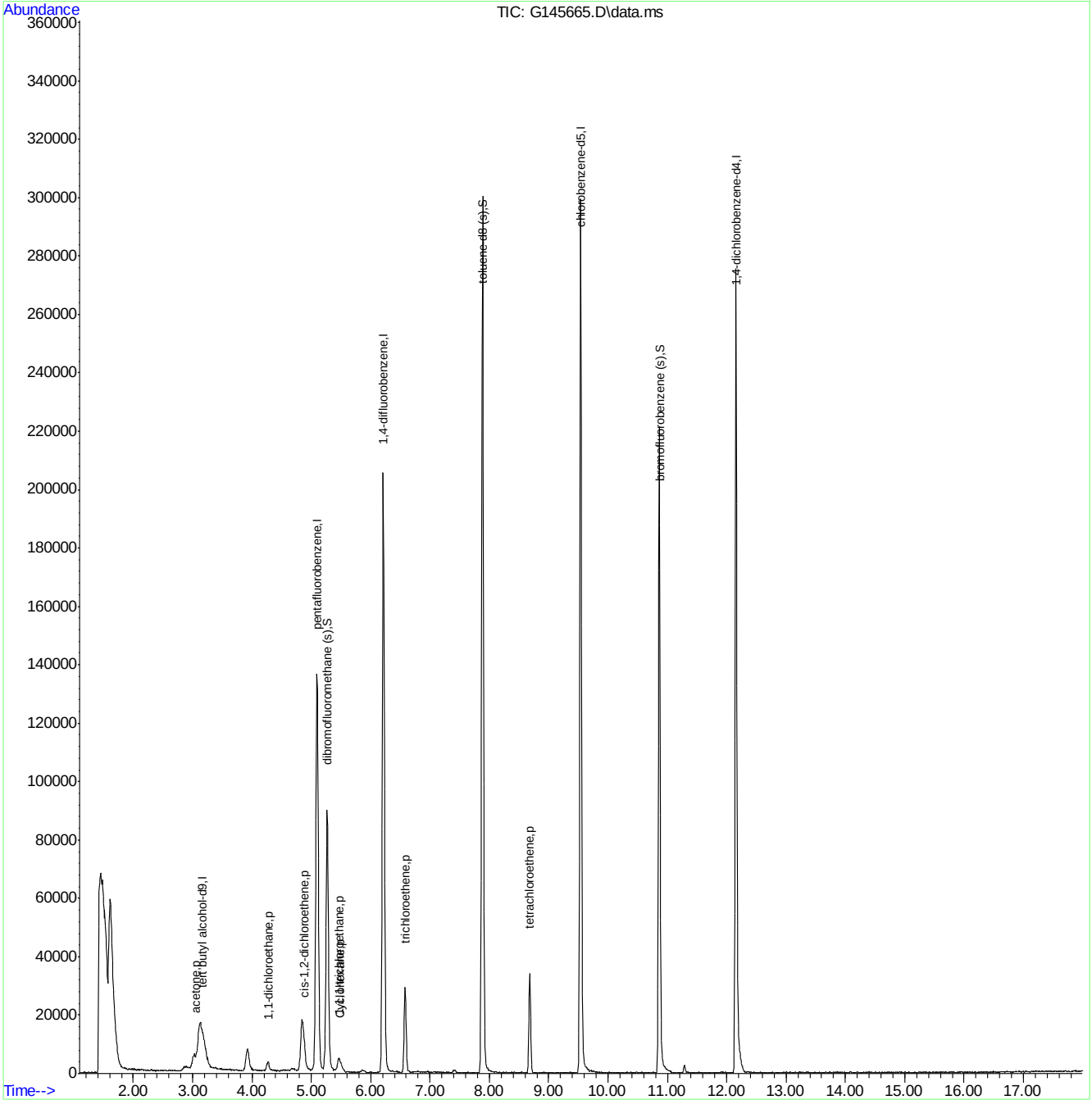
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.172	65	64832	500.00	ppb	0.02
4) pentafluorobenzene	5.100	168	138017	50.00	ppb	0.00
43) 1,4-difluorobenzene	6.216	114	222306	50.00	ppb	0.00
66) chlorobenzene-d5	9.541	82	106335	50.00	ppb	0.00
80) 1,4-dichlorobenzene-d4	12.164	152	89976	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	5.268	113	80402	52.05	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 104.10%			
60) toluene-d8 (s)	7.887	98	250418	51.20	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.40%			
82) bromofluorobenzene (s)	10.869	95	93246	53.66	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 107.32%			
Target Compounds						Qvalue
16) acetone	3.052	58	5743	23.21	ppb #	60
33) 1,1-dichloroethane	4.271	63	5290	1.52	ppb	90
37) cis-1,2-dichloroethene	4.880	96	4001	2.41	ppb	93
42) 1,1,1-trichloroethane	5.464	97	3688	1.57	ppb	84
44) Cyclohexane	5.493	56	2325	0.73	ppb	90
51) trichloroethene	6.580	95	13246	8.22	ppb	86
67) tetrachloroethene	8.682	166	12012	7.75	ppb	98

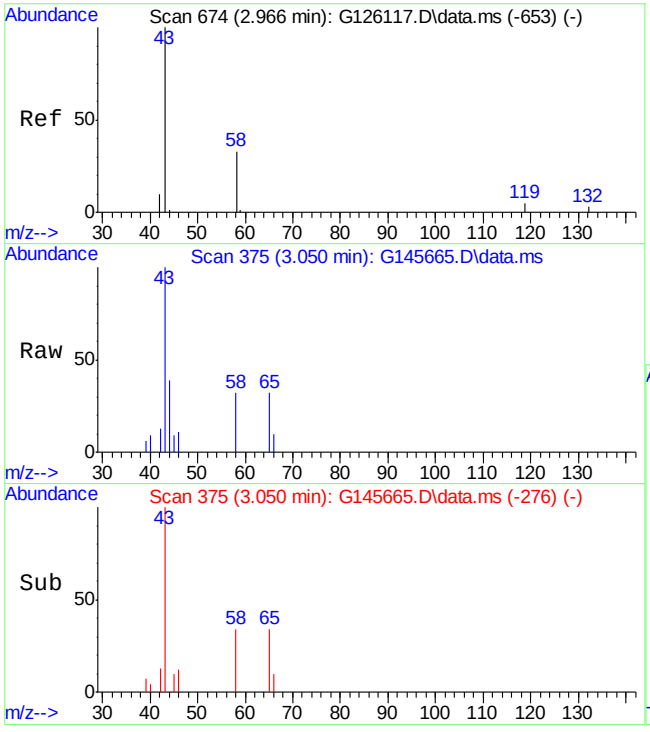
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145665.D
Acq On : 18 Sep 2015 5:09 pm
Operator : andrewd1
Sample : mc41356-10
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 20 08:36:17 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

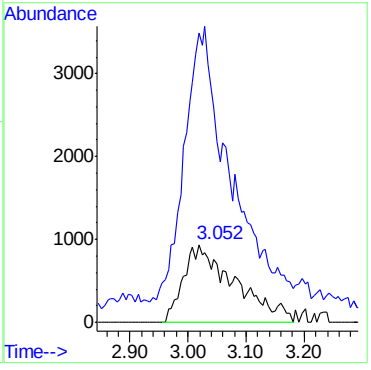


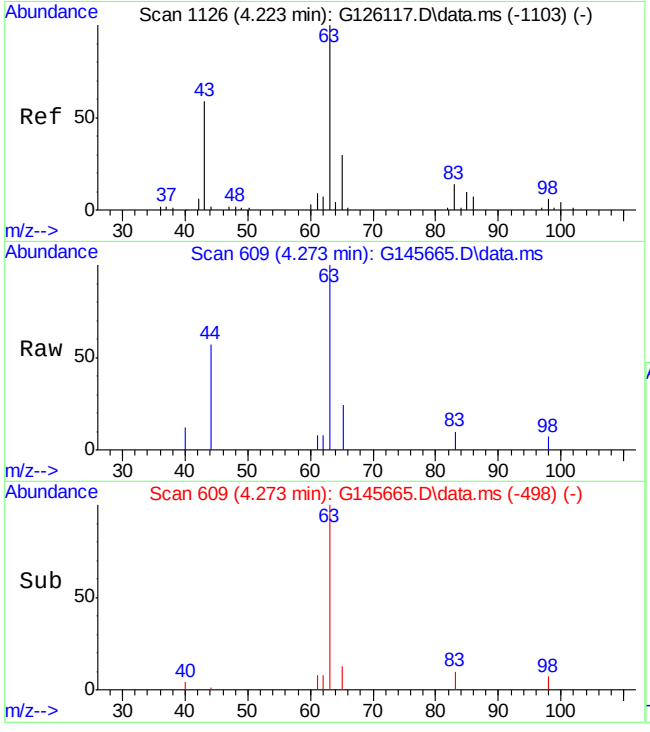


#16
acetone
Concen: 23.21 ppb
RT: 3.052 min Scan# 375
Delta R.T. 0.018 min
Lab File: G145665.D
Acq: 18 Sep 15 5:09 pm

Tgt Ion: 58 Resp: 5743

Ion	Ratio	Lower	Upper
58	100		
43	252.4	306.3	366.3#

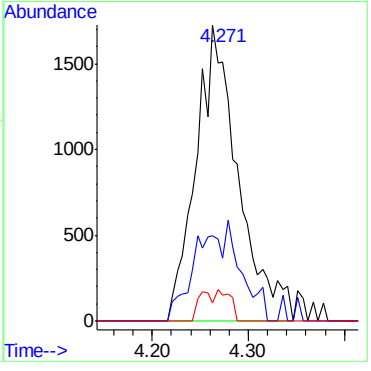


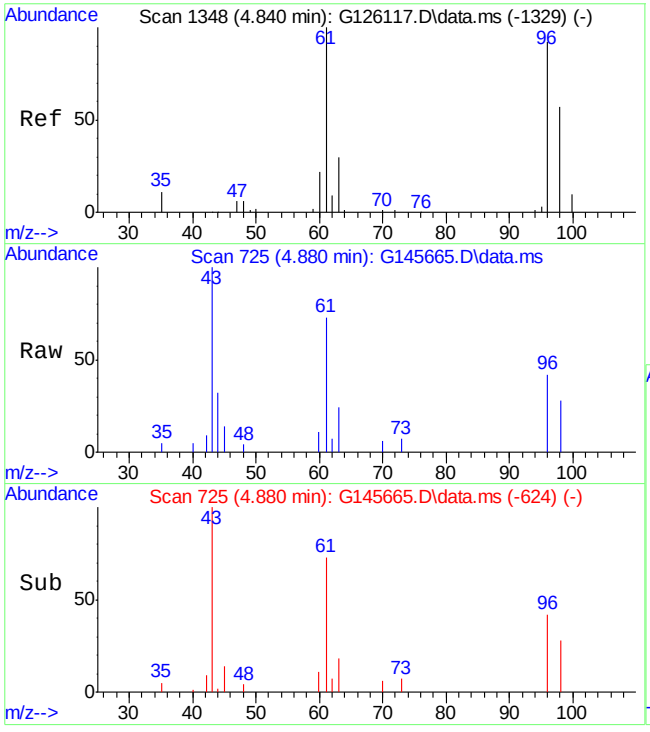


#33
1,1-dichloroethane
Concen: 1.52 ppb
RT: 4.271 min Scan# 609
Delta R.T. -0.010 min
Lab File: G145665.D
Acq: 18 Sep 15 5:09 pm

Tgt Ion: 63 Resp: 5290

Ion	Ratio	Lower	Upper
63	100		
65	24.5	1.5	61.5
83	10.2	0.0	41.1

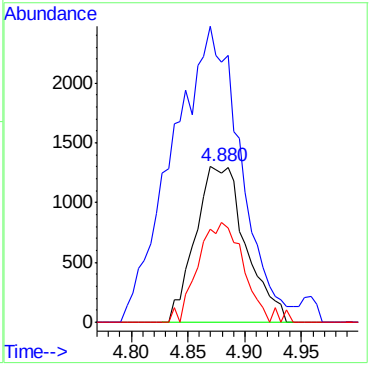


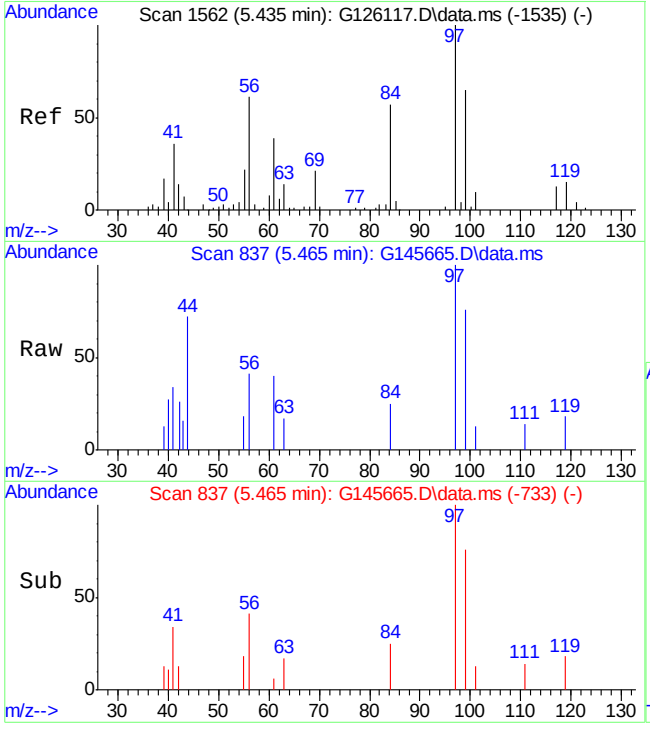


#37
cis-1,2-dichloroethene
Concen: 2.41 ppb
RT: 4.880 min Scan# 725
Delta R.T. -0.003 min
Lab File: G145665.D
Acq: 18 Sep 15 5:09 pm

Tgt Ion: 96 Resp: 4001

Ion	Ratio	Lower	Upper
96	100		
61	164.3	122.1	182.1
98	67.4	36.9	96.9

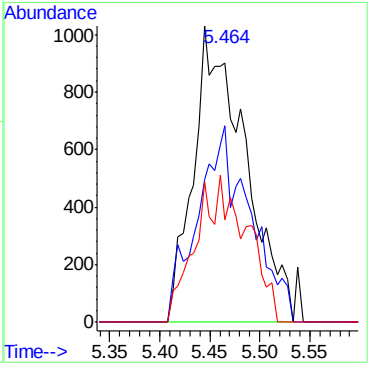




#42
1,1,1-trichloroethane
Concen: 1.57 ppb
RT: 5.464 min Scan# 837
Delta R.T. -0.009 min
Lab File: G145665.D
Acq: 18 Sep 15 5:09 pm

Tgt Ion: 97 Resp: 3688

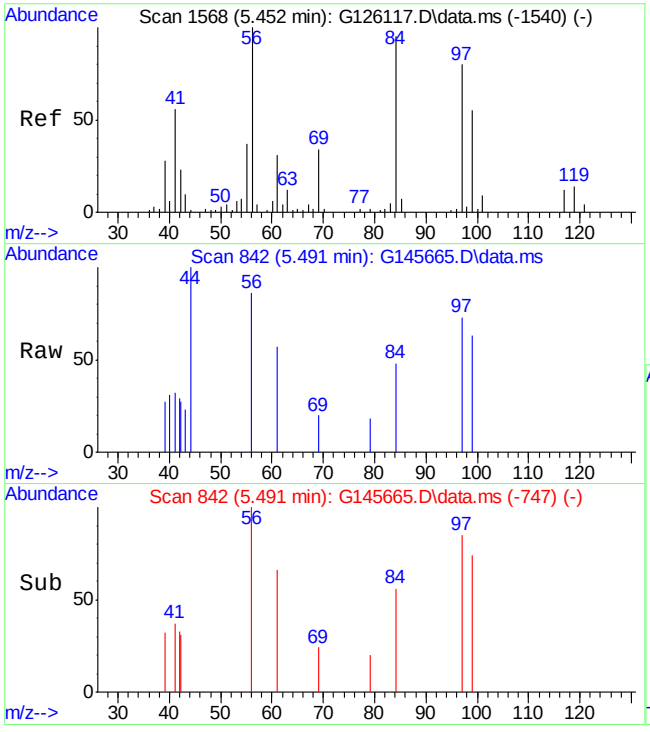
Ion	Ratio	Lower	Upper
97	100		
99	75.9	30.7	90.7
61	39.6	17.5	77.5



7.1.10

7

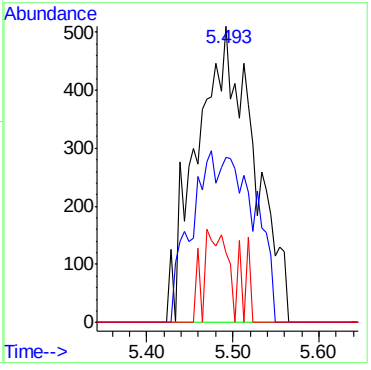
ACCUTEST LABORATORIES
MC41356

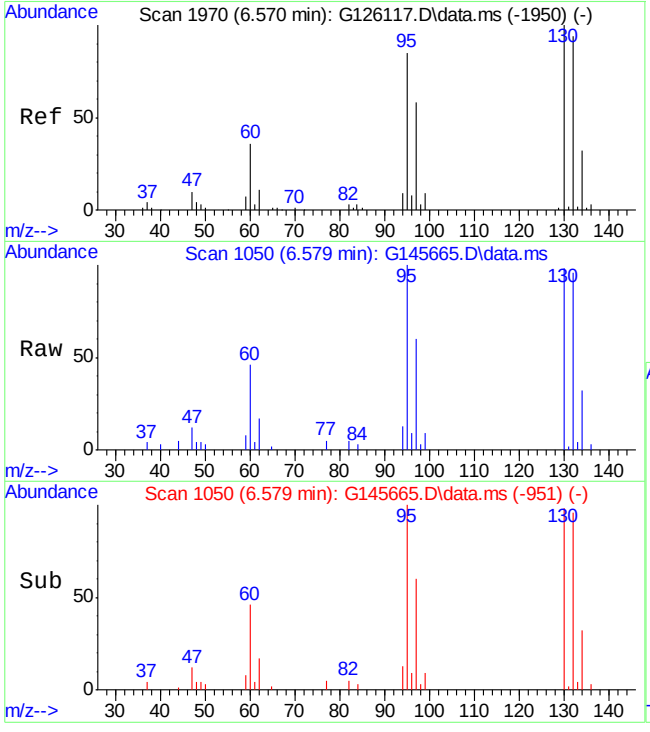


#44
Cyclohexane
Concen: 0.73 ppb
RT: 5.493 min Scan# 842
Delta R.T. -0.004 min
Lab File: G145665.D
Acq: 18 Sep 15 5:09 pm

Tgt Ion: 56 Resp: 2325

Ion	Ratio	Lower	Upper
56	100		
84	55.7	52.2	78.2
69	23.7	21.0	31.6

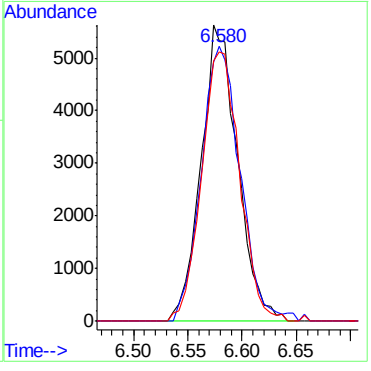


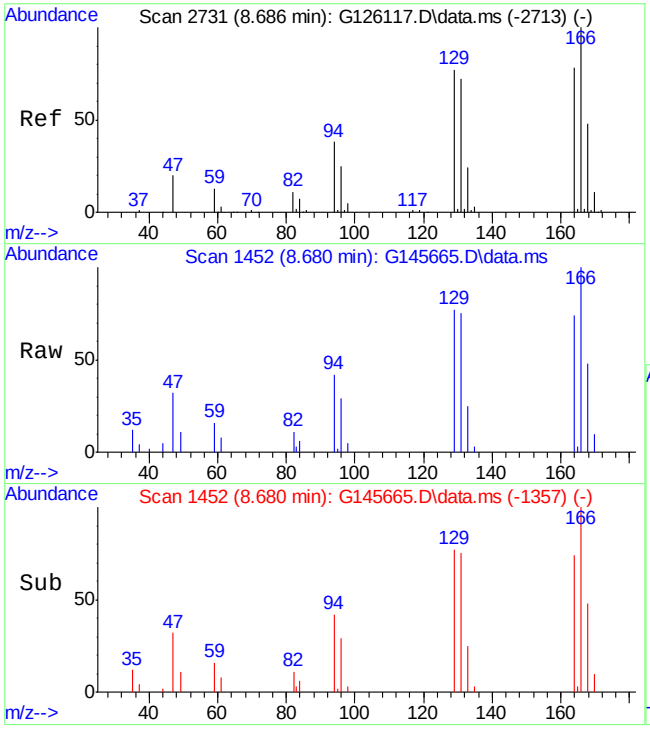


#51
trichloroethene
Concen: 8.22 ppb
RT: 6.580 min Scan# 1050
Delta R.T. -0.000 min
Lab File: G145665.D
Acq: 18 Sep 15 5:09 pm

Tgt Ion: 95 Resp: 13246

Ion	Ratio	Lower	Upper
95	100		
130	97.8	85.7	145.7
132	96.0	78.0	138.0

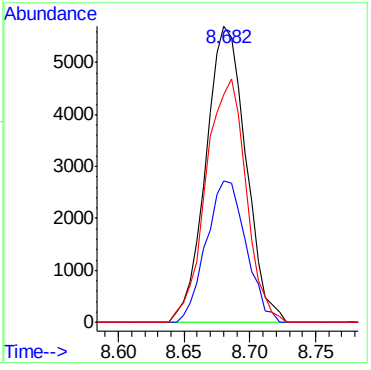




#67
tetrachloroethene
Concen: 7.75 ppb
RT: 8.682 min Scan# 1452
Delta R.T. -0.001 min
Lab File: G145665.D
Acq: 18 Sep 15 5:09 pm

Tgt Ion:166 Resp: 12012

Ion	Ratio	Lower	Upper
166	100		
168	47.8	15.8	75.8
129	76.7	47.3	107.3



7.1.10

7

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145666.D
Acq On : 18 Sep 2015 5:38 pm
Operator : andrewd1
Sample : mc41356-11
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 20 08:36:49 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

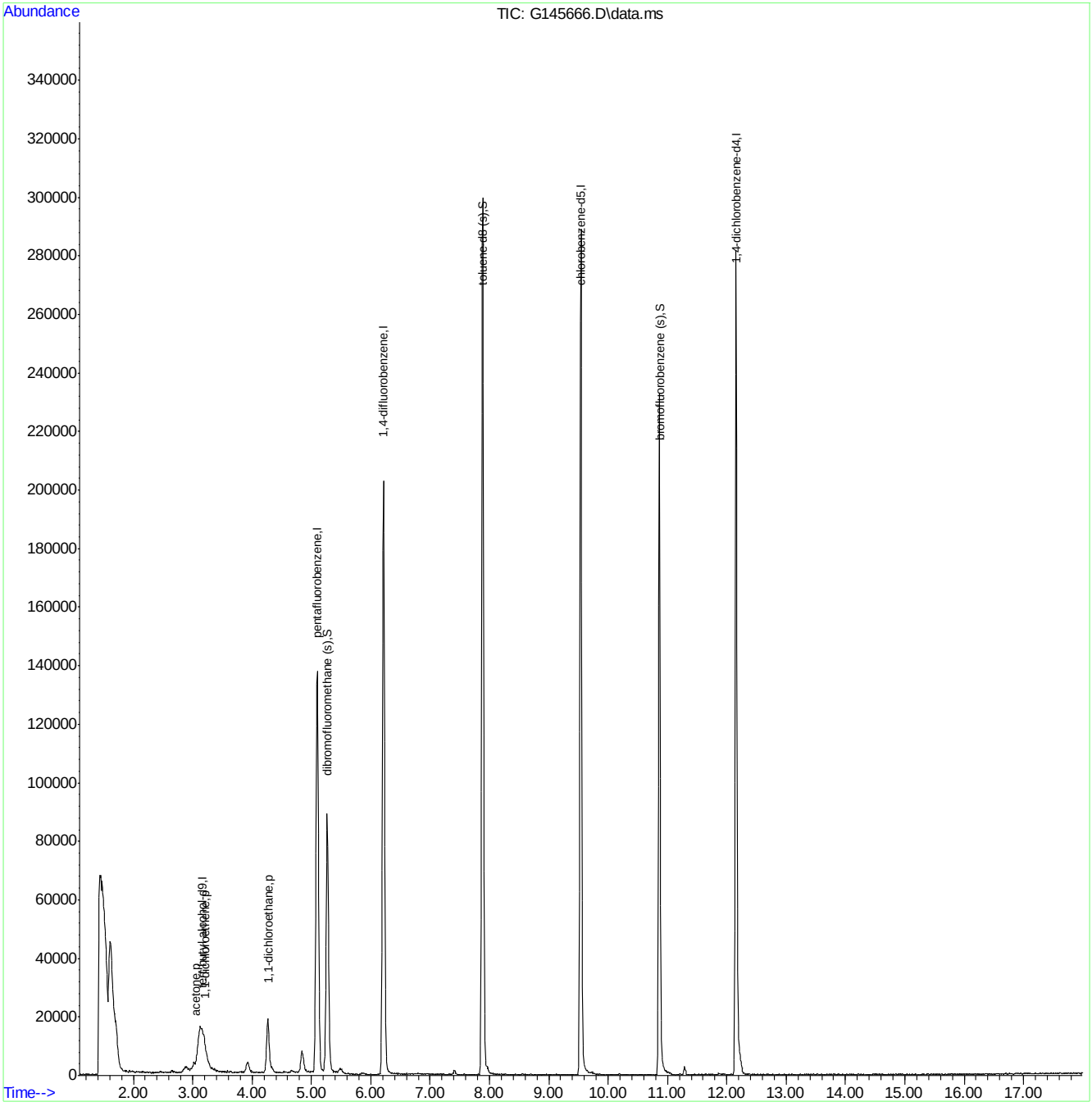
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.171	65	62889	500.00	ppb	0.02
4) pentafluorobenzene	5.101	168	138331	50.00	ppb	0.00
43) 1,4-difluorobenzene	6.217	114	223450	50.00	ppb	0.00
66) chlorobenzene-d5	9.542	82	106288	50.00	ppb	0.00
80) 1,4-dichlorobenzene-d4	12.163	152	92025	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	5.269	113	80941	52.28	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 104.56%			
60) toluene-d8 (s)	7.888	98	253943	51.66	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.32%			
82) bromofluorobenzene (s)	10.868	95	92165	51.86	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.72%			
Target Compounds						Qvalue
15) 1,1-dichloroethene	3.210	96	3608	2.43	ppb	# 71
16) acetone	3.054	58	3335	13.45	ppb	# 33
33) 1,1-dichloroethane	4.276	63	32644	9.37	ppb	98

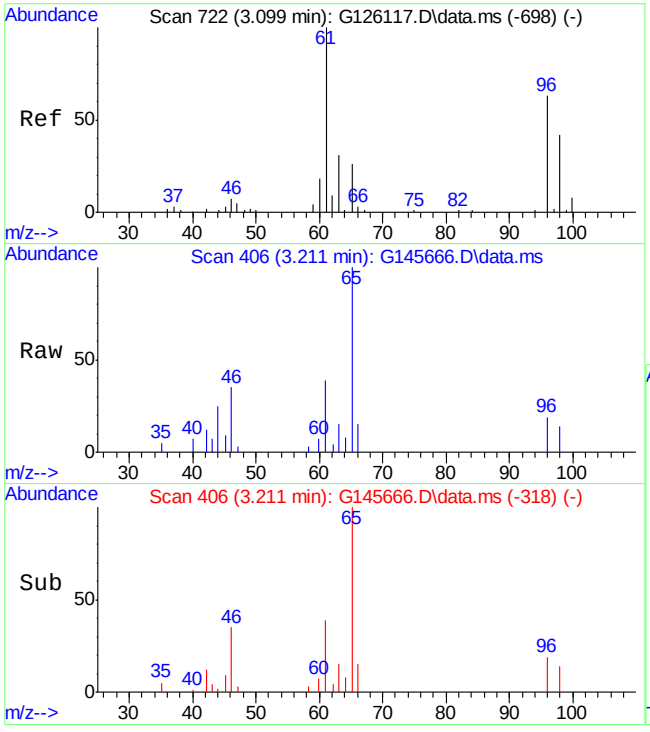
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145666.D
Acq On : 18 Sep 2015 5:38 pm
Operator : andrewd1
Sample : mc41356-11
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 20 08:36:49 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

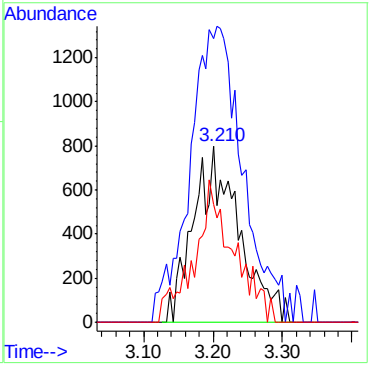


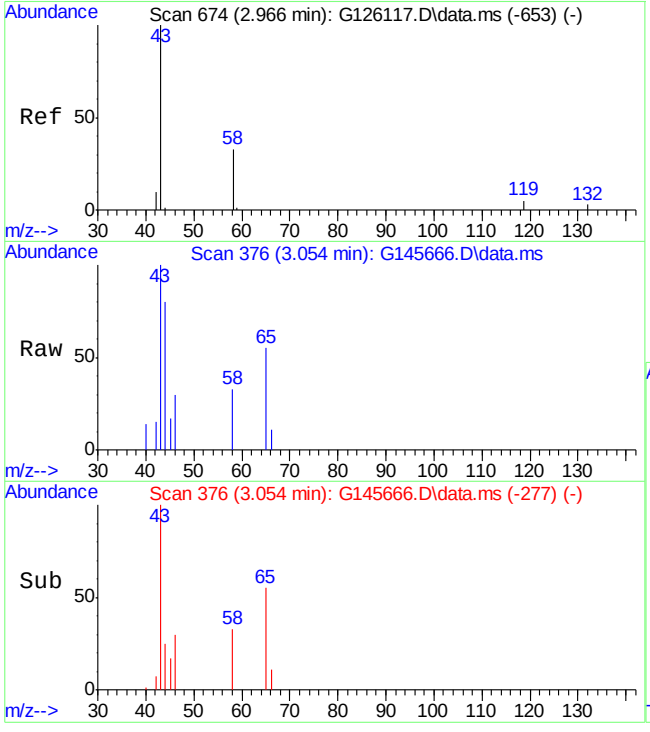


#15
1,1-dichloroethene
Concen: 2.43 ppb
RT: 3.210 min Scan# 406
Delta R.T. -0.043 min
Lab File: G145666.D
Acq: 18 Sep 15 5:38 pm

Tgt Ion: 96 Resp: 3608

Ion	Ratio	Lower	Upper
96	100		
61	206.2	137.8	197.8#
63	79.3	25.8	85.8

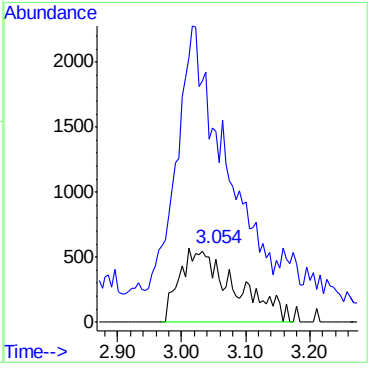


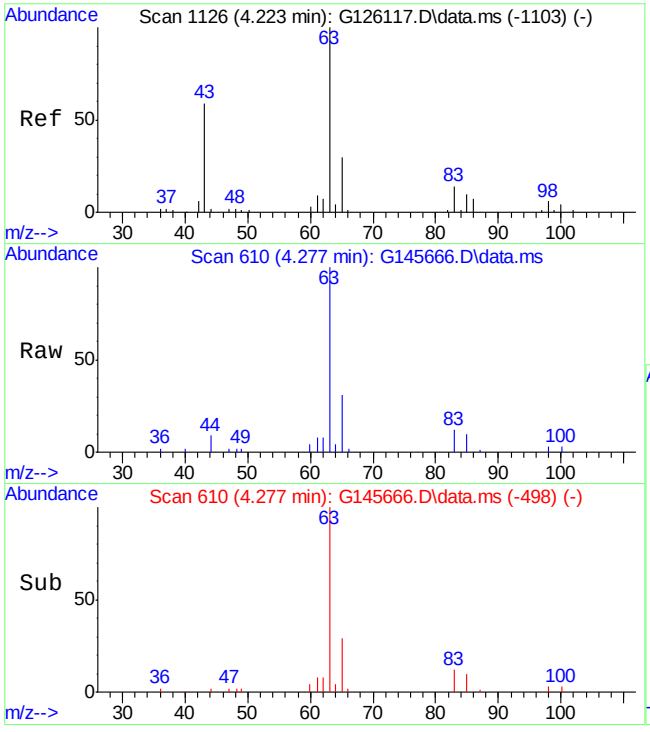


#16
acetone
Concen: 13.45 ppb
RT: 3.054 min Scan# 376
Delta R.T. 0.021 min
Lab File: G145666.D
Acq: 18 Sep 15 5:38 pm

Tgt Ion: 58 Resp: 3335

Ion	Ratio	Lower	Upper
58	100		
43	194.8	306.3	366.3#

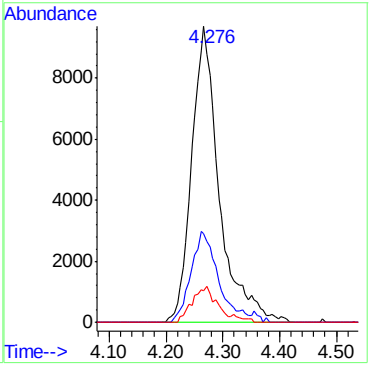




#33
1,1-dichloroethane
Concen: 9.37 ppb
RT: 4.276 min Scan# 610
Delta R.T. -0.005 min
Lab File: G145666.D
Acq: 18 Sep 15 5:38 pm

Tgt Ion: 63 Resp: 32644

Ion	Ratio	Lower	Upper
63	100		
65	30.6	1.5	61.5
83	11.6	0.0	41.1



7.1.11

7

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145667.D
Acq On : 18 Sep 2015 6:06 pm
Operator : andrewd1
Sample : mc41356-12
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 20 08:37:04 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

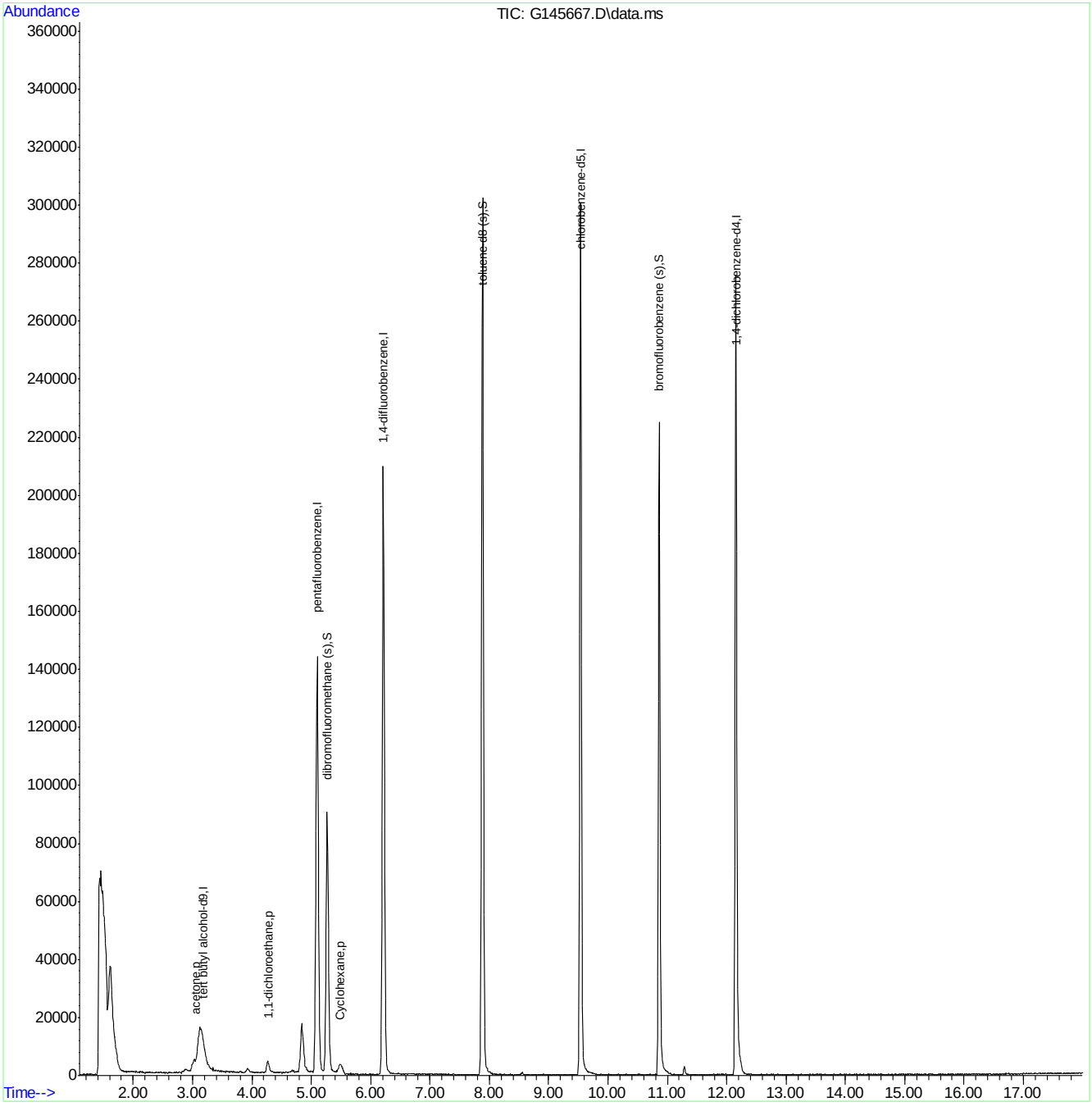
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.181	65	63951	500.00	ppb	0.03
4) pentafluorobenzene	5.102	168	141150	50.00	ppb	0.00
43) 1,4-difluorobenzene	6.218	114	227234	50.00	ppb	0.00
66) chlorobenzene-d5	9.542	82	106826	50.00	ppb	0.00
80) 1,4-dichlorobenzene-d4	12.163	152	91551	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	5.270	113	82929	52.49	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 104.98%			
60) toluene-d8 (s)	7.887	98	257663	51.54	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.08%			
82) bromofluorobenzene (s)	10.869	95	95337	53.92	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 107.84%			
Target Compounds						Qvalue
16) acetone	3.054	58	4548	17.97	ppb #	77
33) 1,1-dichloroethane	4.278	63	7419	2.09	ppb	84
44) Cyclohexane	5.490	56	3425	1.05	ppb	98

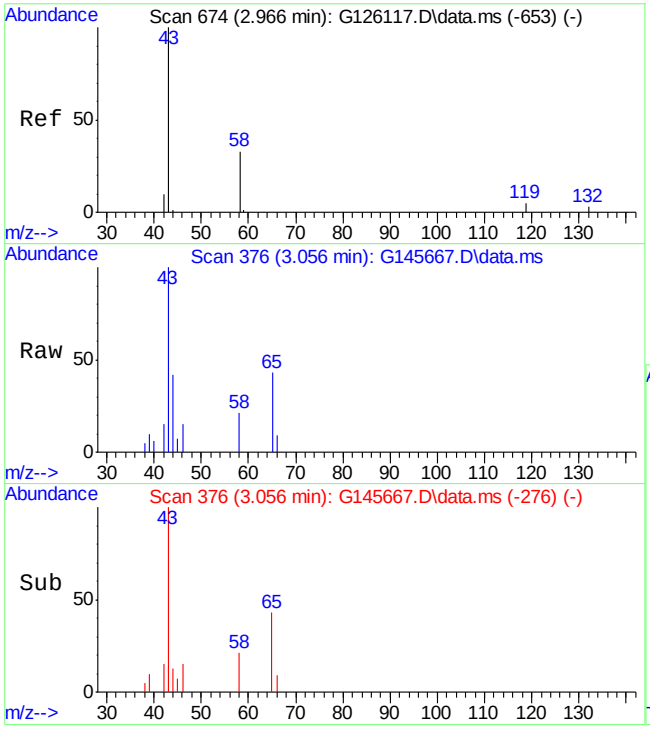
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145667.D
Acq On : 18 Sep 2015 6:06 pm
Operator : andrewd1
Sample : mc41356-12
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 20 08:37:04 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

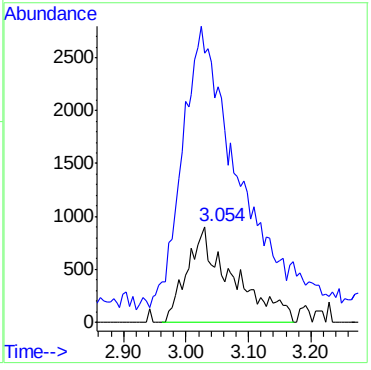


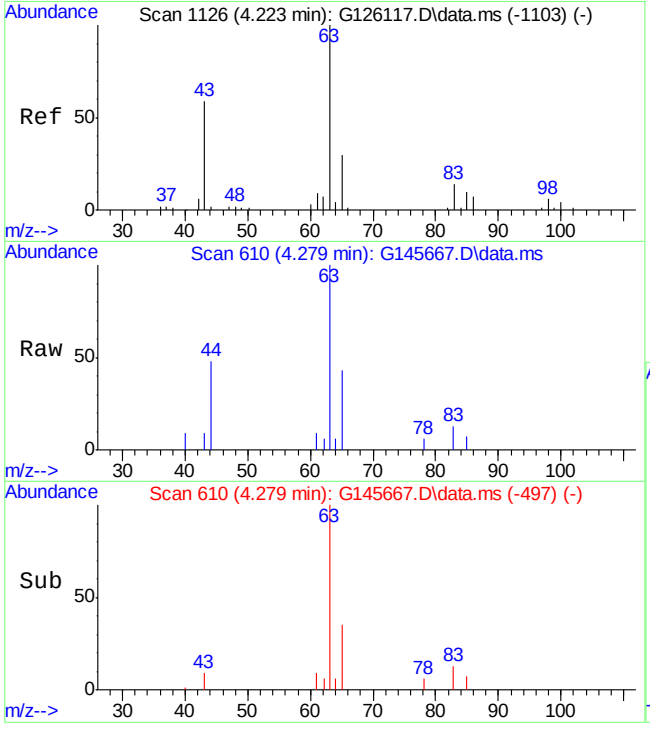


#16
acetone
Concen: 17.97 ppb
RT: 3.054 min Scan# 376
Delta R.T. 0.020 min
Lab File: G145667.D
Acq: 18 Sep 15 6:06 pm

Tgt Ion: 58 Resp: 4548

Ion	Ratio	Lower	Upper
58	100		
43	385.4	306.3	366.3#

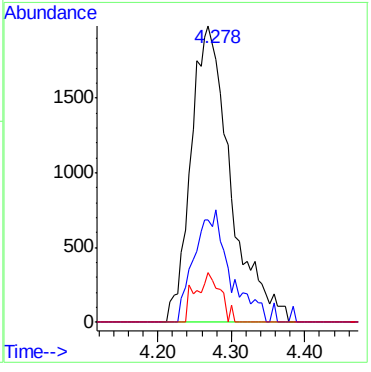


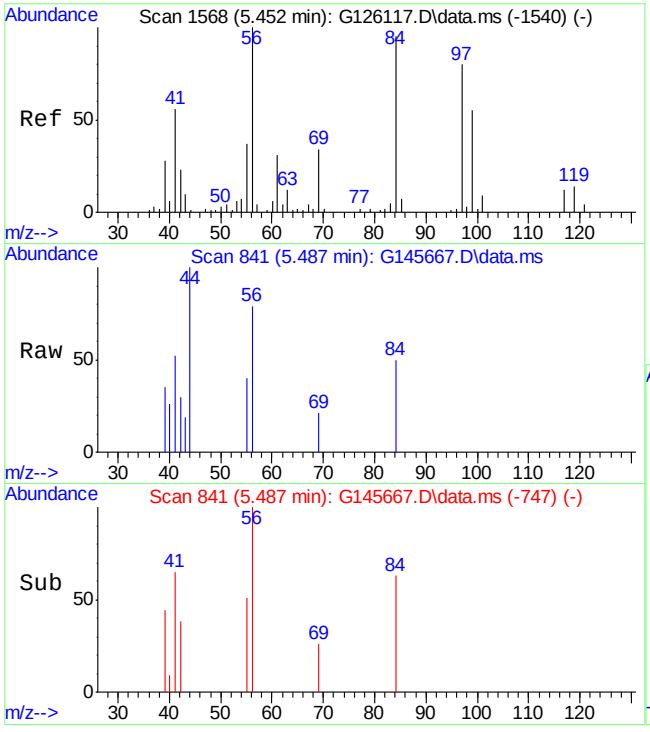


#33
1,1-dichloroethane
Concen: 2.09 ppb
RT: 4.278 min Scan# 610
Delta R.T. -0.003 min
Lab File: G145667.D
Acq: 18 Sep 15 6:06 pm

Tgt Ion: 63 Resp: 7419

Ion	Ratio	Lower	Upper
63	100		
65	42.6	1.5	61.5
83	12.8	0.0	41.1

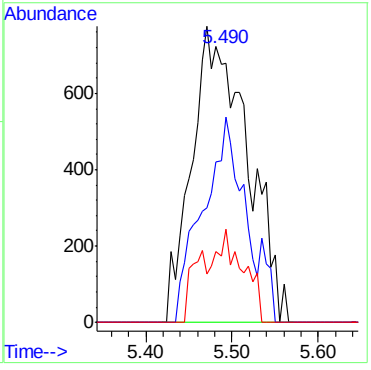




#44
Cyclohexane
Concen: 1.05 ppb
RT: 5.490 min Scan# 841
Delta R.T. -0.007 min
Lab File: G145667.D
Acq: 18 Sep 15 6:06 pm

Tgt Ion: 56 Resp: 3425

Ion	Ratio	Lower	Upper
56	100		
84	62.8	52.2	78.2
69	25.9	21.0	31.6



7.1.12

7

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145668.D
Acq On : 18 Sep 2015 6:35 pm
Operator : andrewd1
Sample : mc41356-13
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 20 08:37:49 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.176	65	63680	500.00	ppb	0.03
4) pentafluorobenzene	5.101	168	141028	50.00	ppb	0.00
43) 1,4-difluorobenzene	6.217	114	226753	50.00	ppb	0.00
66) chlorobenzene-d5	9.542	82	106819	50.00	ppb	0.00
80) 1,4-dichlorobenzene-d4	12.163	152	92173	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	5.269	113	81547	51.66	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.32%			
60) toluene-d8 (s)	7.887	98	255257	51.17	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.34%			
82) bromofluorobenzene (s)	10.868	95	94174	52.90	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 105.80%			
Target Compounds						Qvalue
15) 1,1-dichloroethene	3.218	96	24778	16.34	ppb #	78
16) acetone	3.050	58	4192	16.58	ppb #	70
33) 1,1-dichloroethane	4.275	63	7034	1.98	ppb	96
37) cis-1,2-dichloroethene	4.885	96	43427	25.62	ppb	98
44) Cyclohexane	5.492	56	1775	0.54	ppb	91
51) trichloroethene	6.579	95	1740	1.06	ppb #	67

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

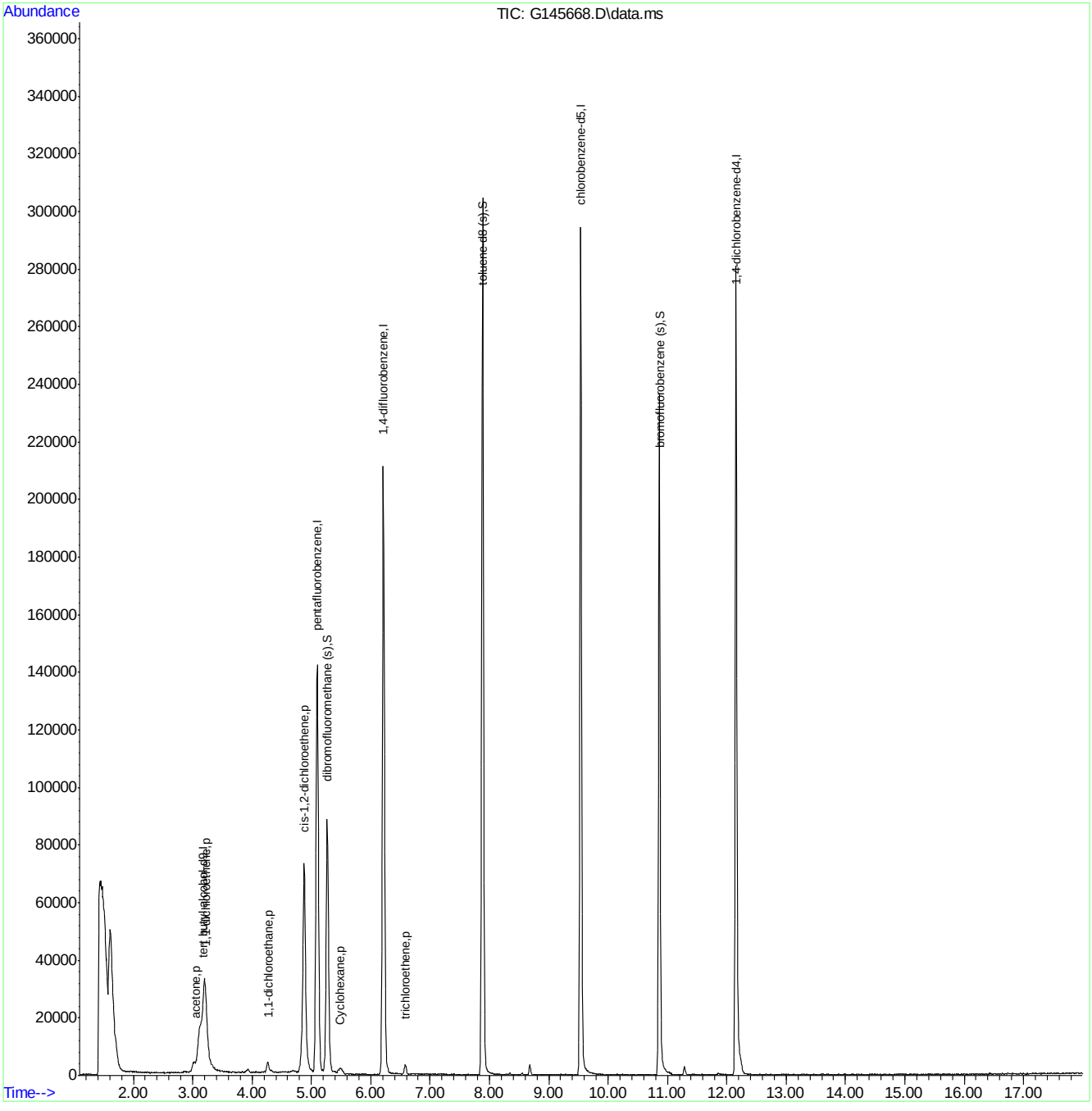
7.1.13

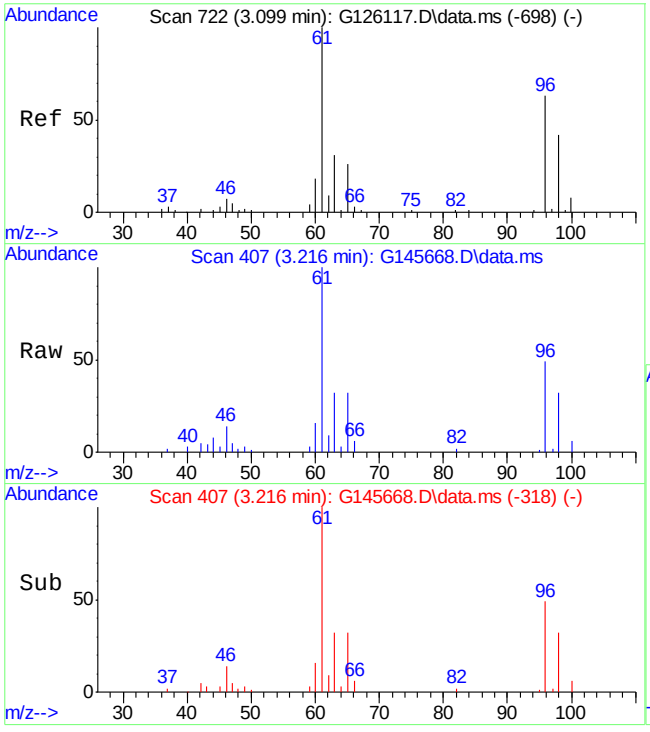
7

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145668.D
Acq On : 18 Sep 2015 6:35 pm
Operator : andrewd1
Sample : mc41356-13
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 20 08:37:49 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

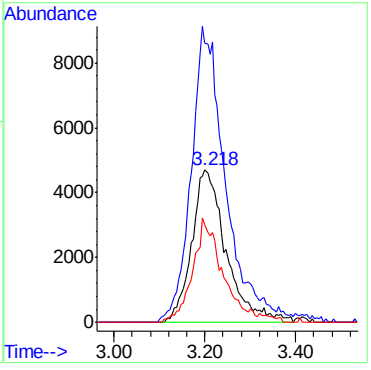


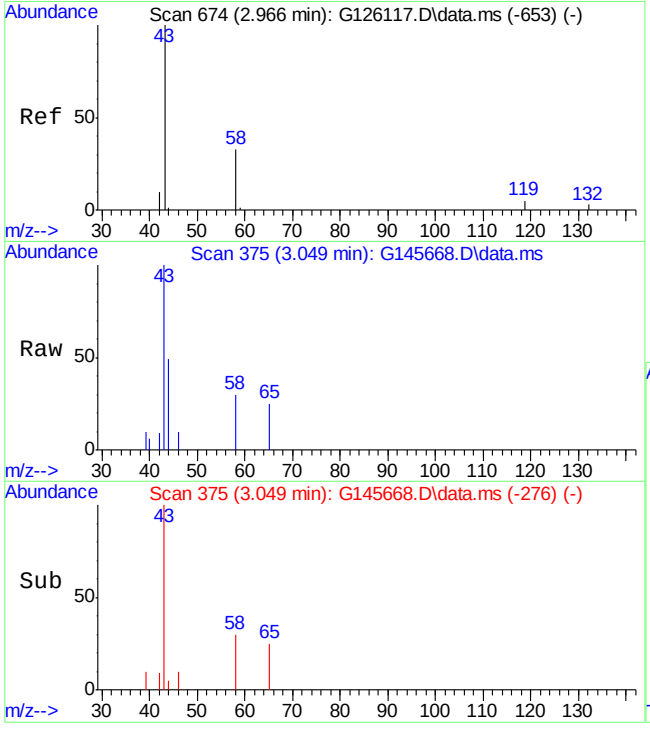


#15
1,1-dichloroethene
Concen: 16.34 ppb
RT: 3.218 min Scan# 407
Delta R.T. -0.035 min
Lab File: G145668.D
Acq: 18 Sep 15 6:35 pm

Tgt Ion: 96 Resp: 24778

Ion	Ratio	Lower	Upper
96	100		
61	202.0	137.8	197.8#
63	65.6	25.8	85.8

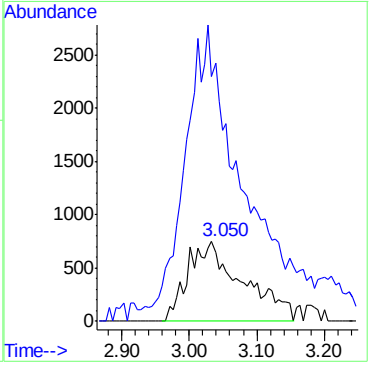


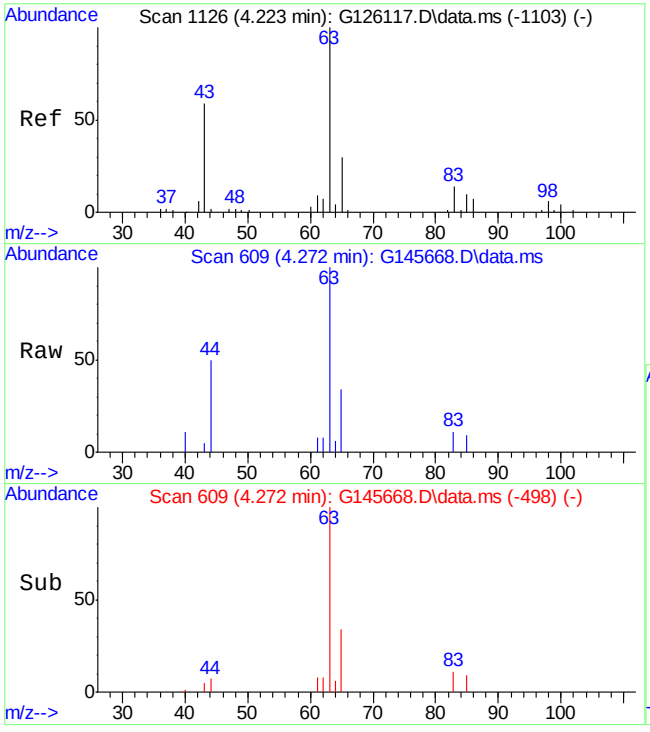


#16
acetone
Concen: 16.58 ppb
RT: 3.050 min Scan# 375
Delta R.T. 0.017 min
Lab File: G145668.D
Acq: 18 Sep 15 6:35 pm

Tgt Ion: 58 Resp: 4192

Ion	Ratio	Lower	Upper
58	100		
43	273.7	306.3	366.3#

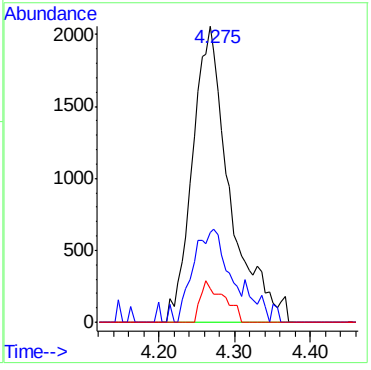


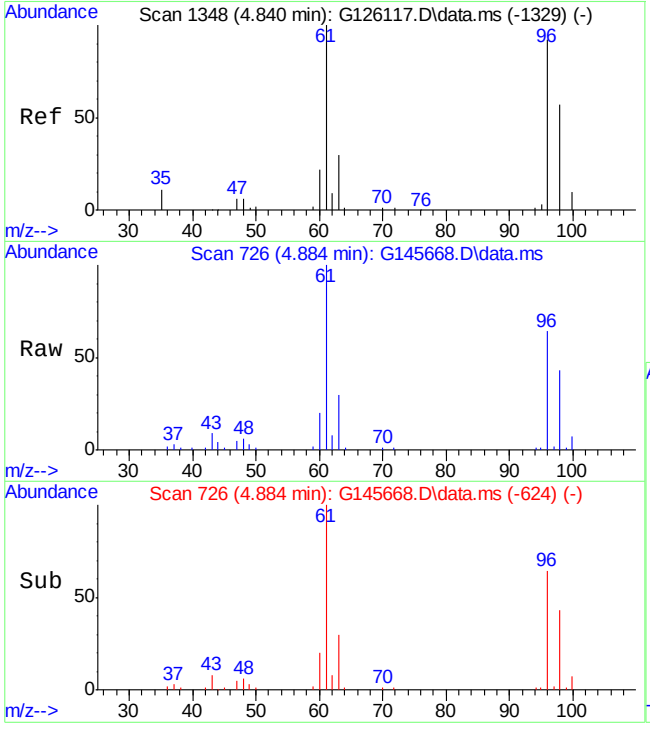


#33
1,1-dichloroethane
Concen: 1.98 ppb
RT: 4.275 min Scan# 609
Delta R.T. -0.006 min
Lab File: G145668.D
Acq: 18 Sep 15 6:35 pm

Tgt Ion: 63 Resp: 7034

Ion	Ratio	Lower	Upper
63	100		
65	34.1	1.5	61.5
83	10.5	0.0	41.1

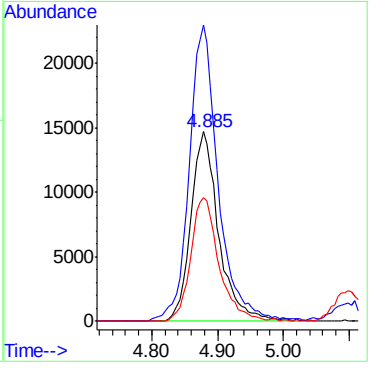


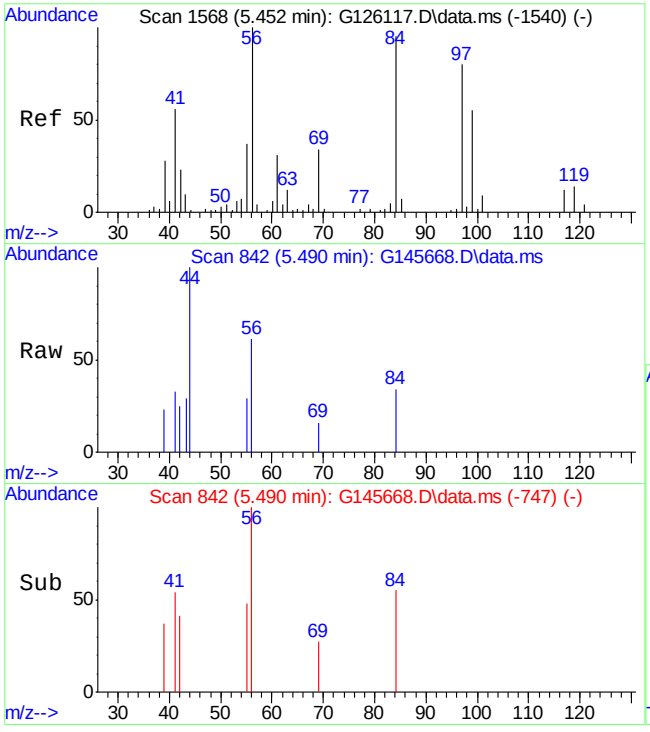


#37
cis-1,2-dichloroethene
Concen: 25.62 ppb
RT: 4.885 min Scan# 726
Delta R.T. 0.002 min
Lab File: G145668.D
Acq: 18 Sep 15 6:35 pm

Tgt Ion: 96 Resp: 43427

Ion	Ratio	Lower	Upper
96	100		
61	155.0	122.1	182.1
98	67.5	36.9	96.9

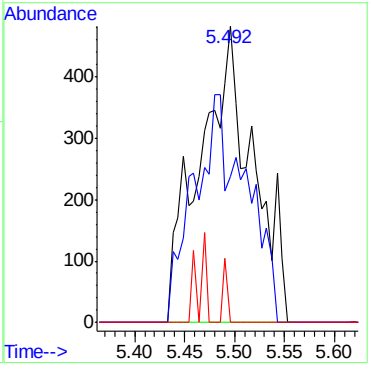


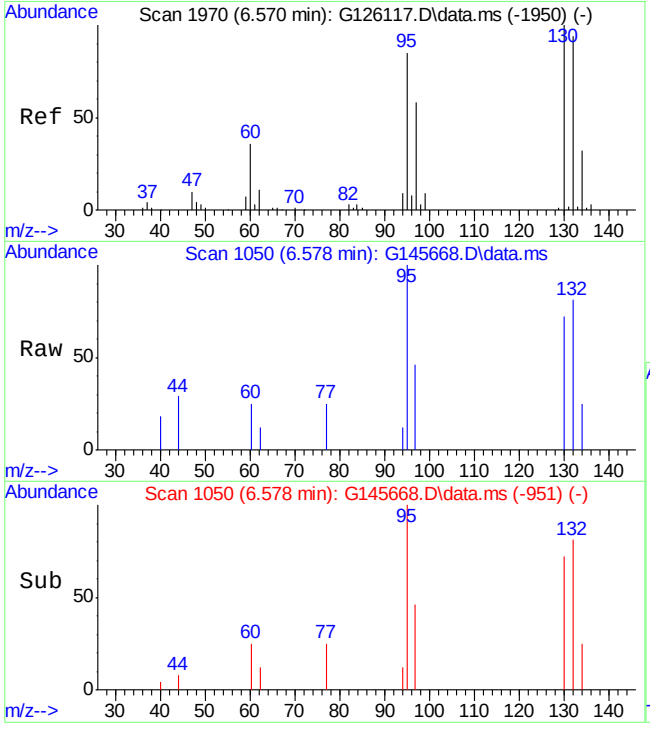


#44
Cyclohexane
Concen: 0.54 ppb
RT: 5.492 min Scan# 842
Delta R.T. -0.005 min
Lab File: G145668.D
Acq: 18 Sep 15 6:35 pm

Tgt Ion: 56 Resp: 1775

Ion	Ratio	Lower	Upper
56	100		
84	55.0	52.2	78.2
69	26.7	21.0	31.6

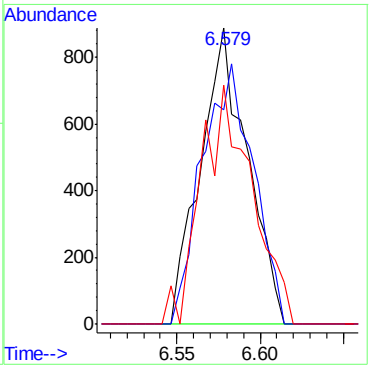




#51
trichloroethene
Concen: 1.06 ppb
RT: 6.579 min Scan# 1050
Delta R.T. -0.001 min
Lab File: G145668.D
Acq: 18 Sep 15 6:35 pm

Tgt Ion: 95 Resp: 1740

Ion	Ratio	Lower	Upper
95	100		
130	72.3	85.7	145.7#
132	80.6	78.0	138.0



Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145669.D
Acq On : 18 Sep 2015 7:03 pm
Operator : andrewd1
Sample : mc41356-14
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 20 08:38:39 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.177	65	63598	500.00	ppb	0.03
4) pentafluorobenzene	5.102	168	139796	50.00	ppb	0.00
43) 1,4-difluorobenzene	6.218	114	226378	50.00	ppb	0.00
66) chlorobenzene-d5	9.541	82	106279	50.00	ppb	0.00
80) 1,4-dichlorobenzene-d4	12.163	152	91562	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	5.269	113	81957	52.38	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 104.76%			
60) toluene-d8 (s)	7.888	98	254668	51.13	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.26%			
82) bromofluorobenzene (s)	10.869	95	94368	53.36	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 106.72%			
Target Compounds						Qvalue
16) acetone	3.053	58	4945	19.73	ppb	94
44) Cyclohexane	5.493	56	2209	0.68	ppb #	88

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

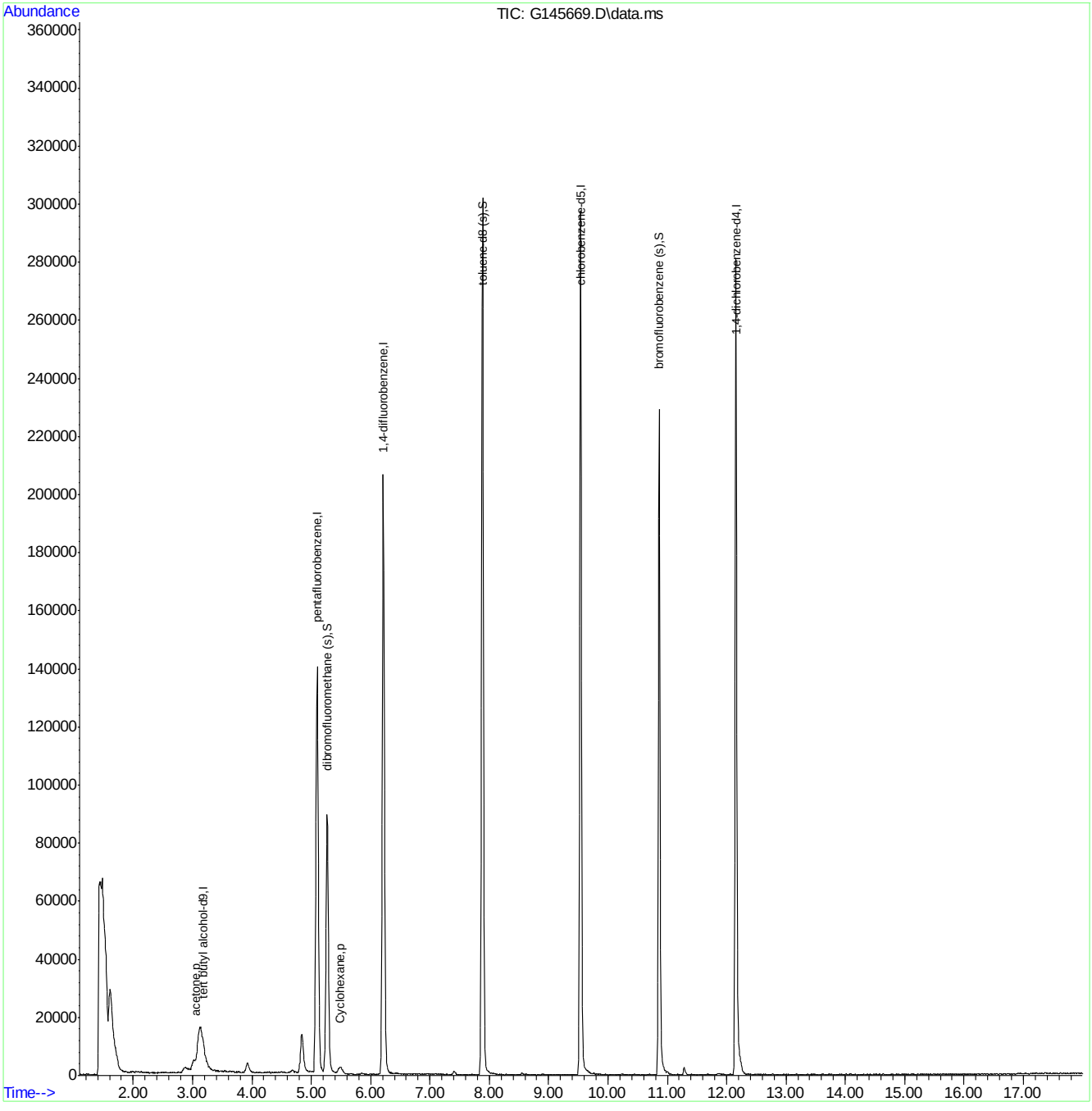
7.1.14

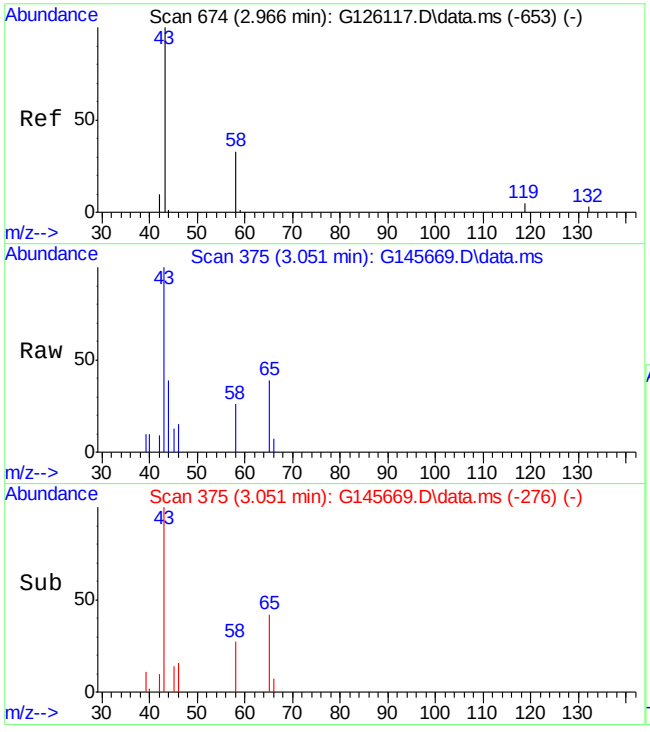
7

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145669.D
Acq On : 18 Sep 2015 7:03 pm
Operator : andrewd1
Sample : mc41356-14
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 20 08:38:39 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

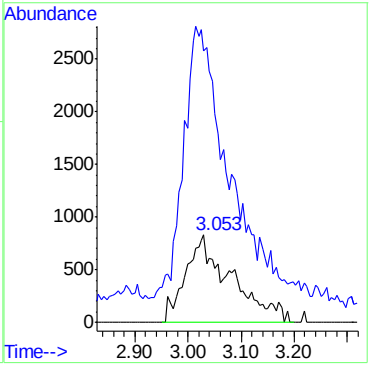


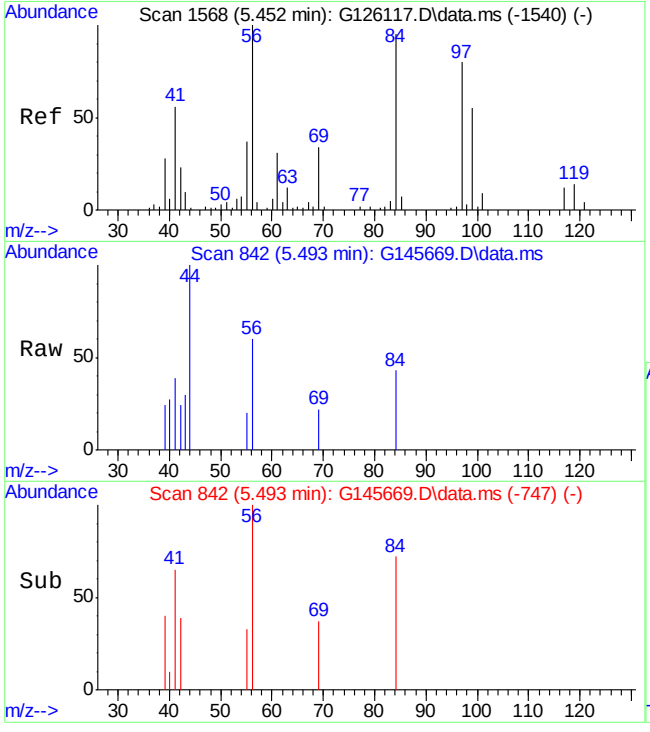


#16
acetone
Concen: 19.73 ppb
RT: 3.053 min Scan# 375
Delta R.T. 0.020 min
Lab File: G145669.D
Acq: 18 Sep 15 7:03 pm

Tgt Ion: 58 Resp: 4945

Ion	Ratio	Lower	Upper
58	100		
43	324.5	306.3	366.3

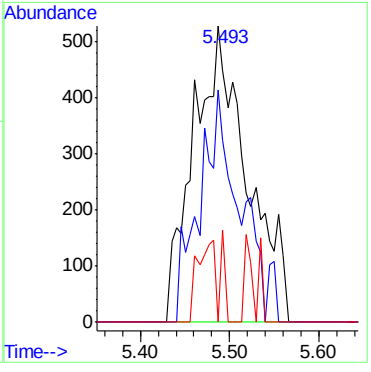




#44
Cyclohexane
Concen: 0.68 ppb
RT: 5.493 min Scan# 842
Delta R.T. -0.003 min
Lab File: G145669.D
Acq: 18 Sep 15 7:03 pm

Tgt Ion: 56 Resp: 2209

Ion	Ratio	Lower	Upper
56	100		
84	72.5	52.2	78.2
69	36.7	21.0	31.6#



Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145670.D
Acq On : 18 Sep 2015 7:32 pm
Operator : andrewd1
Sample : mc41356-15
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 20 08:39:08 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

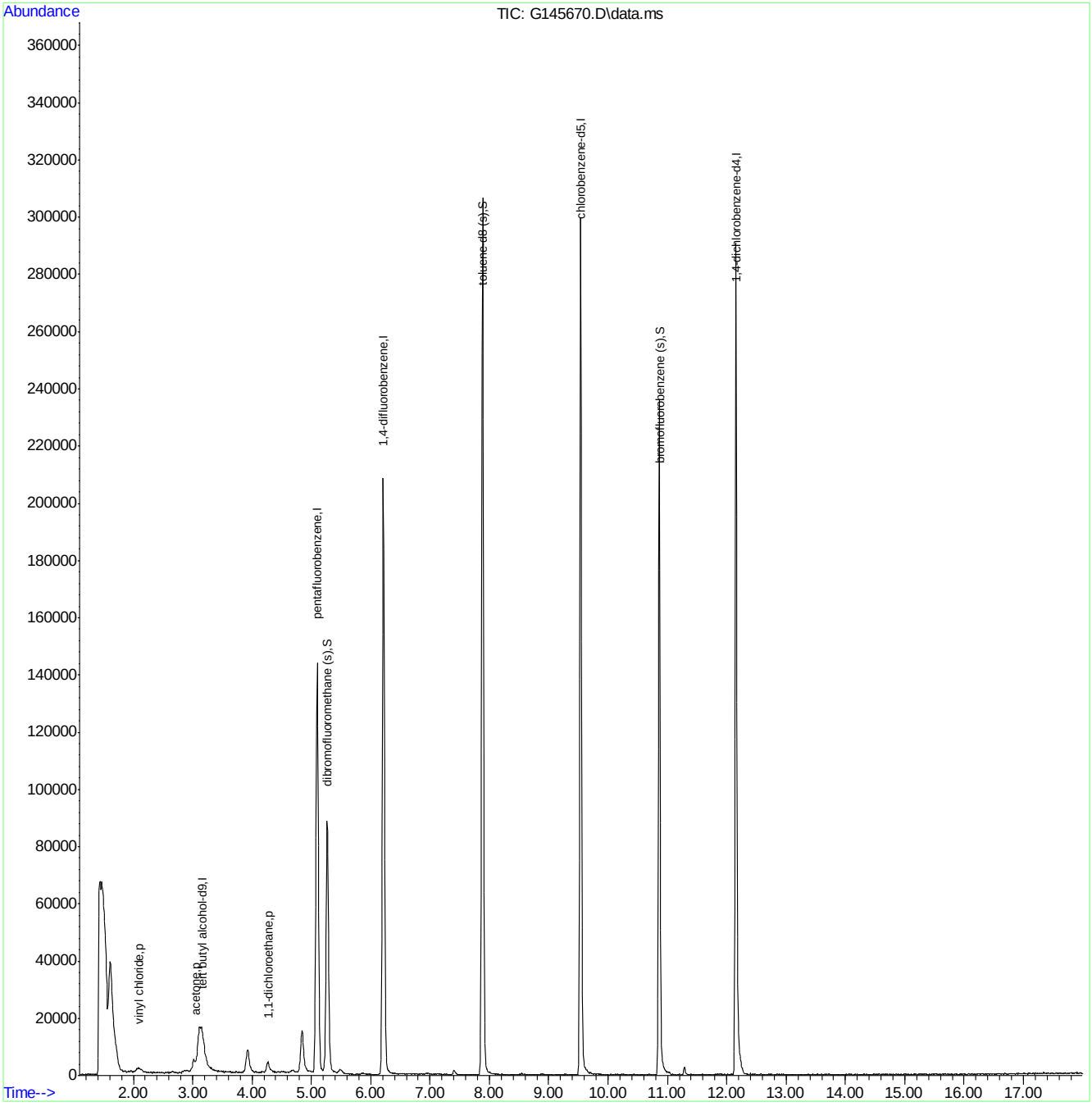
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.164	65	64413	500.00	ppb	0.01
4) pentafluorobenzene	5.101	168	141572	50.00	ppb	0.00
43) 1,4-difluorobenzene	6.217	114	226093	50.00	ppb	0.00
66) chlorobenzene-d5	9.540	82	107510	50.00	ppb	0.00
80) 1,4-dichlorobenzene-d4	12.162	152	93320	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	5.269	113	82388	51.99	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.98%			
60) toluene-d8 (s)	7.887	98	257880	51.84	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.68%			
82) bromofluorobenzene (s)	10.868	95	95684	53.09	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 106.18%			
Target Compounds						Qvalue
7) vinyl chloride	2.098	62	5656	2.59	ppb	93
16) acetone	3.053	58	5221	20.57	ppb	91
33) 1,1-dichloroethane	4.278	63	7902	2.22	ppb	92

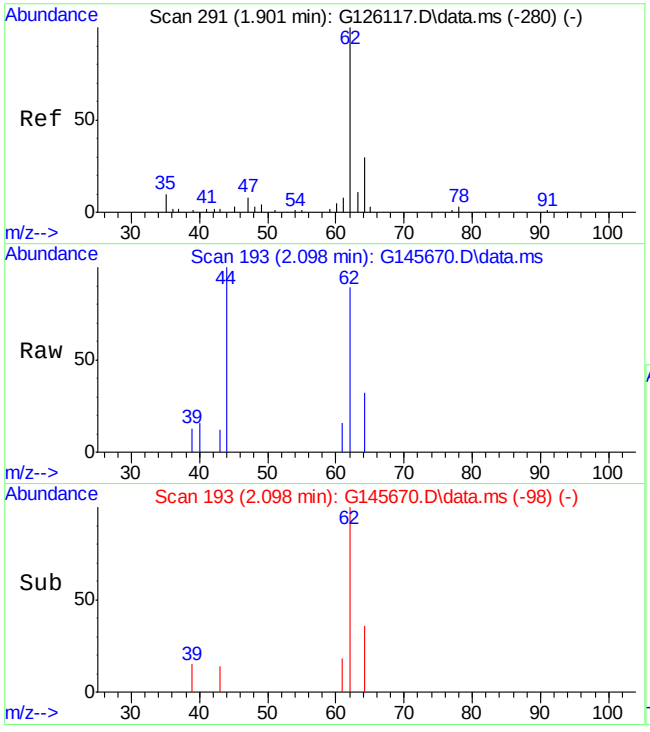
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145670.D
Acq On : 18 Sep 2015 7:32 pm
Operator : andrewd1
Sample : mc41356-15
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 20 08:39:08 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

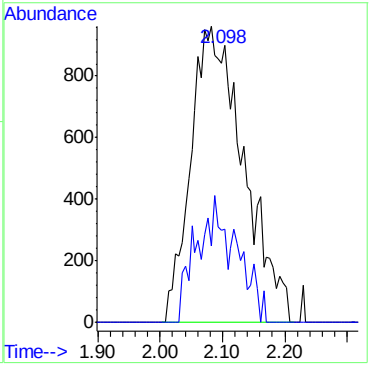


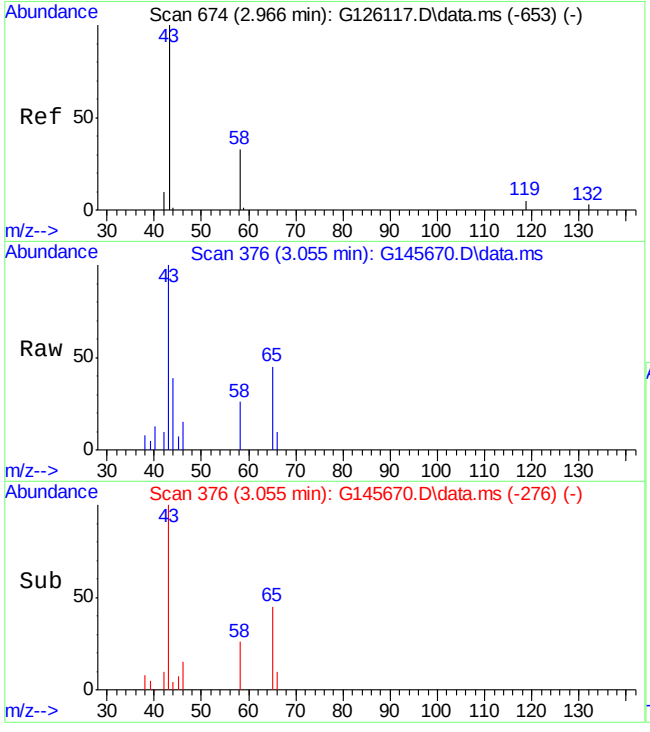


#7
vinyl chloride
Concen: 2.59 ppb
RT: 2.098 min Scan# 193
Delta R.T. -0.003 min
Lab File: G145670.D
Acq: 18 Sep 15 7:32 pm

Tgt Ion: 62 Resp: 5656

Ion	Ratio	Lower	Upper
62	100		
64	35.6	1.5	61.5

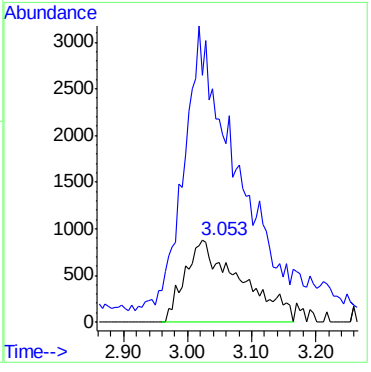


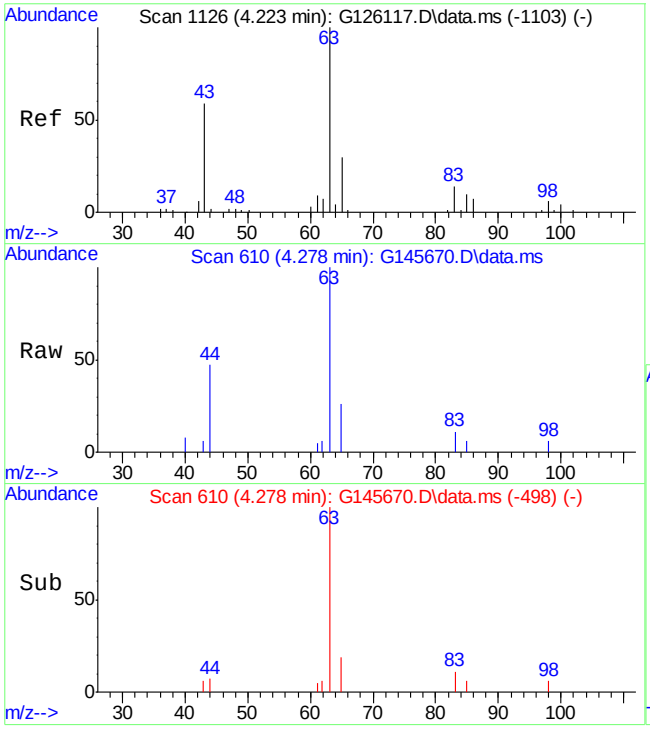


#16
acetone
Concen: 20.57 ppb
RT: 3.053 min Scan# 376
Delta R.T. 0.020 min
Lab File: G145670.D
Acq: 18 Sep 15 7:32 pm

Tgt Ion: 58 Resp: 5221

Ion	Ratio	Lower	Upper
58	100		
43	317.1	306.3	366.3

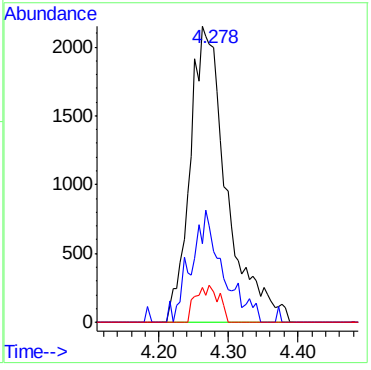




#33
1,1-dichloroethane
Concen: 2.22 ppb
RT: 4.278 min Scan# 610
Delta R.T. -0.003 min
Lab File: G145670.D
Acq: 18 Sep 15 7:32 pm

Tgt Ion: 63 Resp: 7902

Ion	Ratio	Lower	Upper
63	100		
65	25.7	1.5	61.5
83	10.9	0.0	41.1



Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145720.D
Acq On : 20 Sep 2015 1:52 pm
Operator : andrewd1
Sample : mc41356-16
Misc : MS35252,MSG5457,,,,5,5
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 21 08:27:58 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	3.165	65	64494	500.00	ppb		0.01
4) pentafluorobenzene	5.102	168	141355	50.00	ppb		0.00
43) 1,4-difluorobenzene	6.218	114	223557	50.00	ppb		0.00
66) chlorobenzene-d5	9.541	82	105622	50.00	ppb		0.00
80) 1,4-dichlorobenzene-d4	12.162	152	91301	50.00	ppb		0.00
System Monitoring Compounds							
40) dibromofluoromethane (s)	5.271	113	81536	51.54	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.08%				
60) toluene-d8 (s)	7.887	98	253575	51.56	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.12%				
82) bromofluorobenzene (s)	10.868	95	93081	52.79	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 105.58%				
Target Compounds							Qvalue
7) vinyl chloride	2.108	62	6223	2.85	ppb		86
15) 1,1-dichloroethene	3.214	96	1958	1.29	ppb	#	20
16) acetone	3.047	58	4589	18.10	ppb		92
33) 1,1-dichloroethane	4.279	63	17223	4.84	ppb		97
37) cis-1,2-dichloroethene	4.884	96	4589	2.70	ppb	#	80

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

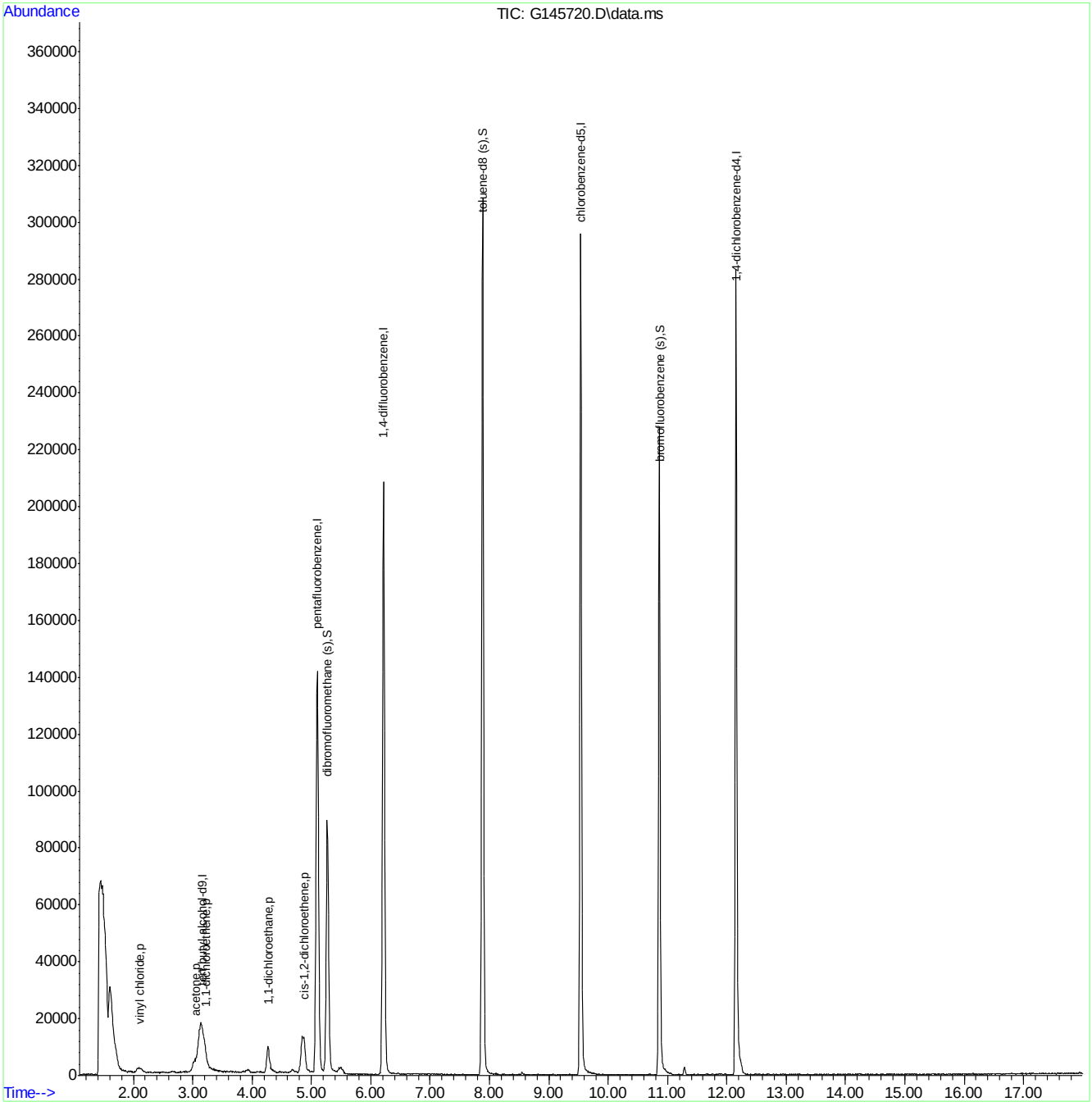
7.1.16

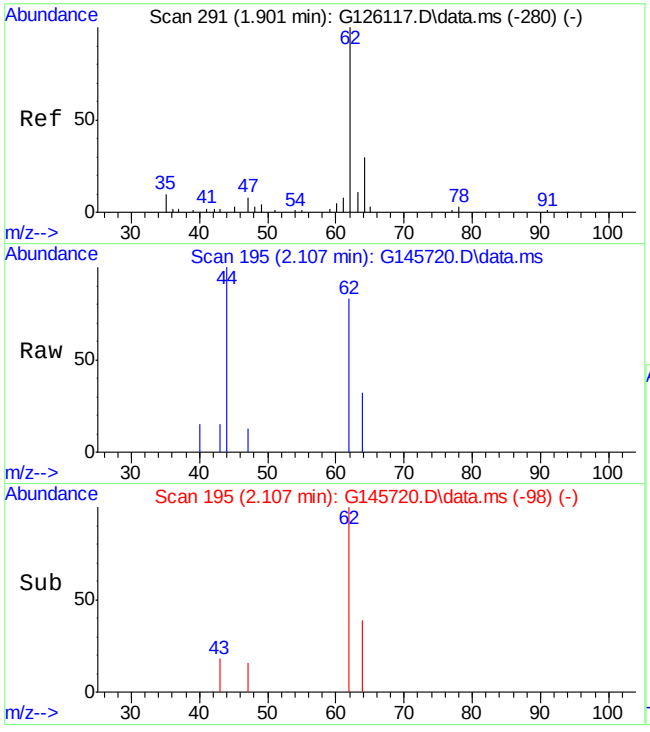
7

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145720.D
Acq On : 20 Sep 2015 1:52 pm
Operator : andrewd1
Sample : mc41356-16
Misc : MS35252,MSG5457,,,,5,5
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 21 08:27:58 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

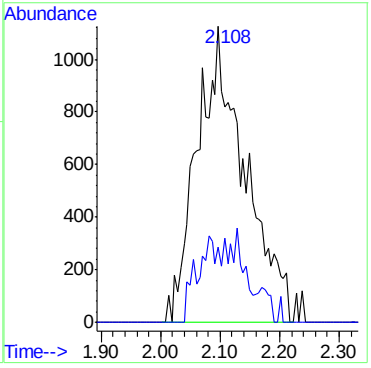


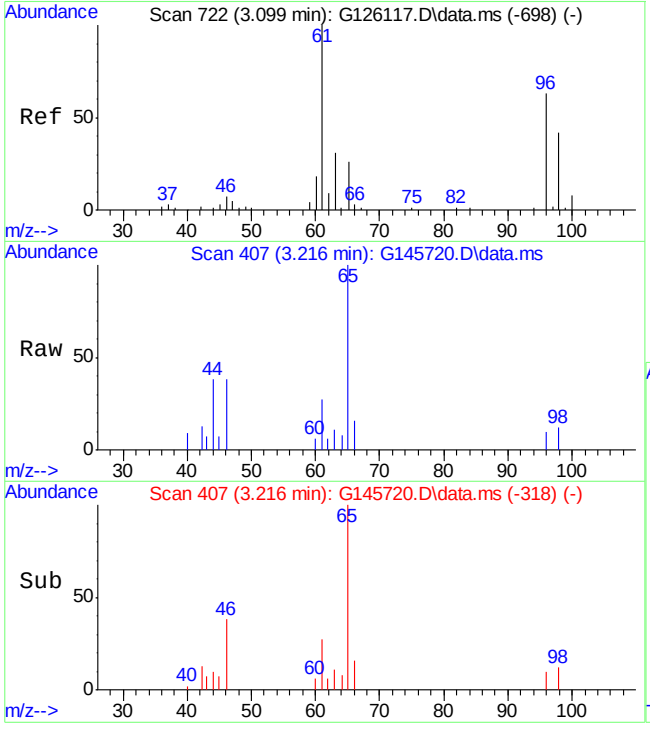


#7
vinyl chloride
Concen: 2.85 ppb
RT: 2.108 min Scan# 195
Delta R.T. 0.007 min
Lab File: G145720.D
Acq: 20 Sep 15 1:52 pm

Tgt Ion: 62 Resp: 6223

Ion	Ratio	Lower	Upper
62	100		
64	39.0	1.5	61.5

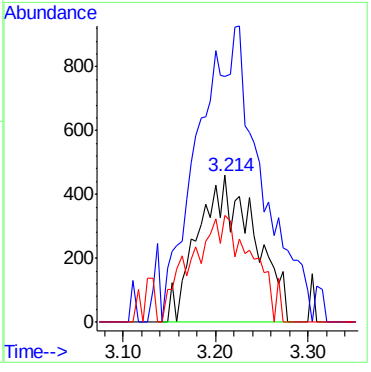


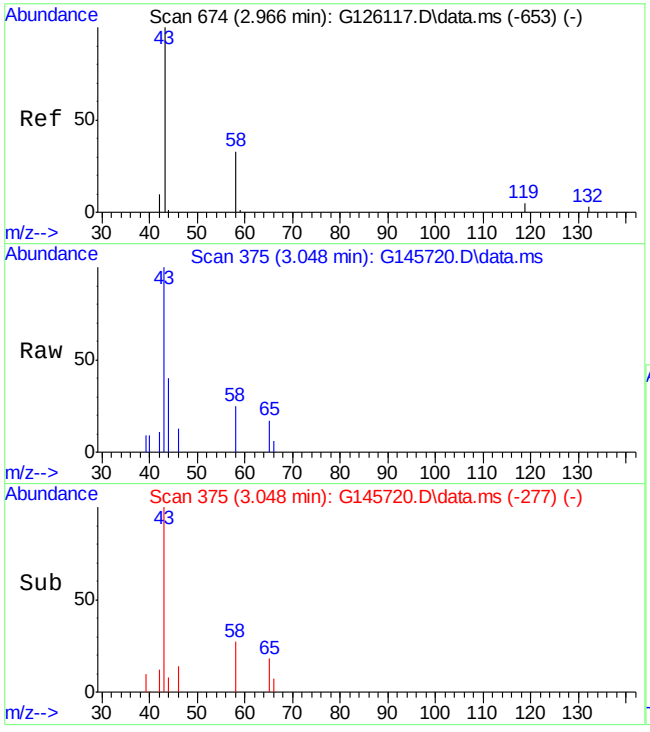


#15
1,1-dichloroethene
Concen: 1.29 ppb
RT: 3.214 min Scan# 407
Delta R.T. -0.039 min
Lab File: G145720.D
Acq: 20 Sep 15 1:52 pm

Tgt Ion: 96 Resp: 1958

Ion	Ratio	Lower	Upper
96	100		
61	276.9	137.8	197.8#
63	112.8	25.8	85.8#

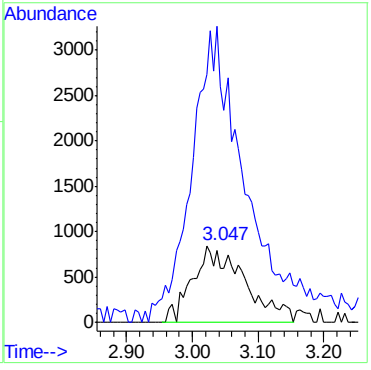


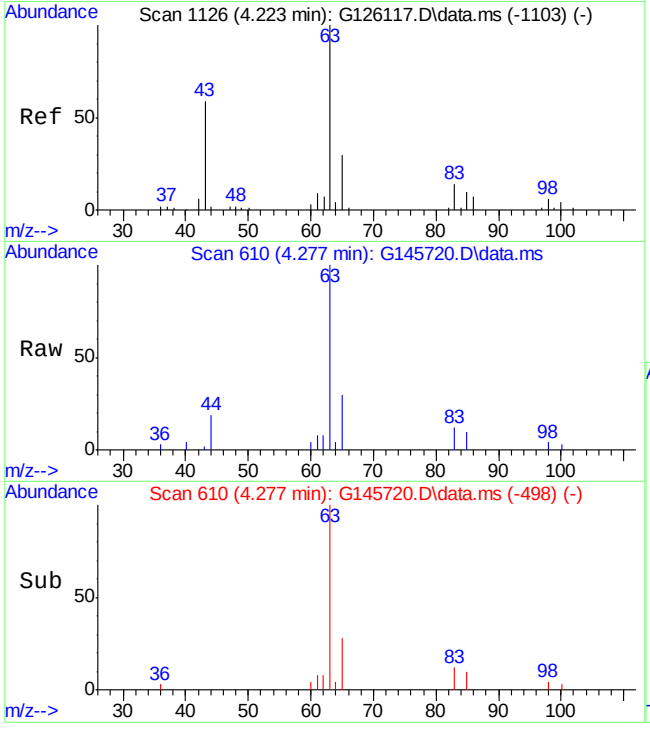


#16
acetone
Concen: 18.10 ppb
RT: 3.047 min Scan# 375
Delta R.T. 0.014 min
Lab File: G145720.D
Acq: 20 Sep 15 1:52 pm

Tgt Ion: 58 Resp: 4589

Ion	Ratio	Lower	Upper
58	100		
43	352.3	306.3	366.3

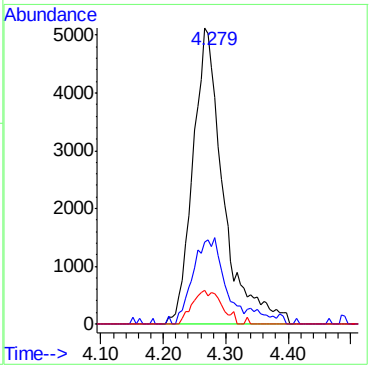




#33
1,1-dichloroethane
Concen: 4.84 ppb
RT: 4.279 min Scan# 610
Delta R.T. -0.002 min
Lab File: G145720.D
Acq: 20 Sep 15 1:52 pm

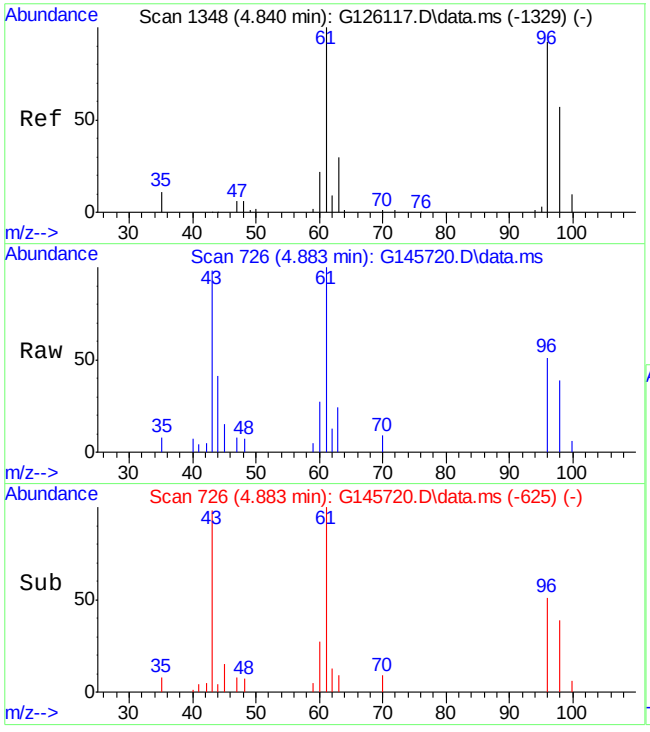
Tgt Ion: 63 Resp: 17223

Ion	Ratio	Lower	Upper
63	100		
65	30.0	1.5	61.5
83	12.2	0.0	41.1



7.1.16

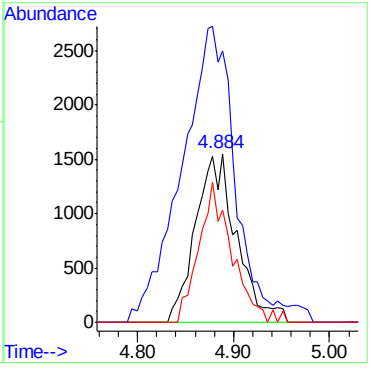
7



#37
cis-1,2-dichloroethene
Concen: 2.70 ppb
RT: 4.884 min Scan# 726
Delta R.T. 0.001 min
Lab File: G145720.D
Acq: 20 Sep 15 1:52 pm

Tgt Ion: 96 Resp: 4589

Ion	Ratio	Lower	Upper
96	100		
61	182.8	122.1	182.1#
98	75.8	36.9	96.9



7.1.16

7

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145721.D
Acq On : 20 Sep 2015 2:21 pm
Operator : andrewd1
Sample : mc41356-17
Misc : MS35252,MSG5457,,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 21 08:28:42 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

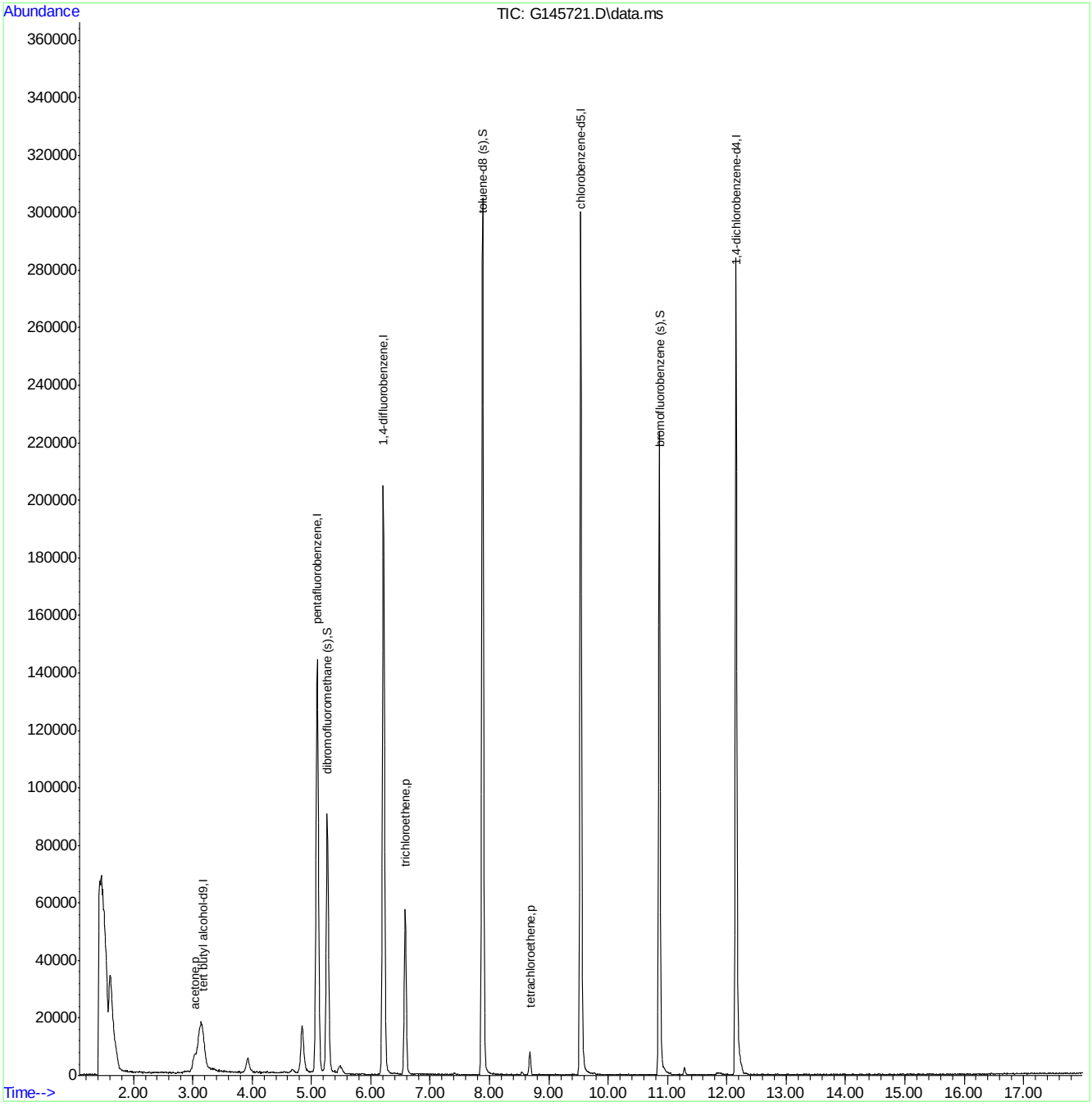
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.178	65	70045	500.00	ppb	0.03
4) pentafluorobenzene	5.101	168	142059	50.00	ppb	0.00
43) 1,4-difluorobenzene	6.217	114	223923	50.00	ppb	0.00
66) chlorobenzene-d5	9.540	82	104845	50.00	ppb	0.00
80) 1,4-dichlorobenzene-d4	12.162	152	90963	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	5.269	113	82076	51.62	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.24%			
60) toluene-d8 (s)	7.887	98	251804	51.11	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.22%			
82) bromofluorobenzene (s)	10.868	95	92277	52.53	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 105.06%			
Target Compounds						Qvalue
16) acetone	3.044	58	6332	24.86	ppb	94
51) trichloroethene	6.581	95	25180	15.52	ppb	92
67) tetrachloroethene	8.682	166	2905	1.90	ppb	92

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

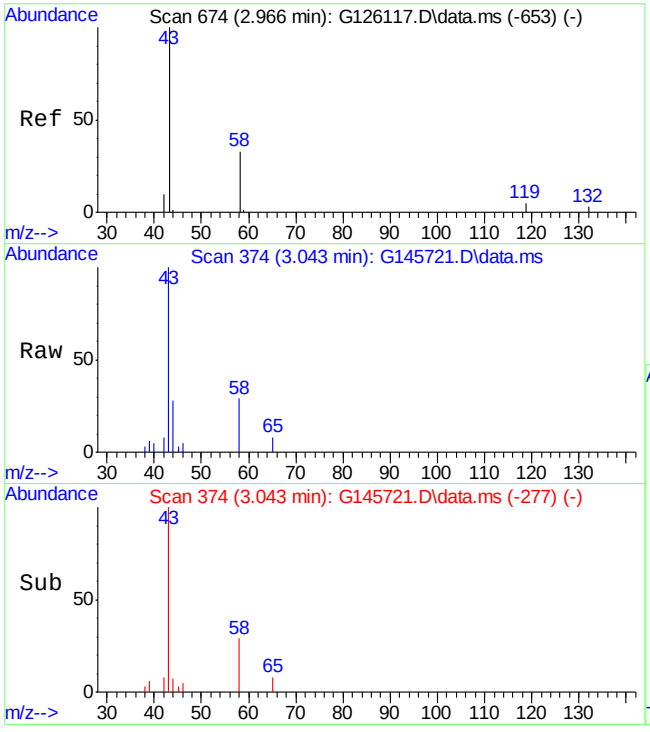
Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145721.D
Acq On : 20 Sep 2015 2:21 pm
Operator : andrewd1
Sample : mc41356-17
Misc : MS35252,MSG5457,,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 21 08:28:42 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration



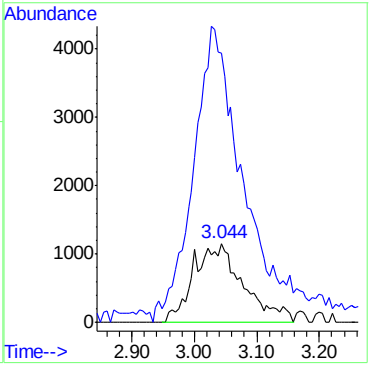
g150913w.m Mon Sep 21 12:45:28 2015 Page: 2

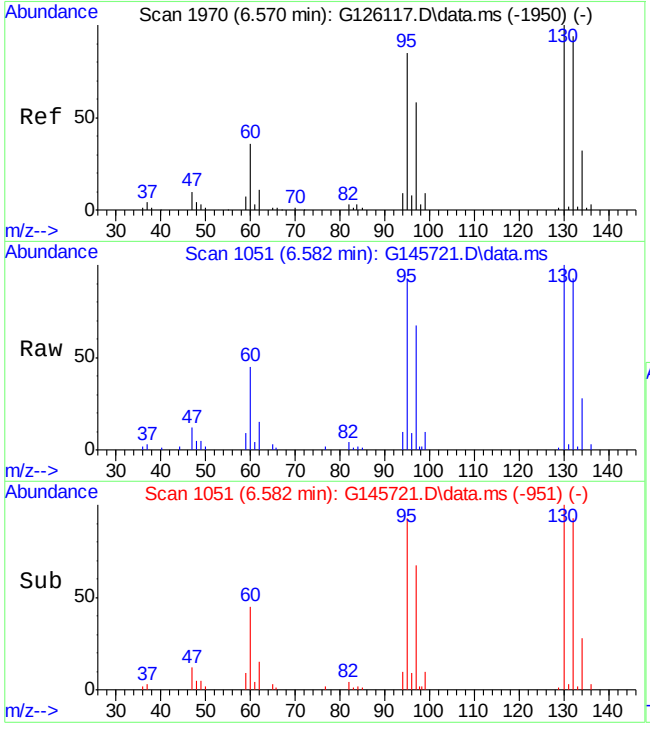


#16
acetone
Concen: 24.86 ppb
RT: 3.044 min Scan# 374
Delta R.T. 0.010 min
Lab File: G145721.D
Acq: 20 Sep 15 2:21 pm

Tgt Ion: 58 Resp: 6332

Ion	Ratio	Lower	Upper
58	100		
43	323.7	306.3	366.3

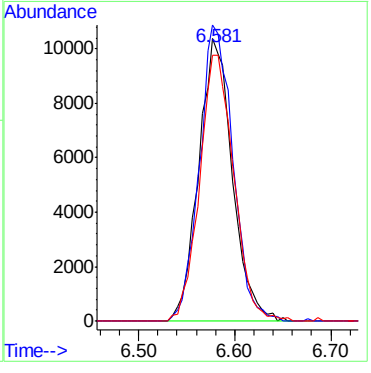


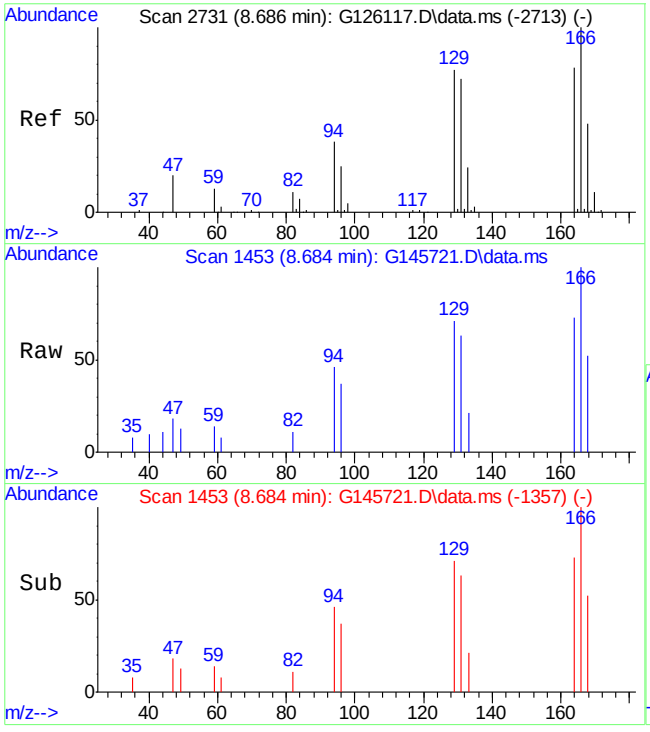


#51
trichloroethene
Concen: 15.52 ppb
RT: 6.581 min Scan# 1051
Delta R.T. 0.001 min
Lab File: G145721.D
Acq: 20 Sep 15 2:21 pm

Tgt Ion: 95 Resp: 25180

Ion	Ratio	Lower	Upper
95	100		
130	107.2	85.7	145.7
132	99.6	78.0	138.0

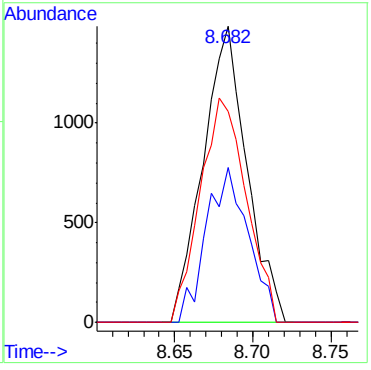




#67
tetrachloroethene
Concen: 1.90 ppb
RT: 8.682 min Scan# 1453
Delta R.T. -0.001 min
Lab File: G145721.D
Acq: 20 Sep 15 2:21 pm

Tgt Ion:166 Resp: 2905

Ion	Ratio	Lower	Upper
166	100		
168	52.5	15.8	75.8
129	71.3	47.3	107.3



7.1.17

7

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145722.D
Acq On : 20 Sep 2015 2:50 pm
Operator : andrewd1
Sample : mc41356-18
Misc : MS35252,MSG5457,,,,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 21 08:29:13 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.181	65	68454	500.00	ppb	0.03
4) pentafluorobenzene	5.102	168	143508	50.00	ppb	0.00
43) 1,4-difluorobenzene	6.218	114	227285	50.00	ppb	0.00
66) chlorobenzene-d5	9.541	82	106895	50.00	ppb	0.00
80) 1,4-dichlorobenzene-d4	12.163	152	91751	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	5.271	113	83032	51.69	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.38%			
60) toluene-d8 (s)	7.888	98	257231	51.44	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.88%			
82) bromofluorobenzene (s)	10.870	95	93752	52.91	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 105.82%			
Target Compounds						Qvalue
16) acetone	3.054	58	6710	26.08	ppb	90
51) trichloroethene	6.582	95	15112	9.17	ppb	89

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

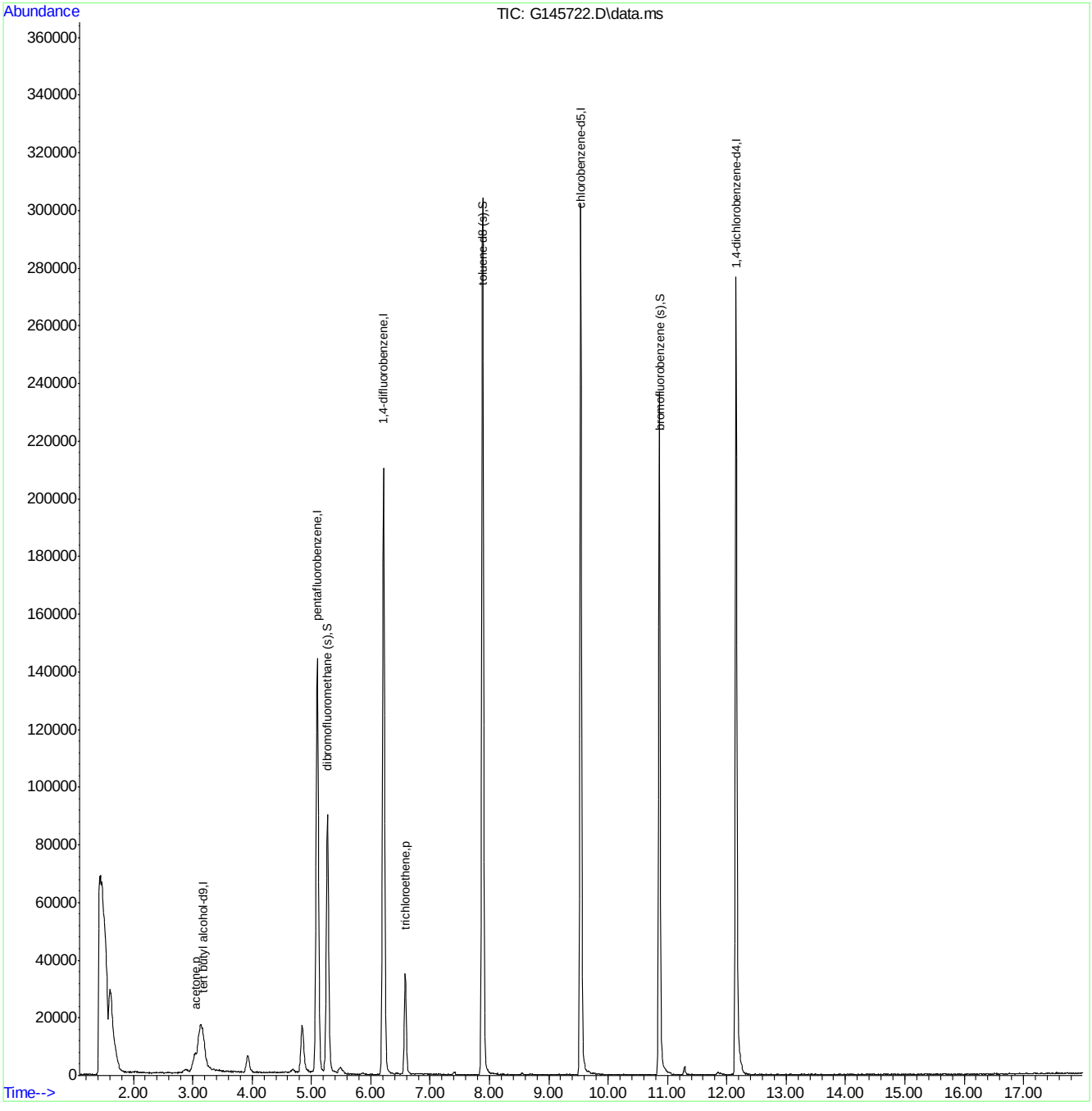
7.1.18

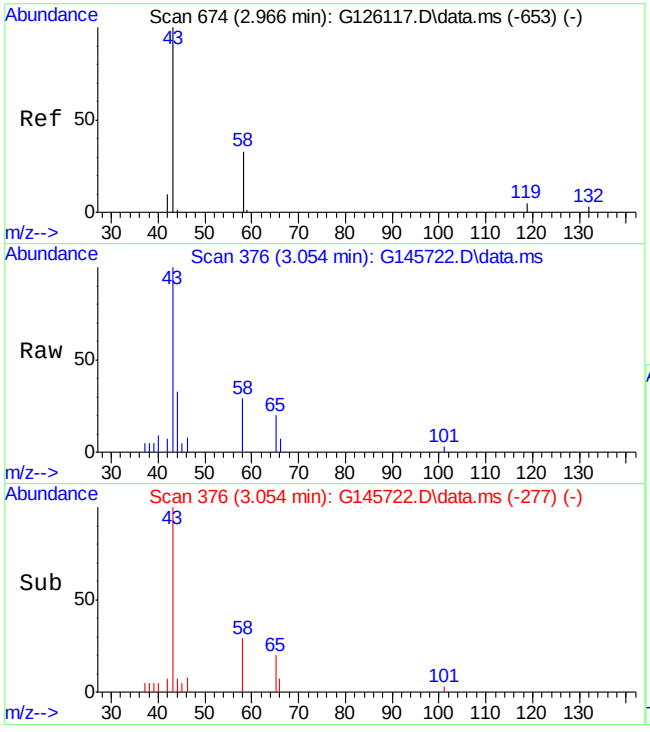
7

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145722.D
Acq On : 20 Sep 2015 2:50 pm
Operator : andrewd1
Sample : mc41356-18
Misc : MS35252,MSG5457,,,,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 21 08:29:13 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

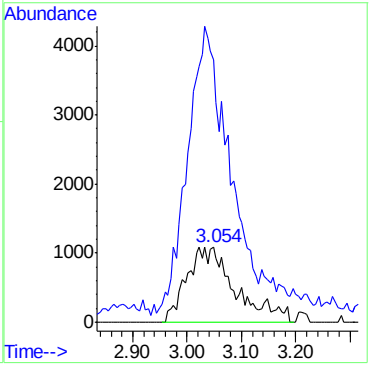


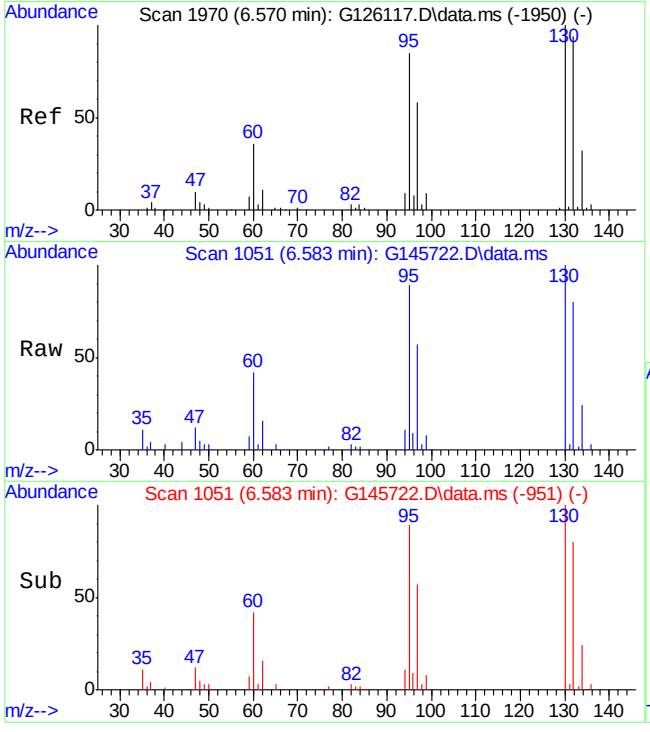


#16
acetone
Concen: 26.08 ppb
RT: 3.054 min Scan# 376
Delta R.T. 0.021 min
Lab File: G145722.D
Acq: 20 Sep 15 2:50 pm

Tgt Ion: 58 Resp: 6710

Ion	Ratio	Lower	Upper
58	100		
43	315.6	306.3	366.3

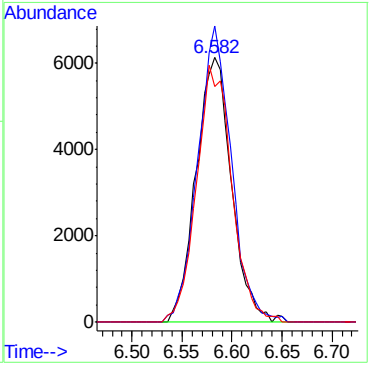




#51
trichloroethene
Concen: 9.17 ppb
RT: 6.582 min Scan# 1051
Delta R.T. 0.002 min
Lab File: G145722.D
Acq: 20 Sep 15 2:50 pm

Tgt Ion: 95 Resp: 15112

Ion	Ratio	Lower	Upper
95	100		
130	112.0	85.7	145.7
132	89.1	78.0	138.0



Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145723.D
Acq On : 20 Sep 2015 3:18 pm
Operator : andrewd1
Sample : mc41356-19
Misc : MS35252,MSG5457,,,,5,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 21 08:29:58 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

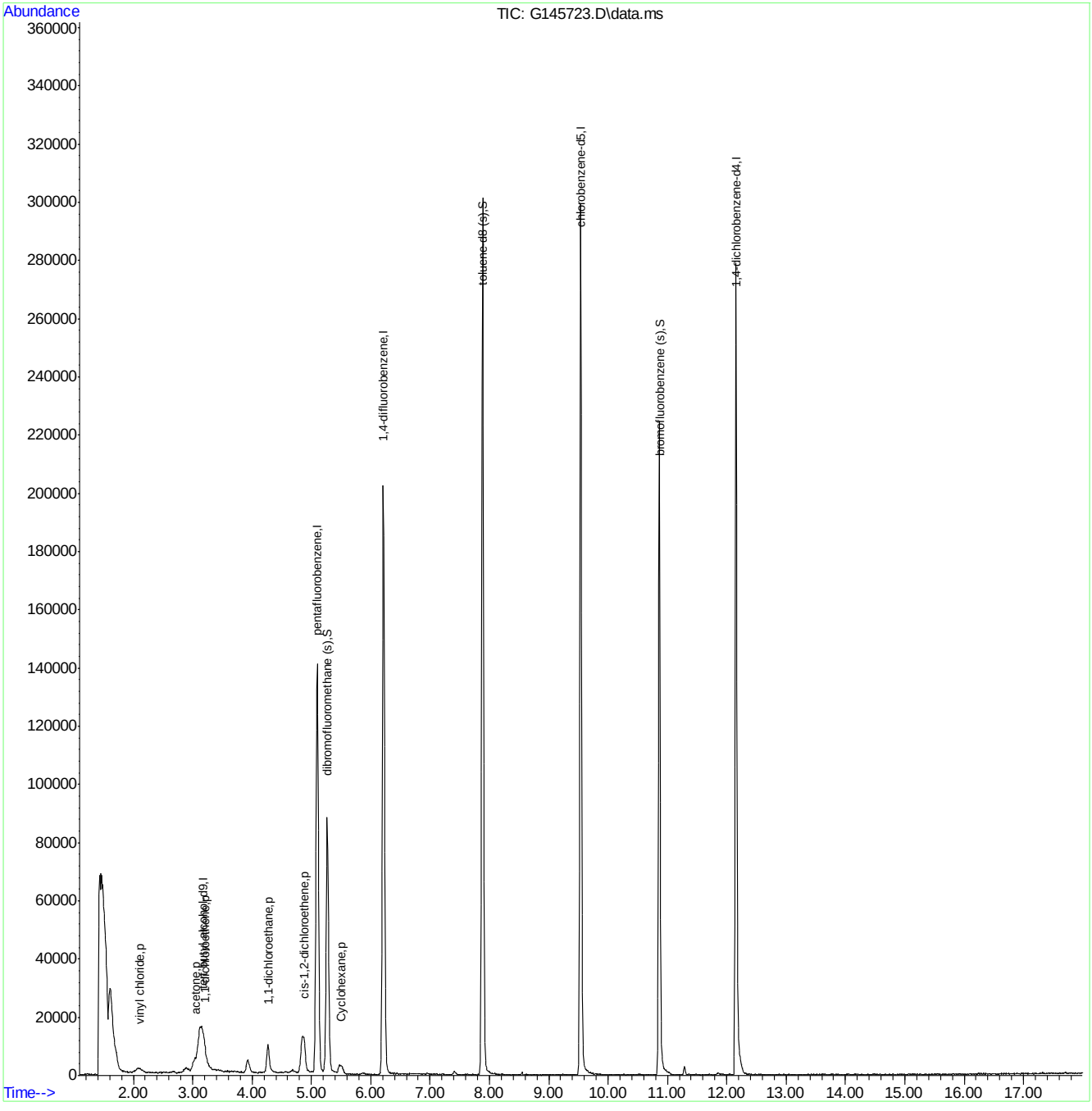
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.175	65	65077	500.00	ppb	0.03
4) pentafluorobenzene	5.102	168	139608	50.00	ppb	0.00
43) 1,4-difluorobenzene	6.217	114	222651	50.00	ppb	0.00
66) chlorobenzene-d5	9.542	82	106183	50.00	ppb	0.00
80) 1,4-dichlorobenzene-d4	12.163	152	89818	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	5.270	113	81625	52.24	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 104.48%			
60) toluene-d8 (s)	7.887	98	250153	51.07	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.14%			
82) bromofluorobenzene (s)	10.869	95	93114	53.68	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 107.36%			
Target Compounds						Qvalue
7) vinyl chloride	2.103	62	6280	2.91	ppb	92
15) 1,1-dichloroethene	3.211	96	1909	1.27	ppb	93
16) acetone	3.053	58	4910	19.61	ppb	97
33) 1,1-dichloroethane	4.277	63	17645	5.02	ppb	91
37) cis-1,2-dichloroethene	4.883	96	4675	2.79	ppb	87
44) Cyclohexane	5.494	56	3222	1.00	ppb #	96

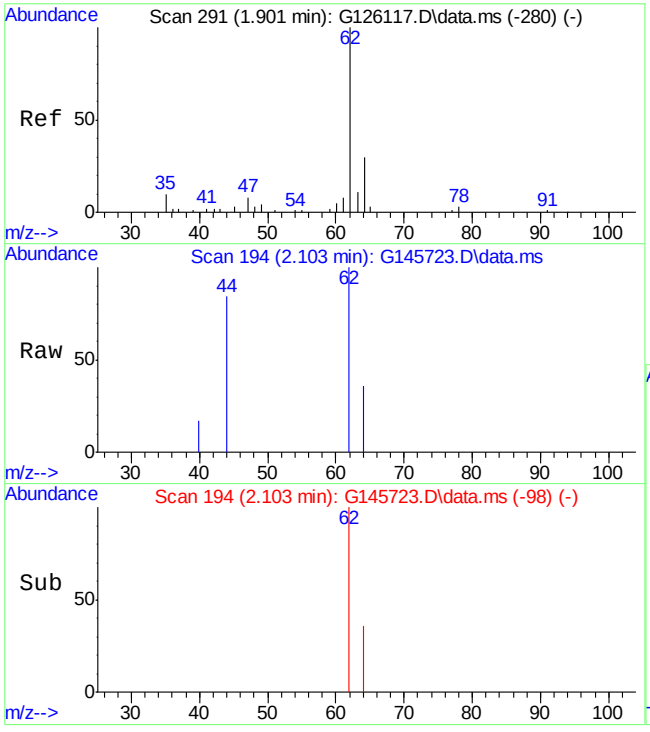
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145723.D
Acq On : 20 Sep 2015 3:18 pm
Operator : andrewd1
Sample : mc41356-19
Misc : MS35252,MSG5457,,,,5,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 21 08:29:58 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

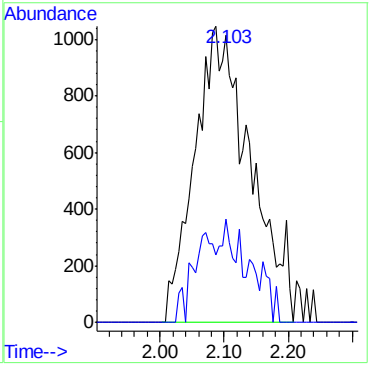


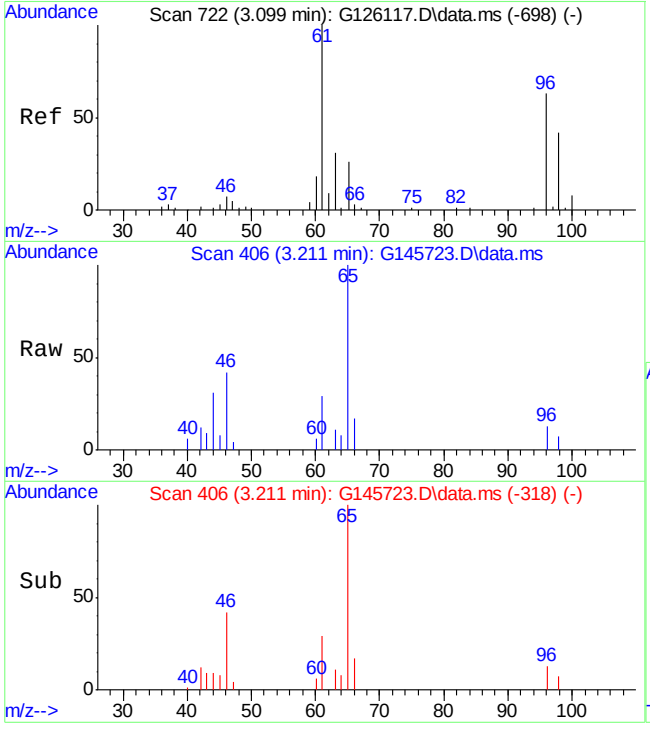


#7
vinyl chloride
Concen: 2.91 ppb
RT: 2.103 min Scan# 194
Delta R.T. 0.002 min
Lab File: G145723.D
Acq: 20 Sep 15 3:18 pm

Tgt Ion: 62 Resp: 6280

Ion	Ratio	Lower	Upper
62	100		
64	36.1	1.5	61.5

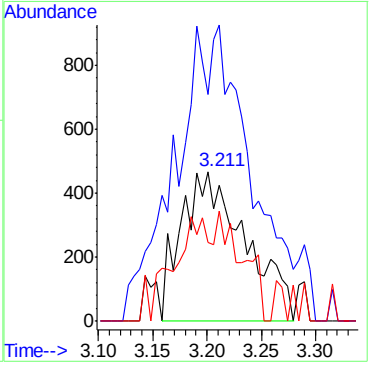


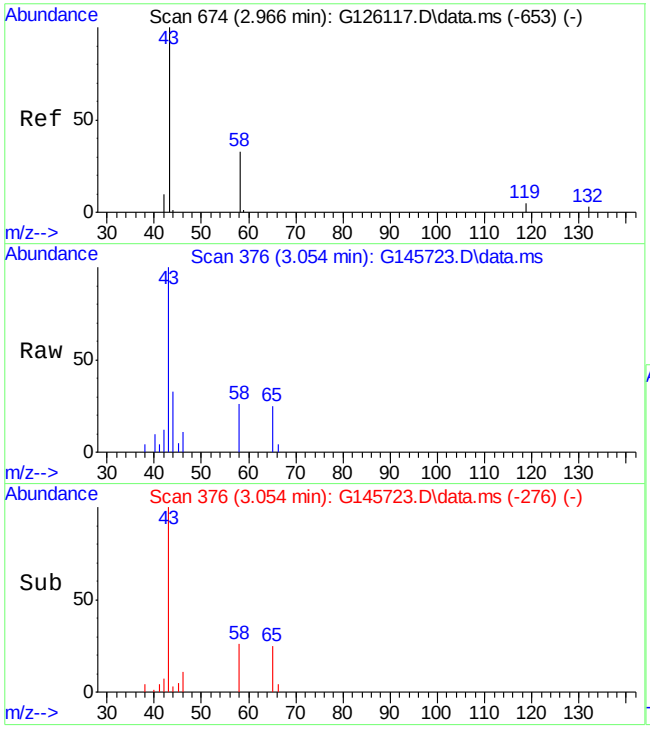


#15
1,1-dichloroethene
Concen: 1.27 ppb
RT: 3.211 min Scan# 406
Delta R.T. -0.041 min
Lab File: G145723.D
Acq: 20 Sep 15 3:18 pm

Tgt Ion: 96 Resp: 1909

Ion	Ratio	Lower	Upper
96	100		
61	180.6	137.8	197.8
63	54.6	25.8	85.8

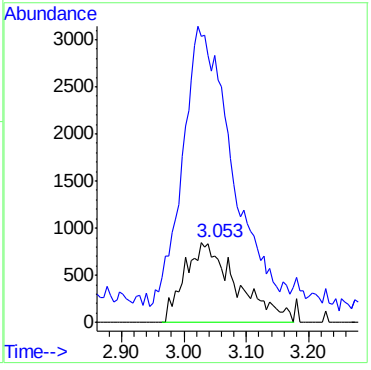


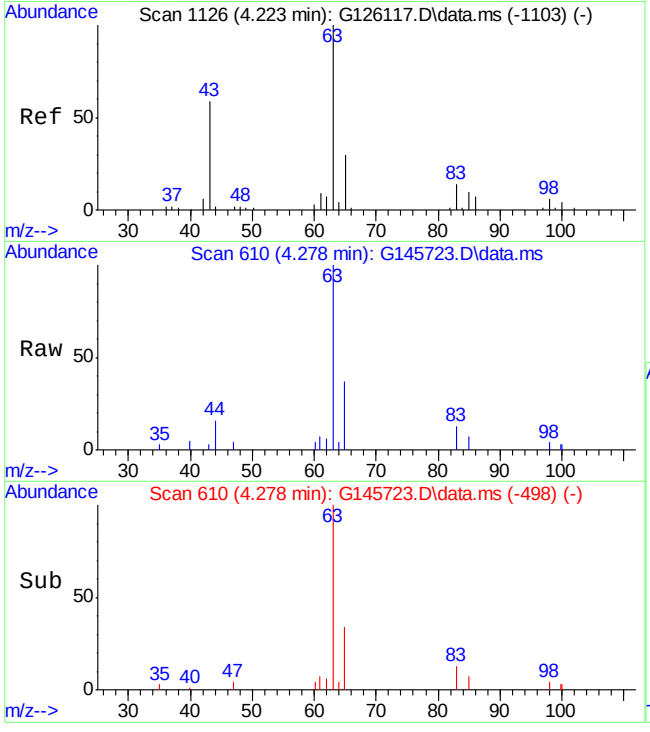


#16
acetone
Concen: 19.61 ppb
RT: 3.053 min Scan# 376
Delta R.T. 0.020 min
Lab File: G145723.D
Acq: 20 Sep 15 3:18 pm

Tgt Ion: 58 Resp: 4910

Ion	Ratio	Lower	Upper
58	100		
43	329.3	306.3	366.3

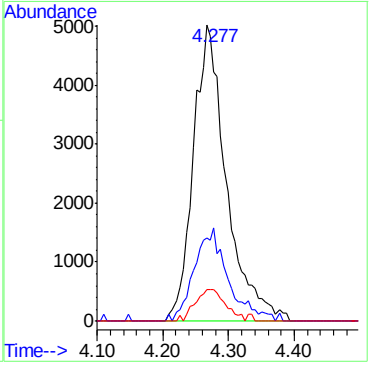


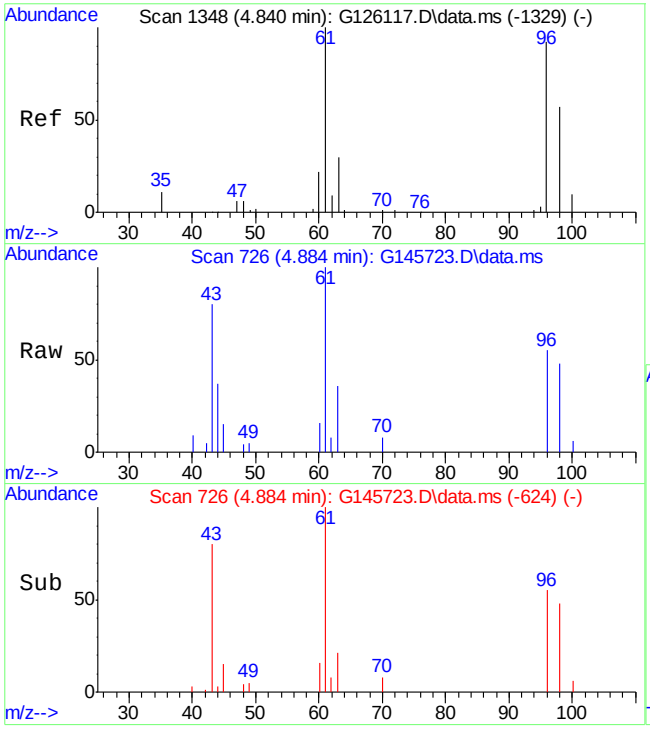


#33
1,1-dichloroethane
Concen: 5.02 ppb
RT: 4.277 min Scan# 610
Delta R.T. -0.004 min
Lab File: G145723.D
Acq: 20 Sep 15 3:18 pm

Tgt Ion: 63 Resp: 17645

Ion	Ratio	Lower	Upper
63	100		
65	37.3	1.5	61.5
83	12.5	0.0	41.1

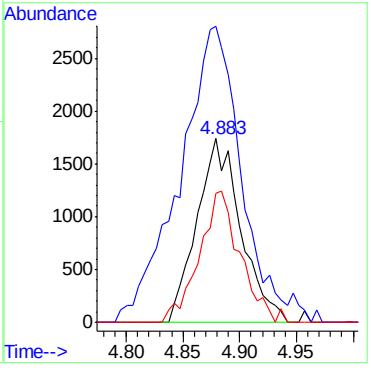


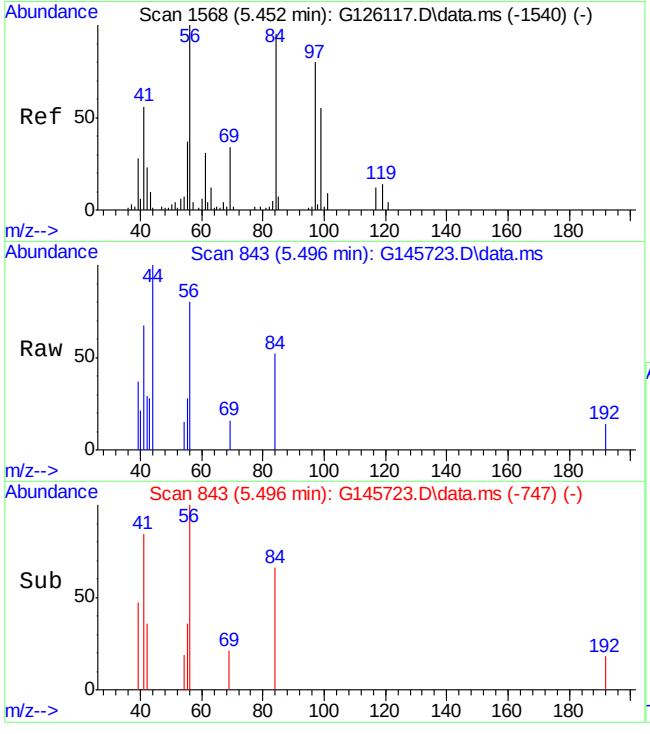


#37
cis-1,2-dichloroethene
Concen: 2.79 ppb
RT: 4.883 min Scan# 726
Delta R.T. 0.000 min
Lab File: G145723.D
Acq: 20 Sep 15 3:18 pm

Tgt Ion: 96 Resp: 4675

Ion	Ratio	Lower	Upper
96	100		
61	161.8	122.1	182.1
98	86.4	36.9	96.9

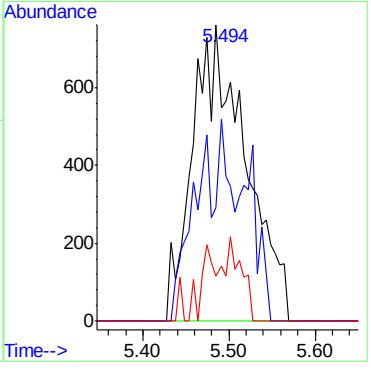




#44
Cyclohexane
Concen: 1.00 ppb
RT: 5.494 min Scan# 843
Delta R.T. -0.003 min
Lab File: G145723.D
Acq: 20 Sep 15 3:18 pm

Tgt Ion: 56 Resp: 3222

Ion	Ratio	Lower	Upper
56	100		
84	65.8	52.2	78.2
69	20.5	21.0	31.6#



Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145724.D
Acq On : 20 Sep 2015 3:47 pm
Operator : andrewd1
Sample : mc41356-20
Misc : MS35252,MSG5457,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 21 08:30:41 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

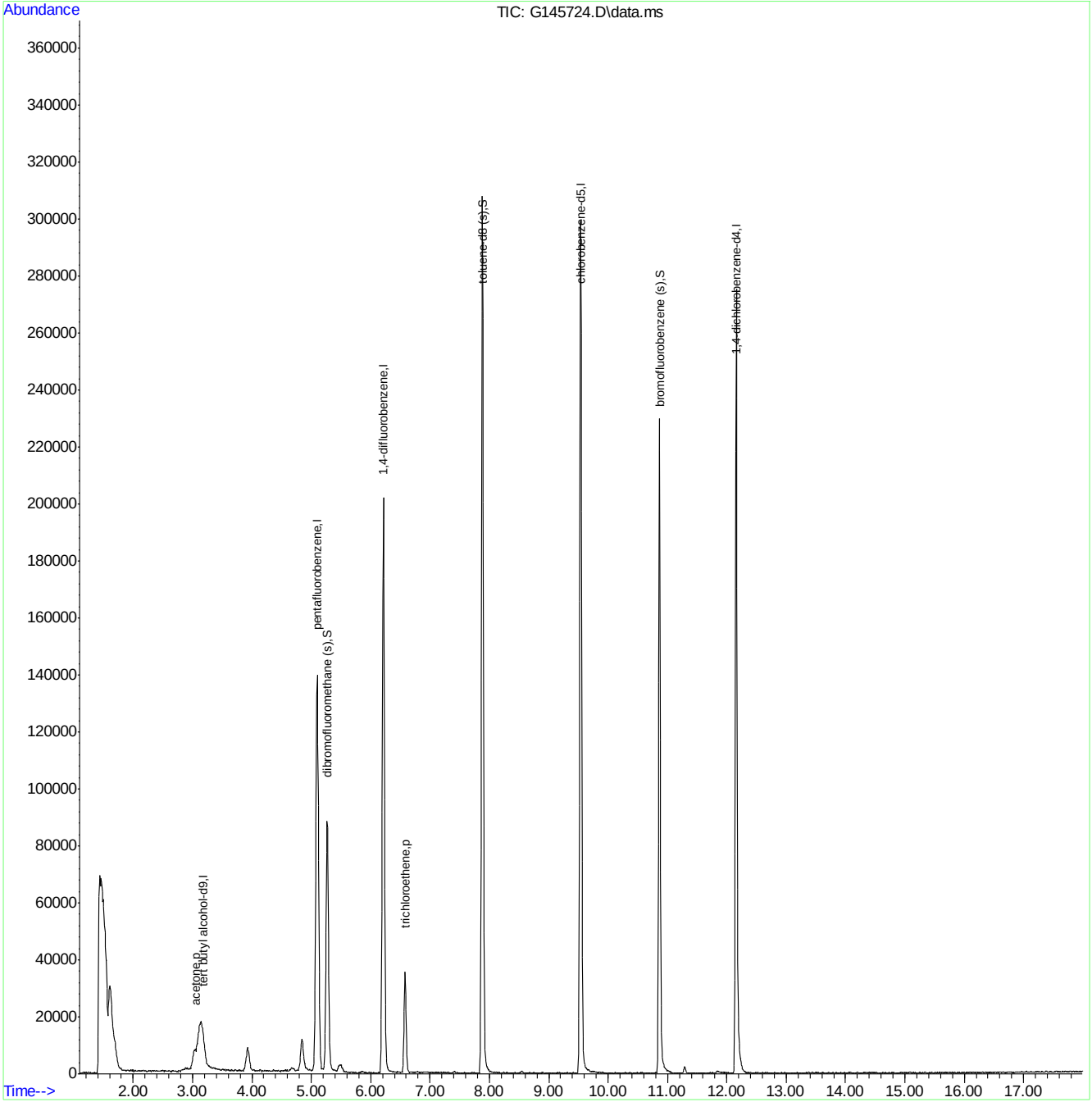
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.169	65	69164	500.00	ppb	0.02
4) pentafluorobenzene	5.101	168	141886	50.00	ppb	0.00
43) 1,4-difluorobenzene	6.217	114	225869	50.00	ppb	0.00
66) chlorobenzene-d5	9.541	82	106844	50.00	ppb	0.00
80) 1,4-dichlorobenzene-d4	12.163	152	91503	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	5.270	113	82871	52.18	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 104.36%			
60) toluene-d8 (s)	7.887	98	256097	51.54	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.08%			
82) bromofluorobenzene (s)	10.869	95	93406	52.85	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 105.70%			
Target Compounds						Qvalue
16) acetone	3.049	58	6945	27.30	ppb #	84
51) trichloroethene	6.582	95	15879	9.70	ppb	87

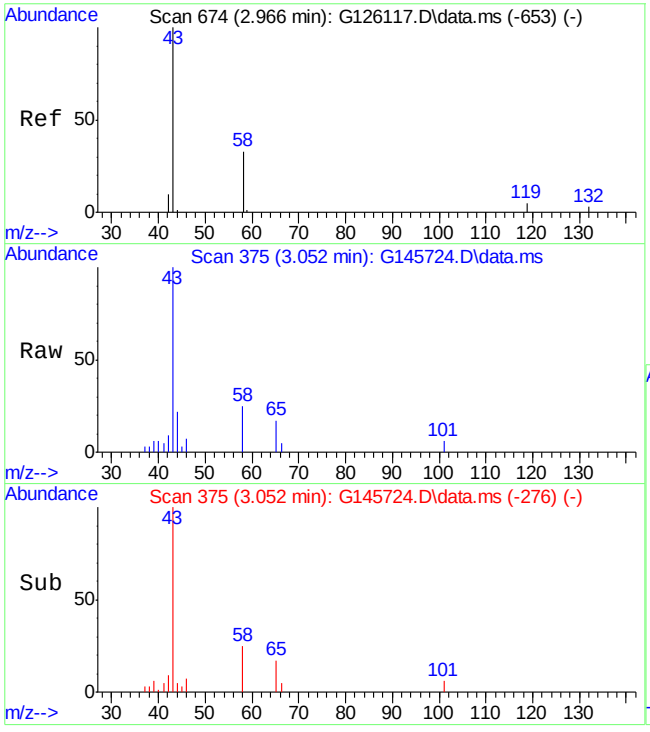
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145724.D
Acq On : 20 Sep 2015 3:47 pm
Operator : andrewd1
Sample : mc41356-20
Misc : MS35252,MSG5457,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 21 08:30:41 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

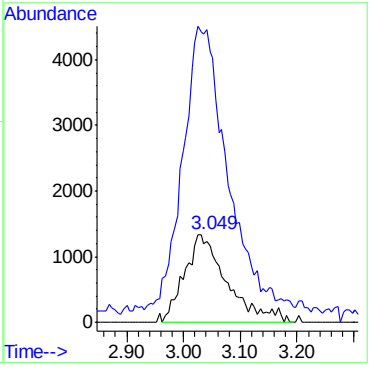


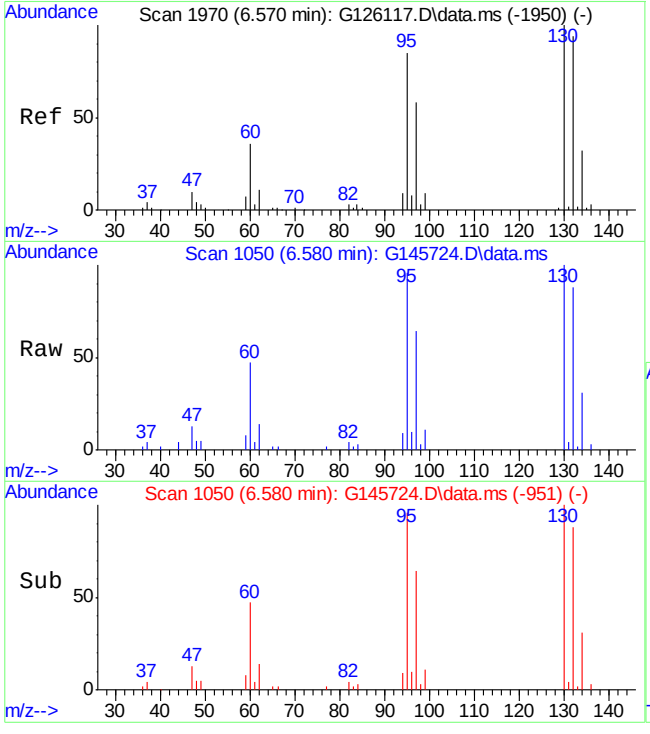


#16
acetone
Concen: 27.30 ppb
RT: 3.049 min Scan# 375
Delta R.T. 0.015 min
Lab File: G145724.D
Acq: 20 Sep 15 3:47 pm

Tgt Ion: 58 Resp: 6945

Ion	Ratio	Lower	Upper
58	100		
43	370.5	306.3	366.3#

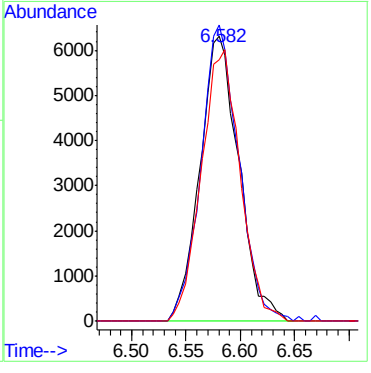




#51
trichloroethene
Concen: 9.70 ppb
RT: 6.582 min Scan# 1050
Delta R.T. 0.002 min
Lab File: G145724.D
Acq: 20 Sep 15 3:47 pm

Tgt Ion: 95 Resp: 15879

Ion	Ratio	Lower	Upper
95	100		
130	103.8	85.7	145.7
132	91.8	78.0	138.0



Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145725.D
Acq On : 20 Sep 2015 4:15 pm
Operator : andrewd1
Sample : mc41356-21
Misc : MS35252,MSG5457,,,,5,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 21 08:31:33 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

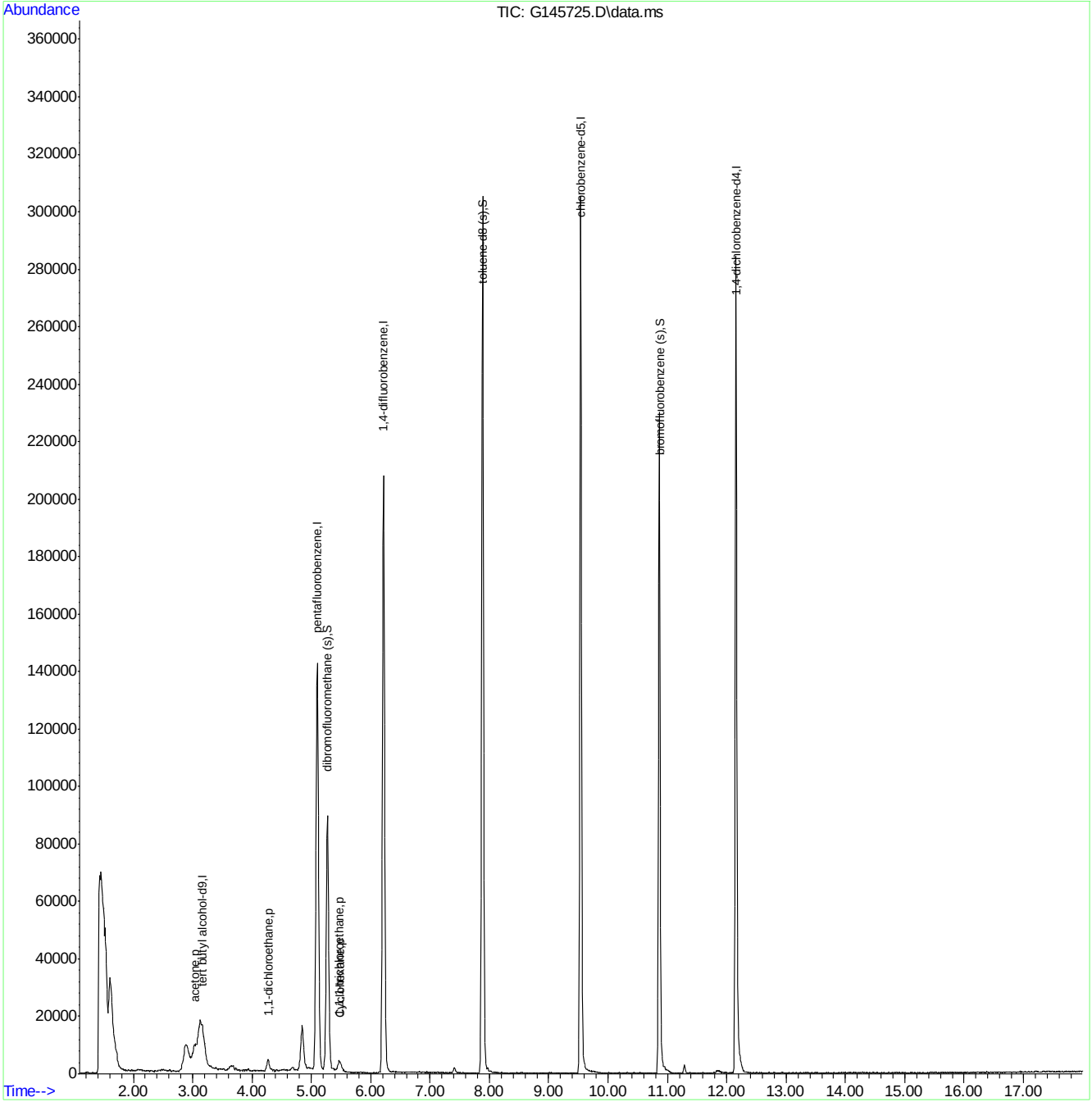
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.171	65	66065	500.00	ppb	0.02
4) pentafluorobenzene	5.103	168	143234	50.00	ppb	0.00
43) 1,4-difluorobenzene	6.218	114	228481	50.00	ppb	0.00
66) chlorobenzene-d5	9.541	82	106205	50.00	ppb	0.00
80) 1,4-dichlorobenzene-d4	12.162	152	90733	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	5.271	113	82113	51.22	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.44%			
60) toluene-d8 (s)	7.887	98	258445	51.41	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.82%			
82) bromofluorobenzene (s)	10.869	95	93514	53.36	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 106.72%			
Target Compounds						Qvalue
16) acetone	3.046	58	8415	32.76	ppb #	75
33) 1,1-dichloroethane	4.276	63	6770	1.88	ppb	80
42) 1,1,1-trichloroethane	5.466	97	2693	1.11	ppb #	60
44) Cyclohexane	5.489	56	1885	0.57	ppb #	83

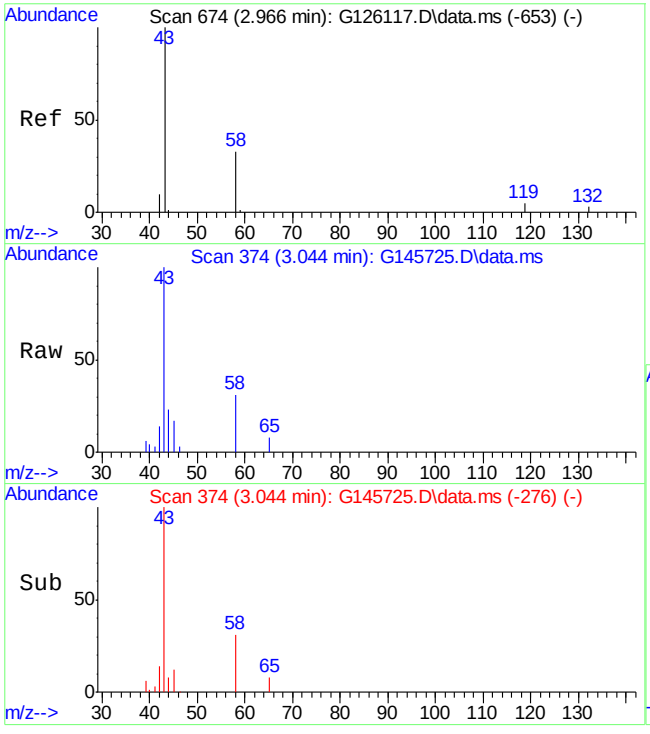
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145725.D
Acq On : 20 Sep 2015 4:15 pm
Operator : andrewd1
Sample : mc41356-21
Misc : MS35252,MSG5457,,,,5,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 21 08:31:33 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

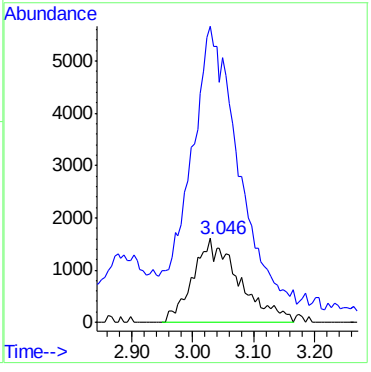


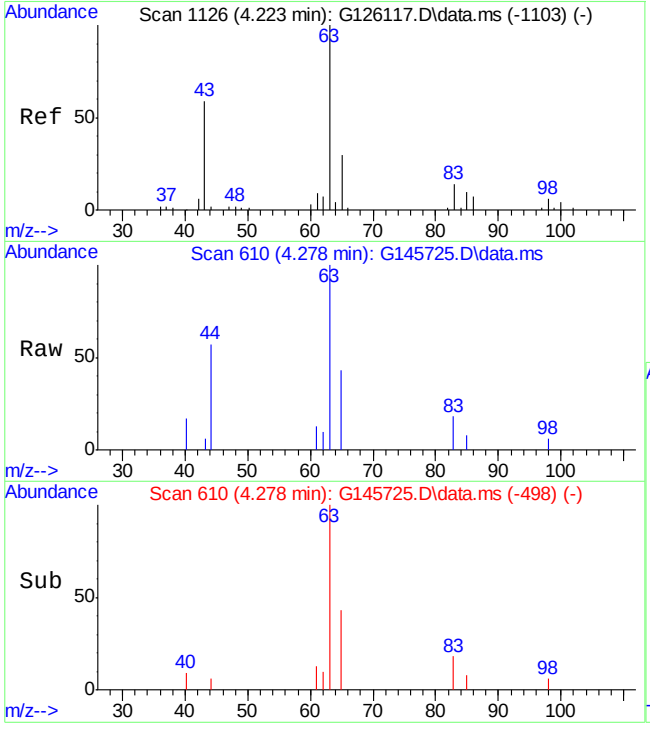


#16
acetone
Concen: 32.76 ppb
RT: 3.046 min Scan# 374
Delta R.T. 0.012 min
Lab File: G145725.D
Acq: 20 Sep 15 4:15 pm

Tgt Ion: 58 Resp: 8415

Ion	Ratio	Lower	Upper
58	100		
43	283.0	306.3	366.3#

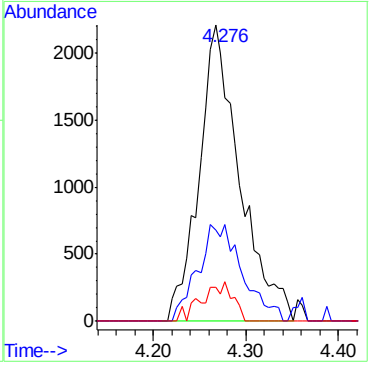


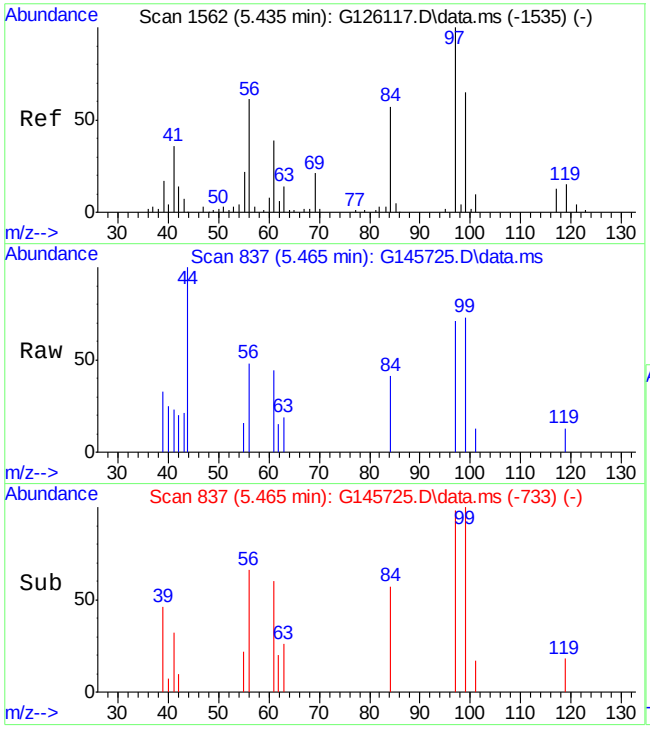


#33
1,1-dichloroethane
Concen: 1.88 ppb
RT: 4.276 min Scan# 610
Delta R.T. -0.006 min
Lab File: G145725.D
Acq: 20 Sep 15 4:15 pm

Tgt Ion: 63 Resp: 6770

Ion	Ratio	Lower	Upper
63	100		
65	43.4	1.5	61.5
83	17.8	0.0	41.1

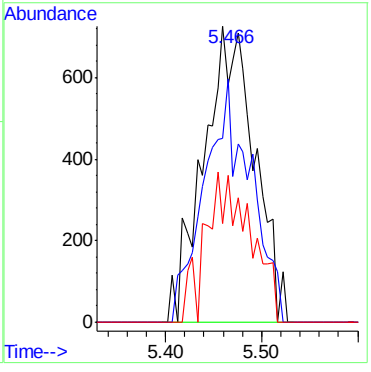


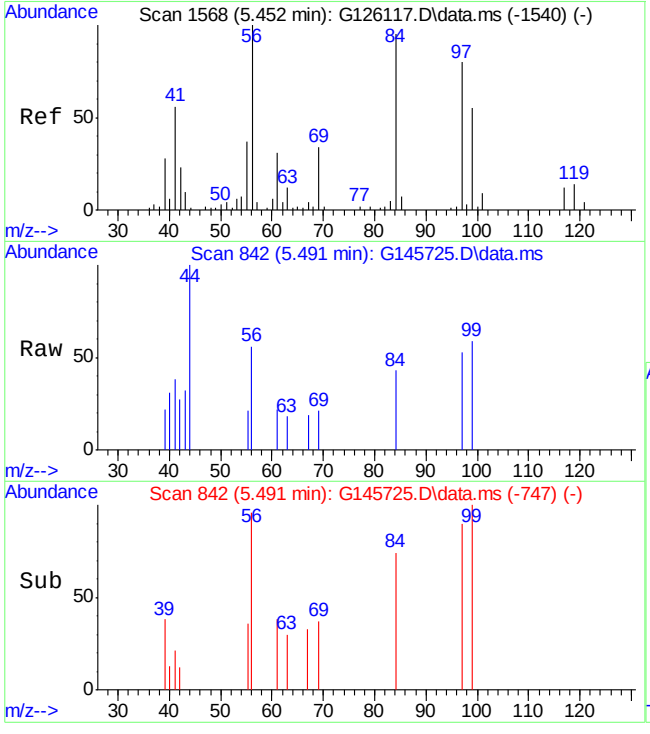


#42
1,1,1-trichloroethane
Concen: 1.11 ppb
RT: 5.466 min Scan# 837
Delta R.T. -0.007 min
Lab File: G145725.D
Acq: 20 Sep 15 4:15 pm

Tgt Ion: 97 Resp: 2693

Ion	Ratio	Lower	Upper
97	100		
99	102.1	30.7	90.7#
61	61.6	17.5	77.5

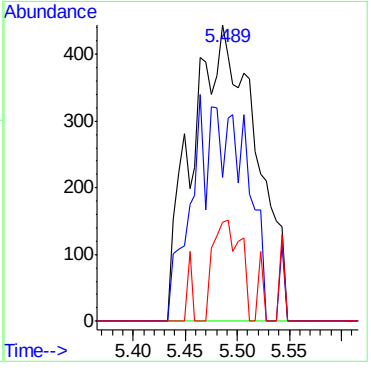




#44
Cyclohexane
Concen: 0.57 ppb
RT: 5.489 min Scan# 842
Delta R.T. -0.008 min
Lab File: G145725.D
Acq: 20 Sep 15 4:15 pm

Tgt Ion: 56 Resp: 1885

Ion	Ratio	Lower	Upper
56	100		
84	76.6	52.2	78.2
69	38.0	21.0	31.6#



Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145726.D
Acq On : 20 Sep 2015 4:44 pm
Operator : andrewd1
Sample : mc41356-22
Misc : MS35252,MSG5457,,,,5,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 21 08:32:36 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	3.167	65	66552	500.00	ppb		0.02
4) pentafluorobenzene	5.103	168	145459	50.00	ppb		0.00
43) 1,4-difluorobenzene	6.218	114	230948	50.00	ppb		0.00
66) chlorobenzene-d5	9.542	82	108993	50.00	ppb		0.00
80) 1,4-dichlorobenzene-d4	12.163	152	92656	50.00	ppb		0.00
System Monitoring Compounds							
40) dibromofluoromethane (s)	5.272	113	83078	51.03	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.06%				
60) toluene-d8 (s)	7.888	98	259393	51.05	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.10%				
82) bromofluorobenzene (s)	10.868	95	94771	52.96	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 105.92%				
Target Compounds							Qvalue
7) vinyl chloride	2.099	62	4379	1.95	ppb		92
15) 1,1-dichloroethene	3.217	96	9528	6.09	ppb		85
16) acetone	3.051	58	4921	18.87	ppb	#	56
33) 1,1-dichloroethane	4.279	63	4340	1.18	ppb		84
37) cis-1,2-dichloroethene	4.887	96	27826	15.92	ppb		96
42) 1,1,1-trichloroethane	5.469	97	9894	4.01	ppb		95
51) trichloroethene	6.582	95	12922	7.72	ppb		83
67) tetrachloroethene	8.683	166	6654	4.19	ppb		98

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

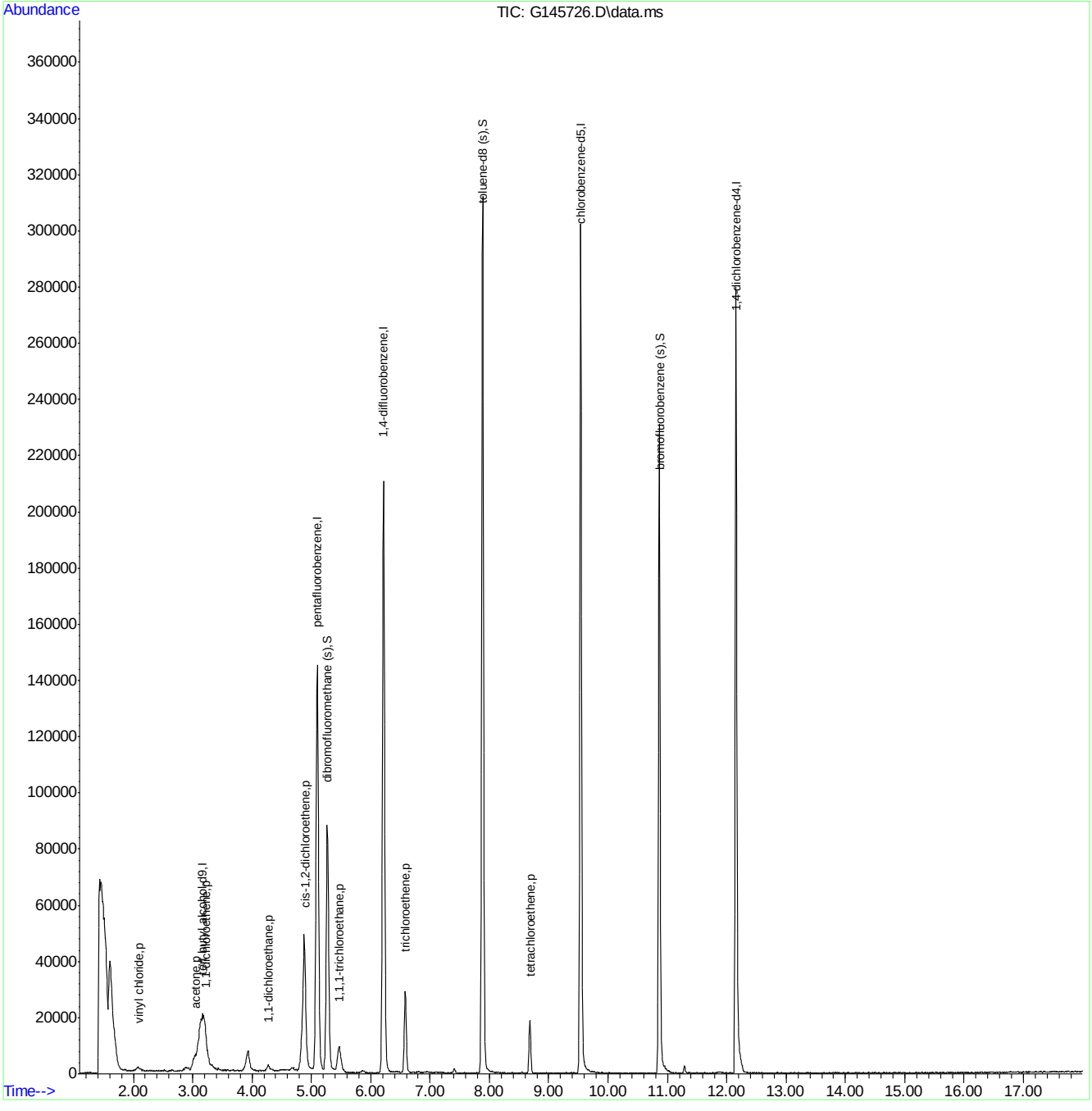
7.1.22

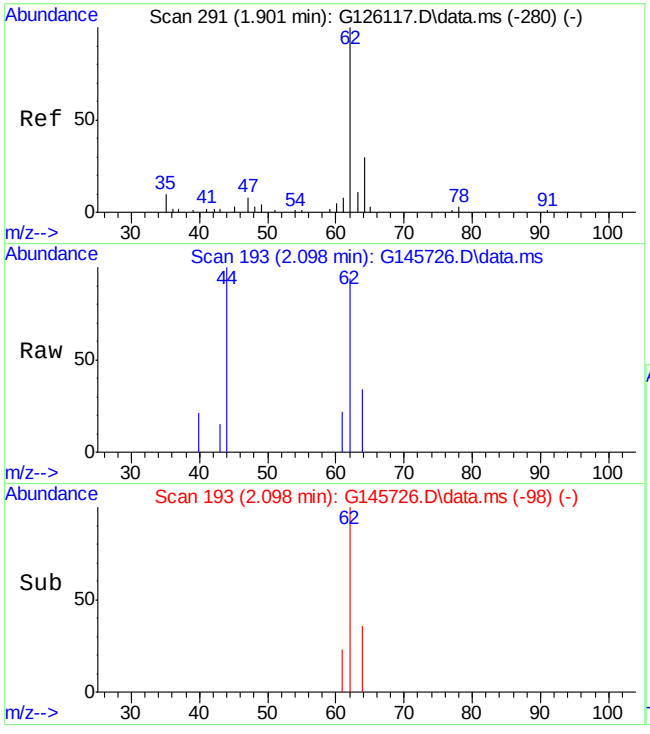
7

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145726.D
Acq On : 20 Sep 2015 4:44 pm
Operator : andrewd1
Sample : mc41356-22
Misc : MS35252,MSG5457,,,,5,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 21 08:32:36 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

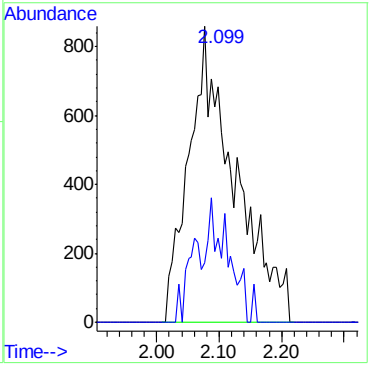


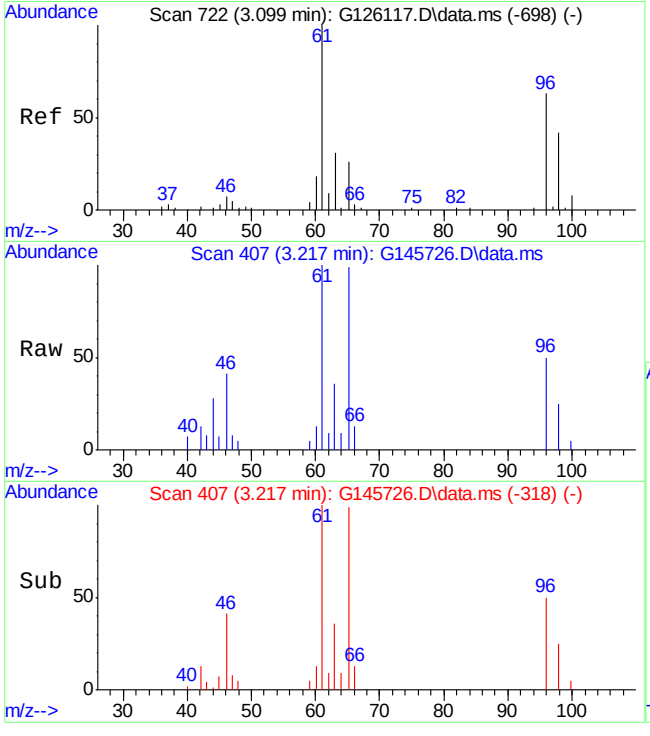


#7
vinyl chloride
Concen: 1.95 ppb
RT: 2.099 min Scan# 193
Delta R.T. -0.002 min
Lab File: G145726.D
Acq: 20 Sep 15 4:44 pm

Tgt Ion: 62 Resp: 4379

Ion	Ratio	Lower	Upper
62	100		
64	35.8	1.5	61.5

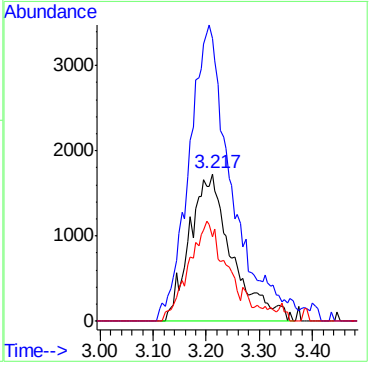


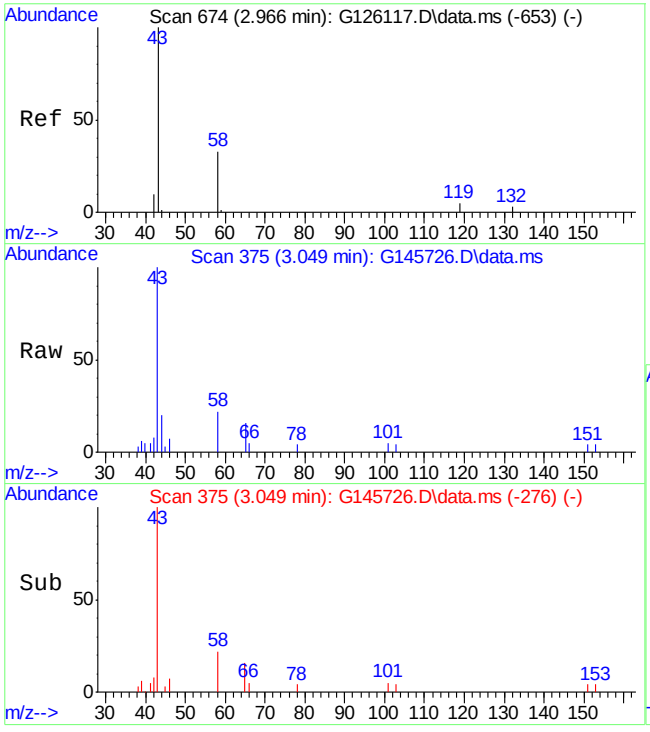


#15
1,1-dichloroethene
Concen: 6.09 ppb
RT: 3.217 min Scan# 407
Delta R.T. -0.036 min
Lab File: G145726.D
Acq: 20 Sep 15 4:44 pm

Tgt Ion: 96 Resp: 9528

Ion	Ratio	Lower	Upper
96	100		
61	185.6	137.8	197.8
63	70.9	25.8	85.8

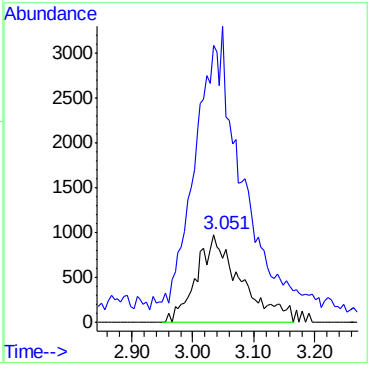


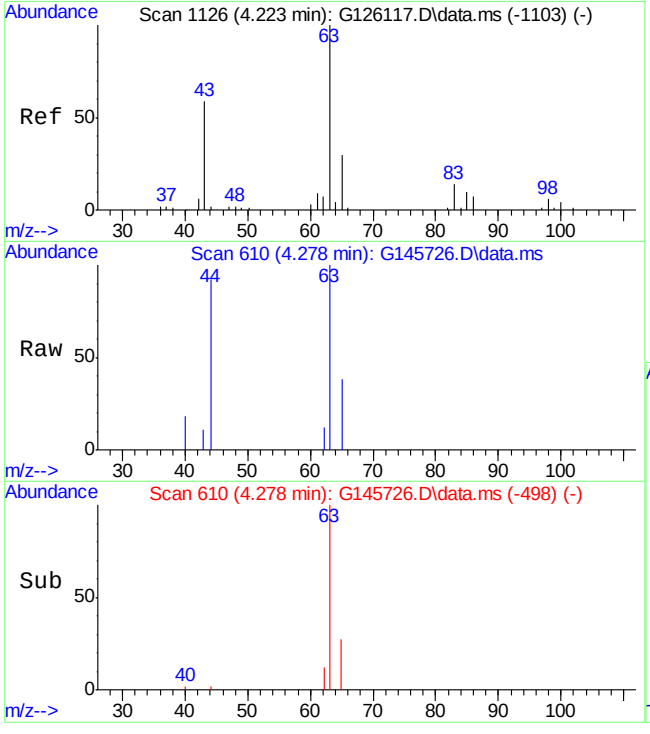


#16
acetone
Concen: 18.87 ppb
RT: 3.051 min Scan# 375
Delta R.T. 0.018 min
Lab File: G145726.D
Acq: 20 Sep 15 4:44 pm

Tgt Ion: 58 Resp: 4921

Ion	Ratio	Lower	Upper
58	100		
43	429.1	306.3	366.3#

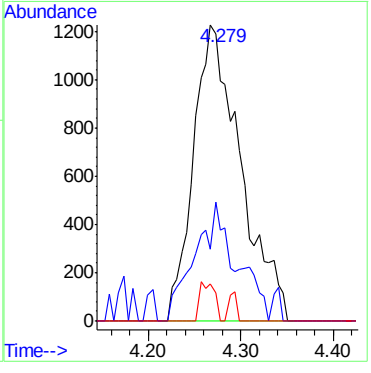


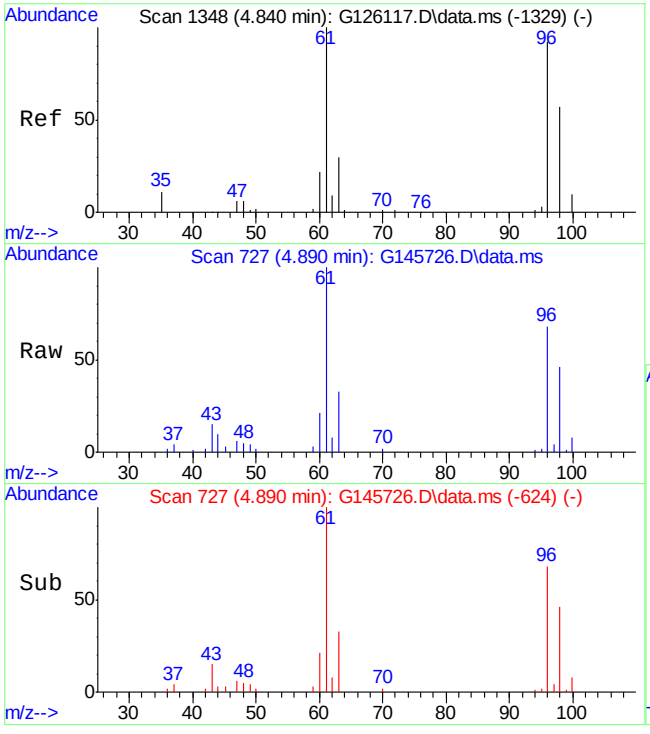


#33
1,1-dichloroethane
Concen: 1.18 ppb
RT: 4.279 min Scan# 610
Delta R.T. -0.002 min
Lab File: G145726.D
Acq: 20 Sep 15 4:44 pm

Tgt Ion: 63 Resp: 4340

Ion	Ratio	Lower	Upper
63	100		
65	37.7	1.5	61.5
83	0.0	0.0	41.1

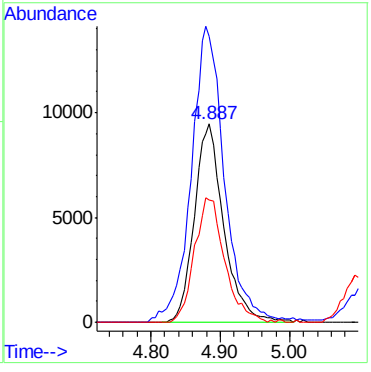


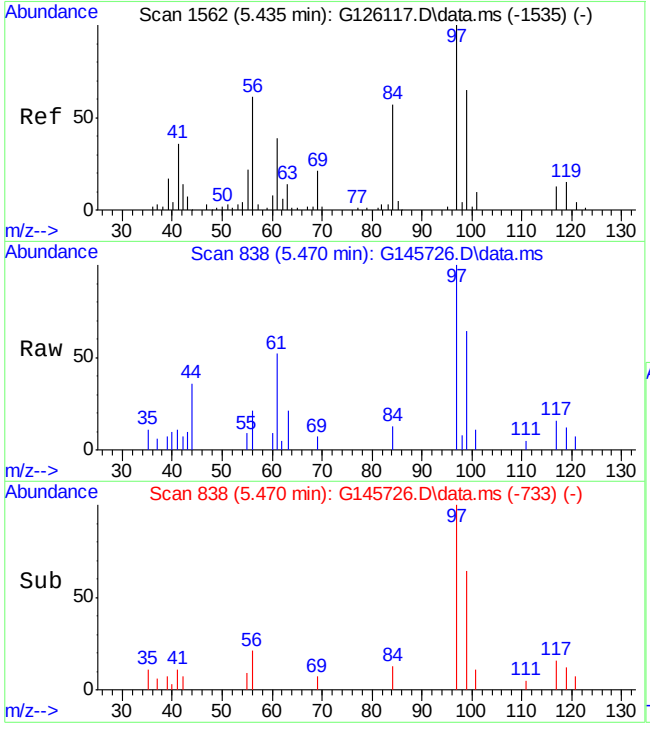


#37
cis-1,2-dichloroethene
Concen: 15.92 ppb
RT: 4.887 min Scan# 727
Delta R.T. 0.004 min
Lab File: G145726.D
Acq: 20 Sep 15 4:44 pm

Tgt Ion: 96 Resp: 27826

Ion	Ratio	Lower	Upper
96	100		
61	145.0	122.1	182.1
98	68.2	36.9	96.9

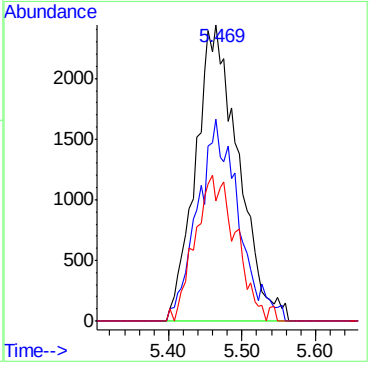


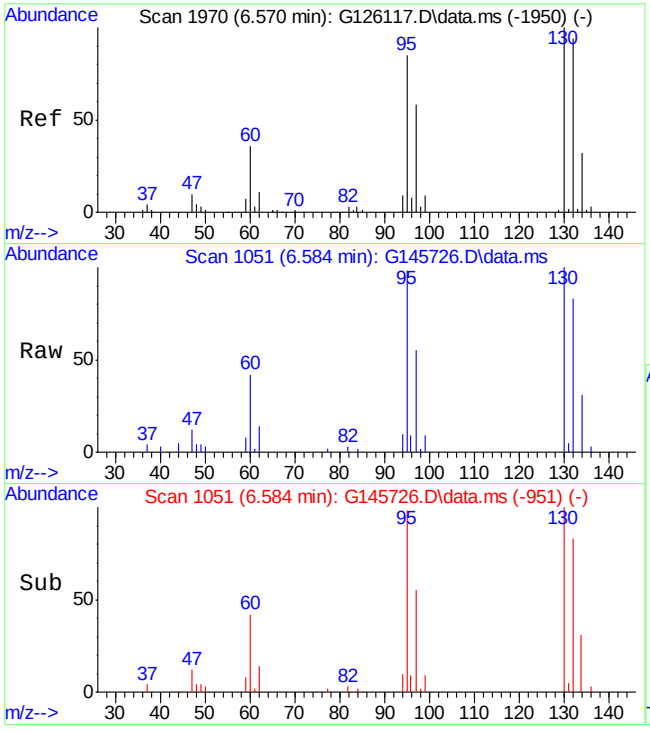


#42
1,1,1-trichloroethane
Concen: 4.01 ppb
RT: 5.469 min Scan# 838
Delta R.T. -0.004 min
Lab File: G145726.D
Acq: 20 Sep 15 4:44 pm

Tgt Ion: 97 Resp: 9894

Ion	Ratio	Lower	Upper
97	100		
99	63.6	30.7	90.7
61	51.9	17.5	77.5

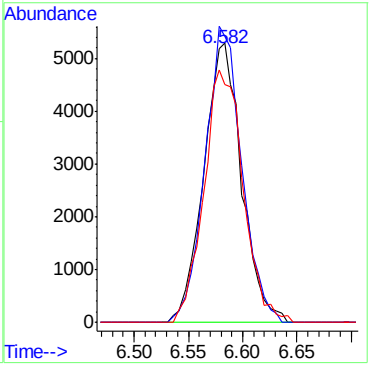


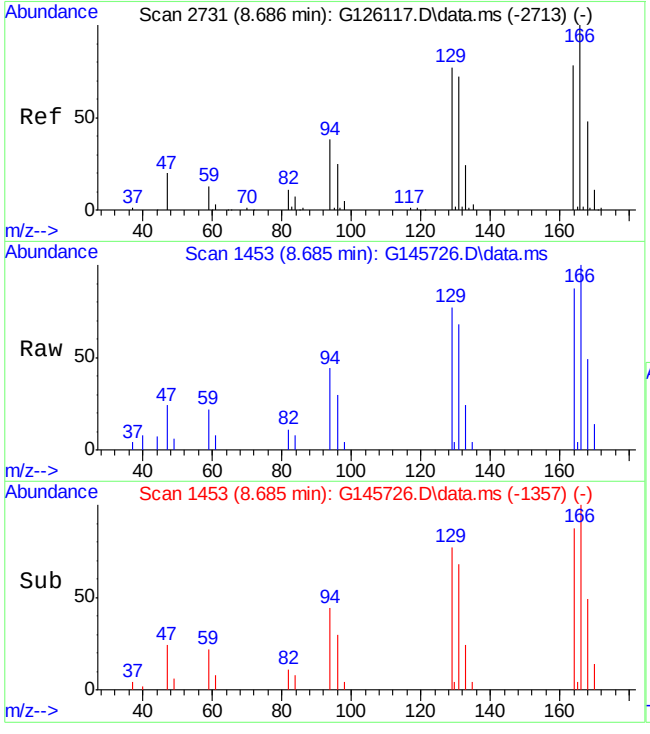


#51
trichloroethene
Concen: 7.72 ppb
RT: 6.582 min Scan# 1051
Delta R.T. 0.002 min
Lab File: G145726.D
Acq: 20 Sep 15 4:44 pm

Tgt Ion: 95 Resp: 12922

Ion	Ratio	Lower	Upper
95	100		
130	102.4	85.7	145.7
132	85.1	78.0	138.0

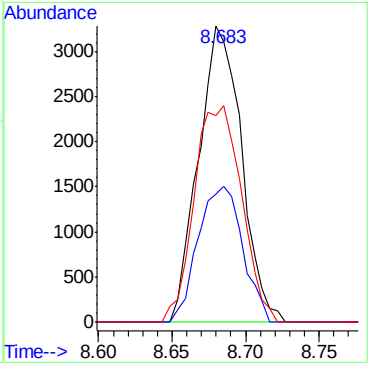




#67
tetrachloroethene
Concen: 4.19 ppb
RT: 8.683 min Scan# 1453
Delta R.T. -0.000 min
Lab File: G145726.D
Acq: 20 Sep 15 4:44 pm

Tgt Ion:166 Resp: 6654

Ion	Ratio	Lower	Upper
166	100		
168	48.6	15.8	75.8
129	77.5	47.3	107.3



Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145727.D
Acq On : 20 Sep 2015 5:12 pm
Operator : andrewd1
Sample : mc41356-23
Misc : MS35252,MSG5457,,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 21 08:33:00 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

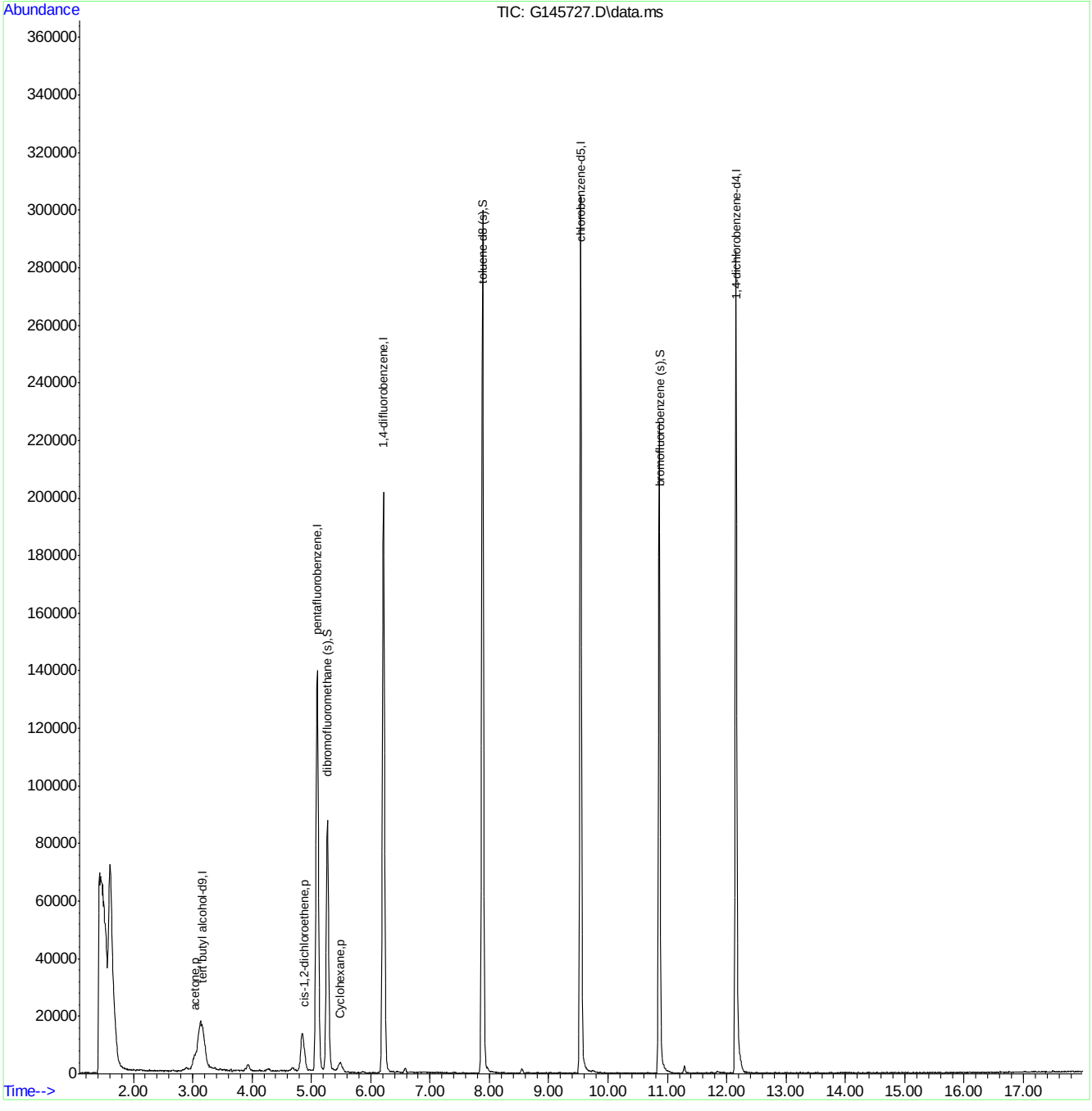
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.167	65	67103	500.00	ppb	0.02
4) pentafluorobenzene	5.102	168	140858	50.00	ppb	0.00
43) 1,4-difluorobenzene	6.217	114	224963	50.00	ppb	0.00
66) chlorobenzene-d5	9.541	82	105943	50.00	ppb	0.00
80) 1,4-dichlorobenzene-d4	12.162	152	90870	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	5.270	113	81969	51.99	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.98%			
60) toluene-d8 (s)	7.887	98	252021	50.92	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.84%			
82) bromofluorobenzene (s)	10.868	95	93205	53.11	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 106.22%			
Target Compounds						Qvalue
16) acetone	3.043	58	5199	20.58	ppb #	82
37) cis-1,2-dichloroethene	4.883	96	2649	1.56	ppb	85
44) Cyclohexane	5.488	56	3448	1.06	ppb	96

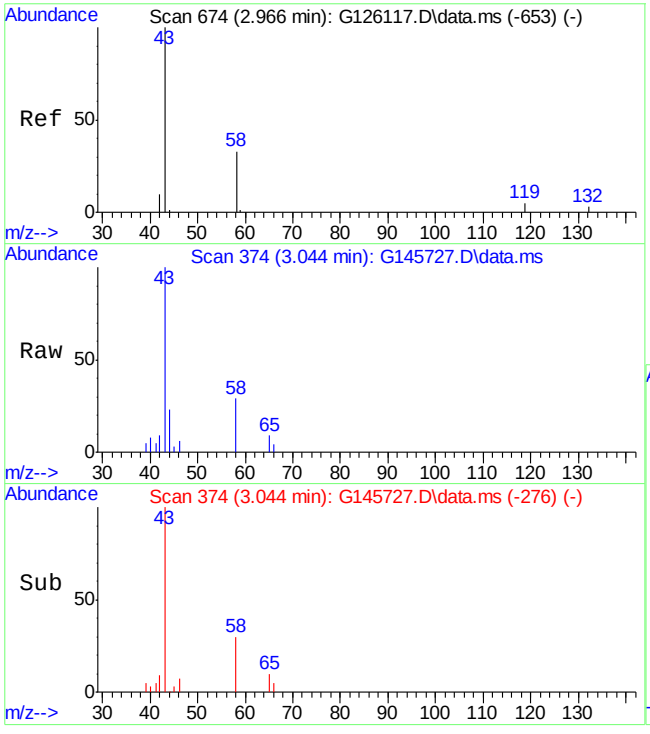
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145727.D
Acq On : 20 Sep 2015 5:12 pm
Operator : andrewd1
Sample : mc41356-23
Misc : MS35252,MSG5457,,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 21 08:33:00 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

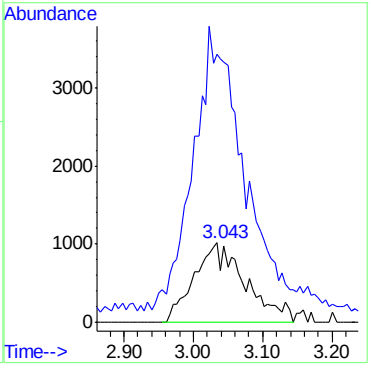


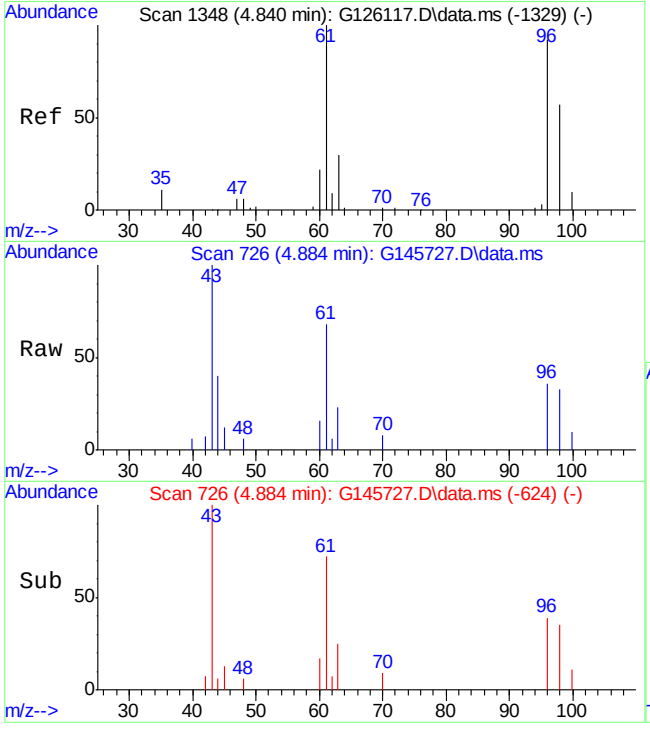


#16
acetone
Concen: 20.58 ppb
RT: 3.043 min Scan# 374
Delta R.T. 0.010 min
Lab File: G145727.D
Acq: 20 Sep 15 5:12 pm

Tgt Ion: 58 Resp: 5199

Ion	Ratio	Lower	Upper
58	100		
43	297.3	306.3	366.3#

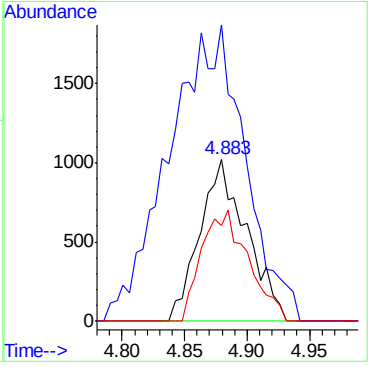


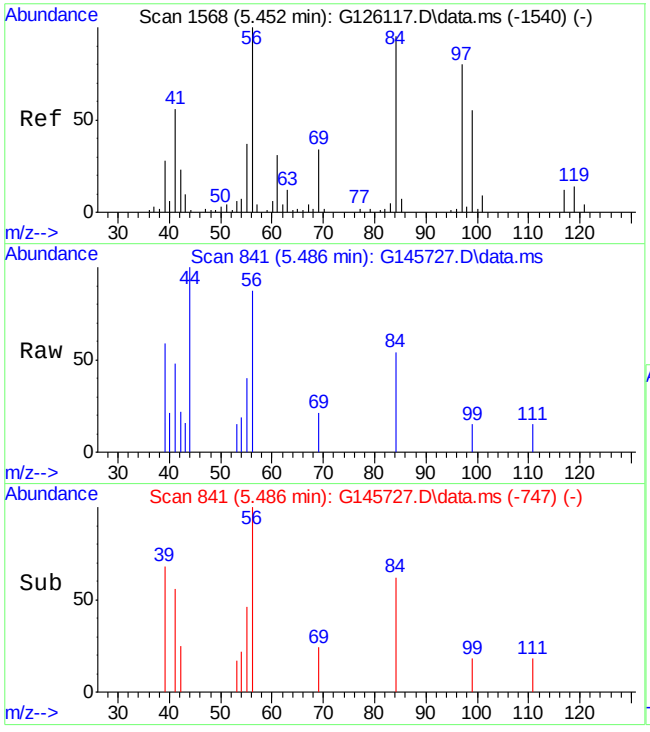


#37
cis-1,2-dichloroethene
Concen: 1.56 ppb
RT: 4.883 min Scan# 726
Delta R.T. -0.000 min
Lab File: G145727.D
Acq: 20 Sep 15 5:12 pm

Tgt Ion: 96 Resp: 2649

Ion	Ratio	Lower	Upper
96	100		
61	162.8	122.1	182.1
98	91.5	36.9	96.9

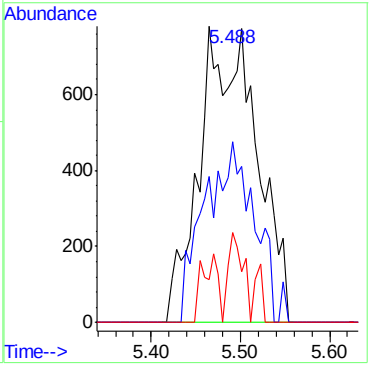




#44
Cyclohexane
Concen: 1.06 ppb
RT: 5.488 min Scan# 841
Delta R.T. -0.008 min
Lab File: G145727.D
Acq: 20 Sep 15 5:12 pm

Tgt Ion: 56 Resp: 3448

Ion	Ratio	Lower	Upper
56	100		
84	61.9	52.2	78.2
69	24.3	21.0	31.6



Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145728.D
Acq On : 20 Sep 2015 5:40 pm
Operator : andrewd1
Sample : mc41356-24
Misc : MS35252,MSG5457,,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 21 08:33:22 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

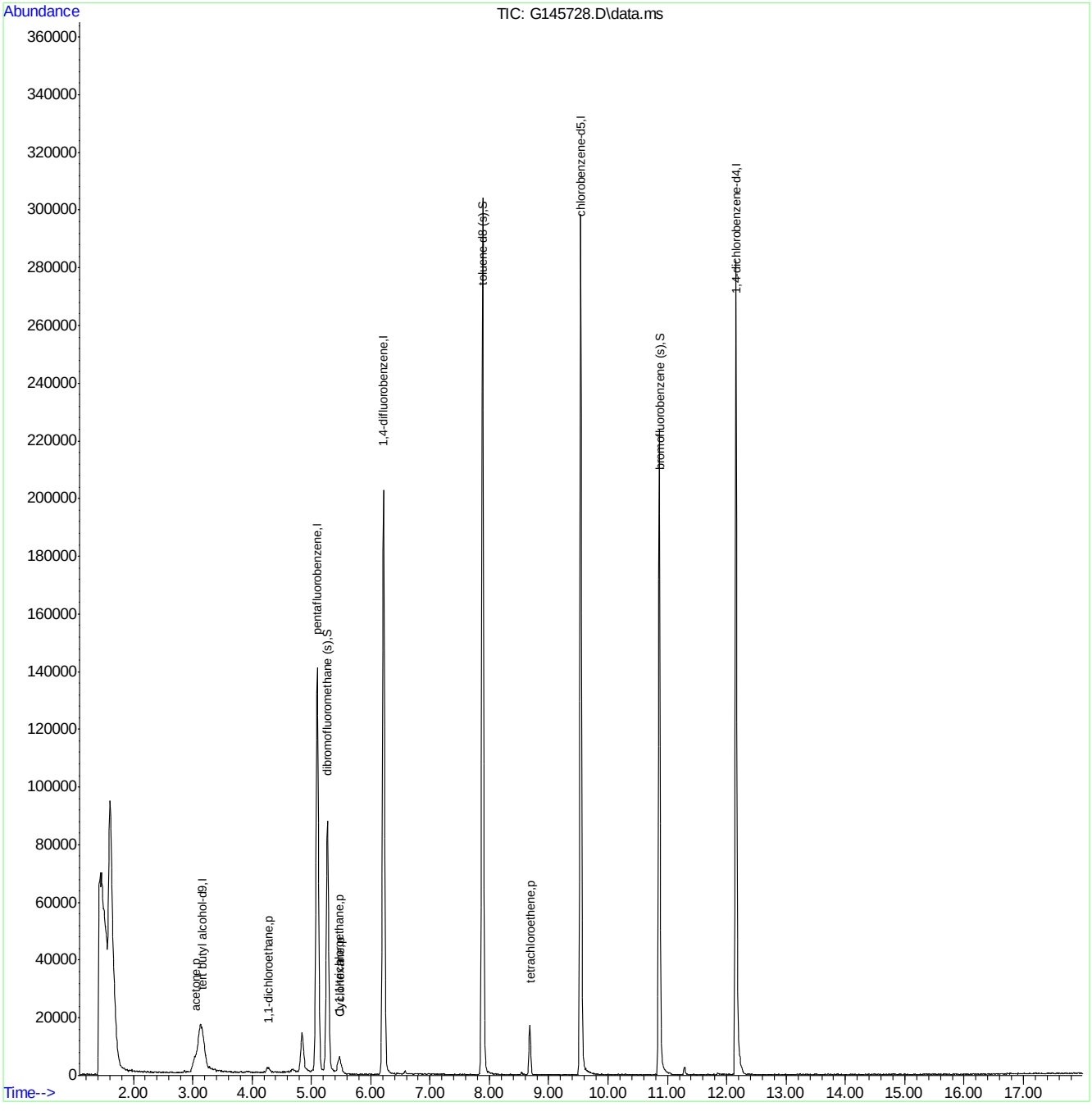
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.170	65	65533	500.00	ppb	0.02
4) pentafluorobenzene	5.102	168	139586	50.00	ppb	0.00
43) 1,4-difluorobenzene	6.218	114	226321	50.00	ppb	0.00
66) chlorobenzene-d5	9.541	82	104893	50.00	ppb	0.00
80) 1,4-dichlorobenzene-d4	12.162	152	88595	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	5.271	113	81606	52.23	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 104.46%			
60) toluene-d8 (s)	7.887	98	251022	50.41	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.82%			
82) bromofluorobenzene (s)	10.868	95	92902	54.29	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 108.58%			
Target Compounds						Qvalue
16) acetone	3.048	58	5146	20.56	ppb #	78
33) 1,1-dichloroethane	4.278	63	3787	1.08	ppb	92
42) 1,1,1-trichloroethane	5.467	97	5330	2.25	ppb	88
44) Cyclohexane	5.488	56	2039	0.62	ppb #	85
67) tetrachloroethene	8.683	166	6322	4.13	ppb	85

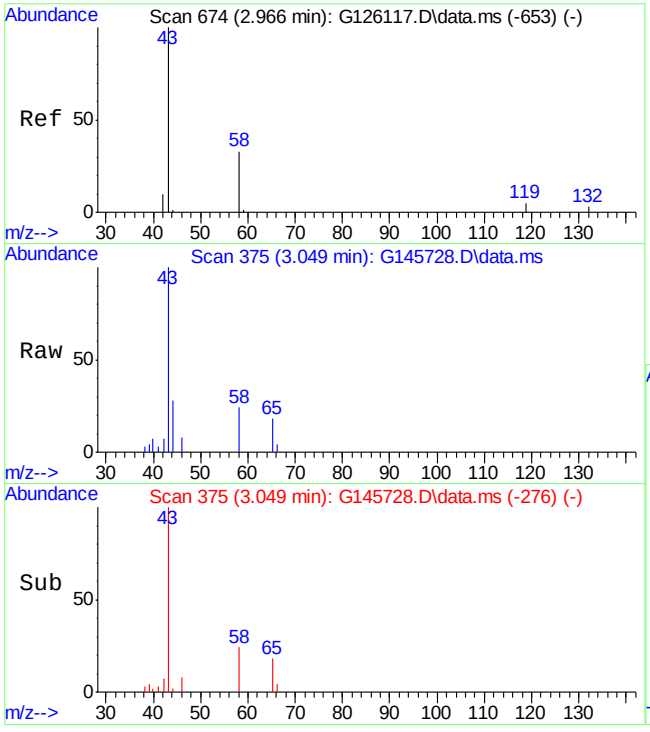
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145728.D
Acq On : 20 Sep 2015 5:40 pm
Operator : andrewd1
Sample : mc41356-24
Misc : MS35252,MSG5457,,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 21 08:33:22 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

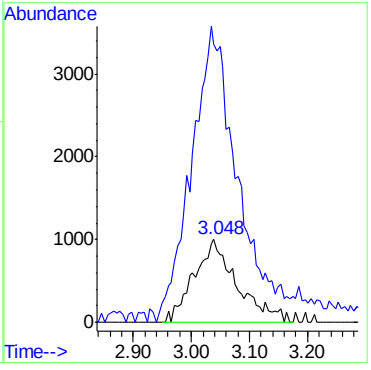


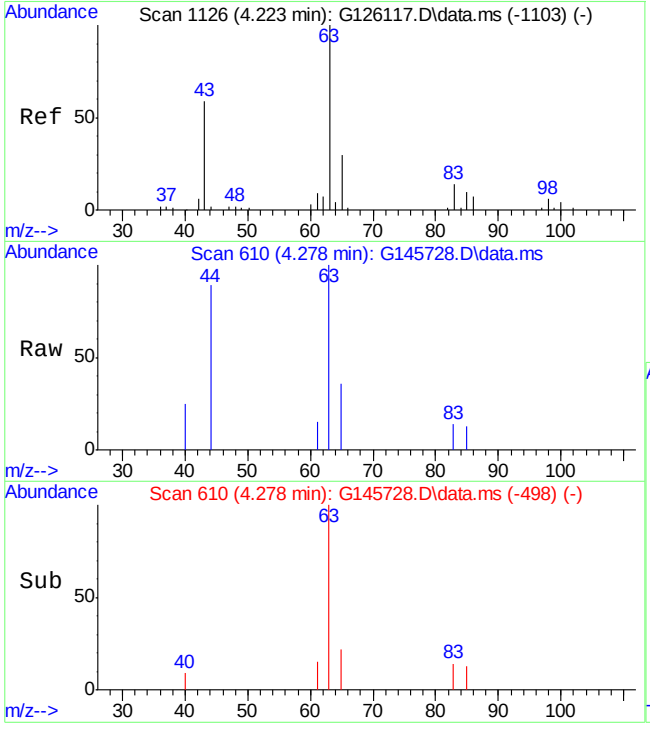


#16
acetone
Concen: 20.56 ppb
RT: 3.048 min Scan# 375
Delta R.T. 0.014 min
Lab File: G145728.D
Acq: 20 Sep 15 5:40 pm

Tgt Ion: 58 Resp: 5146

Ion	Ratio	Lower	Upper
58	100		
43	382.1	306.3	366.3#

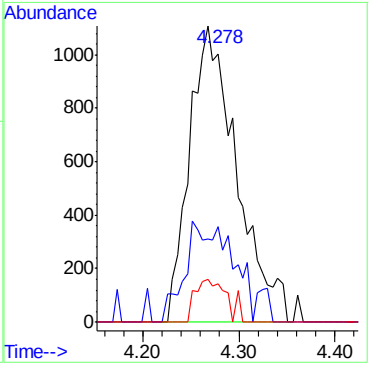


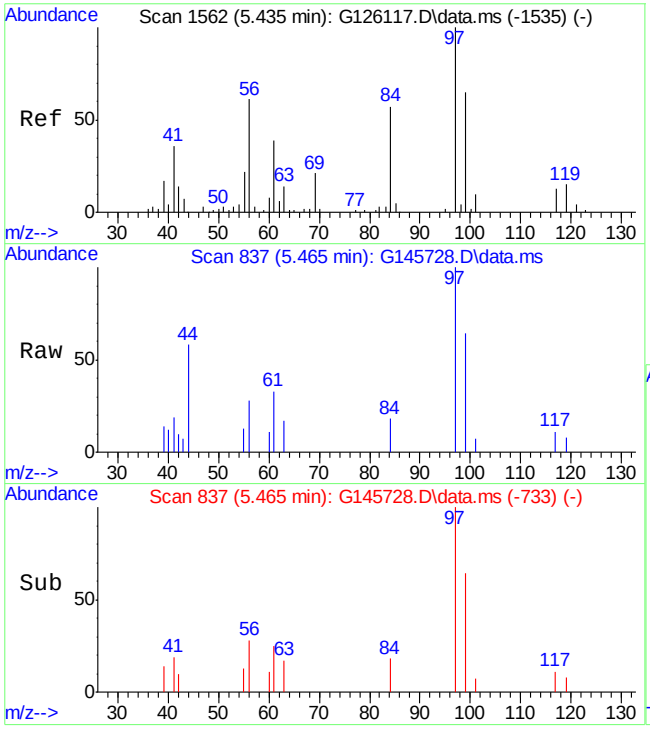


#33
1,1-dichloroethane
Concen: 1.08 ppb
RT: 4.278 min Scan# 610
Delta R.T. -0.003 min
Lab File: G145728.D
Acq: 20 Sep 15 5:40 pm

Tgt Ion: 63 Resp: 3787

Ion	Ratio	Lower	Upper
63	100		
65	35.5	1.5	61.5
83	14.5	0.0	41.1

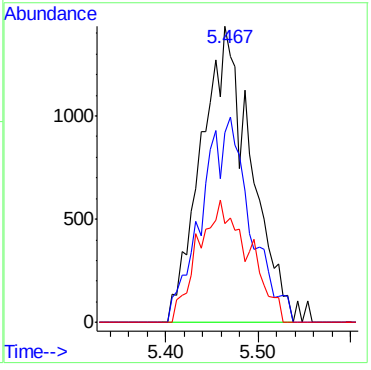


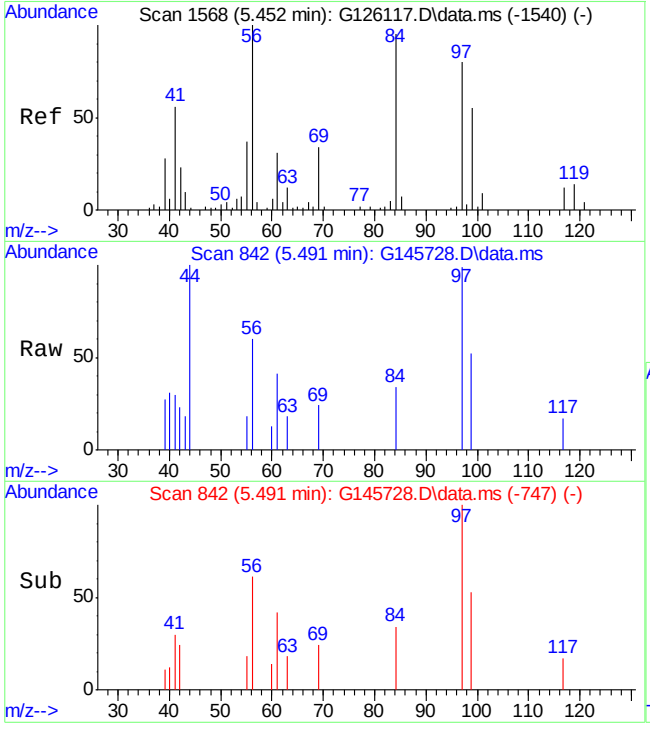


#42
1,1,1-trichloroethane
Concen: 2.25 ppb
RT: 5.467 min Scan# 837
Delta R.T. -0.006 min
Lab File: G145728.D
Acq: 20 Sep 15 5:40 pm

Tgt Ion: 97 Resp: 5330

Ion	Ratio	Lower	Upper
97	100		
99	63.9	30.7	90.7
61	33.4	17.5	77.5

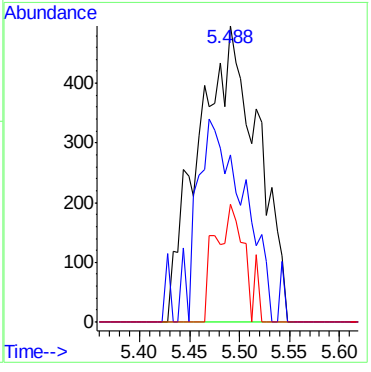


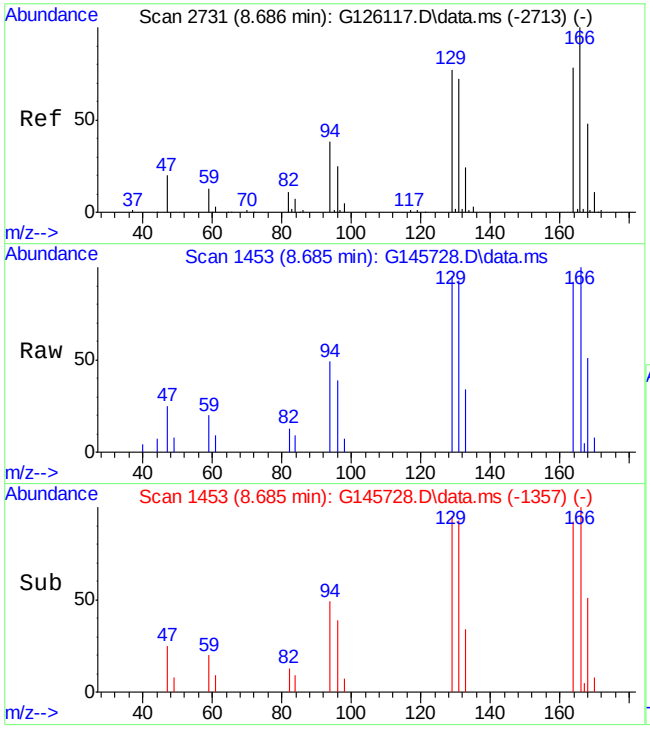


#44
Cyclohexane
Concen: 0.62 ppb
RT: 5.488 min Scan# 842
Delta R.T. -0.008 min
Lab File: G145728.D
Acq: 20 Sep 15 5:40 pm

Tgt Ion: 56 Resp: 2039

Ion	Ratio	Lower	Upper
56	100		
84	56.5	52.2	78.2
69	39.7	21.0	31.6#

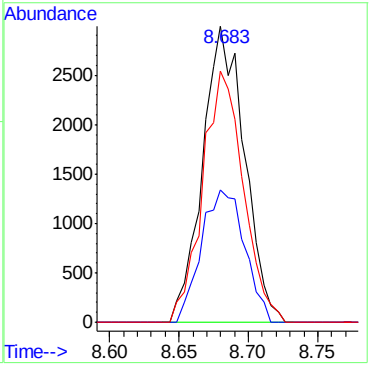




#67
tetrachloroethene
Concen: 4.13 ppb
RT: 8.683 min Scan# 1453
Delta R.T. -0.001 min
Lab File: G145728.D
Acq: 20 Sep 15 5:40 pm

Tgt Ion:166 Resp: 6322

Ion	Ratio	Lower	Upper
166	100		
168	50.5	15.8	75.8
129	94.6	47.3	107.3



7.1.24

7

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145729.D
Acq On : 20 Sep 2015 6:09 pm
Operator : andrewd1
Sample : mc41356-25
Misc : MS35252,MSG5457,,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 21 08:34:05 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

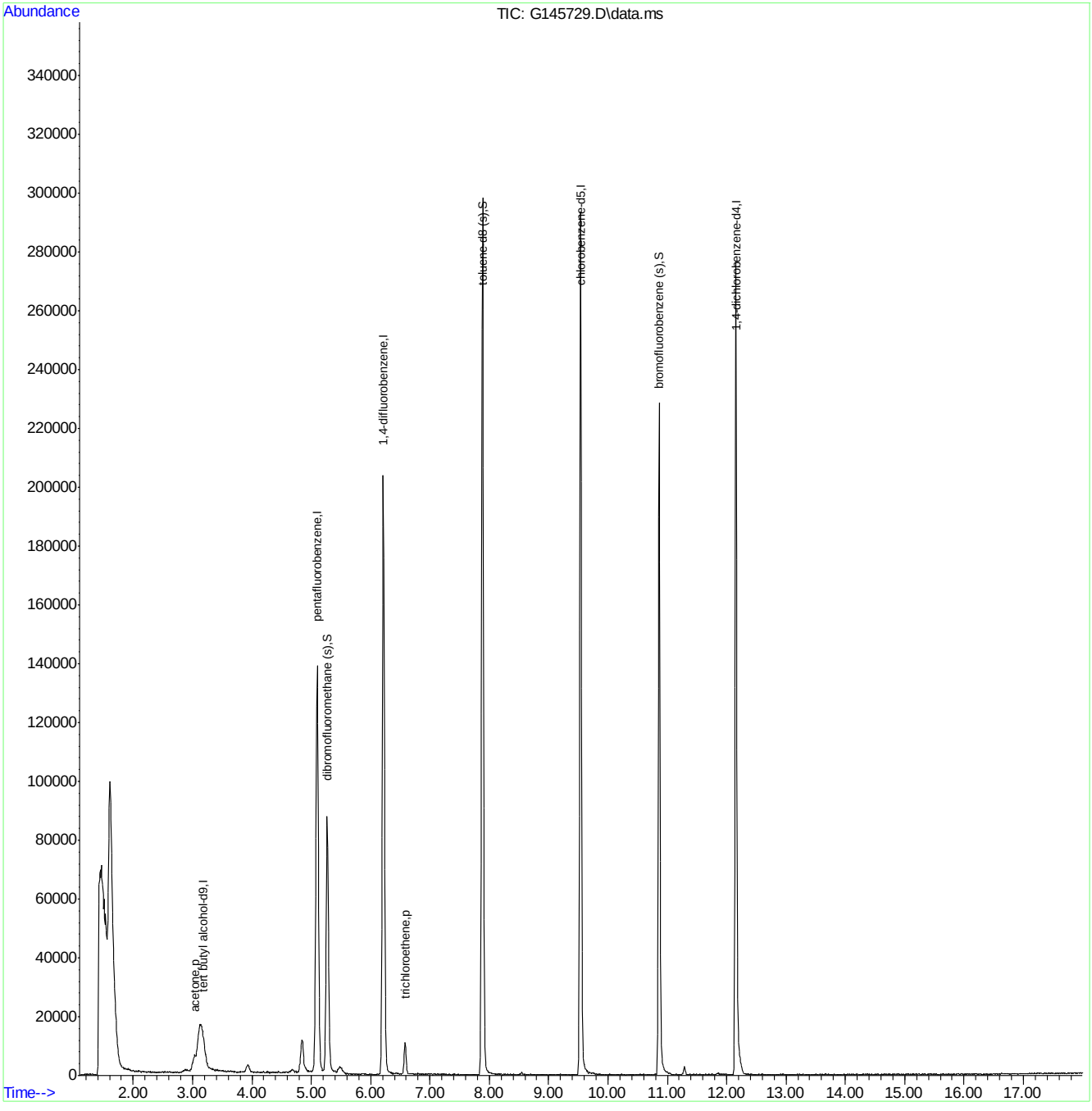
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.180	65	69402	500.00	ppb	0.03
4) pentafluorobenzene	5.102	168	137793	50.00	ppb	0.00
43) 1,4-difluorobenzene	6.218	114	220209	50.00	ppb	0.00
66) chlorobenzene-d5	9.541	82	103877	50.00	ppb	0.00
80) 1,4-dichlorobenzene-d4	12.162	152	88658	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	5.271	113	80410	52.14	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 104.28%			
60) toluene-d8 (s)	7.887	98	247499	51.09	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.18%			
82) bromofluorobenzene (s)	10.867	95	91313	53.33	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 106.66%			
Target Compounds						Qvalue
16) acetone	3.047	58	5577	22.57	ppb	87
51) trichloroethene	6.580	95	4584	2.87	ppb	94

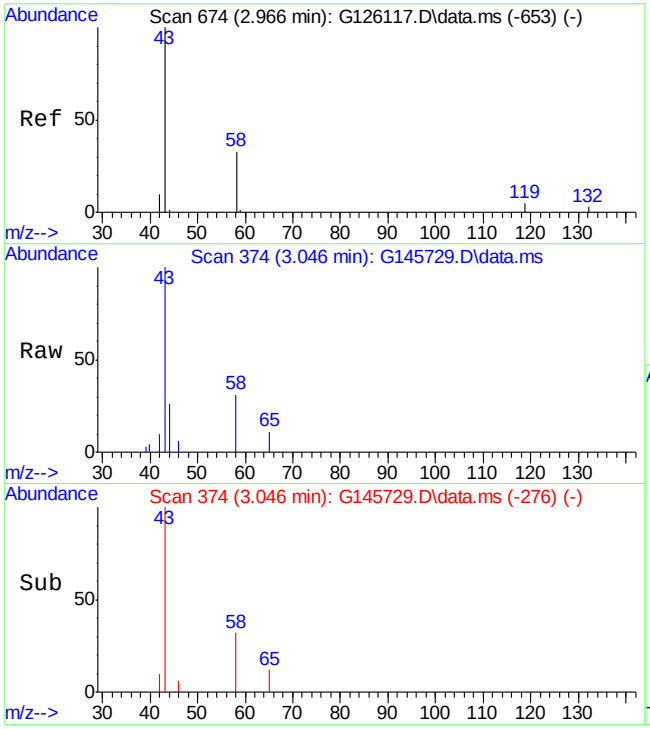
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145729.D
Acq On : 20 Sep 2015 6:09 pm
Operator : andrewd1
Sample : mc41356-25
Misc : MS35252,MSG5457,,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 21 08:34:05 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

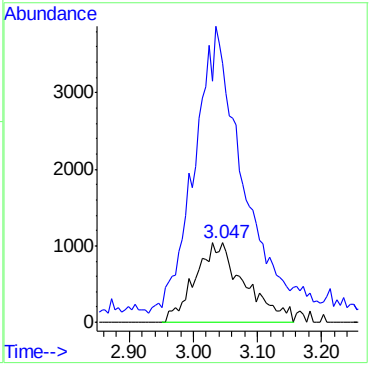


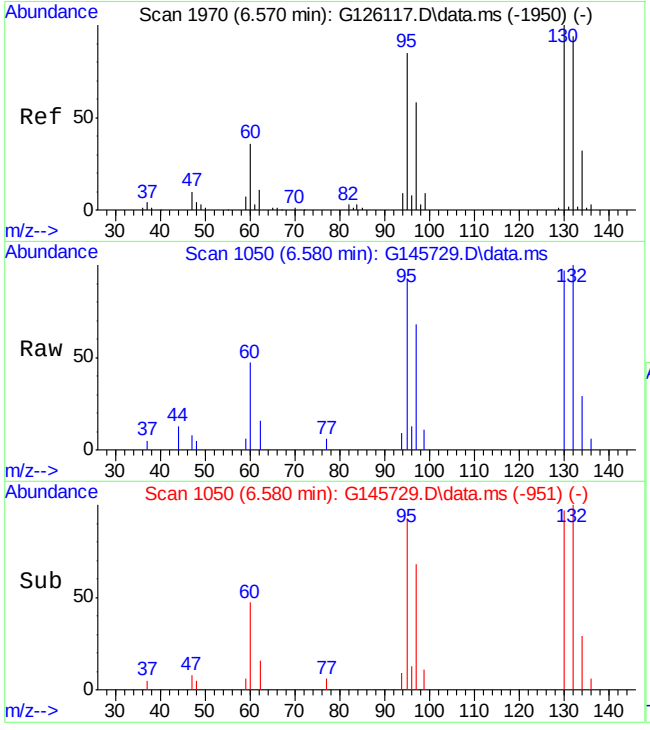


#16
acetone
Concen: 22.57 ppb
RT: 3.047 min Scan# 374
Delta R.T. 0.014 min
Lab File: G145729.D
Acq: 20 Sep 15 6:09 pm

Tgt Ion: 58 Resp: 5577

Ion	Ratio	Lower	Upper
58	100		
43	308.2	306.3	366.3

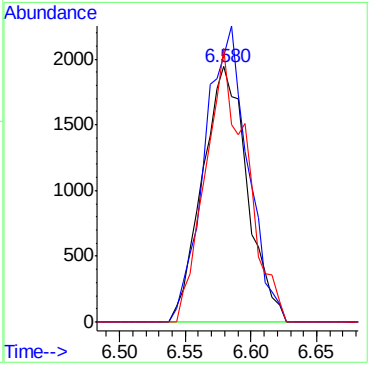




#51
trichloroethene
Concen: 2.87 ppb
RT: 6.580 min Scan# 1050
Delta R.T. 0.000 min
Lab File: G145729.D
Acq: 20 Sep 15 6:09 pm

Tgt Ion: 95 Resp: 4584

Ion	Ratio	Lower	Upper
95	100		
130	104.1	85.7	145.7
132	107.1	78.0	138.0



Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145730.D
Acq On : 20 Sep 2015 6:37 pm
Operator : andrewd1
Sample : mc41356-26
Misc : MS35252,MSG5457,,,,5,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 21 08:34:42 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

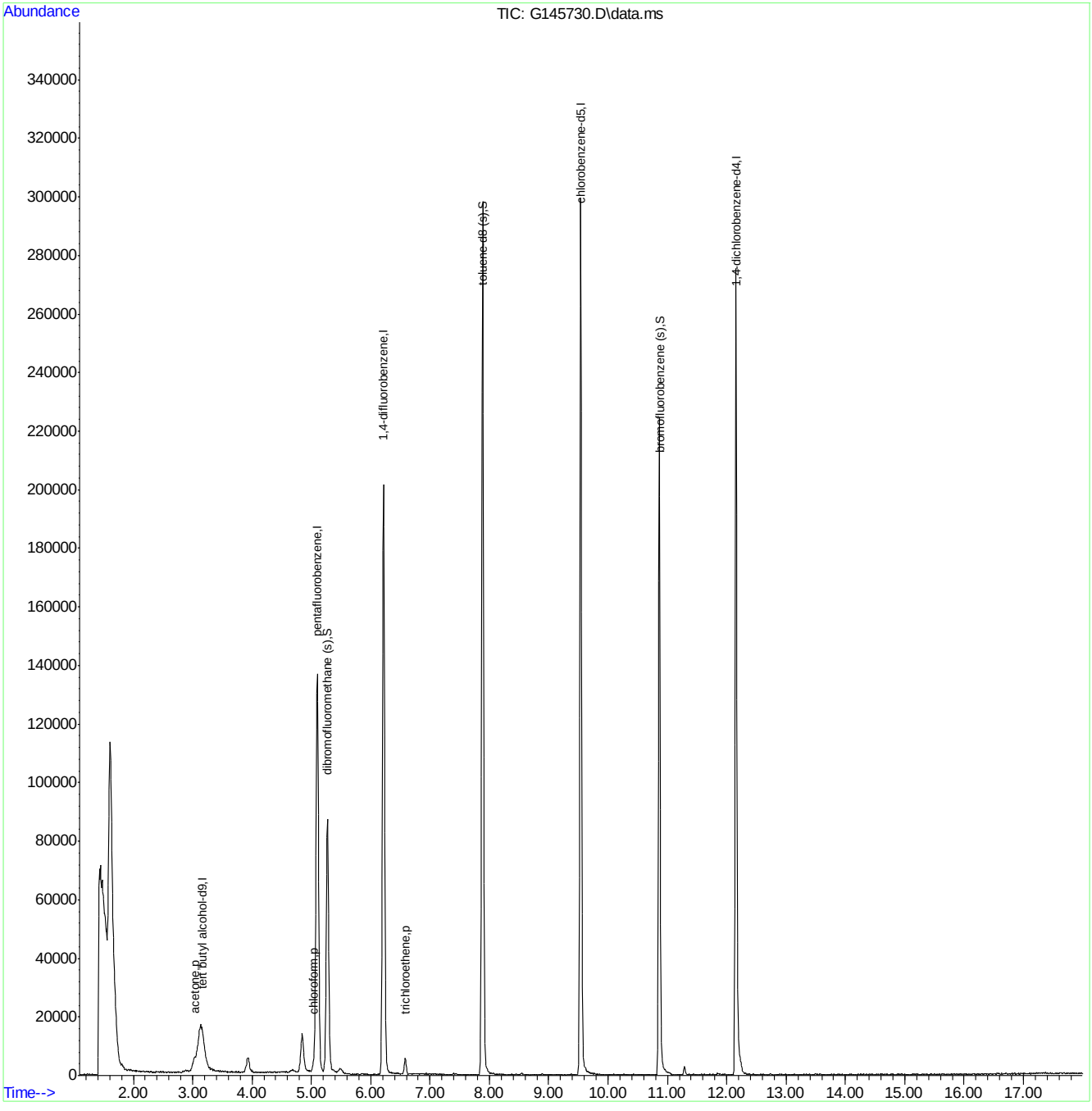
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.172	65	65273	500.00	ppb	0.02
4) pentafluorobenzene	5.102	168	140417	50.00	ppb	0.00
43) 1,4-difluorobenzene	6.218	114	221806	50.00	ppb	0.00
66) chlorobenzene-d5	9.542	82	104833	50.00	ppb	0.00
80) 1,4-dichlorobenzene-d4	12.162	152	89050	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	5.271	113	80537	51.24	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.48%			
60) toluene-d8 (s)	7.888	98	246854	50.59	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.18%			
82) bromofluorobenzene (s)	10.869	95	91863	53.41	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 106.82%			
Target Compounds						Qvalue
16) acetone	3.046	58	5172	20.54	ppb #	23
39) chloroform	5.043	83	4072	1.28	ppb	86
51) trichloroethene	6.581	95	2443	1.52	ppb	87

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

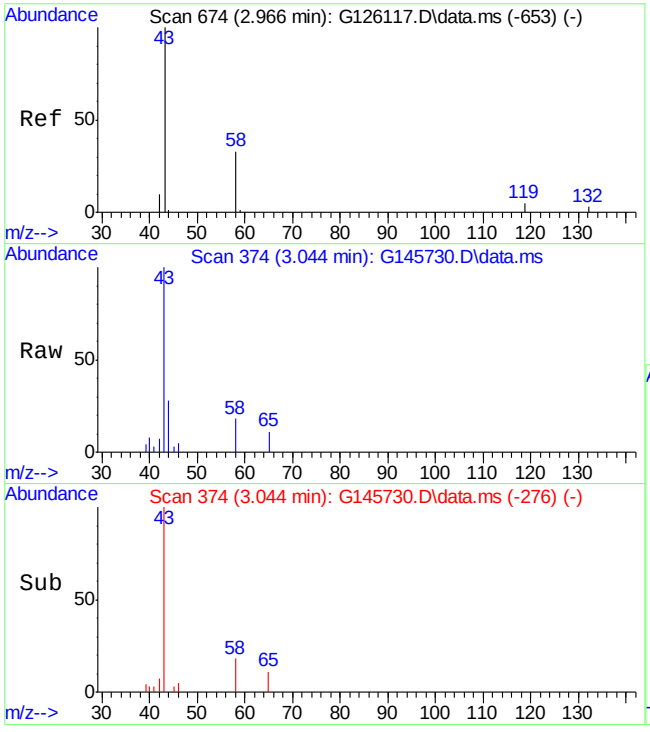
Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145730.D
Acq On : 20 Sep 2015 6:37 pm
Operator : andrewd1
Sample : mc41356-26
Misc : MS35252,MSG5457,,,,5,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 21 08:34:42 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration



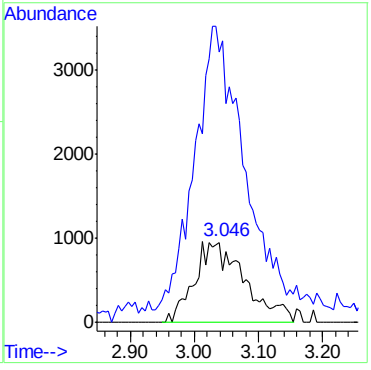
g150913w.m Mon Sep 21 12:45:54 2015 Page: 2

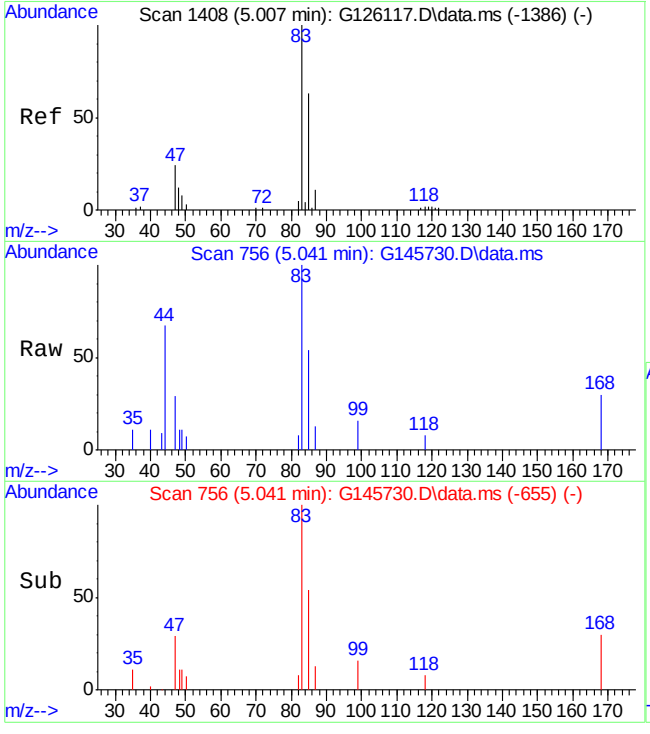


#16
acetone
Concen: 20.54 ppb
RT: 3.046 min Scan# 374
Delta R.T. 0.013 min
Lab File: G145730.D
Acq: 20 Sep 15 6:37 pm

Tgt Ion: 58 Resp: 5172

Ion	Ratio	Lower	Upper
58	100		
43	499.5	306.3	366.3#

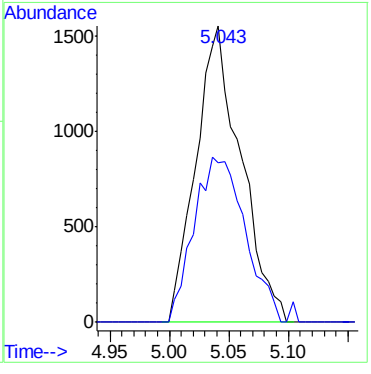


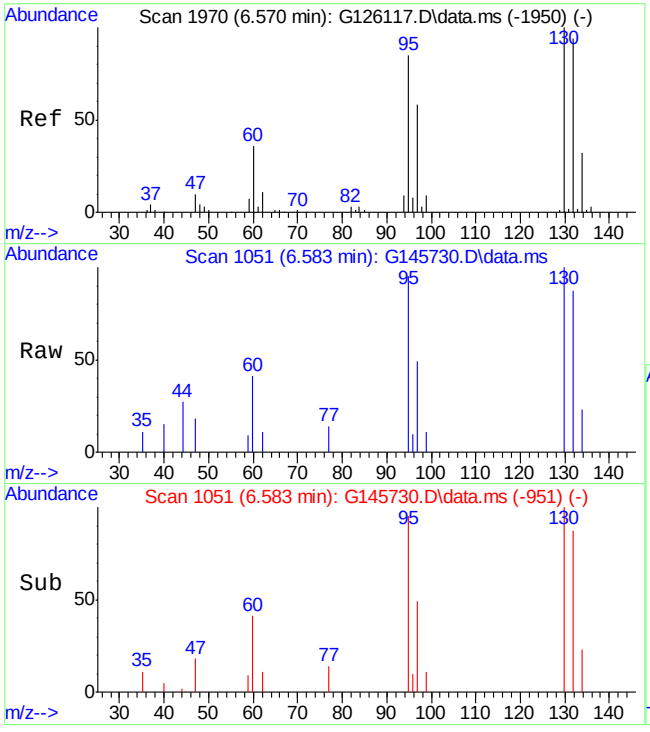


#39
chloroform
Concen: 1.28 ppb
RT: 5.043 min Scan# 756
Delta R.T. -0.000 min
Lab File: G145730.D
Acq: 20 Sep 15 6:37 pm

Tgt Ion: 83 Resp: 4072

Ion	Ratio	Lower	Upper
83	100		
85	53.8	35.2	95.2

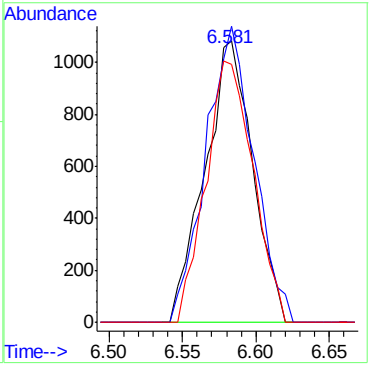




#51
trichloroethene
Concen: 1.52 ppb
RT: 6.581 min Scan# 1051
Delta R.T. 0.001 min
Lab File: G145730.D
Acq: 20 Sep 15 6:37 pm

Tgt Ion: 95 Resp: 2443

Ion	Ratio	Lower	Upper
95	100		
130	105.1	85.7	145.7
132	91.6	78.0	138.0



Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145651.D
Acq On : 18 Sep 2015 10:31 am
Operator : andrewd1
Sample : mb
Misc : MS35241,MSG5455,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 18 11:41:12 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.177	65	68382	500.00	ppb	0.03
4) pentafluorobenzene	5.101	168	140744	50.00	ppb	0.00
43) 1,4-difluorobenzene	6.217	114	233761	50.00	ppb	0.00
66) chlorobenzene-d5	9.541	82	109165	50.00	ppb	0.00
80) 1,4-dichlorobenzene-d4	12.163	152	93549	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	5.269	113	81085	51.47	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.94%			
60) toluene-d8 (s)	7.887	98	257491	50.07	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.14%			
82) bromofluorobenzene (s)	10.869	95	97691	54.07	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 108.14%			

Target Compounds Qvalue

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

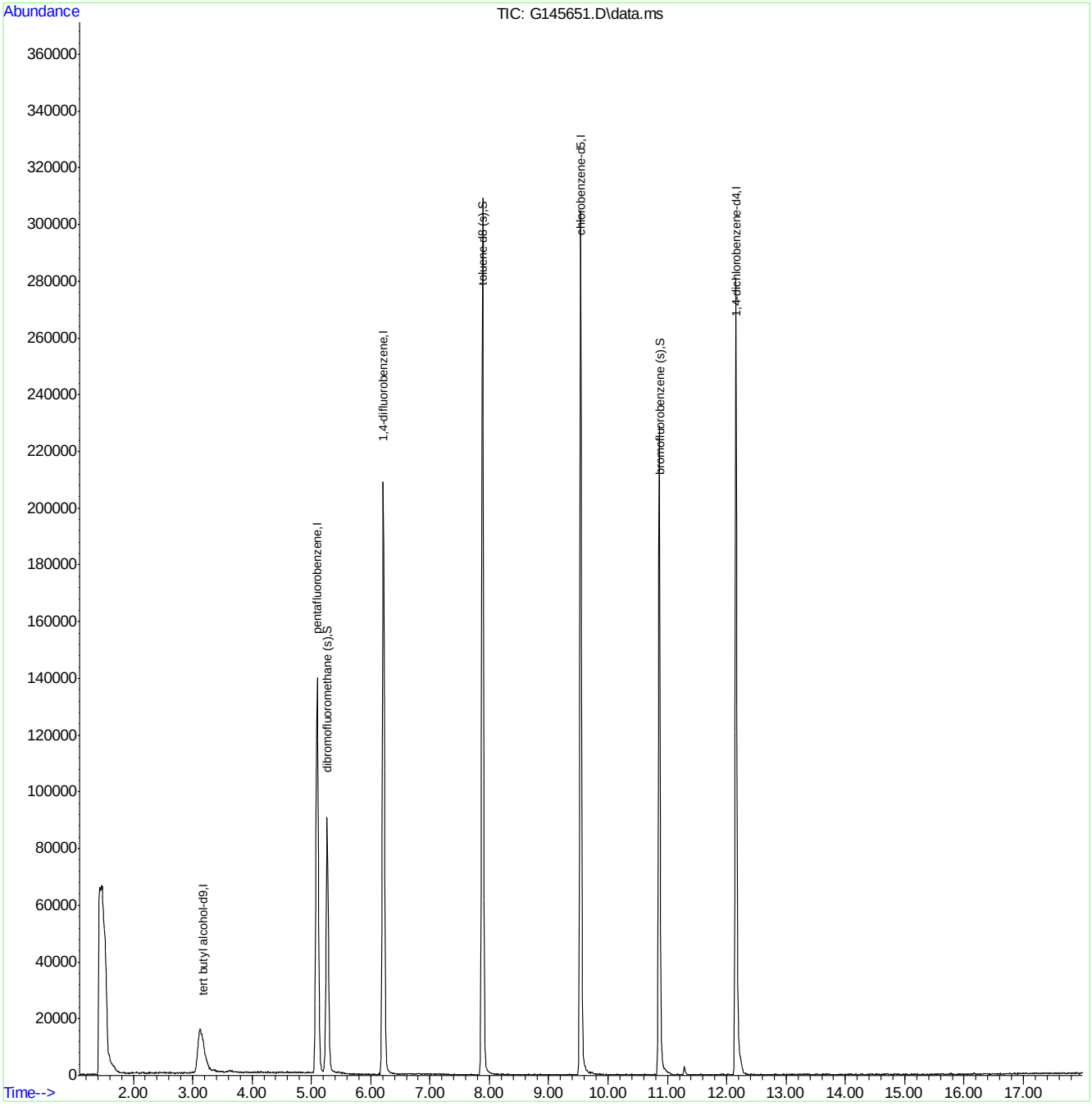
7.2.1

7

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145651.D
Acq On : 18 Sep 2015 10:31 am
Operator : andrewd1
Sample : mb
Misc : MS35241,MSG5455,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 18 11:41:12 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration



g150913w.m Fri Sep 18 13:40:06 2015 Page: 2

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145714.D
Acq On : 20 Sep 2015 11:02 am
Operator : andrewd1
Sample : mb
Misc : MS35249,MSG5457,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 21 08:22:34 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.180	65	68813	500.00	ppb	0.03
4) pentafluorobenzene	5.102	168	147702	50.00	ppb	0.00
43) 1,4-difluorobenzene	6.218	114	240266	50.00	ppb	0.00
66) chlorobenzene-d5	9.541	82	111931	50.00	ppb	0.00
80) 1,4-dichlorobenzene-d4	12.163	152	94604	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	5.272	113	84804	51.30	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.60%			
60) toluene-d8 (s)	7.888	98	267453	50.60	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.20%			
82) bromofluorobenzene (s)	10.869	95	100303	54.90	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 109.80%			

Target Compounds Qvalue

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

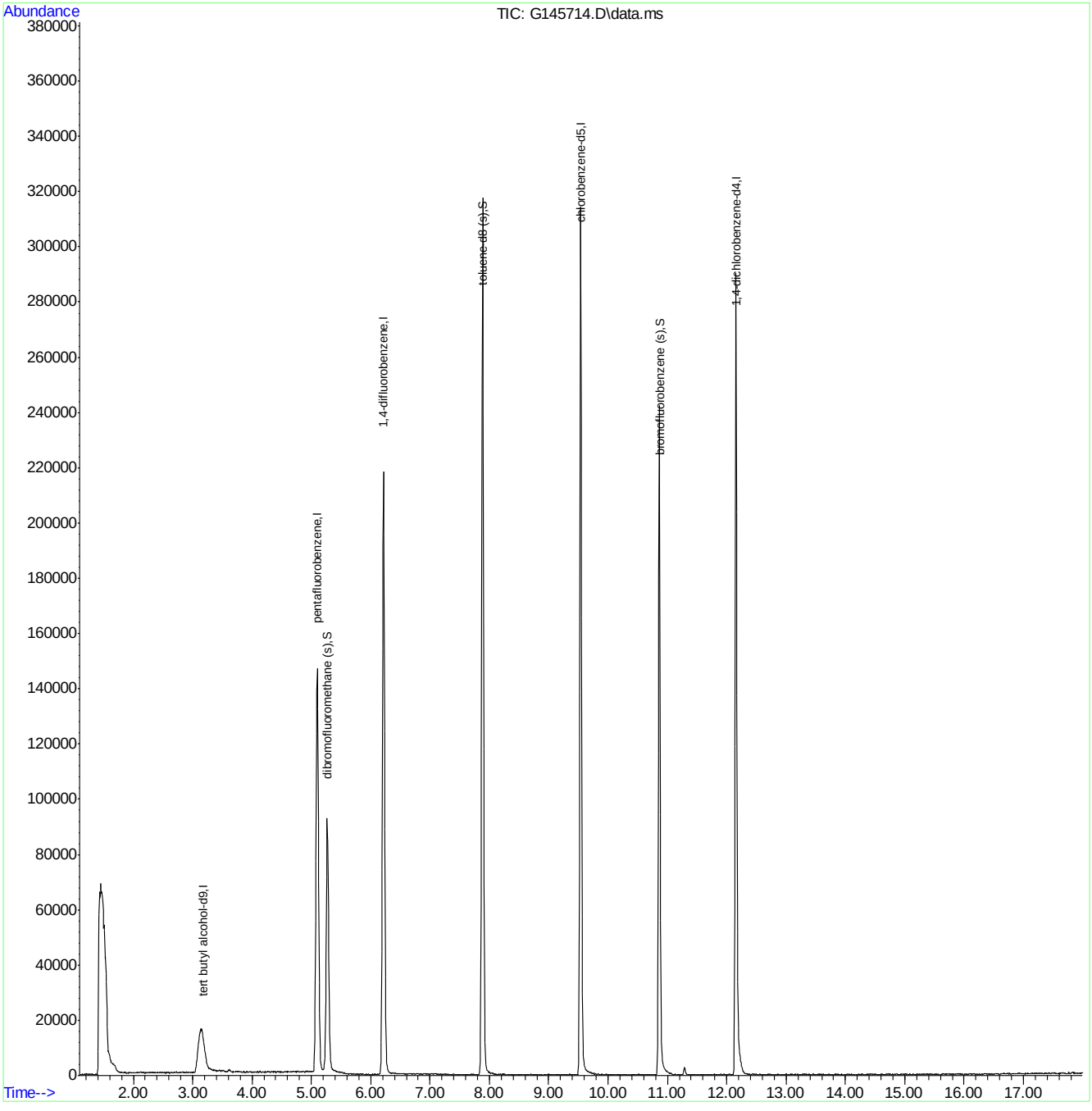
7.2.2

7

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145714.D
Acq On : 20 Sep 2015 11:02 am
Operator : andrewd1
Sample : mb
Misc : MS35249,MSG5457,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 21 08:22:34 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration



g150913w.m Mon Sep 21 12:44:52 2015 Page: 2

Manual Integrations APPROVED (compounds with "m" flag)
Sona Liskova
09/18/15 14:32

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145648.D
Acq On : 18 Sep 2015 9:05 am
Operator : andrewd1
Sample : bs
Misc : MS35241,MSG5455,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 18 09:25:00 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	3.167	65	66247	500.00	ppb		0.02
4) pentafluorobenzene	5.099	168	142184	50.00	ppb		0.00
43) 1,4-difluorobenzene	6.215	114	235325	50.00	ppb		0.00
66) chlorobenzene-d5	9.537	82	113125	50.00	ppb		0.00
80) 1,4-dichlorobenzene-d4	12.156	152	114575	50.00	ppb		0.00
System Monitoring Compounds							
40) dibromofluoromethane (s)	5.267	113	81861	51.44	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.88%				
60) toluene-d8 (s)	7.884	98	272636	52.66	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 105.32%				
82) bromofluorobenzene (s)	10.862	95	105926	47.87	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 95.74%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	3.241	59	87502	500.97	ppb		80
3) Ethanol	2.556	45	87569	4398.60	ppb	#	41
5) dichlorodifluoromethane	1.925	85	199365	54.88	ppb		98
6) chloromethane	2.005	50	179253	57.67	ppb		96
7) vinyl chloride	2.105	62	116410	53.05	ppb		98
8) bromomethane	2.439	96	66255	55.54	ppb		98
9) chloroethane	2.460	64	60734	57.98	ppb		81
10) ethyl ether	2.858	59	73727	49.05	ppb		98
11) acetonitrile	3.258	41	29555	40.13	ppb	#	68
12) trichlorofluoromethane	2.728	101	137983m	53.88	ppb		
13) freon-113	3.078	101	98584m	51.45	ppb		
14) acrolein	3.005	56	59350	357.47	ppb		98
15) 1,1-dichloroethene	3.236	96	82916	54.24	ppb		84
16) acetone	3.042	58	16618m	65.18	ppb		
17) Methyl Acetate	3.433	43	97988	50.83	ppb	#	98
18) methylene chloride	3.632	84	86037	52.72	ppb		93
19) methyl tert butyl ether	3.732	73	216438	45.80	ppb		93
20) acrylonitrile	3.708	53	42119	44.64	ppb		89
21) allyl chloride	3.517	41	163093m	47.76	ppb		
22) trans-1,2-dichloroethene	3.887	96	81792	51.82	ppb		95
23) iodomethane	3.492	142	143515	55.38	ppb		85
24) carbon disulfide	3.727	76	256570	52.47	ppb		97
25) propionitrile	4.772	54	14711	46.04	ppb		100
26) vinyl acetate	4.248	43	205648	42.93	ppb		93
27) chloroprene	4.358	53	145481	45.42	ppb		96
28) di-isopropyl ether	4.143	45	330543	45.29	ppb		95
29) methacrylonitrile	4.966	41	78976	49.88	ppb		88
30) 2-butanone	4.677	72	10785	56.37	ppb	#	78
32) Hexane	3.896	41	113672	47.92	ppb	#	92
33) 1,1-dichloroethane	4.278	63	164554	45.96	ppb		99
34) tert-butyl ethyl ether	4.554	59	263566	44.57	ppb		99
36) 2,2-dichloropropane	4.850	77	113350	49.43	ppb		97
37) cis-1,2-dichloroethene	4.882	96	85207	49.86	ppb		98
38) bromochloromethane	5.218	128	43335	50.26	ppb	#	87

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145648.D
Acq On : 18 Sep 2015 9:05 am
Operator : andrewd1
Sample : bs
Misc : MS35241,MSG5455,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 18 09:25:00 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39)	chloroform	5.041	83	150763	46.89	ppb		97
41)	Tetrahydrofuran	5.252	42	29469	42.89	ppb		88
42)	1,1,1-trichloroethane	5.472	97	121955	50.54	ppb		94
44)	Cyclohexane	5.494	56	153784	45.32	ppb		95
45)	carbon tetrachloride	5.746	117	119798	49.16	ppb		99
46)	1,1-dichloropropene	5.623	75	110662	49.60	ppb		97
47)	benzene	5.920	78	292279	47.53	ppb		100
48)	1,2-dichloroethane	5.900	62	119383	46.55	ppb		96
49)	tert-amyl methyl ether	5.753	73	203852	46.75	ppb	#	42
50)	heptane	5.766	43	232111	49.00	ppb		98
51)	trichloroethene	6.580	95	81817	47.97	ppb		89
52)	1,2-dichloropropane	6.773	63	86614	49.66	ppb		100
53)	dibromomethane	7.092	93	52575	49.73	ppb		90
54)	bromodichloromethane	7.031	83	107771	47.41	ppb		96
55)	Methylcyclohexane	6.652	83	130271	50.31	ppb		96
56)	2-chloroethyl vinyl ether	7.356	63	29853	45.73	ppb		98
57)	methyl methacrylate	6.829	69	47101	46.58	ppb		95
58)	1,4-dioxane	7.070	88	3372	219.19	ppb		73
59)	cis-1,3-dichloropropene	7.619	75	120636	48.80	ppb		94
61)	4-methyl-2-pentanone	7.385	43	113424	46.30	ppb		97
62)	toluene	7.971	92	177379	48.85	ppb		99
63)	trans-1,3-dichloropropene	8.167	75	105913	44.81	ppb		97
64)	1,1,2-trichloroethane	8.338	83	57390	48.22	ppb		98
65)	ethyl methacrylate	8.152	69	84158	47.15	ppb		97
67)	tetrachloroethene	8.681	166	80517	48.81	ppb		93
68)	1,3-dichloropropane	8.613	76	112783	49.91	ppb		98
69)	dibromochloromethane	8.906	129	86604	46.98	ppb		100
70)	1,2-dibromoethane	9.126	107	74536	47.74	ppb		94
71)	2-hexanone	8.353	43	80032	56.46	ppb		97
72)	chlorobenzene	9.579	112	206332	45.74	ppb		95
73)	1,1,1,2-tetrachloroethane	9.626	131	79124	48.30	ppb		99
74)	ethylbenzene	9.633	91	342175	47.71	ppb		96
75)	m,p-xylene	9.717	106	262009	95.34	ppb		95
76)	o-xylene	10.195	106	128454	47.23	ppb		88
77)	styrene	10.234	104	227299	49.31	ppb		94
78)	bromoform	10.607	173	53614	47.02	ppb		99
79)	trans-1,4-dichloro-2-b...	10.640	53	28413	42.31	ppb		97
81)	isopropylbenzene	10.585	105	350500	47.09	ppb		98
83)	bromobenzene	11.076	156	92719	47.48	ppb		97
84)	1,1,2,2-tetrachloroethane	10.776	83	90941	44.23	ppb		95
85)	1,2,3-trichloropropane	10.936	75	62151	43.68	ppb		99
86)	n-propylbenzene	11.023	91	410543	46.02	ppb		96
87)	2-chlorotoluene	11.217	91	281558	45.52	ppb		92
88)	4-chlorotoluene	11.271	91	262680	46.90	ppb		92
89)	1,3,5-trimethylbenzene	11.197	105	317326	47.66	ppb		99
90)	tert-butylbenzene	11.590	91	212764	46.65	ppb		87
91)	1,2,4-trimethylbenzene	11.626	105	318792	47.49	ppb		97
92)	sec-butylbenzene	11.818	105	405165	47.94	ppb		97
93)	1,3-dichlorobenzene	12.074	146	175216	45.11	ppb		95
94)	p-isopropyltoluene	11.967	119	347359	47.92	ppb		95

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145648.D
Acq On : 18 Sep 2015 9:05 am
Operator : andrewd1
Sample : bs
Misc : MS35241,MSG5455,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 18 09:25:00 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

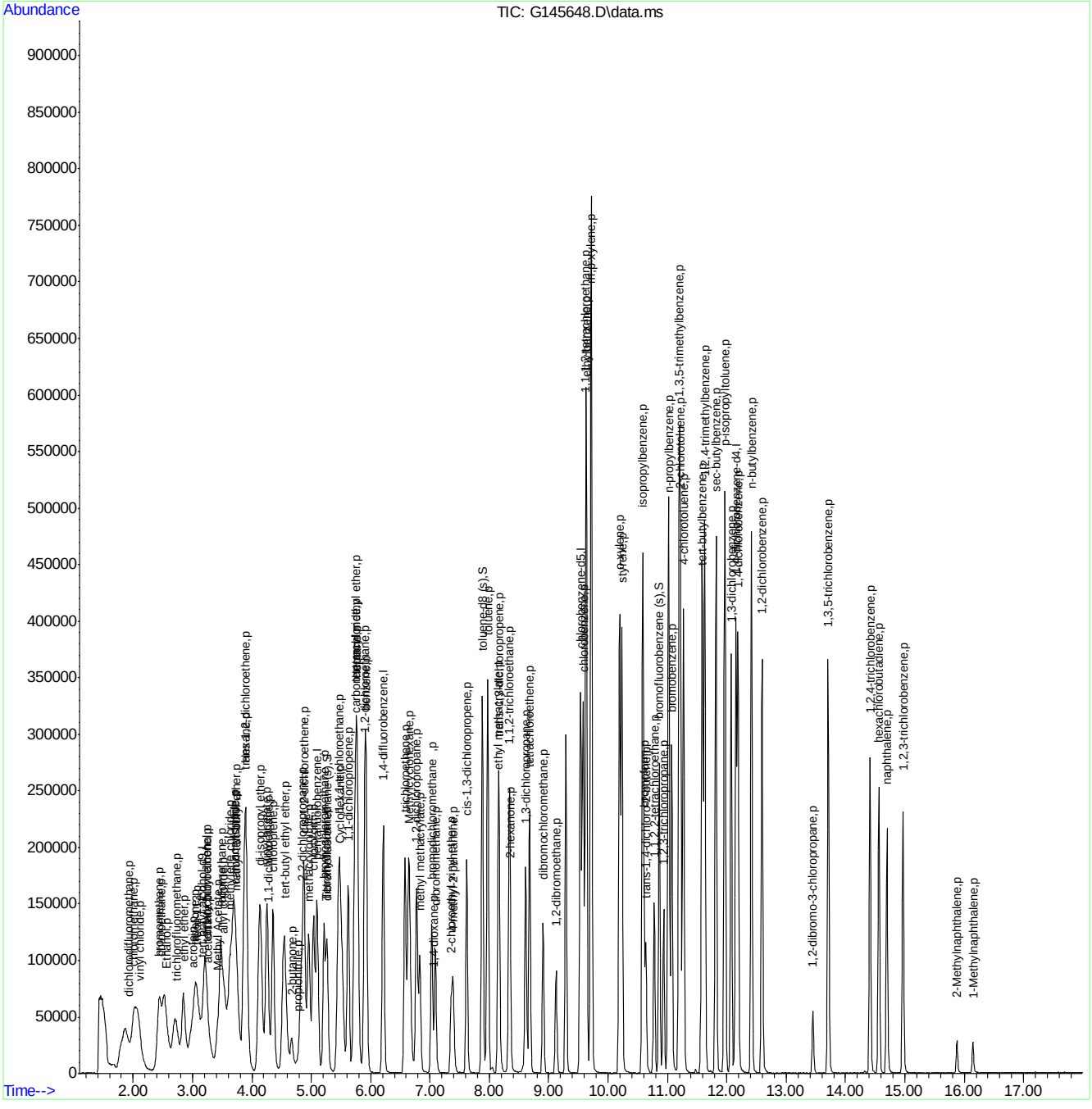
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
95)	1,4-dichlorobenzene	12.191	146	180364	45.50	ppb		98
96)	1,2-dichlorobenzene	12.596	146	171799	46.00	ppb		99
97)	n-butylbenzene	12.415	91	318197	49.10	ppb		92
98)	1,2-dibromo-3-chloropr...	13.452	75	17119	43.26	ppb	#	71
99)	1,3,5-trichlorobenzene	13.711	180	131824	45.32	ppb		99
100)	1,2,4-trichlorobenzene	14.413	180	101543	42.93	ppb		99
101)	hexachlorobutadiene	14.565	225	56708	49.13	ppb		98
102)	naphthalene	14.701	128	201643	35.61	ppb		100
103)	2-Methylnaphthalene	15.883	142	17394	18.67	ppb		96
104)	1-Methylnaphthalene	16.149	142	16084	18.88	ppb		96
105)	1,2,3-trichlorobenzene	14.971	180	86689	42.26	ppb		97

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

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145648.D
Acq On : 18 Sep 2015 9:05 am
Operator : andrewd1
Sample : bs
Misc : MS35241,MSG5455,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 18 09:25:00 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration



ACCUTEST LABORATORIES MC41356

Manual Integrations APPROVED (compounds with "m" flag)
Sona Liskova
09/18/15 14:32

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145649.D
Acq On : 18 Sep 2015 9:33 am
Operator : andrewd1
Sample : bsd
Misc : MS35241,MSG5455,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 18 10:06:51 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	3.164	65	63617	500.00	ppb		0.01
4) pentafluorobenzene	5.101	168	147102	50.00	ppb		0.00
43) 1,4-difluorobenzene	6.216	114	243993	50.00	ppb		0.00
66) chlorobenzene-d5	9.537	82	116002	50.00	ppb		0.00
80) 1,4-dichlorobenzene-d4	12.156	152	116572	50.00	ppb		0.00
System Monitoring Compounds							
40) dibromofluoromethane (s)	5.269	113	84954	51.60	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.20%				
60) toluene-d8 (s)	7.885	98	274997	51.23	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.46%				
82) bromofluorobenzene (s)	10.863	95	108727	48.29	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 96.58%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	3.243	59	81486	485.81	ppb		82
3) Ethanol	2.547	45	80425	4206.76	ppb		93
5) dichlorodifluoromethane	1.895	85	193850	51.58	ppb		99
6) chloromethane	2.006	50	181570	56.46	ppb		99
7) vinyl chloride	2.104	62	116909	51.50	ppb		97
8) bromomethane	2.441	96	66156	53.60	ppb		98
9) chloroethane	2.456	64	61297	56.57	ppb		82
10) ethyl ether	2.857	59	74259	47.75	ppb		98
11) acetonitrile	3.261	41	25043	32.87	ppb	#	60
12) trichlorofluoromethane	2.727	101	138167m	52.15	ppb		
13) freon-113	3.072	101	101452m	51.18	ppb		
14) acrolein	2.993	56	55596	323.67	ppb		97
15) 1,1-dichloroethene	3.237	96	82786	52.34	ppb		91
16) acetone	3.041	58	15374m	58.29	ppb		
17) Methyl Acetate	3.435	43	97893	49.09	ppb	#	98
18) methylene chloride	3.629	84	87166	51.63	ppb		90
19) methyl tert butyl ether	3.726	73	220962	45.19	ppb		100
20) acrylonitrile	3.708	53	42404	43.44	ppb		98
21) allyl chloride	3.578	41	226160	64.01	ppb		88
22) trans-1,2-dichloroethene	3.889	96	82904	50.77	ppb		92
23) iodomethane	3.489	142	146881	54.79	ppb		82
24) carbon disulfide	3.725	76	265178	52.42	ppb		97
25) propionitrile	4.775	54	14699	44.46	ppb		100
26) vinyl acetate	4.248	43	212284	42.83	ppb		94
27) chloroprene	4.364	53	150599	45.44	ppb		96
28) di-isopropyl ether	4.142	45	337357	44.68	ppb		95
29) methacrylonitrile	4.968	41	81079	49.49	ppb		92
30) 2-butanone	4.680	72	11020	55.67	ppb		99
32) Hexane	3.898	41	113823	46.38	ppb		96
33) 1,1-dichloroethane	4.281	63	169910	45.87	ppb		99
34) tert-butyl ethyl ether	4.551	59	266467	43.55	ppb		99
36) 2,2-dichloropropane	4.850	77	110552	46.60	ppb		100
37) cis-1,2-dichloroethene	4.884	96	89242	50.47	ppb		95
38) bromochloromethane	5.220	128	44542	49.93	ppb		85

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145649.D
Acq On : 18 Sep 2015 9:33 am
Operator : andrewd1
Sample : bsd
Misc : MS35241,MSG5455,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 18 10:06:51 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39)	chloroform	5.043	83	153332	46.10	ppb		98
41)	Tetrahydrofuran	5.253	42	29570	41.60	ppb		97
42)	1,1,1-trichloroethane	5.472	97	125217	50.16	ppb		97
44)	Cyclohexane	5.494	56	160501	45.62	ppb		99
45)	carbon tetrachloride	5.746	117	122706	48.57	ppb		98
46)	1,1-dichloropropene	5.624	75	112048	48.44	ppb		95
47)	benzene	5.921	78	296791	46.55	ppb		96
48)	1,2-dichloroethane	5.901	62	120316	45.24	ppb		98
49)	tert-amyl methyl ether	5.747	73	203032	44.91	ppb	#	70
50)	heptane	5.765	43	233399	47.52	ppb		98
51)	trichloroethene	6.581	95	84042	47.53	ppb		88
52)	1,2-dichloropropane	6.774	63	89181	49.32	ppb		100
53)	dibromomethane	7.092	93	54347	49.58	ppb		91
54)	bromodichloromethane	7.032	83	109883	46.62	ppb		99
55)	Methylcyclohexane	6.652	83	130813	48.72	ppb		97
56)	2-chloroethyl vinyl ether	7.357	63	30212	44.70	ppb		99
57)	methyl methacrylate	6.829	69	47504	45.31	ppb		96
58)	1,4-dioxane	7.068	88	3153	197.67	ppb		98
59)	cis-1,3-dichloropropene	7.619	75	124063	48.40	ppb		95
61)	4-methyl-2-pentanone	7.386	43	113771	44.79	ppb		97
62)	toluene	7.971	92	182067	48.36	ppb		97
63)	trans-1,3-dichloropropene	8.169	75	109086	44.52	ppb		100
64)	1,1,2-trichloroethane	8.339	83	58092	47.07	ppb		93
65)	ethyl methacrylate	8.153	69	86403	46.69	ppb		94
67)	tetrachloroethene	8.682	166	83130	49.15	ppb		98
68)	1,3-dichloropropane	8.614	76	112774	48.67	ppb		98
69)	dibromochloromethane	8.907	129	87957	46.53	ppb		98
70)	1,2-dibromoethane	9.126	107	75969	47.45	ppb		98
71)	2-hexanone	8.351	43	77043	53.01	ppb		98
72)	chlorobenzene	9.580	112	211637	45.76	ppb		94
73)	1,1,1,2-tetrachloroethane	9.626	131	81988	48.81	ppb		98
74)	ethylbenzene	9.633	91	355990	48.40	ppb		96
75)	m,p-xylene	9.717	106	272506	96.70	ppb		93
76)	o-xylene	10.195	106	134215	48.13	ppb		93
77)	styrene	10.234	104	233413	49.38	ppb		94
78)	bromoform	10.607	173	54912	46.96	ppb		97
79)	trans-1,4-dichloro-2-b...	10.640	53	29161	42.34	ppb		96
81)	isopropylbenzene	10.585	105	362006	47.80	ppb		98
83)	bromobenzene	11.076	156	93561	47.09	ppb		90
84)	1,1,2,2-tetrachloroethane	10.777	83	90018	43.03	ppb		96
85)	1,2,3-trichloropropane	10.935	75	63534	43.89	ppb		97
86)	n-propylbenzene	11.023	91	422198	46.51	ppb		95
87)	2-chlorotoluene	11.217	91	288724	45.88	ppb		92
88)	4-chlorotoluene	11.271	91	271326	47.61	ppb		90
89)	1,3,5-trimethylbenzene	11.197	105	328008	48.42	ppb		99
90)	tert-butylbenzene	11.591	91	219311	47.26	ppb		89
91)	1,2,4-trimethylbenzene	11.627	105	328391	48.08	ppb		97
92)	sec-butylbenzene	11.818	105	408317	47.49	ppb		96
93)	1,3-dichlorobenzene	12.074	146	179555	45.43	ppb		95
94)	p-isopropyltoluene	11.968	119	359832	48.79	ppb		95

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145649.D
Acq On : 18 Sep 2015 9:33 am
Operator : andrewd1
Sample : bsd
Misc : MS35241,MSG5455,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 18 10:06:51 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

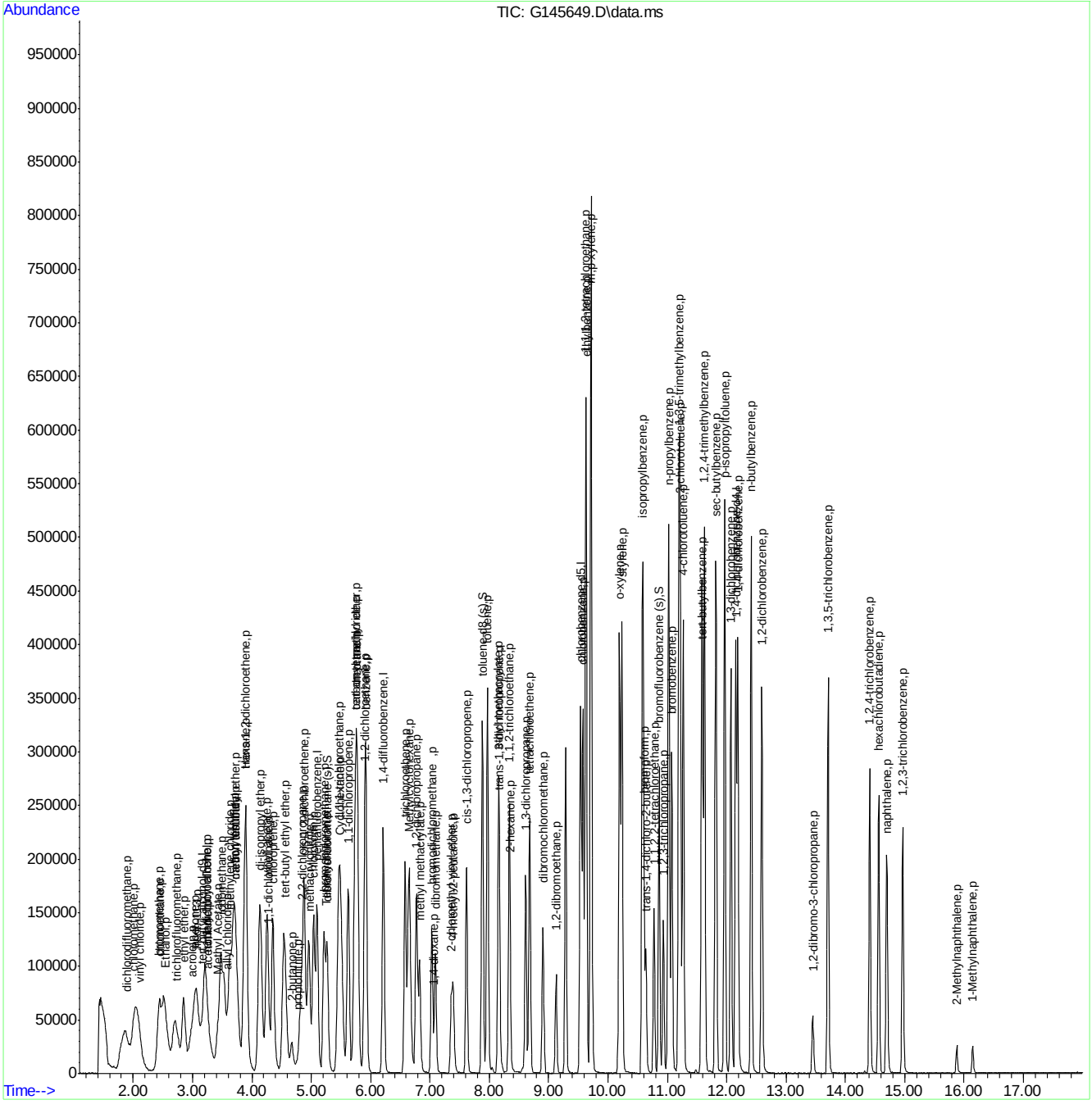
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
95) 1,4-dichlorobenzene	12.192	146	182283	45.20	ppb		97
96) 1,2-dichlorobenzene	12.596	146	176551	46.46	ppb		97
97) n-butylbenzene	12.415	91	324635	49.24	ppb		90
98) 1,2-dibromo-3-chloropr...	13.453	75	16803	41.73	ppb	#	76
99) 1,3,5-trichlorobenzene	13.710	180	135495	45.79	ppb		99
100) 1,2,4-trichlorobenzene	14.414	180	100265	41.75	ppb		97
101) hexachlorobutadiene	14.565	225	57286	48.78	ppb		93
102) naphthalene	14.702	128	194850	34.04	ppb		100
103) 2-Methylnaphthalene	15.884	142	15733	17.12	ppb		98
104) 1-Methylnaphthalene	16.150	142	14932	17.59	ppb		95
105) 1,2,3-trichlorobenzene	14.971	180	84480	40.61	ppb		96

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

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145649.D
Acq On : 18 Sep 2015 9:33 am
Operator : andrewd1
Sample : bsd
Misc : MS35241,MSG5455,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 18 10:06:51 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration



ACCUTEST LABORATORIES MC41356

Manual Integrations APPROVED (compounds with "m" flag)
Sona Liskova
09/21/15 13:37

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145711.D
Acq On : 20 Sep 2015 9:36 am
Operator : andrewd1
Sample : bs
Misc : MS35249,MSG5457,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 20 10:00:41 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	3.182	65	71564	500.00	ppb		0.03
4) pentafluorobenzene	5.099	168	144520	50.00	ppb		0.00
43) 1,4-difluorobenzene	6.215	114	237289	50.00	ppb		0.00
66) chlorobenzene-d5	9.537	82	112504	50.00	ppb		0.00
80) 1,4-dichlorobenzene-d4	12.156	152	113821	50.00	ppb		0.00
System Monitoring Compounds							
40) dibromofluoromethane (s)	5.268	113	82335	50.90	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.80%				
60) toluene-d8 (s)	7.884	98	267314	51.21	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.42%				
82) bromofluorobenzene (s)	10.863	95	104984	47.76	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 95.52%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	3.243	59	88829	470.78	ppb		71
3) Ethanol	2.545	45	66948	3112.96	ppb		92
5) dichlorodifluoromethane	1.904	85	182337	49.38	ppb		99
6) chloromethane	2.017	50	168630	53.37	ppb		97
7) vinyl chloride	2.112	62	108756	48.77	ppb		96
8) bromomethane	2.450	96	61563	50.77	ppb		99
9) chloroethane	2.459	64	56959	53.50	ppb		81
10) ethyl ether	2.862	59	75643	49.51	ppb		95
11) acetonitrile	3.247	41	26424	35.30	ppb	#	56
12) trichlorofluoromethane	2.728	101	129231m	49.65	ppb		
13) freon-113	3.073	101	100804m	51.76	ppb		
14) acrolein	3.009	56	58264	345.26	ppb		99
15) 1,1-dichloroethene	3.235	96	81928	52.72	ppb		88
16) acetone	3.036	58	15472m	59.70	ppb		
17) Methyl Acetate	3.433	43	104337	53.25	ppb	#	98
18) methylene chloride	3.631	84	85073	51.29	ppb		89
19) methyl tert butyl ether	3.754	73	229278	47.73	ppb		98
20) acrylonitrile	3.712	53	44641	46.55	ppb		93
21) allyl chloride	3.517	41	172955m	49.83	ppb		
22) trans-1,2-dichloroethene	3.885	96	80949	50.46	ppb		92
23) iodomethane	3.492	142	143009	54.29	ppb		80
24) carbon disulfide	3.735	76	260876	52.49	ppb		99
25) propionitrile	4.771	54	15874	48.88	ppb		100
26) vinyl acetate	4.248	43	223430	45.88	ppb		94
27) chloroprene	4.362	53	150984	46.37	ppb		94
28) di-isopropyl ether	4.148	45	334848	45.14	ppb		94
29) methacrylonitrile	4.963	41	88827	55.19	ppb		91
30) 2-butanone	4.678	72	11727	60.30	ppb	#	77
32) Hexane	3.896	41	117793	48.86	ppb	#	88
33) 1,1-dichloroethane	4.278	63	165059	45.36	ppb		99
34) tert-butyl ethyl ether	4.573	59	277014	46.08	ppb		98
36) 2,2-dichloropropane	4.853	77	118518	50.85	ppb		100
37) cis-1,2-dichloroethene	4.882	96	87049	50.11	ppb		93
38) bromochloromethane	5.218	128	43878	50.07	ppb		88

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145711.D
Acq On : 20 Sep 2015 9:36 am
Operator : andrewd1
Sample : bs
Misc : MS35249,MSG5457,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 20 10:00:41 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39)	chloroform	5.041	83	152276	46.60	ppb		99
41)	Tetrahydrofuran	5.250	42	30762	44.05	ppb		99
42)	1,1,1-trichloroethane	5.474	97	127060	51.81	ppb		98
44)	Cyclohexane	5.495	56	158629	46.36	ppb		94
45)	carbon tetrachloride	5.747	117	122556	49.88	ppb		100
46)	1,1-dichloropropene	5.623	75	110066	48.93	ppb		96
47)	benzene	5.920	78	288684	46.56	ppb		100
48)	1,2-dichloroethane	5.901	62	120630	46.64	ppb		97
49)	tert-amyl methyl ether	5.762	73	209336	47.61	ppb	#	18
50)	heptane	5.771	43	237227	49.66	ppb		97
51)	trichloroethene	6.580	95	83030	48.28	ppb		89
52)	1,2-dichloropropane	6.774	63	86065	48.94	ppb		100
53)	dibromomethane	7.092	93	53521	50.21	ppb		89
54)	bromodichloromethane	7.031	83	107507	46.90	ppb		99
55)	Methylcyclohexane	6.653	83	129996	49.78	ppb		98
56)	2-chloroethyl vinyl ether	7.356	63	30590	46.42	ppb		99
57)	methyl methacrylate	6.829	69	49322	48.38	ppb		98
58)	1,4-dioxane	7.071	88	3175	204.67	ppb		77
59)	cis-1,3-dichloropropene	7.618	75	120279	48.25	ppb		98
61)	4-methyl-2-pentanone	7.386	43	120720	48.87	ppb		97
62)	toluene	7.971	92	176648	48.24	ppb		99
63)	trans-1,3-dichloropropene	8.167	75	107331	45.04	ppb		96
64)	1,1,2-trichloroethane	8.338	83	58503	48.74	ppb		91
65)	ethyl methacrylate	8.152	69	85860	47.71	ppb		95
67)	tetrachloroethene	8.681	166	80310	48.96	ppb		96
68)	1,3-dichloropropane	8.613	76	112588	50.10	ppb		98
69)	dibromochloromethane	8.906	129	86879	47.39	ppb		99
70)	1,2-dibromoethane	9.126	107	75689	48.74	ppb		93
71)	2-hexanone	8.353	43	83571	59.29	ppb		96
72)	chlorobenzene	9.580	112	206145	45.95	ppb		96
73)	1,1,1,2-tetrachloroethane	9.626	131	79111	48.56	ppb		97
74)	ethylbenzene	9.633	91	342353	47.99	ppb		96
75)	m,p-xylene	9.717	106	261829	95.80	ppb		94
76)	o-xylene	10.195	106	128665	47.57	ppb		90
77)	styrene	10.234	104	222550	48.55	ppb		92
78)	bromoform	10.607	173	55137	48.62	ppb		97
79)	trans-1,4-dichloro-2-b...	10.640	53	32212	47.90	ppb		94
81)	isopropylbenzene	10.585	105	346736	46.89	ppb		99
83)	bromobenzene	11.076	156	91236	47.03	ppb		100
84)	1,1,2,2-tetrachloroethane	10.776	83	92854	45.46	ppb		93
85)	1,2,3-trichloropropane	10.935	75	64157	45.39	ppb		99
86)	n-propylbenzene	11.023	91	411678	46.45	ppb		94
87)	2-chlorotoluene	11.217	91	280135	45.59	ppb		94
88)	4-chlorotoluene	11.271	91	261009	46.91	ppb		93
89)	1,3,5-trimethylbenzene	11.197	105	318642	48.18	ppb		97
90)	tert-butylbenzene	11.591	91	215511	47.57	ppb		88
91)	1,2,4-trimethylbenzene	11.626	105	317164	47.56	ppb		97
92)	sec-butylbenzene	11.818	105	398848	47.51	ppb		95
93)	1,3-dichlorobenzene	12.074	146	173161	44.87	ppb		96
94)	p-isopropyltoluene	11.968	119	346748	48.15	ppb		94

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145711.D
Acq On : 20 Sep 2015 9:36 am
Operator : andrewd1
Sample : bs
Misc : MS35249,MSG5457,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 20 10:00:41 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

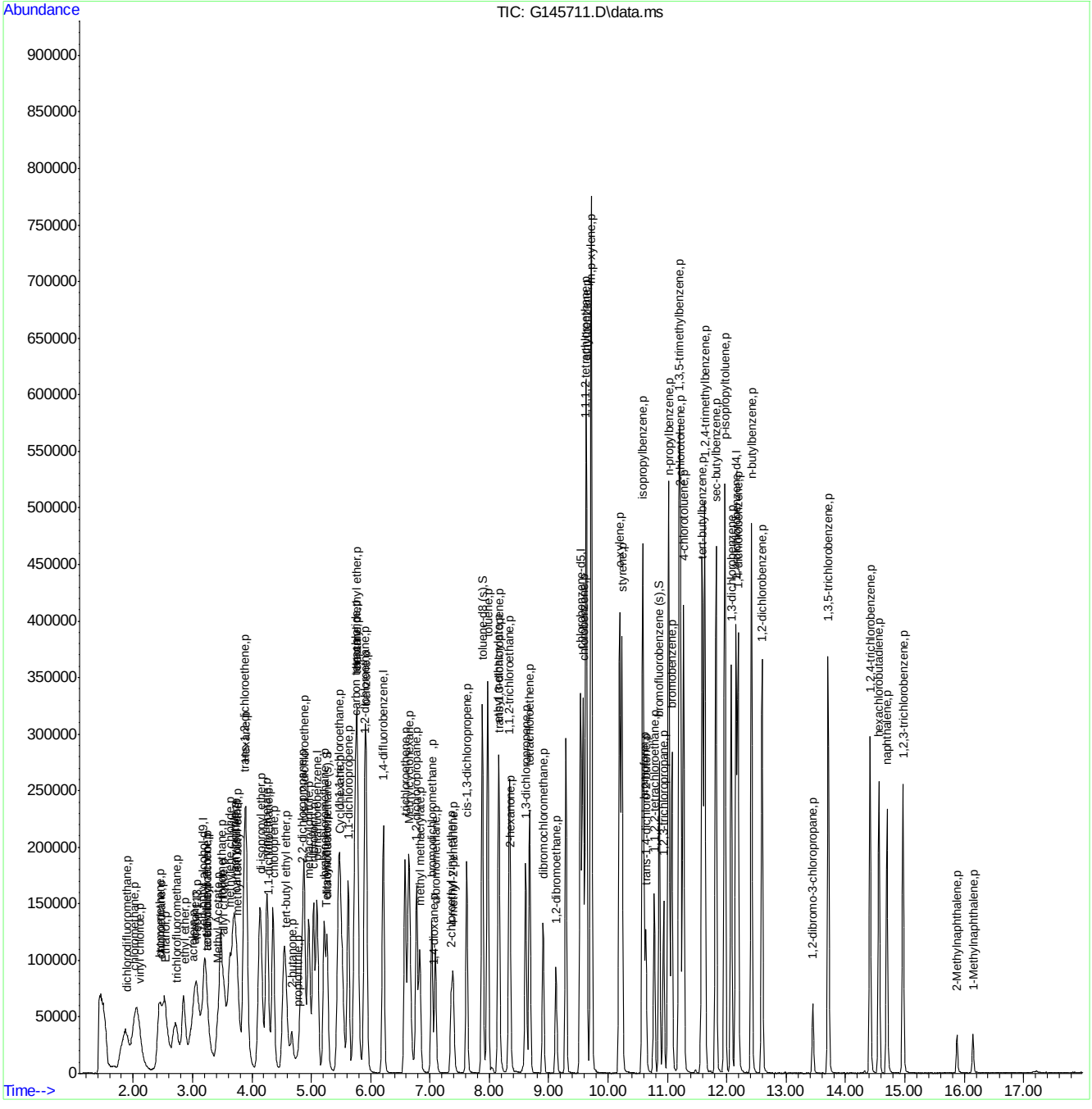
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
95)	1,4-dichlorobenzene	12.191	146	177583	45.10	ppb		98
96)	1,2-dichlorobenzene	12.596	146	172707	46.55	ppb		98
97)	n-butylbenzene	12.415	91	319052	49.56	ppb		90
98)	1,2-dibromo-3-chloropr...	13.452	75	18317	46.59	ppb	#	66
99)	1,3,5-trichlorobenzene	13.711	180	134704	46.62	ppb		100
100)	1,2,4-trichlorobenzene	14.414	180	105619	44.81	ppb		98
101)	hexachlorobutadiene	14.565	225	57690	50.31	ppb		98
102)	naphthalene	14.701	128	216728	38.16	ppb		100
103)	2-Methylnaphthalene	15.884	142	19726	20.60	ppb		97
104)	1-Methylnaphthalene	16.148	142	19075	21.69	ppb		97
105)	1,2,3-trichlorobenzene	14.971	180	91314	44.62	ppb		99

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

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145711.D
Acq On : 20 Sep 2015 9:36 am
Operator : andrewd1
Sample : bs
Misc : MS35249,MSG5457,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 20 10:00:41 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration



ACCUTEST LABORATORIES MC41356

Manual Integrations APPROVED (compounds with "m" flag)
Sona Liskova
09/21/15 13:37

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145712.D
Acq On : 20 Sep 2015 10:05 am
Operator : andrewd1
Sample : bsd
Misc : MS35249,MSG5457,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 20 10:29:29 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	3.186	65	73904	500.00	ppb		0.04
4) pentafluorobenzene	5.099	168	147763	50.00	ppb		0.00
43) 1,4-difluorobenzene	6.215	114	243653	50.00	ppb		0.00
66) chlorobenzene-d5	9.537	82	113399	50.00	ppb		0.00
80) 1,4-dichlorobenzene-d4	12.157	152	114545	50.00	ppb		0.00
System Monitoring Compounds							
40) dibromofluoromethane (s)	5.268	113	84179	50.90	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.80%				
60) toluene-d8 (s)	7.885	98	271883	50.72	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.44%				
82) bromofluorobenzene (s)	10.863	95	107142	48.43	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 96.86%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	3.246	59	92360	473.99	ppb		79
3) Ethanol	2.547	45	65314	2940.82	ppb	#	41
5) dichlorodifluoromethane	1.893	85	182426	48.32	ppb		100
6) chloromethane	2.001	50	170714m	52.85	ppb		
7) vinyl chloride	2.099	62	109704	48.11	ppb		97
8) bromomethane	2.436	96	61714	49.78	ppb		95
9) chloroethane	2.444	64	54968	50.50	ppb		80
10) ethyl ether	2.860	59	74947	47.98	ppb		99
11) acetonitrile	3.254	41	28373	37.07	ppb	#	56
12) trichlorofluoromethane	2.717	101	131583m	49.44	ppb		
13) freon-113	3.062	101	101174m	50.81	ppb		
14) acrolein	3.015	56	59745	346.27	ppb		99
15) 1,1-dichloroethene	3.225	96	81114	51.06	ppb		93
16) acetone	3.036	58	15493m	58.47	ppb		
17) Methyl Acetate	3.433	43	106012	52.92	ppb	#	96
18) methylene chloride	3.619	84	85897	50.65	ppb		92
19) methyl tert butyl ether	3.756	73	233713	47.59	ppb		98
20) acrylonitrile	3.731	53	50441	51.44	ppb		94
21) allyl chloride	3.511	41	168550	47.49	ppb		99
22) trans-1,2-dichloroethene	3.881	96	80791	49.26	ppb		93
23) iodomethane	3.478	142	143104	53.14	ppb		84
24) carbon disulfide	3.722	76	264470	52.05	ppb		100
25) propionitrile	4.772	54	16436	49.49	ppb		100
26) vinyl acetate	4.248	43	218273	43.84	ppb		94
27) chloroprene	4.362	53	152796	45.90	ppb		91
28) di-isopropyl ether	4.147	45	340244	44.86	ppb		94
29) methacrylonitrile	4.964	41	86626	52.64	ppb		90
30) 2-butanone	4.677	72	12495	62.84	ppb	#	54
32) Hexane	3.896	41	119995	48.68	ppb		93
33) 1,1-dichloroethane	4.276	63	167457	45.01	ppb		98
34) tert-butyl ethyl ether	4.573	59	281950	45.88	ppb		99
36) 2,2-dichloropropane	4.848	77	117759	49.42	ppb		99
37) cis-1,2-dichloroethene	4.882	96	87987	49.54	ppb		97
38) bromochloromethane	5.218	128	44429	49.58	ppb	#	79

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145712.D
Acq On : 20 Sep 2015 10:05 am
Operator : andrewd1
Sample : bsd
Misc : MS35249,MSG5457,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 20 10:29:29 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39)	chloroform	5.041	83	154363	46.20	ppb		98
41)	Tetrahydrofuran	5.251	42	33692	47.18	ppb		97
42)	1,1,1-trichloroethane	5.470	97	128070	51.07	ppb		95
44)	Cyclohexane	5.490	56	159456	45.38	ppb		94
45)	carbon tetrachloride	5.744	117	125856	49.88	ppb		100
46)	1,1-dichloropropene	5.623	75	112532	48.72	ppb		96
47)	benzene	5.920	78	293700	46.13	ppb		98
48)	1,2-dichloroethane	5.900	62	122709	46.21	ppb		97
49)	tert-amyl methyl ether	5.761	73	212546	47.08	ppb	#	17
50)	heptane	5.769	43	240979	49.13	ppb		98
51)	trichloroethene	6.580	95	83953	47.54	ppb		93
52)	1,2-dichloropropane	6.774	63	87479	48.44	ppb		99
53)	dibromomethane	7.092	93	54832	50.09	ppb		91
54)	bromodichloromethane	7.032	83	110039	46.75	ppb		98
55)	Methylcyclohexane	6.651	83	132232	49.32	ppb		96
56)	2-chloroethyl vinyl ether	7.356	63	30886	45.70	ppb		97
57)	methyl methacrylate	6.829	69	50632	48.37	ppb		97
58)	1,4-dioxane	7.061	88	2692	169.00	ppb		78
59)	cis-1,3-dichloropropene	7.618	75	123802	48.37	ppb		96
61)	4-methyl-2-pentanone	7.386	43	123997	48.88	ppb		97
62)	toluene	7.971	92	179536	47.75	ppb		98
63)	trans-1,3-dichloropropene	8.167	75	109289	44.66	ppb		95
64)	1,1,2-trichloroethane	8.338	83	58962	47.84	ppb		93
65)	ethyl methacrylate	8.152	69	89874	48.63	ppb		95
67)	tetrachloroethene	8.681	166	82090	49.65	ppb		98
68)	1,3-dichloropropane	8.614	76	116298	51.34	ppb		97
69)	dibromochloromethane	8.907	129	88413	47.85	ppb		99
70)	1,2-dibromoethane	9.126	107	76732	49.02	ppb		97
71)	2-hexanone	8.355	43	87264	61.42	ppb		97
72)	chlorobenzene	9.580	112	207360	45.86	ppb		95
73)	1,1,1,2-tetrachloroethane	9.626	131	80178	48.82	ppb		96
74)	ethylbenzene	9.633	91	346463	48.19	ppb		94
75)	m,p-xylene	9.717	106	265772	96.48	ppb		92
76)	o-xylene	10.195	106	129887	47.64	ppb		89
77)	styrene	10.234	104	227595	49.25	ppb		92
78)	bromoform	10.608	173	57516	50.32	ppb		98
79)	trans-1,4-dichloro-2-b...	10.640	53	33098	48.78	ppb		95
81)	isopropylbenzene	10.585	105	352736	47.40	ppb		98
83)	bromobenzene	11.076	156	92578	47.42	ppb		98
84)	1,1,2,2-tetrachloroethane	10.777	83	95369	46.40	ppb		96
85)	1,2,3-trichloropropane	10.935	75	65641	46.15	ppb		98
86)	n-propylbenzene	11.023	91	417480	46.81	ppb		93
87)	2-chlorotoluene	11.217	91	282442	45.67	ppb		91
88)	4-chlorotoluene	11.270	91	266964	47.68	ppb		88
89)	1,3,5-trimethylbenzene	11.197	105	323930	48.67	ppb		97
90)	tert-butylbenzene	11.591	91	215312	47.22	ppb		84
91)	1,2,4-trimethylbenzene	11.627	105	319184	47.56	ppb		97
92)	sec-butylbenzene	11.818	105	407016	48.17	ppb		96
93)	1,3-dichlorobenzene	12.074	146	174364	44.90	ppb		95
94)	p-isopropyltoluene	11.968	119	351713	48.53	ppb		95

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145712.D
Acq On : 20 Sep 2015 10:05 am
Operator : andrewd1
Sample : bsd
Misc : MS35249,MSG5457,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 20 10:29:29 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

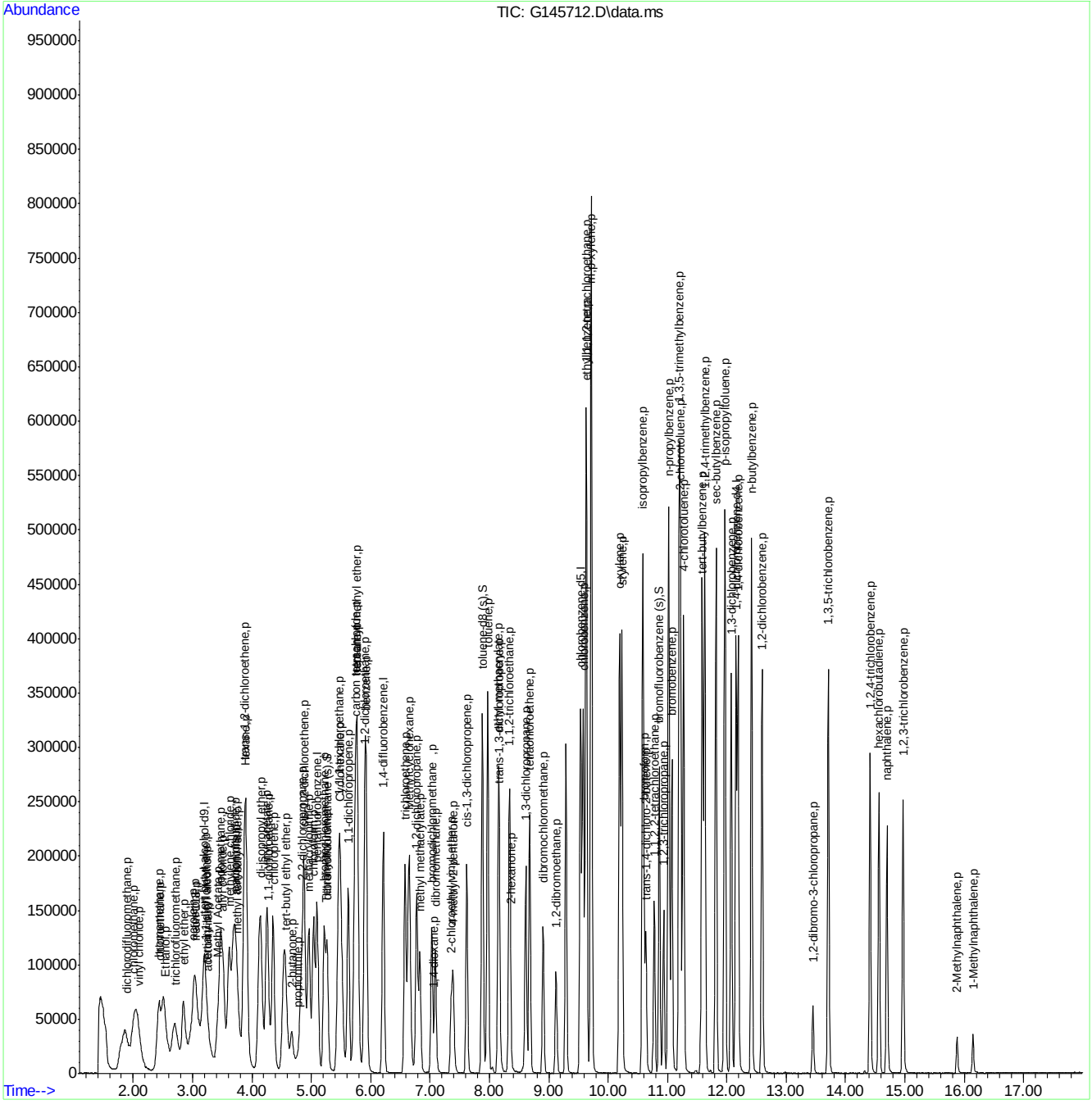
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
95) 1,4-dichlorobenzene	12.192	146	180186	45.47	ppb		98
96) 1,2-dichlorobenzene	12.596	146	174692	46.79	ppb		98
97) n-butylbenzene	12.416	91	322693	49.81	ppb		92
98) 1,2-dibromo-3-chloropr...	13.453	75	19031	48.10	ppb	#	75
99) 1,3,5-trichlorobenzene	13.711	180	135298	46.53	ppb		99
100) 1,2,4-trichlorobenzene	14.414	180	104562	44.13	ppb		100
101) hexachlorobutadiene	14.565	225	58195	50.43	ppb		96
102) naphthalene	14.702	128	217523	38.07	ppb		100
103) 2-Methylnaphthalene	15.883	142	19923	20.66	ppb		97
104) 1-Methylnaphthalene	16.150	142	19702	22.15	ppb		96
105) 1,2,3-trichlorobenzene	14.971	180	91825	44.59	ppb		98

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

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145712.D
Acq On : 20 Sep 2015 10:05 am
Operator : andrewd1
Sample : bsd
Misc : MS35249,MSG5457,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 20 10:29:29 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration



ACCUTEST LABORATORIES MC41356

Manual Integrations APPROVED (compounds with "m" flag)
Sona Liskova
09/21/15 14:25

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145671.D
Acq On : 18 Sep 2015 8:00 pm
Operator : andrewd1
Sample : mc41356-2ms
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 20 08:40:31 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	3.150	65	64953	500.00	ppb		0.00
4) pentafluorobenzene	5.099	168	141456	50.00	ppb		0.00
43) 1,4-difluorobenzene	6.215	114	230379	50.00	ppb		0.00
66) chlorobenzene-d5	9.537	82	109932	50.00	ppb		0.00
80) 1,4-dichlorobenzene-d4	12.157	152	113423	50.00	ppb		0.00
System Monitoring Compounds							
40) dibromofluoromethane (s)	5.267	113	82030	51.81	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.62%				
60) toluene-d8 (s)	7.885	98	261589	51.61	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.22%				
82) bromofluorobenzene (s)	10.863	95	104941	47.91	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 95.82%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	3.224	59	85498	499.25	ppb		89
3) Ethanol	2.538	45	82507	4226.90	ppb		94
5) dichlorodifluoromethane	1.899	85	166624m	46.10	ppb		
6) chloromethane	2.004	50	166448	53.82	ppb		99
7) vinyl chloride	2.103	62	105002	48.10	ppb		95
8) bromomethane	2.438	96	59886	50.46	ppb		98
9) chloroethane	2.456	64	55347	53.11	ppb		80
10) ethyl ether	2.858	59	73299	49.02	ppb		98
11) acetonitrile	3.254	41	30475	41.59	ppb		68
12) trichlorofluoromethane	2.725	101	125014m	49.07	ppb		
13) freon-113	3.075	101	96070m	50.39	ppb		
14) acrolein	3.008	56	51897	314.19	ppb		98
15) 1,1-dichloroethene	3.233	96	79372	52.19	ppb	#	77
16) acetone	3.039	58	9336m	36.81	ppb		
17) Methyl Acetate	3.433	43	98117	51.16	ppb	#	98
18) methylene chloride	3.630	84	83936	51.70	ppb		84
19) methyl tert butyl ether	3.731	73	219495	46.69	ppb		97
20) acrylonitrile	3.726	53	48210	51.36	ppb		99
21) allyl chloride	3.514	41	159415m	46.92	ppb		
22) trans-1,2-dichloroethene	3.884	96	79723	50.77	ppb		87
23) iodomethane	3.488	142	139813	54.23	ppb		78
24) carbon disulfide	3.723	76	230036	47.29	ppb		98
25) propionitrile	4.770	54	15374	48.36	ppb		100
26) vinyl acetate	4.247	43	197029	41.34	ppb		94
27) chloroprene	4.361	53	133785	41.98	ppb		95
28) di-isopropyl ether	4.142	45	329252	45.35	ppb		93
29) methacrylonitrile	4.964	41	81895	51.99	ppb		90
30) 2-butanone	4.677	72	8192	43.03	ppb	#	65
32) Hexane	3.897	41	108909	46.15	ppb	#	87
33) 1,1-dichloroethane	4.277	63	163582	45.92	ppb		97
34) tert-butyl ethyl ether	4.553	59	260404	44.26	ppb		98
36) 2,2-dichloropropane	4.850	77	107782	47.25	ppb		98
37) cis-1,2-dichloroethene	4.881	96	86994	51.17	ppb		93
38) bromochloromethane	5.218	128	44254	51.59	ppb		88

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145671.D
Acq On : 18 Sep 2015 8:00 pm
Operator : andrewd1
Sample : mc41356-2ms
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 20 08:40:31 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
39)	chloroform	5.041	83	151365	47.32	ppb	99
41)	Tetrahydrofuran	5.251	42	29737	43.50	ppb	93
42)	1,1,1-trichloroethane	5.472	97	124499	51.86	ppb	98
44)	Cyclohexane	5.494	56	154094	46.38	ppb	98
45)	carbon tetrachloride	5.746	117	120497	50.51	ppb	97
46)	1,1-dichloropropene	5.622	75	106573	48.80	ppb	95
47)	benzene	5.920	78	290240	48.21	ppb	98
48)	1,2-dichloroethane	5.900	62	118765	47.30	ppb	98
49)	tert-amyl methyl ether	5.747	73	198043	46.39	ppb	70
50)	heptane	5.765	43	220451	47.54	ppb	95
51)	trichloroethene	6.580	95	82786	49.58	ppb	87
52)	1,2-dichloropropane	6.774	63	86863	50.87	ppb	98
53)	dibromomethane	7.091	93	54332	52.50	ppb	89
54)	bromodichloromethane	7.031	83	109106	49.03	ppb	98
55)	Methylcyclohexane	6.652	83	127540	50.31	ppb	94
57)	methyl methacrylate	6.829	69	45018	45.48	ppb	98
58)	1,4-dioxane	7.066	88	3095	205.50	ppb	94
59)	cis-1,3-dichloropropene	7.619	75	119709	49.47	ppb	100
61)	4-methyl-2-pentanone	7.393	43	93576	39.02	ppb	88
62)	toluene	7.971	92	177796	50.01	ppb	97
63)	trans-1,3-dichloropropene	8.167	75	105592	45.64	ppb	97
64)	1,1,2-trichloroethane	8.338	83	59728	51.26	ppb	94
65)	ethyl methacrylate	8.152	69	80974	46.34	ppb	95
67)	tetrachloroethene	8.681	166	81529	50.86	ppb	95
68)	1,3-dichloropropane	8.614	76	115254	52.48	ppb	99
69)	dibromochloromethane	8.906	129	86185	48.11	ppb	99
70)	1,2-dibromoethane	9.126	107	75305	49.63	ppb	97
71)	2-hexanone	8.350	43	61011	44.30	ppb	98
72)	chlorobenzene	9.580	112	209617	47.82	ppb	94
73)	1,1,1,2-tetrachloroethane	9.626	131	80619	50.64	ppb	100
74)	ethylbenzene	9.633	91	340490	48.85	ppb	96
75)	m,p-xylene	9.717	106	249552	93.45	ppb	92
76)	o-xylene	10.195	106	123266	46.64	ppb	90
77)	styrene	10.233	104	172267	38.46	ppb	93
78)	bromoform	10.608	173	53643	48.41	ppb	97
79)	trans-1,4-dichloro-2-b...	10.640	53	27305	41.87	ppb	93
81)	isopropylbenzene	10.586	105	351112	47.65	ppb	97
83)	bromobenzene	11.076	156	95334	49.32	ppb	98
84)	1,1,2,2-tetrachloroethane	10.777	83	96340	47.33	ppb	94
85)	1,2,3-trichloropropane	10.936	75	67229	47.73	ppb	98
86)	n-propylbenzene	11.024	91	413329	46.80	ppb	95
87)	2-chlorotoluene	11.218	91	286729	46.82	ppb	94
88)	4-chlorotoluene	11.273	91	264944	47.79	ppb	91
89)	1,3,5-trimethylbenzene	11.198	105	266721	40.47	ppb	98
90)	tert-butylbenzene	11.590	91	215222	47.67	ppb	87
91)	1,2,4-trimethylbenzene	11.627	105	277987	41.83	ppb	100
92)	sec-butylbenzene	11.819	105	408264	48.80	ppb	96
93)	1,3-dichlorobenzene	12.074	146	179078	46.57	ppb	95
94)	p-isopropyltoluene	11.968	119	345687	48.17	ppb	95
95)	1,4-dichlorobenzene	12.192	146	183489	46.76	ppb	97

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145671.D
Acq On : 18 Sep 2015 8:00 pm
Operator : andrewd1
Sample : mc41356-2ms
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 20 08:40:31 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

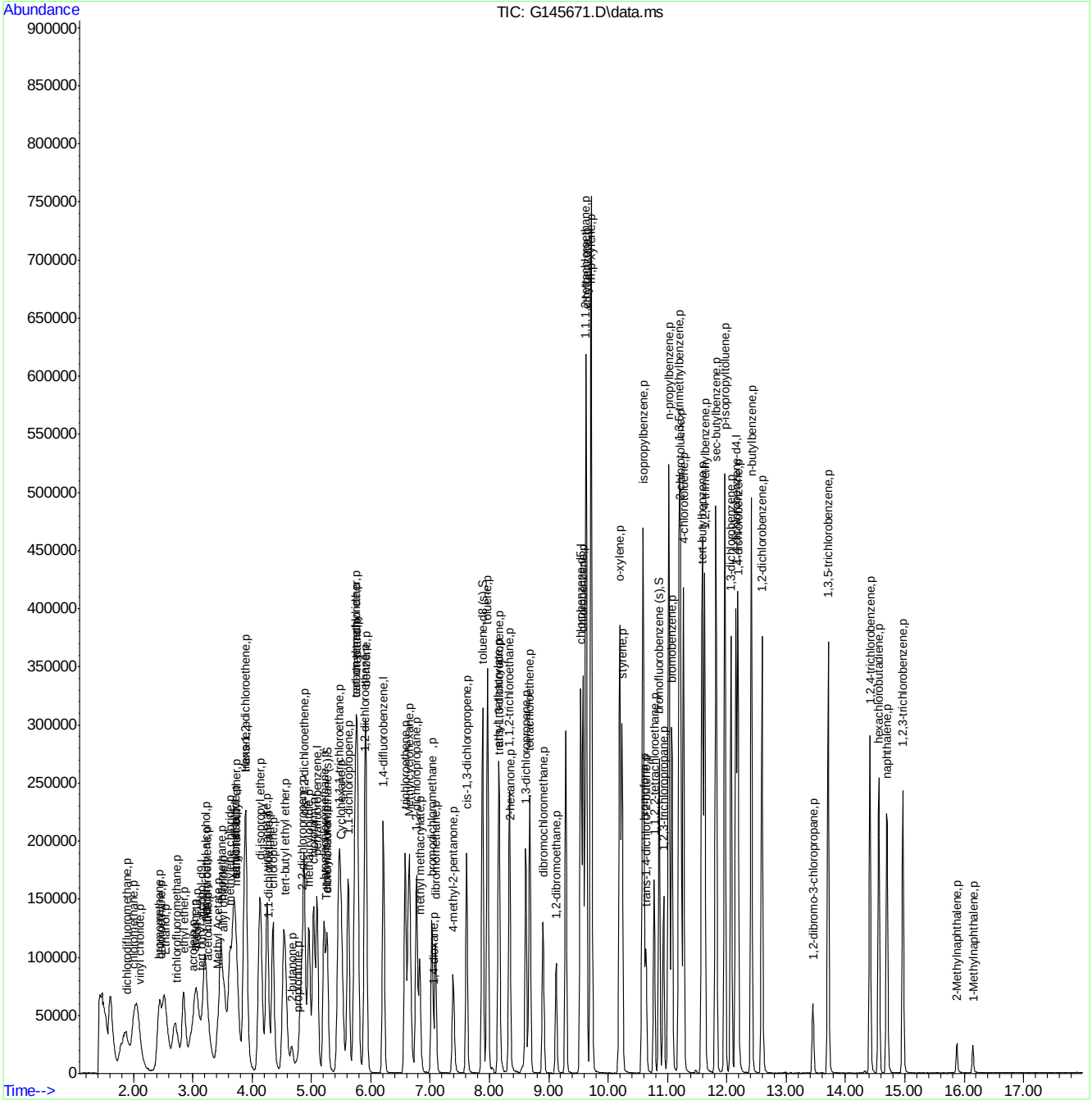
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
96)	1,2-dichlorobenzene	12.597	146	176581	47.76	ppb		97
97)	n-butylbenzene	12.416	91	320320	49.93	ppb		93
98)	1,2-dibromo-3-chloropr...	13.453	75	17973	45.88	ppb	#	74
99)	1,3,5-trichlorobenzene	13.711	180	134667	46.77	ppb		99
100)	1,2,4-trichlorobenzene	14.414	180	102409	43.68	ppb		99
101)	hexachlorobutadiene	14.565	225	57728	50.52	ppb		97
102)	naphthalene	14.702	128	206759	36.72	ppb		100
103)	2-Methylnaphthalene	15.884	142	15250	17.07	ppb		98
104)	1-Methylnaphthalene	16.150	142	13906	17.01	ppb		97
105)	1,2,3-trichlorobenzene	14.971	180	88384	43.43	ppb		98

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

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145671.D
Acq On : 18 Sep 2015 8:00 pm
Operator : andrewd1
Sample : mc41356-2ms
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 20 08:40:31 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Sona Liskova
09/21/15 14:25

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145672.D
Acq On : 18 Sep 2015 8:29 pm
Operator : andrewd1
Sample : mc41356-2msd
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 20 08:42:20 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	3.153	65	66466	500.00	ppb		0.00
4) pentafluorobenzene	5.098	168	139490	50.00	ppb		0.00
43) 1,4-difluorobenzene	6.214	114	231242	50.00	ppb		0.00
66) chlorobenzene-d5	9.536	82	111146	50.00	ppb		0.00
80) 1,4-dichlorobenzene-d4	12.156	152	113702	50.00	ppb		0.00
System Monitoring Compounds							
40) dibromofluoromethane (s)	5.266	113	81141	51.97	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.94%				
60) toluene-d8 (s)	7.884	98	261764	51.45	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.90%				
82) bromofluorobenzene (s)	10.862	95	103618	47.19	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 94.38%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	3.223	59	85655	488.78	ppb		91
3) Ethanol	2.540	45	85176	4264.30	ppb	#	41
5) dichlorodifluoromethane	1.901	85	177251	49.73	ppb		95
6) chloromethane	2.003	50	172497m	56.56	ppb		
7) vinyl chloride	2.108	62	110315	51.25	ppb		96
8) bromomethane	2.435	96	62843	53.70	ppb		98
9) chloroethane	2.462	64	57063	55.53	ppb		89
10) ethyl ether	2.857	59	74995	50.86	ppb		98
11) acetonitrile	3.255	41	32174	44.53	ppb	#	65
12) trichlorofluoromethane	2.730	101	130205m	51.83	ppb		
13) freon-113	3.069	101	102482m	54.52	ppb		
14) acrolein	3.007	56	53416	327.95	ppb		99
15) 1,1-dichloroethene	3.228	96	82232	54.83	ppb		86
16) acetone	3.043	58	10201m	40.78	ppb		
17) Methyl Acetate	3.430	43	97866	51.75	ppb	#	98
18) methylene chloride	3.634	84	86383	53.96	ppb		90
19) methyl tert butyl ether	3.736	73	227007	48.96	ppb		99
20) acrylonitrile	3.707	53	43196	46.67	ppb		100
21) allyl chloride	3.509	41	164088m	48.98	ppb		
22) trans-1,2-dichloroethene	3.884	96	81221	52.45	ppb		89
23) iodomethane	3.491	142	142751	56.15	ppb		85
24) carbon disulfide	3.731	76	236582	49.32	ppb		100
25) propionitrile	4.767	54	14831	47.31	ppb		100
26) vinyl acetate	4.246	43	196017	41.71	ppb		93
27) chloroprene	4.355	53	129951	41.35	ppb		100
28) di-isopropyl ether	4.144	45	334500	46.72	ppb		98
29) methacrylonitrile	4.965	41	85801	55.24	ppb		96
30) 2-butanone	4.678	72	8428	44.90	ppb	#	81
32) Hexane	3.895	41	107647	46.26	ppb	#	90
33) 1,1-dichloroethane	4.273	63	165777	47.20	ppb		99
34) tert-butyl ethyl ether	4.558	59	269311	46.42	ppb		99
36) 2,2-dichloropropane	4.848	77	113799	50.59	ppb		99
37) cis-1,2-dichloroethene	4.879	96	88482	52.78	ppb		97
38) bromochloromethane	5.216	128	44329	52.40	ppb		89

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145672.D
Acq On : 18 Sep 2015 8:29 pm
Operator : andrewd1
Sample : mc41356-2msd
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 20 08:42:20 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39)	chloroform	5.039	83	151688	48.09	ppb		98
41)	Tetrahydrofuran	5.251	42	30818	45.72	ppb		93
42)	1,1,1-trichloroethane	5.470	97	123765	52.29	ppb		94
44)	Cyclohexane	5.494	56	153743	46.10	ppb		98
45)	carbon tetrachloride	5.746	117	122578	51.19	ppb		97
46)	1,1-dichloropropene	5.622	75	108567	49.52	ppb		97
47)	benzene	5.919	78	292561	48.41	ppb		97
48)	1,2-dichloroethane	5.899	62	118965	47.20	ppb		98
49)	tert-amyl methyl ether	5.755	73	208880	48.75	ppb	#	35
50)	heptane	5.766	43	226043	48.56	ppb		98
51)	trichloroethene	6.579	95	81984	48.92	ppb		90
52)	1,2-dichloropropane	6.773	63	87242	50.91	ppb		100
53)	dibromomethane	7.091	93	55168	53.10	ppb		88
54)	bromodichloromethane	7.031	83	108596	48.62	ppb		99
55)	Methylcyclohexane	6.652	83	128495	50.50	ppb		92
57)	methyl methacrylate	6.828	69	45524	45.82	ppb		96
58)	1,4-dioxane	7.066	88	3089	204.34	ppb		87
59)	cis-1,3-dichloropropene	7.619	75	119791	49.32	ppb		98
61)	4-methyl-2-pentanone	7.393	43	94097	39.09	ppb		86
62)	toluene	7.971	92	176226	49.39	ppb		96
63)	trans-1,3-dichloropropene	8.166	75	105019	45.22	ppb		96
64)	1,1,2-trichloroethane	8.338	83	58449	49.97	ppb		93
65)	ethyl methacrylate	8.152	69	81103	46.24	ppb		96
67)	tetrachloroethene	8.681	166	80574	49.72	ppb		96
68)	1,3-dichloropropane	8.613	76	113205	50.99	ppb		96
69)	dibromochloromethane	8.906	129	86334	47.67	ppb		99
70)	1,2-dibromoethane	9.125	107	75168	49.00	ppb		96
71)	2-hexanone	8.349	43	61582	44.22	ppb		97
72)	chlorobenzene	9.580	112	210249	47.44	ppb		96
73)	1,1,1,2-tetrachloroethane	9.626	131	80433	49.97	ppb		97
74)	ethylbenzene	9.632	91	339241	48.14	ppb		92
75)	m,p-xylene	9.716	106	247713	91.74	ppb		92
76)	o-xylene	10.195	106	123038	46.05	ppb		88
77)	styrene	10.233	104	169084	37.33	ppb		92
78)	bromoform	10.607	173	52972	47.28	ppb		93
79)	trans-1,4-dichloro-2-b...	10.640	53	26789	40.70	ppb		96
81)	isopropylbenzene	10.585	105	348441	47.17	ppb		100
83)	bromobenzene	11.076	156	93416	48.21	ppb		88
84)	1,1,2,2-tetrachloroethane	10.776	83	94879	46.50	ppb		95
85)	1,2,3-trichloropropane	10.935	75	65806	46.61	ppb		97
86)	n-propylbenzene	11.023	91	414102	46.77	ppb		94
87)	2-chlorotoluene	11.217	91	282664	46.05	ppb		91
88)	4-chlorotoluene	11.272	91	259797	46.74	ppb		93
89)	1,3,5-trimethylbenzene	11.197	105	265393	40.17	ppb		99
90)	tert-butylbenzene	11.590	91	211824	46.80	ppb		85
91)	1,2,4-trimethylbenzene	11.626	105	276338	41.48	ppb		98
92)	sec-butylbenzene	11.818	105	405016	48.29	ppb		96
93)	1,3-dichlorobenzene	12.074	146	177745	46.11	ppb		95
94)	p-isopropyltoluene	11.967	119	346358	48.14	ppb		95
95)	1,4-dichlorobenzene	12.191	146	182422	46.38	ppb		98

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145672.D
Acq On : 18 Sep 2015 8:29 pm
Operator : andrewd1
Sample : mc41356-2msd
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 20 08:42:20 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
96) 1,2-dichlorobenzene	12.596	146	178083	48.05	ppb		97
97) n-butylbenzene	12.415	91	316660	49.24	ppb		93
98) 1,2-dibromo-3-chloropr...	13.452	75	18002	45.84	ppb	#	74
99) 1,3,5-trichlorobenzene	13.710	180	135462	46.93	ppb		100
100) 1,2,4-trichlorobenzene	14.413	180	104672	44.48	ppb		99
101) hexachlorobutadiene	14.565	225	57818	50.48	ppb		99
102) naphthalene	14.701	128	217494	38.32	ppb		100
103) 2-Methylnaphthalene	15.884	142	19330	20.31	ppb		96
104) 1-Methylnaphthalene	16.150	142	18479	21.17	ppb		94
105) 1,2,3-trichlorobenzene	14.971	180	91893	44.93	ppb		98

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

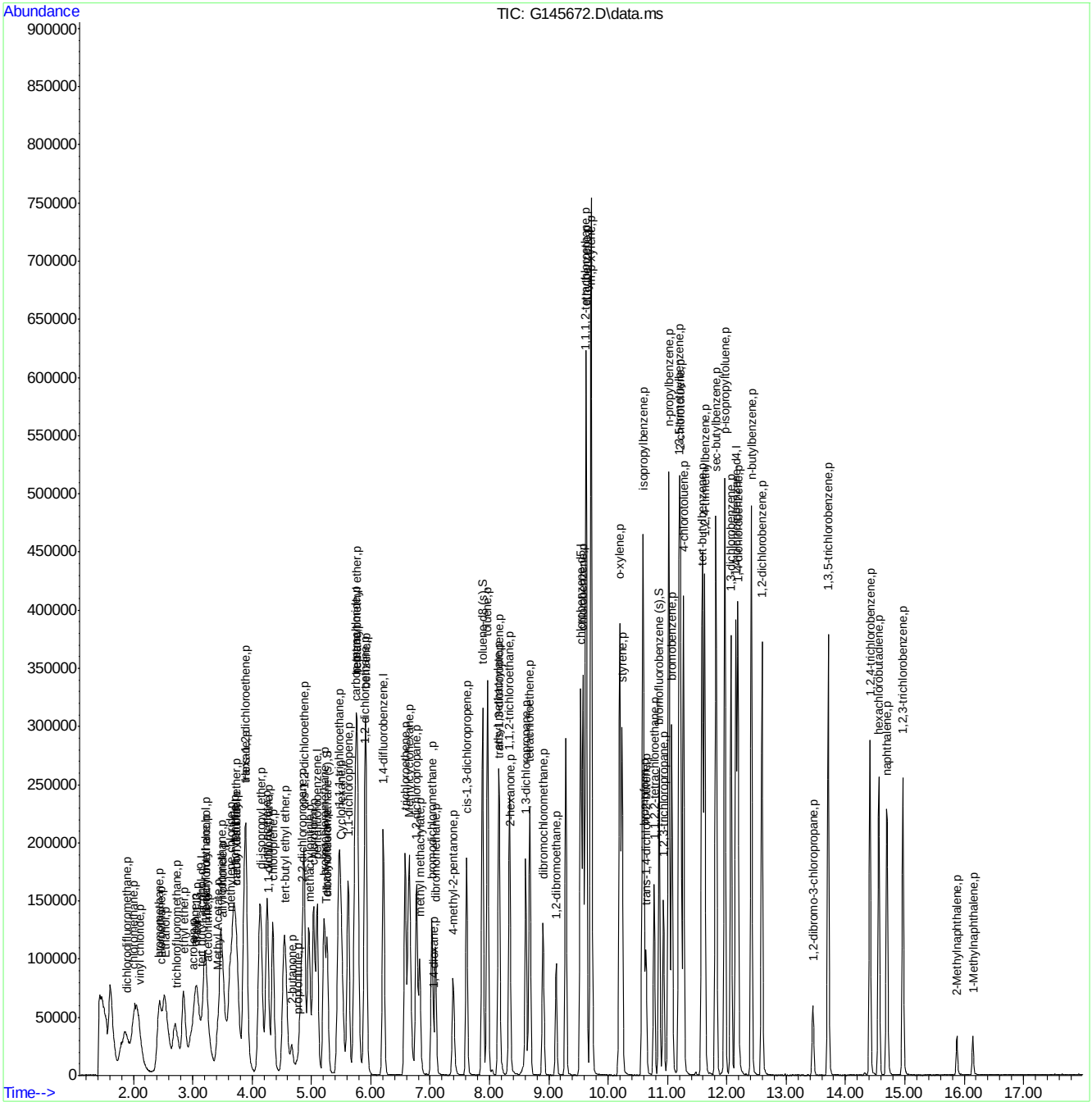
7.4.2

7

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145672.D
Acq On : 18 Sep 2015 8:29 pm
Operator : andrewd1
Sample : mc41356-2msd
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 20 08:42:20 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Sona Liskova
09/21/15 13:37

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145734.D
Acq On : 20 Sep 15 8:30 pm
Operator : andrewd1
Sample : mc41356-20ms
Misc : MS35252,MSG5457,,,,5,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 21 08:53:18 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	3.160	65	62679	500.00	ppb		0.00
4) pentafluorobenzene	5.100	168	140685	50.00	ppb		0.00
43) 1,4-difluorobenzene	6.215	114	226360	50.00	ppb		0.00
66) chlorobenzene-d5	9.537	82	108800	50.00	ppb		0.00
80) 1,4-dichlorobenzene-d4	12.157	152	110701	50.00	ppb		0.00
System Monitoring Compounds							
40) dibromofluoromethane (s)	5.268	113	80309	51.00	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.00%				
60) toluene-d8 (s)	7.885	98	256679	51.54	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.08%				
82) bromofluorobenzene (s)	10.863	95	100560	47.03	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 94.06%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	3.224	59	74480	450.69	ppb		81
3) Ethanol	2.523	45	61603	3270.47	ppb		98
5) dichlorodifluoromethane	1.899	85	173398	48.24	ppb		98
6) chloromethane	2.004	50	170142	55.32	ppb		99
7) vinyl chloride	2.104	62	107493	49.51	ppb		95
8) bromomethane	2.437	96	60600	51.34	ppb		95
9) chloroethane	2.448	64	55435	53.49	ppb		81
10) ethyl ether	2.863	59	71216	47.88	ppb		97
11) acetonitrile	3.244	41	24662	33.84	ppb	#	62
12) trichlorofluoromethane	2.722	101	126926m	50.09	ppb		
13) freon-113	3.067	101	96004m	50.64	ppb		
14) acrolein	3.018	56	54179	329.80	ppb		100
15) 1,1-dichloroethene	3.226	96	75476	49.90	ppb		87
16) acetone	3.036	58	13535m	53.65	ppb		
17) Methyl Acetate	3.434	43	93835	49.20	ppb	#	93
18) methylene chloride	3.622	84	78688	48.73	ppb		87
19) methyl tert butyl ether	3.745	73	206737	44.21	ppb		99
20) acrylonitrile	3.731	53	45616	48.86	ppb		90
21) allyl chloride	3.511	41	156084m	46.19	ppb		
22) trans-1,2-dichloroethene	3.882	96	76300	48.86	ppb		90
23) iodomethane	3.483	142	134116	52.31	ppb		84
24) carbon disulfide	3.728	76	228635	47.26	ppb		99
25) propionitrile	4.773	54	14658	46.36	ppb		100
26) vinyl acetate	4.248	43	196113	41.37	ppb		95
27) chloroprene	4.359	53	138527	43.71	ppb		96
28) di-isopropyl ether	4.145	45	317090	43.91	ppb		94
29) methacrylonitrile	4.962	41	81528	52.04	ppb		89
30) 2-butanone	4.676	72	7812	41.26	ppb	#	74
32) Hexane	3.898	41	105293	44.87	ppb		91
33) 1,1-dichloroethane	4.278	63	158802	44.83	ppb		98
34) tert-butyl ethyl ether	4.563	59	255570	43.68	ppb		97
36) 2,2-dichloropropane	4.852	77	99738	43.96	ppb		96
37) cis-1,2-dichloroethene	4.883	96	83046	49.11	ppb		95
38) bromochloromethane	5.218	128	41354	48.47	ppb	#	86

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145734.D
Acq On : 20 Sep 15 8:30 pm
Operator : andrewd1
Sample : mc41356-20ms
Misc : MS35252,MSG5457,,,,5,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 21 08:53:18 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39)	chloroform	5.042	83	146397	46.02	ppb		98
41)	Tetrahydrofuran	5.250	42	28656	42.15	ppb		94
42)	1,1,1-trichloroethane	5.472	97	120221	50.36	ppb		96
44)	Cyclohexane	5.492	56	147847	45.29	ppb		98
45)	carbon tetrachloride	5.745	117	116329	49.63	ppb		96
46)	1,1-dichloropropene	5.623	75	105835	49.32	ppb		95
47)	benzene	5.920	78	277362	46.89	ppb		97
48)	1,2-dichloroethane	5.901	62	117398	47.58	ppb		97
49)	tert-amyl methyl ether	5.748	73	189301	45.13	ppb	#	66
50)	heptane	5.767	43	215498	47.29	ppb		97
51)	trichloroethene	6.580	95	91692	55.89	ppb		85
52)	1,2-dichloropropane	6.774	63	83398	49.71	ppb		99
53)	dibromomethane	7.091	93	52041	51.17	ppb		94
54)	bromodichloromethane	7.031	83	103690	47.42	ppb		97
55)	Methylcyclohexane	6.652	83	119317	47.90	ppb		97
57)	methyl methacrylate	6.829	69	46862	48.18	ppb		95
58)	1,4-dioxane	7.060	88	2231	150.76	ppb		96
59)	cis-1,3-dichloropropene	7.619	75	111116	46.73	ppb		98
61)	4-methyl-2-pentanone	7.394	43	90365	38.35	ppb		88
62)	toluene	7.971	92	170324	48.76	ppb		100
63)	trans-1,3-dichloropropene	8.167	75	101470	44.63	ppb		100
64)	1,1,2-trichloroethane	8.338	83	55938	48.86	ppb		88
65)	ethyl methacrylate	8.152	69	83552	48.67	ppb		97
67)	tetrachloroethene	8.681	166	77058	48.57	ppb		93
68)	1,3-dichloropropane	8.613	76	107981	49.68	ppb		98
69)	dibromochloromethane	8.906	129	83060	46.85	ppb		98
70)	1,2-dibromoethane	9.125	107	72230	48.10	ppb		95
71)	2-hexanone	8.348	43	59295	43.50	ppb		98
72)	chlorobenzene	9.580	112	197780	45.59	ppb		94
73)	1,1,1,2-tetrachloroethane	9.626	131	76341	48.45	ppb		98
74)	ethylbenzene	9.633	91	328087	47.56	ppb		93
75)	m,p-xylene	9.717	106	251470	95.14	ppb		93
76)	o-xylene	10.195	106	123676	47.28	ppb		90
77)	styrene	10.234	104	216218	48.77	ppb		93
78)	bromoform	10.607	173	51817	47.25	ppb		97
79)	trans-1,4-dichloro-2-b...	10.640	53	29024	44.79	ppb		95
81)	isopropylbenzene	10.585	105	328726	45.71	ppb		97
83)	bromobenzene	11.076	156	88174	46.73	ppb		99
84)	1,1,2,2-tetrachloroethane	10.776	83	88226	44.41	ppb		95
85)	1,2,3-trichloropropane	10.935	75	61051	44.41	ppb		99
86)	n-propylbenzene	11.023	91	386912	44.89	ppb		94
87)	2-chlorotoluene	11.217	91	267621	44.78	ppb		93
88)	4-chlorotoluene	11.271	91	251106	46.40	ppb		92
89)	1,3,5-trimethylbenzene	11.197	105	303582	47.19	ppb		95
90)	tert-butylbenzene	11.592	91	205241	46.58	ppb		89
91)	1,2,4-trimethylbenzene	11.627	105	304371	46.93	ppb		98
92)	sec-butylbenzene	11.818	105	379249	46.45	ppb		97
93)	1,3-dichlorobenzene	12.074	146	164786	43.91	ppb		95
94)	p-isopropyltoluene	11.968	119	329369	47.02	ppb		95
95)	1,4-dichlorobenzene	12.192	146	170912	44.63	ppb		98

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145734.D
Acq On : 20 Sep 15 8:30 pm
Operator : andrewd1
Sample : mc41356-20ms
Misc : MS35252,MSG5457,,,,5,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 21 08:53:18 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

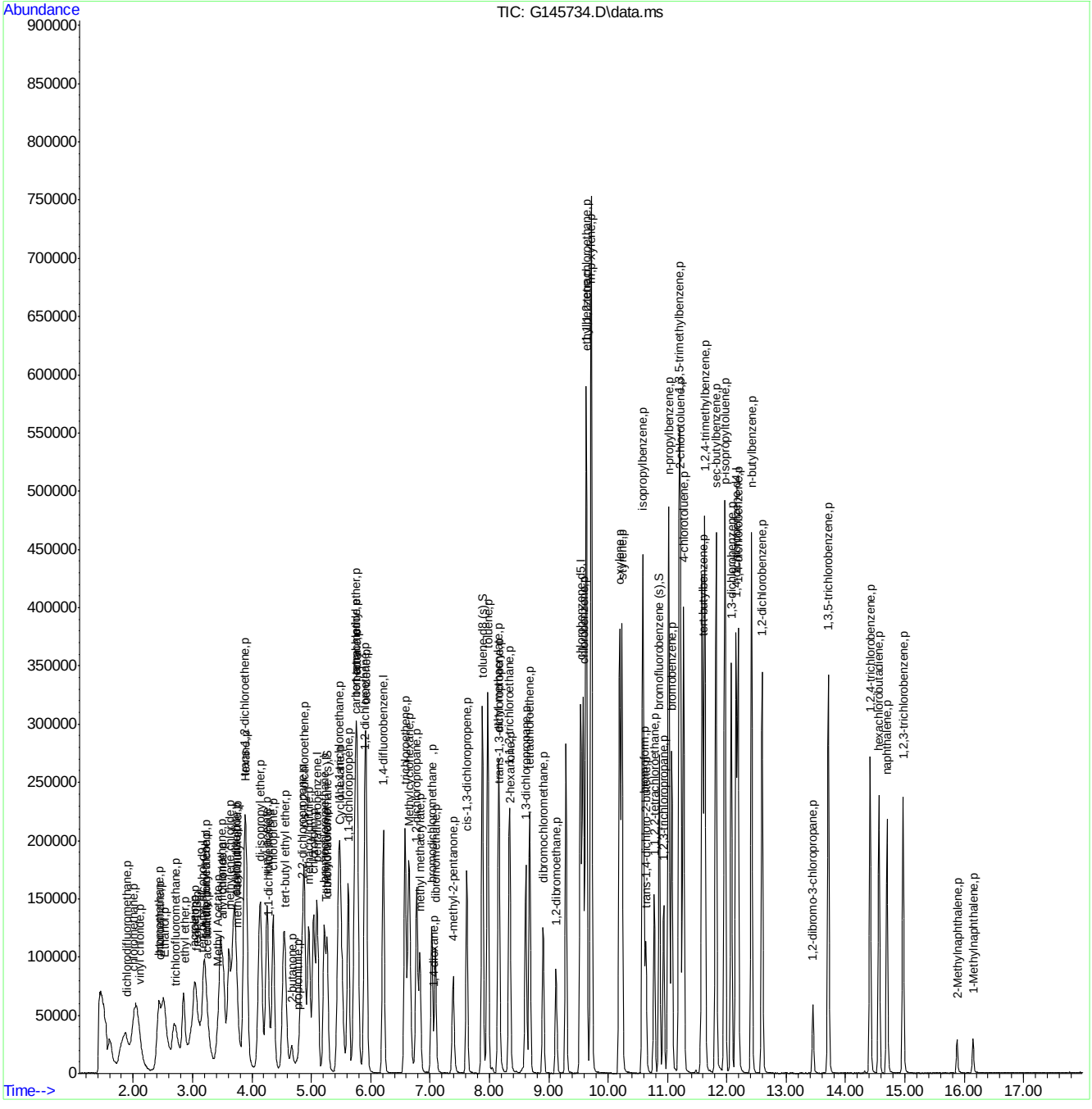
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
96)	1,2-dichlorobenzene	12.596	146	164378	45.55	ppb		98
97)	n-butylbenzene	12.415	91	296792	47.40	ppb		91
98)	1,2-dibromo-3-chloropr...	13.452	75	17713	46.32	ppb	#	70
99)	1,3,5-trichlorobenzene	13.711	180	124305	44.23	ppb		99
100)	1,2,4-trichlorobenzene	14.414	180	97040	42.50	ppb		97
101)	hexachlorobutadiene	14.565	225	51475	46.16	ppb		99
102)	naphthalene	14.702	128	206822	37.53	ppb		100
103)	2-Methylnaphthalene	15.883	142	17382	19.14	ppb		98
104)	1-Methylnaphthalene	16.149	142	16520	19.80	ppb		95
105)	1,2,3-trichlorobenzene	14.971	180	86026	43.32	ppb		99

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

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145734.D
Acq On : 20 Sep 15 8:30 pm
Operator : andrewd1
Sample : mc41356-20ms
Misc : MS35252,MSG5457,,,,5,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 21 08:53:18 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Sona Liskova
09/21/15 13:37

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145735.D
Acq On : 20 Sep 2015 8:58 pm
Operator : andrewd1
Sample : mc41356-20msd
Misc : MS35252,MSG5457,,,,5,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Sep 21 08:58:17 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	3.164	65	66804	500.00	ppb		0.01
4) pentafluorobenzene	5.100	168	143742	50.00	ppb		0.00
43) 1,4-difluorobenzene	6.215	114	236549	50.00	ppb		0.00
66) chlorobenzene-d5	9.536	82	110873	50.00	ppb		0.00
80) 1,4-dichlorobenzene-d4	12.156	152	111708	50.00	ppb		0.00
System Monitoring Compounds							
40) dibromofluoromethane (s)	5.268	113	81301	50.53	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.06%				
60) toluene-d8 (s)	7.884	98	266857	51.28	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.56%				
82) bromofluorobenzene (s)	10.862	95	103594	48.02	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 96.04%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	3.238	59	84629	480.48	ppb		84
3) Ethanol	2.521	45	75771	3774.25	ppb		95
5) dichlorodifluoromethane	1.923	85	188555	51.34	ppb		97
6) chloromethane	2.004	50	178600m	56.83	ppb		
7) vinyl chloride	2.105	62	112140	50.55	ppb		94
8) bromomethane	2.435	96	62947	52.19	ppb		98
9) chloroethane	2.448	64	57171	53.99	ppb		81
10) ethyl ether	2.856	59	73251	48.21	ppb		97
11) acetonitrile	3.246	41	27374	36.77	ppb	#	62
12) trichlorofluoromethane	2.725	101	134255m	51.86	ppb		
13) freon-113	3.065	101	97459m	50.31	ppb		
14) acrolein	3.012	56	55032	327.87	ppb		95
15) 1,1-dichloroethene	3.229	96	78850	51.02	ppb		87
16) acetone	3.034	58	15157m	58.81	ppb		
17) Methyl Acetate	3.431	43	95397	48.95	ppb	#	95
18) methylene chloride	3.623	84	79825	48.38	ppb		88
19) methyl tert butyl ether	3.721	73	216141	45.24	ppb		100
20) acrylonitrile	3.707	53	41470	43.48	ppb		88
21) allyl chloride	3.510	41	160638m	46.53	ppb		
22) trans-1,2-dichloroethene	3.883	96	77689	48.69	ppb		97
23) iodomethane	3.480	142	136634	52.15	ppb		85
24) carbon disulfide	3.726	76	230231	46.58	ppb		98
25) propionitrile	4.767	54	14506	44.90	ppb		100
26) vinyl acetate	4.248	43	201172	41.54	ppb		95
27) chloroprene	4.363	53	146495	45.24	ppb		95
28) di-isopropyl ether	4.142	45	327432	44.38	ppb		95
29) methacrylonitrile	4.963	41	83332	52.06	ppb		90
30) 2-butanone	4.676	72	8175	42.26	ppb	#	63
32) Hexane	3.898	41	107377	44.78	ppb	#	87
33) 1,1-dichloroethane	4.278	63	160877	44.45	ppb		96
34) tert-butyl ethyl ether	4.551	59	262129	43.84	ppb		99
36) 2,2-dichloropropane	4.849	77	101101	43.61	ppb		93
37) cis-1,2-dichloroethene	4.883	96	85078	49.24	ppb		96
38) bromochloromethane	5.219	128	43001	49.33	ppb		89

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145735.D
Acq On : 20 Sep 2015 8:58 pm
Operator : andrewd1
Sample : mc41356-20msd
Misc : MS35252,MSG5457,,,,5,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Sep 21 08:58:17 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
39)	chloroform	5.042	83	149702	46.06	ppb	97
41)	Tetrahydrofuran	5.252	42	31193	44.90	ppb	98
42)	1,1,1-trichloroethane	5.471	97	122195	50.09	ppb	94
44)	Cyclohexane	5.491	56	151231	44.33	ppb	94
45)	carbon tetrachloride	5.745	117	119175	48.65	ppb	96
46)	1,1-dichloropropene	5.623	75	108383	48.33	ppb	96
47)	benzene	5.921	78	288910	46.74	ppb	96
48)	1,2-dichloroethane	5.900	62	120185	46.62	ppb	99
49)	tert-amyl methyl ether	5.747	73	199481	45.51	ppb	76
50)	heptane	5.766	43	219611	46.12	ppb	98
51)	trichloroethene	6.580	95	95162	55.51	ppb	88
52)	1,2-dichloropropane	6.773	63	86414	49.29	ppb	98
53)	dibromomethane	7.088	93	56085	52.78	ppb	91
54)	bromodichloromethane	7.031	83	108404	47.44	ppb	97
55)	Methylcyclohexane	6.651	83	121552	46.70	ppb	93
57)	methyl methacrylate	6.828	69	48904	48.12	ppb	94
58)	1,4-dioxane	7.069	88	2823	182.55	ppb	98
59)	cis-1,3-dichloropropene	7.618	75	116179	46.76	ppb	99
61)	4-methyl-2-pentanone	7.392	43	92298	37.48	ppb	87
62)	toluene	7.971	92	173300	47.48	ppb	96
63)	trans-1,3-dichloropropene	8.168	75	101882	42.89	ppb	98
64)	1,1,2-trichloroethane	8.338	83	55510	46.40	ppb	90
65)	ethyl methacrylate	8.152	69	84099	46.88	ppb	95
67)	tetrachloroethene	8.681	166	78329	48.45	ppb	96
68)	1,3-dichloropropane	8.613	76	109551	49.46	ppb	100
69)	dibromochloromethane	8.906	129	84158	46.58	ppb	99
70)	1,2-dibromoethane	9.125	107	73150	47.80	ppb	94
71)	2-hexanone	8.352	43	60423	43.50	ppb	98
72)	chlorobenzene	9.579	112	198206	44.83	ppb	96
73)	1,1,1,2-tetrachloroethane	9.625	131	76968	47.94	ppb	96
74)	ethylbenzene	9.632	91	331128	47.10	ppb	95
75)	m,p-xylene	9.716	106	252770	93.85	ppb	90
76)	o-xylene	10.195	106	124714	46.79	ppb	92
77)	styrene	10.233	104	217699	48.19	ppb	92
78)	bromoform	10.607	173	51431	46.02	ppb	95
79)	trans-1,4-dichloro-2-b...	10.640	53	29134	44.15	ppb	94
81)	isopropylbenzene	10.585	105	330620	45.56	ppb	98
83)	bromobenzene	11.076	156	89644	47.09	ppb	97
84)	1,1,2,2-tetrachloroethane	10.776	83	88996	44.39	ppb	96
85)	1,2,3-trichloropropane	10.935	75	62881	45.33	ppb	100
86)	n-propylbenzene	11.023	91	390778	44.92	ppb	95
87)	2-chlorotoluene	11.217	91	275276	45.64	ppb	93
88)	4-chlorotoluene	11.272	91	245745	45.00	ppb	91
89)	1,3,5-trimethylbenzene	11.197	105	304664	46.93	ppb	97
90)	tert-butylbenzene	11.591	91	206562	46.45	ppb	89
91)	1,2,4-trimethylbenzene	11.626	105	304035	46.46	ppb	97
92)	sec-butylbenzene	11.818	105	375681	45.60	ppb	97
93)	1,3-dichlorobenzene	12.073	146	165923	43.81	ppb	95
94)	p-isopropyltoluene	11.967	119	325234	46.01	ppb	96
95)	1,4-dichlorobenzene	12.191	146	170147	44.03	ppb	98

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145735.D
Acq On : 20 Sep 2015 8:58 pm
Operator : andrewd1
Sample : mc41356-20msd
Misc : MS35252,MSG5457,,,,5,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Sep 21 08:58:17 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

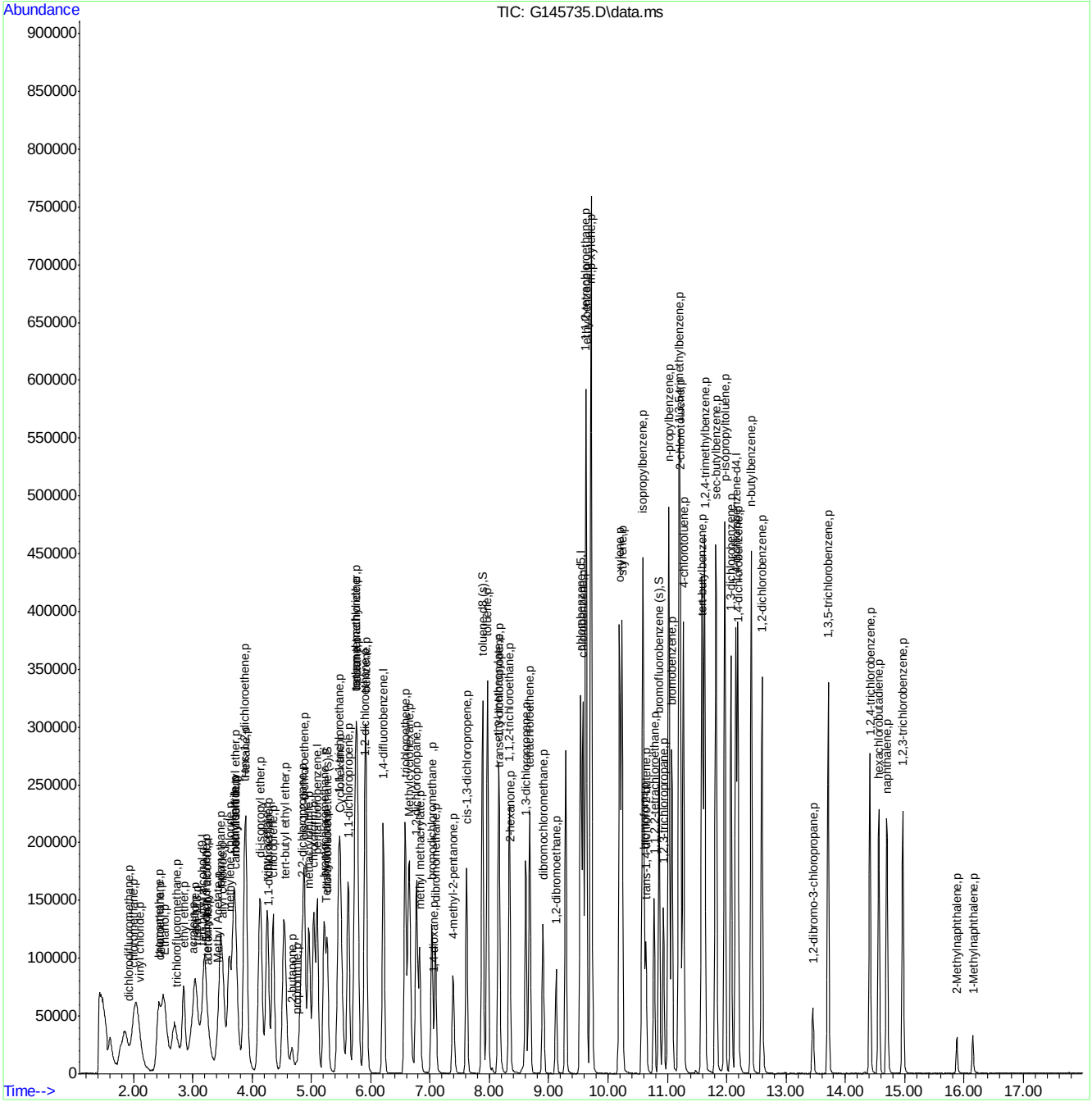
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
96)	1,2-dichlorobenzene	12.596	146	165569	45.47	ppb		98
97)	n-butylbenzene	12.415	91	294921	46.68	ppb		91
98)	1,2-dibromo-3-chloropr...	13.452	75	17046	44.18	ppb	#	72
99)	1,3,5-trichlorobenzene	13.711	180	123325	43.49	ppb		99
100)	1,2,4-trichlorobenzene	14.413	180	97291	42.24	ppb		100
101)	hexachlorobutadiene	14.565	225	50258	44.66	ppb		97
102)	naphthalene	14.701	128	204242	36.82	ppb		100
103)	2-Methylnaphthalene	15.882	142	18252	19.72	ppb		96
104)	1-Methylnaphthalene	16.150	142	18822	21.79	ppb		93
105)	1,2,3-trichlorobenzene	14.970	180	84335	42.18	ppb		99

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

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145735.D
Acq On : 20 Sep 2015 8:58 pm
Operator : andrewd1
Sample : mc41356-20msd
Misc : MS35252,MSG5457,,,,5,1
ALS Vial : 27 Sample Multiplier: 1

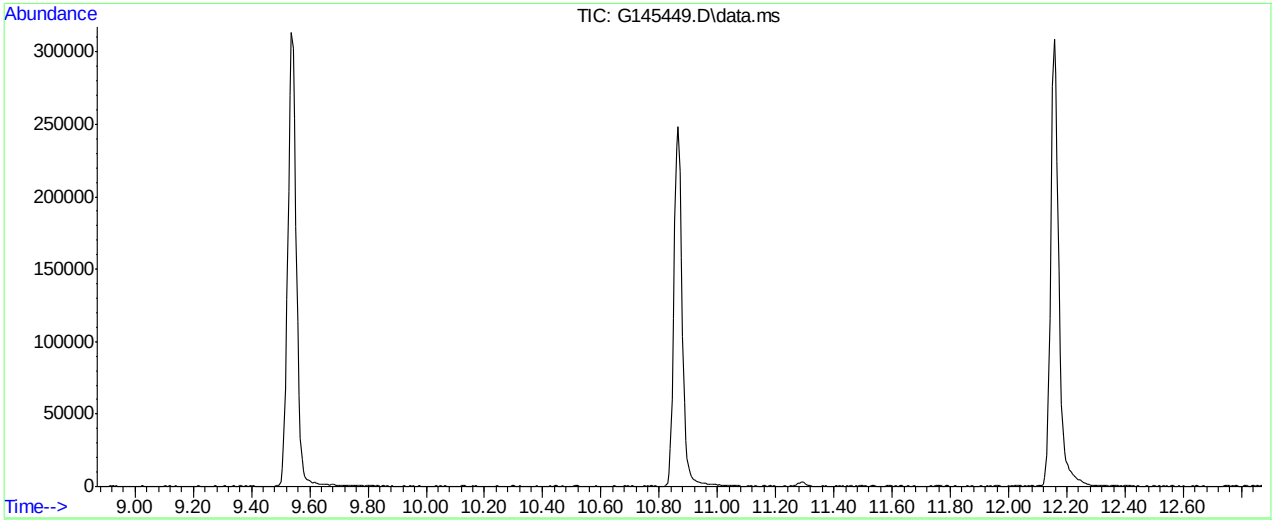
Quant Time: Sep 21 08:58:17 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

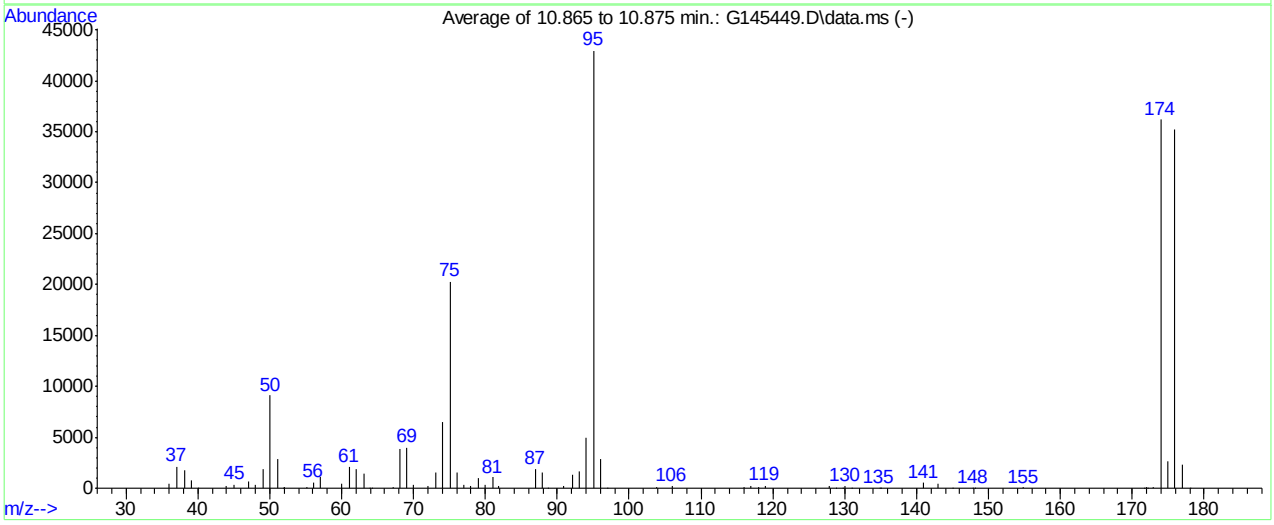


SW-846 Method 8260

Data File : C:\msdchem\1\DATA\G150913\G145449.D Vial: 2
Acq On : 13 Sep 2015 8:11 am Operator: andrewd1
Sample : bfb Inst : MSG
Misc : MS35209,MSG5447,,,,5,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\METHODS\g150913w.m (RTE Integrator)
Title : SW-846 Method 8260





Spectrum Information: Average of 10.865 to 10.875 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.2	9129	PASS
75	95	30	60	47.2	20277	PASS
95	95	100	100	100.0	42978	PASS
96	95	5	9	6.7	2891	PASS
173	174	0.00	2	0.4	162	PASS
174	95	50	100	84.2	36168	PASS
175	174	5	9	7.4	2673	PASS
176	174	95	101	97.3	35202	PASS
177	176	5	9	6.7	2355	PASS

G145449.D g150913w.m Mon Sep 14 15:11:59 2015

Average of 10.865 to 10.875 min.: G145449.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	433	51.05	2915	64.25	45	78.00	181
37.05	2138	51.95	43	67.10	104	78.95	979
38.10	1787	52.10	80	68.05	3905	80.00	312
39.10	813	55.15	138	69.05	3974	81.00	1059
40.05	31	56.10	595	70.05	282	81.90	222
44.00	227	57.05	1156	72.05	277	86.95	1879
45.10	388	59.95	436	73.05	1595	87.95	1587
47.05	707	61.05	2053	74.05	6476	88.65	50
48.05	384	62.05	1920	75.05	20277	90.90	184
49.05	1825	63.05	1391	76.05	1581	92.05	1376
50.05	9129	63.95	59	76.95	293	93.05	1679

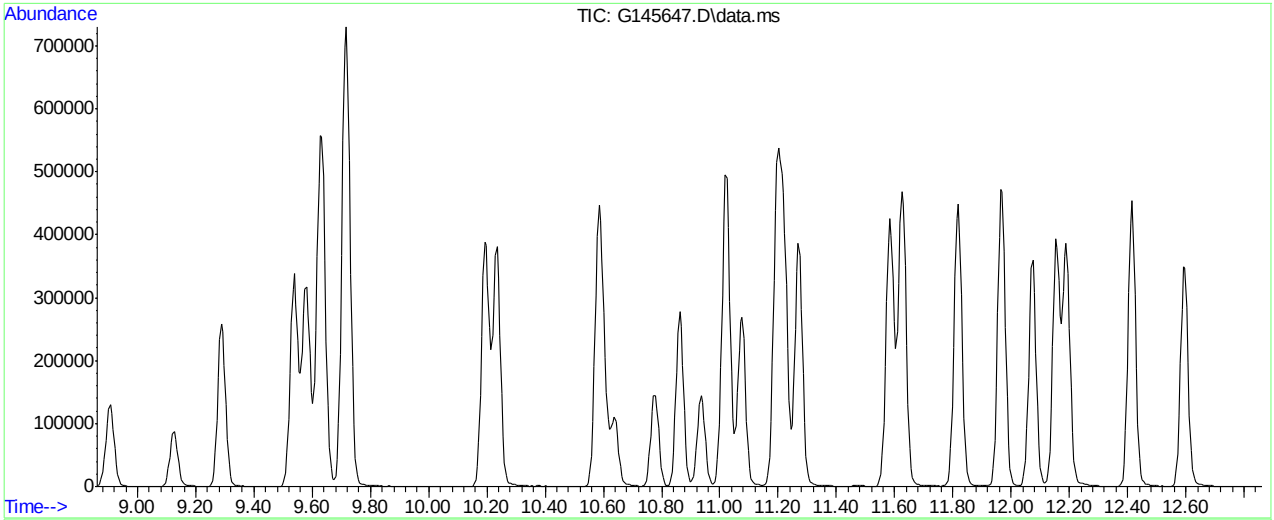
Average of 10.865 to 10.875 min.: G145449.D\data.ms
bfb
Modified:subtracted

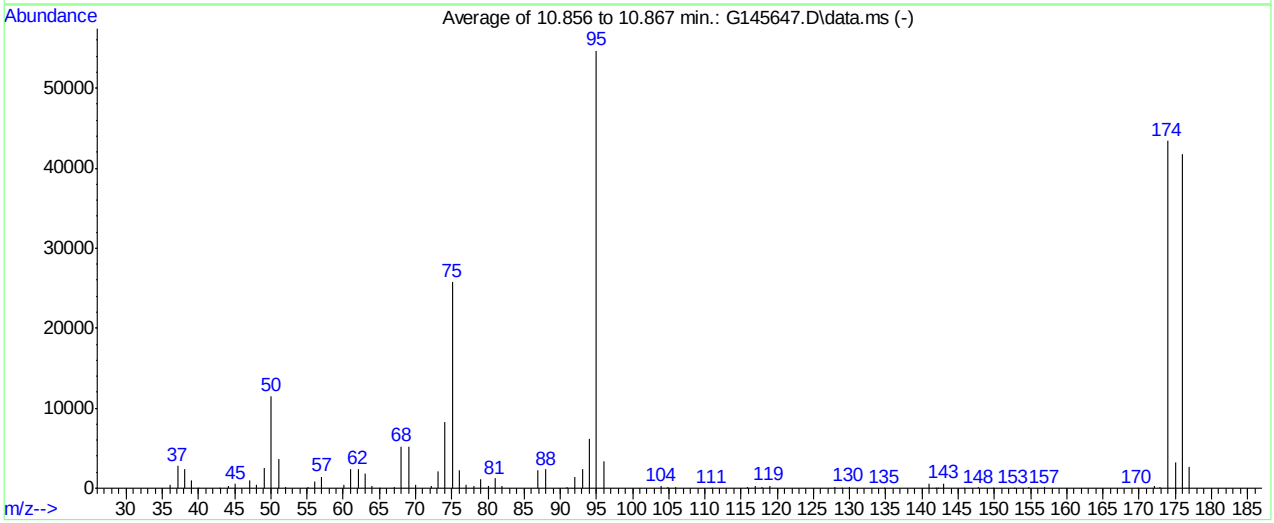
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
94.05	4960	128.75	35	154.90	86		
95.05	42978	129.75	41	171.65	39		
96.05	2891	130.05	179	171.95	123		
96.95	45	130.95	53	172.15	55		
103.80	154	134.85	38	172.95	162		
105.95	170	135.05	36	173.95	36168		
116.00	129	140.95	500	175.00	2673		
116.95	243	142.95	476	175.95	35202		
117.95	142	144.95	50	176.95	2355		
118.90	251	147.85	48	178.05	41		
127.90	172	148.15	37				

SW-846 Method 8260

Data File : G:\1\DATA\G150918\G145647.D Vial: 2
Acq On : 18 Sep 2015 8:37 am Operator: andrewd1
Sample : cc5447-50 Inst : MSG
Misc : MS35241,MSG5455,,,,5,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : G:\1\METHODS\g150913w.m (RTE Integrator)
Title : SW-846 Method 8260





AutoFind: Scans 1868, 1869, 1870; Background Corrected with Scan 1860

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.1	11546	PASS
75	95	30	60	47.0	25730	PASS
95	95	100	100	100.0	54709	PASS
96	95	5	9	6.1	3359	PASS
173	174	0.00	2	0.3	117	PASS
174	95	50	100	79.3	43405	PASS
175	174	5	9	7.5	3268	PASS
176	174	95	101	96.3	41800	PASS
177	176	5	9	6.5	2715	PASS

G145647.D g150913w.m Fri Sep 18 13:39:35 2015

Average of 10.856 to 10.867 min.: G145647.D\data.ms
cc5447-50
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	457	50.05	11546	65.05	56	78.00	258
37.10	2762	51.05	3686	67.10	139	79.00	1109
38.05	2439	52.05	207	68.05	5258	80.00	346
39.05	936	55.05	164	69.05	5164	80.95	1243
39.95	32	56.05	839	70.05	376	81.90	244
42.95	36	57.05	1473	72.10	312	86.95	2242
44.05	264	60.05	489	73.05	2175	88.00	2354
45.10	512	61.05	2332	74.05	8338	90.95	172
47.05	976	62.05	2445	75.05	25730	92.00	1396
48.05	417	63.05	1812	76.05	2268	93.05	2332
49.05	2521	64.00	243	77.00	363	94.05	6164

Average of 10.856 to 10.867 min.: G145647.D\data.ms
cc5447-50
Modified:subtracted

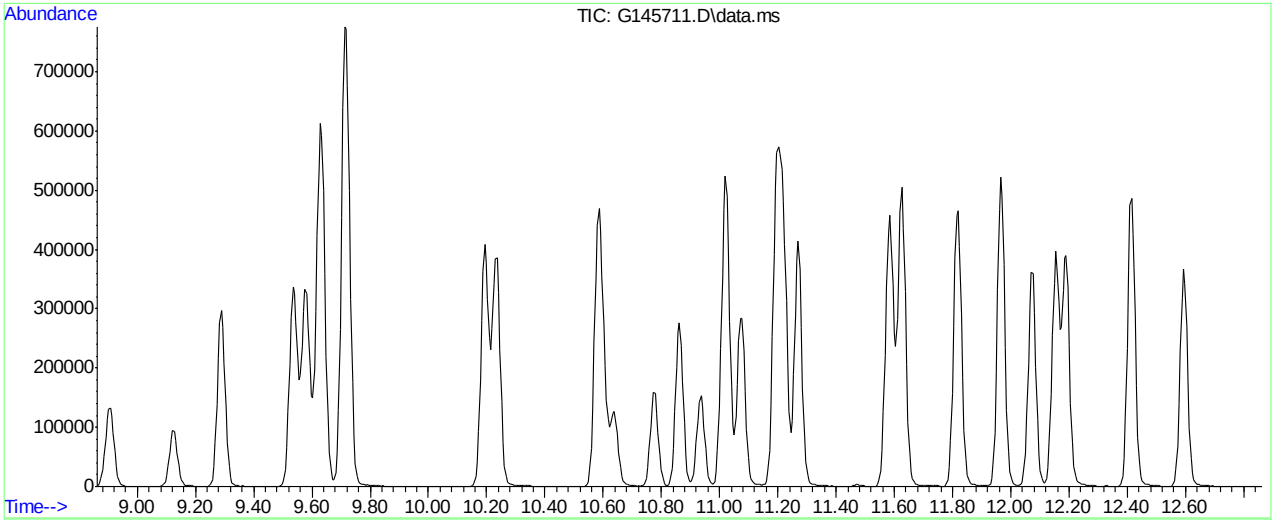
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
95.00	54709	128.85	39	154.80	88		
96.05	3359	129.90	204	156.95	104		
104.00	249	134.85	45	169.75	38		
104.90	77	140.95	559	172.05	244		
106.00	198	141.85	34	172.95	117		
110.95	35	142.15	33	173.95	43405		
115.90	184	143.00	586	175.00	3268		
117.00	319	145.85	42	175.95	41800		
117.90	186	147.85	104	177.00	2715		
118.95	330	149.85	35				
127.90	182	152.75	41				

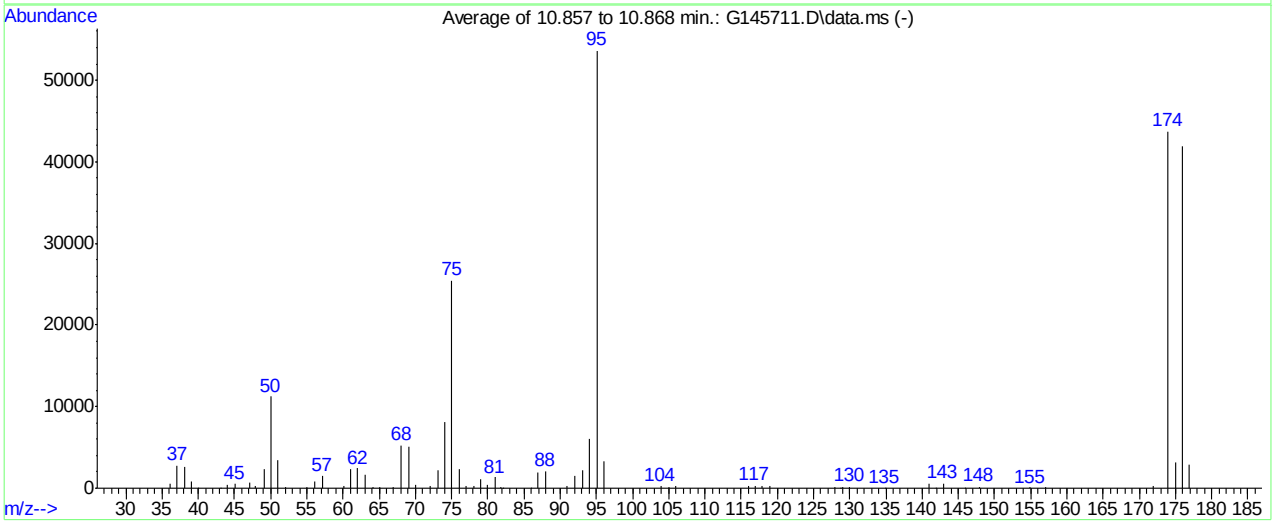
SW-846 Method 8260

Data File : G:\1\DATA\G150920\G145711.D
Acq On : 20 Sep 2015 9:36 am
Sample : bs
Misc : MS35249,MSG5457,,,,5,1
MS Integration Params: RTEINT.P

Vial: 3
Operator: andrewd1
Inst : MSG
Multiplr: 1.00

Method : G:\1\METHODS\g150913w.m (RTE Integrator)
Title : SW-846 Method 8260





Spectrum Information: Average of 10.857 to 10.868 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.9	11221	PASS
75	95	30	60	47.4	25445	PASS
95	95	100	100	100.0	53648	PASS
96	95	5	9	6.1	3287	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	81.5	43709	PASS
175	174	5	9	7.4	3233	PASS
176	174	95	101	96.0	41960	PASS
177	176	5	9	6.9	2910	PASS

G145711.D g150913w.m Mon Sep 21 12:44:21 2015

Average of 10.857 to 10.868 min.: G145711.D\data.ms
bs
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	616	50.05	11221	65.10	168	78.10	246
37.05	2773	51.05	3400	67.00	119	78.95	1139
38.05	2593	52.05	152	68.05	5259	79.90	450
39.10	867	55.05	177	69.05	5057	80.95	1344
40.00	67	56.05	777	70.00	372	81.85	179
43.15	41	57.10	1453	72.05	300	82.15	70
44.05	383	60.10	286	73.05	2135	86.05	50
45.05	503	61.05	2407	74.05	8139	86.95	1914
47.05	714	62.05	2419	75.05	25445	87.95	2079
47.95	283	63.00	1636	76.05	2366	91.00	230
49.05	2407	64.10	179	77.00	293	92.00	1559

Average of 10.857 to 10.868 min.: G145711.D\data.ms
bs
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
93.05	2217	127.95	171	157.00	120		
94.05	6105	128.75	52	172.00	265		
95.05	53648	129.05	97	173.95	43709		
96.00	3287	130.00	190	175.00	3233		
103.90	255	134.85	42	175.95	41960		
105.00	100	140.95	594	176.95	2910		
106.00	249	141.95	40				
116.00	245	142.90	617				
116.90	290	145.85	35				
117.90	219	147.90	143				
118.90	288	154.95	136				

Manual Integrations
APPROVED
(compounds with "m" flag)
Doug Yargeau
09/14/15 19:20

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145450.D
Acq On : 13 Sep 2015 8:39 am
Operator : andrewd1
Sample : ic5447-.5
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 14 08:34:08 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Sun Sep 13 13:06:51 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.163	65	79609	500.00	ppb	0.00
4) pentafluorobenzene	5.102	168	156368	50.00	ppb	0.00
43) 1,4-difluorobenzene	6.217	114	260518	50.00	ppb	0.00
66) chlorobenzene-d5	9.540	82	112288	50.00	ppb	0.00
80) 1,4-dichlorobenzene-d4	12.162	152	100404	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	5.270	113	87765	48.44	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 96.88%			
60) toluene-d8 (s)	7.887	98	263776	45.10	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 90.20%			
82) bromofluorobenzene (s)	10.867	95	102221	54.08	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 108.16%			
Target Compounds						Qvalue
47) benzene	5.921	78	4023	0.60	ppb	93
51) trichloroethene	6.578	95	1213m	0.65	ppb	
59) cis-1,3-dichloropropene	7.618	75	1297m	0.44	ppb	
63) trans-1,3-dichloropropene	8.172	75	1248m	0.45	ppb	
67) tetrachloroethene	8.679	166	915m	0.56	ppb	
69) dibromochloromethane	8.904	129	951m	0.50	ppb	
74) ethylbenzene	9.635	91	3965	0.55	ppb	94
75) m,p-xylene	9.719	106	2948	1.07	ppb	88
76) o-xylene	10.196	106	1463m	0.53	ppb	
84) 1,1,2,2-tetrachloroethane	10.776	83	1148m	0.66	ppb	

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

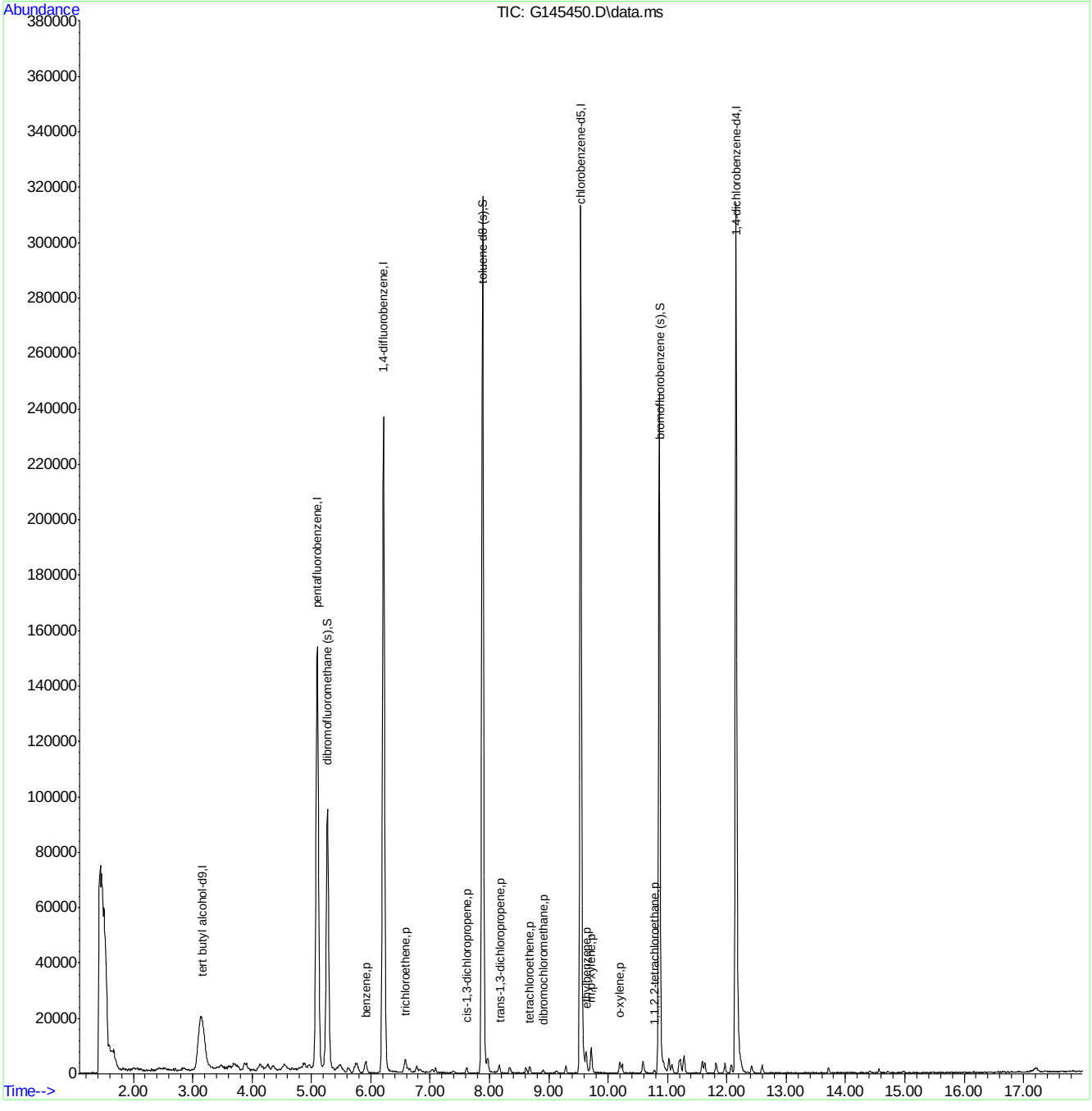
7.6.1

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145450.D
Acq On : 13 Sep 2015 8:39 am
Operator : andrewd1
Sample : ic5447-.5
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

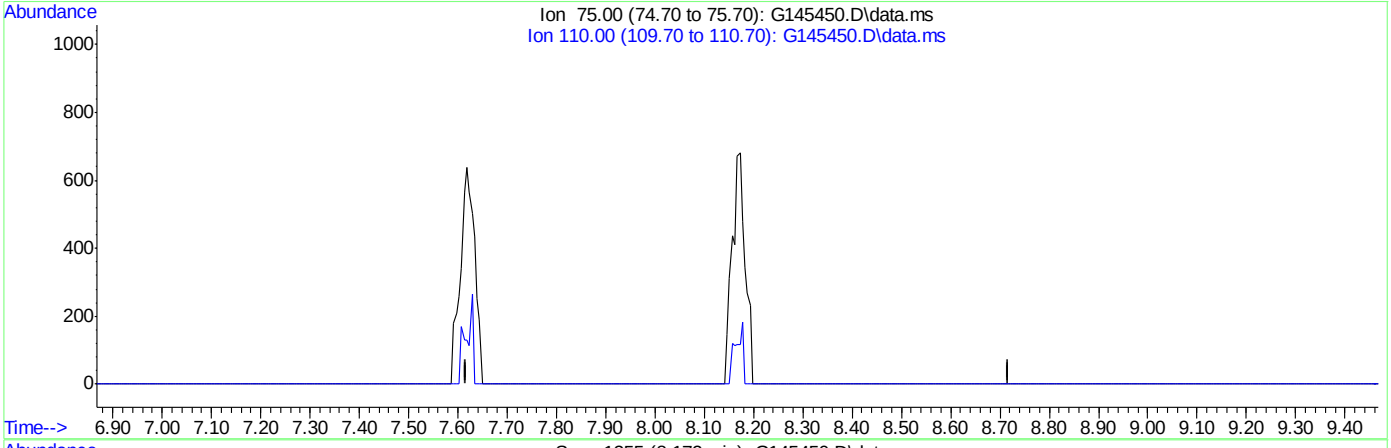
Quant Time: Sep 14 08:34:08 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Sun Sep 13 13:06:51 2015
Response via : Initial Calibration

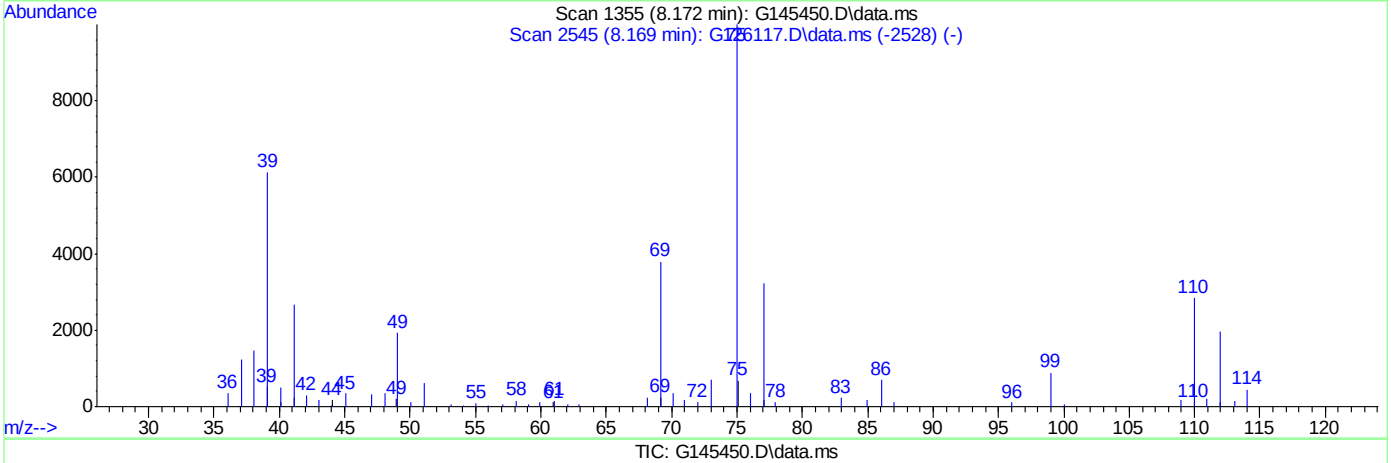


Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145450.D
Acq On : 13 Sep 2015 8:39 am
Operator : andrewd1
Sample : ic5447-.5
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 13 13:08:12 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Sun Sep 13 13:06:51 2015
Response via : Initial Calibration





TIC: G145450.D\data.ms

(63) trans-1,3-dichloropropene (p)

8.168min (-8.168) 0.00ppb

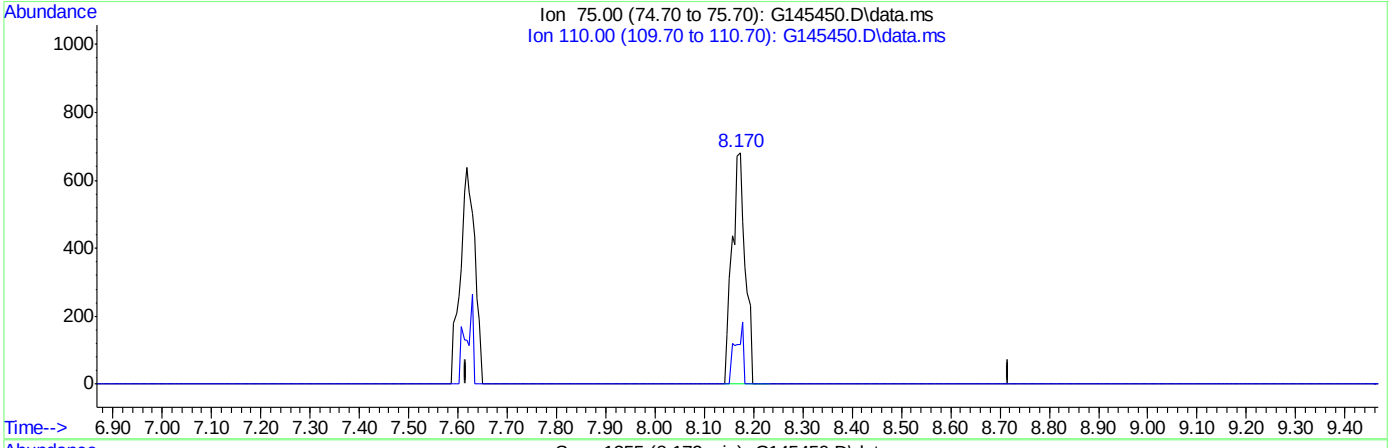
response 0

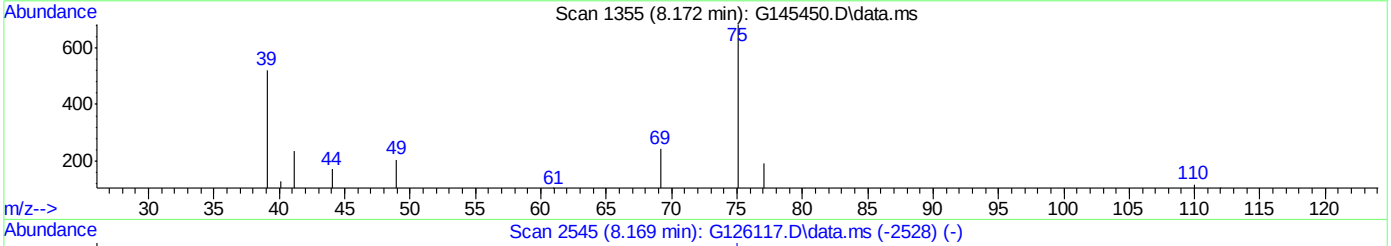
Ion	Exp%	Act%
75.00	100	0.00
110.00	26.60	0.00
0.00	0.00	0.00
0.00	0.00	0.00

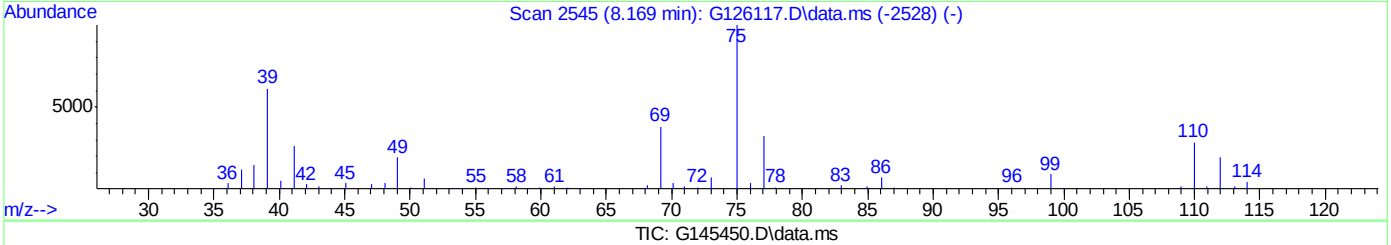
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145450.D
Acq On : 13 Sep 2015 8:39 am
Operator : andrewd1
Sample : ic5447-.5
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 13 13:08:12 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Sun Sep 13 13:06:51 2015
Response via : Initial Calibration







TIC: G145450.D\data.ms

(63) trans-1,3-dichloropropene (p)

8.172min (+0.005) 0.45ppb m

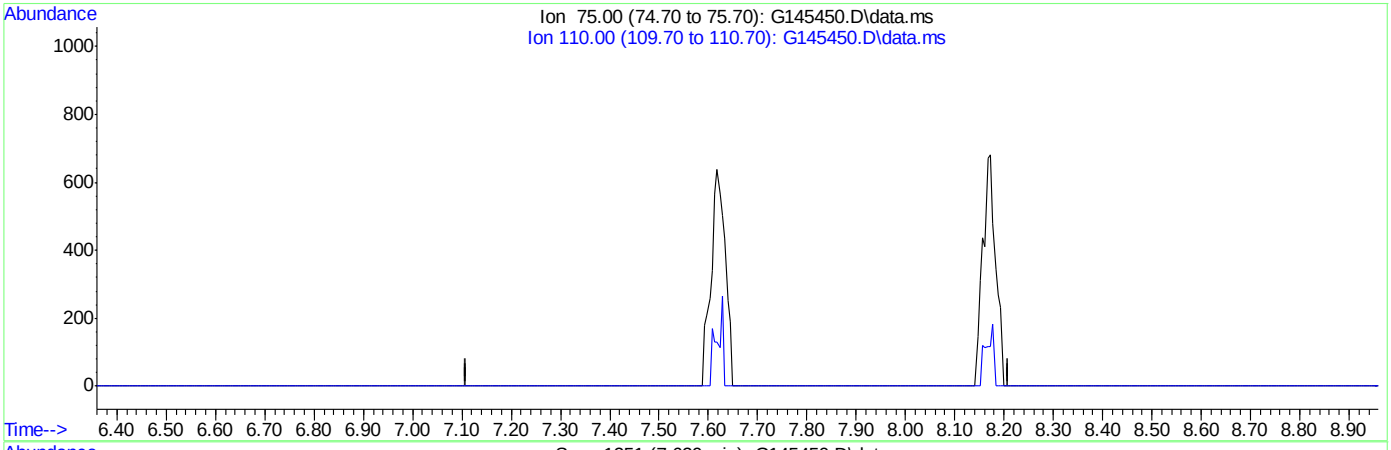
response 1249

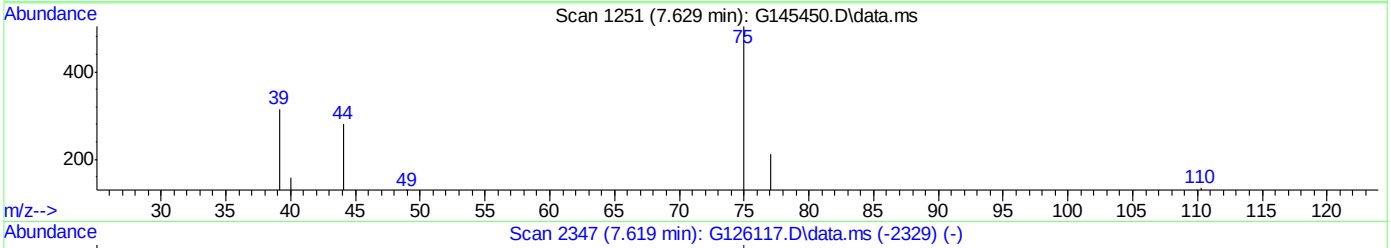
Ion	Exp%	Act%
75.00	100	100
110.00	26.60	17.30
0.00	0.00	0.00
0.00	0.00	0.00

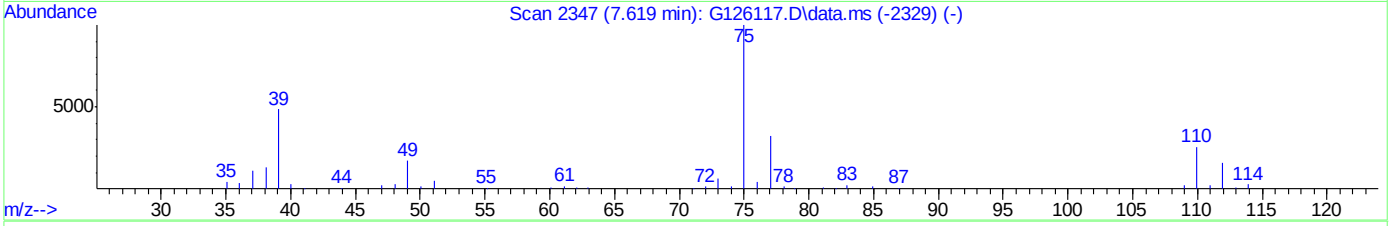
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145450.D
Acq On : 13 Sep 2015 8:39 am
Operator : andrewd1
Sample : ic5447-.5
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 13 13:08:12 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Sun Sep 13 13:06:51 2015
Response via : Initial Calibration







TIC: G145450.D\data.ms

(59) cis-1,3-dichloropropene (p)

7.619min (-7.619) 0.00ppb

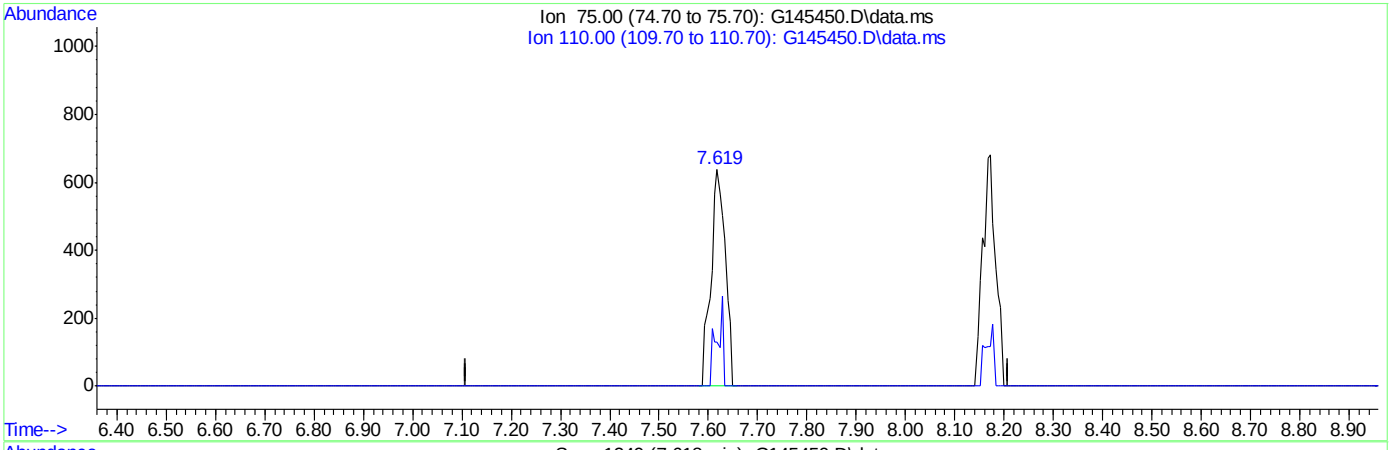
response 0

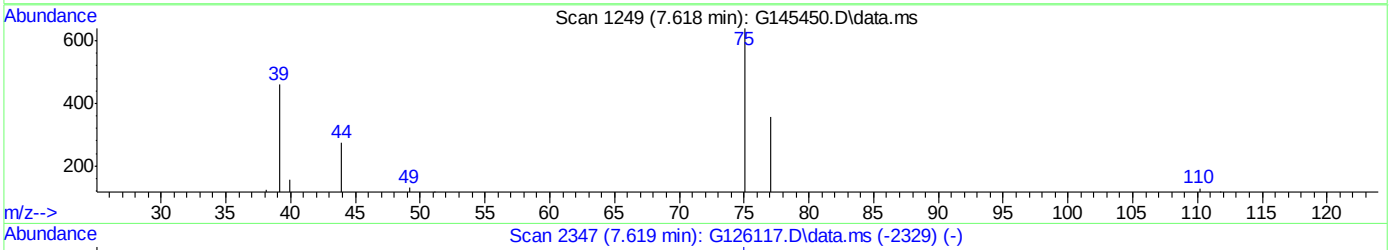
Ion	Exp%	Act%
75.00	100	0.00
110.00	25.60	0.00
0.00	0.00	0.00
0.00	0.00	0.00

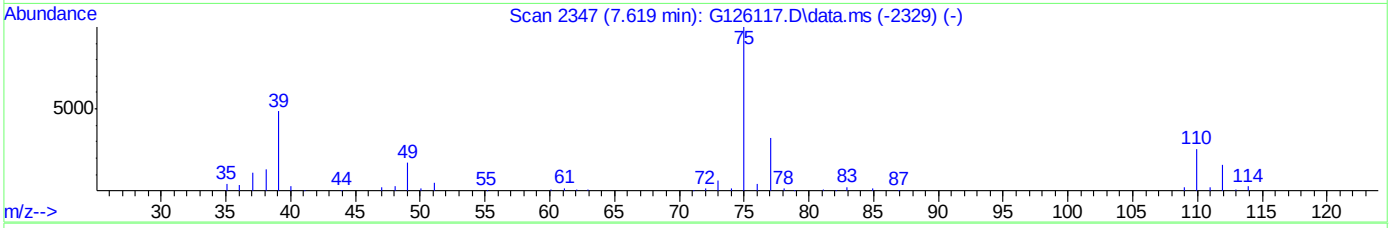
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145450.D
Acq On : 13 Sep 2015 8:39 am
Operator : andrewd1
Sample : ic5447-.5
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 13 13:08:12 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Sun Sep 13 13:06:51 2015
Response via : Initial Calibration







TIC: G145450.D\data.ms

(59) cis-1,3-dichloropropene (p)

7.618min (-0.001) 0.44ppb m

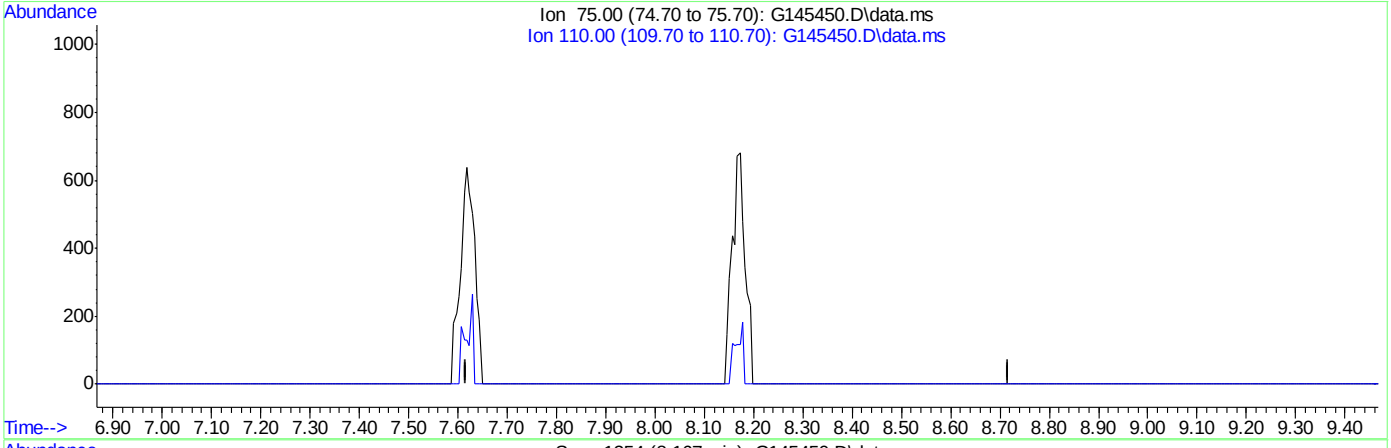
response 1297

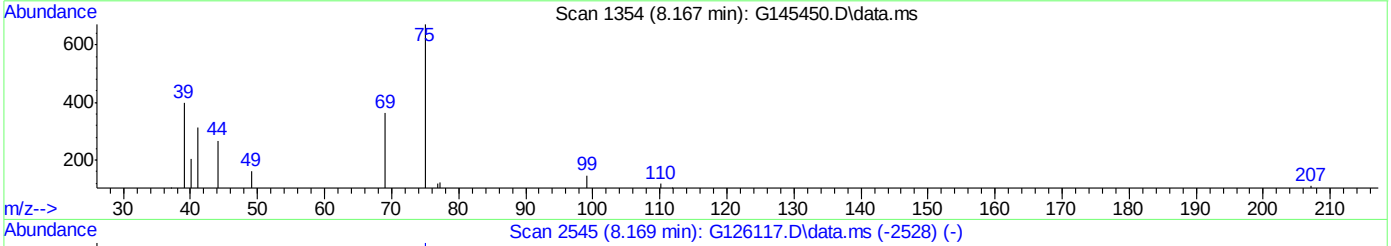
Ion	Exp%	Act%
75.00	100	100
110.00	25.60	20.19
0.00	0.00	0.00
0.00	0.00	0.00

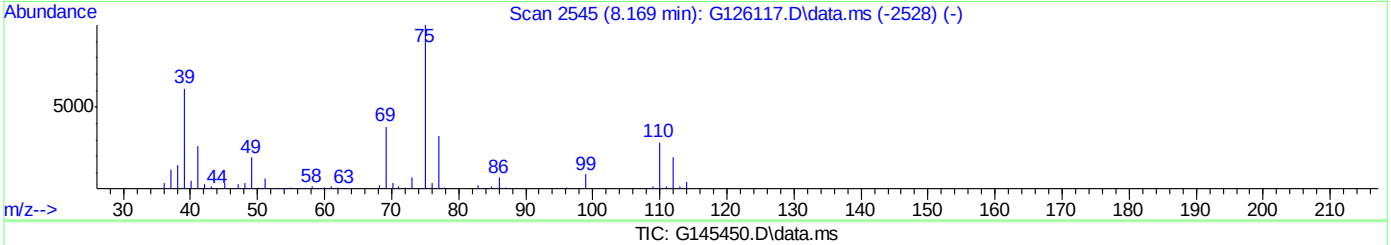
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145450.D
Acq On : 13 Sep 2015 8:39 am
Operator : andrewd1
Sample : ic5447-.5
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 13 13:08:12 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Sun Sep 13 13:06:51 2015
Response via : Initial Calibration







TIC: G145450.D\data.ms

(63) trans-1,3-dichloropropene (p)

8.168min (-8.168) 0.00ppb

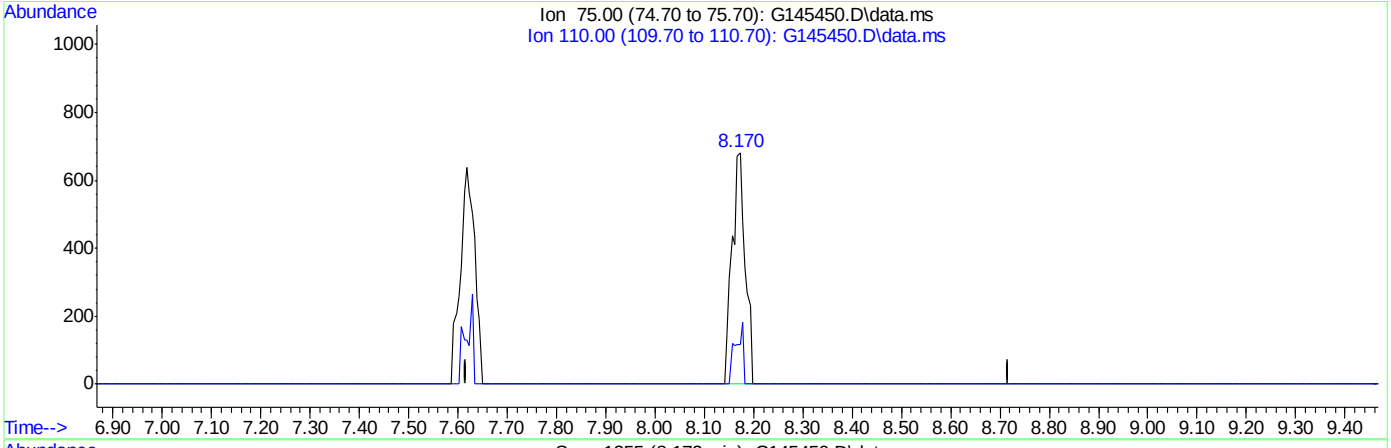
response 0

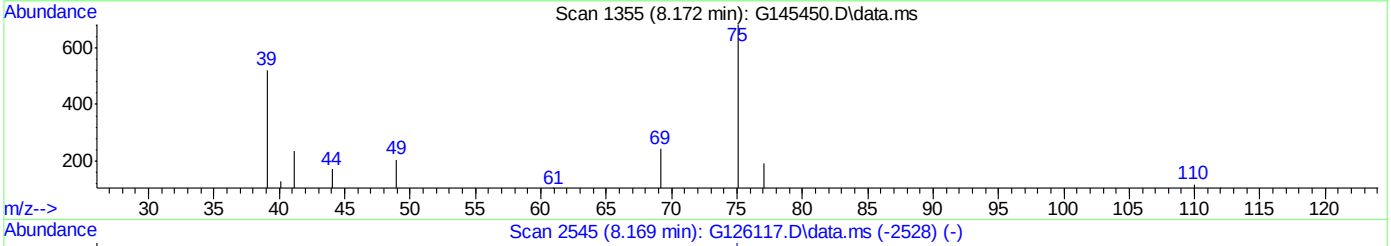
Ion	Exp%	Act%
75.00	100	0.00
110.00	26.60	0.00
0.00	0.00	0.00
0.00	0.00	0.00

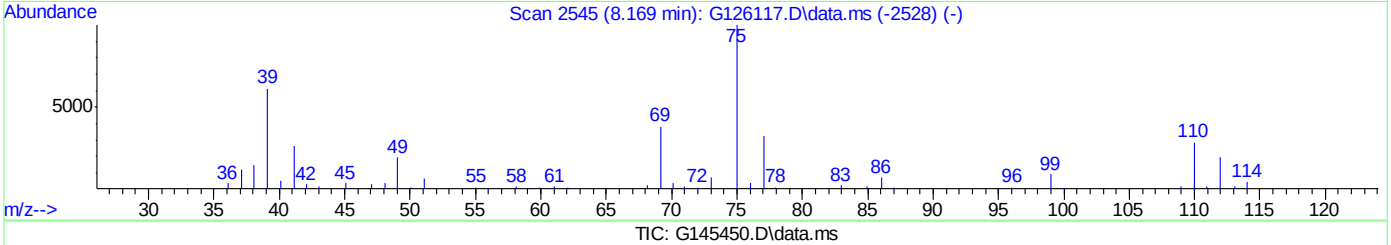
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145450.D
Acq On : 13 Sep 2015 8:39 am
Operator : andrewd1
Sample : ic5447-.5
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 13 13:08:12 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Sun Sep 13 13:06:51 2015
Response via : Initial Calibration







TIC: G145450.D\data.ms

(63) trans-1,3-dichloropropene (p)

8.172min (+0.005) 0.45ppb m

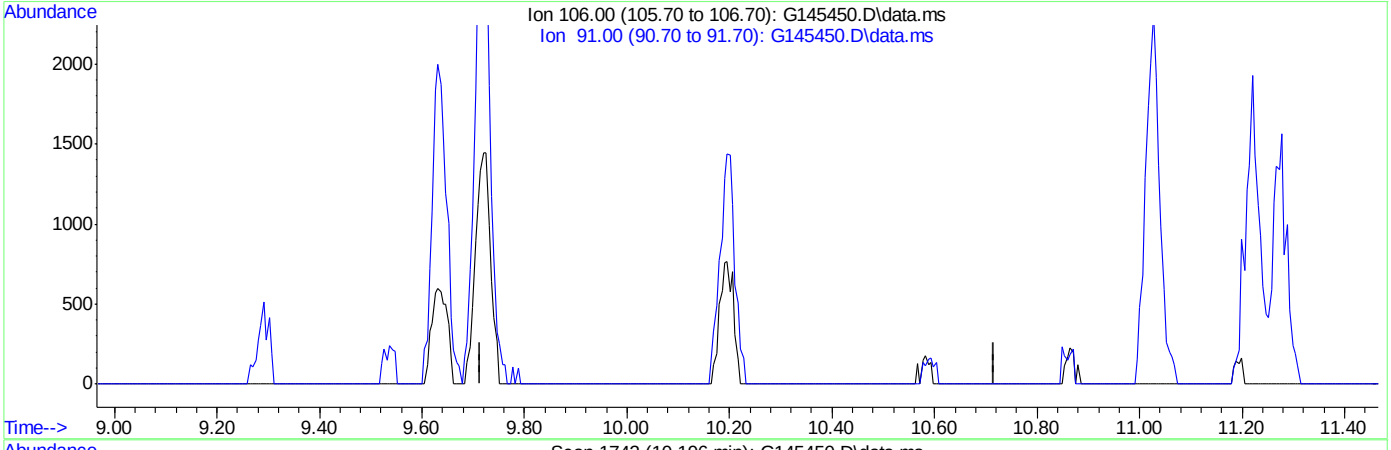
response 1249

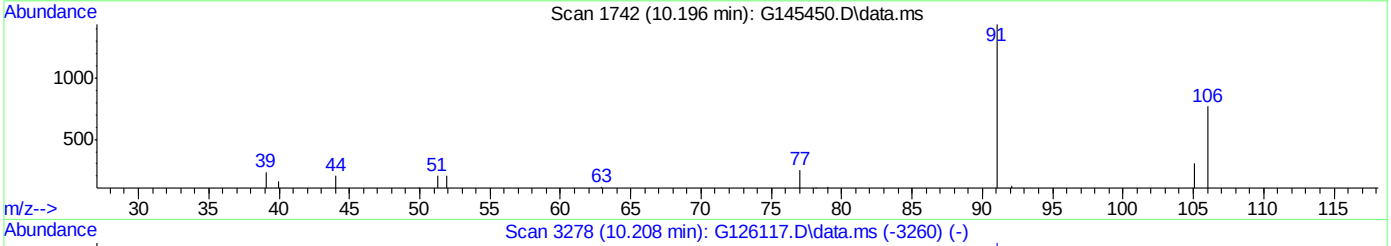
Ion	Exp%	Act%
75.00	100	100
110.00	26.60	17.30
0.00	0.00	0.00
0.00	0.00	0.00

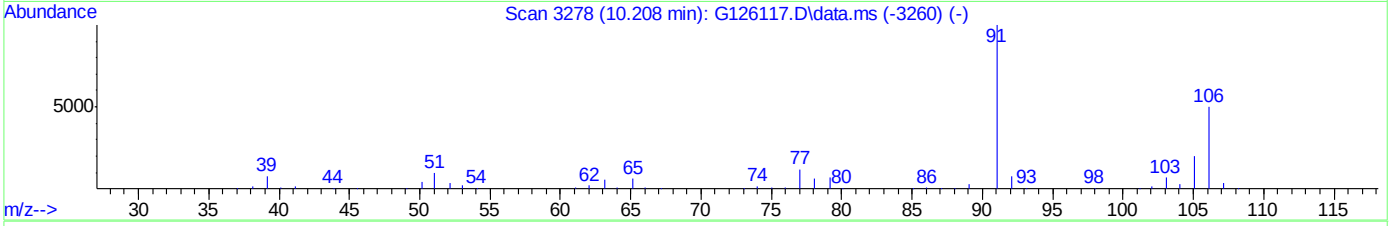
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145450.D
Acq On : 13 Sep 2015 8:39 am
Operator : andrewd1
Sample : ic5447-.5
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 13 13:08:12 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Sun Sep 13 13:06:51 2015
Response via : Initial Calibration







TIC: G145450.D\data.ms

(76) o-xylene (p)

10.196min (-10.196) 0.00ppb

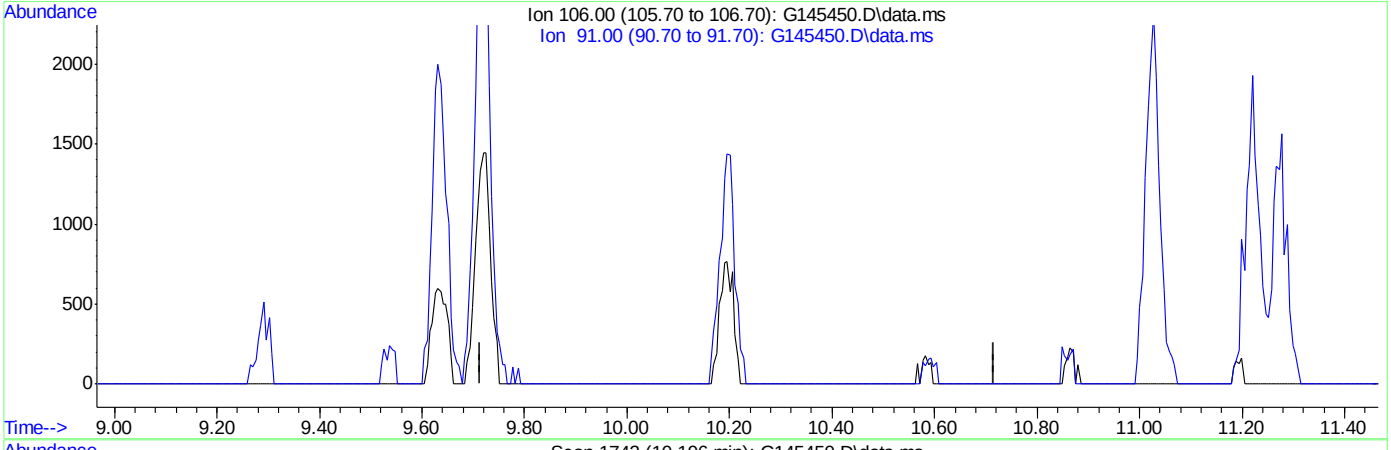
response 0

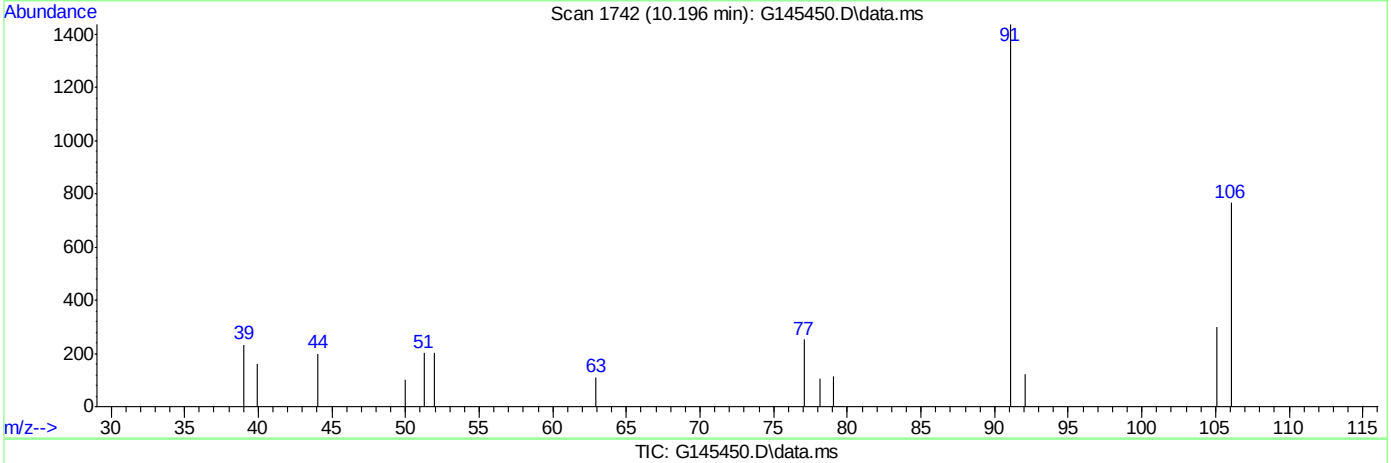
Ion	Exp%	Act%
106.00	100	0.00
91.00	199.30	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145450.D
Acq On : 13 Sep 2015 8:39 am
Operator : andrewd1
Sample : ic5447-.5
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 13 13:08:12 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Sun Sep 13 13:06:51 2015
Response via : Initial Calibration





TIC: G145450.D\data.ms

(76) o-xylene (p)

10.196min (-10.196) 0.00ppb

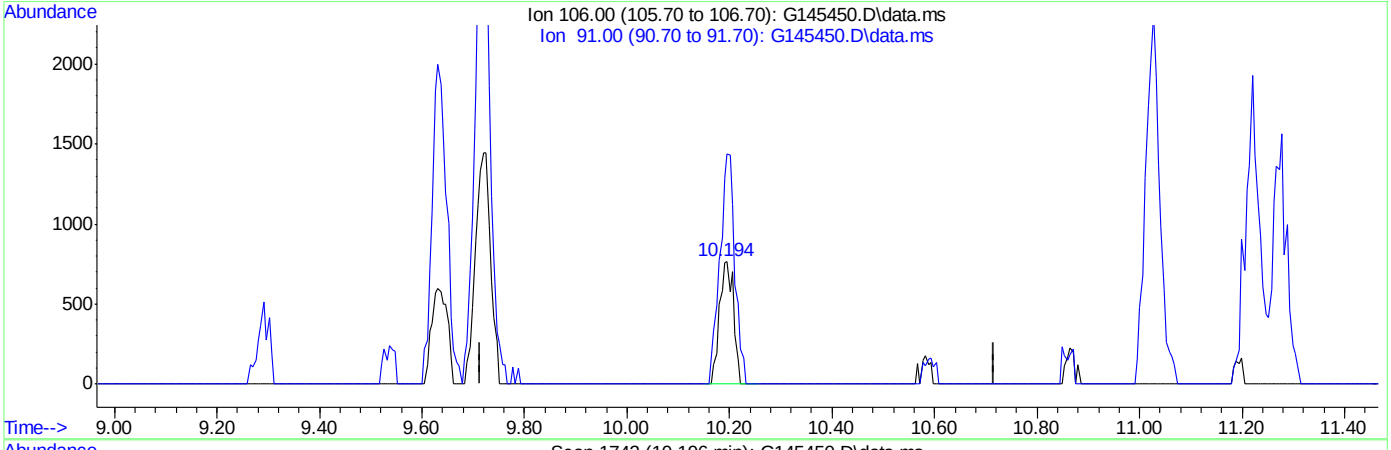
response 0

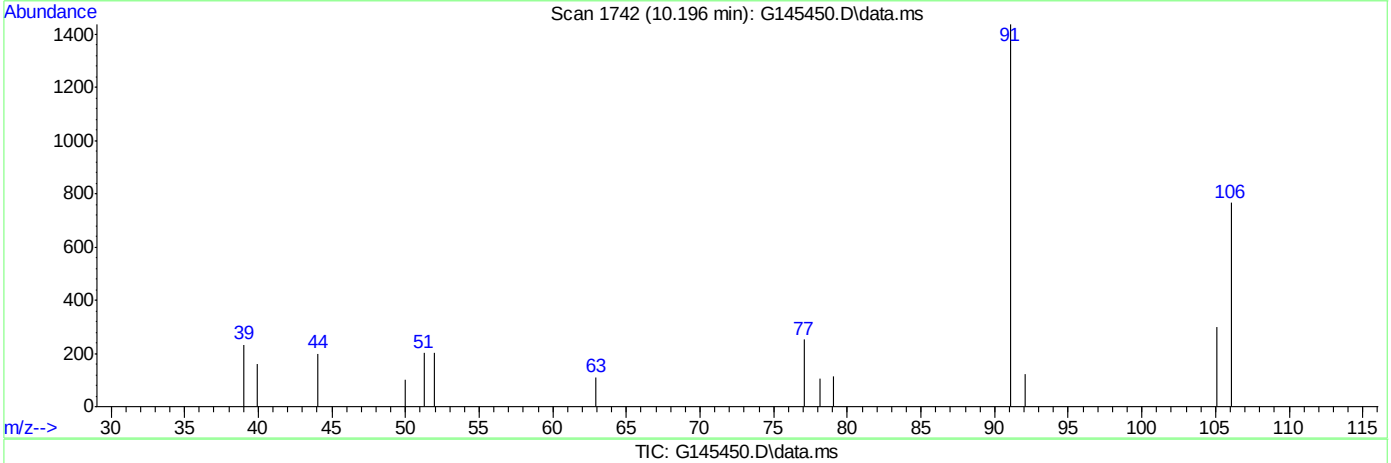
Ion	Exp%	Act%
106.00	100	0.00
91.00	199.30	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145450.D
Acq On : 13 Sep 2015 8:39 am
Operator : andrewd1
Sample : ic5447-.5
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 13 13:08:12 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Sun Sep 13 13:06:51 2015
Response via : Initial Calibration





TIC: G145450.D\data.ms

(76) o-xylene (p)

10.196min (-0.000) 0.53ppb m

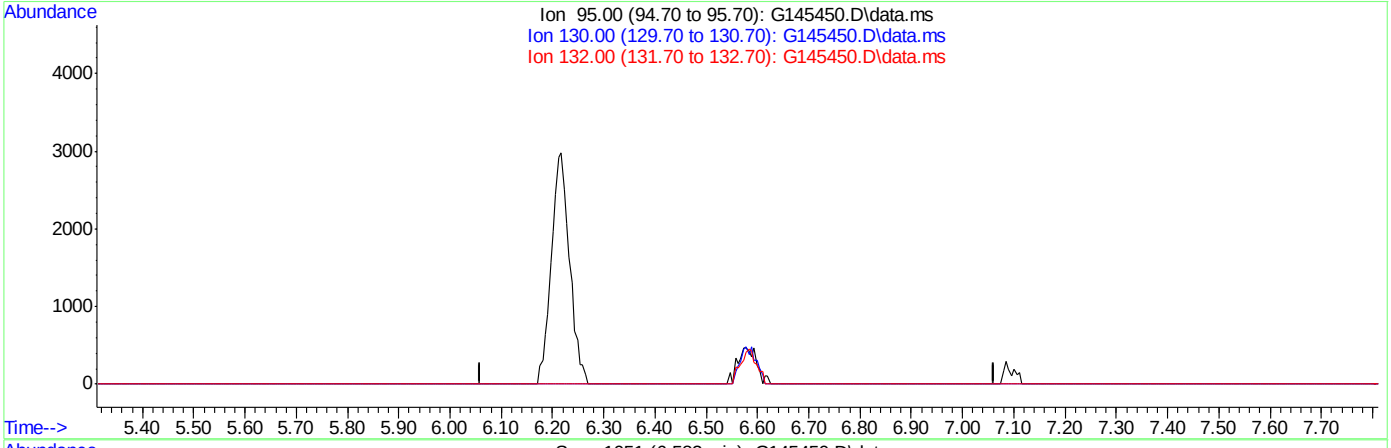
response 1463

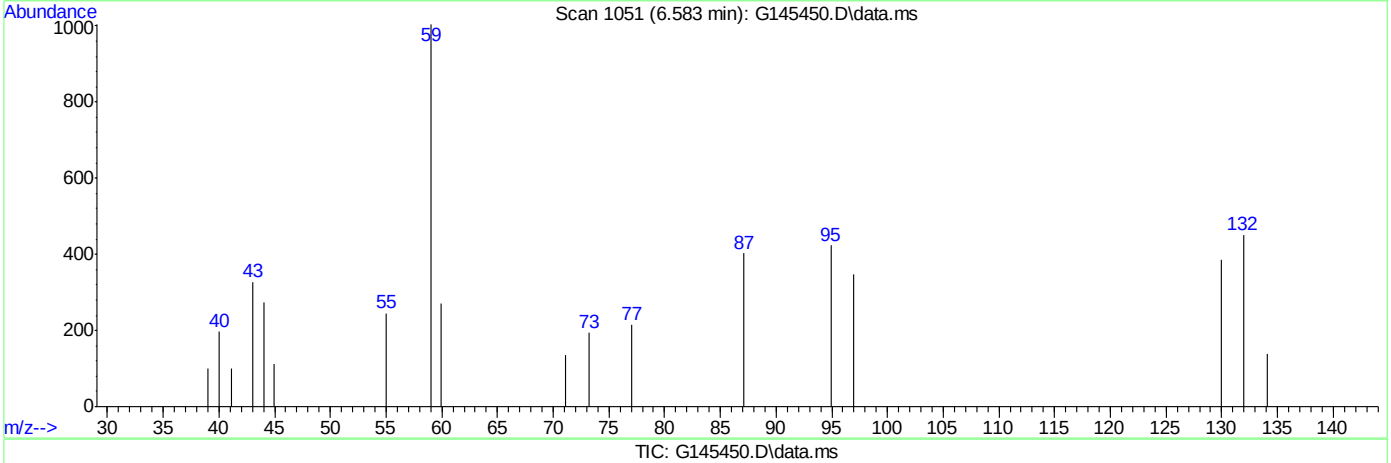
Ion	Exp%	Act%
106.00	100	100
91.00	199.30	187.47
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145450.D
Acq On : 13 Sep 2015 8:39 am
Operator : andrewd1
Sample : ic5447-.5
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 13 13:16:19 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Sun Sep 13 13:06:51 2015
Response via : Initial Calibration





TIC: G145450.D\data.ms

(51) trichloroethene (p)

6.581min (-6.581) 0.00ppb

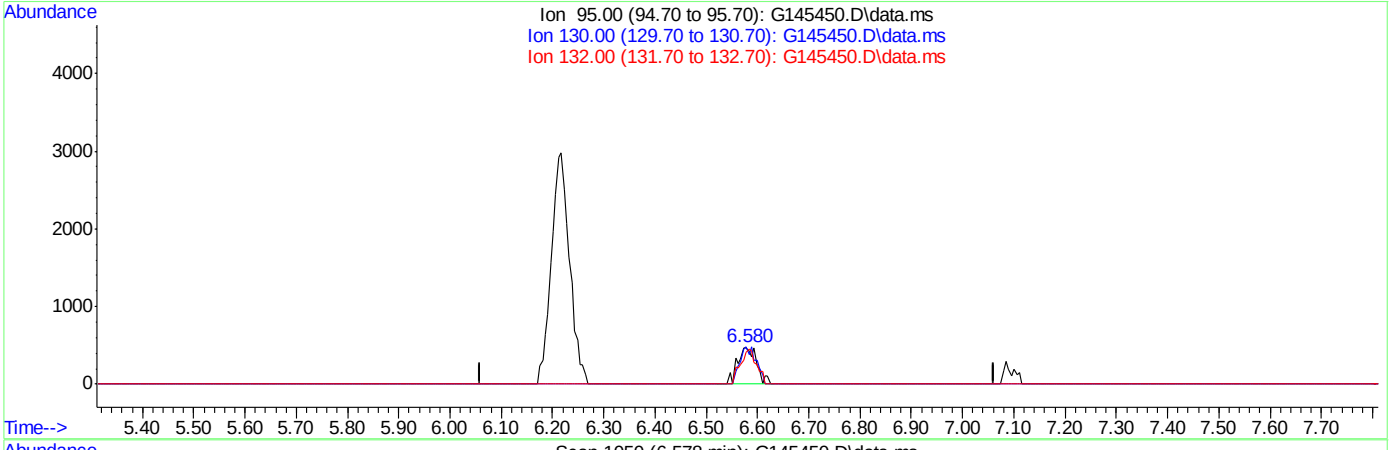
response 0

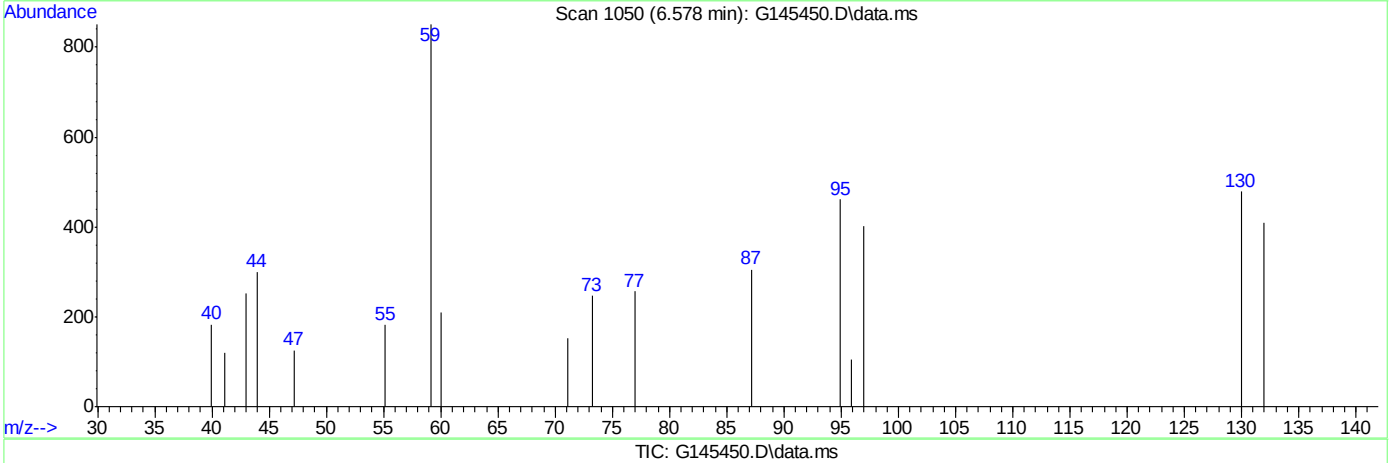
Ion	Exp%	Act%
95.00	100	0.00
130.00	115.70	0.00#
132.00	108.00	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145450.D
Acq On    : 13 Sep 2015   8:39 am
Operator  : andrewd1
Sample    : ic5447-.5
Misc      : MS35209,MSG5447,,,,5,1
ALS Vial  : 3   Sample Multiplier: 1

Quant Time: Sep 13 13:16:19 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title  : SW-846 Method 8260
QLast Update : Sun Sep 13 13:06:51 2015
Response via : Initial Calibration
```





TIC: G145450.D\data.ms

(51) trichloroethene (p)

6.578min (-0.003) 0.65ppb m

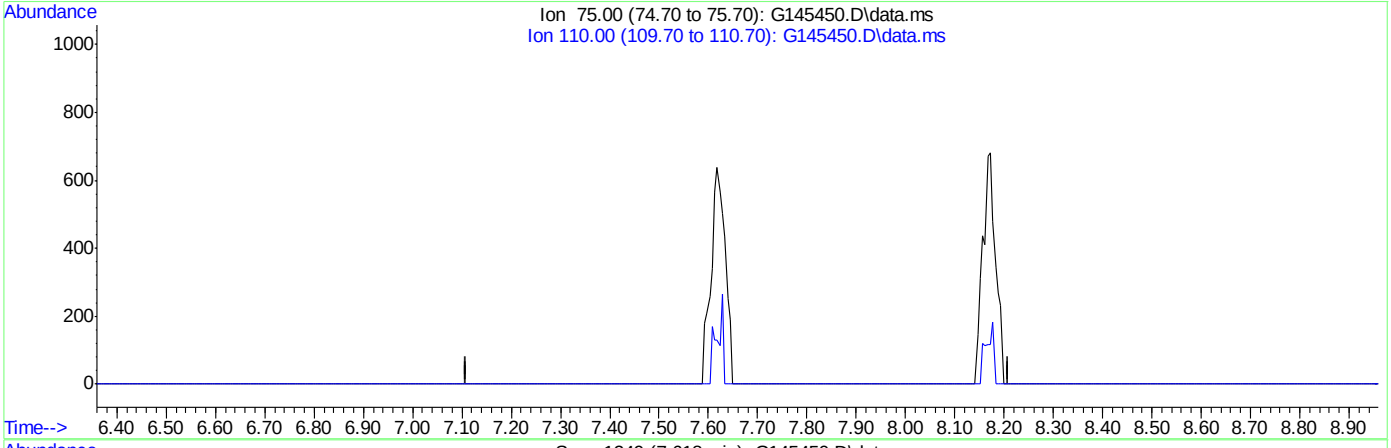
response 1213

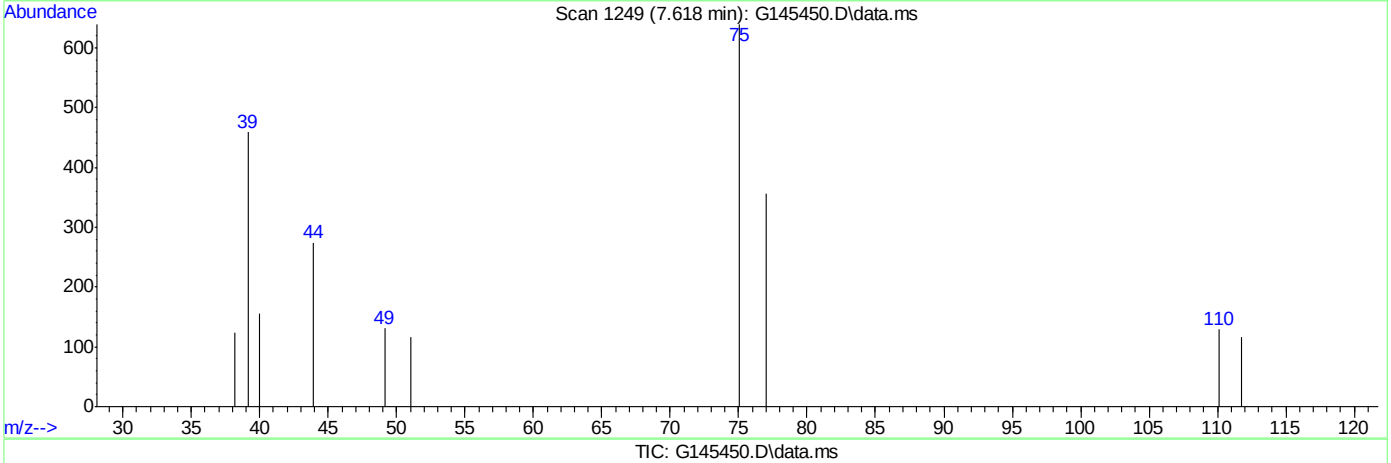
Ion	Exp%	Act%
95.00	100	100
130.00	115.70	103.90
132.00	108.00	88.94
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145450.D
Acq On : 13 Sep 2015 8:39 am
Operator : andrewd1
Sample : ic5447-.5
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 13 13:16:19 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Sun Sep 13 13:06:51 2015
Response via : Initial Calibration





TIC: G145450.D\data.ms

(59) cis-1,3-dichloropropene (p)

7.619min (-7.619) 0.00ppb

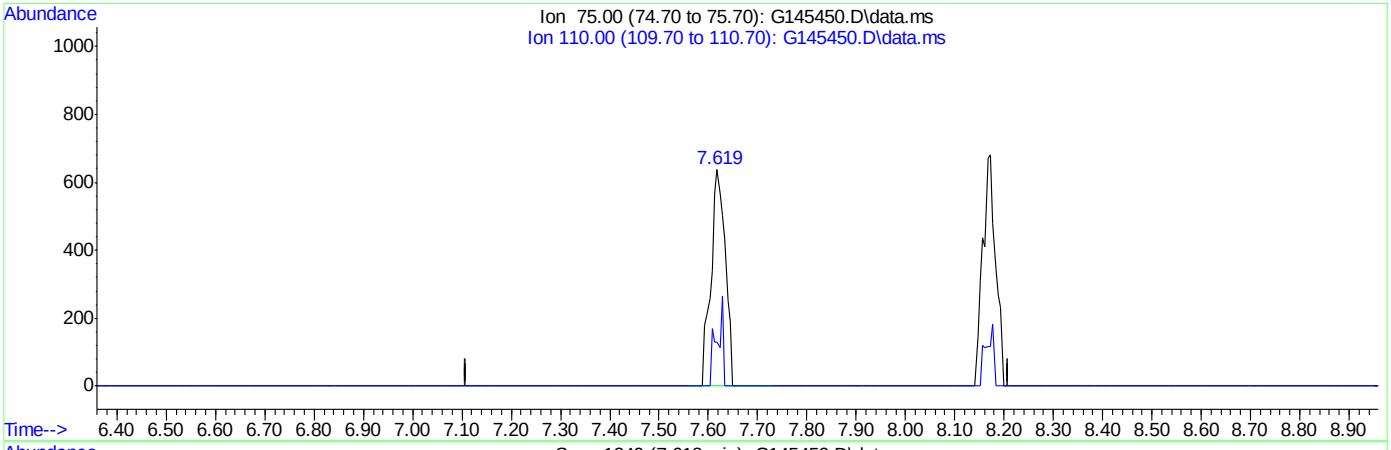
response 0

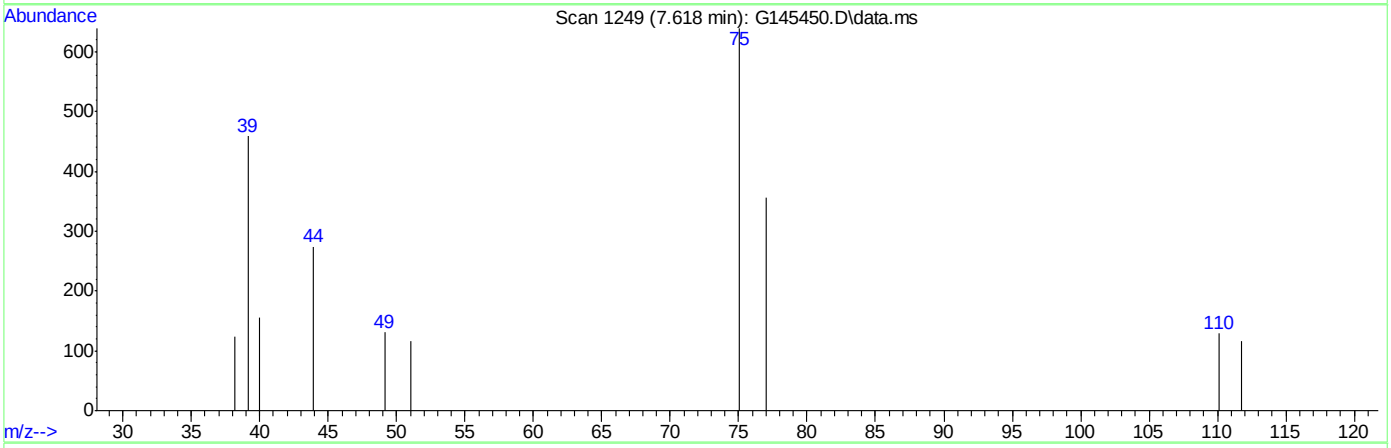
Ion	Exp%	Act%
75.00	100	0.00
110.00	25.60	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145450.D
Acq On : 13 Sep 2015 8:39 am
Operator : andrewd1
Sample : ic5447-.5
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 13 13:16:19 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Sun Sep 13 13:06:51 2015
Response via : Initial Calibration





TIC: G145450.D\data.ms

(59) cis-1,3-dichloropropene (p)

7.618min (-0.001) 0.44ppb m

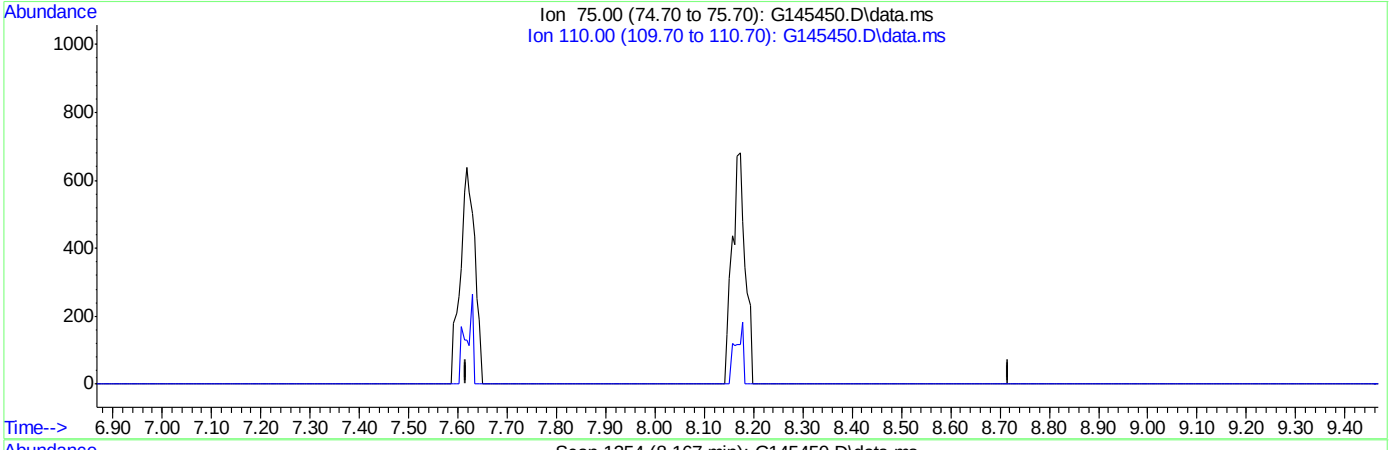
response 1297

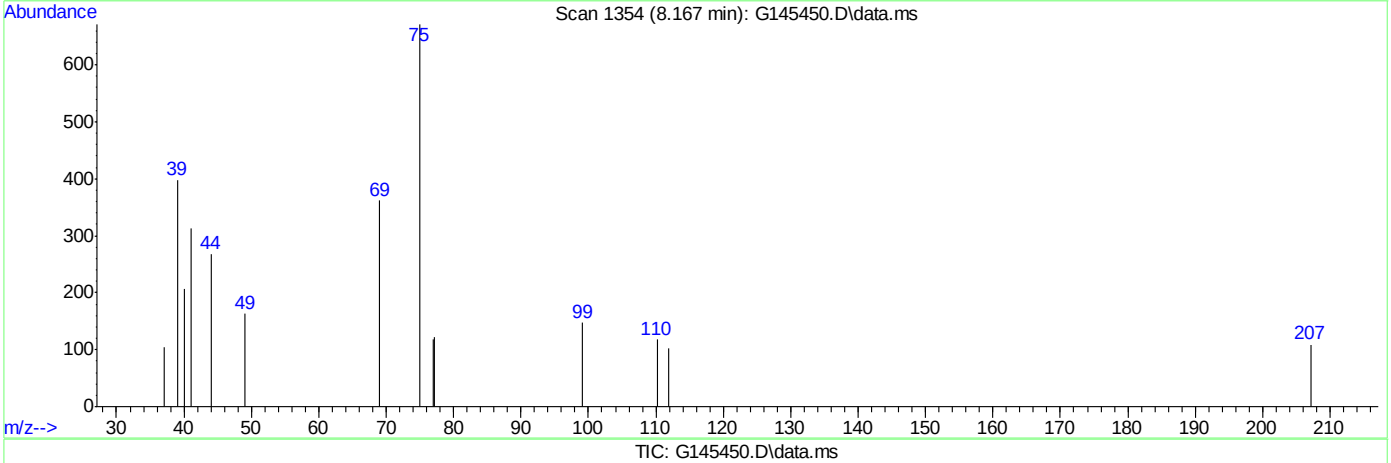
Ion	Exp%	Act%
75.00	100	100
110.00	25.60	20.19
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145450.D
Acq On : 13 Sep 2015 8:39 am
Operator : andrewd1
Sample : ic5447-.5
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 13 13:16:19 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Sun Sep 13 13:06:51 2015
Response via : Initial Calibration





TIC: G145450.D\data.ms

(63) trans-1,3-dichloropropene (p)

8.168min (-8.168) 0.00ppb

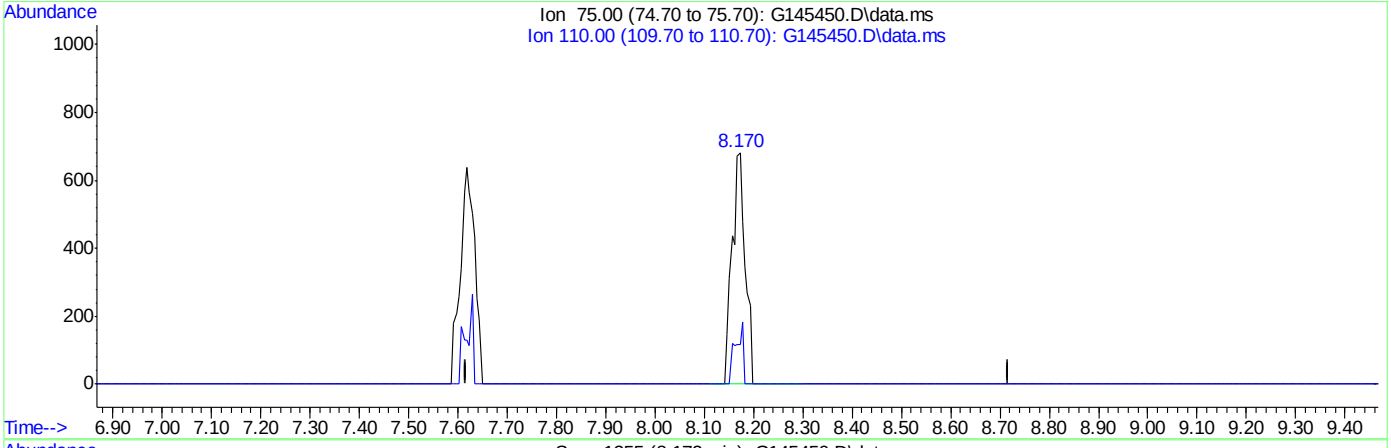
response 0

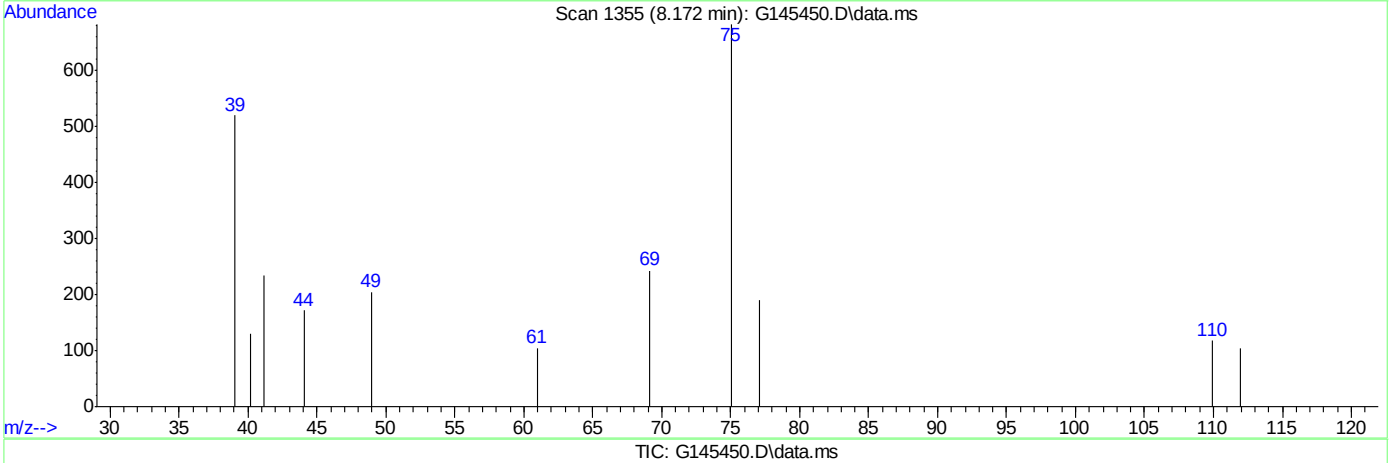
Ion	Exp%	Act%
75.00	100	0.00
110.00	26.60	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145450.D
Acq On : 13 Sep 2015 8:39 am
Operator : andrewd1
Sample : ic5447-.5
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 13 13:16:19 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Sun Sep 13 13:06:51 2015
Response via : Initial Calibration





TIC: G145450.D\data.ms

(63) trans-1,3-dichloropropene (p)

8.172min (+0.005) 0.45ppb m

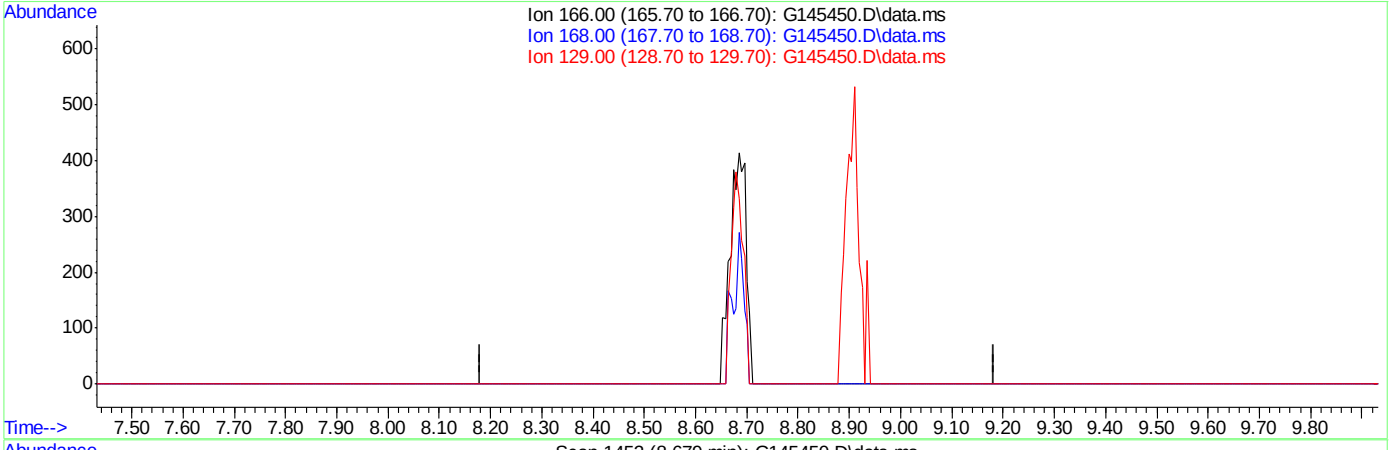
response 1248

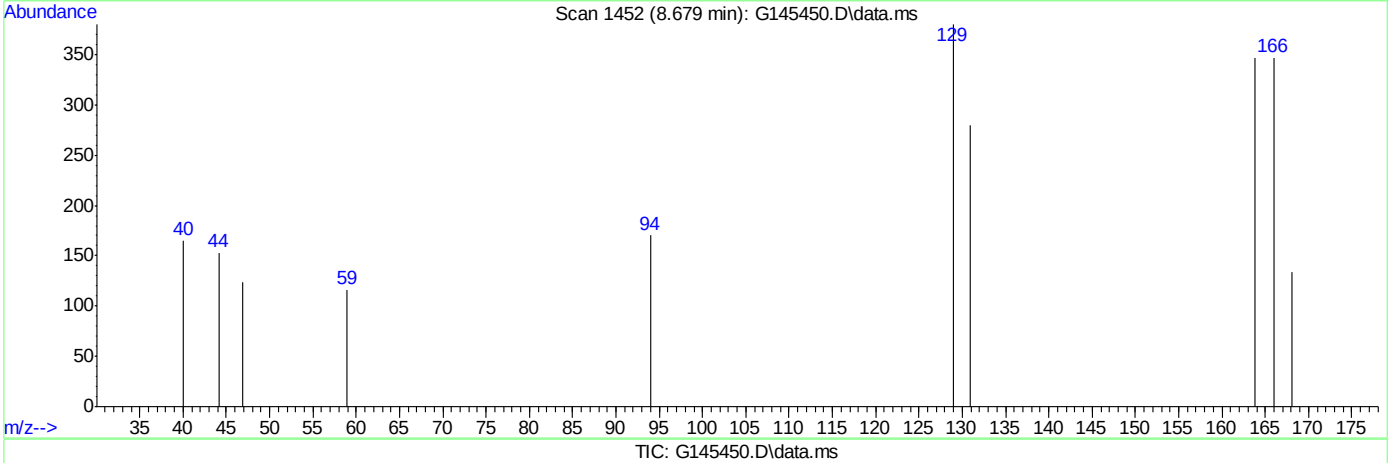
Ion	Exp%	Act%
75.00	100	100
110.00	26.60	17.30
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145450.D
Acq On : 13 Sep 2015 8:39 am
Operator : andrewd1
Sample : ic5447-.5
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 13 13:16:19 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Sun Sep 13 13:06:51 2015
Response via : Initial Calibration





TIC: G145450.D\data.ms

(67) tetrachloroethene (p)

8.682min (-8.682) 0.00ppb

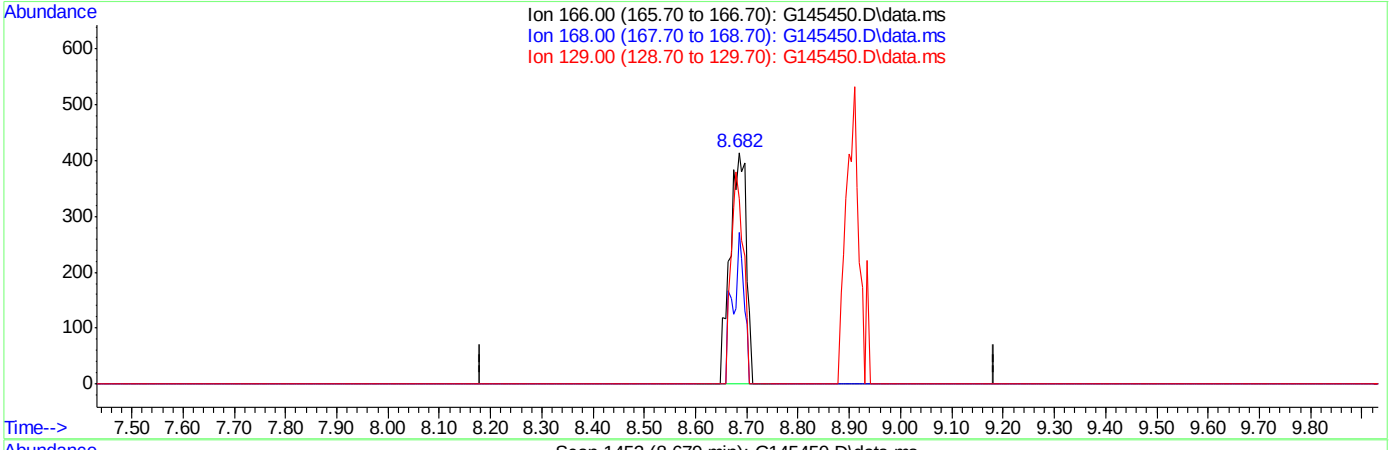
response 0

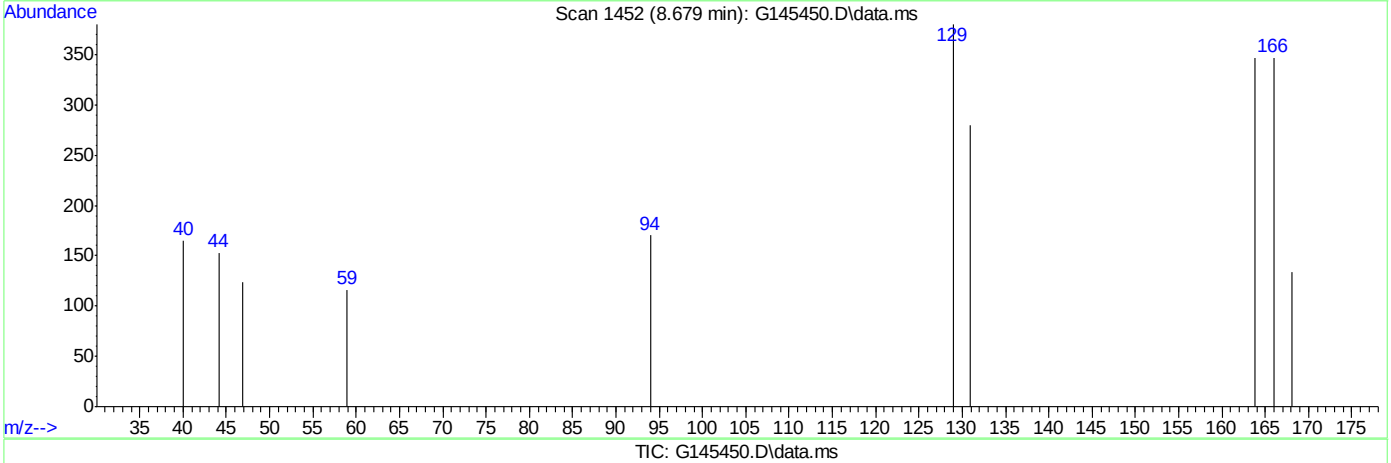
Ion	Exp%	Act%
166.00	100	0.00
168.00	45.80	0.00#
129.00	77.30	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145450.D
Acq On : 13 Sep 2015 8:39 am
Operator : andrewd1
Sample : ic5447-.5
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 13 13:16:19 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Sun Sep 13 13:06:51 2015
Response via : Initial Calibration





TIC: G145450.D\data.ms

(67) tetrachloroethene (p)

8.679min (-0.002) 0.56ppb m

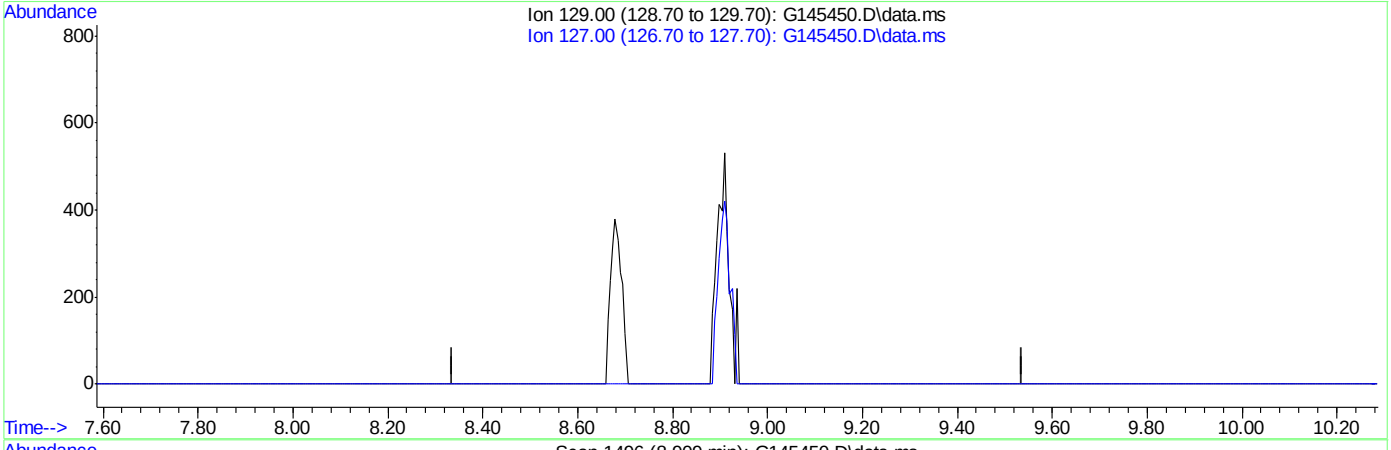
response 915

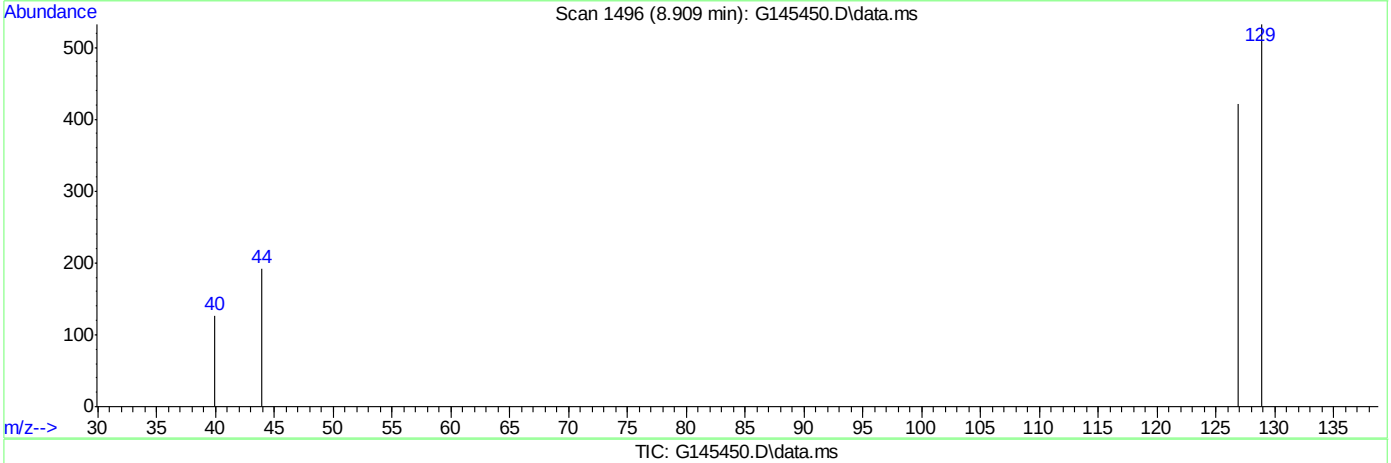
Ion	Exp%	Act%
166.00	100	100
168.00	45.80	38.62
129.00	77.30	109.51#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145450.D
Acq On : 13 Sep 2015 8:39 am
Operator : andrewd1
Sample : ic5447-.5
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 13 13:16:19 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Sun Sep 13 13:06:51 2015
Response via : Initial Calibration





TIC: G145450.D\data.ms

(69) dibromochloromethane (p)

8.907min (-8.907) 0.00ppb

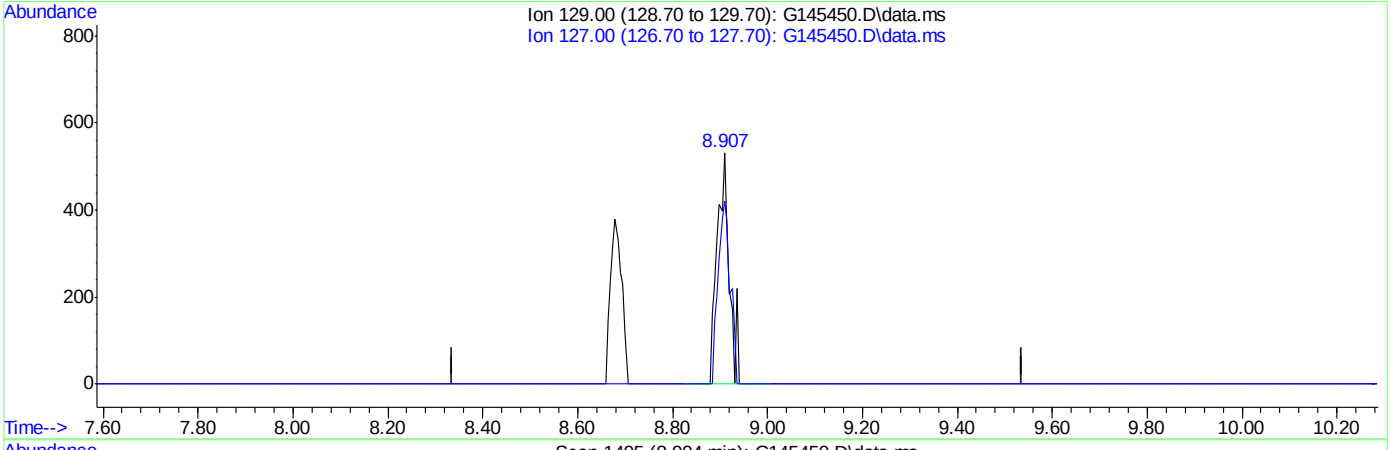
response 0

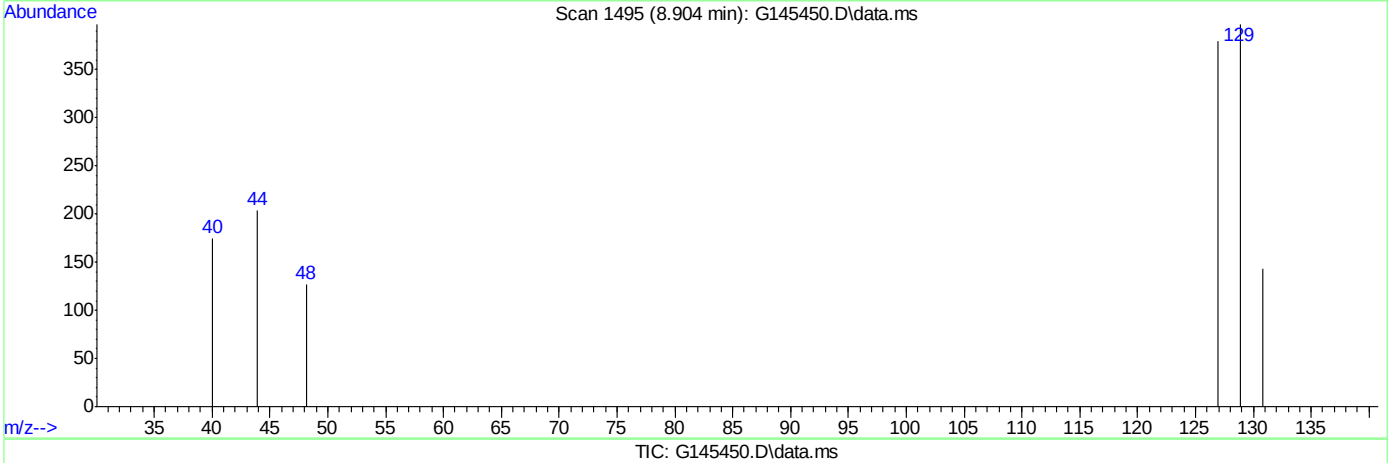
Ion	Exp%	Act%
129.00	100	0.00
127.00	76.40	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145450.D
Acq On : 13 Sep 2015 8:39 am
Operator : andrewd1
Sample : ic5447-.5
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 13 13:16:19 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Sun Sep 13 13:06:51 2015
Response via : Initial Calibration





TIC: G145450.D\data.ms

(69) dibromochloromethane (p)

8.904min (-0.003) 0.50ppb m

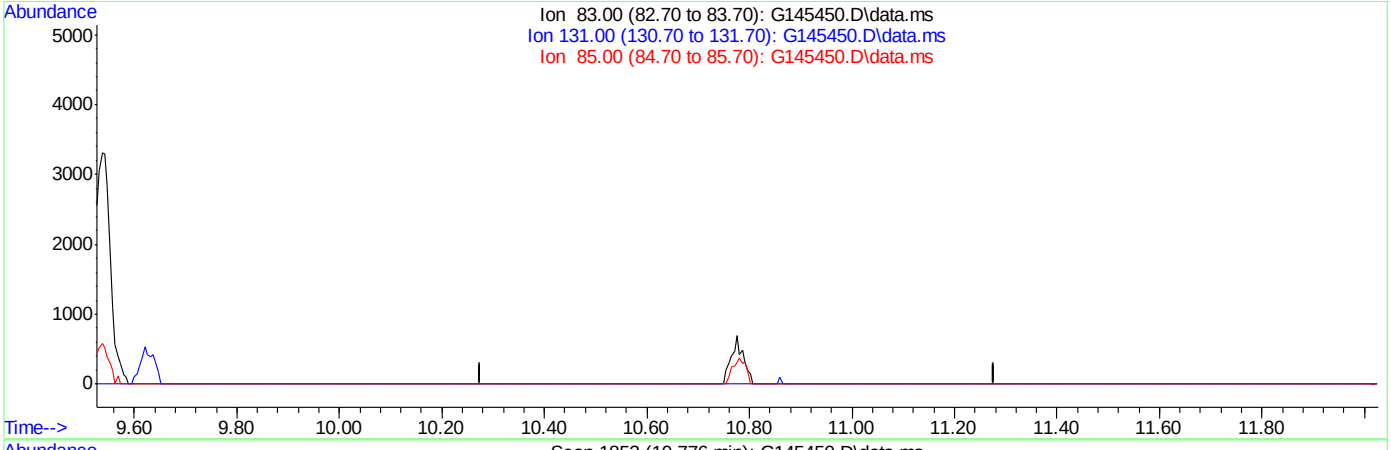
response 951

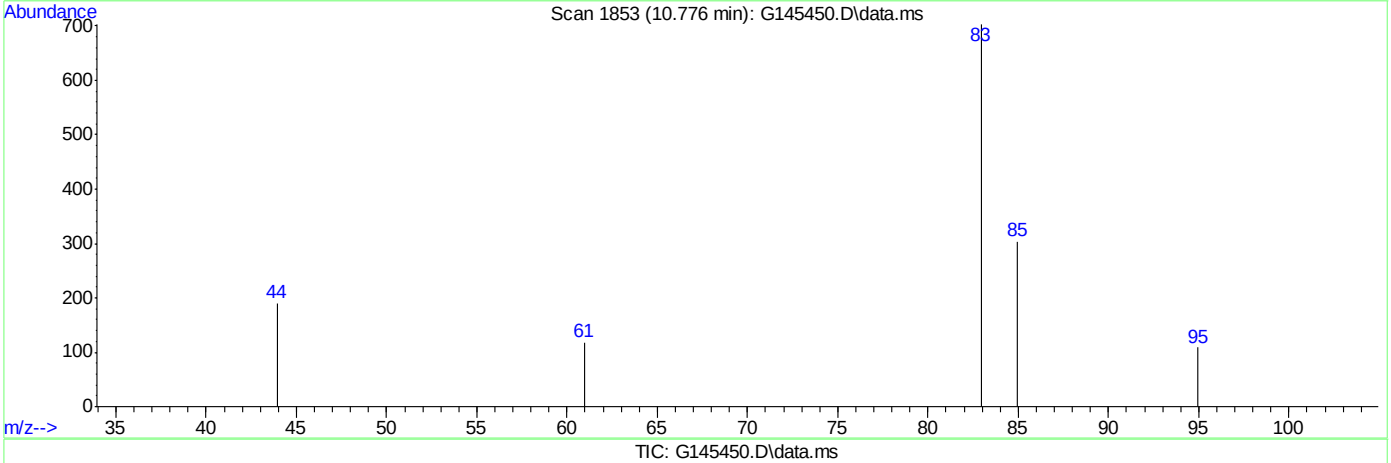
Ion	Exp%	Act%
129.00	100	100
127.00	76.40	95.47
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145450.D
Acq On : 13 Sep 2015 8:39 am
Operator : andrewd1
Sample : ic5447-.5
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 13 13:16:19 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Sun Sep 13 13:06:51 2015
Response via : Initial Calibration





TIC: G145450.D\data.ms

(84) 1,1,2,2-tetrachloroethane (p)

10.777min (-10.777) 0.00ppb

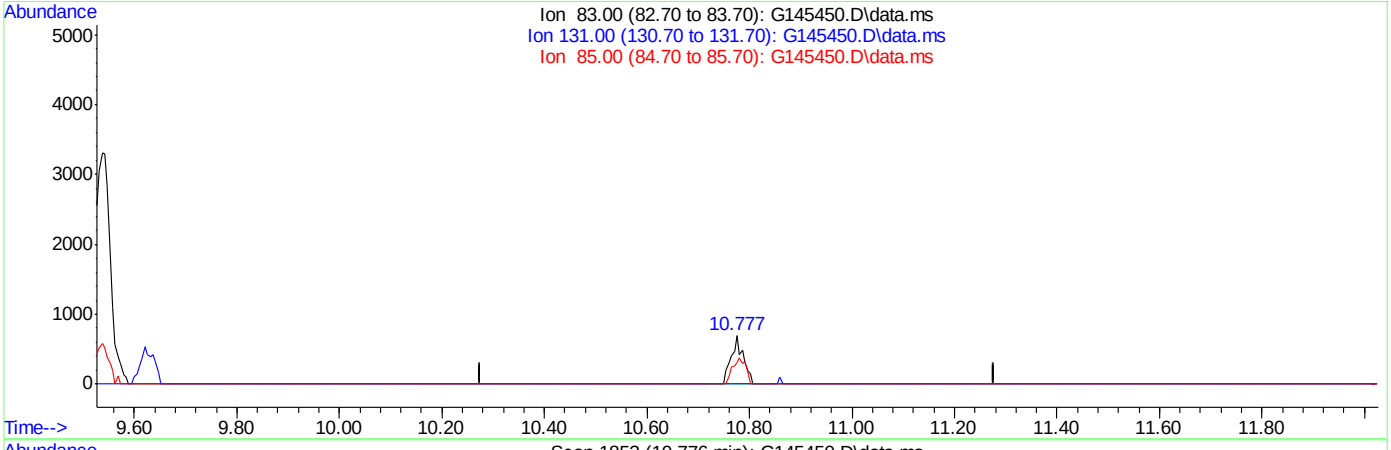
response 0

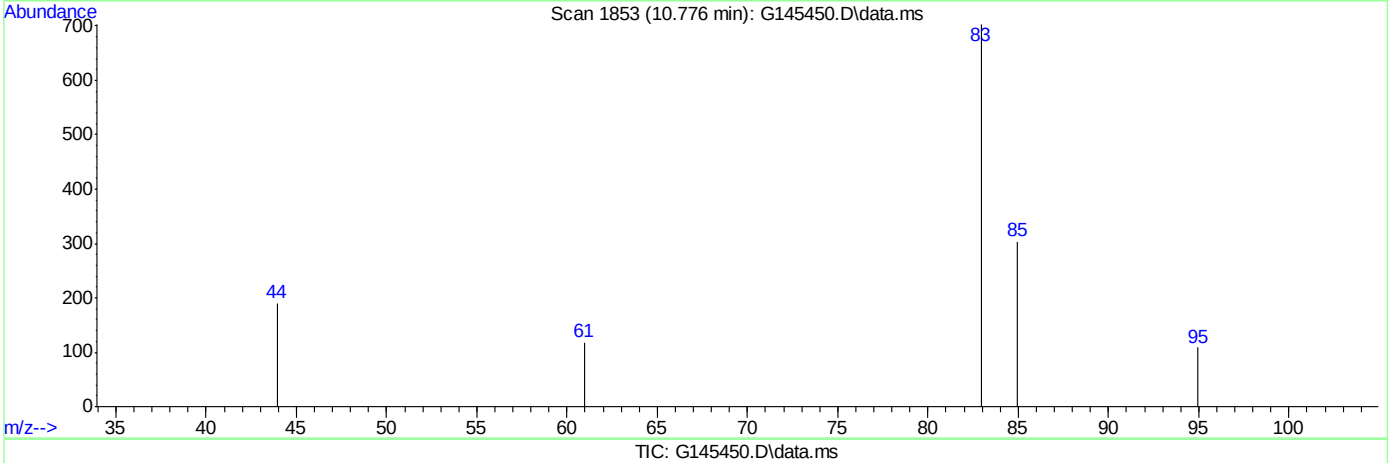
Ion	Exp%	Act%
83.00	100	0.00
131.00	12.90	0.00
85.00	68.40	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145450.D
Acq On : 13 Sep 2015 8:39 am
Operator : andrewd1
Sample : ic5447-.5
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 13 13:16:19 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Sun Sep 13 13:06:51 2015
Response via : Initial Calibration





TIC: G145450.D\data.ms

(84) 1,1,2,2-tetrachloroethane (p)

10.776min (-0.001) 0.66ppb m

response 1148

Ion	Exp%	Act%
83.00	100	100
131.00	12.90	0.00
85.00	68.40	43.24
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Doug Yargeau
09/14/15 19:20

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145451.D
Acq On : 13 Sep 2015 9:08 am
Operator : andrewd1
Sample : ic5447-1.0
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 14 08:37:00 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Sun Sep 13 13:16:45 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	3.169	65	80010	500.00	ppb		0.00
4) pentafluorobenzene	5.103	168	155543	50.00	ppb		0.00
43) 1,4-difluorobenzene	6.218	114	235170	50.00	ppb		0.00
66) chlorobenzene-d5	9.540	82	112588	50.00	ppb		0.00
80) 1,4-dichlorobenzene-d4	12.162	152	100688	50.00	ppb		0.00
System Monitoring Compounds							
40) dibromofluoromethane (s)	5.272	113	86871	48.96	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 97.92%				
60) toluene-d8 (s)	7.887	98	262178	52.22	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 104.44%				
82) bromofluorobenzene (s)	10.868	95	101888	51.64	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.28%				
Target Compounds							Qvalue
7) vinyl chloride	2.096	62	2531	1.14	ppb	#	43
12) trichlorofluoromethane	2.707	101	2347	0.88	ppb	#	46
15) 1,1-dichloroethene	3.205	96	1675	0.98	ppb		91
19) methyl tert butyl ether	3.722	73	5526	0.98	ppb		98
22) trans-1,2-dichloroethene	3.878	96	1925	1.09	ppb	#	73
33) 1,1-dichloroethane	4.277	63	4300	0.99	ppb		85
37) cis-1,2-dichloroethene	4.883	96	1983	1.02	ppb	#	75
39) chloroform	5.043	83	3817	0.98	ppb		96
42) 1,1,1-trichloroethane	5.467	97	2481	0.90	ppb		86
45) carbon tetrachloride	5.743	117	2533	1.03	ppb		92
47) benzene	5.922	78	6578	0.99	ppb		98
48) 1,2-dichloroethane	5.902	62	2538	0.94	ppb		87
51) trichloroethene	6.582	95	1715	1.02	ppb		95
54) bromodichloromethane	7.034	83	2414	1.04	ppb		90
59) cis-1,3-dichloropropene	7.621	75	2420	0.92	ppb		92
62) toluene	7.972	92	3923	1.02	ppb		97
63) trans-1,3-dichloropropene	8.171	75	2350	0.94	ppb		98
64) 1,1,2-trichloroethane	8.340	83	1239m	1.04	ppb		
67) tetrachloroethene	8.681	166	1739	1.07	ppb		89
69) dibromochloromethane	8.907	129	1785	0.94	ppb		98
72) chlorobenzene	9.582	112	4972	1.05	ppb		88
73) 1,1,1,2-tetrachloroethane	9.626	131	1759	1.05	ppb		83
74) ethylbenzene	9.635	91	7642	1.01	ppb		93
75) m,p-xylene	9.718	106	5790	2.03	ppb		90
76) o-xylene	10.197	106	2661	0.93	ppb	#	77
78) bromoform	10.609	173	987m	0.82	ppb		
84) 1,1,2,2-tetrachloroethane	10.779	83	1906	1.10	ppb		96
89) 1,3,5-trimethylbenzene	11.200	105	6420	1.06	ppb		79
91) 1,2,4-trimethylbenzene	11.630	105	5863	0.98	ppb		98
93) 1,3-dichlorobenzene	12.078	146	3734	1.00	ppb		91
95) 1,4-dichlorobenzene	12.192	146	3774	1.02	ppb		86
96) 1,2-dichlorobenzene	12.600	146	3320	0.97	ppb		83

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145451.D
Acq On : 13 Sep 2015 9:08 am
Operator : andrewd1
Sample : ic5447-1.0
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 14 08:37:00 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Sun Sep 13 13:16:45 2015
Response via : Initial Calibration

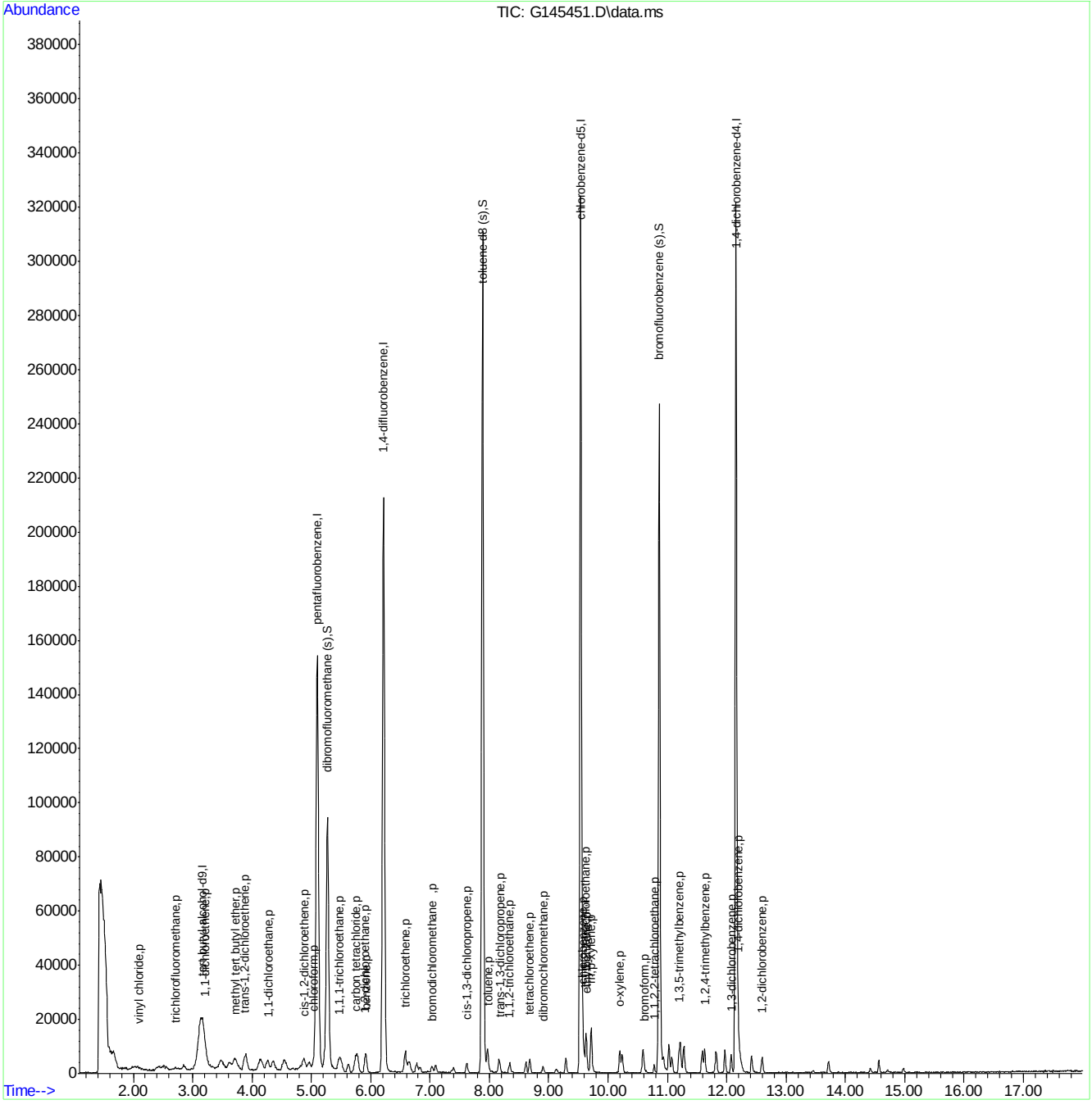
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145451.D
Acq On : 13 Sep 2015 9:08 am
Operator : andrewd1
Sample : ic5447-1.0
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

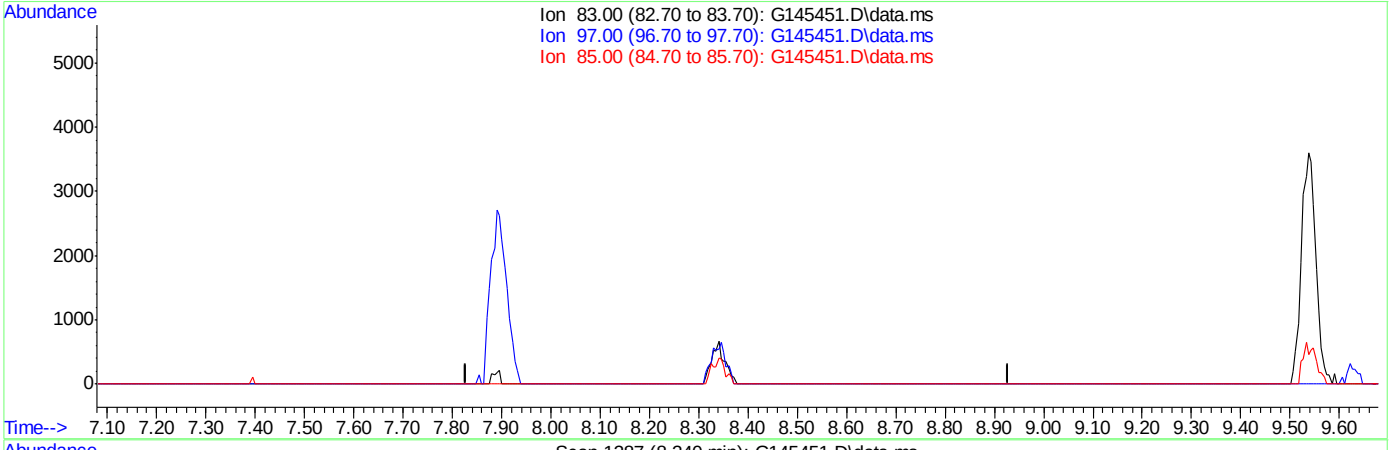
Quant Time: Sep 14 08:37:00 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Sun Sep 13 13:16:45 2015
Response via : Initial Calibration

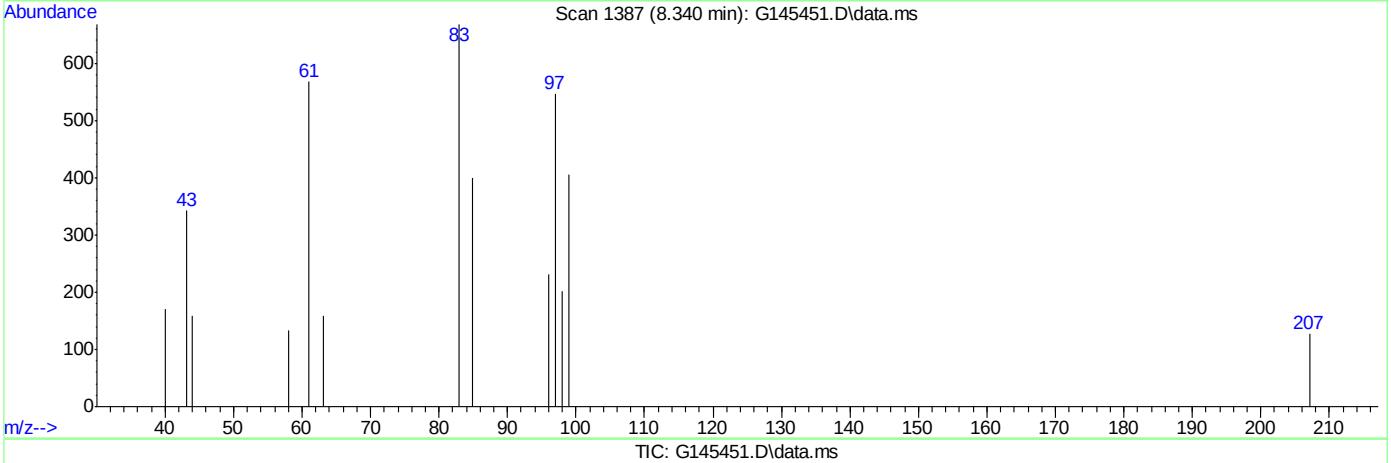


Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145451.D
Acq On : 13 Sep 2015 9:08 am
Operator : andrewd1
Sample : ic5447-1.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 13 13:18:45 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Sun Sep 13 13:16:45 2015
Response via : Initial Calibration





TIC: G145451.D\data.ms

(64) 1,1,2-trichloroethane (p)

8.339min (-8.339) 0.00ppb

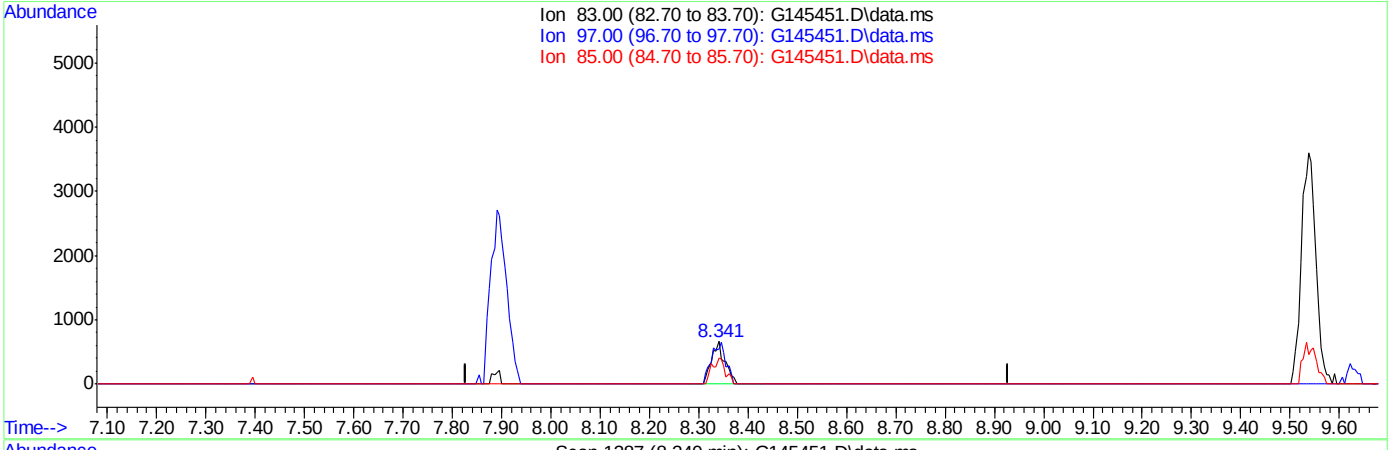
response 0

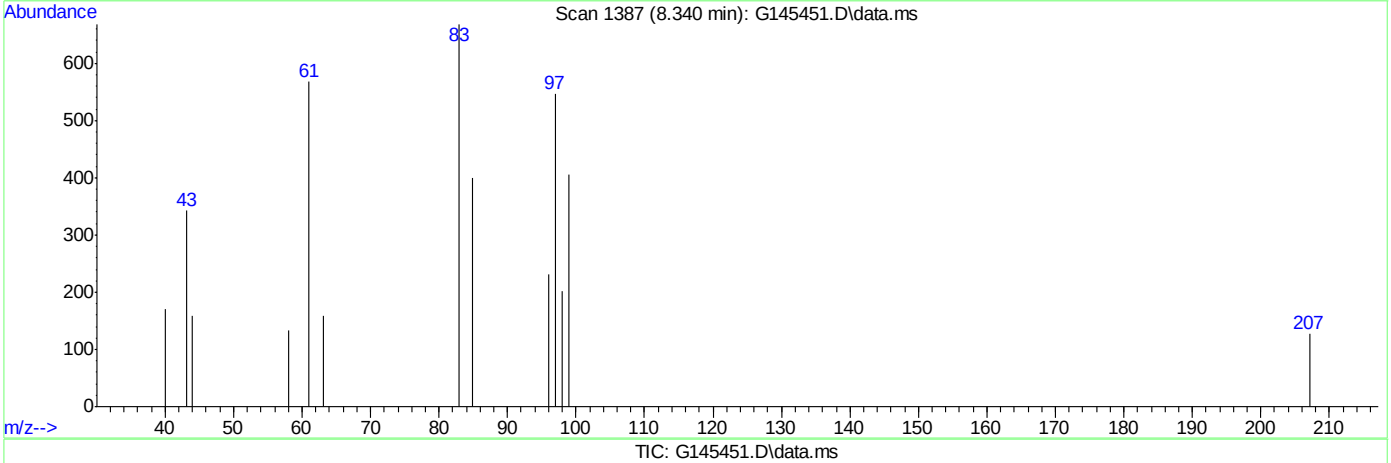
Ion	Exp%	Act%
83.00	100	0.00
97.00	127.30	0.00#
85.00	76.00	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145451.D
Acq On : 13 Sep 2015 9:08 am
Operator : andrewd1
Sample : ic5447-1.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 13 13:18:45 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Sun Sep 13 13:16:45 2015
Response via : Initial Calibration





TIC: G145451.D\data.ms

(64) 1,1,2-trichloroethane (p)

8.340min (+0.001) 1.04ppb m

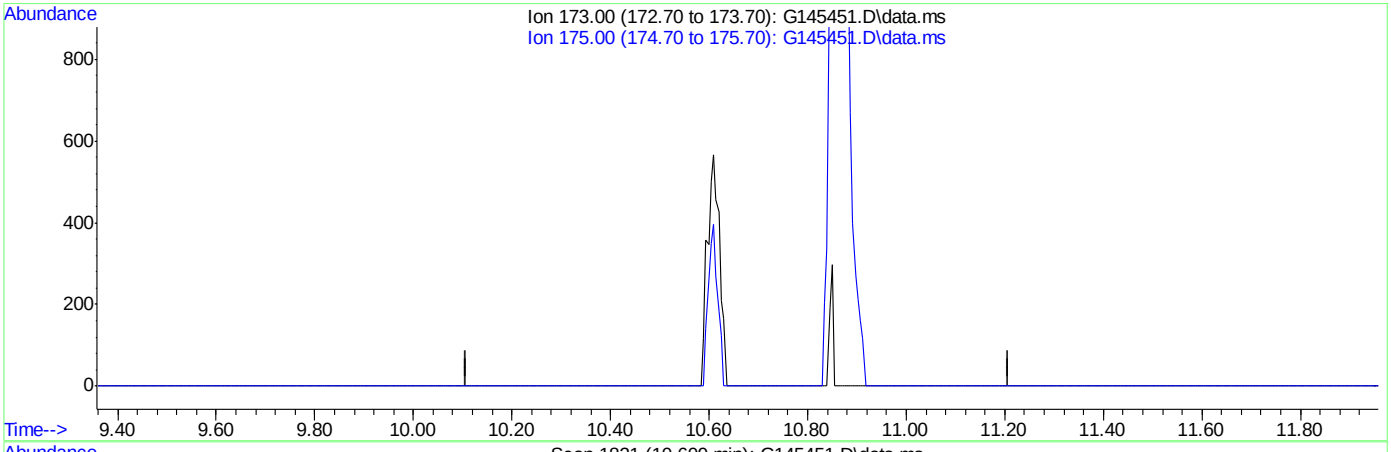
response 1239

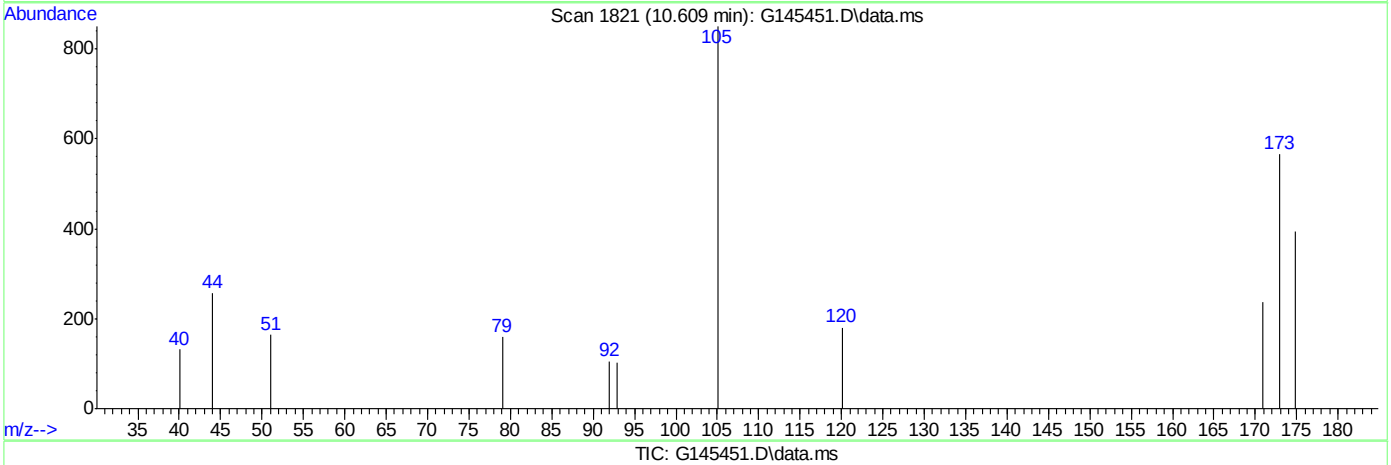
Ion	Exp%	Act%
83.00	100	100
97.00	127.30	81.74#
85.00	76.00	59.73
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145451.D
Acq On : 13 Sep 2015 9:08 am
Operator : andrewd1
Sample : ic5447-1.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 13 13:18:45 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Sun Sep 13 13:16:45 2015
Response via : Initial Calibration





TIC: G145451.D\data.ms

(78) bromoform (p)

10.608min (-10.608) 0.00ppb

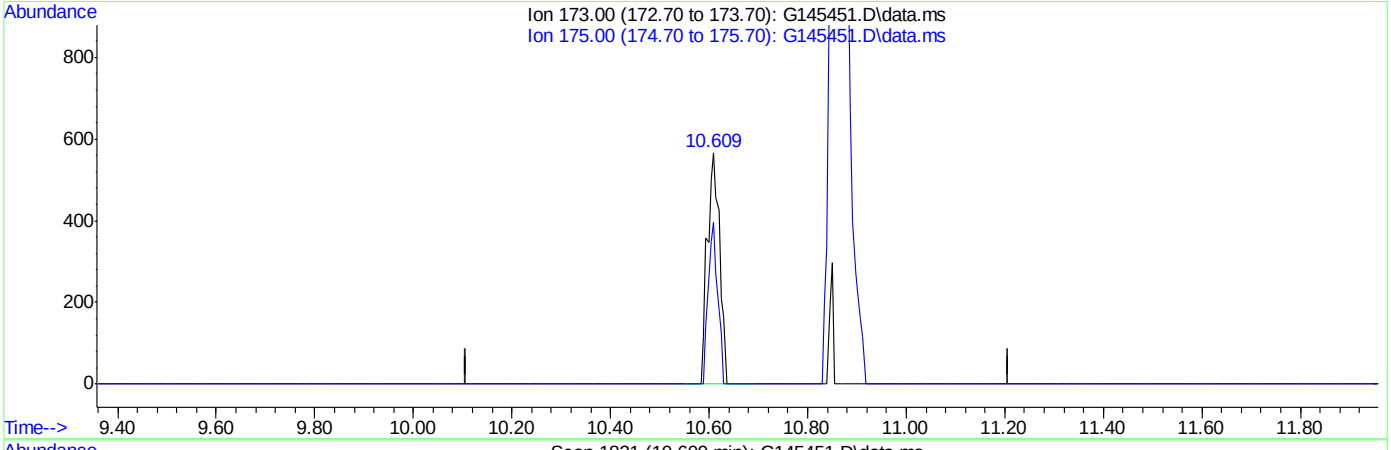
response 0

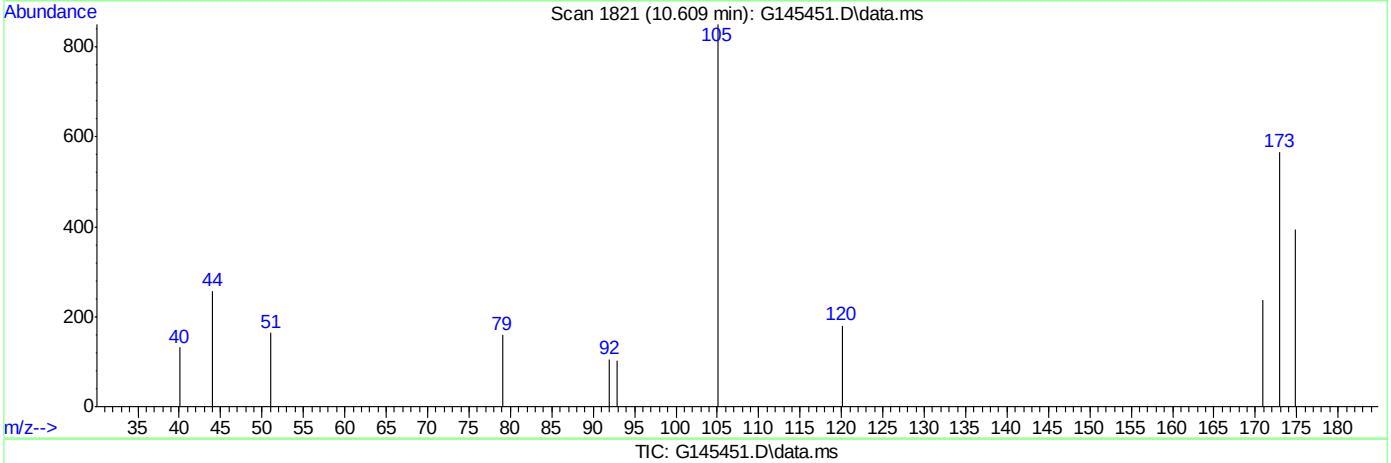
Ion	Exp%	Act%
173.00	100	0.00
175.00	47.00	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145451.D
Acq On : 13 Sep 2015 9:08 am
Operator : andrewd1
Sample : ic5447-1.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 13 13:18:45 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Sun Sep 13 13:16:45 2015
Response via : Initial Calibration





TIC: G145451.D\data.ms

(78) bromoform (p)

10.609min (+0.001) 0.82ppb m

response 987

Ion	Exp%	Act%
173.00	100	100
175.00	47.00	69.66
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Doug Yargeau
09/14/15 19:20

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145452.D
Acq On : 13 Sep 2015 9:36 am
Operator : andrewd1
Sample : ic5447-2.0
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 14 08:42:08 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:37:18 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	3.174	65	78924	500.00	ppb		0.00
4) pentafluorobenzene	5.102	168	152109	50.00	ppb		0.00
43) 1,4-difluorobenzene	6.218	114	234516	50.00	ppb		0.00
66) chlorobenzene-d5	9.540	82	110380	50.00	ppb		0.00
80) 1,4-dichlorobenzene-d4	12.161	152	103384	50.00	ppb		0.00
System Monitoring Compounds							
40) dibromofluoromethane (s)	5.271	113	84246	48.89	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 97.78%				
60) toluene-d8 (s)	7.887	98	260265	51.22	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.44%				
82) bromofluorobenzene (s)	10.867	95	101391	49.51	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.02%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	3.225	59	4287	19.96	ppb		84
3) Ethanol	2.505	45	4439m	169.43	ppb		
5) dichlorodifluoromethane	1.863	85	6621	1.75	ppb		95
6) chloromethane	2.027	50	6094	1.62	ppb		87
7) vinyl chloride	2.103	62	4335	1.87	ppb		78
8) bromomethane	2.425	96	2072	1.73	ppb	#	70
9) chloroethane	2.439	64	1993	1.93	ppb	#	33
12) trichlorofluoromethane	2.724	101	4754m	1.94	ppb		
15) 1,1-dichloroethene	3.208	96	3657	2.21	ppb		85
18) methylene chloride	3.621	84	3695	2.06	ppb	#	75
19) methyl tert butyl ether	3.719	73	10069	1.84	ppb		99
22) trans-1,2-dichloroethene	3.881	96	3572	1.98	ppb		84
28) di-isopropyl ether	4.146	45	16596	1.96	ppb		94
33) 1,1-dichloroethane	4.275	63	7819	1.85	ppb		96
34) tert-butyl ethyl ether	4.550	59	12430	1.86	ppb		97
37) cis-1,2-dichloroethene	4.884	96	3744	1.95	ppb		96
39) chloroform	5.043	83	6805	1.80	ppb		92
42) 1,1,1-trichloroethane	5.470	97	5281	2.06	ppb		88
45) carbon tetrachloride	5.746	117	5150	2.07	ppb		90
47) benzene	5.922	78	13095	1.98	ppb		100
48) 1,2-dichloroethane	5.903	62	5416	2.05	ppb		99
49) tert-amyl methyl ether	5.749	73	8471	1.86	ppb		79
51) trichloroethene	6.581	95	3392	1.83	ppb		97
52) 1,2-dichloropropane	6.775	63	3360	1.85	ppb		92
53) dibromomethane	7.095	93	2190	1.98	ppb		84
54) bromodichloromethane	7.032	83	4706	1.99	ppb		92
59) cis-1,3-dichloropropene	7.621	75	4823	1.96	ppb		92
62) toluene	7.972	92	7358	1.90	ppb		90
63) trans-1,3-dichloropropene	8.171	75	4708	1.99	ppb		92
64) 1,1,2-trichloroethane	8.341	83	2574	2.12	ppb		82
67) tetrachloroethene	8.682	166	3254	1.92	ppb		98
69) dibromochloromethane	8.908	129	3624	1.98	ppb		93
70) 1,2-dibromoethane	9.128	107	3093	1.98	ppb		85
72) chlorobenzene	9.581	112	8786	1.86	ppb		91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145452.D
Acq On : 13 Sep 2015 9:36 am
Operator : andrewd1
Sample : ic5447-2.0
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 14 08:42:08 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:37:18 2015
Response via : Initial Calibration

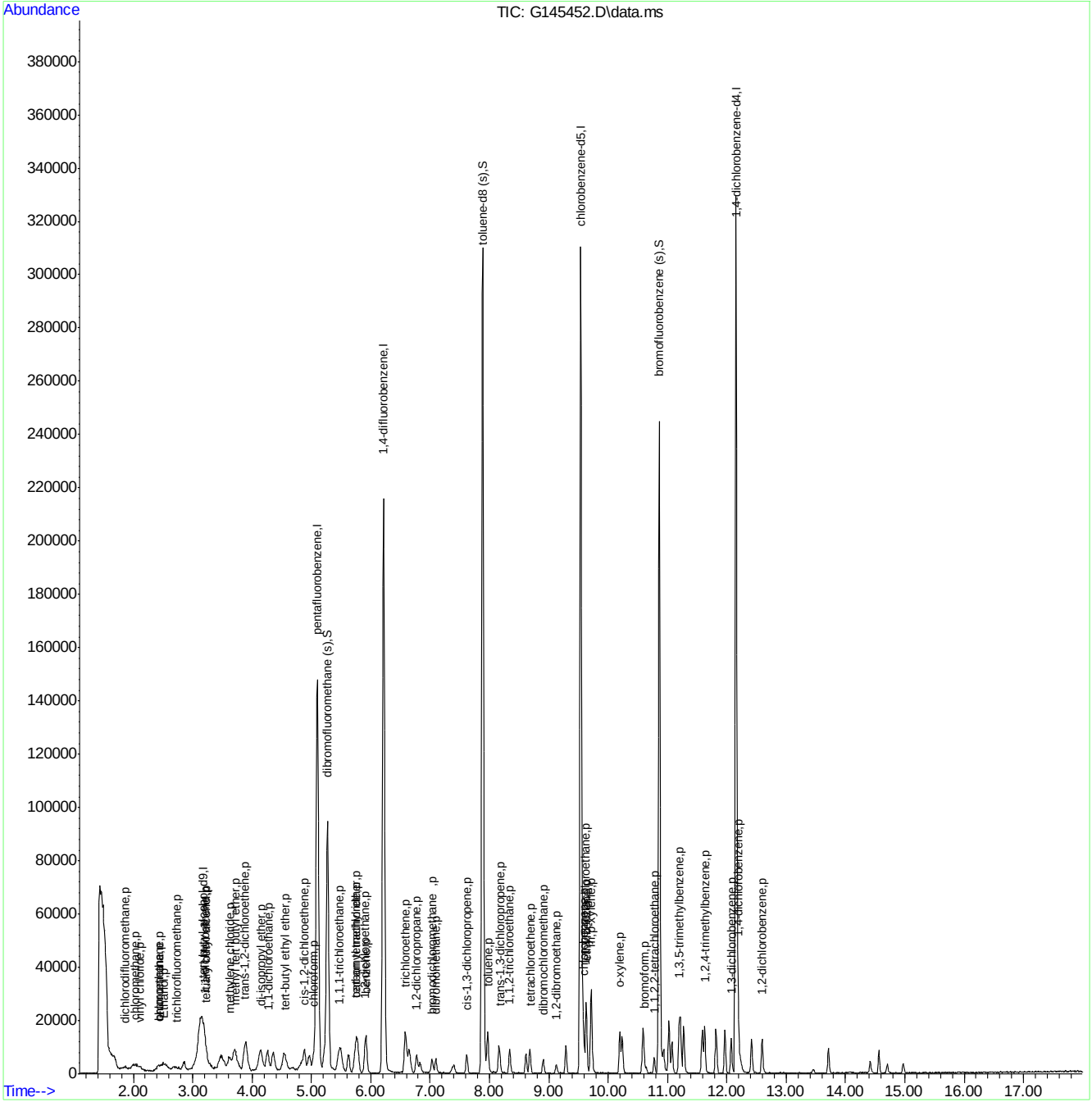
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
73) 1,1,1,2-tetrachloroethane	9.628	131	3201	1.90	ppb		90
74) ethylbenzene	9.635	91	14157	1.90	ppb		93
75) m,p-xylene	9.719	106	10687	3.80	ppb	#	78
76) o-xylene	10.196	106	5311	1.94	ppb		92
78) bromoform	10.609	173	2216	2.07	ppb		83
84) 1,1,2,2-tetrachloroethane	10.777	83	3986	1.96	ppb		90
89) 1,3,5-trimethylbenzene	11.199	105	11342	1.78	ppb		96
91) 1,2,4-trimethylbenzene	11.629	105	11572	1.89	ppb		96
93) 1,3-dichlorobenzene	12.077	146	6964	1.81	ppb		91
95) 1,4-dichlorobenzene	12.194	146	7467	1.96	ppb		91
96) 1,2-dichlorobenzene	12.600	146	6707	1.93	ppb		92

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145452.D
Acq On : 13 Sep 2015 9:36 am
Operator : andrewd1
Sample : ic5447-2.0
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 14 08:42:08 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:37:18 2015
Response via : Initial Calibration

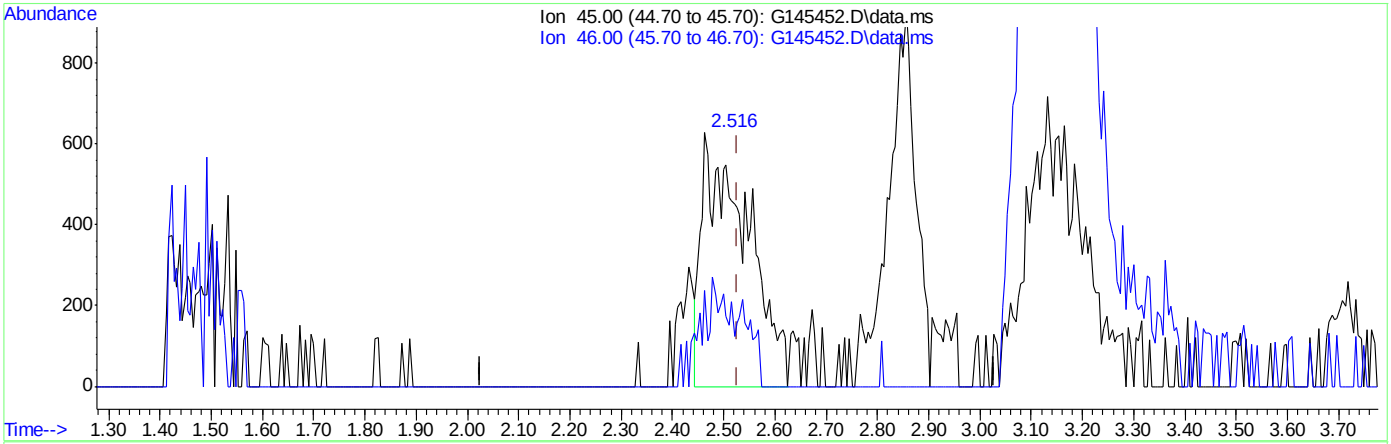


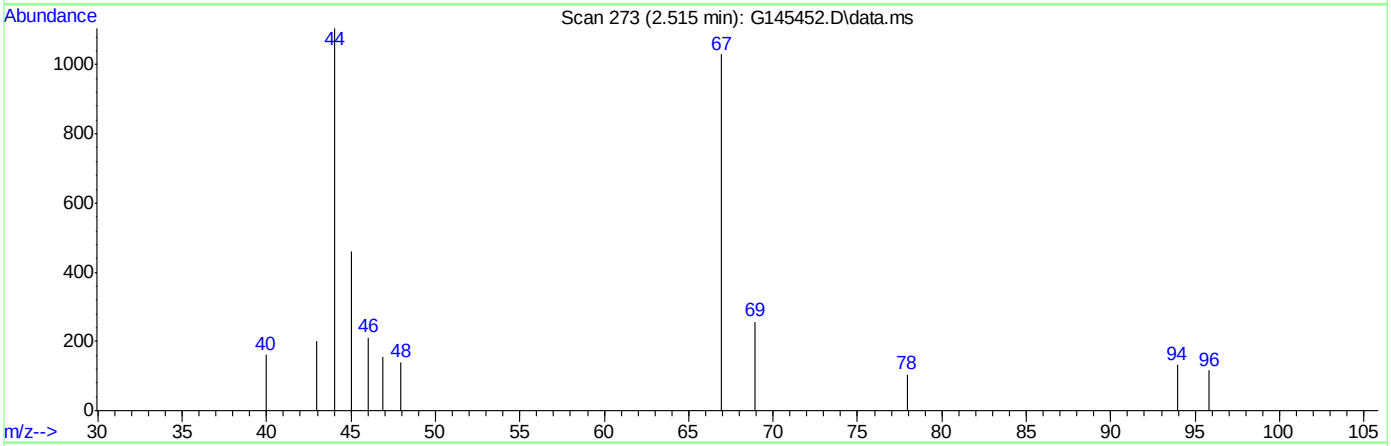
ACCUTEST LABORATORIES MC41356

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145452.D
Acq On : 13 Sep 2015 9:36 am
Operator : andrewd1
Sample : ic5447-2.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 14 08:37:23 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:37:18 2015
Response via : Initial Calibration





TIC: G145452.D\data.ms

(3) Ethanol (p)

2.516min (-0.011) 146.72ppb

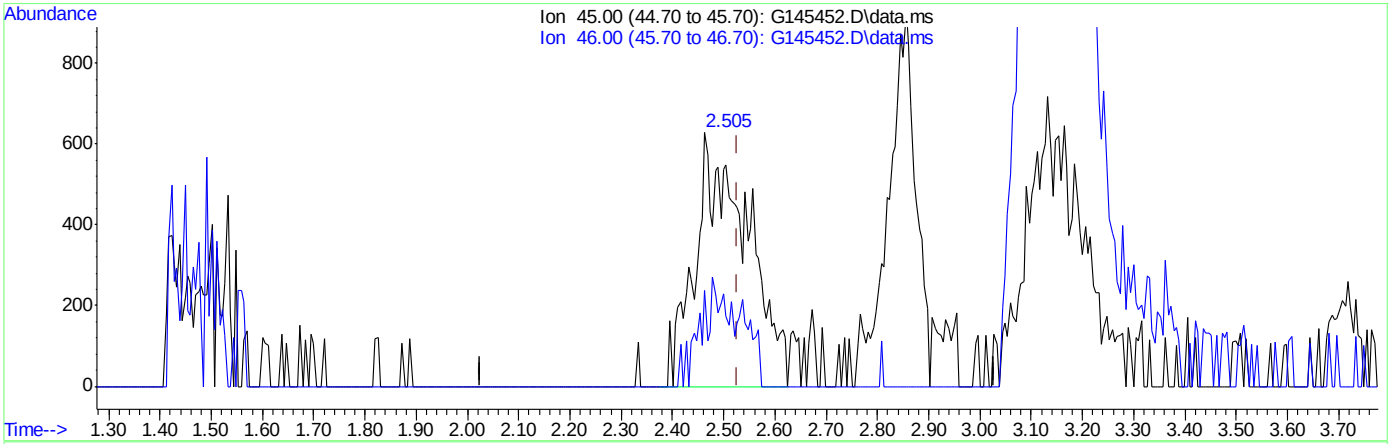
response 3844

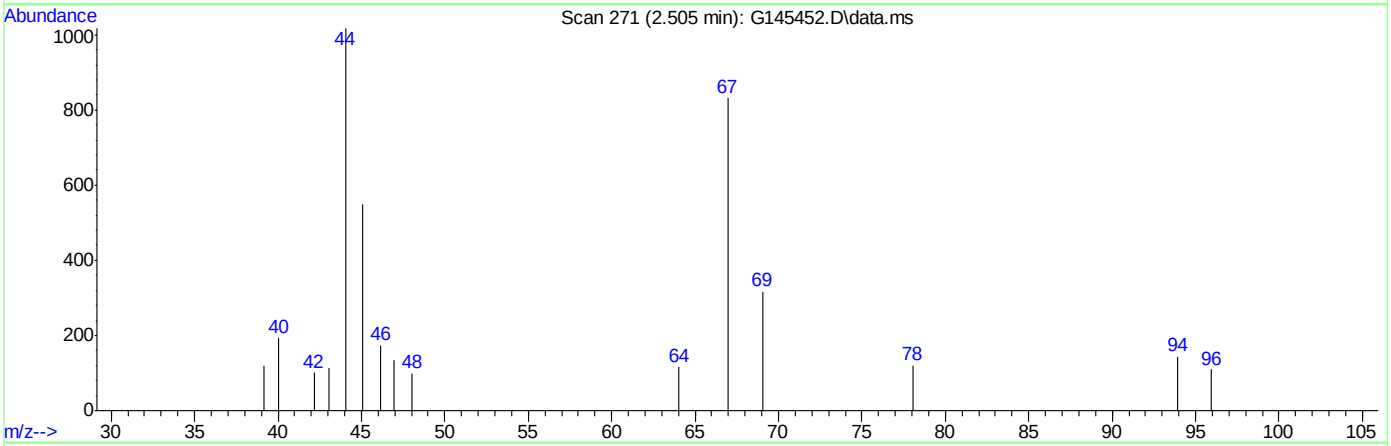
Ion	Exp%	Act%
45.00	100	100
46.00	34.10	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145452.D
Acq On : 13 Sep 2015 9:36 am
Operator : andrewd1
Sample : ic5447-2.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 14 08:37:23 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:37:18 2015
Response via : Initial Calibration





TIC: G145452.D\data.ms

(3) Ethanol (p)

2.505min (-0.022) 169.43ppb m

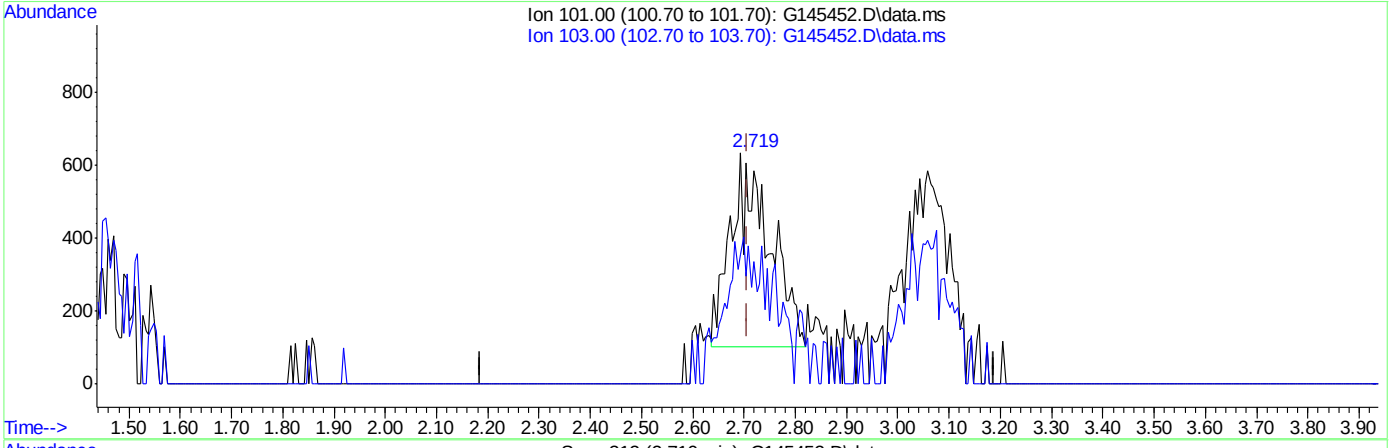
response 4439

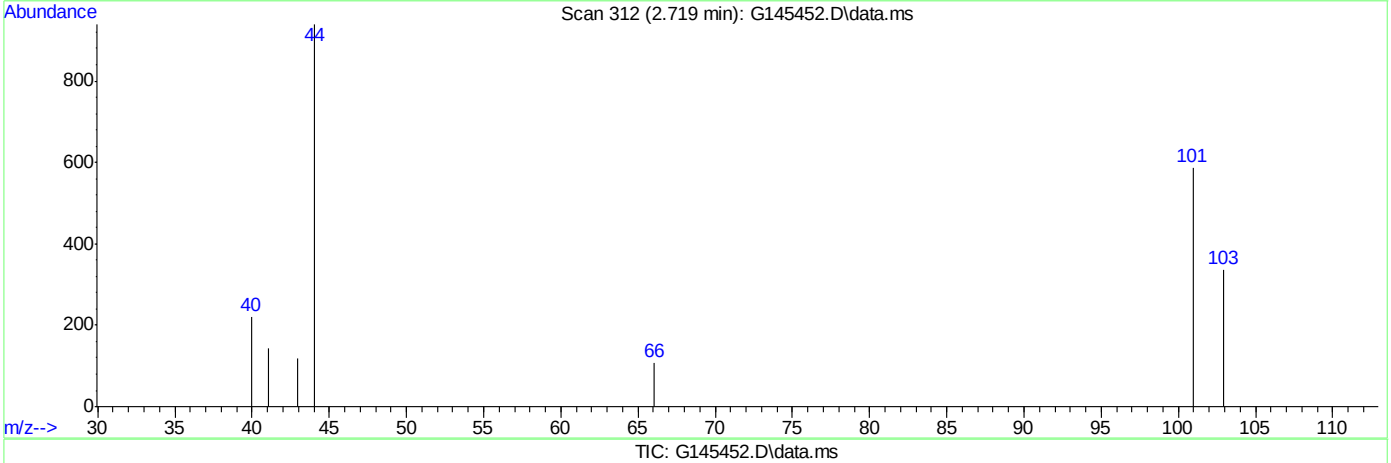
Ion	Exp%	Act%
45.00	100	100
46.00	34.10	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145452.D
Acq On : 13 Sep 2015 9:36 am
Operator : andrewd1
Sample : ic5447-2.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 14 08:37:23 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:37:18 2015
Response via : Initial Calibration





TIC: G145452.D\data.ms

(12) trichlorofluoromethane (p)

2.719min (+0.011) 1.15ppb

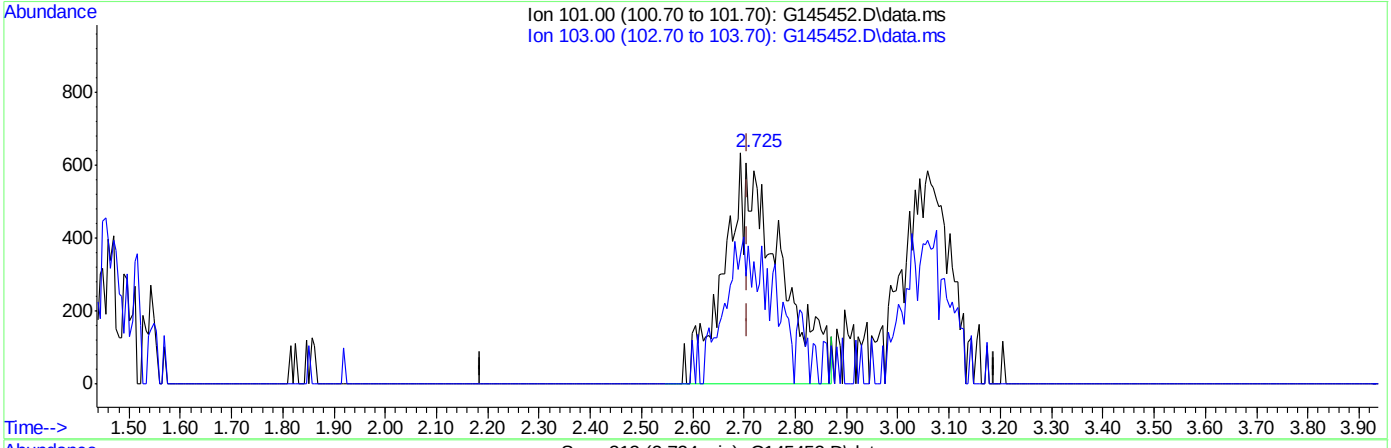
response 2804

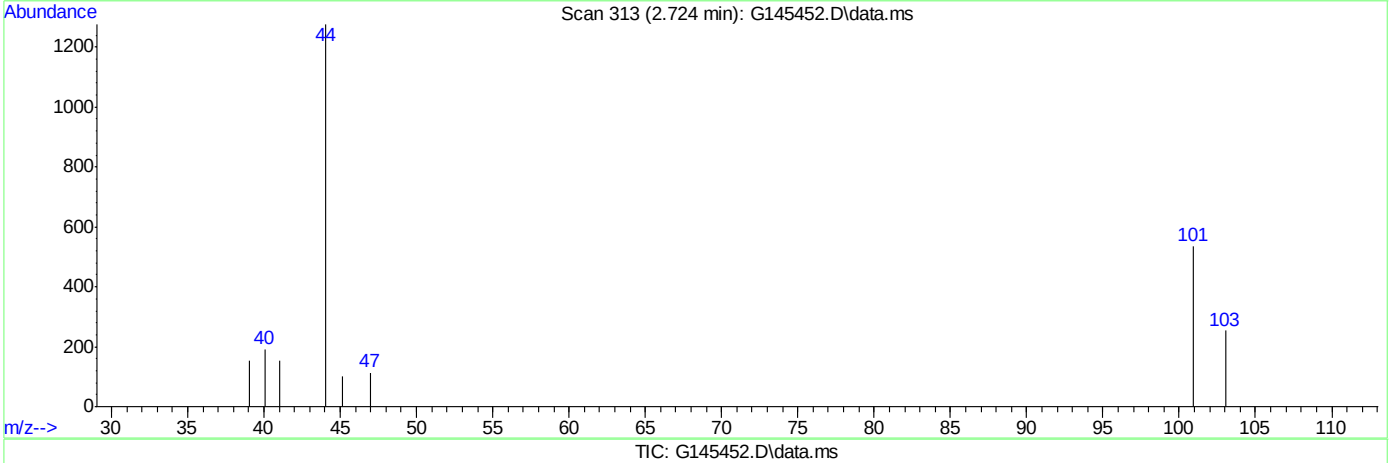
Ion	Exp%	Act%
101.00	100	100
103.00	62.20	48.04
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145452.D
Acq On : 13 Sep 2015 9:36 am
Operator : andrewd1
Sample : ic5447-2.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 14 08:37:23 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:37:18 2015
Response via : Initial Calibration





TIC: G145452.D\data.ms

(12) trichlorofluoromethane (p)

2.724min (+0.017) 1.94ppb m

response 4754

Ion	Exp%	Act%
101.00	100	100
103.00	62.20	47.30
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Doug Yargeau
09/14/15 19:20

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145453.D
Acq On : 13 Sep 2015 10:04 am
Operator : andrewd1
Sample : ic5447-5.0
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 14 08:49:40 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:44:37 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	3.175	65	79960	500.00	ppb		0.00
4) pentafluorobenzene	5.102	168	152556	50.00	ppb		0.00
43) 1,4-difluorobenzene	6.217	114	233107	50.00	ppb		0.00
66) chlorobenzene-d5	9.540	82	110825	50.00	ppb		0.00
80) 1,4-dichlorobenzene-d4	12.160	152	105382	50.00	ppb		0.00
System Monitoring Compounds							
40) dibromofluoromethane (s)	5.270	113	85258	49.61	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.22%				
60) toluene-d8 (s)	7.887	98	261277	51.42	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.84%				
82) bromofluorobenzene (s)	10.867	95	101789	48.88	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 97.76%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	3.225	59	10547	48.52	ppb		69
3) Ethanol	2.521	45	12576	512.99	ppb	#	41
5) dichlorodifluoromethane	1.878	85	19949	5.61	ppb		92
6) chloromethane	2.014	50	18295	5.10	ppb		87
7) vinyl chloride	2.102	62	12323	5.41	ppb		99
8) bromomethane	2.421	96	6782	6.05	ppb		97
9) chloroethane	2.439	64	6211	6.10	ppb		81
10) ethyl ether	2.851	59	8195	4.83	ppb		98
11) acetonitrile	3.255	41	4596	5.75	ppb	#	43
12) trichlorofluoromethane	2.719	101	14955m	6.15	ppb		
13) freon-113	3.064	101	8242	3.93	ppb		95
14) acrolein	2.998	56	4421	26.13	ppb		92
15) 1,1-dichloroethene	3.207	96	8074	4.70	ppb		88
16) acetone	3.044	58	1398m	4.68	ppb		
17) Methyl Acetate	3.436	43	11533	3.55	ppb		96
18) methylene chloride	3.617	84	8912	4.90	ppb		98
19) methyl tert butyl ether	3.719	73	24164	4.49	ppb		98
20) acrylonitrile	3.707	53	4798	4.78	ppb		70
21) allyl chloride	3.509	41	18384m	4.42	ppb		
22) trans-1,2-dichloroethene	3.881	96	8181	4.54	ppb	#	66
23) iodomethane	3.478	142	13861	4.53	ppb		80
24) carbon disulfide	3.727	76	26514	4.84	ppb		80
25) propionitrile	4.771	54	1703	4.78	ppb		100
26) vinyl acetate	4.255	43	25187	4.04	ppb		92
27) chloroprene	4.360	53	17406	4.81	ppb		94
28) di-isopropyl ether	4.145	45	38022	4.51	ppb		85
29) methacrylonitrile	4.968	41	8481	4.73	ppb		83
30) 2-butanone	4.680	72	1043m	4.89	ppb		
32) Hexane	3.899	41	13822	5.01	ppb	#	86
33) 1,1-dichloroethane	4.278	63	18698	4.49	ppb		96
34) tert-butyl ethyl ether	4.551	59	31220	4.74	ppb		97
36) 2,2-dichloropropane	4.850	77	12404	4.52	ppb		93
37) cis-1,2-dichloroethene	4.884	96	9117	4.78	ppb		94
38) bromochloromethane	5.220	128	4679	4.84	ppb		89

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145453.D
Acq On : 13 Sep 2015 10:04 am
Operator : andrewd1
Sample : ic5447-5.0
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 14 08:49:40 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:44:37 2015
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39)	chloroform	5.043	83	16401	4.43	ppb		90
41)	Tetrahydrofuran	5.256	42	3913	5.28	ppb		92
42)	1,1,1-trichloroethane	5.470	97	12640	4.86	ppb		98
44)	Cyclohexane	5.492	56	17955	5.19	ppb		97
45)	carbon tetrachloride	5.745	117	11841	4.73	ppb		97
46)	1,1-dichloropropene	5.624	75	12001	5.14	ppb		95
47)	benzene	5.922	78	30096	4.59	ppb		96
48)	1,2-dichloroethane	5.903	62	13164	4.98	ppb		92
49)	tert-amyl methyl ether	5.749	73	20666	4.65	ppb		85
50)	heptane	5.768	43	24028	4.91	ppb		93
51)	trichloroethene	6.582	95	8255	4.57	ppb		95
52)	1,2-dichloropropane	6.776	63	8841	5.02	ppb		98
53)	dibromomethane	7.094	93	5477	5.01	ppb		88
54)	bromodichloromethane	7.033	83	11411	4.87	ppb		94
55)	Methylcyclohexane	6.650	83	12642	4.92	ppb		92
56)	2-chloroethyl vinyl ether	7.360	63	2556	4.73	ppb	#	47
57)	methyl methacrylate	6.832	69	4676	4.43	ppb		91
58)	1,4-dioxane	7.069	88	74m	4.43	ppb		
59)	cis-1,3-dichloropropene	7.621	75	12375	5.09	ppb		99
61)	4-methyl-2-pentanone	7.390	43	11161	4.77	ppb	#	92
62)	toluene	7.973	92	17742	4.67	ppb		98
63)	trans-1,3-dichloropropene	8.171	75	11537	4.92	ppb		96
64)	1,1,2-trichloroethane	8.341	83	6094	4.95	ppb		87
65)	ethyl methacrylate	8.157	69	8145	4.79	ppb		94
67)	tetrachloroethene	8.682	166	8172	4.84	ppb		93
68)	1,3-dichloropropane	8.615	76	11579	5.01	ppb		95
69)	dibromochloromethane	8.908	129	8910	4.86	ppb		99
70)	1,2-dibromoethane	9.129	107	8018	5.14	ppb		92
71)	2-hexanone	8.357	43	6235	4.30	ppb	#	61
72)	chlorobenzene	9.581	112	21683	4.65	ppb		98
73)	1,1,1,2-tetrachloroethane	9.627	131	7788	4.68	ppb		93
74)	ethylbenzene	9.634	91	33270	4.51	ppb		92
75)	m,p-xylene	9.718	106	26513	9.50	ppb		82
76)	o-xylene	10.197	106	12513	4.58	ppb		95
77)	styrene	10.237	104	22322	4.92	ppb		95
78)	bromoform	10.608	173	5421	4.98	ppb		82
79)	trans-1,4-dichloro-2-b...	10.642	53	2091	3.11	ppb		86
81)	isopropylbenzene	10.587	105	33193	4.52	ppb		98
83)	bromobenzene	11.078	156	9586	4.68	ppb		94
84)	1,1,2,2-tetrachloroethane	10.778	83	9360	4.54	ppb		92
85)	1,2,3-trichloropropane	10.937	75	6807	5.15	ppb		99
86)	n-propylbenzene	11.026	91	41257	4.59	ppb		92
87)	2-chlorotoluene	11.219	91	28846	4.73	ppb		93
88)	4-chlorotoluene	11.275	91	27142	4.90	ppb		89
89)	1,3,5-trimethylbenzene	11.199	105	30293	4.80	ppb		100
90)	tert-butylbenzene	11.593	91	20301	4.47	ppb		86
91)	1,2,4-trimethylbenzene	11.629	105	30757	5.01	ppb		95
92)	sec-butylbenzene	11.820	105	38011	4.92	ppb		99
93)	1,3-dichlorobenzene	12.077	146	17147	4.48	ppb		97
94)	p-isopropyltoluene	11.970	119	30940	4.95	ppb		93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145453.D
Acq On : 13 Sep 2015 10:04 am
Operator : andrewd1
Sample : ic5447-5.0
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 14 08:49:40 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:44:37 2015
Response via : Initial Calibration

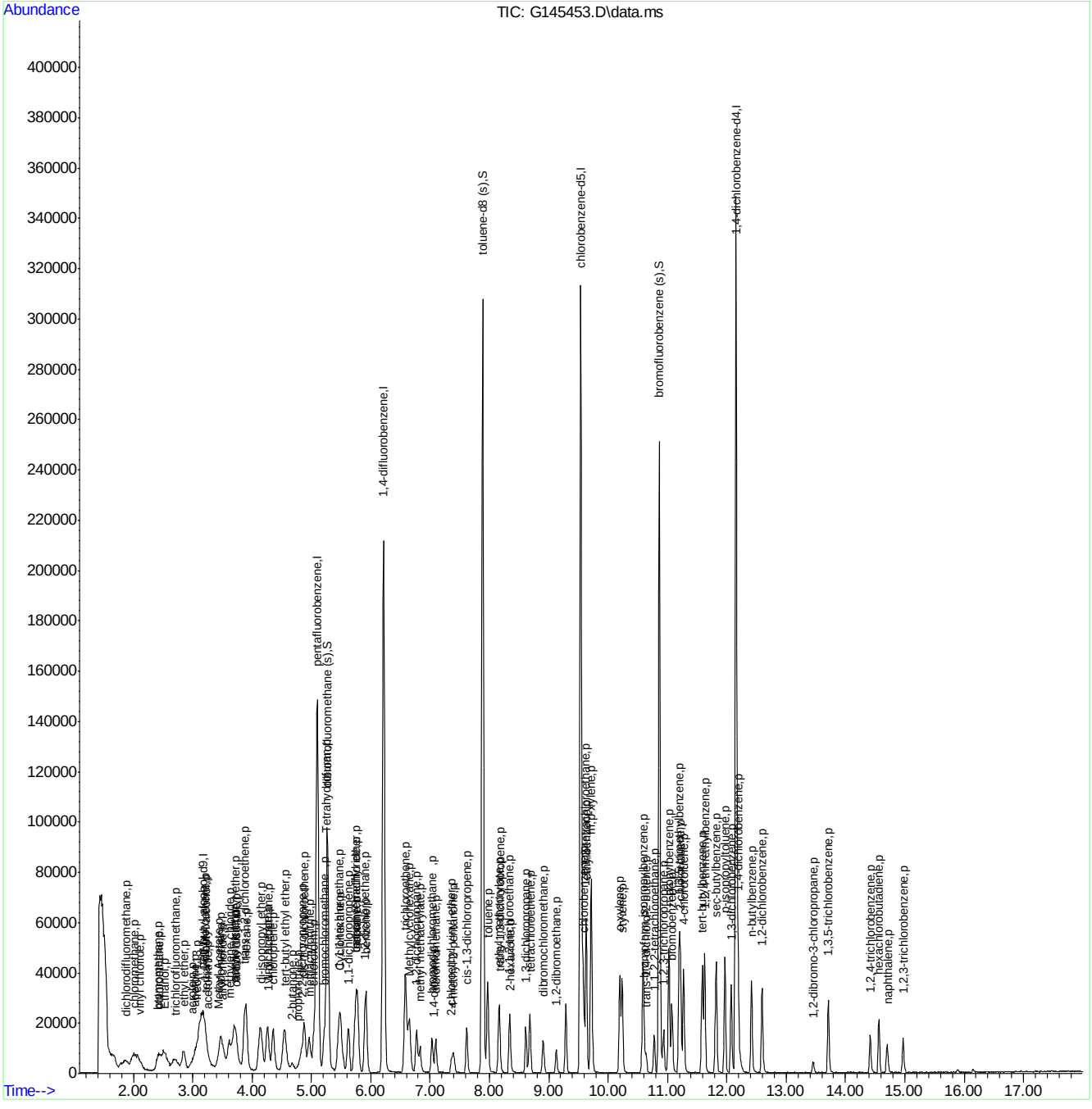
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) 1,4-dichlorobenzene	12.194	146	18051	4.67	ppb	97
96) 1,2-dichlorobenzene	12.600	146	17382	4.95	ppb	98
97) n-butylbenzene	12.420	91	26216	4.89	ppb	97
98) 1,2-dibromo-3-chloropr...	13.456	75	1618	4.16	ppb	80
99) 1,3,5-trichlorobenzene	13.715	180	11343	4.42	ppb	98
100) 1,2,4-trichlorobenzene	14.420	180	6305	2.88	ppb	98
101) hexachlorobutadiene	14.566	225	5306	4.77	ppb	92
102) naphthalene	14.708	128	11601	3.47	ppb	100
105) 1,2,3-trichlorobenzene	14.975	180	5311	2.84	ppb	95

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145453.D
Acq On : 13 Sep 2015 10:04 am
Operator : andrewd1
Sample : ic5447-5.0
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

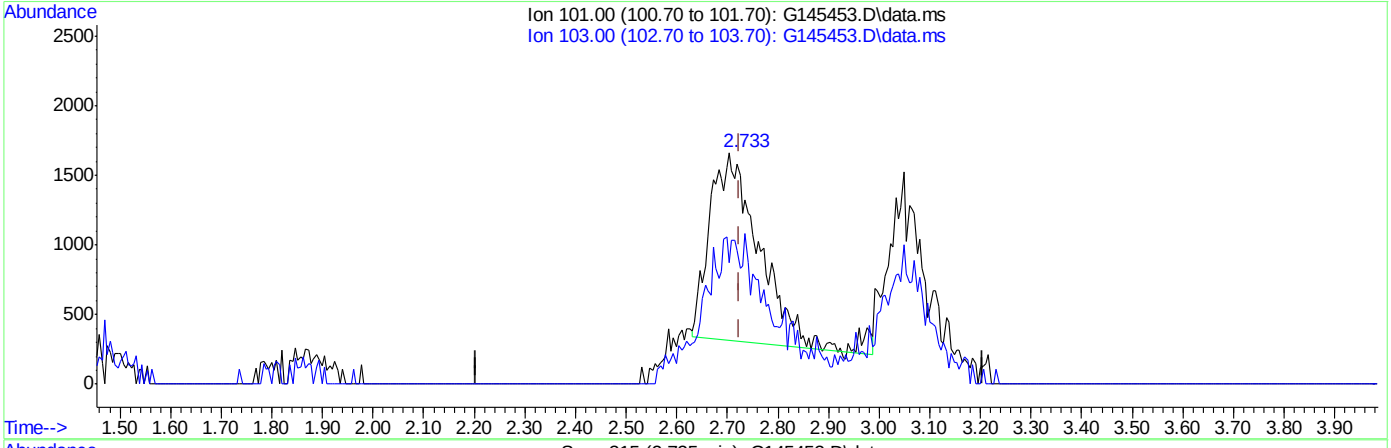
Quant Time: Sep 14 08:49:40 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:44:37 2015
Response via : Initial Calibration

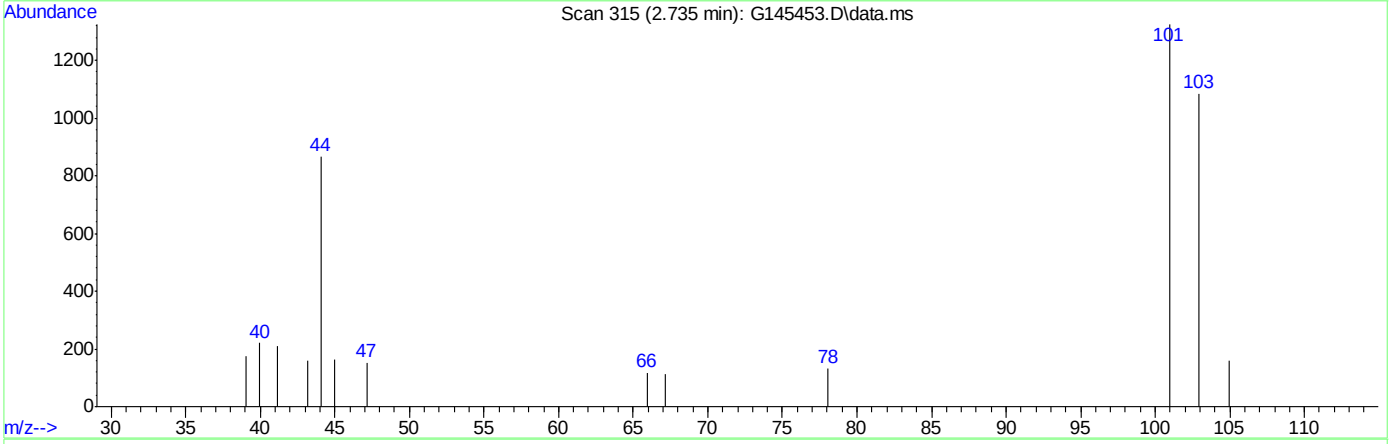


Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145453.D
Acq On : 13 Sep 2015 10:04 am
Operator : andrewd1
Sample : ic5447-5.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 14 08:44:47 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:44:37 2015
Response via : Initial Calibration





TIC: G145453.D\data.ms

(12) trichlorofluoromethane (p)

2.733min (+0.008) 3.83ppb

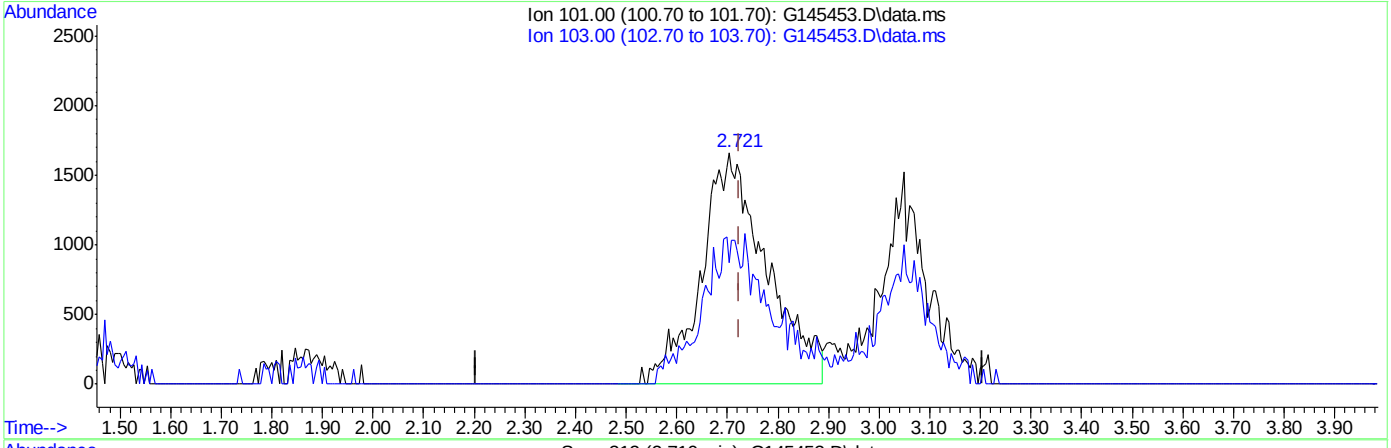
response 9313

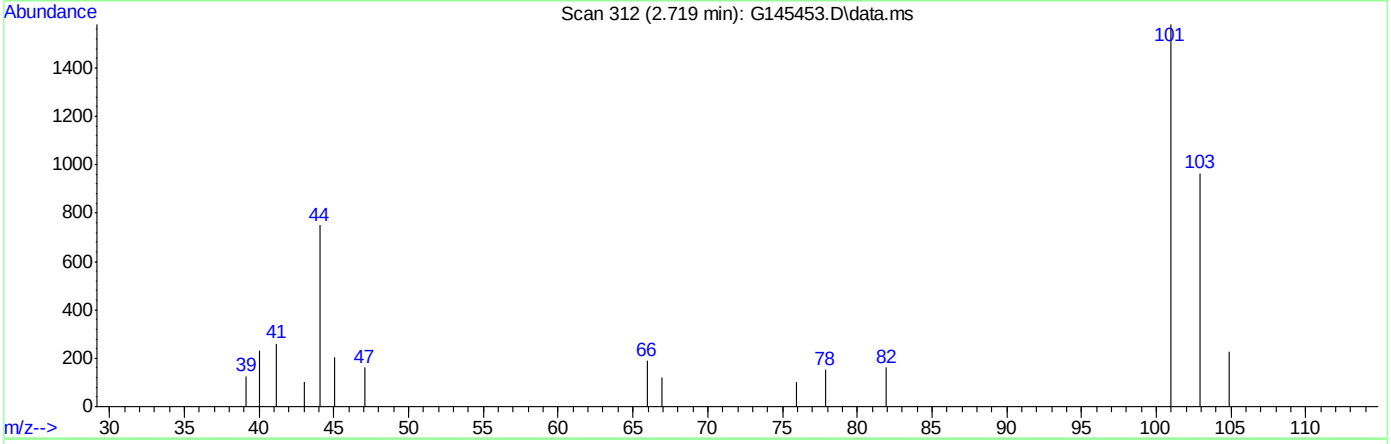
Ion	Exp%	Act%
101.00	100	100
103.00	62.20	83.37
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145453.D
Acq On : 13 Sep 2015 10:04 am
Operator : andrewd1
Sample : ic5447-5.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 14 08:44:47 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:44:37 2015
Response via : Initial Calibration





TIC: G145453.D\data.ms

(12) trichlorofluoromethane (p)

2.719min (-0.005) 6.15ppb m

response 14955

Ion	Exp%	Act%
101.00	100	100
103.00	62.20	61.08
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145453.D
Acq On : 13 Sep 2015 10:04 am
Operator : andrewd1
Sample : ic5447-5.0
Misc : MS35209,MSG5447,,,,5,1
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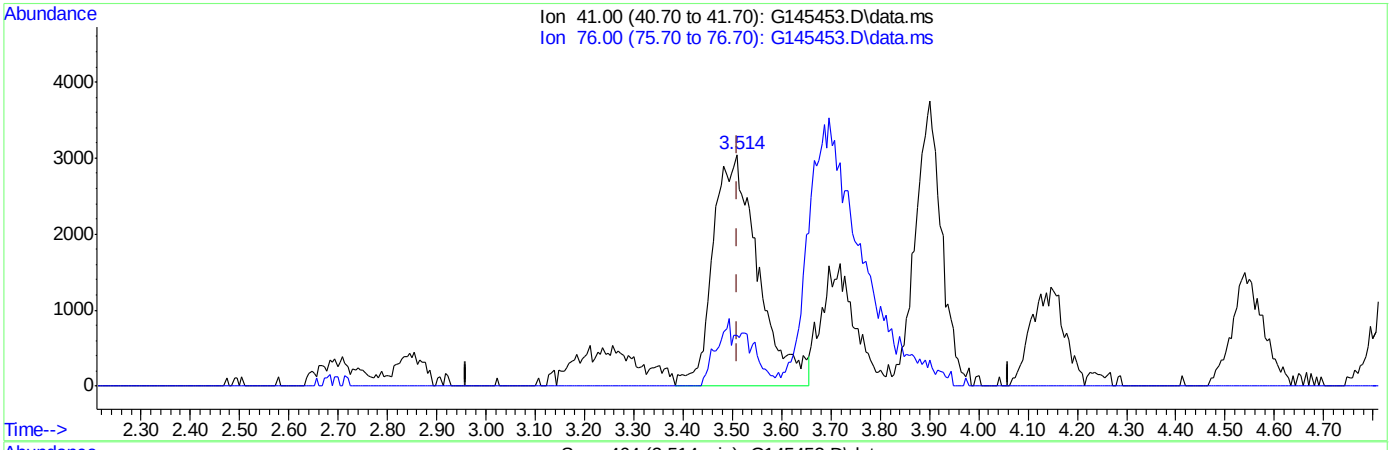
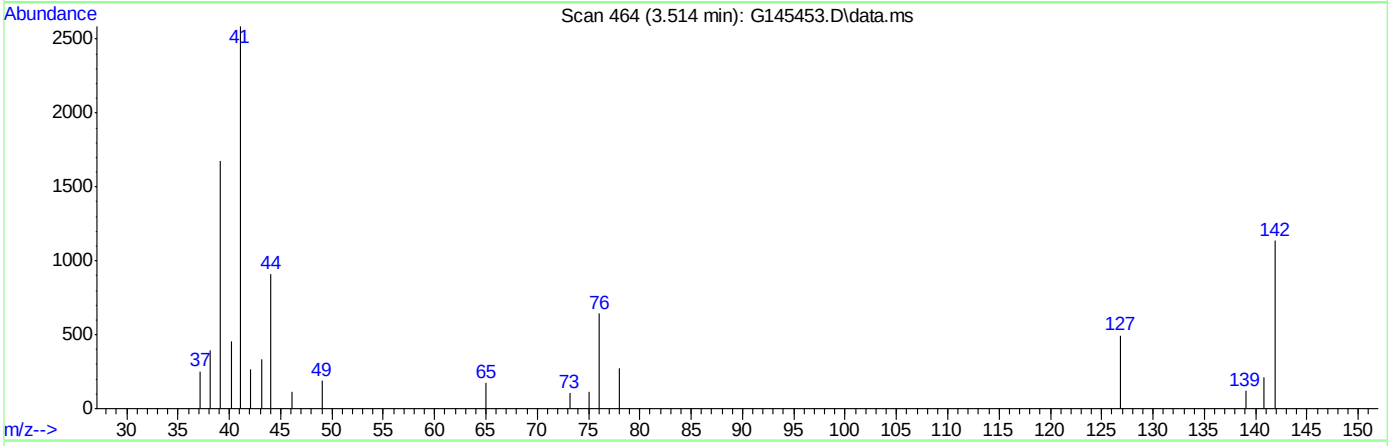
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:44:37 2015
Response via : Initial Calibration





TIC: G145453.D\data.ms

(21) allyl chloride (p)

3.514min (+0.004) 4.67ppb

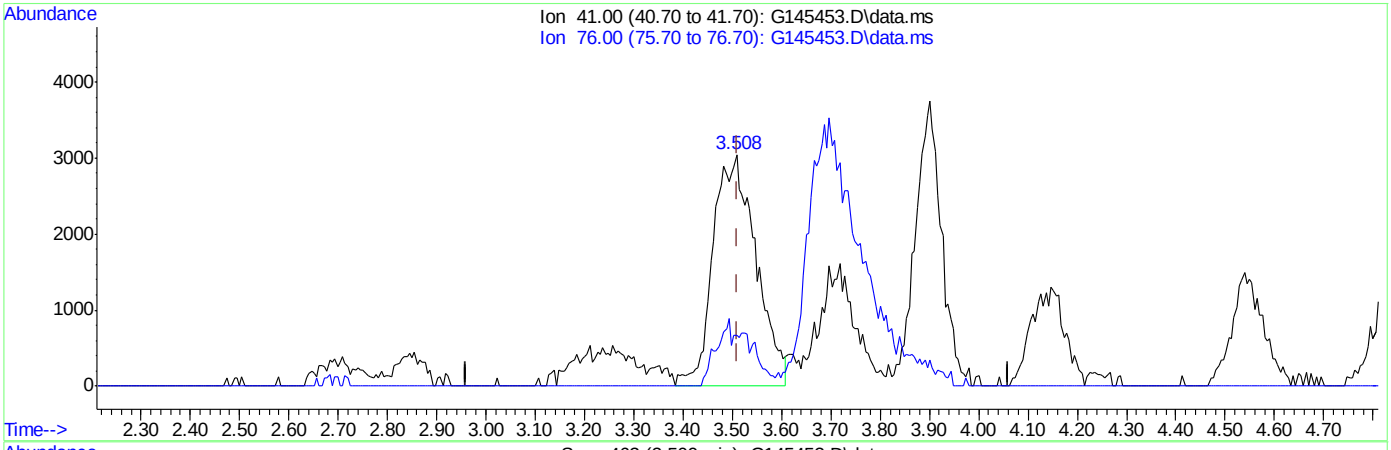
response 19405

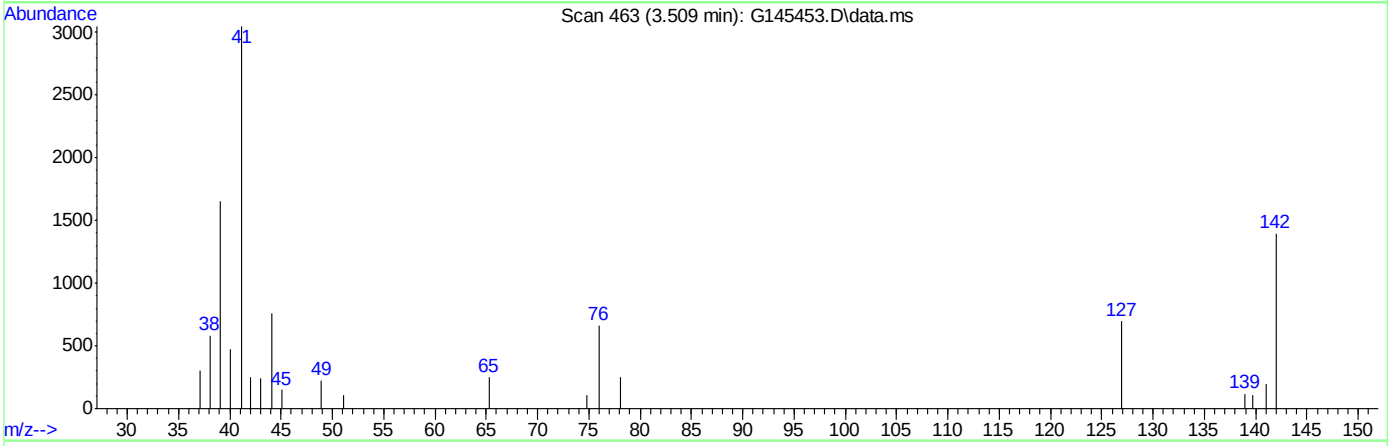
Ion	Exp%	Act%
41.00	100	100
76.00	28.10	24.82
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145453.D
Acq On : 13 Sep 2015 10:04 am
Operator : andrewd1
Sample : ic5447-5.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 14 08:44:47 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:44:37 2015
Response via : Initial Calibration





TIC: G145453.D\data.ms

(21) allyl chloride (p)

3.509min (-0.002) 4.42ppb m

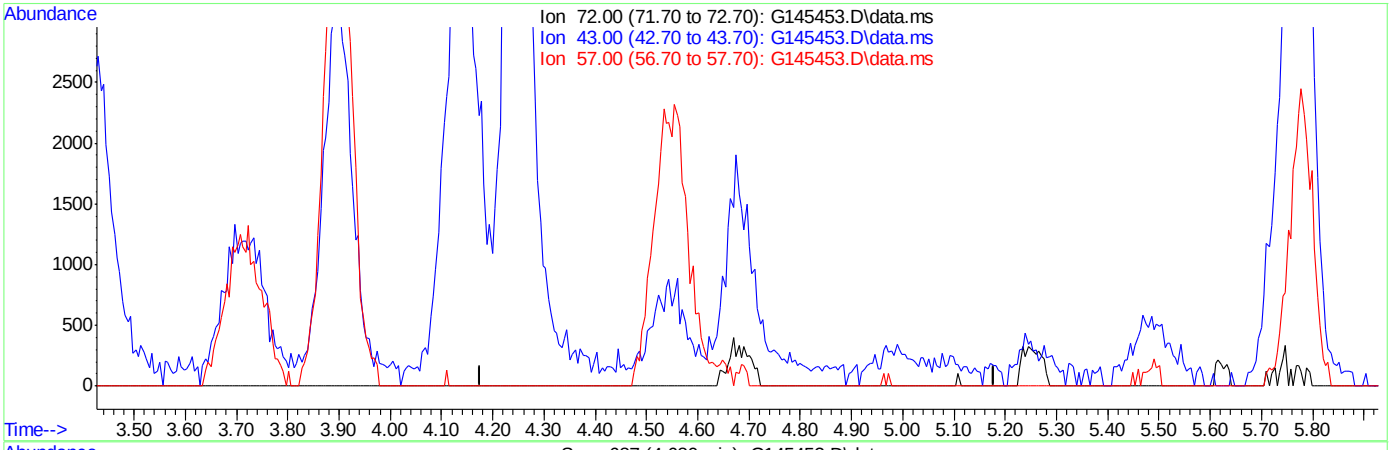
response 18384

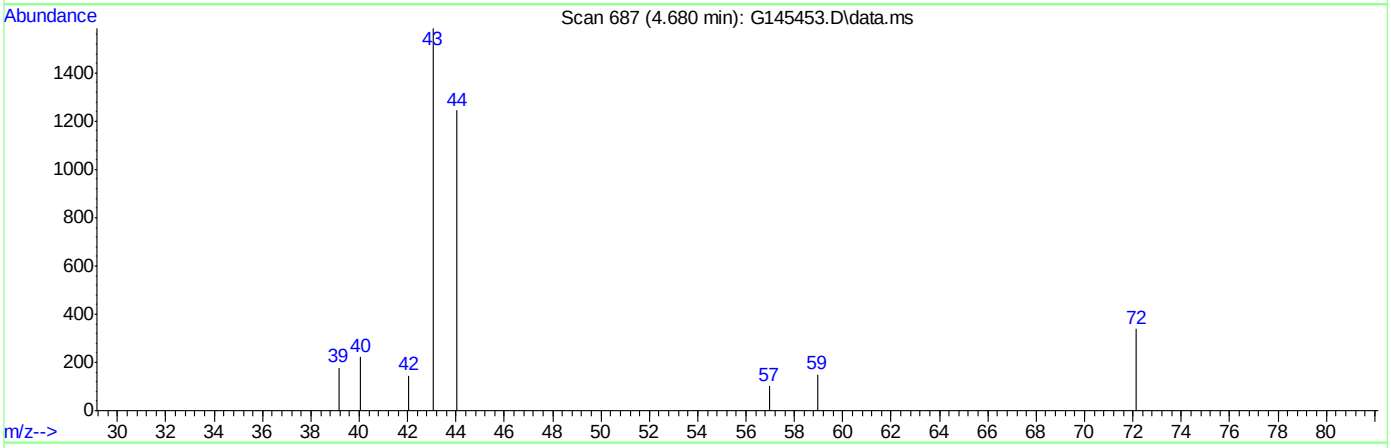
Ion	Exp%	Act%
41.00	100	100
76.00	28.10	21.79
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145453.D
Acq On : 13 Sep 2015 10:04 am
Operator : andrewd1
Sample : ic5447-5.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 14 08:44:47 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:44:37 2015
Response via : Initial Calibration





TIC: G145453.D\data.ms

(30) 2-butanone (p)

4.678min (-4.678) 0.00ppb

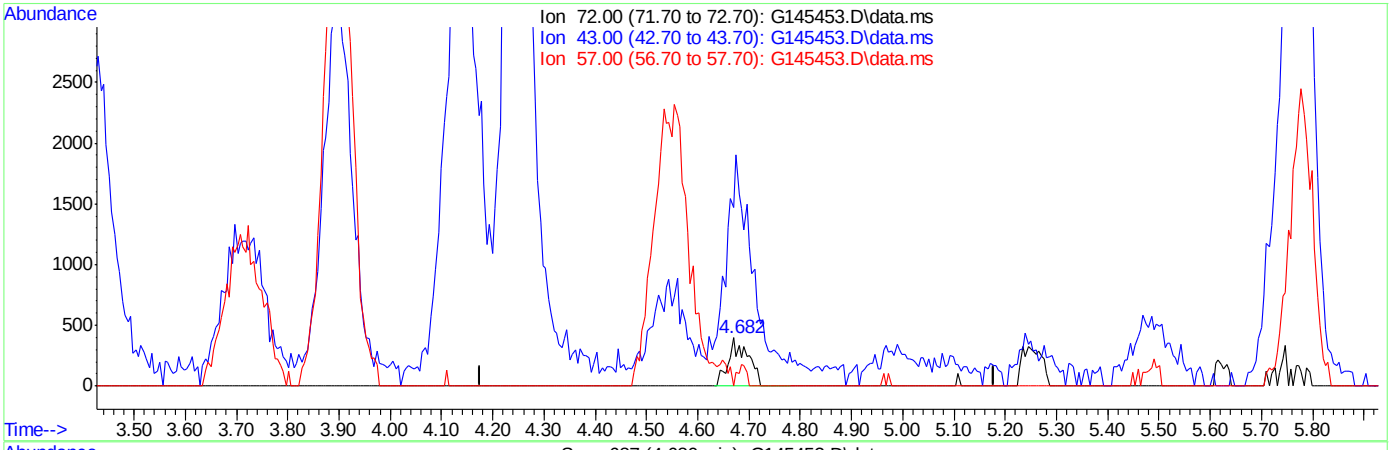
response 0

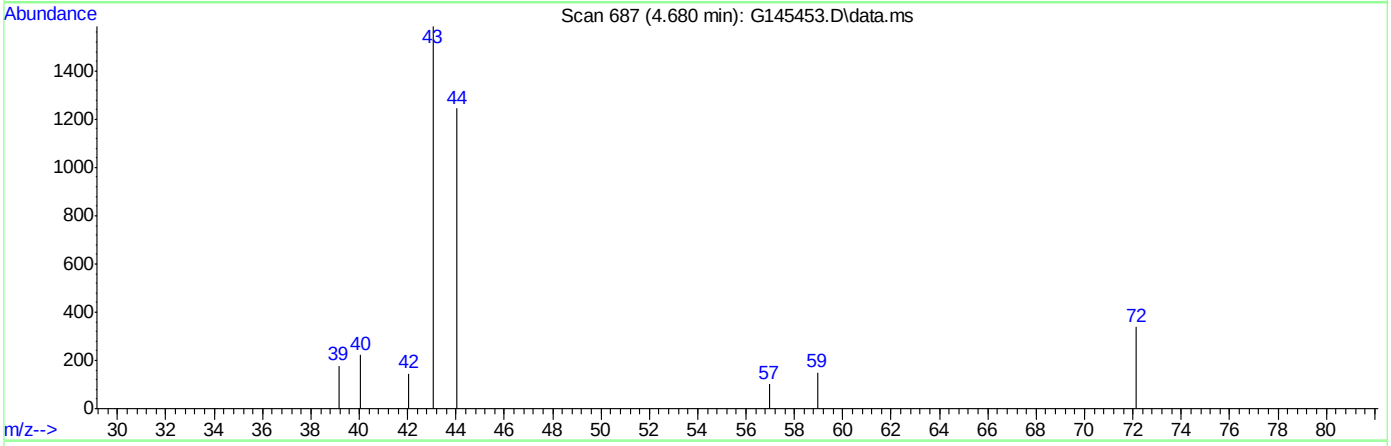
Ion	Exp%	Act%
72.00	100	0.00
43.00	484.50	0.00#
57.00	47.40	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145453.D
Acq On : 13 Sep 2015 10:04 am
Operator : andrewd1
Sample : ic5447-5.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 14 08:44:47 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:44:37 2015
Response via : Initial Calibration





TIC: G145453.D\data.ms

(30) 2-butanone (p)

4.680min (+0.002) 4.89ppb m

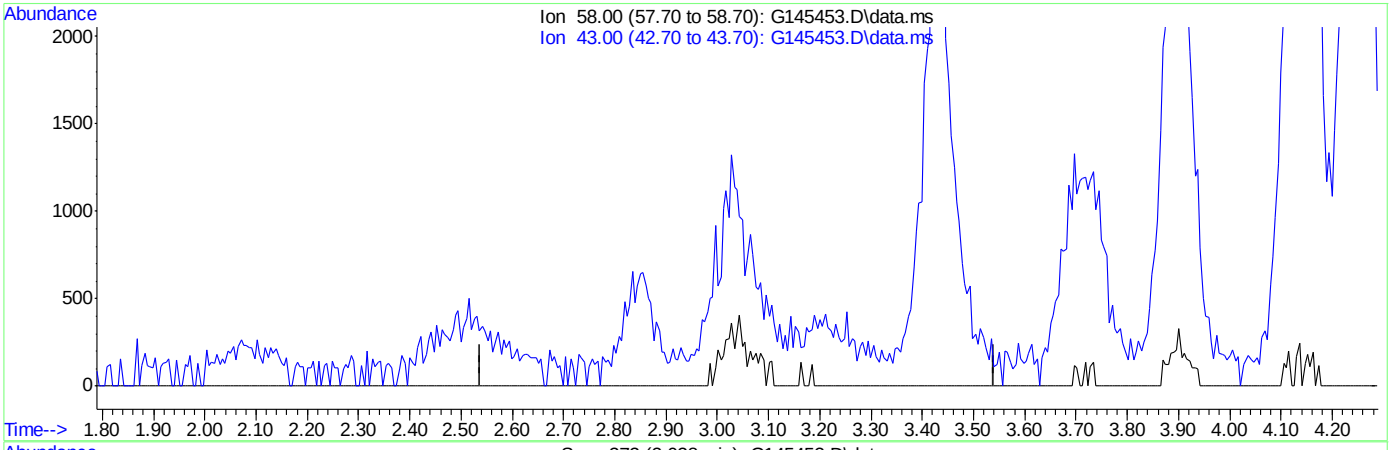
response 1043

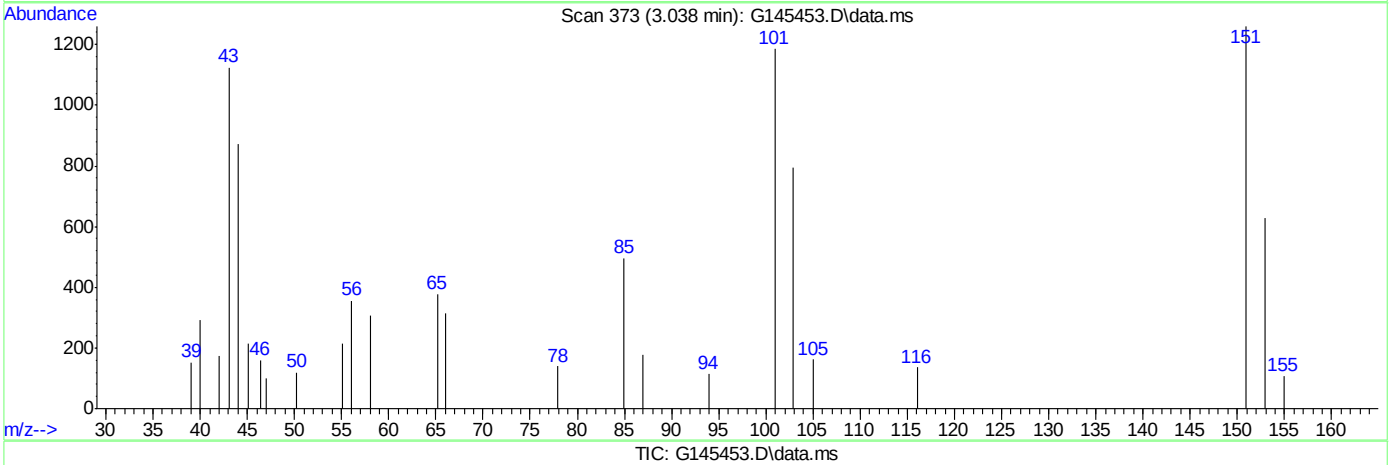
Ion	Exp%	Act%
72.00	100	100
43.00	484.50	468.93
57.00	47.40	29.88
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145453.D
Acq On : 13 Sep 2015 10:04 am
Operator : andrewd1
Sample : ic5447-5.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 14 08:44:47 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:44:37 2015
Response via : Initial Calibration





TIC: G145453.D\data.ms

(16) acetone (p)

3.040min (-3.040) 0.00ppb

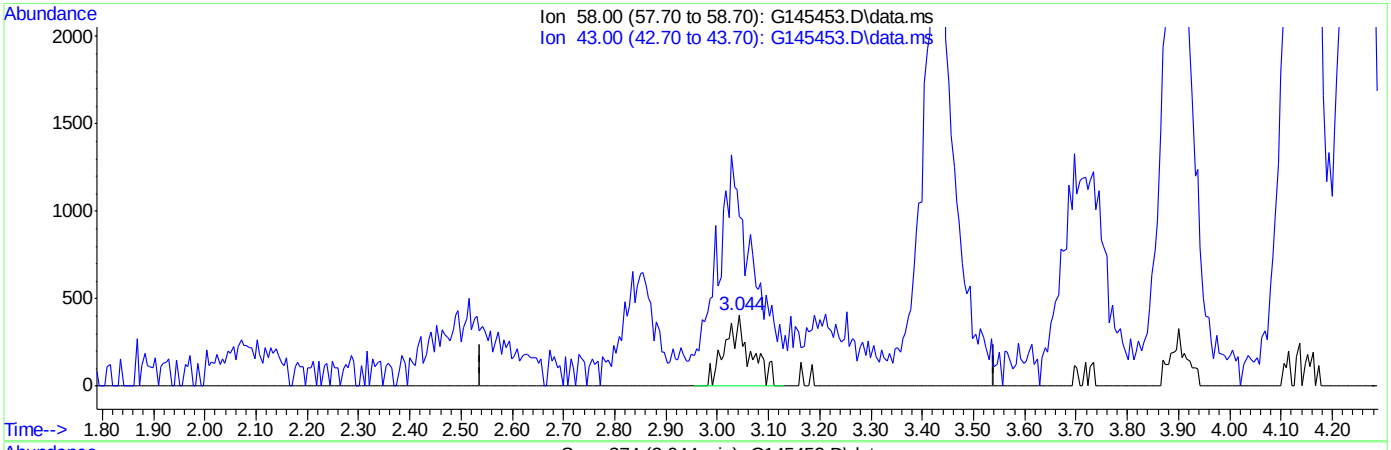
response 0

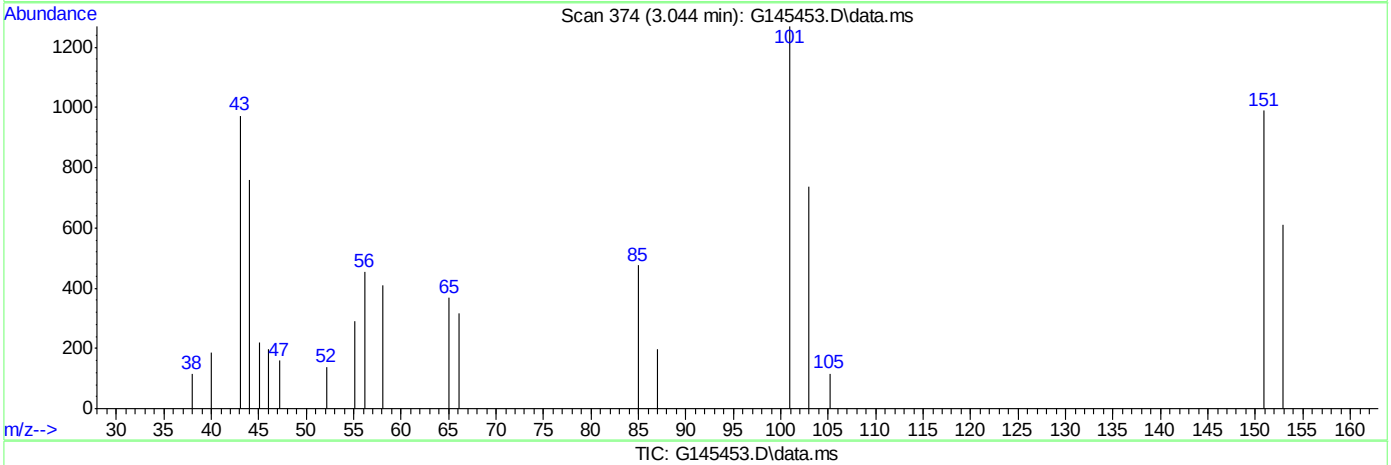
Ion	Exp%	Act%
58.00	100	0.00
43.00	336.30	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145453.D
Acq On : 13 Sep 2015 10:04 am
Operator : andrewd1
Sample : ic5447-5.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 14 08:44:47 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:44:37 2015
Response via : Initial Calibration





TIC: G145453.D\data.ms

(16) acetone (p)

3.044min (+0.004) 4.68ppb m

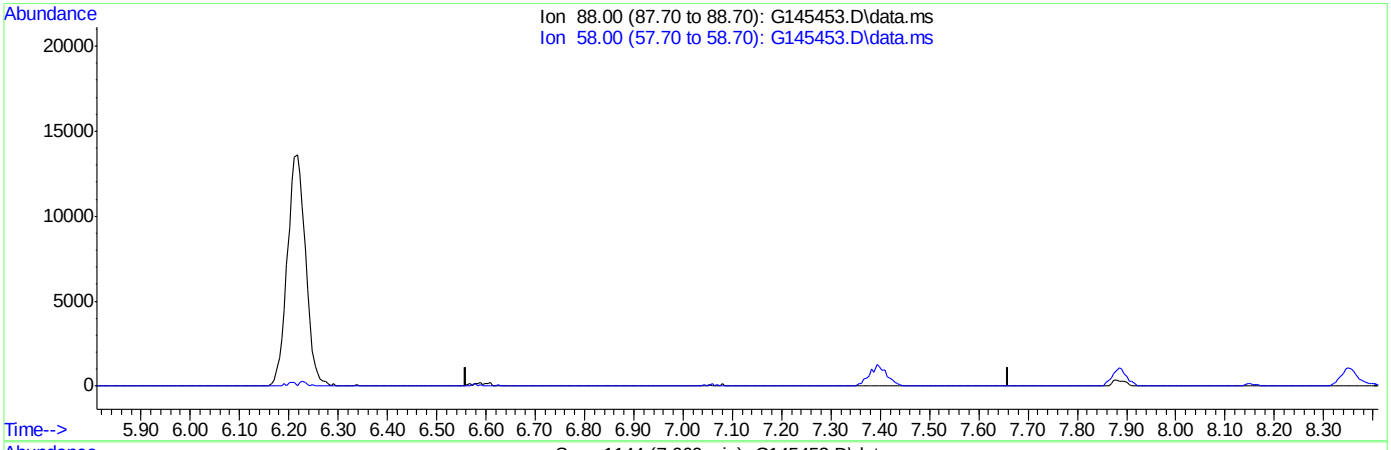
response 1398

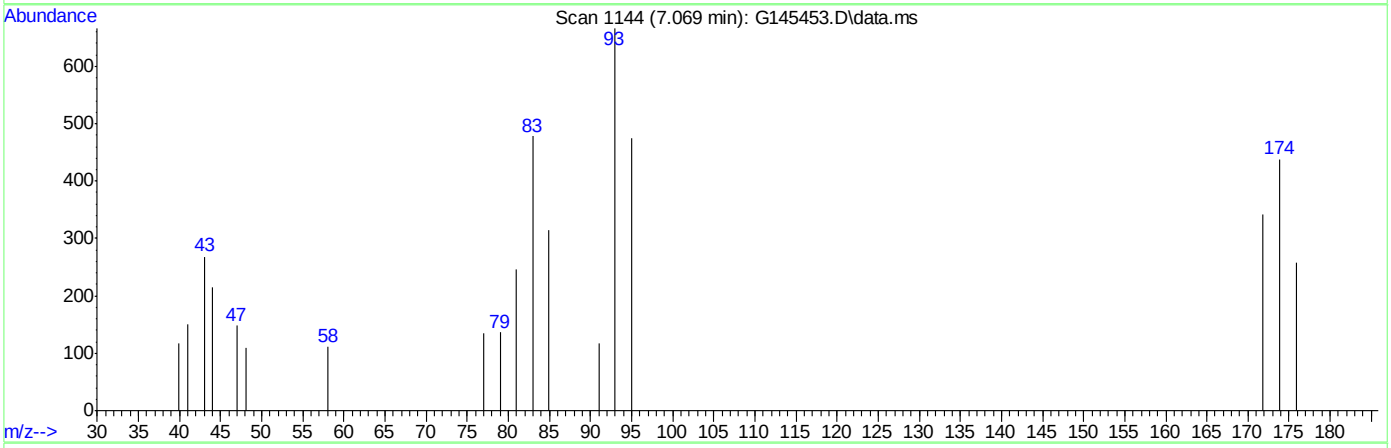
Ion	Exp%	Act%
58.00	100	100
43.00	336.30	237.65#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145453.D
Acq On : 13 Sep 2015 10:04 am
Operator : andrewd1
Sample : ic5447-5.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 14 08:44:47 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:44:37 2015
Response via : Initial Calibration





TIC: G145453.D\data.ms

(58) 1,4-dioxane (p)

7.071min (-7.071) 0.00ppb

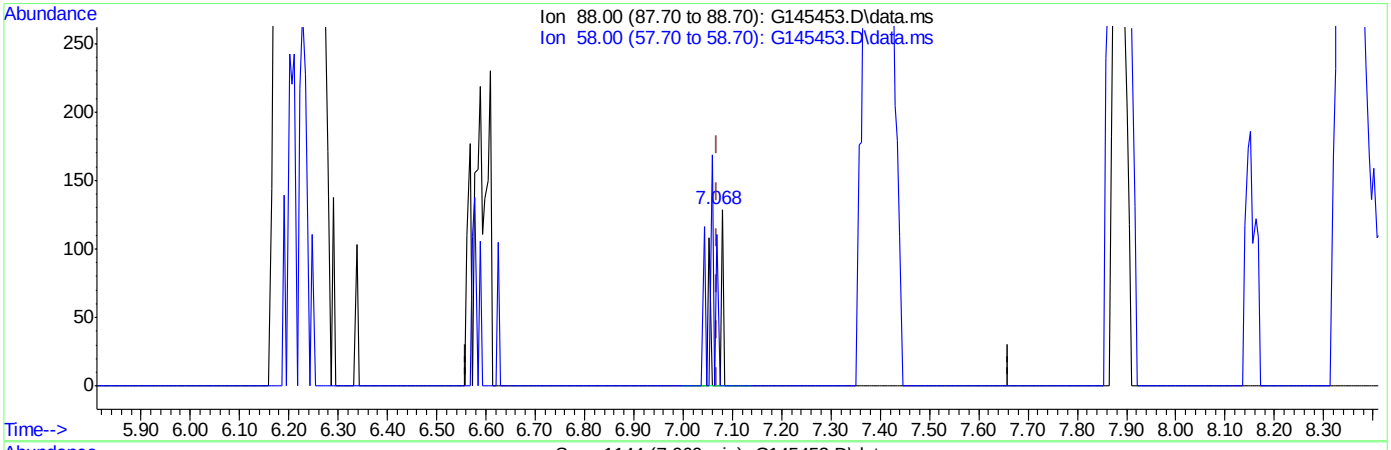
response 0

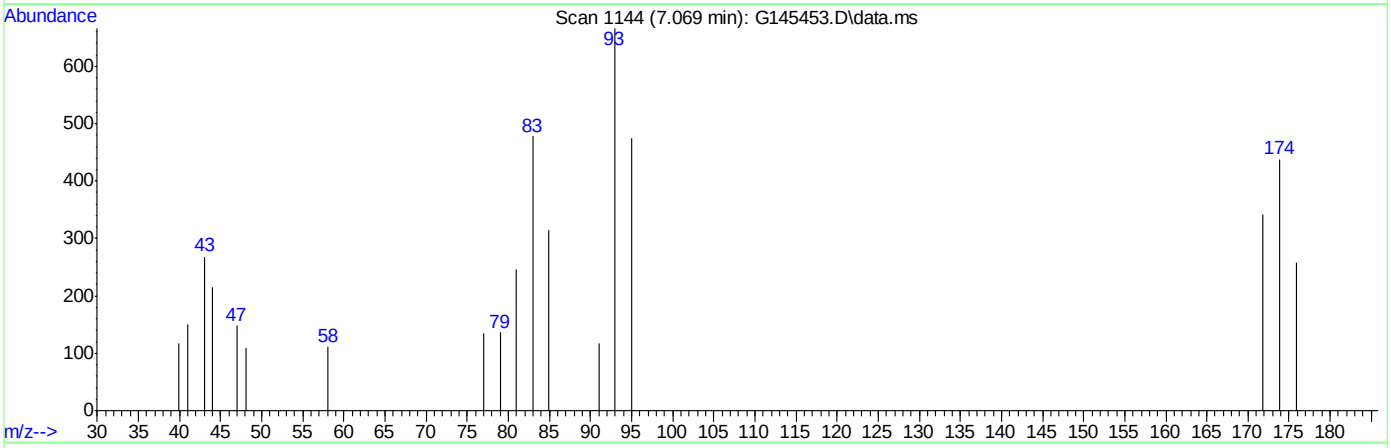
Ion	Exp%	Act%
88.00	100	0.00
58.00	88.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145453.D
Acq On : 13 Sep 2015 10:04 am
Operator : andrewd1
Sample : ic5447-5.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 14 08:44:47 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:44:37 2015
Response via : Initial Calibration





TIC: G145453.D\data.ms

(58) 1,4-dioxane (p)

7.069min (-0.002) 4.43ppb m

response 74

Ion	Exp%	Act%
88.00	100	100
58.00	88.20	11100.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Doug Yargeau 09/14/15 19:20

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145454.D
Acq On : 13 Sep 2015 10:33 am
Operator : andrewd1
Sample : ic5447-10.0
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 14 08:52:53 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:50:14 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	3.173	65	80064	500.00	ppb		0.00
4) pentafluorobenzene	5.101	168	156738	50.00	ppb		0.00
43) 1,4-difluorobenzene	6.217	114	257590	50.00	ppb		0.00
66) chlorobenzene-d5	9.539	82	123518	50.00	ppb		0.00
80) 1,4-dichlorobenzene-d4	12.159	152	119783	50.00	ppb		0.00
System Monitoring Compounds							
40) dibromofluoromethane (s)	5.270	113	87394	49.57	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.14%				
60) toluene-d8 (s)	7.886	98	290465	51.44	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.88%				
82) bromofluorobenzene (s)	10.865	95	114367	48.54	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 97.08%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	3.226	59	21051	97.68	ppb		74
3) Ethanol	2.528	45	24413	986.00	ppb		99
5) dichlorodifluoromethane	1.882	85	40449	10.64	ppb		90
6) chloromethane	2.021	50	33581	9.07	ppb		98
7) vinyl chloride	2.102	62	25456	10.66	ppb		100
8) bromomethane	2.423	96	13691	11.11	ppb		73
9) chloroethane	2.442	64	12075	10.75	ppb		94
10) ethyl ether	2.850	59	16029	9.30	ppb		98
11) acetonitrile	3.247	41	8419	9.54	ppb	#	50
12) trichlorofluoromethane	2.726	101	30567m	11.57	ppb		
13) freon-113	3.055	101	21298m	11.06	ppb		
14) acrolein	2.998	56	8230	46.30	ppb		92
15) 1,1-dichloroethene	3.216	96	16702	9.61	ppb		97
16) acetone	3.039	58	2875	9.68	ppb		92
17) Methyl Acetate	3.433	43	19906	6.43	ppb	#	98
18) methylene chloride	3.621	84	18352	9.88	ppb		95
19) methyl tert butyl ether	3.719	73	50223	9.27	ppb		96
20) acrylonitrile	3.716	53	10135	10.05	ppb		93
21) allyl chloride	3.510	41	37199m	8.97	ppb		
22) trans-1,2-dichloroethene	3.880	96	17448	9.65	ppb		90
23) iodomethane	3.475	142	28902	9.42	ppb		84
24) carbon disulfide	3.726	76	54173	9.71	ppb		93
25) propionitrile	4.772	54	3541	9.89	ppb		100
26) vinyl acetate	4.253	43	51440	8.58	ppb		95
27) chloroprene	4.359	53	34404	9.34	ppb		96
28) di-isopropyl ether	4.145	45	78252	9.21	ppb		96
29) methacrylonitrile	4.964	41	16954	9.37	ppb		82
30) 2-butanone	4.680	72	2135	9.85	ppb		96
32) Hexane	3.898	41	26728	9.42	ppb		91
33) 1,1-dichloroethane	4.277	63	37493	8.95	ppb		99
34) tert-butyl ethyl ether	4.550	59	61059	9.13	ppb		98
36) 2,2-dichloropropane	4.848	77	25993	9.52	ppb		93
37) cis-1,2-dichloroethene	4.883	96	18909	9.75	ppb		95
38) bromochloromethane	5.220	128	9596	9.82	ppb	#	65

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145454.D
Acq On : 13 Sep 2015 10:33 am
Operator : andrewd1
Sample : ic5447-10.0
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 14 08:52:53 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:50:14 2015
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39)	chloroform	5.043	83	34797	9.37	ppb		95
41)	Tetrahydrofuran	5.256	42	7906	10.10	ppb		84
42)	1,1,1-trichloroethane	5.470	97	26901	10.14	ppb		92
44)	Cyclohexane	5.490	56	36301	9.38	ppb		97
45)	carbon tetrachloride	5.745	117	26632	9.76	ppb		100
46)	1,1-dichloropropene	5.624	75	25031	9.62	ppb		97
47)	benzene	5.921	78	68282	9.59	ppb		96
48)	1,2-dichloroethane	5.903	62	28419	9.74	ppb		98
49)	tert-amyl methyl ether	5.749	73	46409	9.58	ppb		81
50)	heptane	5.766	43	52705	9.80	ppb		98
51)	trichloroethene	6.581	95	19117	9.75	ppb		80
52)	1,2-dichloropropane	6.775	63	20064	10.30	ppb		99
53)	dibromomethane	7.094	93	12163	10.06	ppb		91
54)	bromodichloromethane	7.033	83	25420	9.88	ppb		99
55)	Methylcyclohexane	6.650	83	29785	10.55	ppb		98
56)	2-chloroethyl vinyl ether	7.357	63	5740	9.88	ppb	#	79
57)	methyl methacrylate	6.831	69	11196	10.18	ppb		94
58)	1,4-dioxane	7.060	88	686m	63.15	ppb		
59)	cis-1,3-dichloropropene	7.620	75	27646	10.25	ppb		96
61)	4-methyl-2-pentanone	7.388	43	25628	10.07	ppb		97
62)	toluene	7.972	92	40042	9.66	ppb		99
63)	trans-1,3-dichloropropene	8.170	75	27125	10.50	ppb		92
64)	1,1,2-trichloroethane	8.339	83	13826	10.19	ppb		95
65)	ethyl methacrylate	8.156	69	19743	10.65	ppb		88
67)	tetrachloroethene	8.682	166	18306	9.79	ppb		97
68)	1,3-dichloropropane	8.615	76	25463	9.88	ppb		99
69)	dibromochloromethane	8.907	129	19967	9.83	ppb		93
70)	1,2-dibromoethane	9.127	107	17435	9.93	ppb		97
71)	2-hexanone	8.361	43	15409	10.25	ppb		96
72)	chlorobenzene	9.580	112	48966	9.55	ppb		96
73)	1,1,1,2-tetrachloroethane	9.626	131	18325	10.05	ppb		96
74)	ethylbenzene	9.634	91	76544	9.49	ppb		94
75)	m,p-xylene	9.718	106	61934	20.12	ppb		99
76)	o-xylene	10.196	106	30668	10.25	ppb		96
77)	styrene	10.235	104	51159	10.15	ppb		91
78)	bromoform	10.609	173	12320	10.16	ppb		99
79)	trans-1,4-dichloro-2-b...	10.642	53	5934	9.76	ppb		92
81)	isopropylbenzene	10.586	105	79260	9.73	ppb		98
83)	bromobenzene	11.077	156	20959	9.20	ppb	#	82
84)	1,1,2,2-tetrachloroethane	10.777	83	21061	9.15	ppb		92
85)	1,2,3-trichloropropane	10.937	75	15473	10.15	ppb		95
86)	n-propylbenzene	11.025	91	96299	9.62	ppb		93
87)	2-chlorotoluene	11.218	91	67455	9.91	ppb		89
88)	4-chlorotoluene	11.274	91	61301	9.81	ppb		91
89)	1,3,5-trimethylbenzene	11.198	105	70507	9.92	ppb		99
90)	tert-butylbenzene	11.592	91	47890	9.53	ppb		79
91)	1,2,4-trimethylbenzene	11.628	105	73039	10.46	ppb		98
92)	sec-butylbenzene	11.819	105	90605	10.36	ppb		97
93)	1,3-dichlorobenzene	12.076	146	40279	9.46	ppb		97
94)	p-isopropyltoluene	11.969	119	76072	10.73	ppb		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145454.D
Acq On : 13 Sep 2015 10:33 am
Operator : andrewd1
Sample : ic5447-10.0
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 14 08:52:53 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:50:14 2015
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
95)	1,4-dichlorobenzene	12.193	146	41929	9.66	ppb		98
96)	1,2-dichlorobenzene	12.599	146	40541	10.18	ppb		95
97)	n-butylbenzene	12.418	91	65601	10.83	ppb		97
98)	1,2-dibromo-3-chloropr...	13.455	75	3630	8.97	ppb	#	69
99)	1,3,5-trichlorobenzene	13.713	180	28462	10.16	ppb		98
100)	1,2,4-trichlorobenzene	14.417	180	16624	8.47	ppb		96
101)	hexachlorobutadiene	14.566	225	12083	9.78	ppb		96
102)	naphthalene	14.706	128	35196	10.31	ppb		100
103)	2-Methylnaphthalene	15.886	142	2170	2.09	ppb	#	79
104)	1-Methylnaphthalene	16.151	142	2101	2.20	ppb	#	83
105)	1,2,3-trichlorobenzene	14.974	180	15094	9.06	ppb		95

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

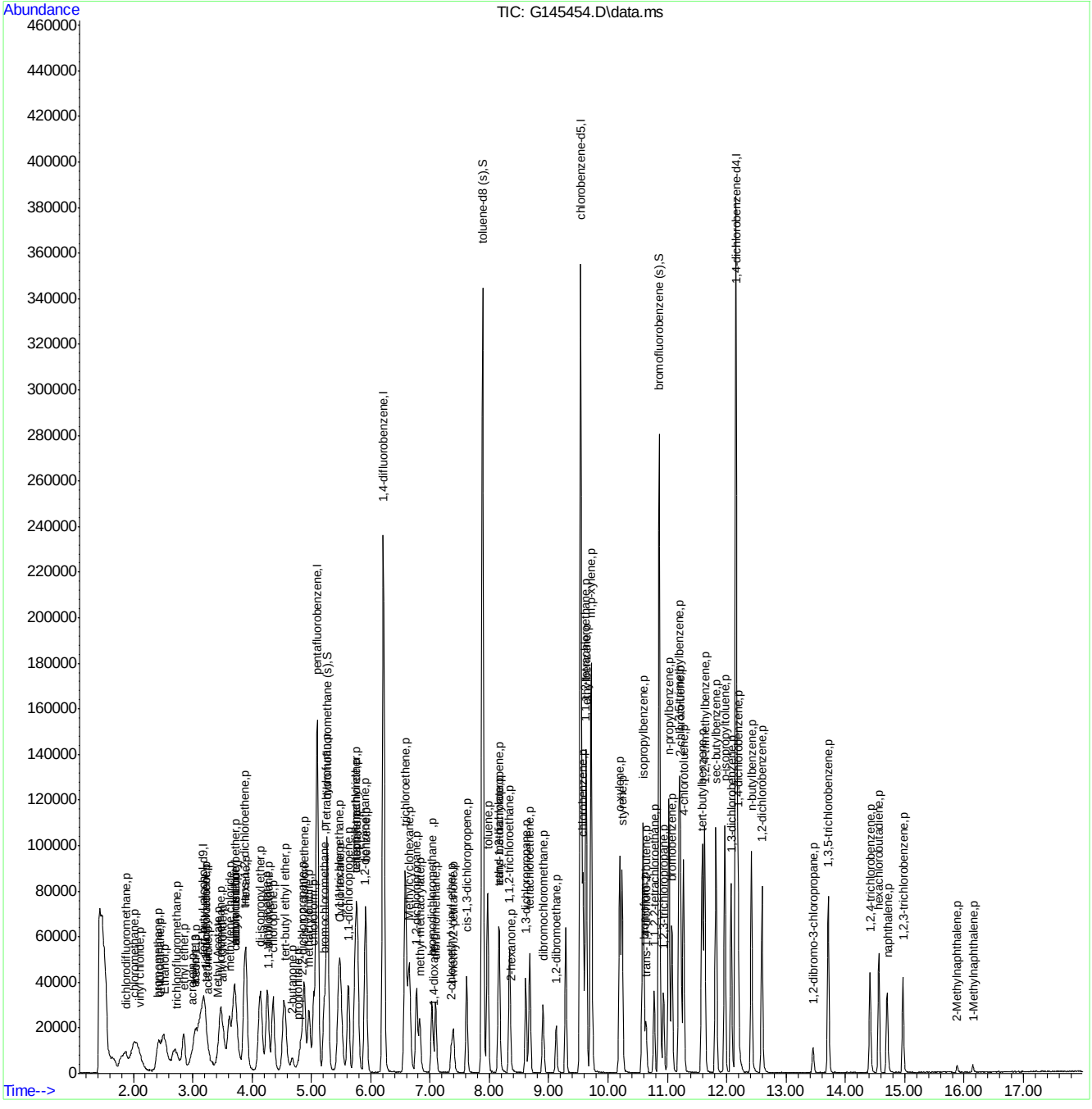
7.6.5

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145454.D
Acq On : 13 Sep 2015 10:33 am
Operator : andrewd1
Sample : ic5447-10.0
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

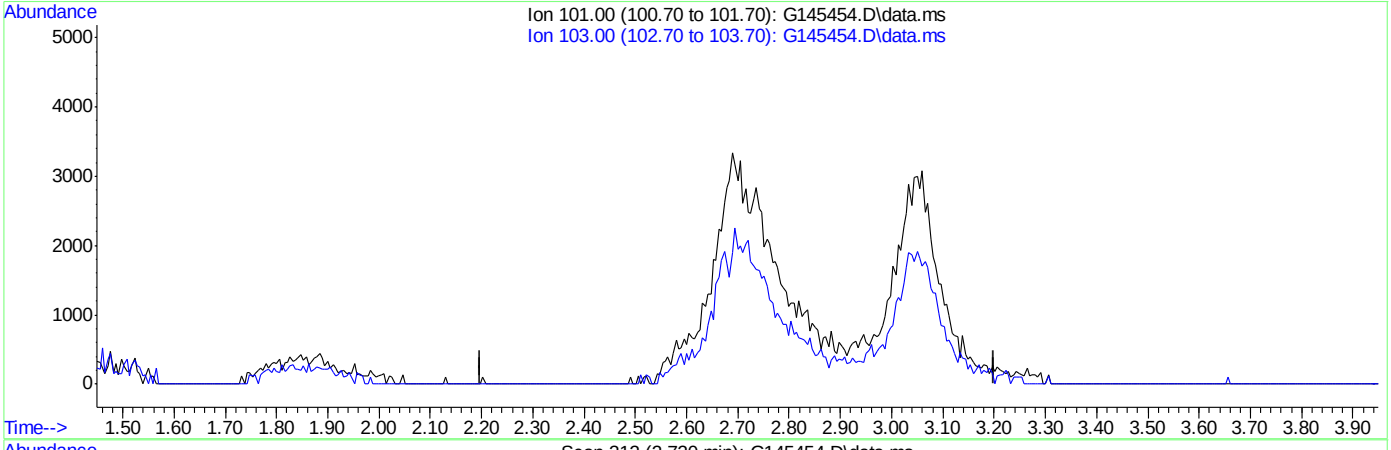
Quant Time: Sep 14 08:52:53 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:50:14 2015
Response via : Initial Calibration

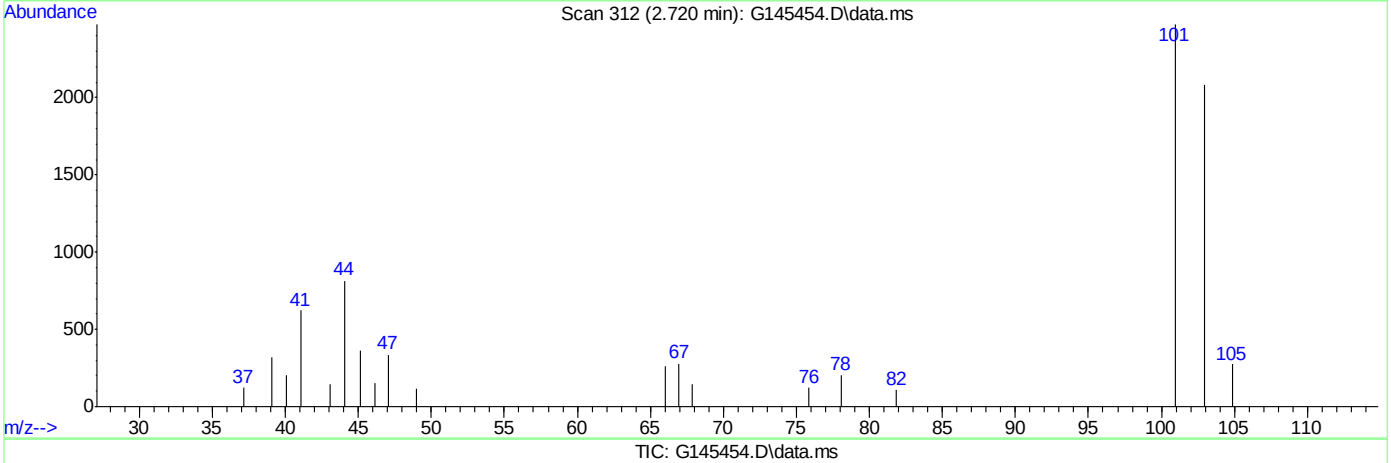


Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145454.D
Acq On : 13 Sep 2015 10:33 am
Operator : andrewd1
Sample : ic5447-10.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 14 08:51:59 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:50:14 2015
Response via : Initial Calibration





TIC: G145454.D\data.ms

(12) trichlorofluoromethane (p)

2.719min (-2.719) 0.00ppb

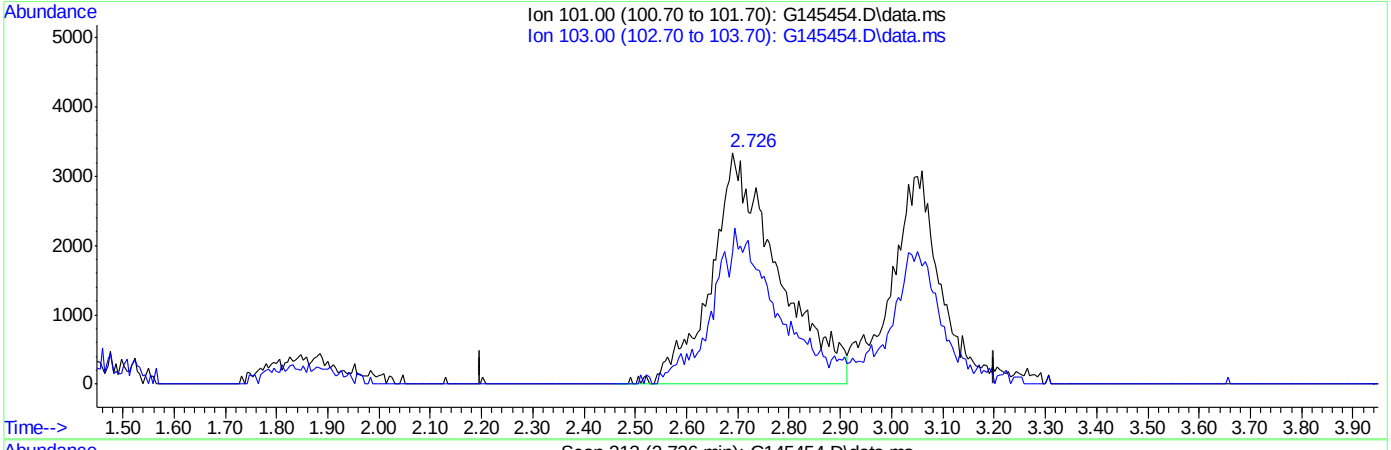
response 0

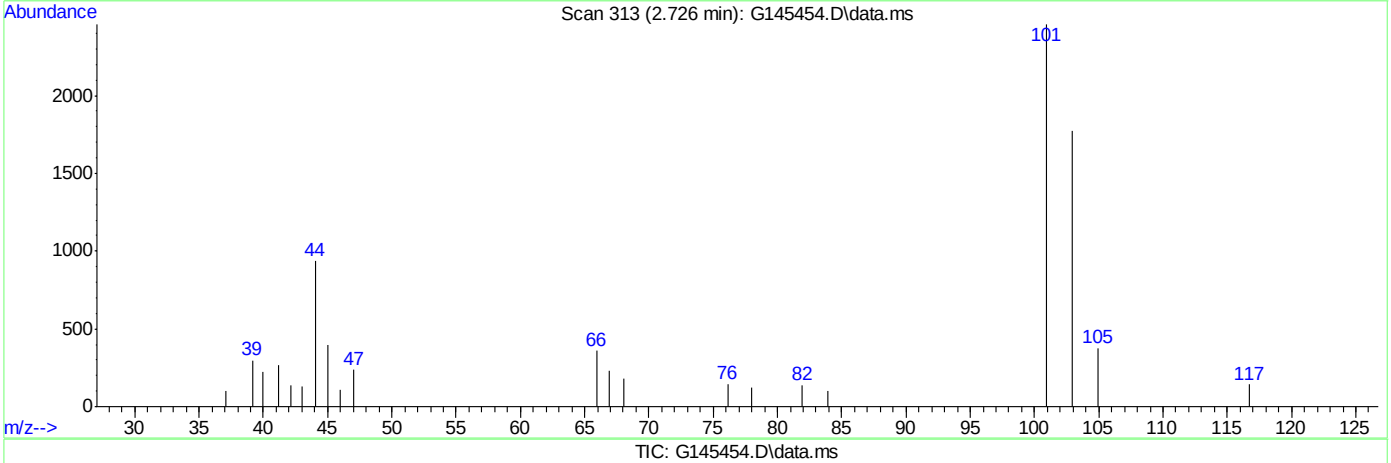
Ion	Exp%	Act%
101.00	100	0.00
103.00	62.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145454.D
Acq On : 13 Sep 2015 10:33 am
Operator : andrewd1
Sample : ic5447-10.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 14 08:51:59 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:50:14 2015
Response via : Initial Calibration





TIC: G145454.D\data.ms

(12) trichlorofluoromethane (p)

2.726min (+0.006) 11.57ppb m

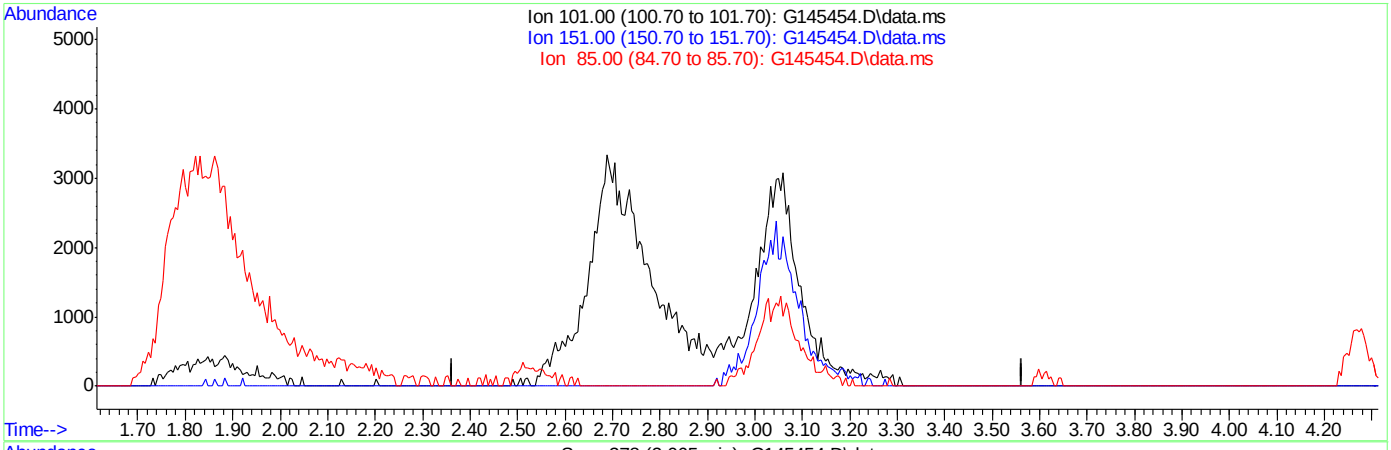
response 30567

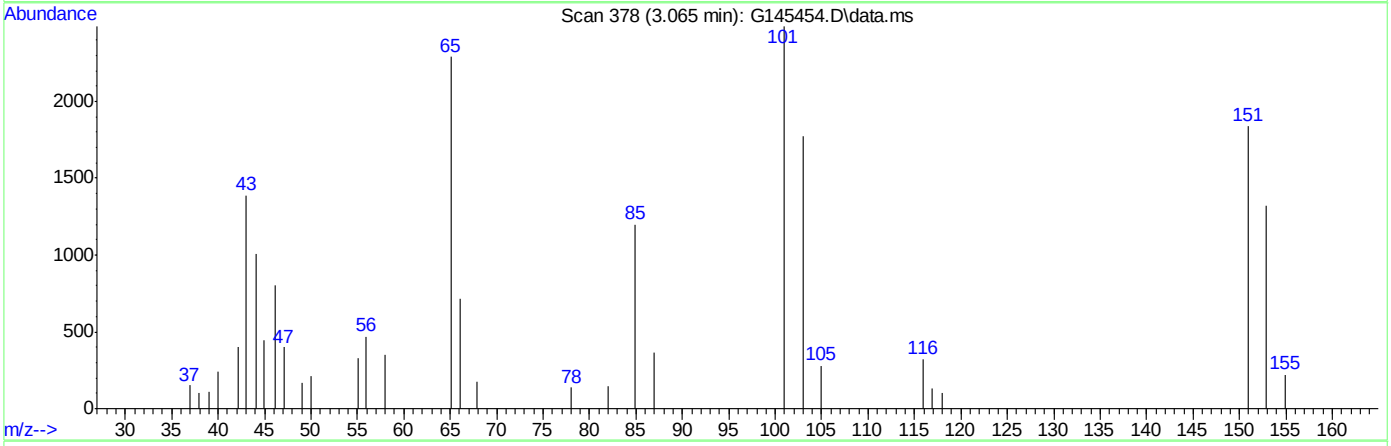
Ion	Exp%	Act%
101.00	100	100
103.00	62.20	72.01
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145454.D
Acq On : 13 Sep 2015 10:33 am
Operator : andrewd1
Sample : ic5447-10.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 14 08:51:59 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:50:14 2015
Response via : Initial Calibration





TIC: G145454.D\data.ms

(13) freon-113 (p)

3.064min (-3.064) 0.00ppb

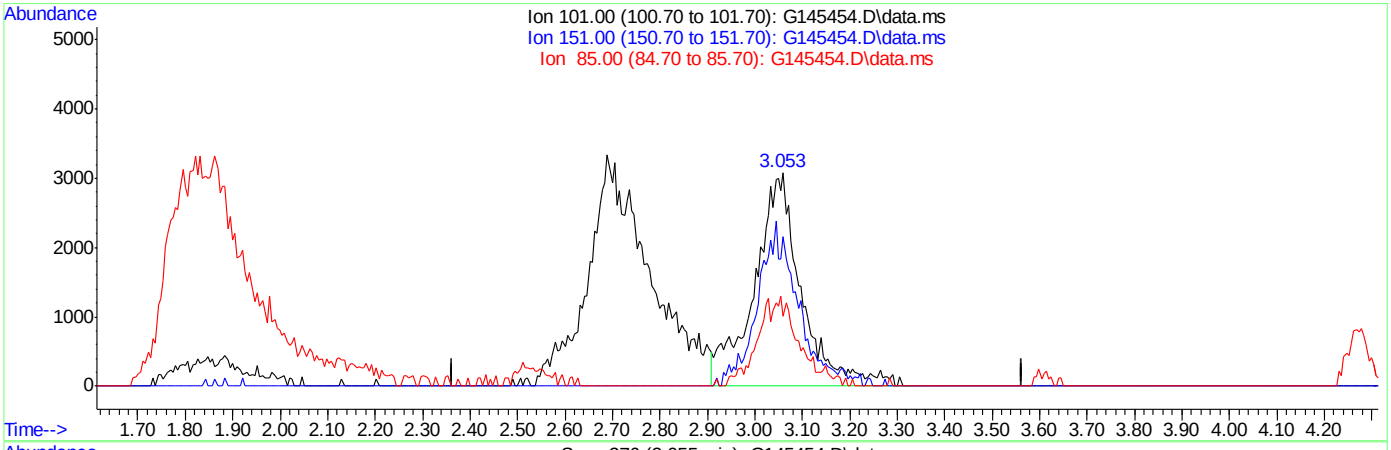
response 0

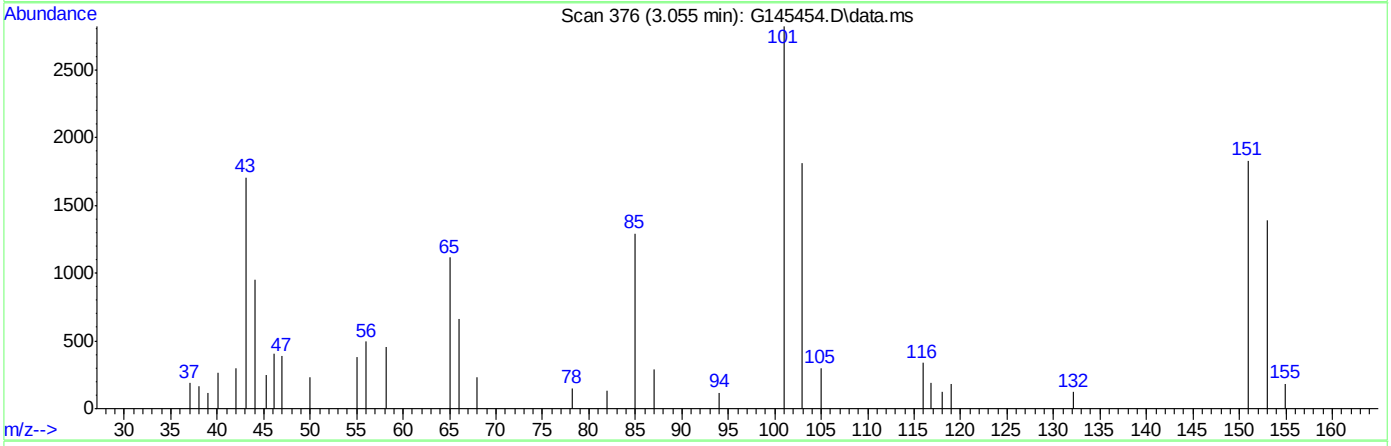
Ion	Exp%	Act%
101.00	100	0.00
151.00	91.80	0.00#
85.00	39.40	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145454.D
Acq On : 13 Sep 2015 10:33 am
Operator : andrewd1
Sample : ic5447-10.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 14 08:51:59 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:50:14 2015
Response via : Initial Calibration





TIC: G145454.D\data.ms

(13) freon-113 (p)

3.055min (-0.009) 11.06ppb m

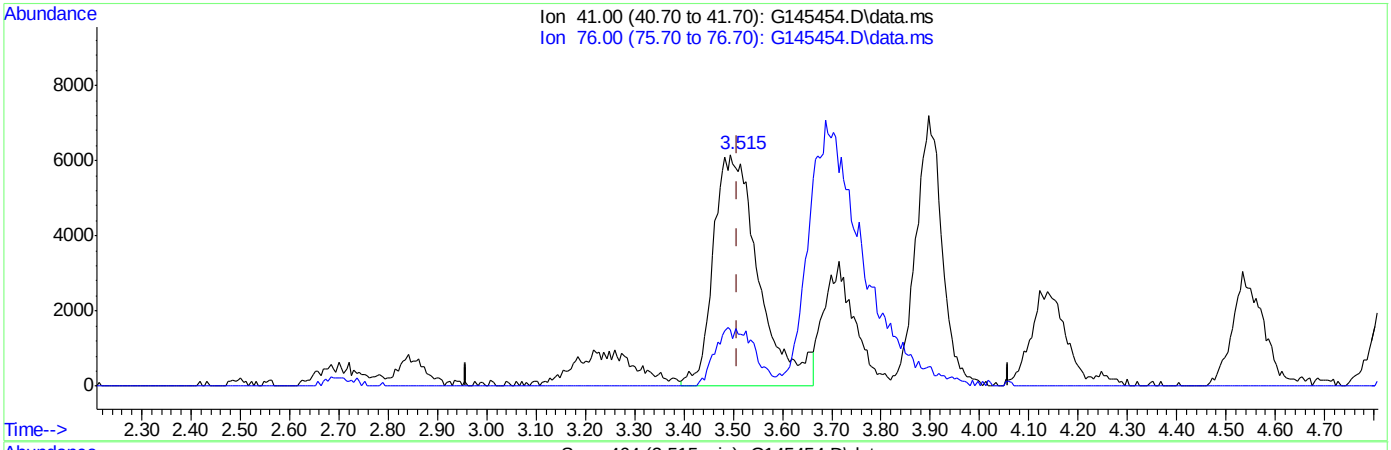
response 21298

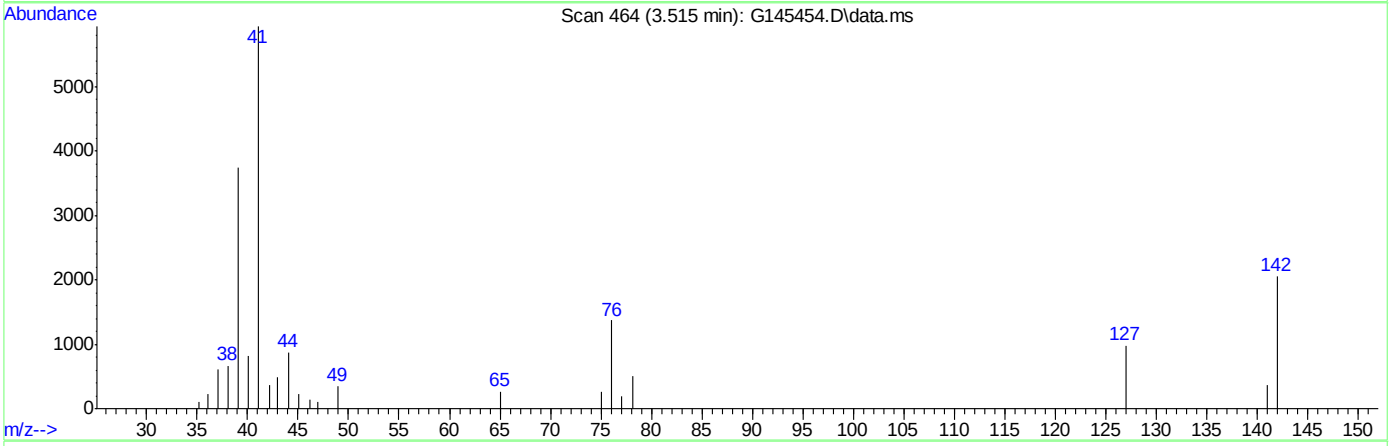
Ion	Exp%	Act%
101.00	100	100
151.00	91.80	64.86
85.00	39.40	45.89
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145454.D
Acq On : 13 Sep 2015 10:33 am
Operator : andrewd1
Sample : ic5447-10.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 14 08:51:59 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:50:14 2015
Response via : Initial Calibration





TIC: G145454.D\data.ms

(21) allyl chloride (p)

3.515min (+0.006) 9.50ppb

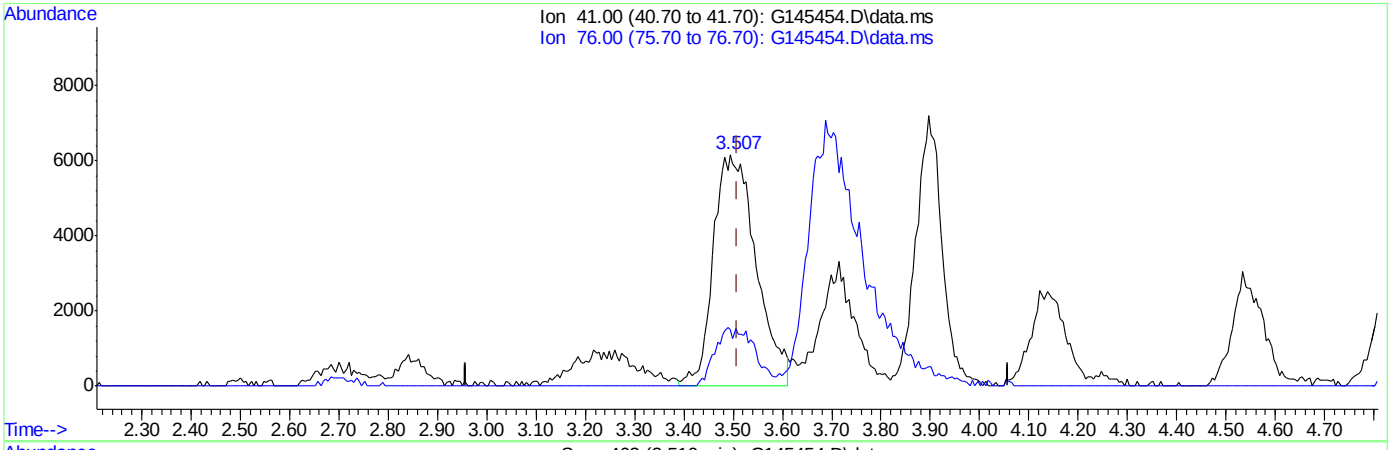
response 39395

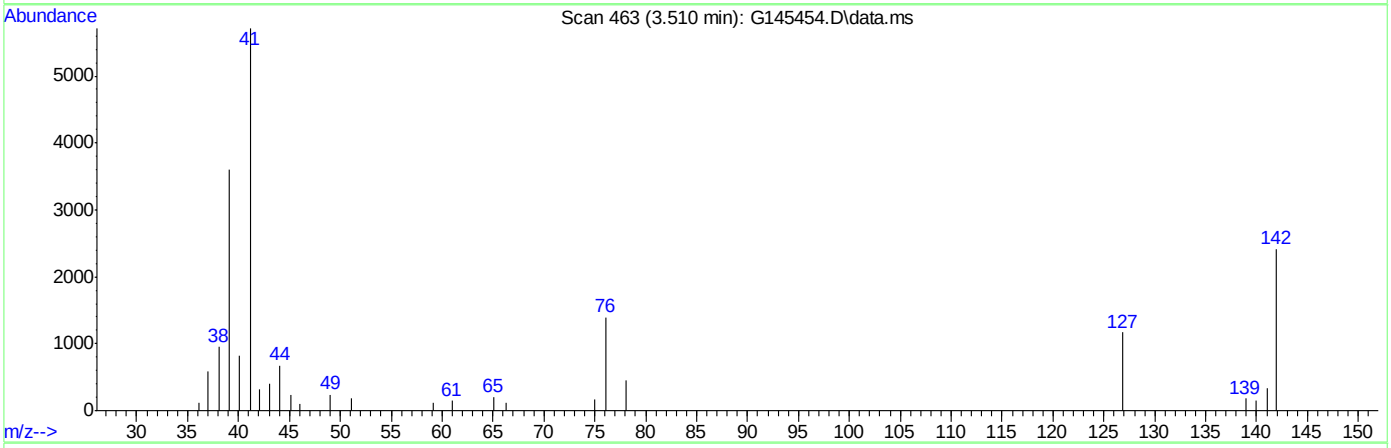
Ion	Exp%	Act%
41.00	100	100
76.00	28.10	23.69
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145454.D
Acq On : 13 Sep 2015 10:33 am
Operator : andrewd1
Sample : ic5447-10.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 14 08:51:59 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:50:14 2015
Response via : Initial Calibration





TIC: G145454.D\data.ms

(21) allyl chloride (p)

3.510min (+0.001) 8.97ppb m

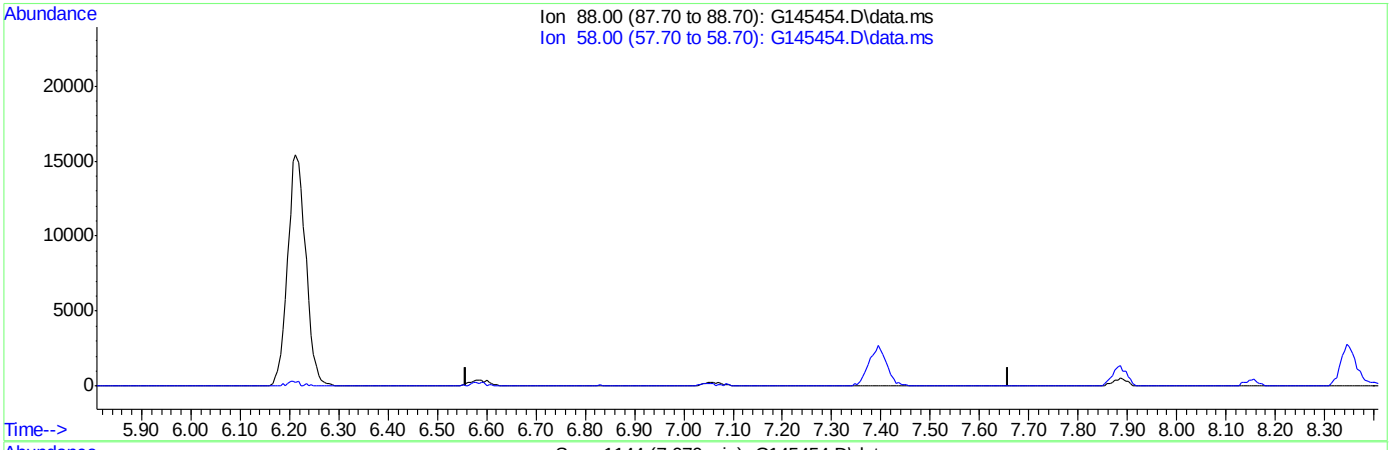
response 37199

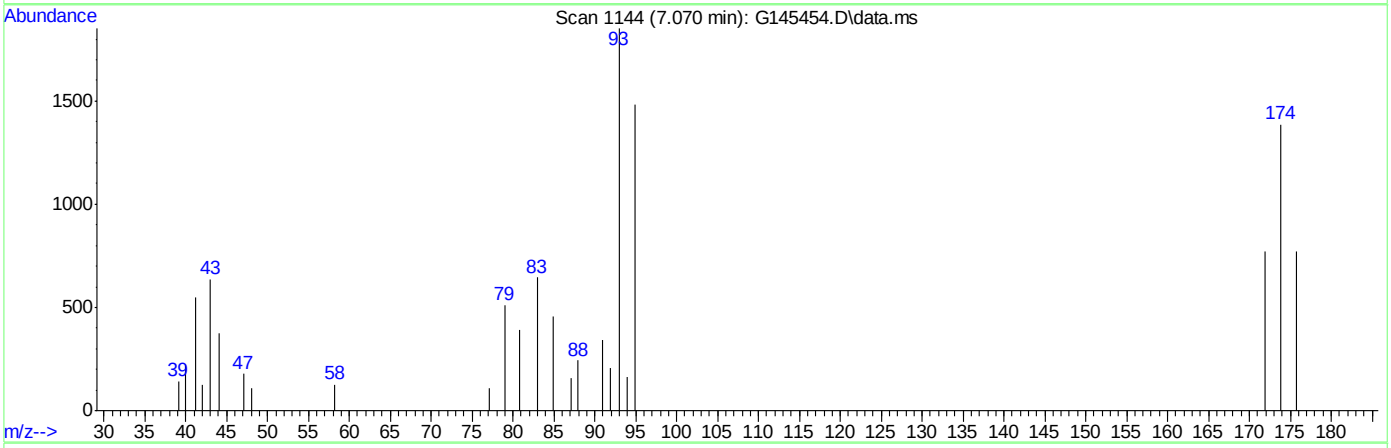
Ion	Exp%	Act%
41.00	100	100
76.00	28.10	24.44
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145454.D
Acq On : 13 Sep 2015 10:33 am
Operator : andrewd1
Sample : ic5447-10.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 14 08:51:59 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:50:14 2015
Response via : Initial Calibration





(58) 1,4-dioxane (p)

7.069min (-7.069) 0.00ppb

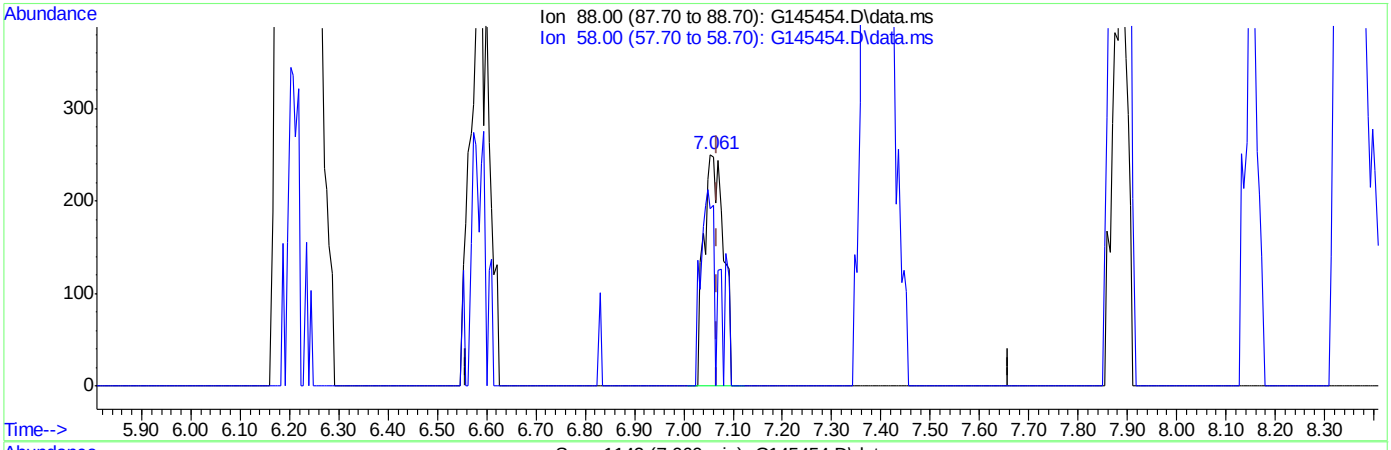
response 0

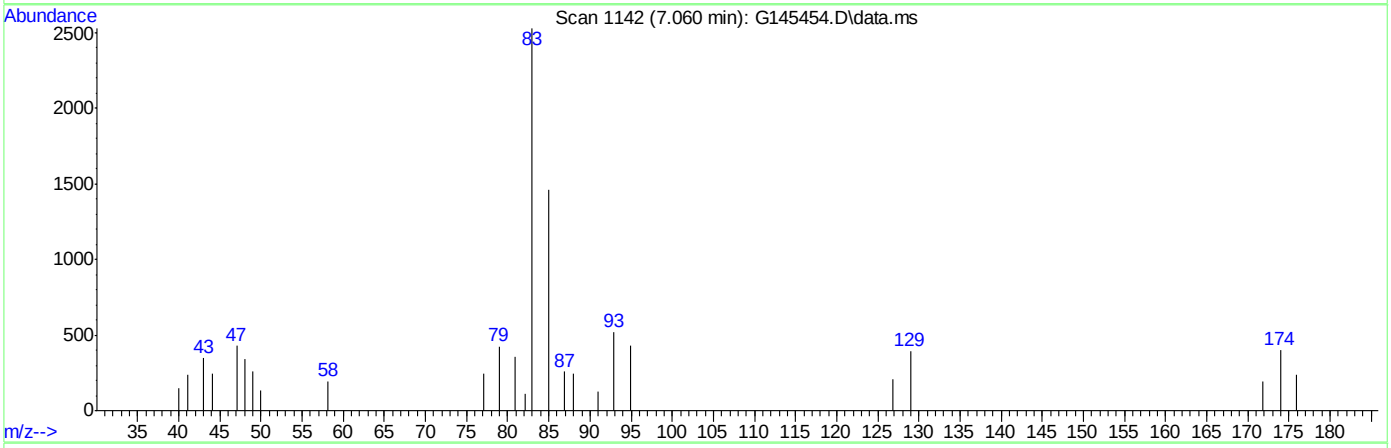
Ion	Exp%	Act%
88.00	100	0.00
58.00	88.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145454.D
Acq On : 13 Sep 2015 10:33 am
Operator : andrewd1
Sample : ic5447-10.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 14 08:51:59 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:50:14 2015
Response via : Initial Calibration





TIC: G145454.D\data.ms

(58) 1,4-dioxane (p)

7.060min (-0.010) 63.15ppb m

response 686

Ion	Exp%	Act%
88.00	100	100
58.00	88.20	78.63
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145454.D
Acq On : 13 Sep 2015 10:33 am
Operator : andrewd1
Sample : ic5447-10.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

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Quant Method : C:\msdchem\1\METHODS\g150913w.m
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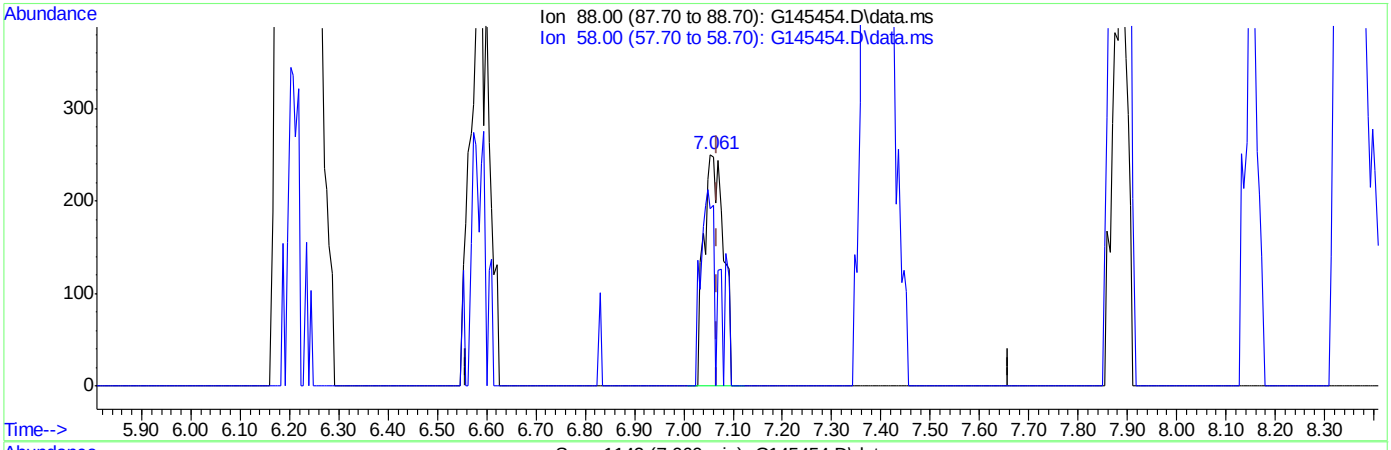
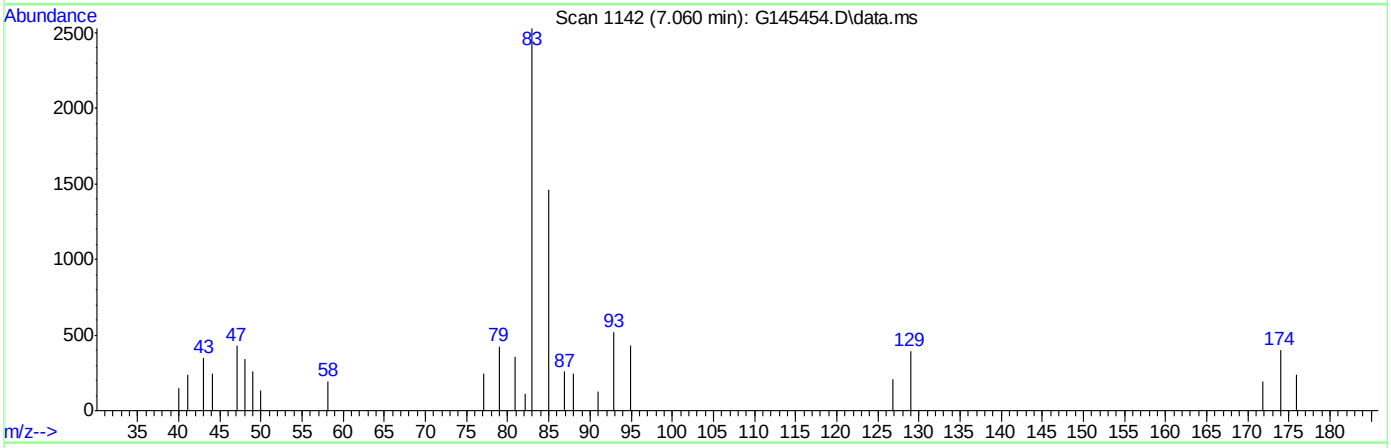
QLast Update : Mon Sep 14 08:50:14 2015
Response via : Initial Calibration





TIC: G145454.D\data.ms

(58) 1,4-dioxane (p)

7.060min (-0.010) 63.15ppb m

response 686

Ion	Exp%	Act%
88.00	100	100
58.00	88.20	78.63
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Doug Yargeau 09/14/15 19:20

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145455.D
Acq On : 13 Sep 2015 11:01 am
Operator : andrewd1
Sample : ic5447-20.0
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 08:54:37 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:53:24 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	3.162	65	79343	500.00	ppb		-0.01
4) pentafluorobenzene	5.101	168	151614	50.00	ppb		0.00
43) 1,4-difluorobenzene	6.216	114	237458	50.00	ppb		0.00
66) chlorobenzene-d5	9.538	82	112011	50.00	ppb		0.00
80) 1,4-dichlorobenzene-d4	12.158	152	109935	50.00	ppb		0.00
System Monitoring Compounds							
40) dibromofluoromethane (s)	5.270	113	85507	50.21	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.42%				
60) toluene-d8 (s)	7.886	98	264850	50.64	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.28%				
82) bromofluorobenzene (s)	10.864	95	105852	49.19	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 98.38%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	3.226	59	43001	202.53	ppb		88
3) Ethanol	2.525	45	50265	2055.77	ppb		93
5) dichlorodifluoromethane	1.899	85	82915	22.19	ppb		89
6) chloromethane	2.027	50	68581	19.45	ppb		99
7) vinyl chloride	2.109	62	50213	21.46	ppb		98
8) bromomethane	2.434	96	28077	22.91	ppb		93
9) chloroethane	2.442	64	23993	21.68	ppb		92
10) ethyl ether	2.851	59	32587	19.89	ppb		98
11) acetonitrile	3.254	41	16367	19.47	ppb	#	59
12) trichlorofluoromethane	2.727	101	60082m	22.80	ppb		
13) freon-113	3.061	101	42931m	22.26	ppb		
14) acrolein	3.000	56	17468	104.15	ppb		94
15) 1,1-dichloroethene	3.225	96	32933	19.75	ppb	#	70
16) acetone	3.041	58	5837m	20.53	ppb		
17) Methyl Acetate	3.434	43	40502	14.56	ppb	#	95
18) methylene chloride	3.621	84	35475	19.79	ppb		87
19) methyl tert butyl ether	3.718	73	98082	18.95	ppb		98
20) acrylonitrile	3.709	53	19187	19.64	ppb		95
21) allyl chloride	3.511	41	72878m	18.55	ppb		
22) trans-1,2-dichloroethene	3.881	96	34360	19.78	ppb		88
23) iodomethane	3.480	142	57274	19.53	ppb		81
24) carbon disulfide	3.734	76	106579	19.86	ppb		98
25) propionitrile	4.771	54	6610	19.15	ppb		100
26) vinyl acetate	4.251	43	100120	17.89	ppb		94
27) chloroprene	4.360	53	69303	19.70	ppb		91
28) di-isopropyl ether	4.145	45	153230	18.89	ppb		95
29) methacrylonitrile	4.966	41	35247	20.45	ppb		84
30) 2-butanone	4.682	72	3842	18.41	ppb	#	41
32) Hexane	3.899	41	52874	19.55	ppb	#	94
33) 1,1-dichloroethane	4.278	63	75520	18.96	ppb		98
34) tert-butyl ethyl ether	4.551	59	127408	19.98	ppb		99
36) 2,2-dichloropropane	4.852	77	50316	19.29	ppb		99
37) cis-1,2-dichloroethene	4.884	96	38014	20.37	ppb		94
38) bromochloromethane	5.220	128	18872	20.08	ppb	#	86

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145455.D
Acq On : 13 Sep 2015 11:01 am
Operator : andrewd1
Sample : ic5447-20.0
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 08:54:37 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:53:24 2015
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39)	chloroform	5.043	83	69124	19.44	ppb		100
41)	Tetrahydrofuran	5.253	42	14588	19.21	ppb		99
42)	1,1,1-trichloroethane	5.471	97	51804	20.14	ppb		95
44)	Cyclohexane	5.492	56	69636	19.83	ppb		98
45)	carbon tetrachloride	5.746	117	50533	20.18	ppb		97
46)	1,1-dichloropropene	5.624	75	45315	19.07	ppb		94
47)	benzene	5.922	78	122830	18.84	ppb		100
48)	1,2-dichloroethane	5.902	62	52694	19.68	ppb		99
49)	tert-amyl methyl ether	5.755	73	89761	20.24	ppb	#	57
50)	heptane	5.766	43	98800	20.00	ppb		94
51)	trichloroethene	6.581	95	34560	19.20	ppb		85
52)	1,2-dichloropropane	6.775	63	36255	20.07	ppb		99
53)	dibromomethane	7.093	93	22361	20.03	ppb		94
54)	bromodichloromethane	7.033	83	46703	19.73	ppb		99
55)	Methylcyclohexane	6.652	83	54061	20.49	ppb		100
56)	2-chloroethyl vinyl ether	7.357	63	11510	21.58	ppb		98
57)	methyl methacrylate	6.831	69	19881	19.49	ppb		93
58)	1,4-dioxane	7.066	88	1442m	132.39	ppb		
59)	cis-1,3-dichloropropene	7.620	75	51868	20.77	ppb		95
61)	4-methyl-2-pentanone	7.388	43	49534	21.08	ppb		97
62)	toluene	7.972	92	74295	19.56	ppb		98
63)	trans-1,3-dichloropropene	8.169	75	49253	20.51	ppb		95
64)	1,1,2-trichloroethane	8.339	83	24542	19.55	ppb		88
65)	ethyl methacrylate	8.154	69	36727	21.15	ppb		97
67)	tetrachloroethene	8.683	166	33672	19.93	ppb		96
68)	1,3-dichloropropane	8.615	76	45890	19.70	ppb		98
69)	dibromochloromethane	8.907	129	36835	20.05	ppb		99
70)	1,2-dibromoethane	9.127	107	31463	19.80	ppb		90
71)	2-hexanone	8.356	43	28848	20.99	ppb		96
72)	chlorobenzene	9.581	112	89627	19.43	ppb		98
73)	1,1,1,2-tetrachloroethane	9.627	131	33774	20.40	ppb		100
74)	ethylbenzene	9.634	91	143361	19.77	ppb		94
75)	m,p-xylene	9.718	106	110455	39.52	ppb		90
76)	o-xylene	10.196	106	55605	20.41	ppb		88
77)	styrene	10.235	104	95555	20.85	ppb		93
78)	bromoform	10.608	173	24203	21.95	ppb		98
79)	trans-1,4-dichloro-2-b...	10.641	53	12086	22.09	ppb		99
81)	isopropylbenzene	10.586	105	150548	20.24	ppb		96
83)	bromobenzene	11.077	156	39397	19.22	ppb		92
84)	1,1,2,2-tetrachloroethane	10.777	83	38025	18.26	ppb		91
85)	1,2,3-trichloropropane	10.936	75	27841	19.80	ppb		95
86)	n-propylbenzene	11.024	91	178913	19.62	ppb		96
87)	2-chlorotoluene	11.218	91	125323	20.11	ppb		92
88)	4-chlorotoluene	11.273	91	109981	19.26	ppb		89
89)	1,3,5-trimethylbenzene	11.197	105	129856	19.93	ppb		98
90)	tert-butylbenzene	11.592	91	90912	19.90	ppb		87
91)	1,2,4-trimethylbenzene	11.627	105	134399	20.81	ppb		98
92)	sec-butylbenzene	11.819	105	168221	20.81	ppb		96
93)	1,3-dichlorobenzene	12.075	146	74838	19.32	ppb		96
94)	p-isopropyltoluene	11.968	119	145413	22.02	ppb		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145455.D
Acq On : 13 Sep 2015 11:01 am
Operator : andrewd1
Sample : ic5447-20.0
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 08:54:37 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:53:24 2015
Response via : Initial Calibration

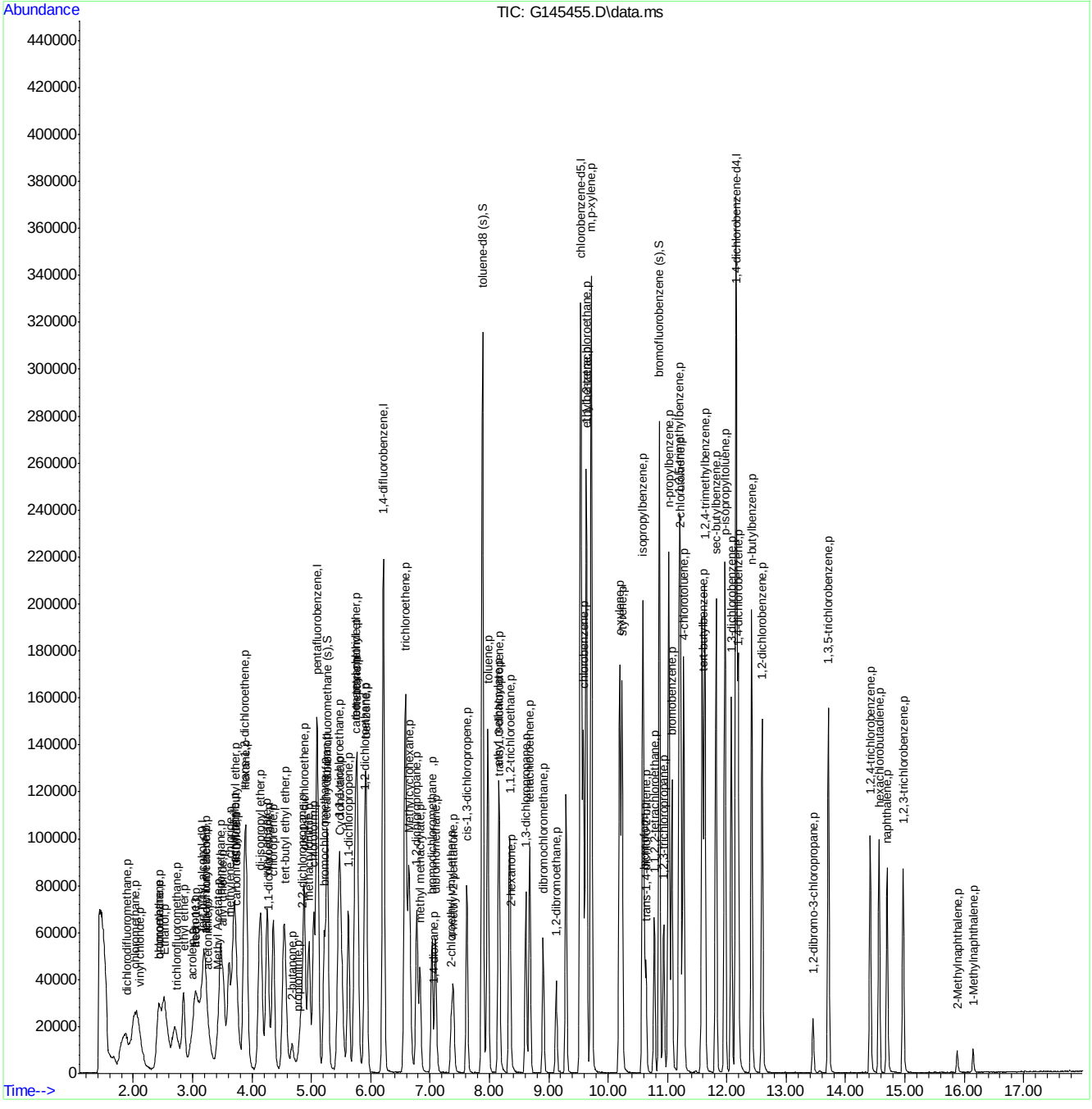
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
95) 1,4-dichlorobenzene	12.192	146	75486	19.06	ppb		92
96) 1,2-dichlorobenzene	12.597	146	72917	19.89	ppb		97
97) n-butylbenzene	12.417	91	129134	22.85	ppb		91
98) 1,2-dibromo-3-chloropr...	13.454	75	7104	19.80	ppb	#	72
99) 1,3,5-trichlorobenzene	13.712	180	57367	22.22	ppb		100
100) 1,2,4-trichlorobenzene	14.416	180	38175	22.33	ppb		99
101) hexachlorobutadiene	14.566	225	22461	19.95	ppb		97
102) naphthalene	14.704	128	83157	26.35	ppb		100
103) 2-Methylnaphthalene	15.886	142	5872	8.69	ppb		97
104) 1-Methylnaphthalene	16.150	142	5804	9.21	ppb		95
105) 1,2,3-trichlorobenzene	14.973	180	33150	22.38	ppb		98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145455.D
Acq On : 13 Sep 2015 11:01 am
Operator : andrewd1
Sample : ic5447-20.0
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 08:54:37 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:53:24 2015
Response via : Initial Calibration

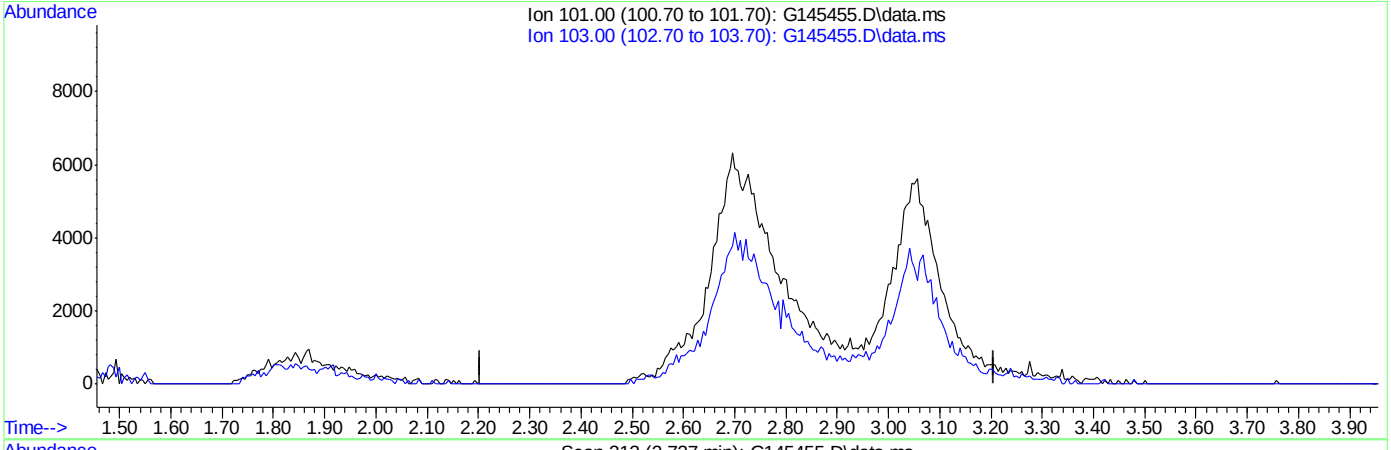


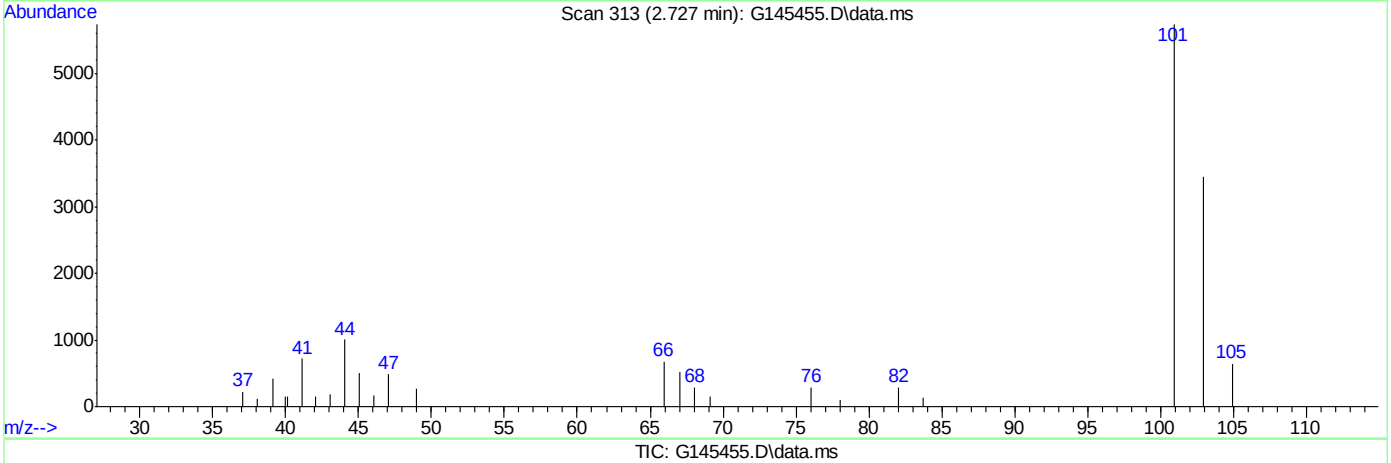
ACCUTEST LABORATORIES MC41356

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145455.D
Acq On : 13 Sep 2015 11:01 am
Operator : andrewd1
Sample : ic5447-20.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 08:53:28 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:53:24 2015
Response via : Initial Calibration





TIC: G145455.D\data.ms

(12) trichlorofluoromethane (p)

2.726min (-2.726) 0.00ppb

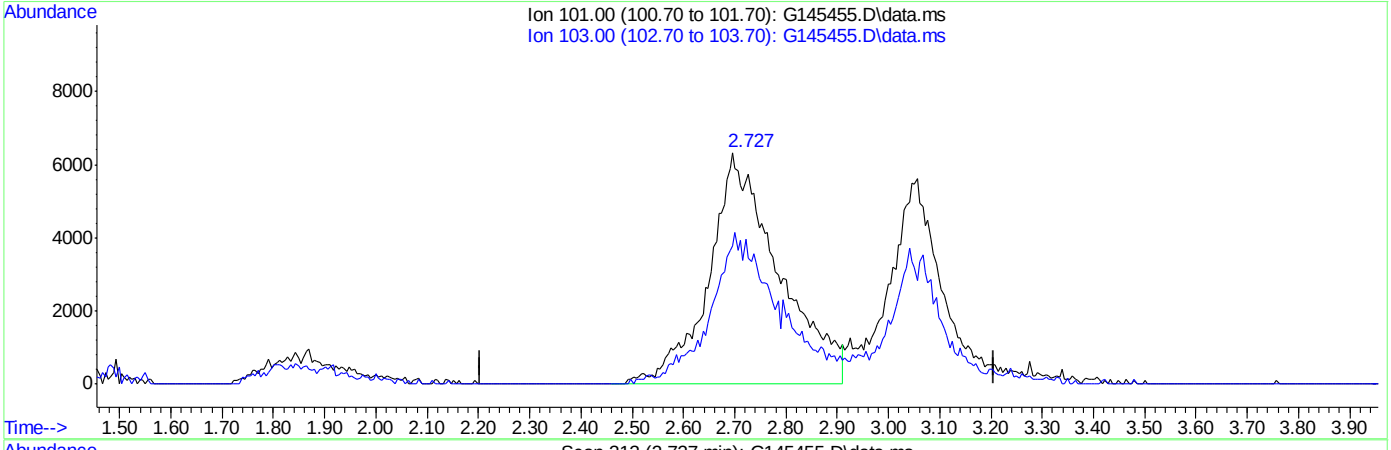
response 0

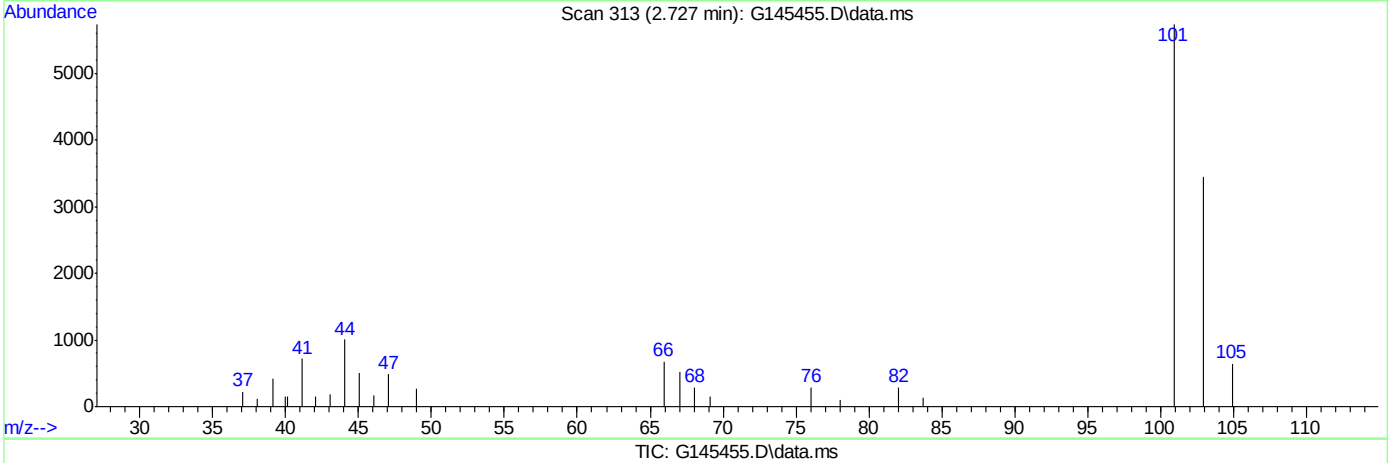
Ion	Exp%	Act%
101.00	100	0.00
103.00	62.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145455.D
Acq On : 13 Sep 2015 11:01 am
Operator : andrewd1
Sample : ic5447-20.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 08:53:28 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:53:24 2015
Response via : Initial Calibration





TIC: G145455.D\data.ms

(12) trichlorofluoromethane (p)

2.727min (+0.001) 22.80ppb m

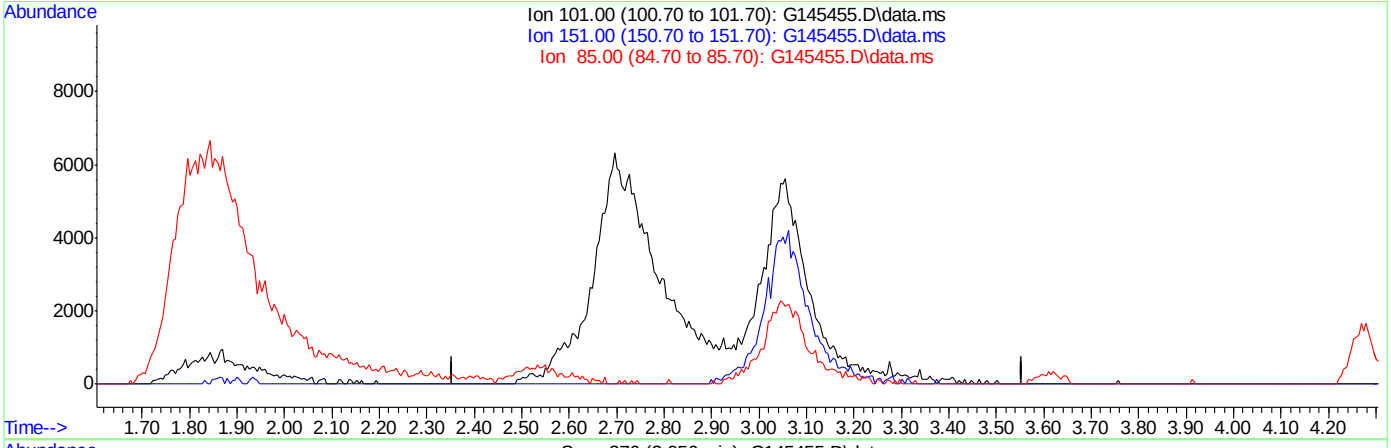
response 60082

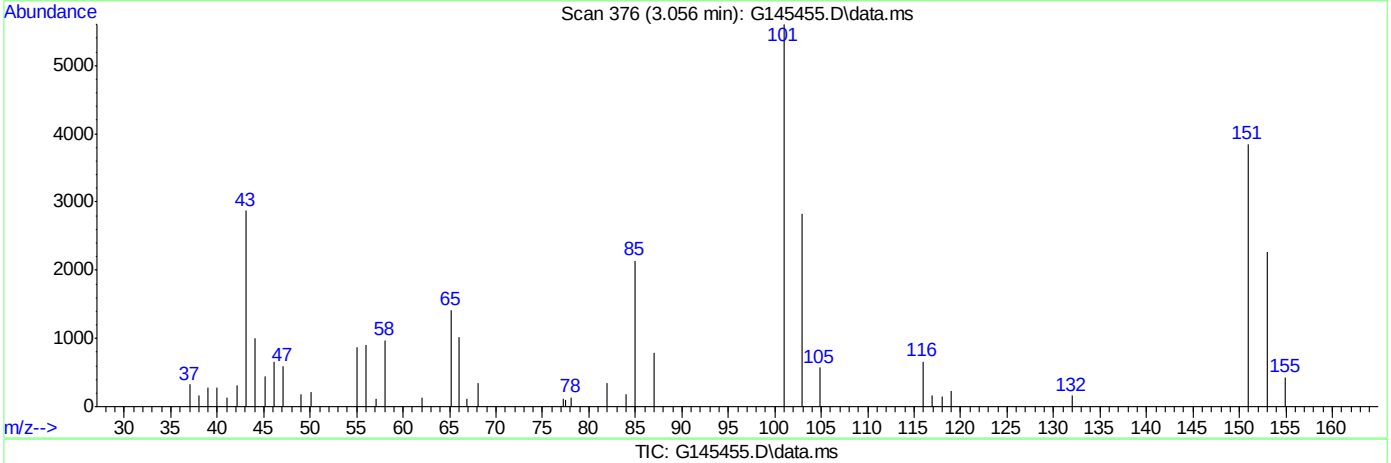
Ion	Exp%	Act%
101.00	100	100
103.00	62.20	60.10
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145455.D
Acq On : 13 Sep 2015 11:01 am
Operator : andrewd1
Sample : ic5447-20.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 08:53:28 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:53:24 2015
Response via : Initial Calibration





TIC: G145455.D\data.ms

(13) freon-113 (p)

3.055min (-3.055) 0.00ppb

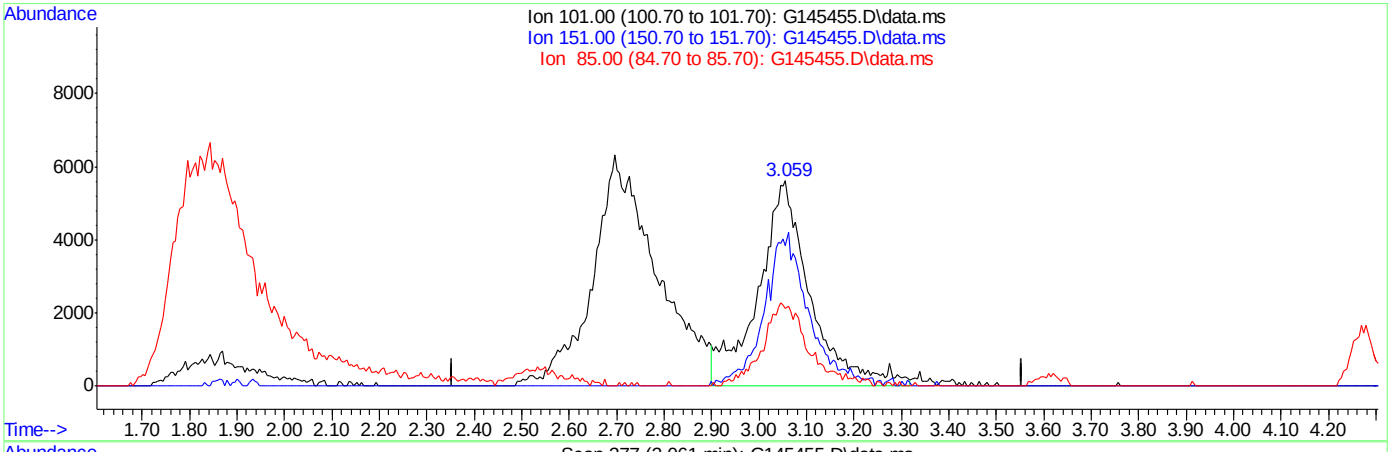
response 0

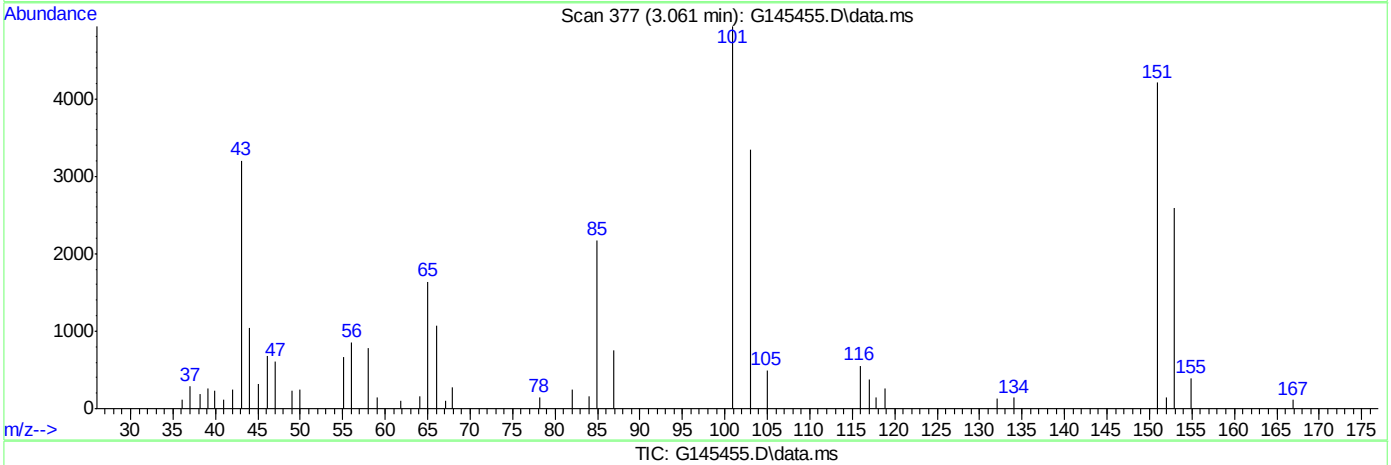
Ion	Exp%	Act%
101.00	100	0.00
151.00	91.80	0.00#
85.00	39.40	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145455.D
Acq On : 13 Sep 2015 11:01 am
Operator : andrewd1
Sample : ic5447-20.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 08:53:28 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:53:24 2015
Response via : Initial Calibration





TIC: G145455.D\data.ms

(13) freon-113 (p)

3.061min (+0.007) 22.26ppb m

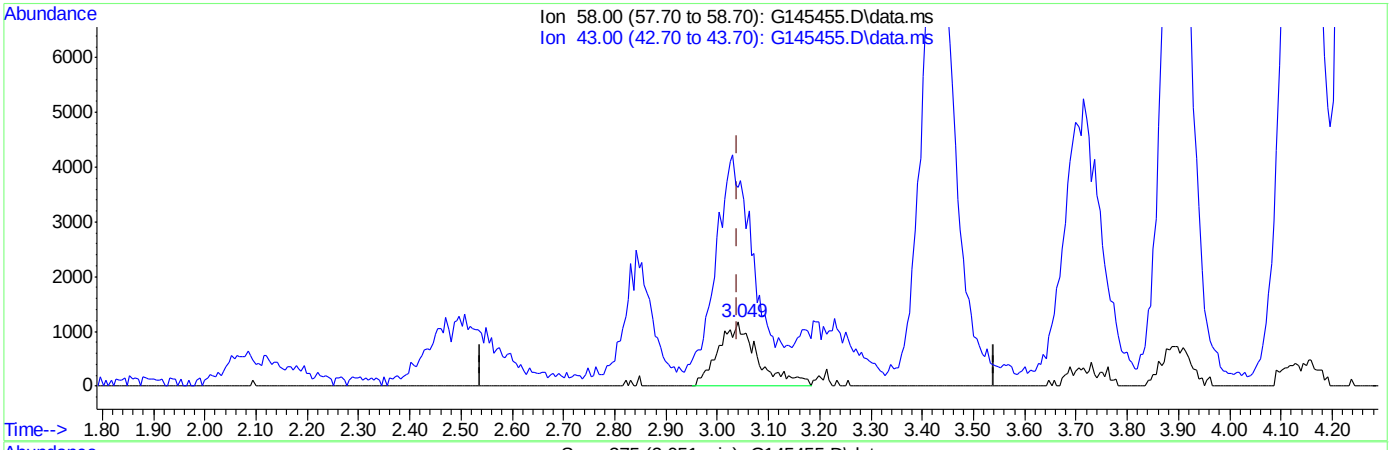
response 42931

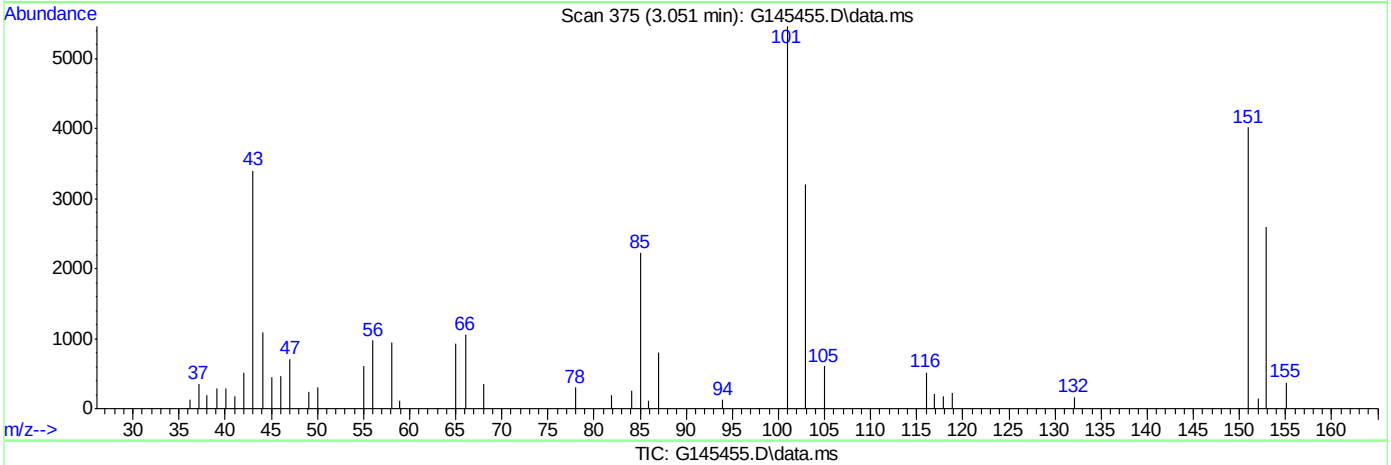
Ion	Exp%	Act%
101.00	100	100
151.00	91.80	85.20
85.00	39.40	44.10
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145455.D
Acq On : 13 Sep 2015 11:01 am
Operator : andrewd1
Sample : ic5447-20.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 08:53:28 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:53:24 2015
Response via : Initial Calibration





TIC: G145455.D\data.ms

(16) acetone (p)

3.049min (+0.009) 22.05ppb

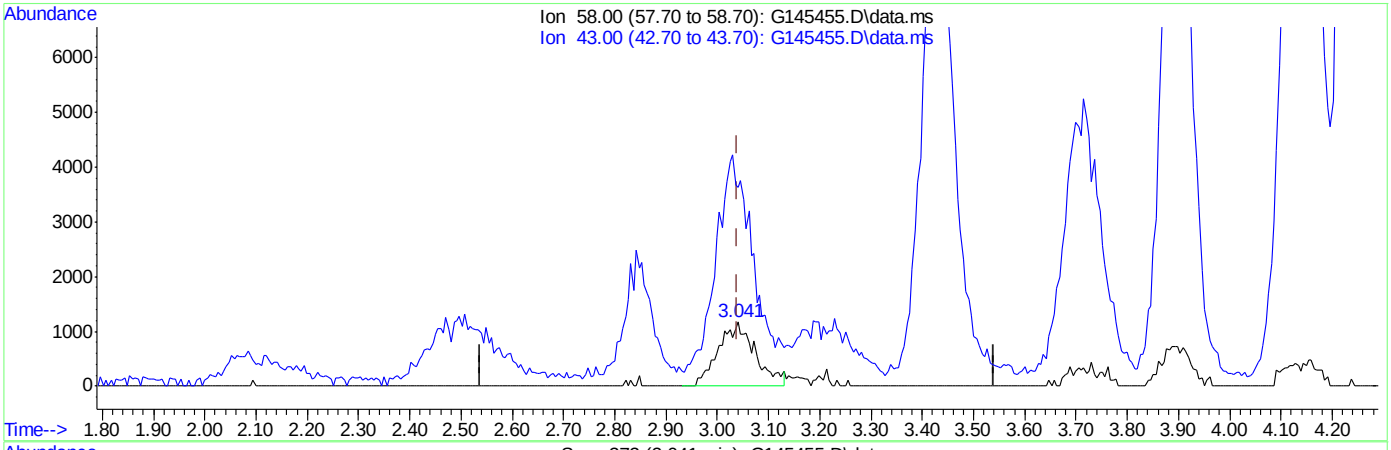
response 6267

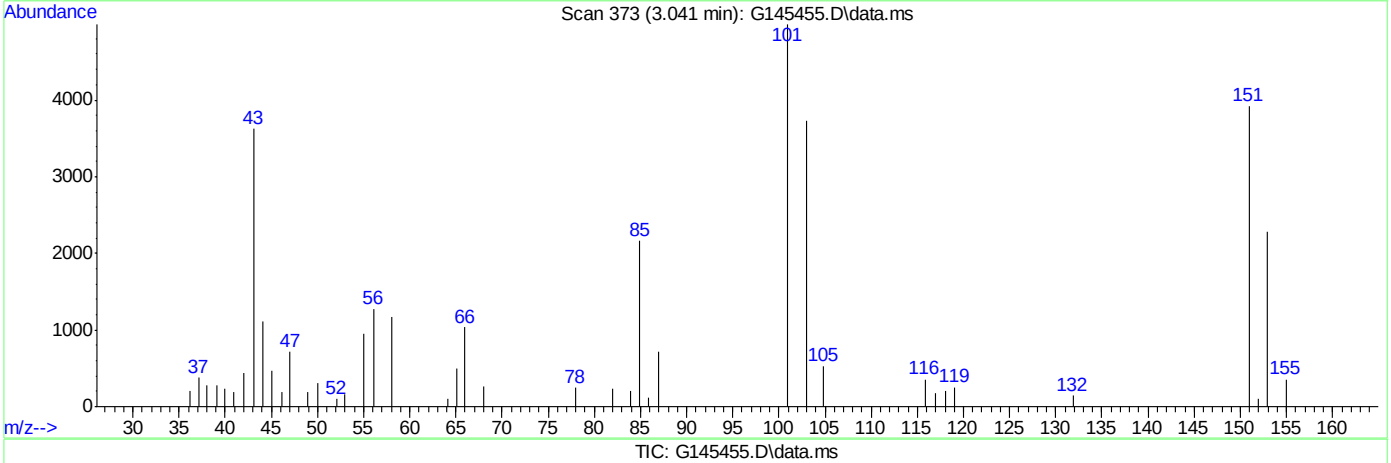
Ion	Exp%	Act%
58.00	100	100
43.00	336.30	310.08
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145455.D
Acq On : 13 Sep 2015 11:01 am
Operator : andrewd1
Sample : ic5447-20.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 08:53:28 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:53:24 2015
Response via : Initial Calibration





TIC: G145455.D\data.ms

(16) acetone (p)

3.041min (+0.001) 20.53ppb m

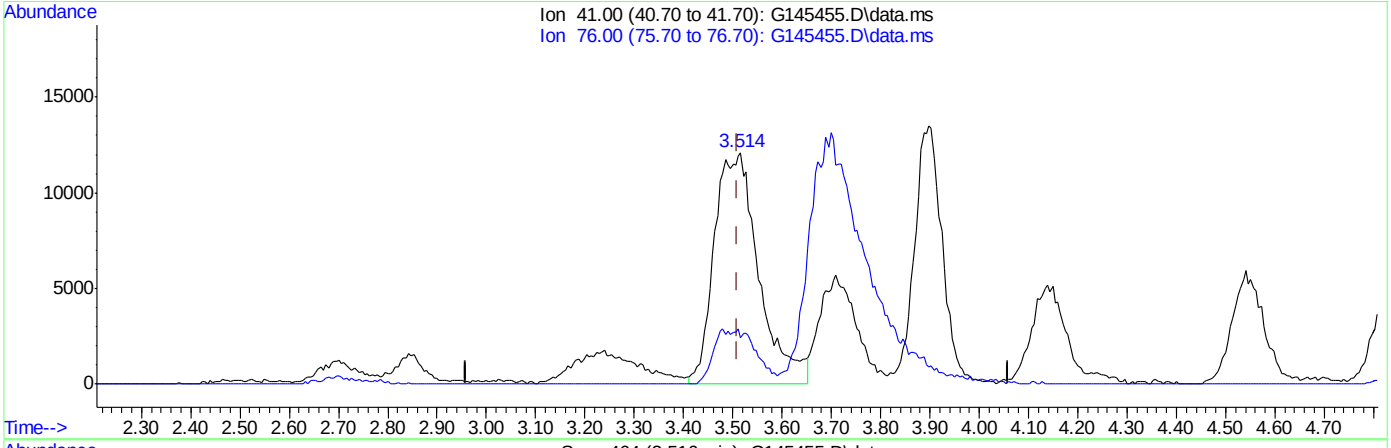
response 5837

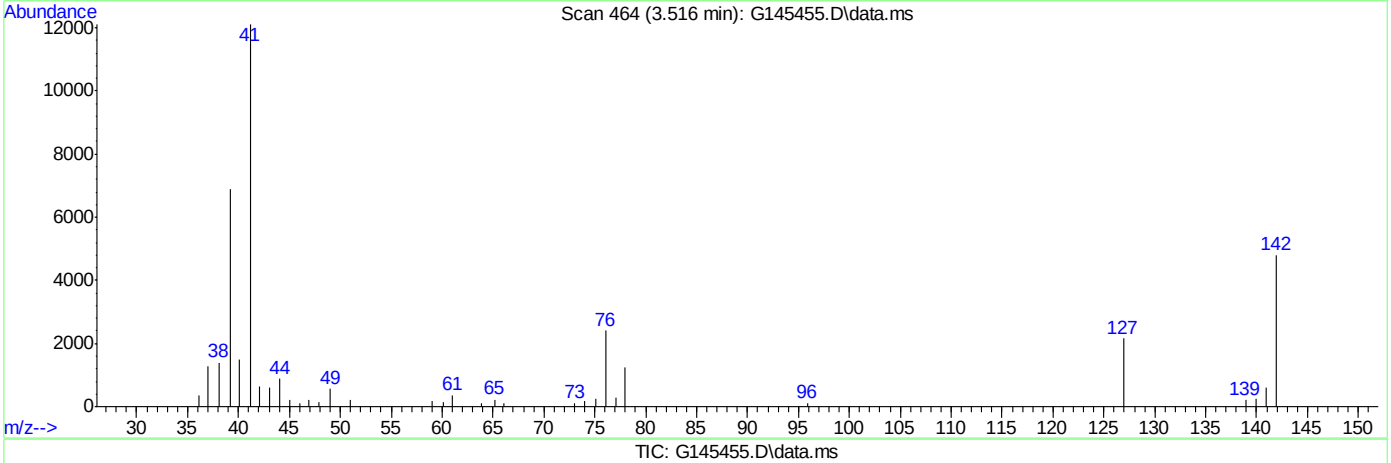
Ion	Exp%	Act%
58.00	100	100
43.00	336.30	309.13
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145455.D
Acq On : 13 Sep 2015 11:01 am
Operator : andrewd1
Sample : ic5447-20.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 08:53:28 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:53:24 2015
Response via : Initial Calibration





TIC: G145455.D\data.ms

(21) allyl chloride (p)

3.514min (+0.005) 19.32ppb

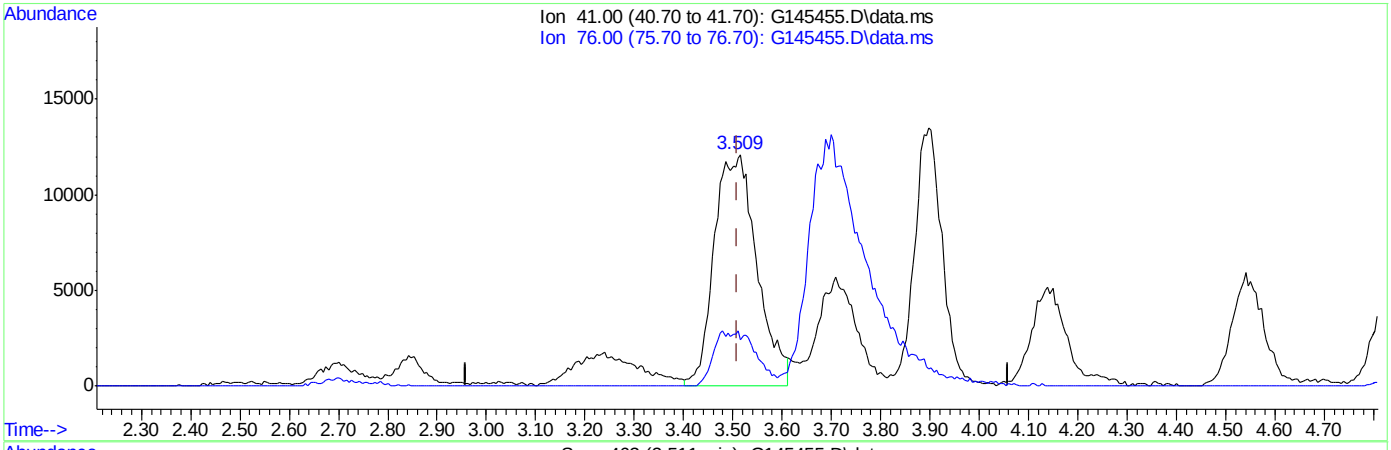
response 75908

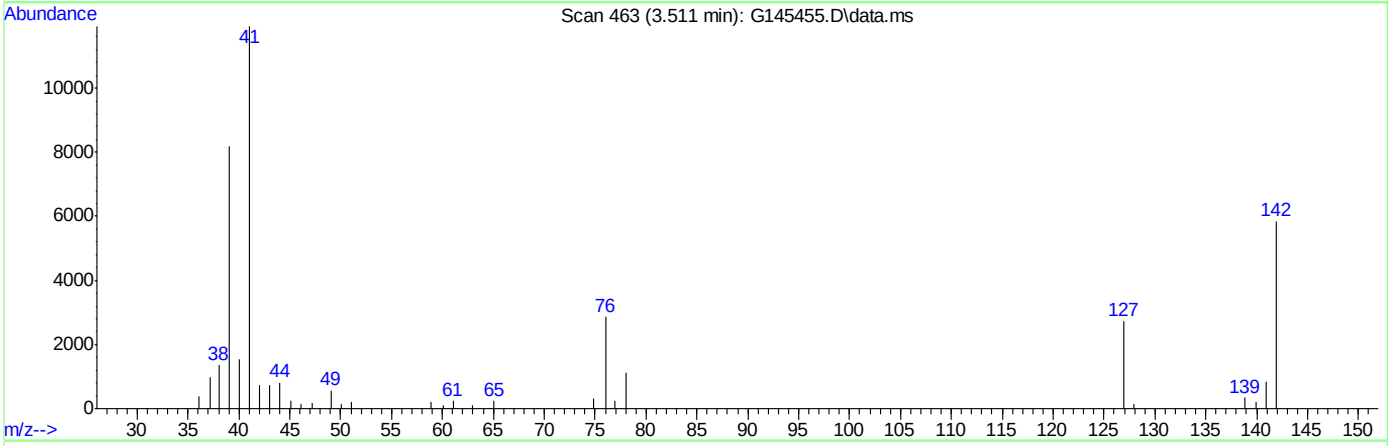
Ion	Exp%	Act%
41.00	100	100
76.00	28.10	20.45
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145455.D
Acq On : 13 Sep 2015 11:01 am
Operator : andrewd1
Sample : ic5447-20.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 08:53:28 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:53:24 2015
Response via : Initial Calibration





TIC: G145455.D\data.ms

(21) allyl chloride (p)

3.511min (+0.001) 18.55ppb m

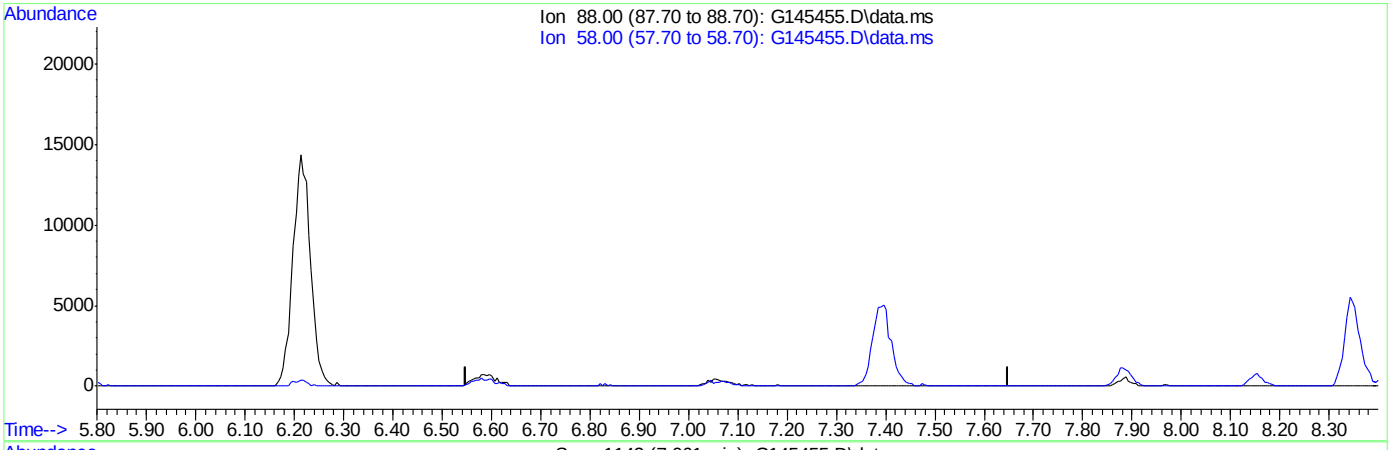
response 72878

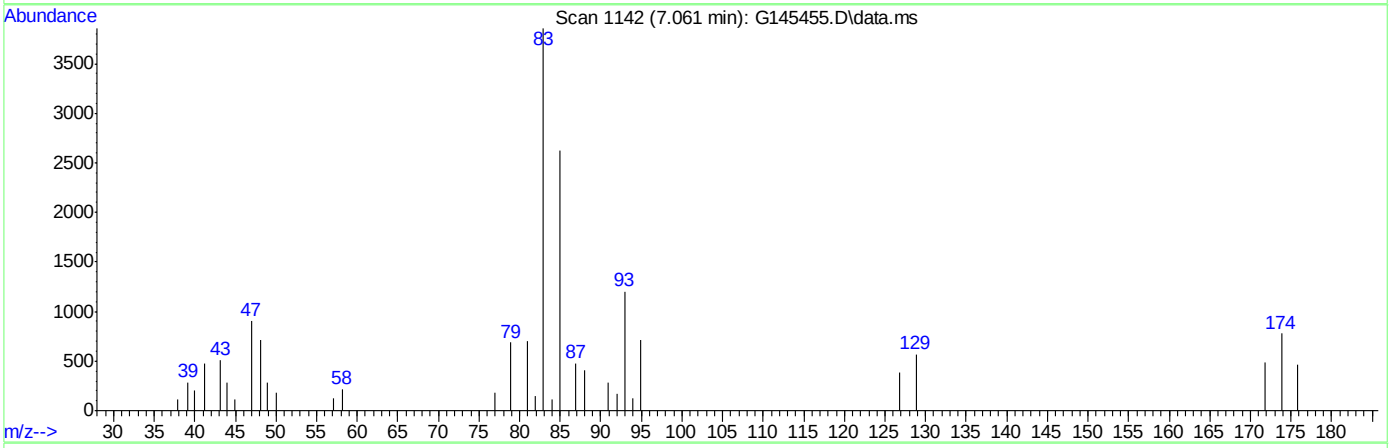
Ion	Exp%	Act%
41.00	100	100
76.00	28.10	24.02
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145455.D
Acq On : 13 Sep 2015 11:01 am
Operator : andrewd1
Sample : ic5447-20.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 08:53:28 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:53:24 2015
Response via : Initial Calibration





TIC: G145455.D\data.ms

(58) 1,4-dioxane (p)

7.060min (-7.060) 0.00ppb

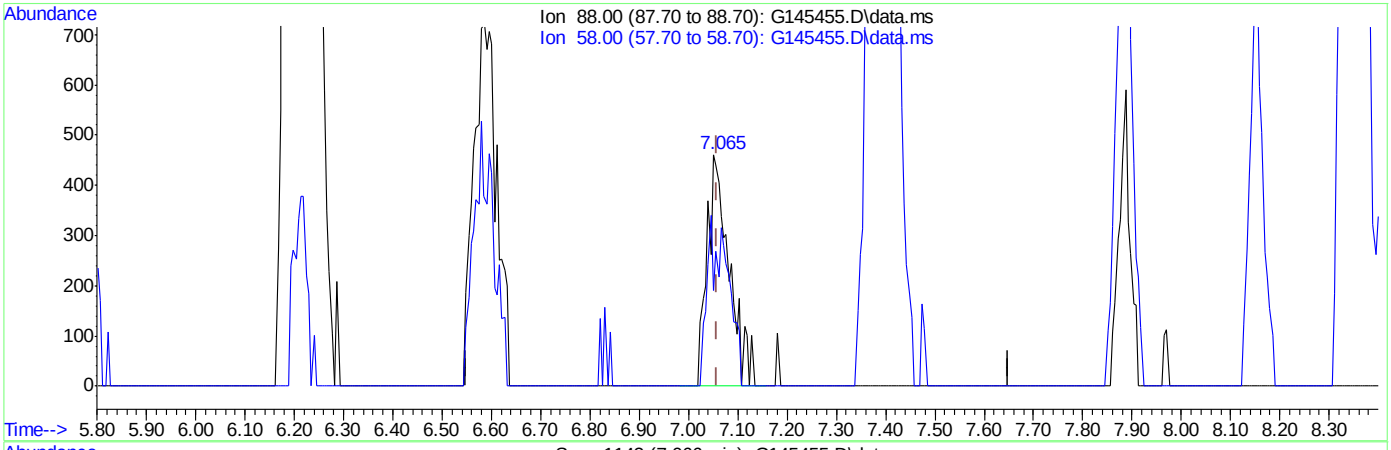
response 0

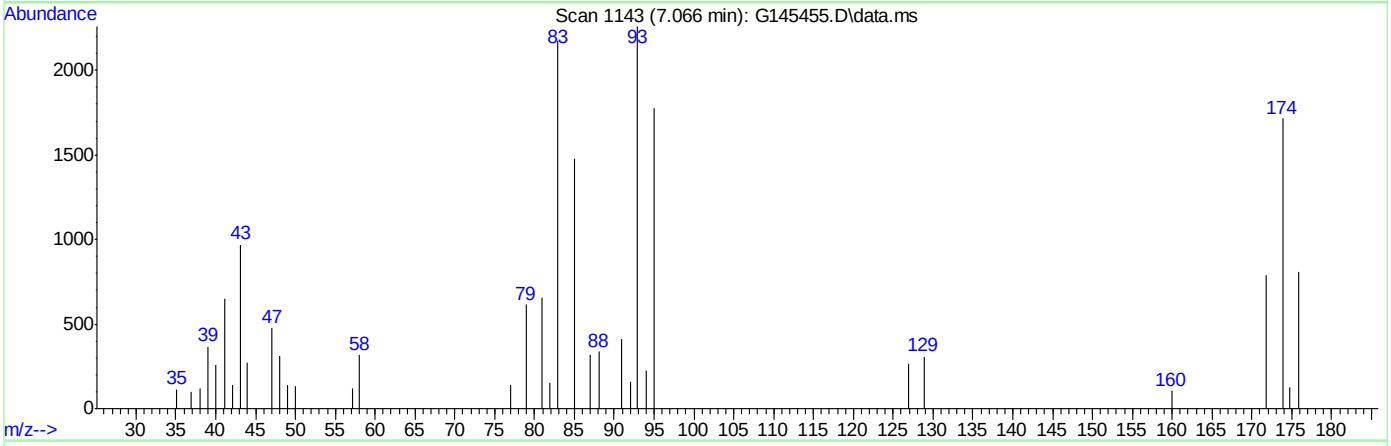
Ion	Exp%	Act%
88.00	100	0.00
58.00	88.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145455.D
Acq On : 13 Sep 2015 11:01 am
Operator : andrewd1
Sample : ic5447-20.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 08:53:28 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:53:24 2015
Response via : Initial Calibration





(58) 1,4-dioxane (p)

7.066min (+0.007) 132.39ppb m

response 1442

Ion	Exp%	Act%
88.00	100	100
58.00	88.20	93.77
0.00	0.00	0.00
0.00	0.00	0.00

G145456.D

Manual Integrations APPROVED (compounds with "m" flag)

Doug Yargeau 09/14/15 19:20

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145456.D
Acq On : 13 Sep 2015 11:29 am
Operator : andrewd1
Sample : icc5447-50.0
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 14 08:56:08 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:55:06 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	3.158	65	80990	500.00	ppb		0.00
4) pentafluorobenzene	5.101	168	150574	50.00	ppb		0.00
43) 1,4-difluorobenzene	6.216	114	242451	50.00	ppb		0.00
66) chlorobenzene-d5	9.538	82	115358	50.00	ppb		0.00
80) 1,4-dichlorobenzene-d4	12.157	152	113483	50.00	ppb		0.00
System Monitoring Compounds							
40) dibromofluoromethane (s)	5.270	113	87242	51.55	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.10%				
60) toluene-d8 (s)	7.885	98	272165	50.87	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.74%				
82) bromofluorobenzene (s)	10.863	95	106823	48.20	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 96.40%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	3.225	59	110178	507.08	ppb		97
3) Ethanol	2.527	45	134429	5356.28	ppb	#	41
5) dichlorodifluoromethane	1.932	85	196864	51.90	ppb		94
6) chloromethane	2.026	50	141854	40.67	ppb		99
7) vinyl chloride	2.106	62	107241	45.60	ppb		99
8) bromomethane	2.436	96	59439	47.46	ppb		94
9) chloroethane	2.444	64	51210	45.82	ppb		77
10) ethyl ether	2.854	59	83775	51.54	ppb		93
11) acetonitrile	3.254	41	39450	47.56	ppb	#	57
12) trichlorofluoromethane	2.725	101	127938m	47.77	ppb		
13) freon-113	3.054	101	105180m	53.41	ppb		
14) acrolein	3.020	56	41754	248.10	ppb		99
15) 1,1-dichloroethene	3.228	96	82587	49.97	ppb		90
16) acetone	3.033	58	14257m	50.17	ppb		
17) Methyl Acetate	3.430	43	106971	40.56	ppb	#	96
18) methylene chloride	3.621	84	87411	49.18	ppb		92
19) methyl tert butyl ether	3.720	73	254177	49.82	ppb		99
20) acrylonitrile	3.706	53	49519	51.26	ppb		96
21) allyl chloride	3.509	41	190881m	49.52	ppb		
22) trans-1,2-dichloroethene	3.882	96	85209	49.48	ppb		90
23) iodomethane	3.478	142	143450	49.44	ppb		84
24) carbon disulfide	3.730	76	266134	49.99	ppb		96
25) propionitrile	4.767	54	17594	51.88	ppb		100
26) vinyl acetate	4.248	43	271099	49.84	ppb		95
27) chloroprene	4.363	53	179857	51.62	ppb		93
28) di-isopropyl ether	4.143	45	388283	48.59	ppb		96
29) methacrylonitrile	4.960	41	88844	51.68	ppb		84
30) 2-butanone	4.678	72	10536	51.87	ppb	#	62
32) Hexane	3.897	41	127708	47.76	ppb		97
33) 1,1-dichloroethane	4.278	63	190341	48.49	ppb		96
34) tert-butyl ethyl ether	4.551	59	323983	51.15	ppb		98
36) 2,2-dichloropropane	4.850	77	127676	49.63	ppb		97
37) cis-1,2-dichloroethene	4.883	96	93885	50.50	ppb		89
38) bromochloromethane	5.220	128	47734	51.09	ppb		88

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145456.D
Acq On : 13 Sep 2015 11:29 am
Operator : andrewd1
Sample : icc5447-50.0
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 14 08:56:08 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:55:06 2015
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
39)	chloroform	5.043	83	171695	48.82	ppb	98
41)	Tetrahydrofuran	5.253	42	36556	48.95	ppb	96
42)	1,1,1-trichloroethane	5.472	97	133942	52.37	ppb	97
44)	Cyclohexane	5.491	56	176585	49.33	ppb	95
45)	carbon tetrachloride	5.746	117	126917	49.57	ppb	99
46)	1,1-dichloropropene	5.625	75	118152	49.15	ppb	96
47)	benzene	5.922	78	310848	47.08	ppb	98
48)	1,2-dichloroethane	5.902	62	134654	49.37	ppb	95
49)	tert-amyl methyl ether	5.748	73	227813	50.22	ppb	81
50)	heptane	5.767	43	251573	49.88	ppb	97
51)	trichloroethene	6.581	95	86594	47.39	ppb	88
52)	1,2-dichloropropane	6.775	63	91763	49.72	ppb	100
53)	dibromomethane	7.093	93	57206	50.16	ppb	94
54)	bromodichloromethane	7.033	83	119718	49.65	ppb	99
55)	Methylcyclohexane	6.653	83	135651	50.12	ppb	98
56)	2-chloroethyl vinyl ether	7.357	63	28080	50.57	ppb	97
57)	methyl methacrylate	6.830	69	54920	53.06	ppb	97
58)	1,4-dioxane	7.071	88	4343	361.26	ppb	92
59)	cis-1,3-dichloropropene	7.619	75	135866	53.00	ppb	97
61)	4-methyl-2-pentanone	7.387	43	128841	53.13	ppb	96
62)	toluene	7.972	92	189084	48.91	ppb	99
63)	trans-1,3-dichloropropene	8.168	75	128941	52.40	ppb	95
64)	1,1,2-trichloroethane	8.339	83	61647	48.27	ppb	94
65)	ethyl methacrylate	8.152	69	97013	54.10	ppb	95
67)	tetrachloroethene	8.682	166	83255	47.88	ppb	96
68)	1,3-dichloropropane	8.614	76	118462	49.52	ppb	97
69)	dibromochloromethane	8.907	129	97696	51.62	ppb	100
70)	1,2-dibromoethane	9.126	107	81615	49.97	ppb	96
71)	2-hexanone	8.353	43	75464	52.66	ppb	99
72)	chlorobenzene	9.580	112	225154	47.58	ppb	94
73)	1,1,1,2-tetrachloroethane	9.627	131	85886	50.20	ppb	98
74)	ethylbenzene	9.633	91	367843	49.34	ppb	94
75)	m,p-xylene	9.718	106	282962	98.48	ppb	92
76)	o-xylene	10.196	106	142940	50.79	ppb	88
77)	styrene	10.234	104	243338	51.19	ppb	91
78)	bromoform	10.608	173	61510	53.29	ppb	99
79)	trans-1,4-dichloro-2-b...	10.640	53	35043	60.61	ppb	93
81)	isopropylbenzene	10.586	105	380839	49.50	ppb	97
83)	bromobenzene	11.077	156	100032	47.65	ppb	98
84)	1,1,2,2-tetrachloroethane	10.777	83	97910	46.11	ppb	96
85)	1,2,3-trichloropropane	10.936	75	71103	49.11	ppb	99
86)	n-propylbenzene	11.024	91	450620	48.03	ppb	94
87)	2-chlorotoluene	11.218	91	308274	47.87	ppb	93
88)	4-chlorotoluene	11.272	91	283802	48.51	ppb	91
89)	1,3,5-trimethylbenzene	11.197	105	334119	49.69	ppb	97
90)	tert-butylbenzene	11.591	91	232415	49.33	ppb	85
91)	1,2,4-trimethylbenzene	11.627	105	345155	51.47	ppb	95
92)	sec-butylbenzene	11.818	105	429669	51.14	ppb	94
93)	1,3-dichlorobenzene	12.074	146	189450	47.61	ppb	94
94)	p-isopropyltoluene	11.968	119	374422	54.02	ppb	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145456.D
Acq On : 13 Sep 2015 11:29 am
Operator : andrewd1
Sample : icc5447-50.0
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 14 08:56:08 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:55:06 2015
Response via : Initial Calibration

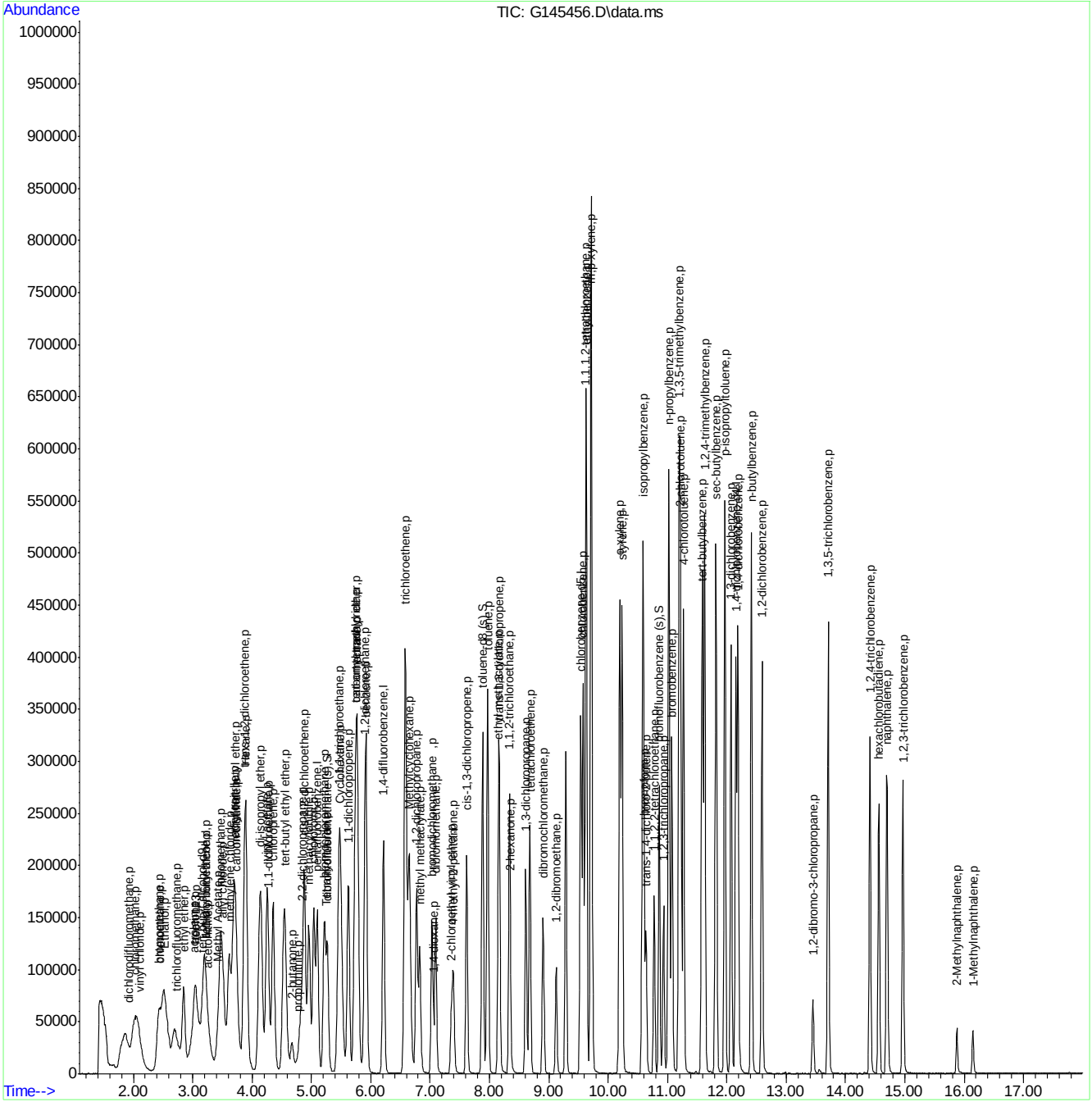
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
95) 1,4-dichlorobenzene	12.192	146	195127	48.06	ppb		98
96) 1,2-dichlorobenzene	12.597	146	189418	50.10	ppb		96
97) n-butylbenzene	12.415	91	340251	56.97	ppb		92
98) 1,2-dibromo-3-chloropr...	13.453	75	20935	56.67	ppb	#	66
99) 1,3,5-trichlorobenzene	13.711	180	155633	57.13	ppb		99
100) 1,2,4-trichlorobenzene	14.414	180	118068	65.01	ppb		100
101) hexachlorobutadiene	14.565	225	59925	51.60	ppb		98
102) naphthalene	14.701	128	270220	77.99	ppb		100
103) 2-Methylnaphthalene	15.884	142	24605	36.88	ppb		98
104) 1-Methylnaphthalene	16.150	142	22584	35.65	ppb		97
105) 1,2,3-trichlorobenzene	14.971	180	100702	63.95	ppb		98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145456.D
Acq On : 13 Sep 2015 11:29 am
Operator : andrewd1
Sample : icc5447-50.0
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 14 08:56:08 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:55:06 2015
Response via : Initial Calibration

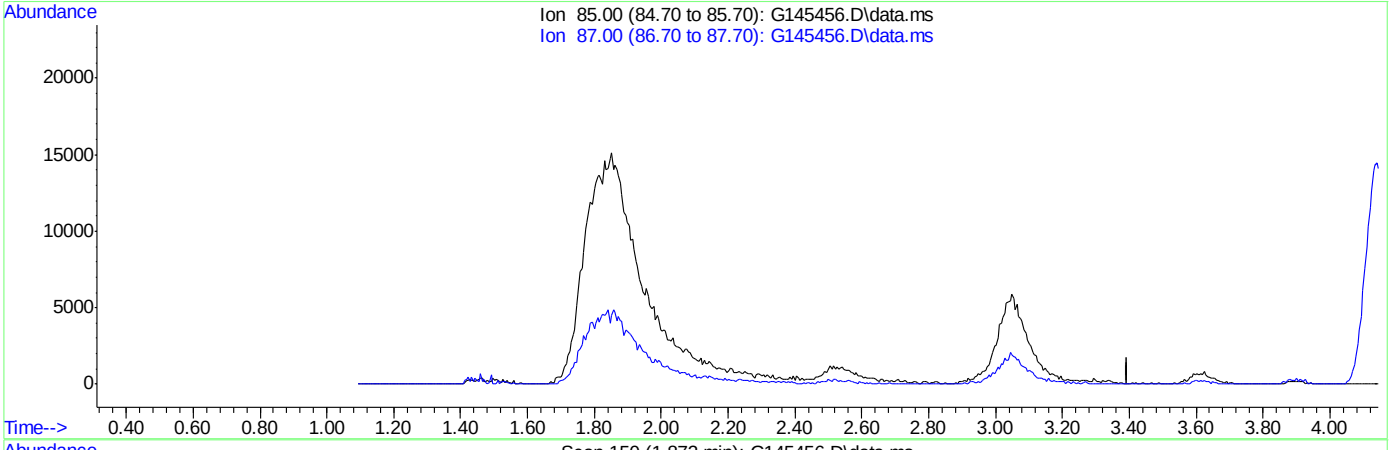


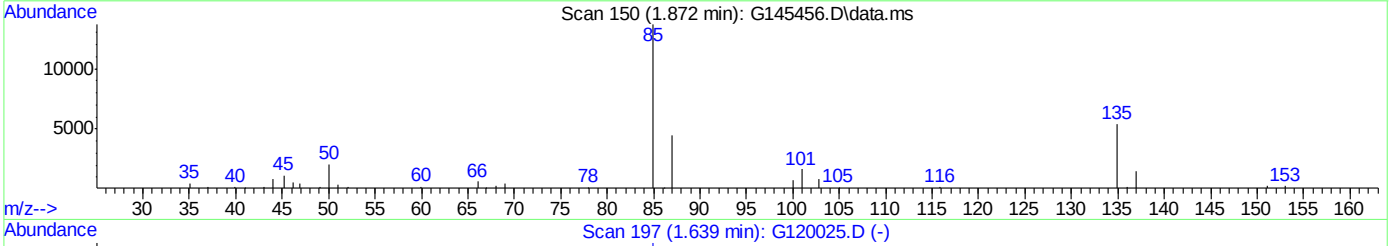
ACCUTEST LABORATORIES MC41356

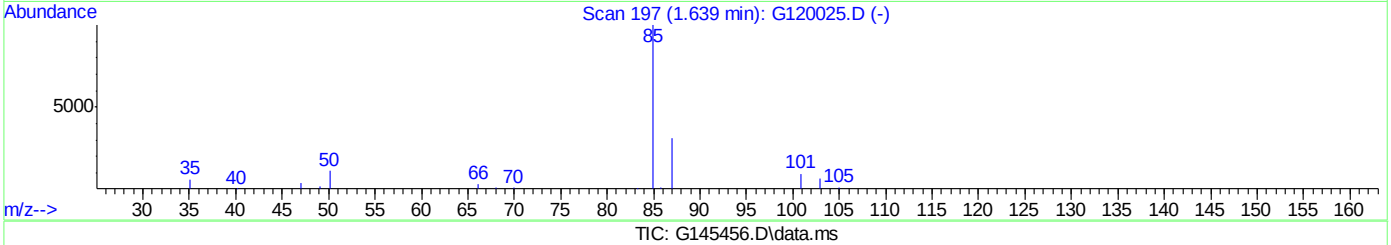
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145456.D
Acq On : 13 Sep 2015 11:29 am
Operator : andrewd1
Sample : icc5447-50.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 13 12:49:22 2015
Quant Method : C:\msdchem\1\METHODS\g150909w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Sep 10 11:49:45 2015
Response via : Initial Calibration







TIC: G145456.D\data.ms

(5) dichlorodifluoromethane (p)

1.873min (-1.873) 0.00ppb

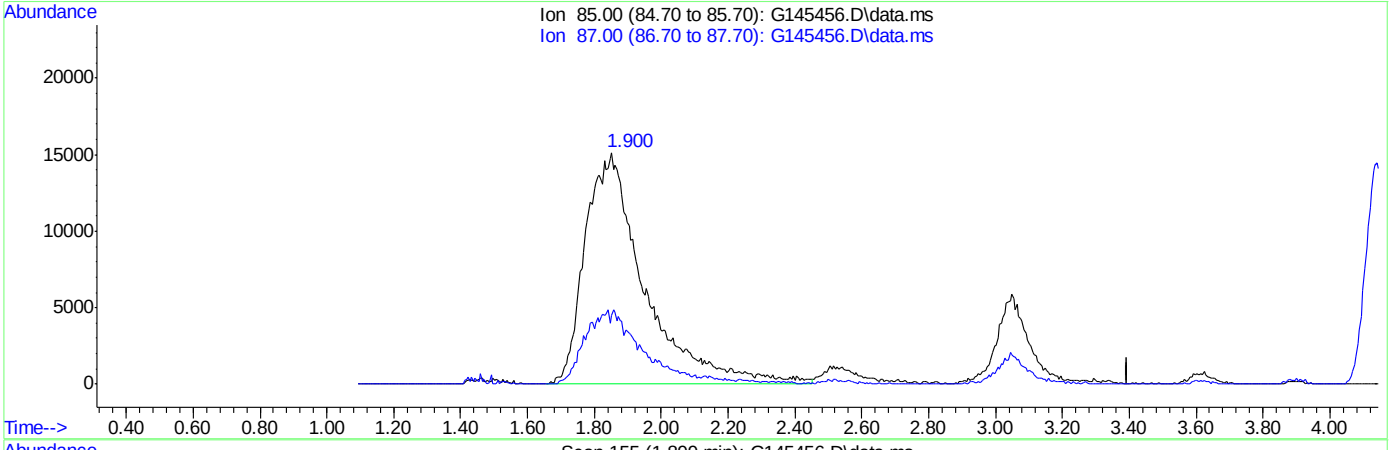
response 0

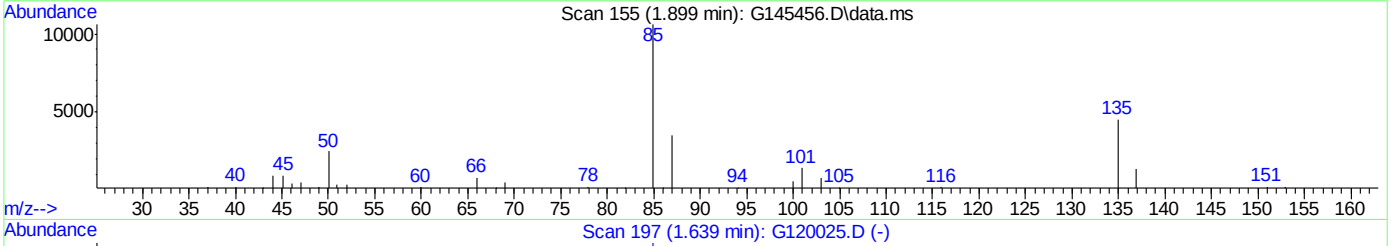
Ion	Exp%	Act%
85.00	100	0.00
87.00	32.00	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

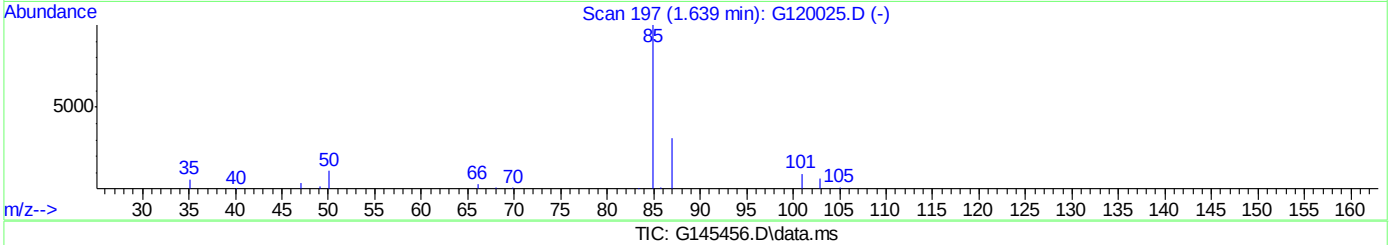
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145456.D
Acq On : 13 Sep 2015 11:29 am
Operator : andrewd1
Sample : icc5447-50.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 13 12:49:22 2015
Quant Method : C:\msdchem\1\METHODS\g150909w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Sep 10 11:49:45 2015
Response via : Initial Calibration







TIC: G145456.D\data.ms

(5) dichlorodifluoromethane (p)

1.899min (+0.026) 99.47ppb m

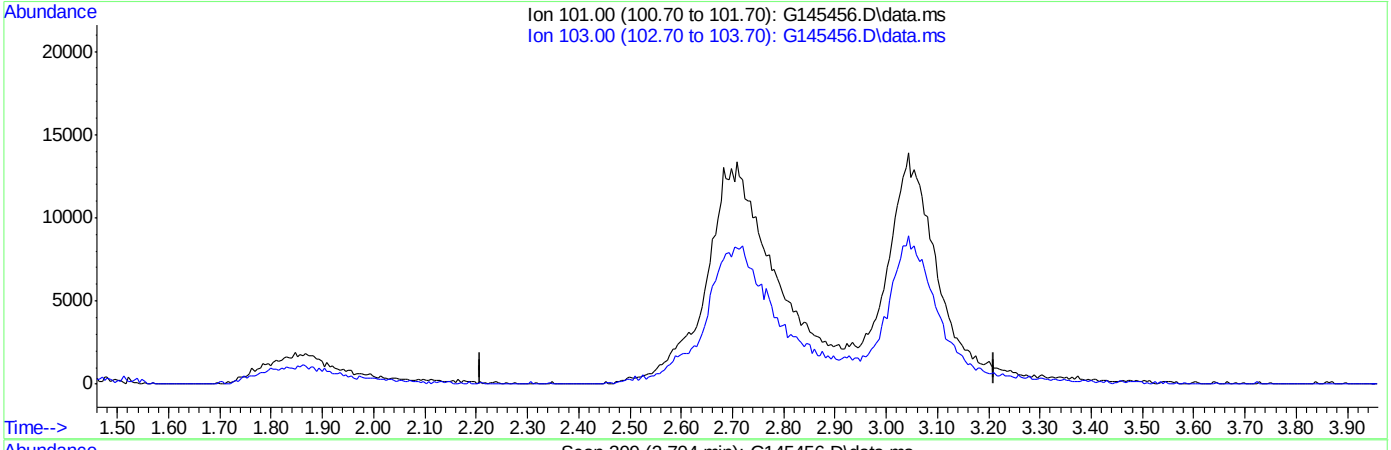
response 187311

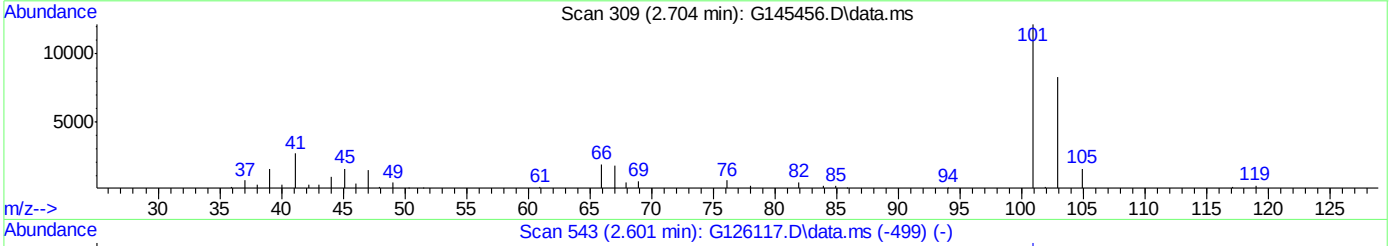
Ion	Exp%	Act%
85.00	100	100
87.00	32.00	32.63
0.00	0.00	0.00
0.00	0.00	0.00

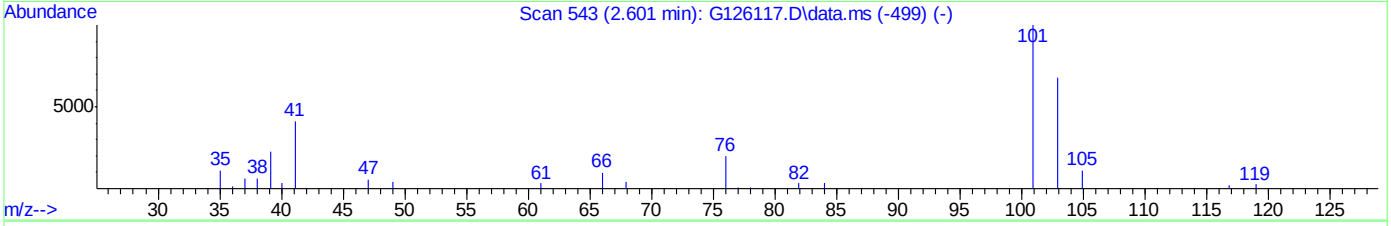
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145456.D
Acq On : 13 Sep 2015 11:29 am
Operator : andrewd1
Sample : icc5447-50.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 13 12:49:22 2015
Quant Method : C:\msdchem\1\METHODS\g150909w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Sep 10 11:49:45 2015
Response via : Initial Calibration







TIC: G145456.D\data.ms

(12) trichlorofluoromethane (p)

2.730min (-2.730) 0.00ppb

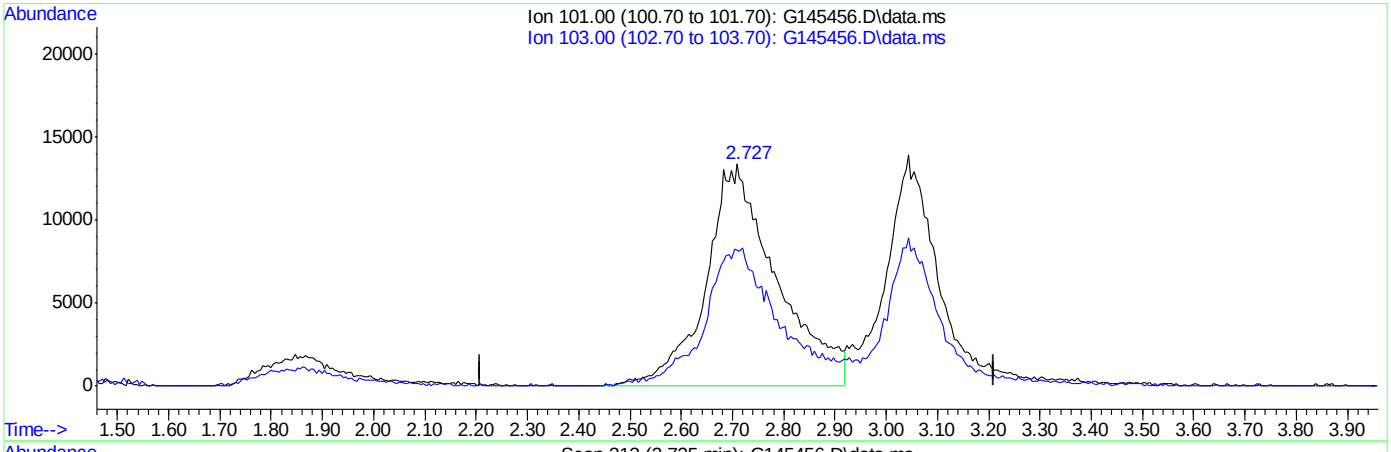
response 0

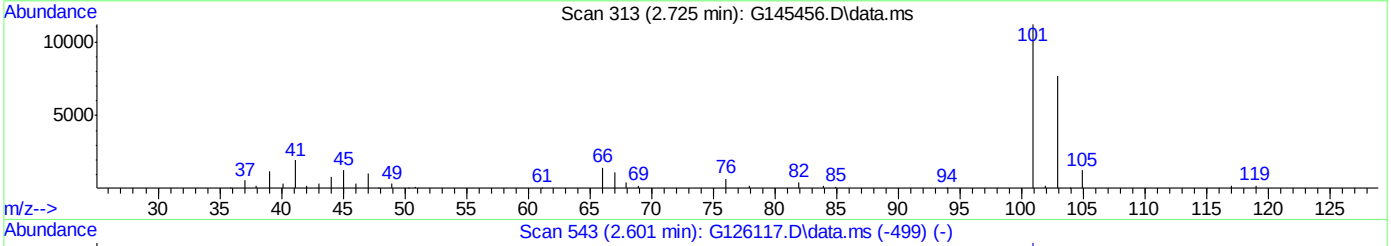
Ion	Exp%	Act%
101.00	100	0.00
103.00	62.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

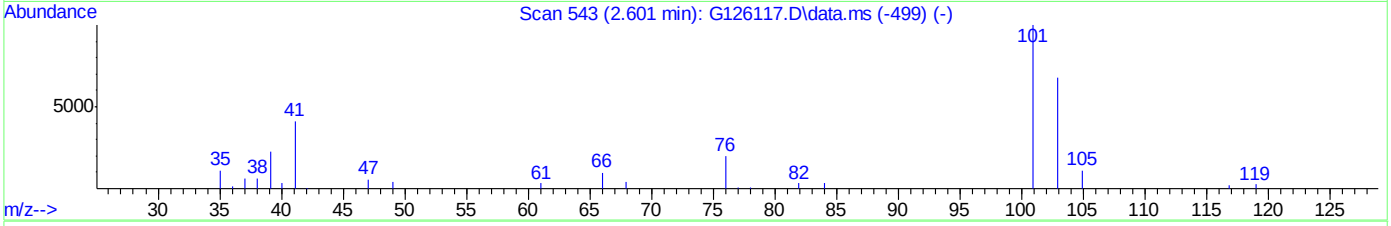
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145456.D
Acq On : 13 Sep 2015 11:29 am
Operator : andrewd1
Sample : icc5447-50.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 13 12:49:22 2015
Quant Method : C:\msdchem\1\METHODS\g150909w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Sep 10 11:49:45 2015
Response via : Initial Calibration







TIC: G145456.D\data.ms

(12) trichlorofluoromethane (p)

2.725min (-0.005) 73.78ppb m

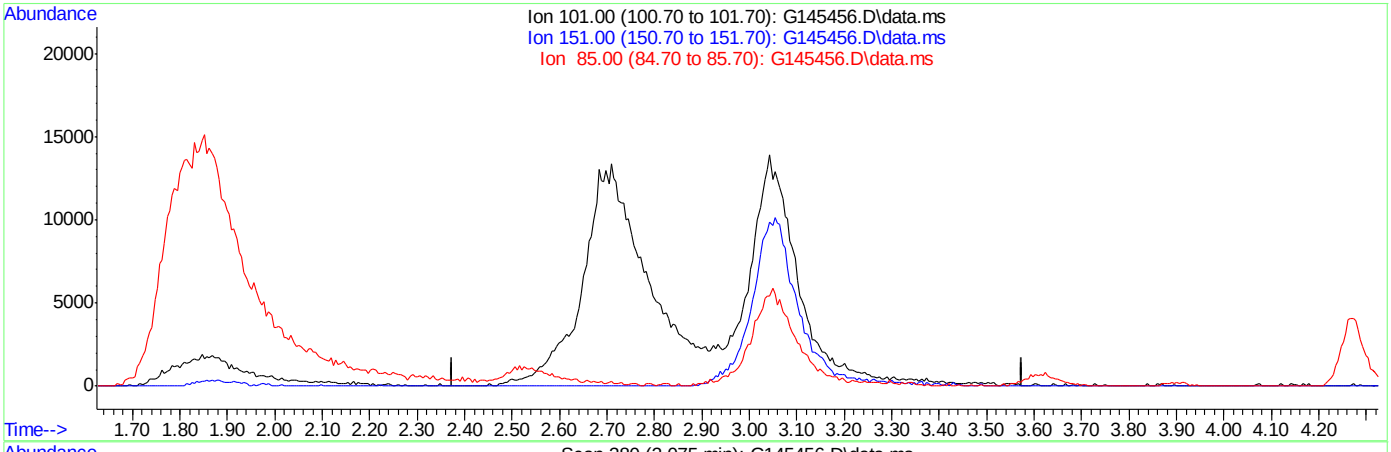
response 128607

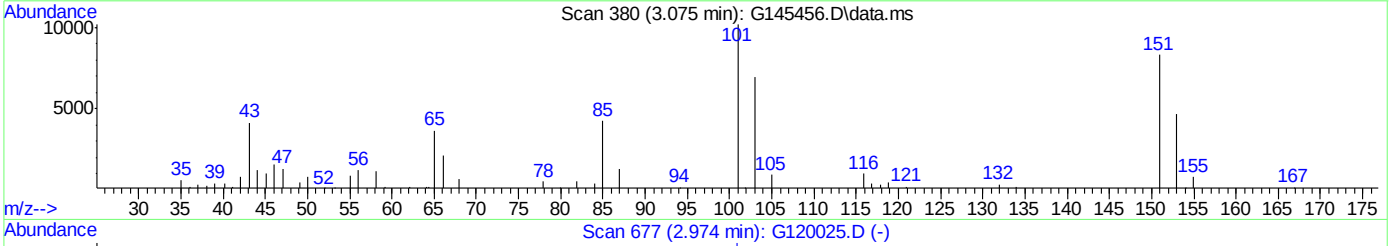
Ion	Exp%	Act%
101.00	100	100
103.00	62.20	69.12
0.00	0.00	0.00
0.00	0.00	0.00

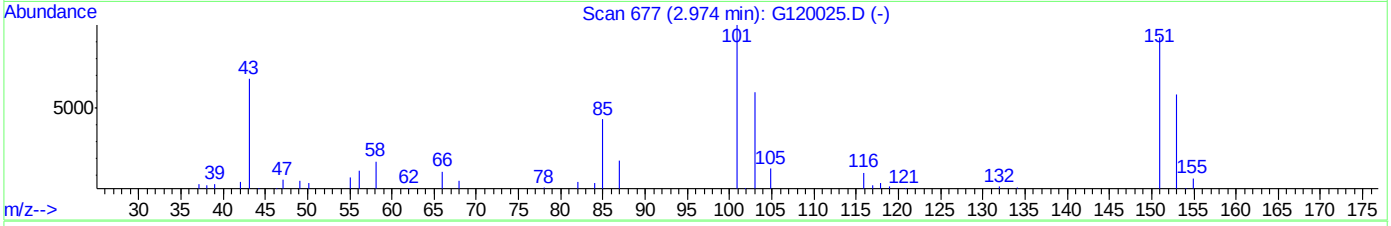
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145456.D
Acq On : 13 Sep 2015 11:29 am
Operator : andrewd1
Sample : icc5447-50.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 13 12:49:22 2015
Quant Method : C:\msdchem\1\METHODS\g150909w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Sep 10 11:49:45 2015
Response via : Initial Calibration







TIC: G145456.D\data.ms

(13) freon-113 (p)

3.075min (-3.075) 0.00ppb

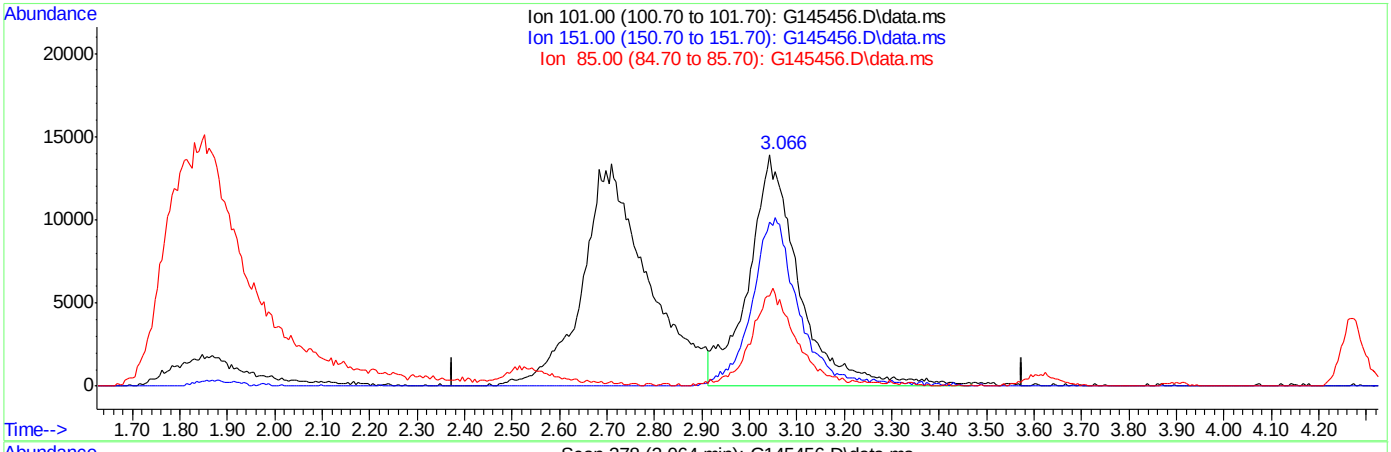
response 0

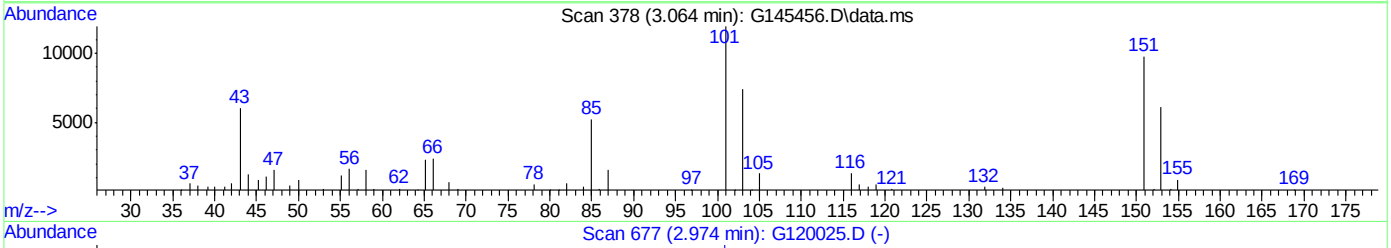
Ion	Exp%	Act%
101.00	100	0.00
151.00	91.80	0.00#
85.00	39.40	0.00#
0.00	0.00	0.00

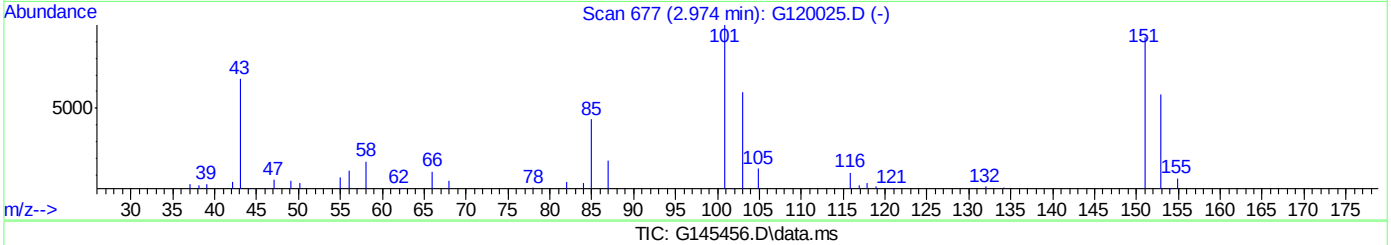
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145456.D
Acq On : 13 Sep 2015 11:29 am
Operator : andrewd1
Sample : icc5447-50.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 13 12:49:22 2015
Quant Method : C:\msdchem\1\METHODS\g150909w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Sep 10 11:49:45 2015
Response via : Initial Calibration







TIC: G145456.D\data.ms

(13) freon-113 (p)

3.064min (-0.011) 75.44ppb m

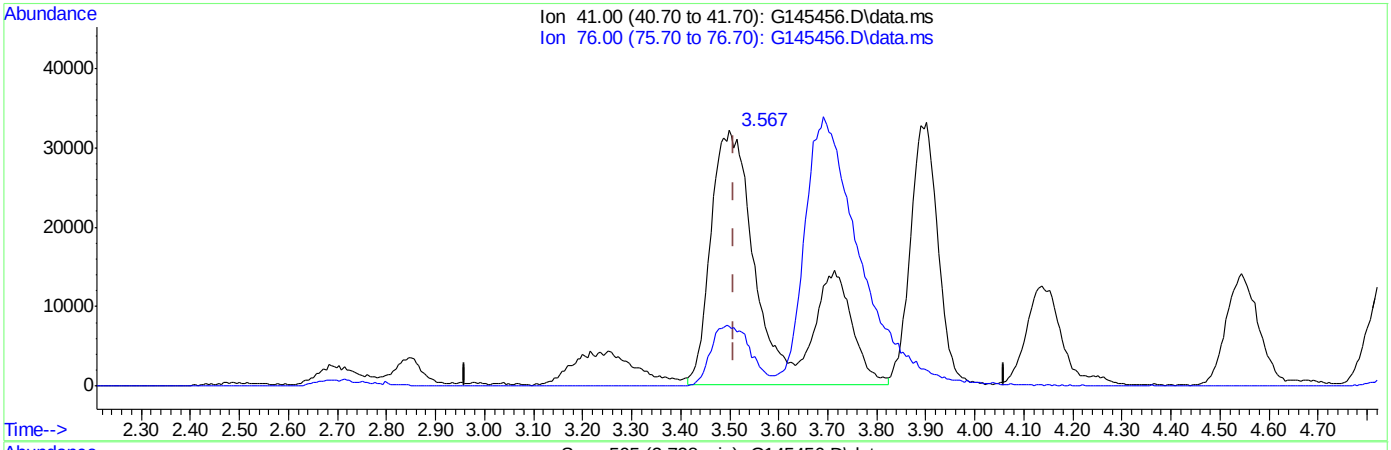
response 103628

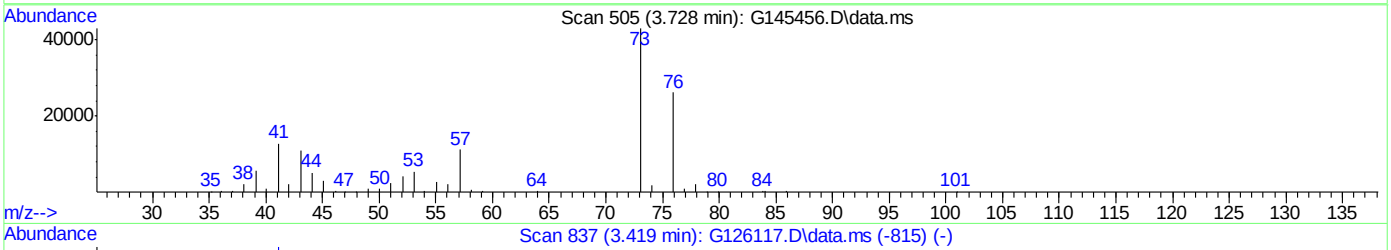
Ion	Exp%	Act%
101.00	100	100
151.00	91.80	81.70
85.00	39.40	43.66
0.00	0.00	0.00

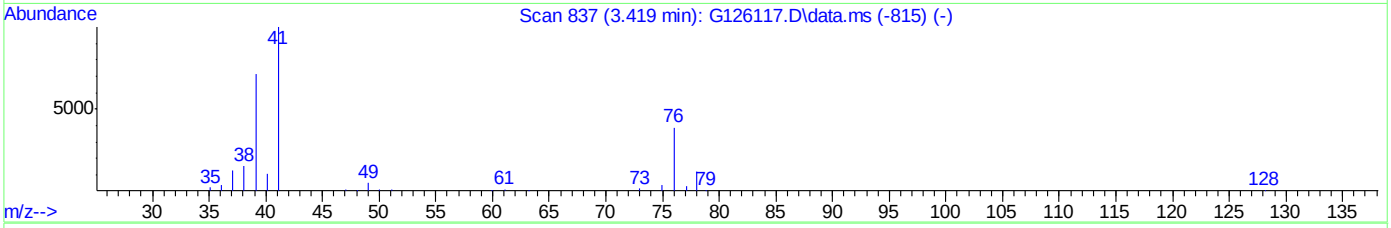
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145456.D
Acq On : 13 Sep 2015 11:29 am
Operator : andrewd1
Sample : icc5447-50.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 13 12:49:22 2015
Quant Method : C:\msdchem\1\METHODS\g150909w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Sep 10 11:49:45 2015
Response via : Initial Calibration







TIC: G145456.D\data.ms

(21) allyl chloride (p)

3.567min (+0.058) 114.78ppb

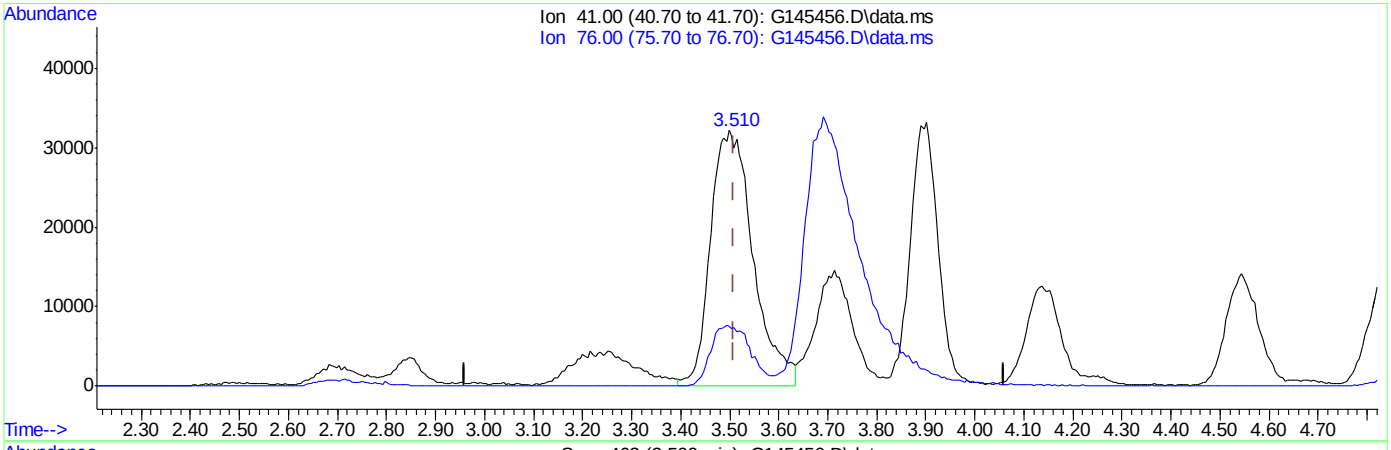
response 264697

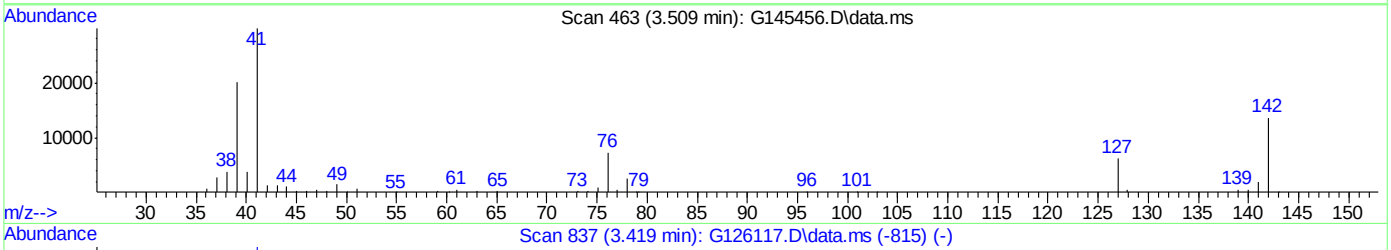
Ion	Exp%	Act%
41.00	100	100
76.00	28.10	25.31
0.00	0.00	0.00
0.00	0.00	0.00

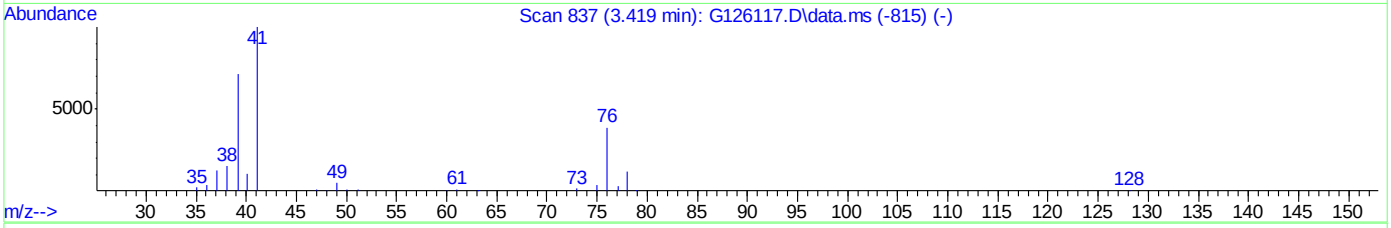
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145456.D
Acq On : 13 Sep 2015 11:29 am
Operator : andrewd1
Sample : icc5447-50.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 13 12:49:22 2015
Quant Method : C:\msdchem\1\METHODS\g150909w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Sep 10 11:49:45 2015
Response via : Initial Calibration







TIC: G145456.D\data.ms

(21) allyl chloride (p)

3.509min (-0.001) 84.14ppb m

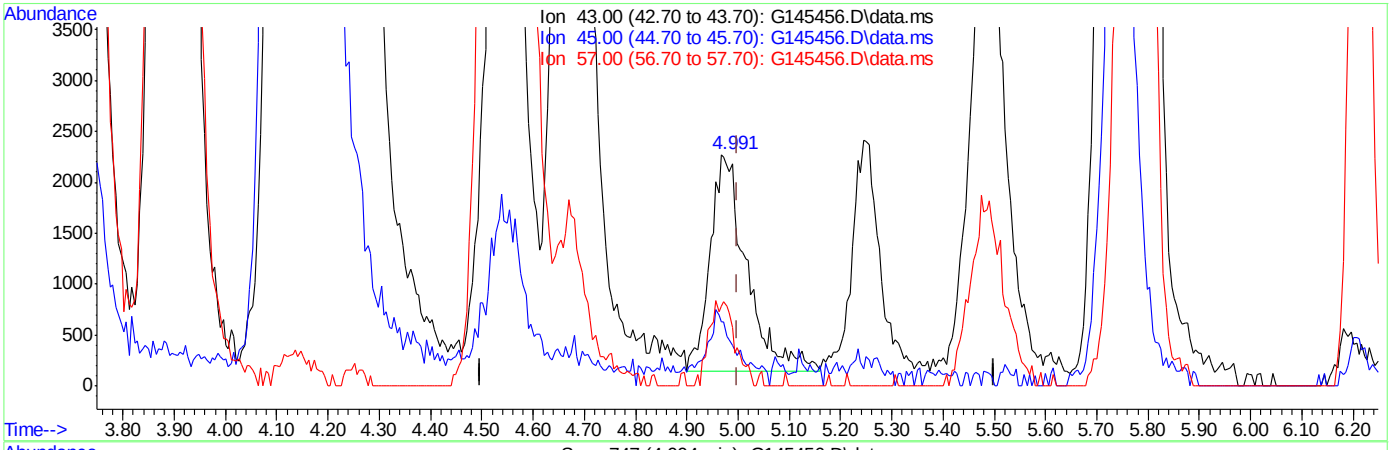
response 194047

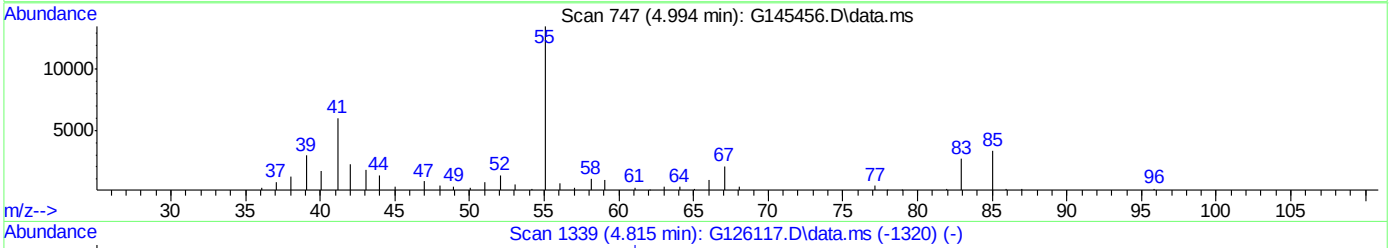
Ion	Exp%	Act%
41.00	100	100
76.00	28.10	24.57
0.00	0.00	0.00
0.00	0.00	0.00

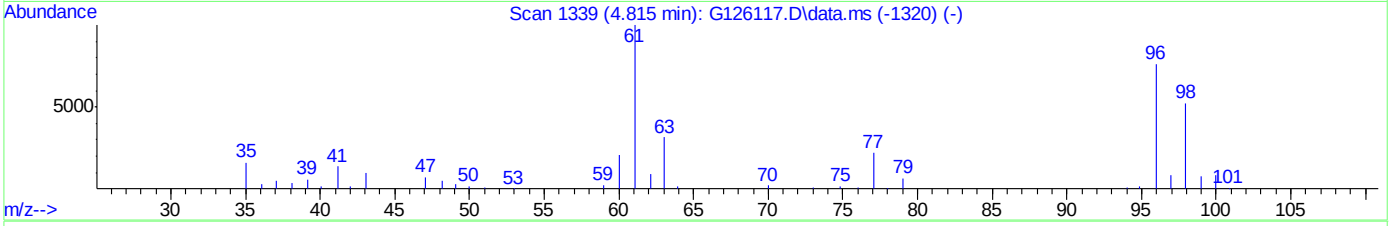
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145456.D
Acq On : 13 Sep 2015 11:29 am
Operator : andrewd1
Sample : icc5447-50.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 13 12:49:22 2015
Quant Method : C:\msdchem\1\METHODS\g150909w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Sep 10 11:49:45 2015
Response via : Initial Calibration







TIC: G145456.D\data.ms

(31) Ethyl Acetate (p)

4.991min (-0.008) 0.00ppb

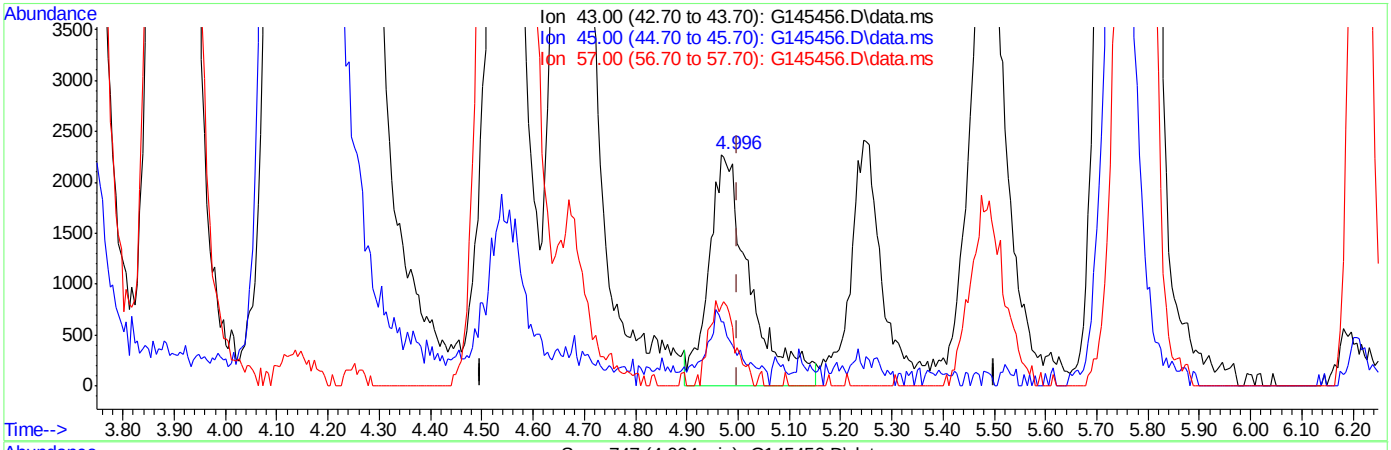
response 10437

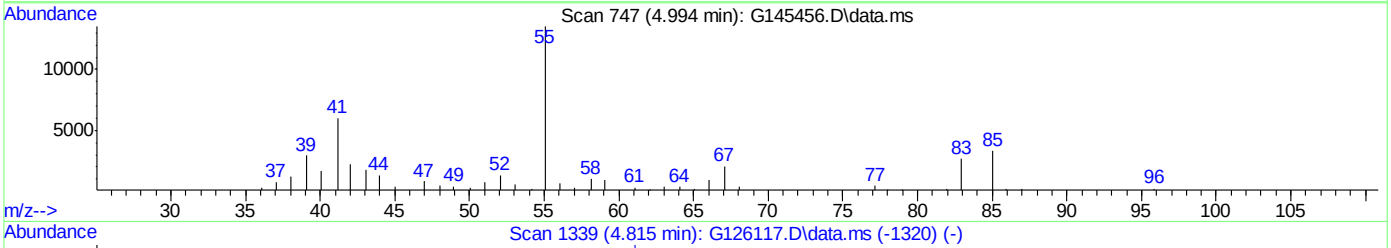
Ion	Exp%	Act%
43.00	100	100
45.00	14.10	26.47
57.00	0.00	28.40#
0.00	0.00	0.00

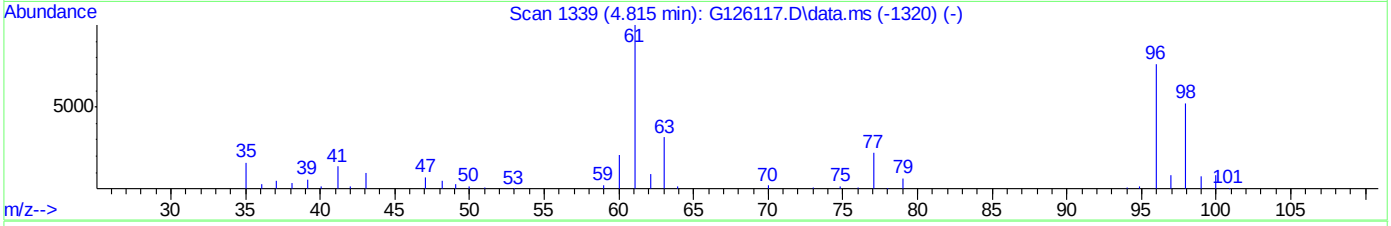
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145456.D
Acq On : 13 Sep 2015 11:29 am
Operator : andrewd1
Sample : icc5447-50.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 13 12:49:22 2015
Quant Method : C:\msdchem\1\METHODS\g150909w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Sep 10 11:49:45 2015
Response via : Initial Calibration







TIC: G145456.D\data.ms

(31) Ethyl Acetate (p)

4.994min (-0.005) 0.00ppb m

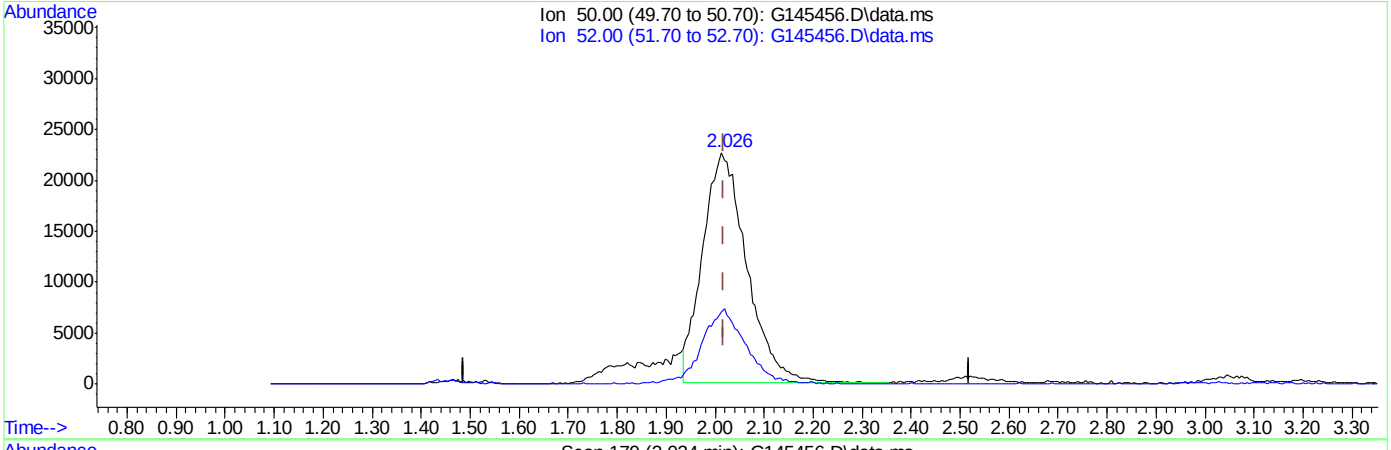
response 12739

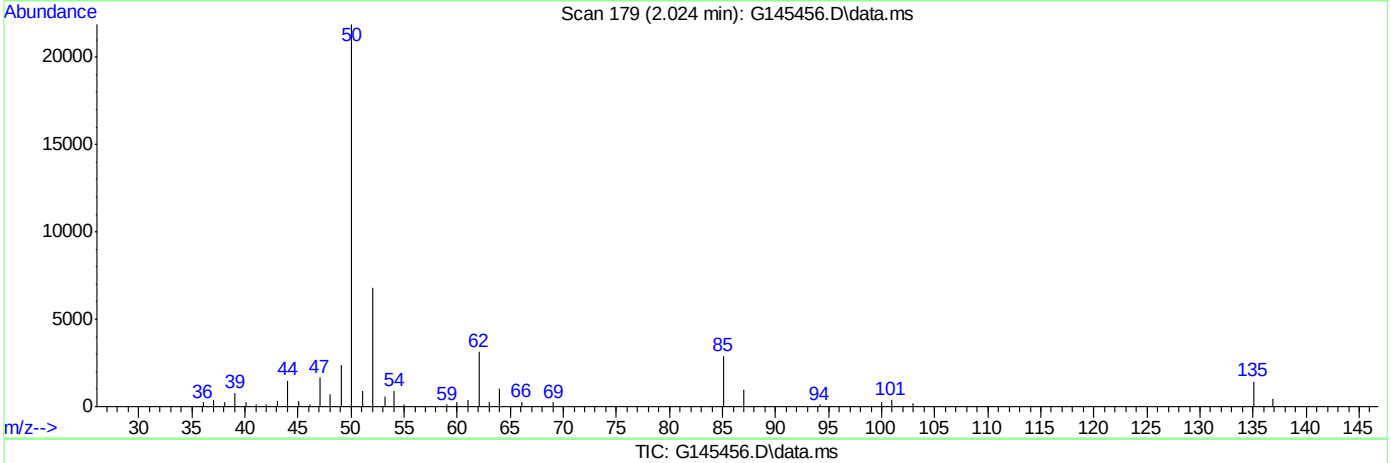
Ion	Exp%	Act%
43.00	100	100
45.00	14.10	21.69
57.00	0.00	23.27#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145456.D
Acq On : 13 Sep 2015 11:29 am
Operator : andrewd1
Sample : icc5447-50.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 13 12:52:33 2015
Quant Method : C:\msdchem\1\METHODS\g150909w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Sep 10 11:49:45 2015
Response via : Initial Calibration





(6) chloromethane (p)

2.026min (+0.008) 76.32ppb

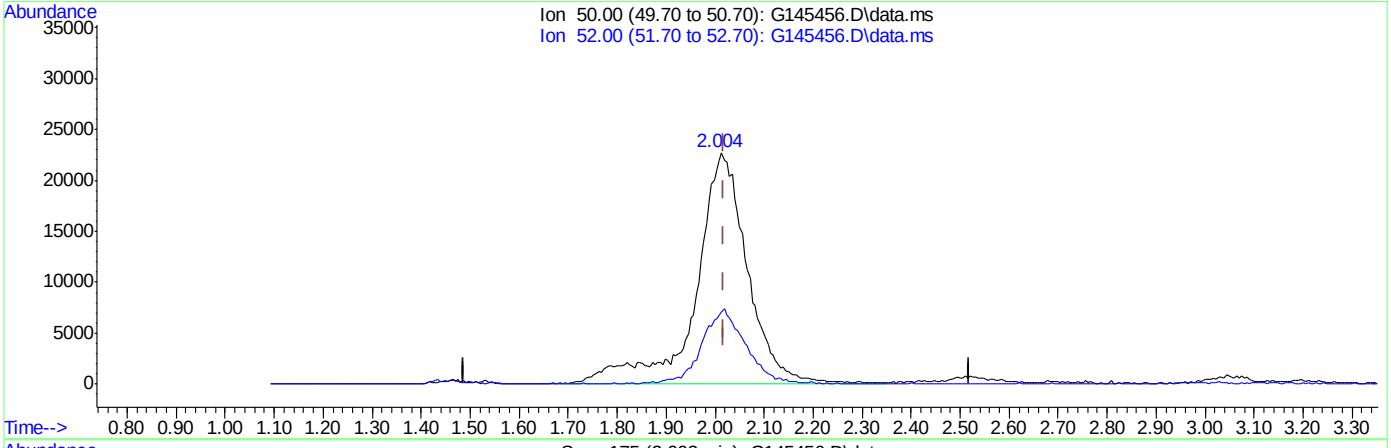
response 141854

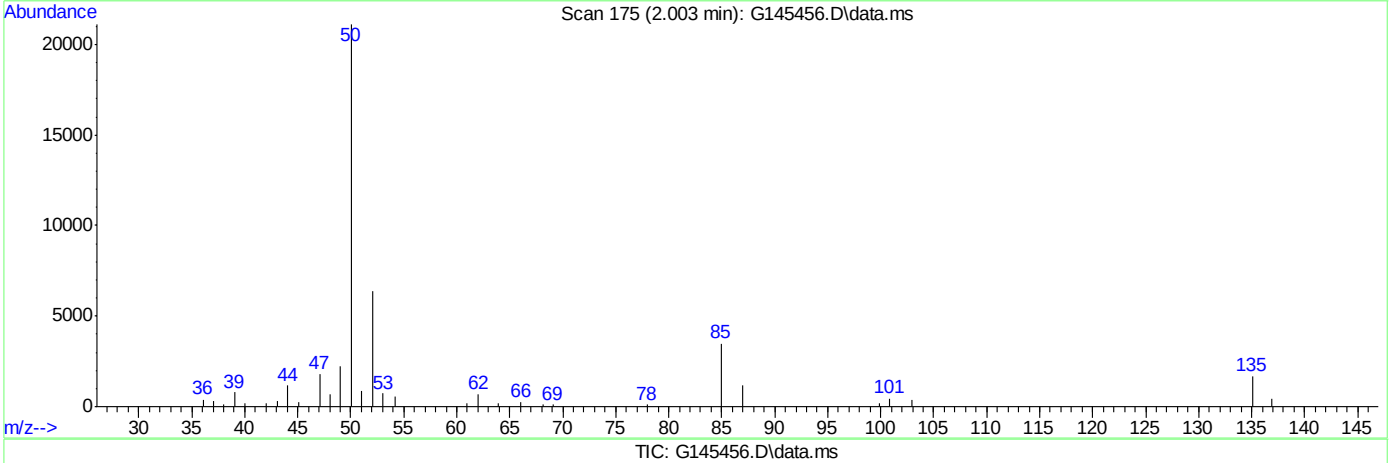
Ion	Exp%	Act%
50.00	100	100
52.00	30.70	31.22
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145456.D
Acq On : 13 Sep 2015 11:29 am
Operator : andrewd1
Sample : icc5447-50.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 13 12:52:33 2015
Quant Method : C:\msdchem\1\METHODS\g150909w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Sep 10 11:49:45 2015
Response via : Initial Calibration





TIC: G145456.D\data.ms

(6) chloromethane (p)

2.003min (-0.015) 90.49ppb m

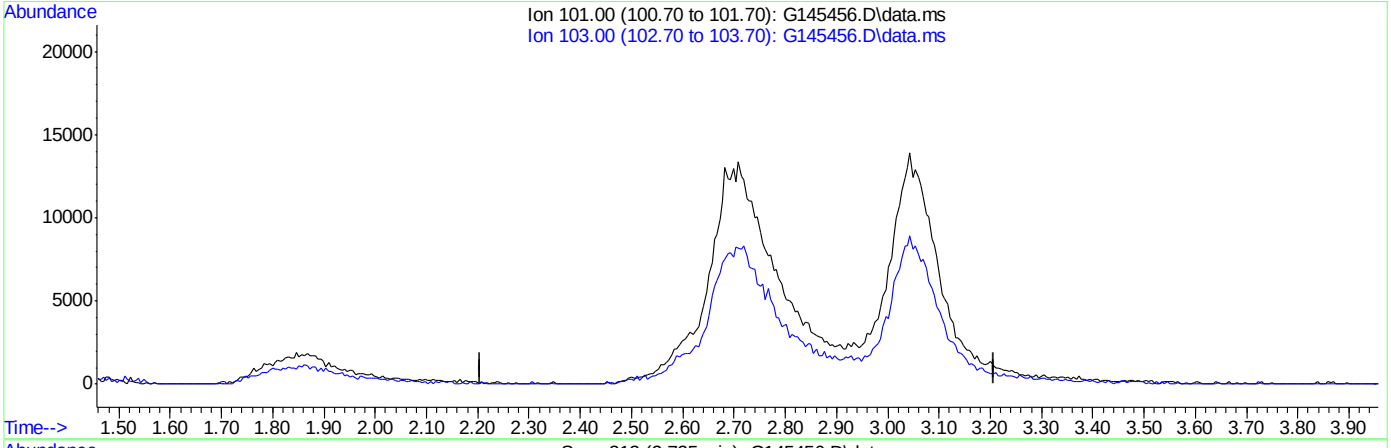
response 168199

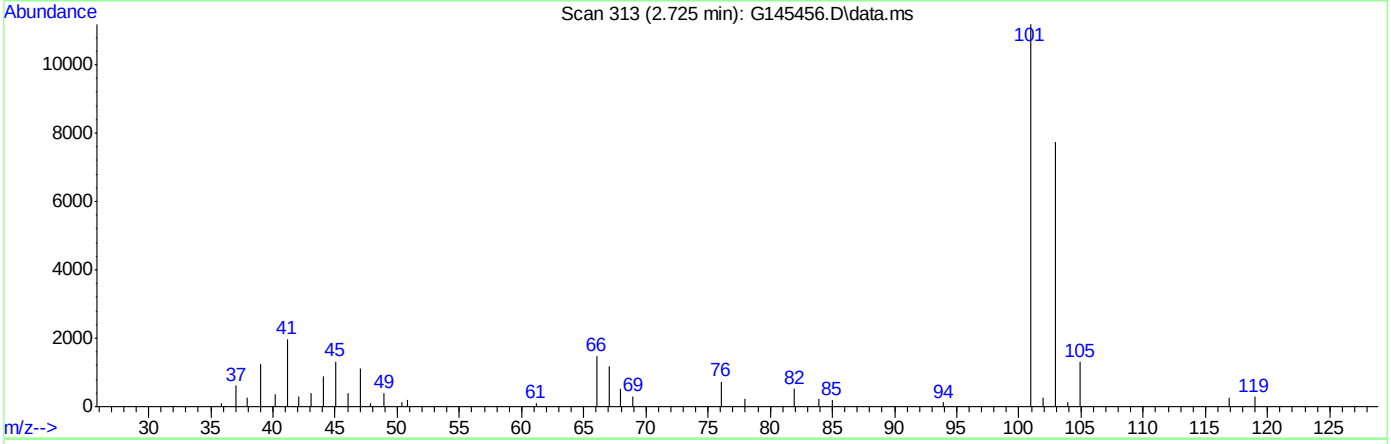
Ion	Exp%	Act%
50.00	100	100
52.00	30.70	30.23
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145456.D
Acq On : 13 Sep 2015 11:29 am
Operator : andrewd1
Sample : icc5447-50.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 14 08:55:12 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:55:06 2015
Response via : Initial Calibration





TIC: G145456.D\data.ms

(12) trichlorofluoromethane (p)

2.727min (-2.727) 0.00ppb

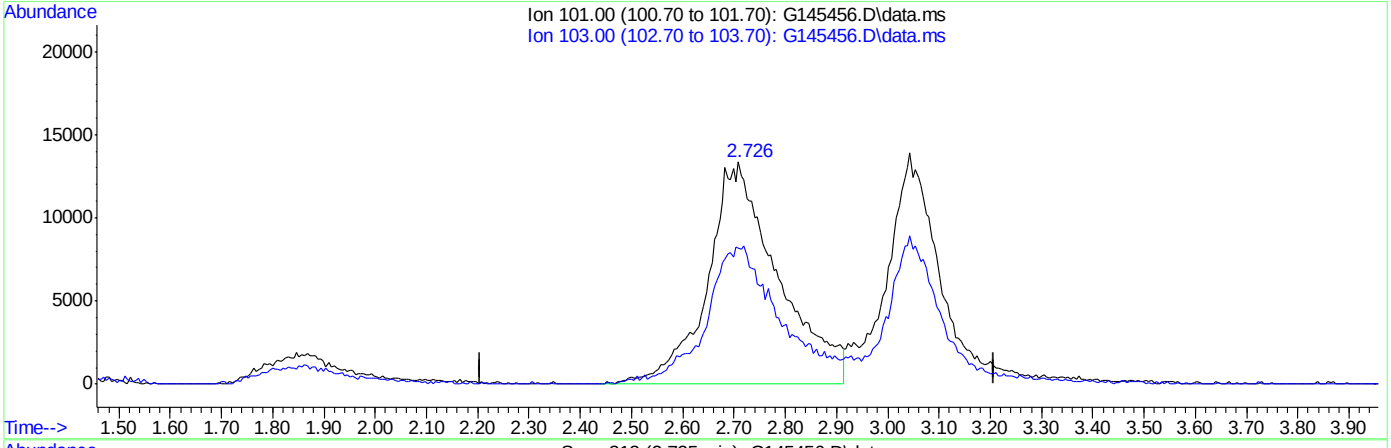
response 0

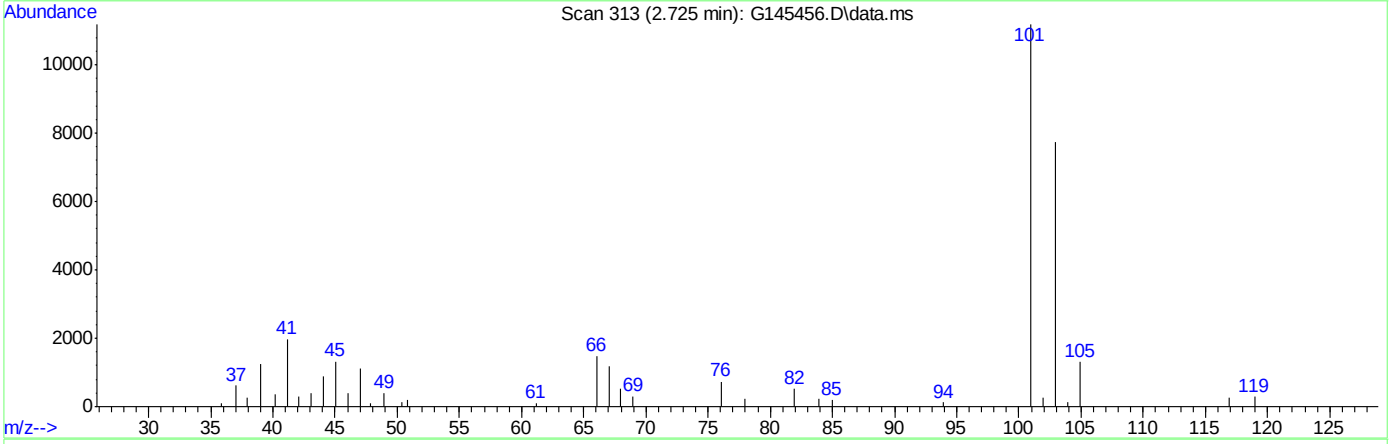
Ion	Exp%	Act%
101.00	100	0.00
103.00	62.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145456.D
Acq On : 13 Sep 2015 11:29 am
Operator : andrewd1
Sample : icc5447-50.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 14 08:55:12 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:55:06 2015
Response via : Initial Calibration





TIC: G145456.D\data.ms

(12) trichlorofluoromethane (p)

2.725min (-0.002) 47.77ppb m

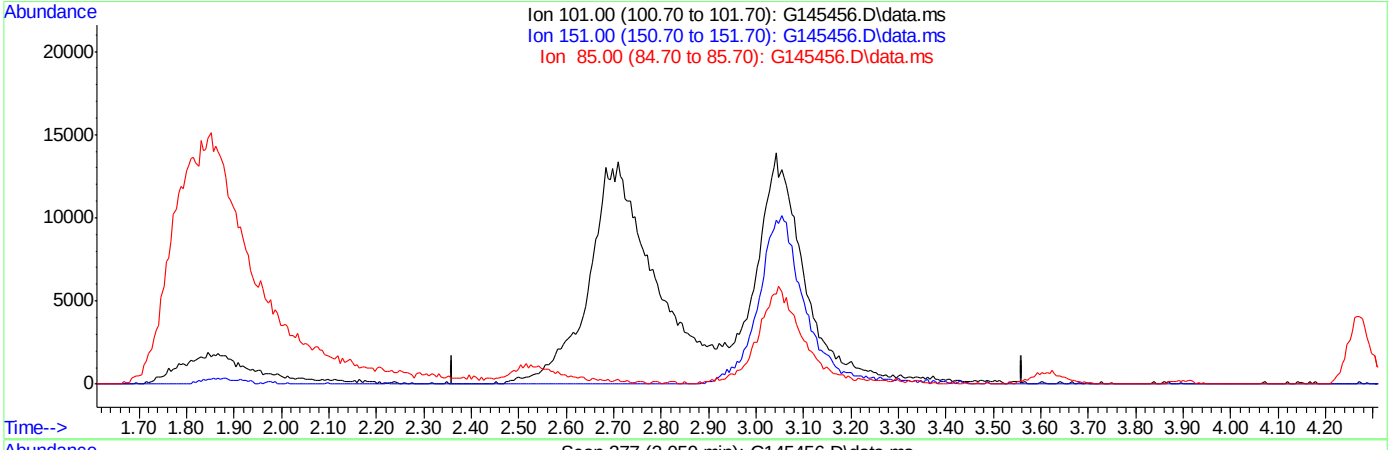
response 127938

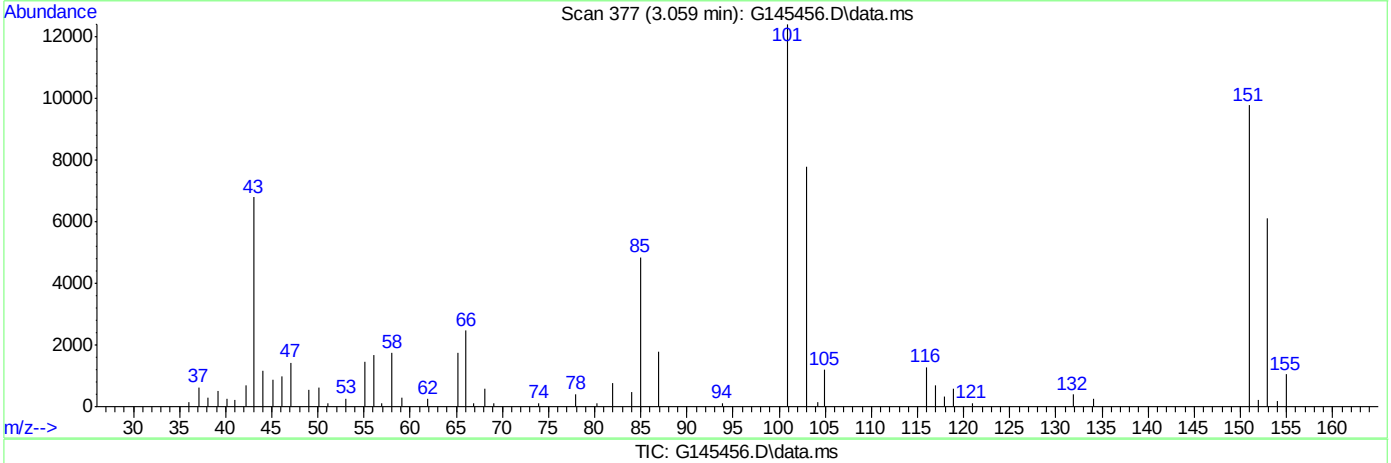
Ion	Exp%	Act%
101.00	100	100
103.00	62.20	69.12
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145456.D
Acq On : 13 Sep 2015 11:29 am
Operator : andrewd1
Sample : icc5447-50.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 14 08:55:12 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:55:06 2015
Response via : Initial Calibration





TIC: G145456.D\data.ms

(13) freon-113 (p)

3.061min (-3.061) 0.00ppb

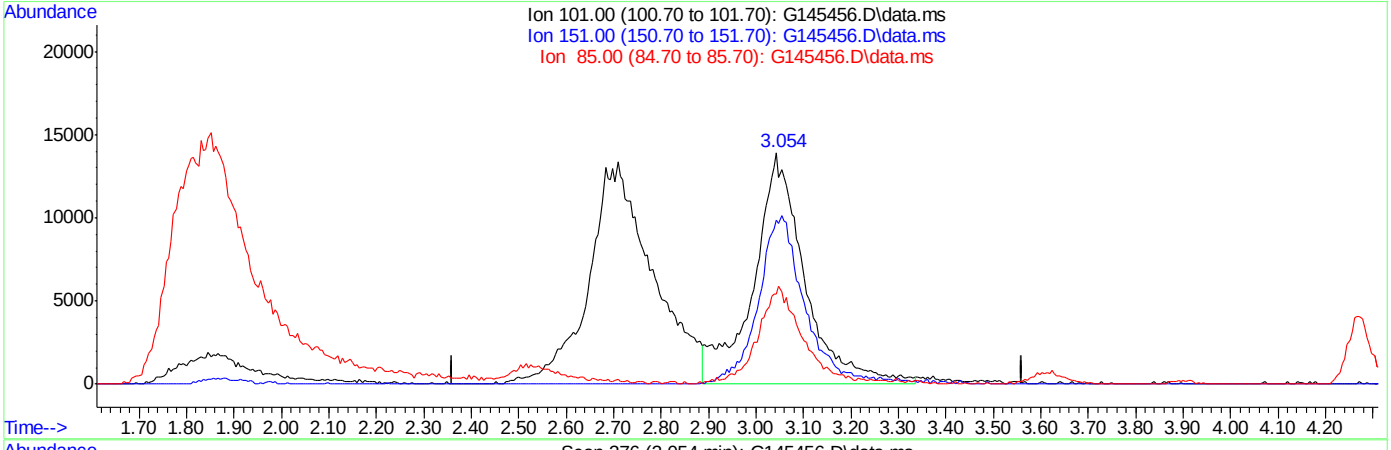
response 0

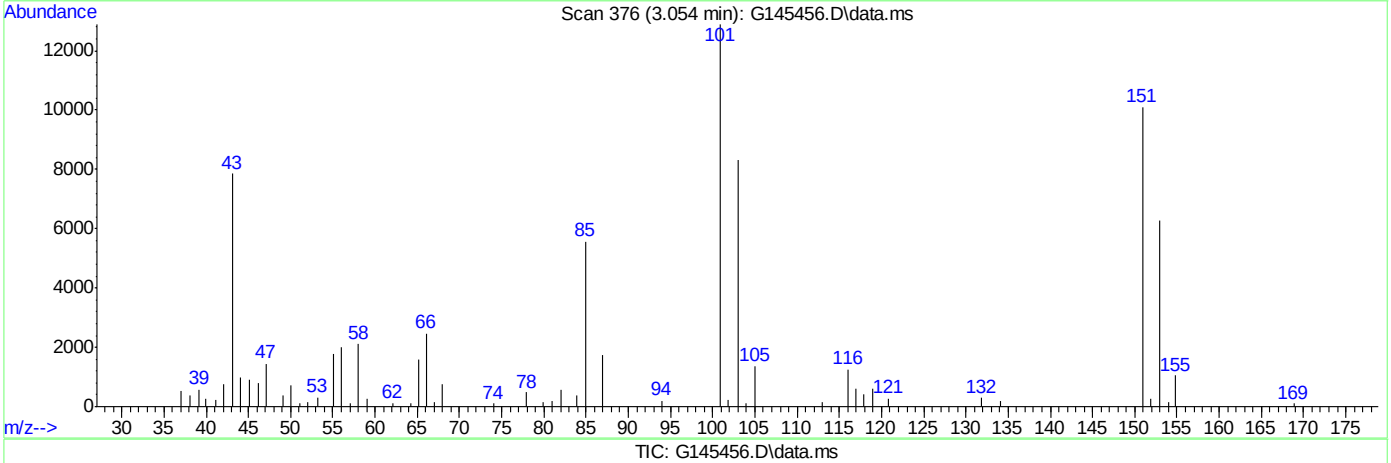
Ion	Exp%	Act%
101.00	100	0.00
151.00	91.80	0.00#
85.00	39.40	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145456.D
Acq On : 13 Sep 2015 11:29 am
Operator : andrewd1
Sample : icc5447-50.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 14 08:55:12 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:55:06 2015
Response via : Initial Calibration





TIC: G145456.D\data.ms

(13) freon-113 (p)

3.054min (-0.007) 53.41ppb m

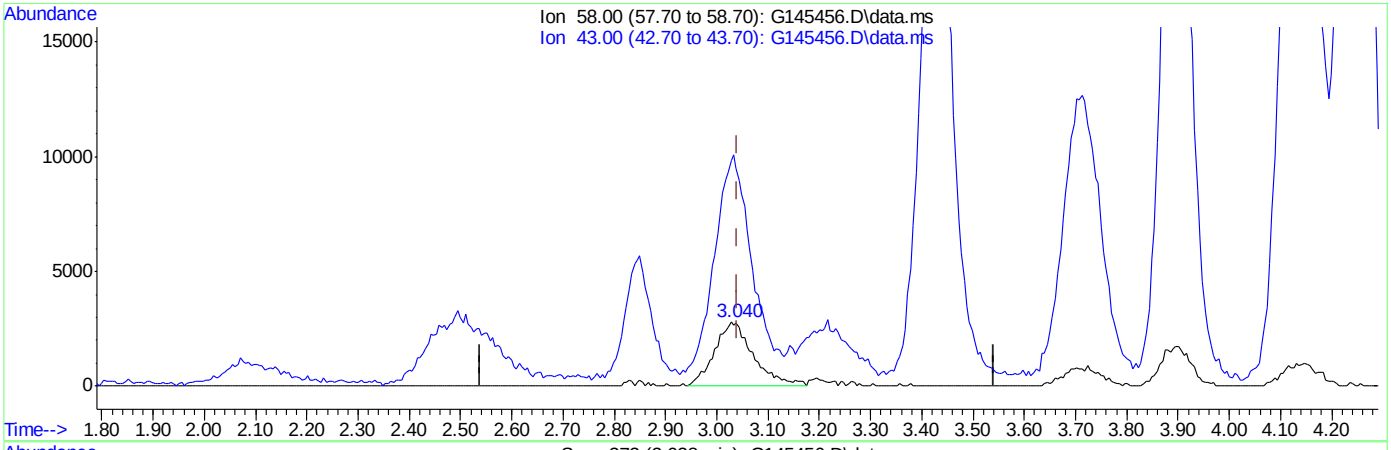
response 105180

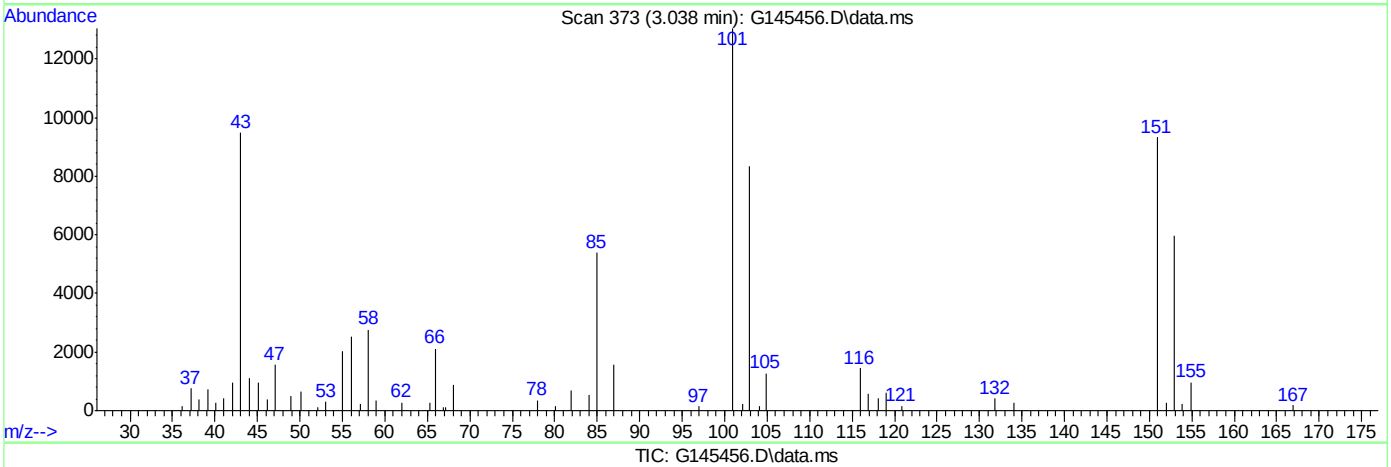
Ion	Exp%	Act%
101.00	100	100
151.00	91.80	78.44
85.00	39.40	43.21
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145456.D
Acq On : 13 Sep 2015 11:29 am
Operator : andrewd1
Sample : icc5447-50.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 14 08:55:12 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:55:06 2015
Response via : Initial Calibration





(16) acetone (p)

3.040min (-0.001) 51.86ppb

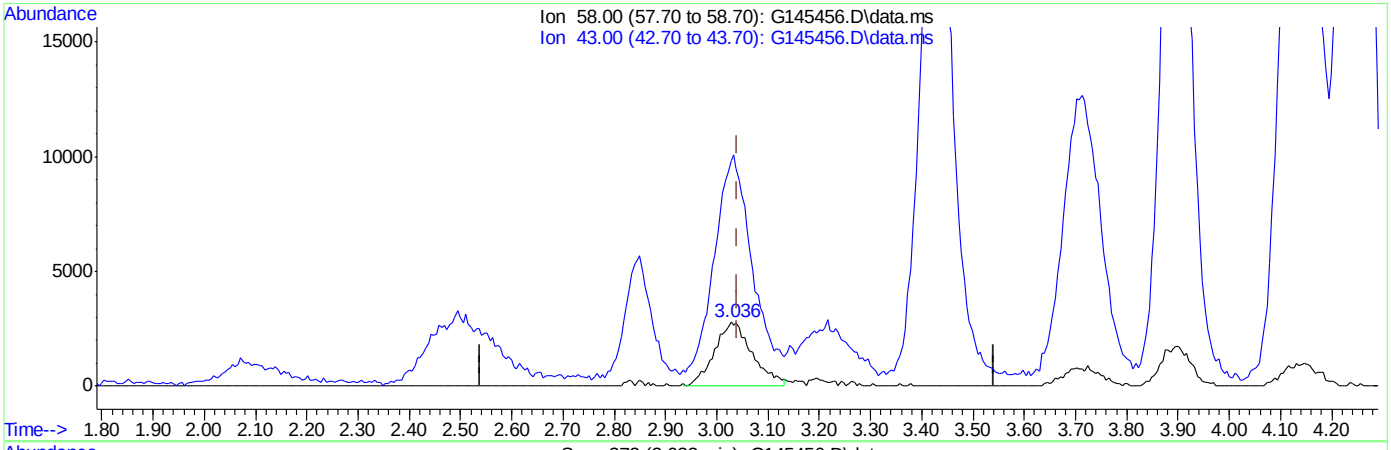
response 14737

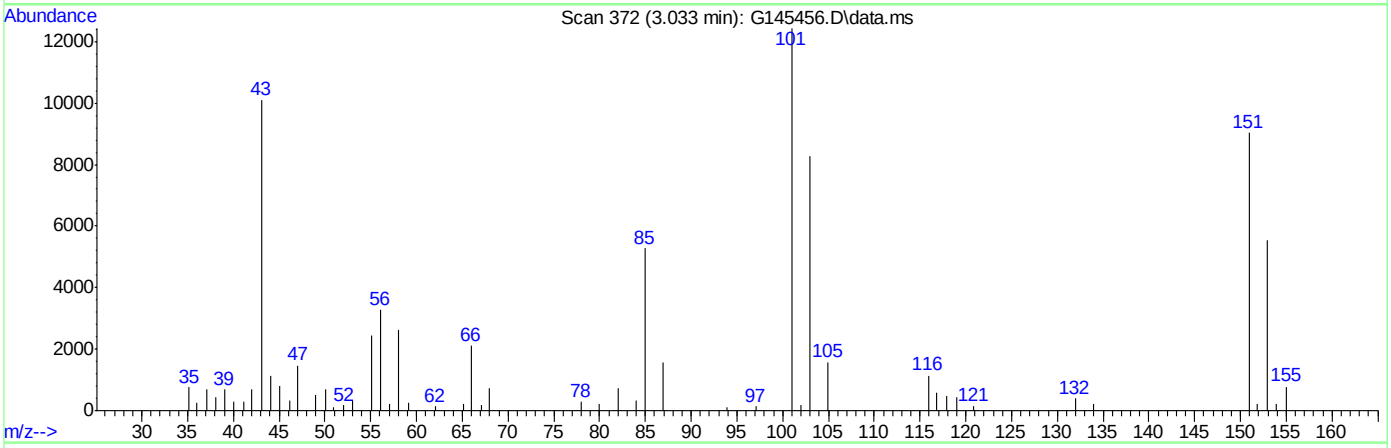
Ion	Exp%	Act%
58.00	100	100
43.00	336.30	313.09
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145456.D
Acq On : 13 Sep 2015 11:29 am
Operator : andrewd1
Sample : icc5447-50.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 14 08:55:12 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:55:06 2015
Response via : Initial Calibration





(16) acetone (p)

3.033min (-0.007) 50.17ppb m

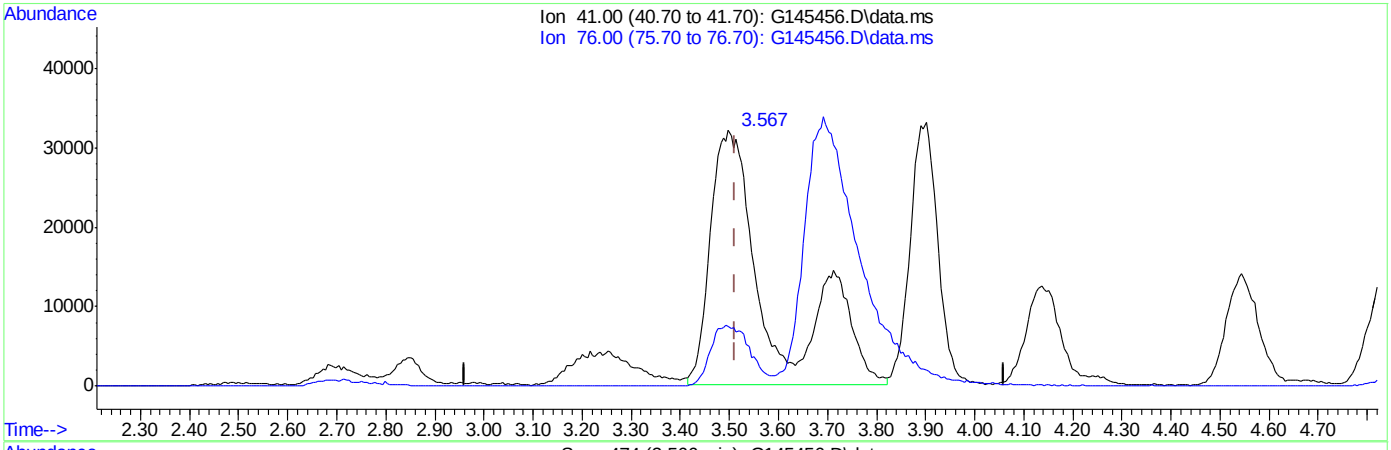
response 14257

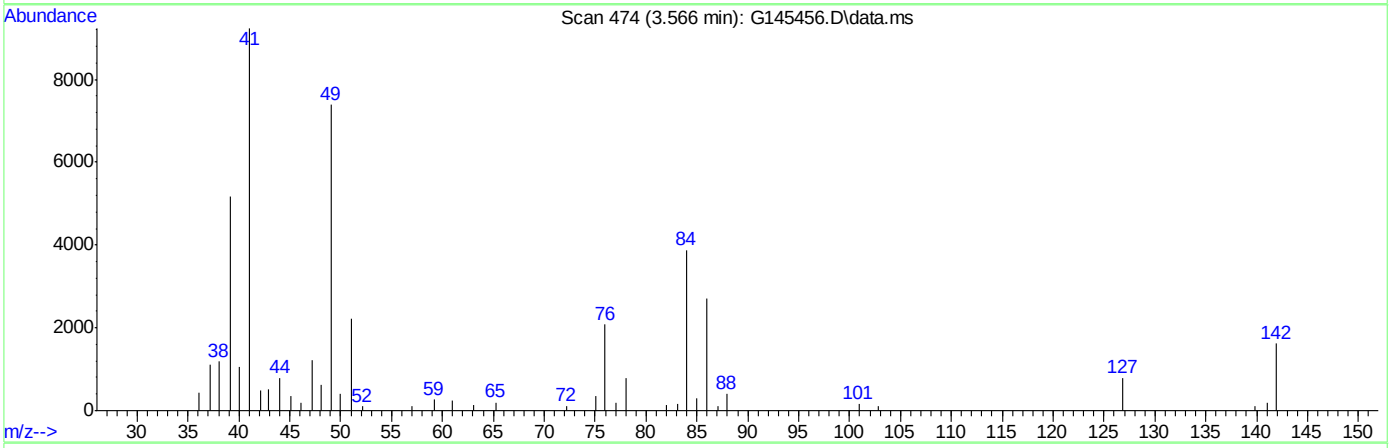
Ion	Exp%	Act%
58.00	100	100
43.00	336.30	383.70#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145456.D
Acq On : 13 Sep 2015 11:29 am
Operator : andrewd1
Sample : icc5447-50.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 14 08:55:12 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:55:06 2015
Response via : Initial Calibration





TIC: G145456.D\data.ms

(21) allyl chloride (p)

3.567min (+0.056) 68.68ppb

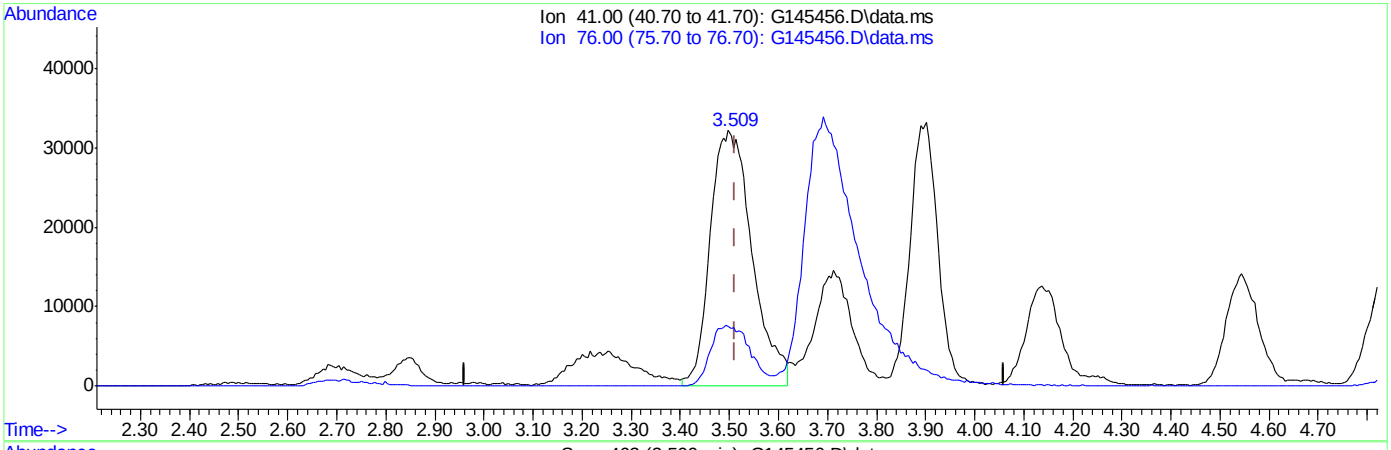
response 264697

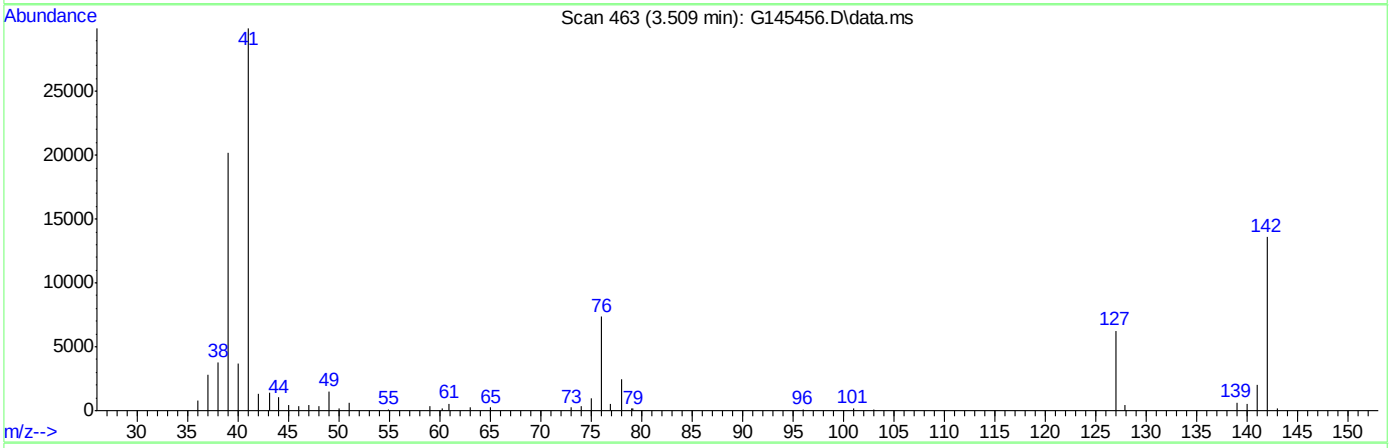
Ion	Exp%	Act%
41.00	100	100
76.00	28.10	25.31
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145456.D
Acq On : 13 Sep 2015 11:29 am
Operator : andrewd1
Sample : icc5447-50.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 14 08:55:12 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:55:06 2015
Response via : Initial Calibration





TIC: G145456.D\data.ms

(21) allyl chloride (p)

3.509min (-0.002) 49.52ppb m

response 190881

Ion	Exp%	Act%
41.00	100	100
76.00	28.10	24.57
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Doug Yargeau 09/14/15 19:20

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145457.D
Acq On : 13 Sep 2015 11:58 am
Operator : andrewd1
Sample : ic5447-100.0
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 14 08:57:54 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:56:46 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	3.163	65	84383	500.00	ppb		0.00
4) pentafluorobenzene	5.101	168	153839	50.00	ppb		0.00
43) 1,4-difluorobenzene	6.216	114	246451	50.00	ppb		0.00
66) chlorobenzene-d5	9.537	82	115007	50.00	ppb		0.00
80) 1,4-dichlorobenzene-d4	12.156	152	114962	50.00	ppb		0.00
System Monitoring Compounds							
40) dibromofluoromethane (s)	5.269	113	86020	49.75	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.50%				
60) toluene-d8 (s)	7.885	98	277481	51.02	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.04%				
82) bromofluorobenzene (s)	10.863	95	109266	48.67	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 97.34%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	3.221	59	207908m	918.40	ppb		
3) Ethanol	2.528	45	250750	9589.31	ppb	#	41
5) dichlorodifluoromethane	1.893	85	398875	101.91	ppb		98
6) chloromethane	2.008	50	380176	109.04	ppb		98
7) vinyl chloride	2.113	62	254358	105.85	ppb		96
8) bromomethane	2.442	96	139315	108.87	ppb		98
9) chloroethane	2.445	64	118988	104.21	ppb		81
10) ethyl ether	2.853	59	156430	94.19	ppb		100
11) acetonitrile	3.251	41	70095	82.71	ppb	#	61
12) trichlorofluoromethane	2.730	101	305662m	111.80	ppb		
13) freon-113	3.054	101	212152m	105.03	ppb		
14) acrolein	3.015	56	96795	562.95	ppb		100
15) 1,1-dichloroethene	3.229	96	156310	92.56	ppb		84
16) acetone	3.033	58	26084m	90.60	ppb		
17) Methyl Acetate	3.430	43	195226	72.46	ppb	#	97
18) methylene chloride	3.620	84	165832	91.32	ppb		87
19) methyl tert butyl ether	3.720	73	473764	90.88	ppb		97
20) acrylonitrile	3.722	53	103115	104.48	ppb		87
21) allyl chloride	3.509	41	352786m	89.83	ppb		
22) trans-1,2-dichloroethene	3.880	96	158961	90.34	ppb		90
23) iodomethane	3.479	142	270769	91.34	ppb		85
24) carbon disulfide	3.728	76	506470	93.12	ppb		99
25) propionitrile	4.767	54	32098	92.64	ppb		100
26) vinyl acetate	4.248	43	496802	89.39	ppb		94
27) chloroprene	4.362	53	327341	91.95	ppb		94
28) di-isopropyl ether	4.144	45	714927	87.56	ppb		94
29) methacrylonitrile	4.959	41	162085	92.28	ppb		88
30) 2-butanone	4.677	72	19021	91.65	ppb	#	61
32) Hexane	3.897	41	238058	87.14	ppb	#	93
33) 1,1-dichloroethane	4.277	63	346847	86.48	ppb		99
34) tert-butyl ethyl ether	4.551	59	597609	92.36	ppb		98
36) 2,2-dichloropropane	4.850	77	237511	90.36	ppb		95
37) cis-1,2-dichloroethene	4.883	96	170523	89.78	ppb		95
38) bromochloromethane	5.219	128	87719	91.89	ppb	#	86

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145457.D
Acq On : 13 Sep 2015 11:58 am
Operator : andrewd1
Sample : ic5447-100.0
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 14 08:57:54 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:56:46 2015
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
39)	chloroform	5.043	83	315020	87.67	ppb	98
41)	Tetrahydrofuran	5.251	42	67988	89.10	ppb	95
42)	1,1,1-trichloroethane	5.473	97	254838	97.52	ppb	96
44)	Cyclohexane	5.492	56	343254	94.33	ppb	98
45)	carbon tetrachloride	5.746	117	239420	92.00	ppb	100
46)	1,1-dichloropropene	5.624	75	213724	87.46	ppb	97
47)	benzene	5.922	78	565463	84.26	ppb	99
48)	1,2-dichloroethane	5.902	62	243566	87.85	ppb	97
49)	tert-amyl methyl ether	5.748	73	429339	93.11	ppb	81
50)	heptane	5.766	43	463712	90.45	ppb	98
51)	trichloroethene	6.581	95	160418	86.36	ppb	88
52)	1,2-dichloropropane	6.775	63	169023	90.10	ppb	99
53)	dibromomethane	7.092	93	102746	88.64	ppb	90
54)	bromodichloromethane	7.033	83	223497	91.19	ppb	99
55)	Methylcyclohexane	6.653	83	252189	91.66	ppb	99
56)	2-chloroethyl vinyl ether	7.356	63	75638	134.00	ppb	99
57)	methyl methacrylate	6.829	69	100123	95.17	ppb	96
58)	1,4-dioxane	7.084	88	8905	728.71	ppb	97
59)	cis-1,3-dichloropropene	7.619	75	252858	97.04	ppb	96
61)	4-methyl-2-pentanone	7.383	43	253819	102.96	ppb	98
62)	toluene	7.972	92	350178	89.11	ppb	95
63)	trans-1,3-dichloropropene	8.167	75	237906	95.11	ppb	96
64)	1,1,2-trichloroethane	8.339	83	114769	88.41	ppb	95
65)	ethyl methacrylate	8.151	69	179521	98.48	ppb	99
67)	tetrachloroethene	8.682	166	154868	89.33	ppb	97
68)	1,3-dichloropropane	8.614	76	217773	91.32	ppb	98
69)	dibromochloromethane	8.907	129	181550	96.23	ppb	95
70)	1,2-dibromoethane	9.126	107	148922	91.46	ppb	97
71)	2-hexanone	8.351	43	139747	97.82	ppb	99
72)	chlorobenzene	9.580	112	416409	88.27	ppb	94
73)	1,1,1,2-tetrachloroethane	9.627	131	157924	92.59	ppb	99
74)	ethylbenzene	9.634	91	681963	91.75	ppb	95
75)	m,p-xylene	9.718	106	517004	180.49	ppb	87
76)	o-xylene	10.196	106	266414	94.96	ppb	83
77)	styrene	10.234	104	453894	95.77	ppb	90
78)	bromoform	10.608	173	115256	100.17	ppb	100
79)	trans-1,4-dichloro-2-b...	10.639	53	66661	115.65	ppb	94
81)	isopropylbenzene	10.586	105	710442	91.15	ppb	97
83)	bromobenzene	11.077	156	182042	85.60	ppb	93
84)	1,1,2,2-tetrachloroethane	10.776	83	177184	82.37	ppb	96
85)	1,2,3-trichloropropane	10.936	75	129513	88.31	ppb	97
86)	n-propylbenzene	11.024	91	837106	88.07	ppb	92
87)	2-chlorotoluene	11.218	91	572948	87.82	ppb	92
88)	4-chlorotoluene	11.272	91	519784	87.71	ppb	91
89)	1,3,5-trimethylbenzene	11.197	105	620246	91.06	ppb	96
90)	tert-butylbenzene	11.591	91	434736	91.08	ppb	83
91)	1,2,4-trimethylbenzene	11.627	105	638469	93.98	ppb	97
92)	sec-butylbenzene	11.818	105	799204	93.91	ppb	95
93)	1,3-dichlorobenzene	12.074	146	350103	86.84	ppb	95
94)	p-isopropyltoluene	11.968	119	694229	98.87	ppb	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145457.D
Acq On : 13 Sep 2015 11:58 am
Operator : andrewd1
Sample : ic5447-100.0
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 14 08:57:54 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:56:46 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
95) 1,4-dichlorobenzene	12.191	146	358617	87.18	ppb		98
96) 1,2-dichlorobenzene	12.596	146	349038	91.12	ppb		96
97) n-butylbenzene	12.415	91	636526	105.21	ppb		92
98) 1,2-dibromo-3-chloropr...	13.453	75	38973	104.14	ppb	#	72
99) 1,3,5-trichlorobenzene	13.711	180	297686	107.86	ppb		100
100) 1,2,4-trichlorobenzene	14.413	180	237617	129.15	ppb		99
101) hexachlorobutadiene	14.565	225	109831	93.36	ppb		99
102) naphthalene	14.701	128	556252	158.47	ppb		100
103) 2-Methylnaphthalene	15.882	142	62628	92.66	ppb		96
104) 1-Methylnaphthalene	16.150	142	52296	81.48	ppb		95
105) 1,2,3-trichlorobenzene	14.970	180	199854	125.28	ppb		99

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

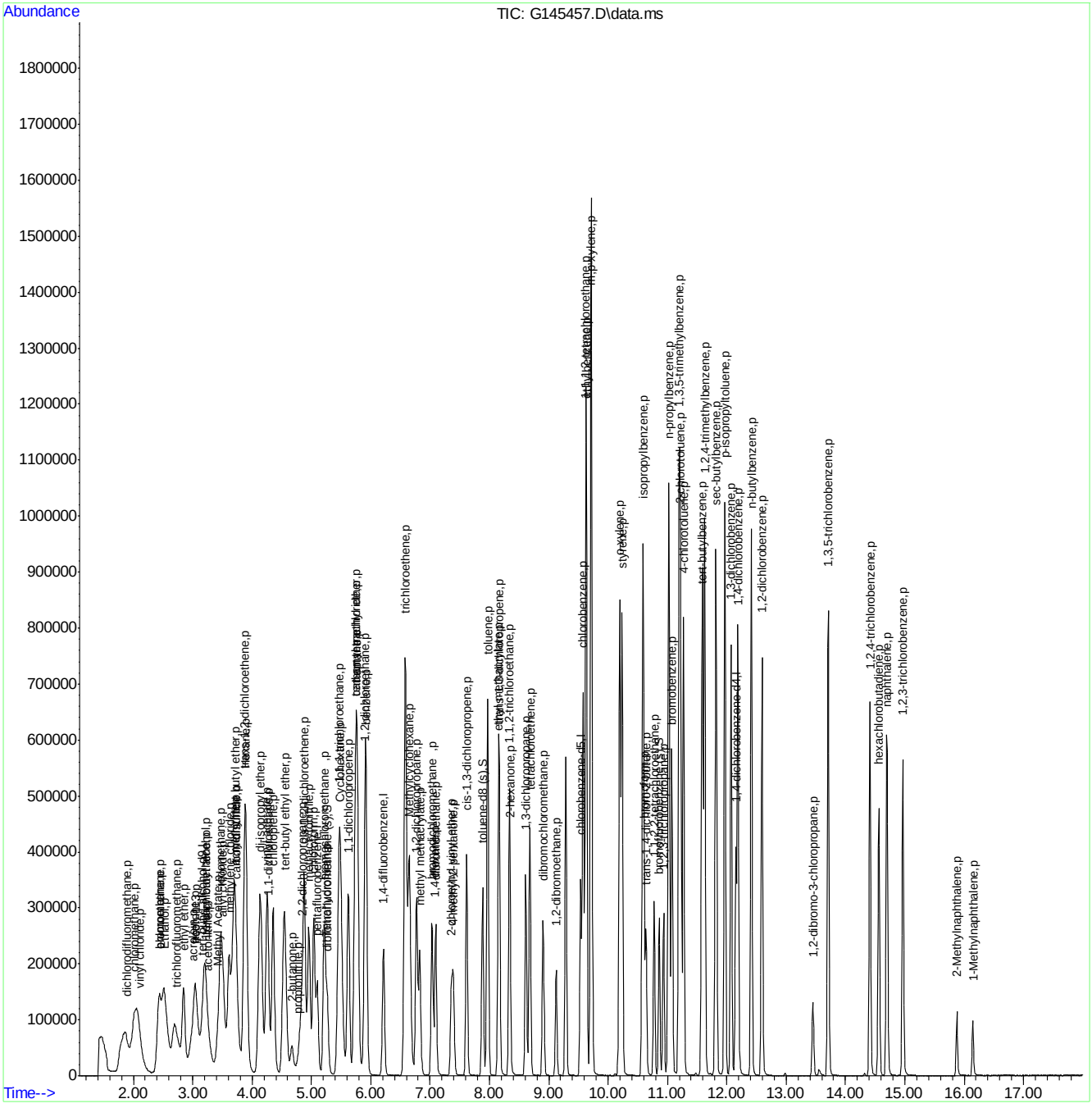
7.6.8

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145457.D
Acq On : 13 Sep 2015 11:58 am
Operator : andrewd1
Sample : ic5447-100.0
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

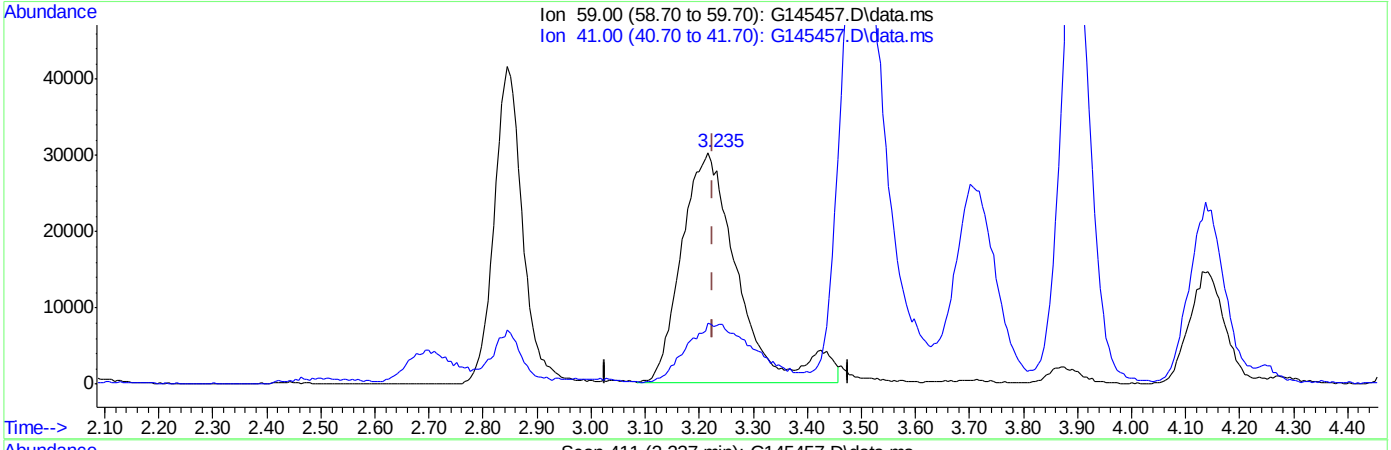
Quant Time: Sep 14 08:57:54 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:56:46 2015
Response via : Initial Calibration

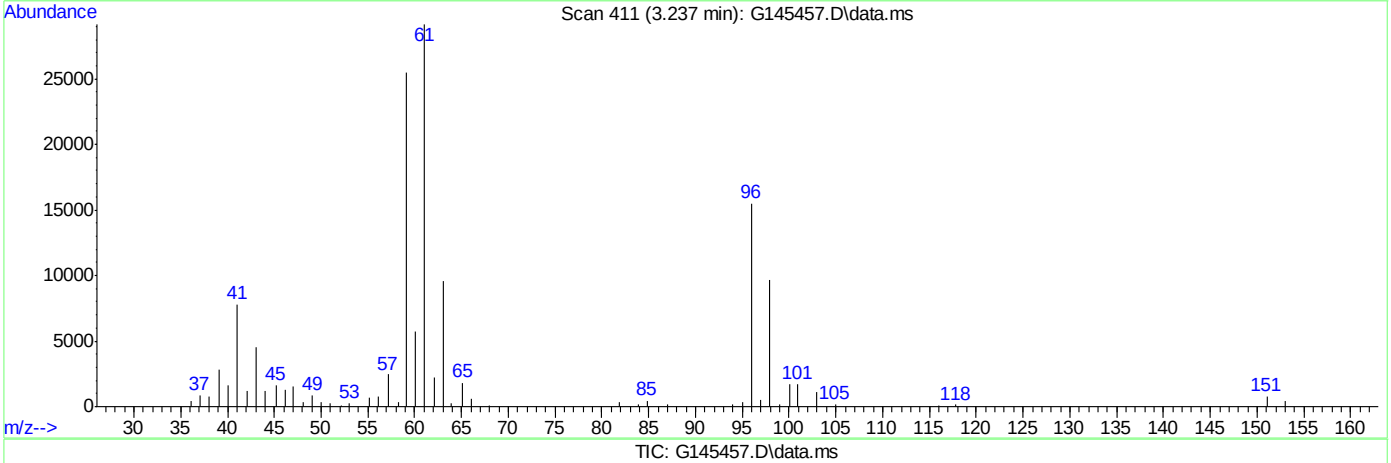


Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145457.D
Acq On : 13 Sep 2015 11:58 am
Operator : andrewd1
Sample : ic5447-100.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 14 08:56:51 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:56:46 2015
Response via : Initial Calibration





TIC: G145457.D\data.ms

(2) tertiary butyl alcohol (p)

3.235min (+0.010) 963.68ppb

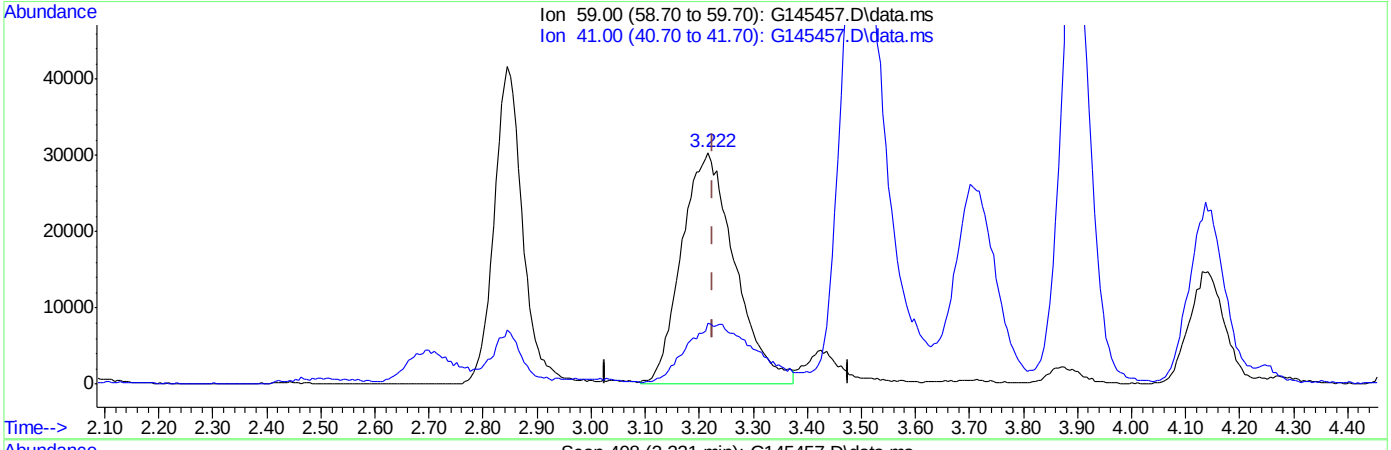
response 218159

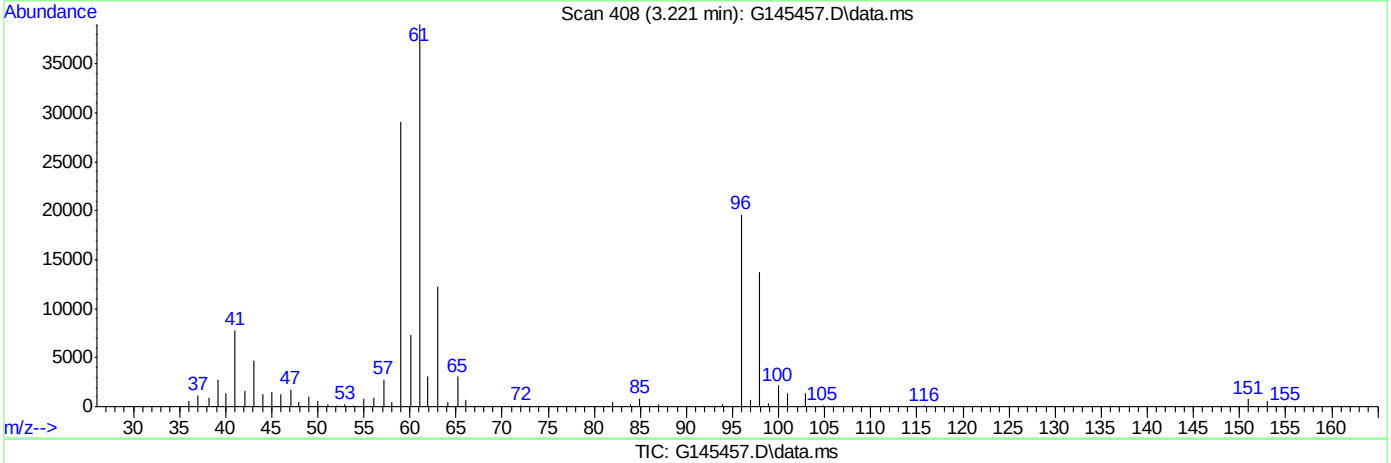
Ion	Exp%	Act%
59.00	100	100
41.00	22.50	29.89
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145457.D
Acq On : 13 Sep 2015 11:58 am
Operator : andrewd1
Sample : ic5447-100.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 14 08:56:51 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:56:46 2015
Response via : Initial Calibration





(2) tertiary butyl alcohol (p)

3.221min (-0.004) 918.40ppb m

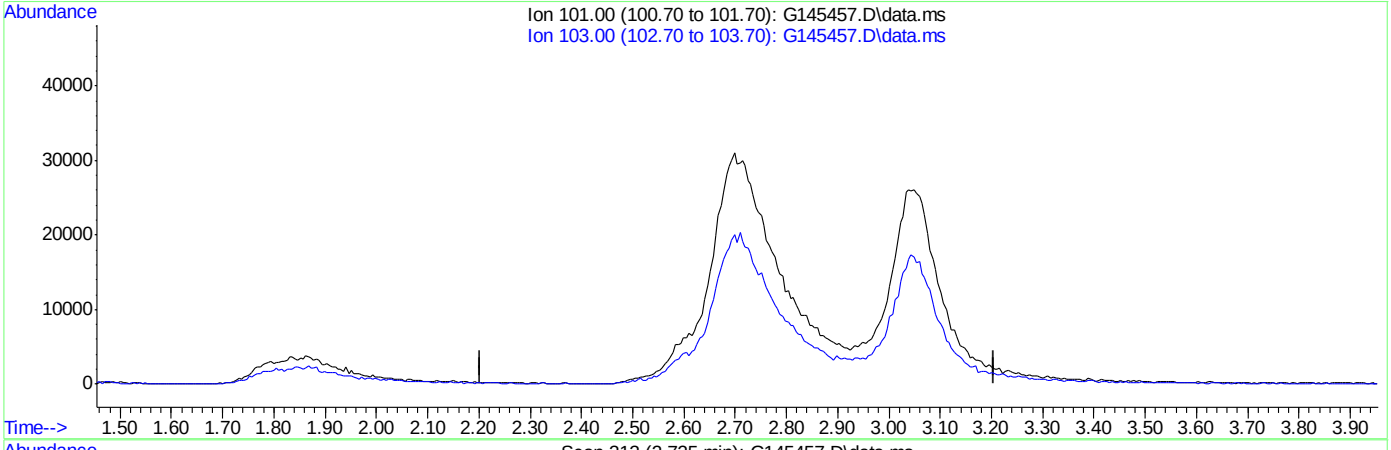
response 207908

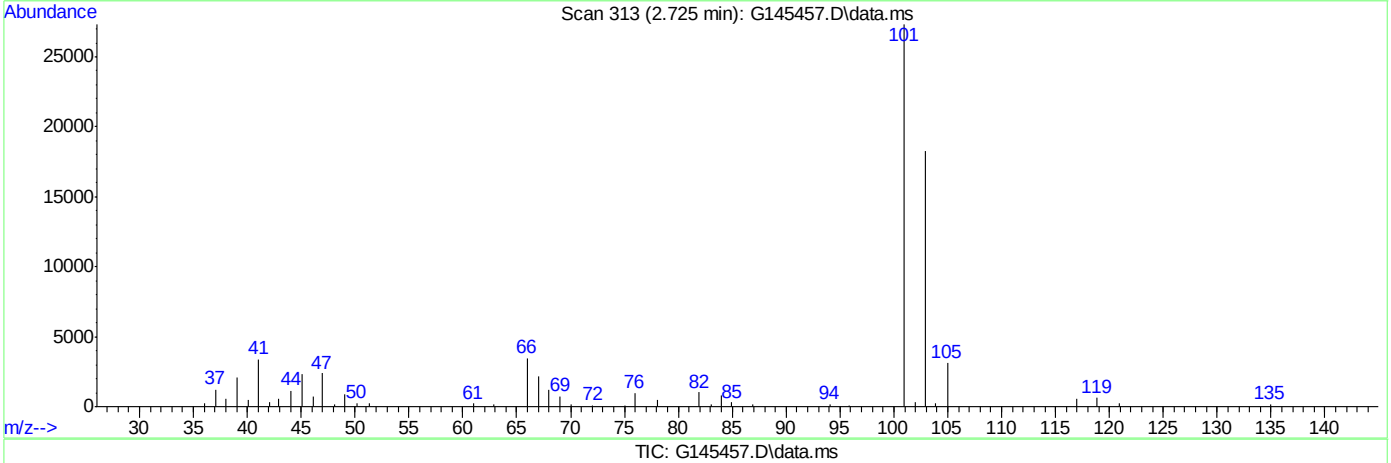
Ion	Exp%	Act%
59.00	100	100
41.00	22.50	26.86
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145457.D
Acq On    : 13 Sep 2015  11:58 am
Operator  : andrewd1
Sample    : ic5447-100.0
Misc      : MS35209,MSG5447,,,,5,1
ALS Vial  : 10   Sample Multiplier: 1

Quant Time: Sep 14 08:56:51 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title  : SW-846 Method 8260
QLast Update : Mon Sep 14 08:56:46 2015
Response via : Initial Calibration
```





TIC: G145457.D\data.ms

(12) trichlorofluoromethane (p)

2.725min (-2.725) 0.00ppb

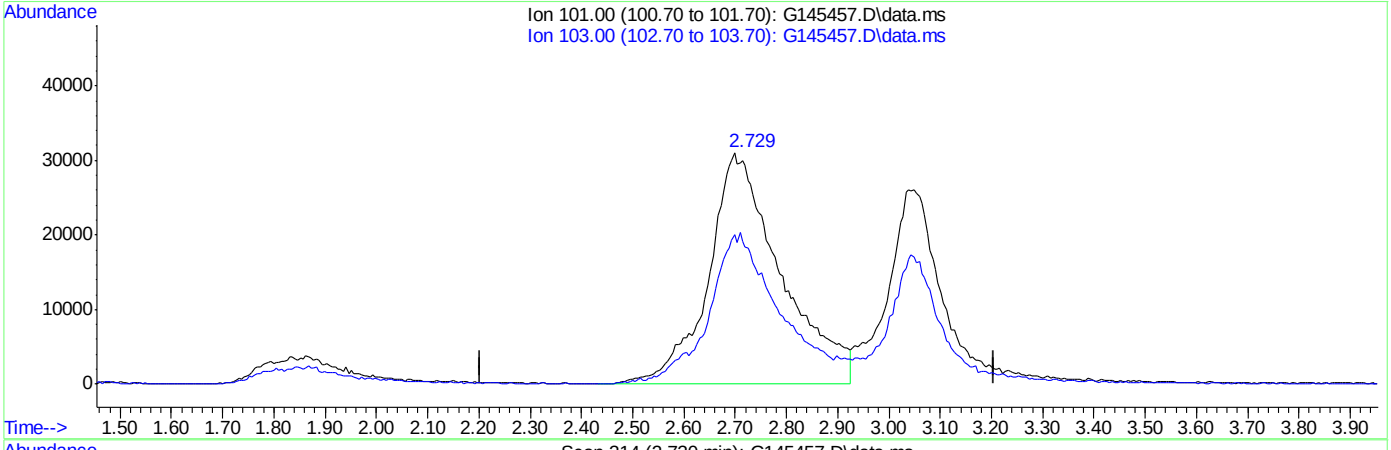
response 0

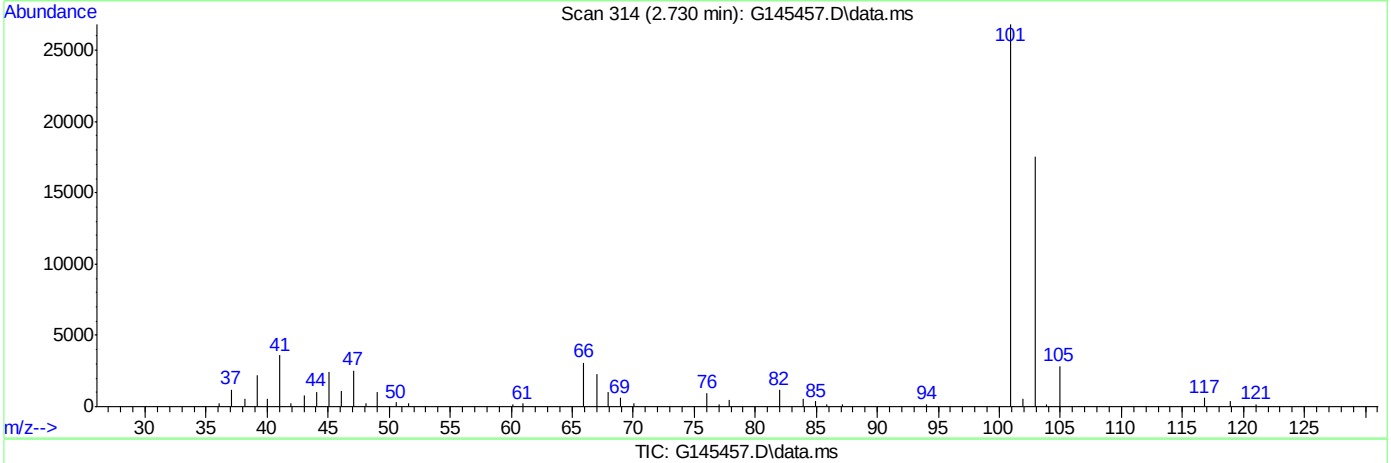
Ion	Exp%	Act%
101.00	100	0.00
103.00	62.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145457.D
Acq On : 13 Sep 2015 11:58 am
Operator : andrewd1
Sample : ic5447-100.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 14 08:56:51 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:56:46 2015
Response via : Initial Calibration





TIC: G145457.D\data.ms

(12) trichlorofluoromethane (p)

2.730min (+0.005) 111.80ppb m

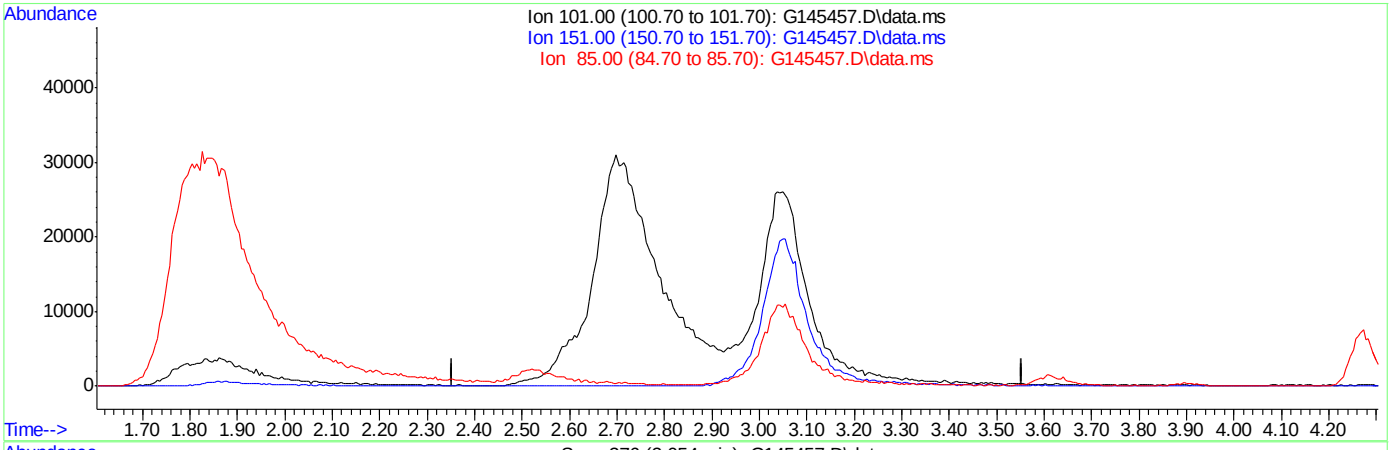
response 305662

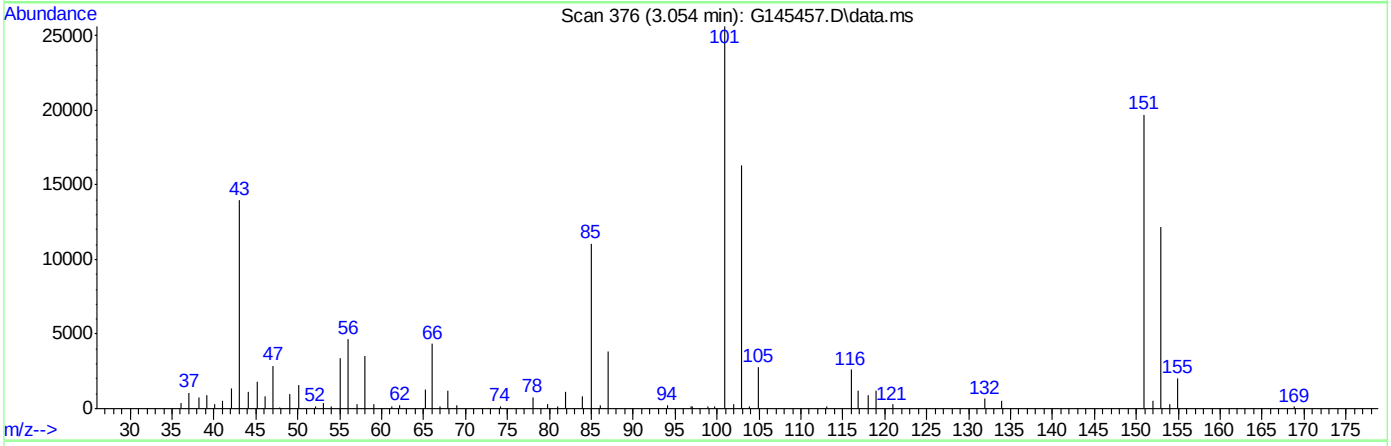
Ion	Exp%	Act%
101.00	100	100
103.00	62.20	65.48
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145457.D
Acq On : 13 Sep 2015 11:58 am
Operator : andrewd1
Sample : ic5447-100.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 14 08:56:51 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:56:46 2015
Response via : Initial Calibration





TIC: G145457.D\data.ms

(13) freon-113 (p)

3.054min (-3.054) 0.00ppb

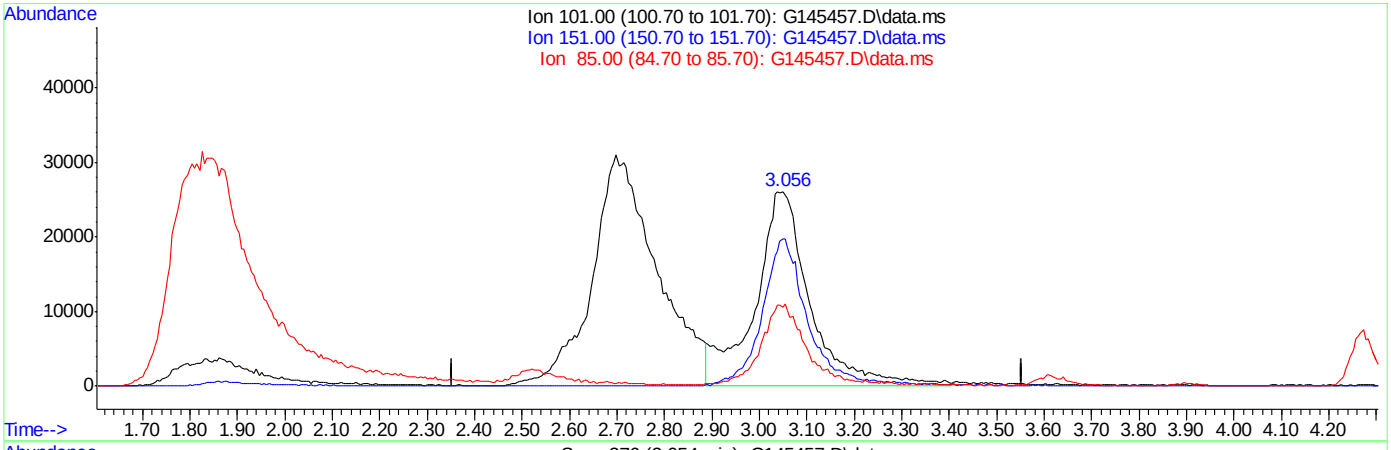
response 0

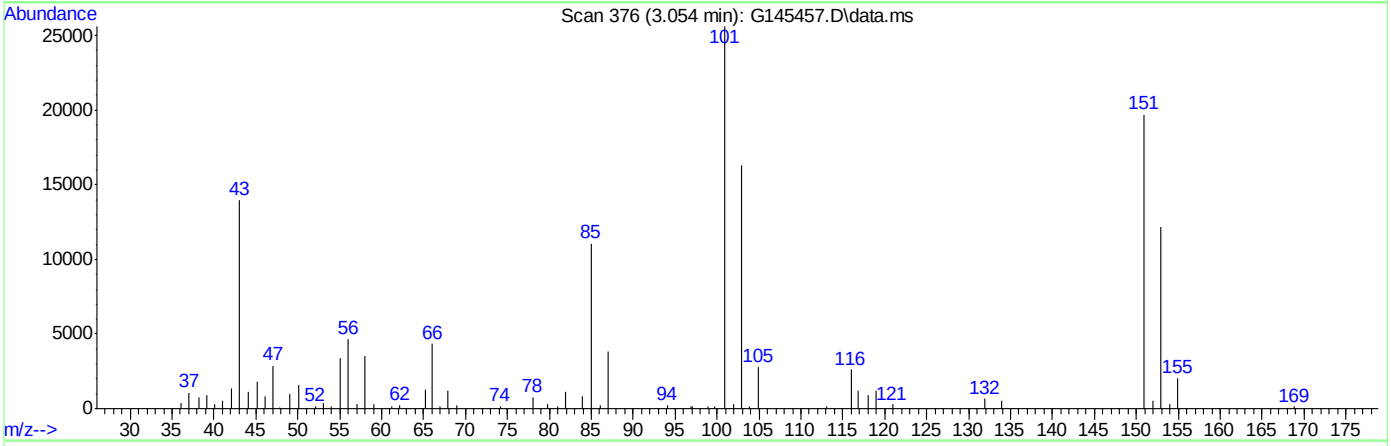
Ion	Exp%	Act%
101.00	100	0.00
151.00	91.80	0.00#
85.00	39.40	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145457.D
Acq On : 13 Sep 2015 11:58 am
Operator : andrewd1
Sample : ic5447-100.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 14 08:56:51 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:56:46 2015
Response via : Initial Calibration





TIC: G145457.D\data.ms

(13) freon-113 (p)

3.054min (+0.000) 105.03ppb m

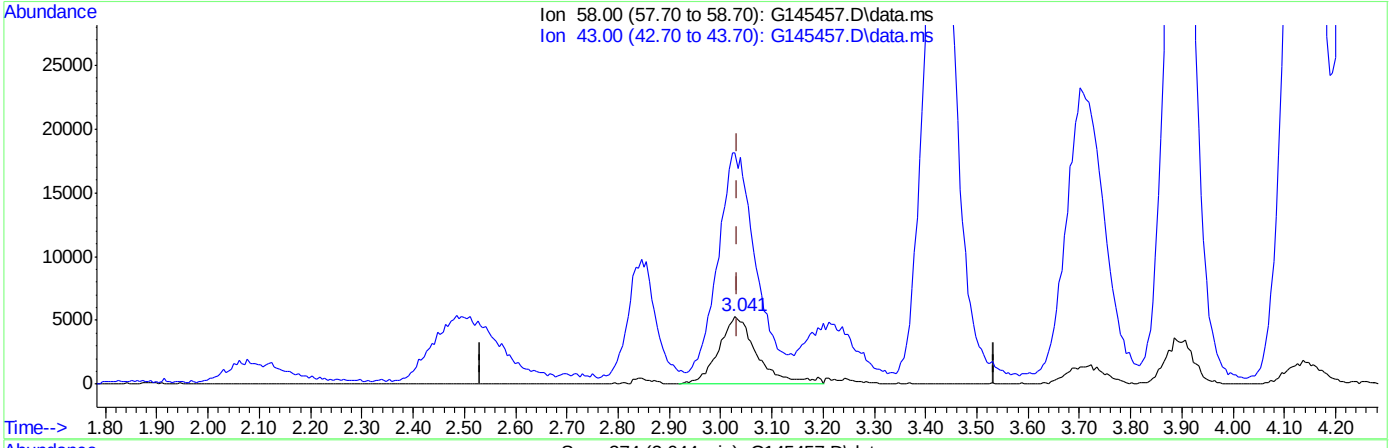
response 212152

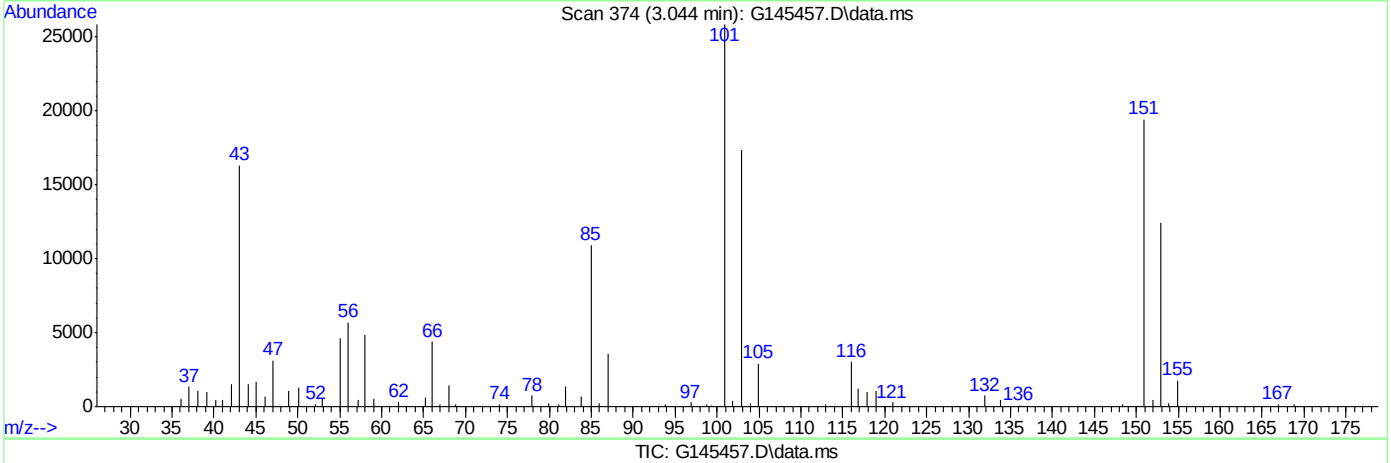
Ion	Exp%	Act%
101.00	100	100
151.00	91.80	76.91
85.00	39.40	43.13
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145457.D
Acq On : 13 Sep 2015 11:58 am
Operator : andrewd1
Sample : ic5447-100.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 14 08:56:51 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:56:46 2015
Response via : Initial Calibration





TIC: G145457.D\data.ms

(16) acetone (p)

3.041min (+0.008) 95.79ppb

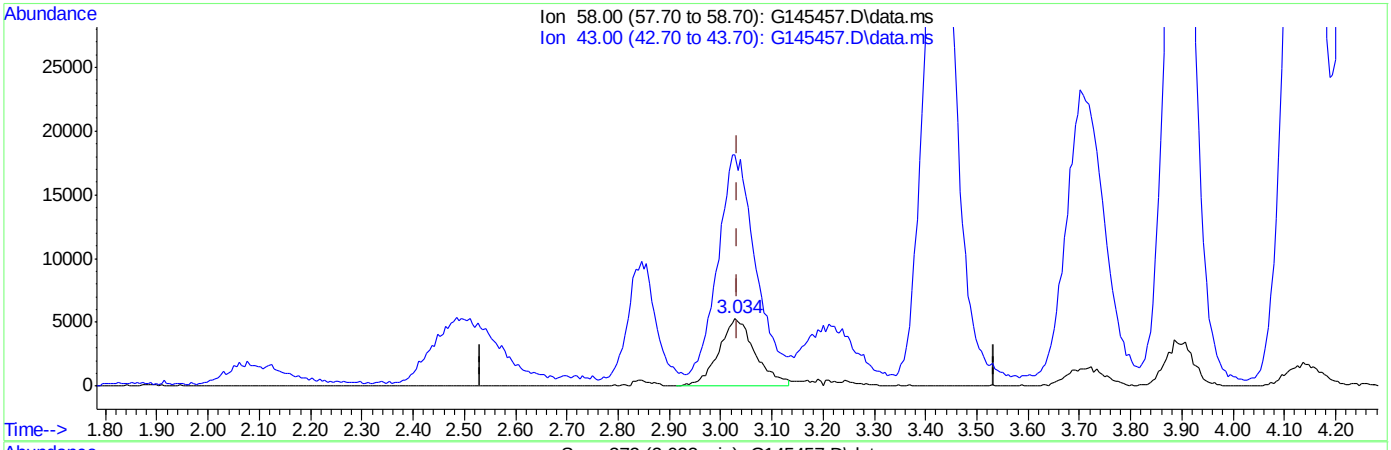
response 27578

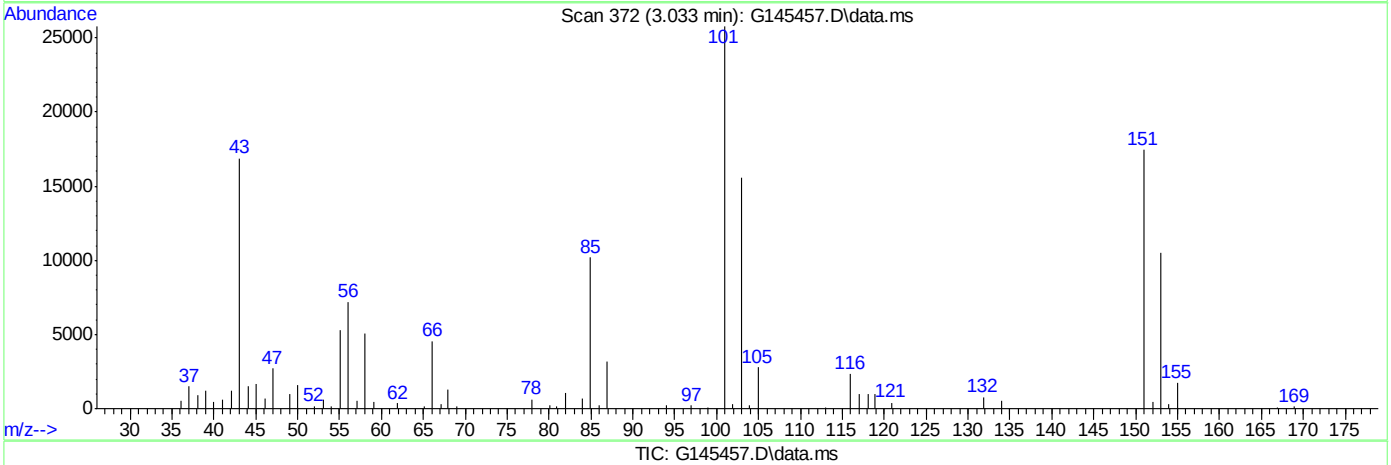
Ion	Exp%	Act%
58.00	100	100
43.00	336.30	315.94
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145457.D
Acq On : 13 Sep 2015 11:58 am
Operator : andrewd1
Sample : ic5447-100.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 14 08:56:51 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:56:46 2015
Response via : Initial Calibration





TIC: G145457.D\data.ms

(16) acetone (p)

3.033min (+0.000) 90.60ppb m

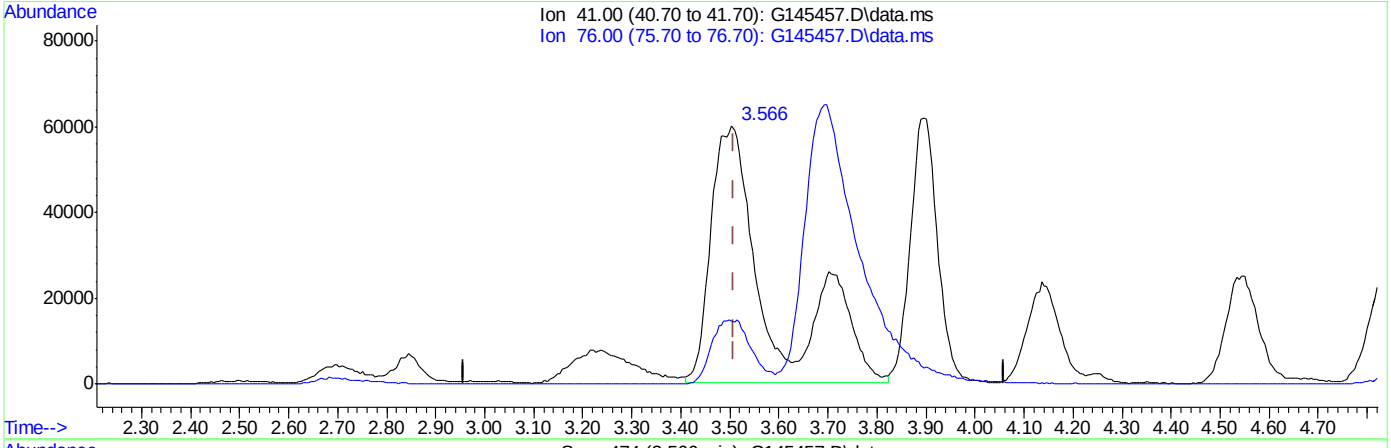
response 26084

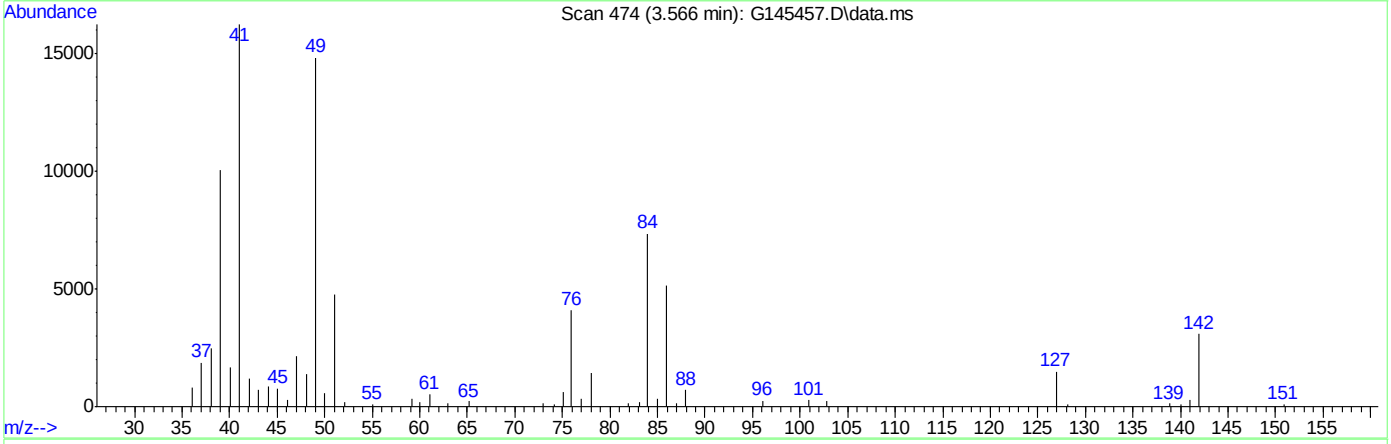
Ion	Exp%	Act%
58.00	100	100
43.00	336.30	333.24
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145457.D
Acq On : 13 Sep 2015 11:58 am
Operator : andrewd1
Sample : ic5447-100.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 14 08:56:51 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:56:46 2015
Response via : Initial Calibration





TIC: G145457.D\data.ms

(21) allyl chloride (p)

3.566min (+0.058) 125.07ppb

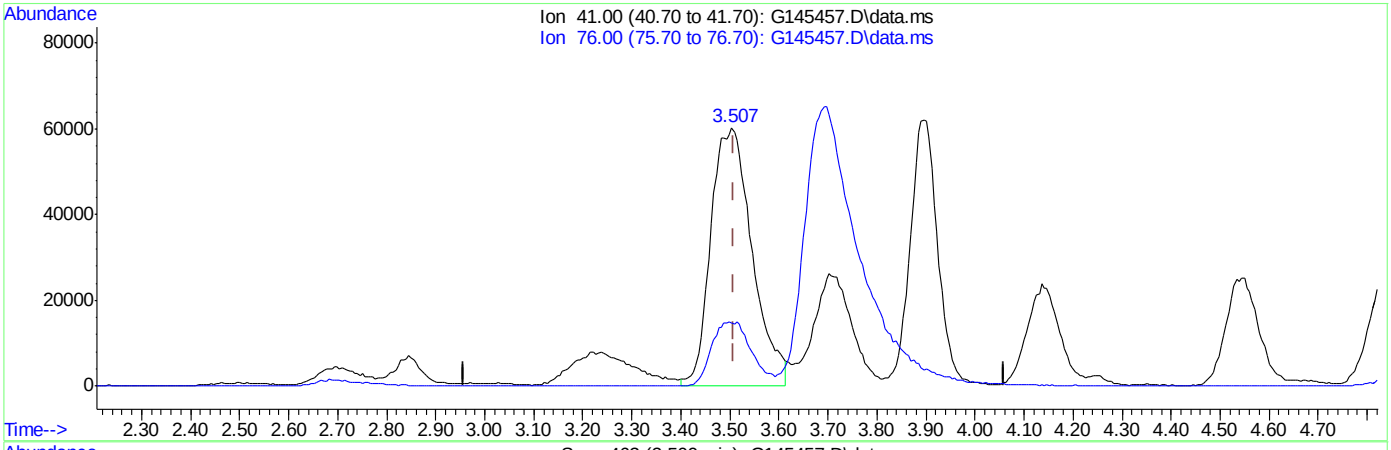
response 491161

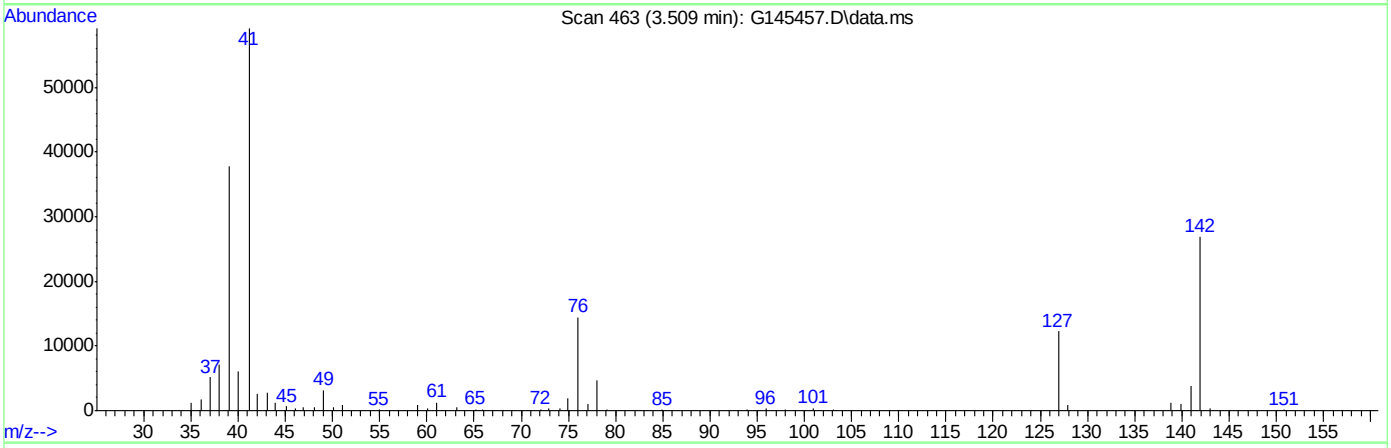
Ion	Exp%	Act%
41.00	100	100
76.00	28.10	28.24
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145457.D
Acq On : 13 Sep 2015 11:58 am
Operator : andrewd1
Sample : ic5447-100.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 14 08:56:51 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:56:46 2015
Response via : Initial Calibration





(21) allyl chloride (p)

3.509min (+0.000) 89.83ppb m

response 352786

Ion	Exp%	Act%
41.00	100	100
76.00	28.10	24.35
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Doug Yargeau
09/14/15 19:20

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145458.D
Acq On : 13 Sep 2015 12:26 pm
Operator : andrewd1
Sample : ic5447-200.0
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 14 09:00:21 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:59:19 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	3.162	65	89093	500.00	ppb		0.00
4) pentafluorobenzene	5.100	168	161090	50.00	ppb		0.00
43) 1,4-difluorobenzene	6.215	114	259223	50.00	ppb		0.00
66) chlorobenzene-d5	9.538	82	129288	50.00	ppb		0.00
80) 1,4-dichlorobenzene-d4	12.157	152	120034	50.00	ppb		0.00
System Monitoring Compounds							
40) dibromofluoromethane (s)	5.269	113	89349	49.38	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 98.76%				
60) toluene-d8 (s)	7.886	98	287746	50.17	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.34%				
82) bromofluorobenzene (s)	10.863	95	112730	48.25	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 96.50%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	3.225	59	467765m	1984.03	ppb		
3) Ethanol	2.531	45	526468	19200.51	ppb	#	41
5) dichlorodifluoromethane	1.892	85	806928	196.25	ppb		99
6) chloromethane	2.018	50	561678	152.12	ppb		99
7) vinyl chloride	2.101	62	466580	183.89	ppb		100
8) bromomethane	2.446	96	266081	195.68	ppb		99
9) chloroethane	2.443	64	228691	189.93	ppb		82
10) ethyl ether	2.857	59	341451	198.26	ppb		98
11) acetonitrile	3.252	41	154902	180.81	ppb	#	60
12) trichlorofluoromethane	2.723	101	561093m	192.74	ppb		
13) freon-113	3.063	101	456407m	213.63	ppb		
14) acrolein	3.021	56	191896	1039.64	ppb		97
15) 1,1-dichloroethene	3.238	96	336853	192.54	ppb		85
16) acetone	3.037	58	54171m	183.13	ppb		
17) Methyl Acetate	3.428	43	425691	157.06	ppb	#	96
18) methylene chloride	3.619	84	352502	187.71	ppb		89
19) methyl tert butyl ether	3.723	73	1042217	193.13	ppb		98
20) acrylonitrile	3.727	53	224756	215.55	ppb		92
21) allyl chloride	3.513	41	784547	193.60	ppb		96
22) trans-1,2-dichloroethene	3.880	96	340242	187.25	ppb		90
23) iodomethane	3.479	142	573004	186.91	ppb		82
24) carbon disulfide	3.723	76	1102966	195.58	ppb		97
25) propionitrile	4.765	54	72892	203.92	ppb		100
26) vinyl acetate	4.246	43	1101394	192.66	ppb		93
27) chloroprene	4.363	53	733988	199.18	ppb		93
28) di-isopropyl ether	4.143	45	1551950	184.39	ppb		96
29) methacrylonitrile	4.958	41	348740	192.08	ppb		86
30) 2-butanone	4.679	72	43780	204.88	ppb	#	53
32) Hexane	3.896	41	521826	186.41	ppb	#	93
33) 1,1-dichloroethane	4.279	63	755152	182.90	ppb		97
34) tert-butyl ethyl ether	4.551	59	1343964	200.26	ppb		98
36) 2,2-dichloropropane	4.851	77	509637	188.19	ppb		94
37) cis-1,2-dichloroethene	4.883	96	372760	190.20	ppb		92
38) bromochloromethane	5.219	128	194001	197.28	ppb	#	86

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145458.D
Acq On : 13 Sep 2015 12:26 pm
Operator : andrewd1
Sample : ic5447-200.0
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 14 09:00:21 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:59:19 2015
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39)	chloroform	5.043	83	685577	185.05	ppb		99
41)	Tetrahydrofuran	5.249	42	149922	191.81	ppb		92
42)	1,1,1-trichloroethane	5.472	97	554340	203.30	ppb		96
44)	Cyclohexane	5.492	56	754391	198.99	ppb		96
45)	carbon tetrachloride	5.746	117	538065	198.84	ppb		97
46)	1,1-dichloropropene	5.624	75	488247	194.02	ppb		96
47)	benzene	5.922	78	1242289	179.53	ppb		99
48)	1,2-dichloroethane	5.902	62	535285	186.39	ppb		97
49)	tert-amyl methyl ether	5.748	73	964664	200.63	ppb	#	66
50)	heptane	5.766	43	1061724	199.62	ppb		95
51)	trichloroethene	6.581	95	348589	181.51	ppb		85
52)	1,2-dichloropropane	6.775	63	372908	191.70	ppb		99
53)	dibromomethane	7.093	93	222318	185.86	ppb		91
54)	bromodichloromethane	7.033	83	495551	194.69	ppb		99
55)	Methylcyclohexane	6.654	83	569056	199.42	ppb		99
56)	2-chloroethyl vinyl ether	7.356	63	167159	263.63	ppb		99
57)	methyl methacrylate	6.829	69	227125	207.26	ppb		98
58)	1,4-dioxane	7.067	88	17319m	1234.48	ppb		
59)	cis-1,3-dichloropropene	7.619	75	565369	207.05	ppb		97
61)	4-methyl-2-pentanone	7.384	43	572196	219.59	ppb		98
62)	toluene	7.972	92	777139	190.62	ppb		99
63)	trans-1,3-dichloropropene	8.167	75	537153	205.42	ppb		94
64)	1,1,2-trichloroethane	8.340	83	250336	186.42	ppb		93
65)	ethyl methacrylate	8.152	69	411601	215.21	ppb		98
67)	tetrachloroethene	8.683	166	343841	178.82	ppb		96
68)	1,3-dichloropropane	8.614	76	482567	182.64	ppb		99
69)	dibromochloromethane	8.907	129	407443	193.01	ppb		99
70)	1,2-dibromoethane	9.126	107	334233	185.23	ppb		97
71)	2-hexanone	8.350	43	317644	198.65	ppb		99
72)	chlorobenzene	9.581	112	999072	191.20	ppb		94
73)	1,1,1,2-tetrachloroethane	9.628	131	360646	190.11	ppb		99
74)	ethylbenzene	9.635	91	1584518	191.61	ppb		94
75)	m,p-xylene	9.719	106	1150802	361.79	ppb		87
76)	o-xylene	10.197	106	594177	189.59	ppb		85
77)	styrene	10.235	104	1012211	191.14	ppb		90
78)	bromoform	10.608	173	258477	199.78	ppb		98
79)	trans-1,4-dichloro-2-b...	10.639	53	151953	227.38	ppb		96
81)	isopropylbenzene	10.587	105	1591960	198.12	ppb		97
83)	bromobenzene	11.078	156	401164	185.11	ppb		86
84)	1,1,2,2-tetrachloroethane	10.777	83	399149	181.73	ppb		95
85)	1,2,3-trichloropropane	10.937	75	296984	198.58	ppb		98
86)	n-propylbenzene	11.025	91	1894138	194.18	ppb		93
87)	2-chlorotoluene	11.220	91	1301894	195.08	ppb		90
88)	4-chlorotoluene	11.273	91	1159036	191.23	ppb		90
89)	1,3,5-trimethylbenzene	11.199	105	1390068	197.67	ppb		95
90)	tert-butylbenzene	11.593	91	980704	199.32	ppb		84
91)	1,2,4-trimethylbenzene	11.628	105	1431553	203.34	ppb		95
92)	sec-butylbenzene	11.819	105	1810485	205.53	ppb		95
93)	1,3-dichlorobenzene	12.075	146	781769	188.83	ppb		95
94)	p-isopropyltoluene	11.969	119	1578836	215.70	ppb		94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145458.D
Acq On : 13 Sep 2015 12:26 pm
Operator : andrewd1
Sample : ic5447-200.0
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 14 09:00:21 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:59:19 2015
Response via : Initial Calibration

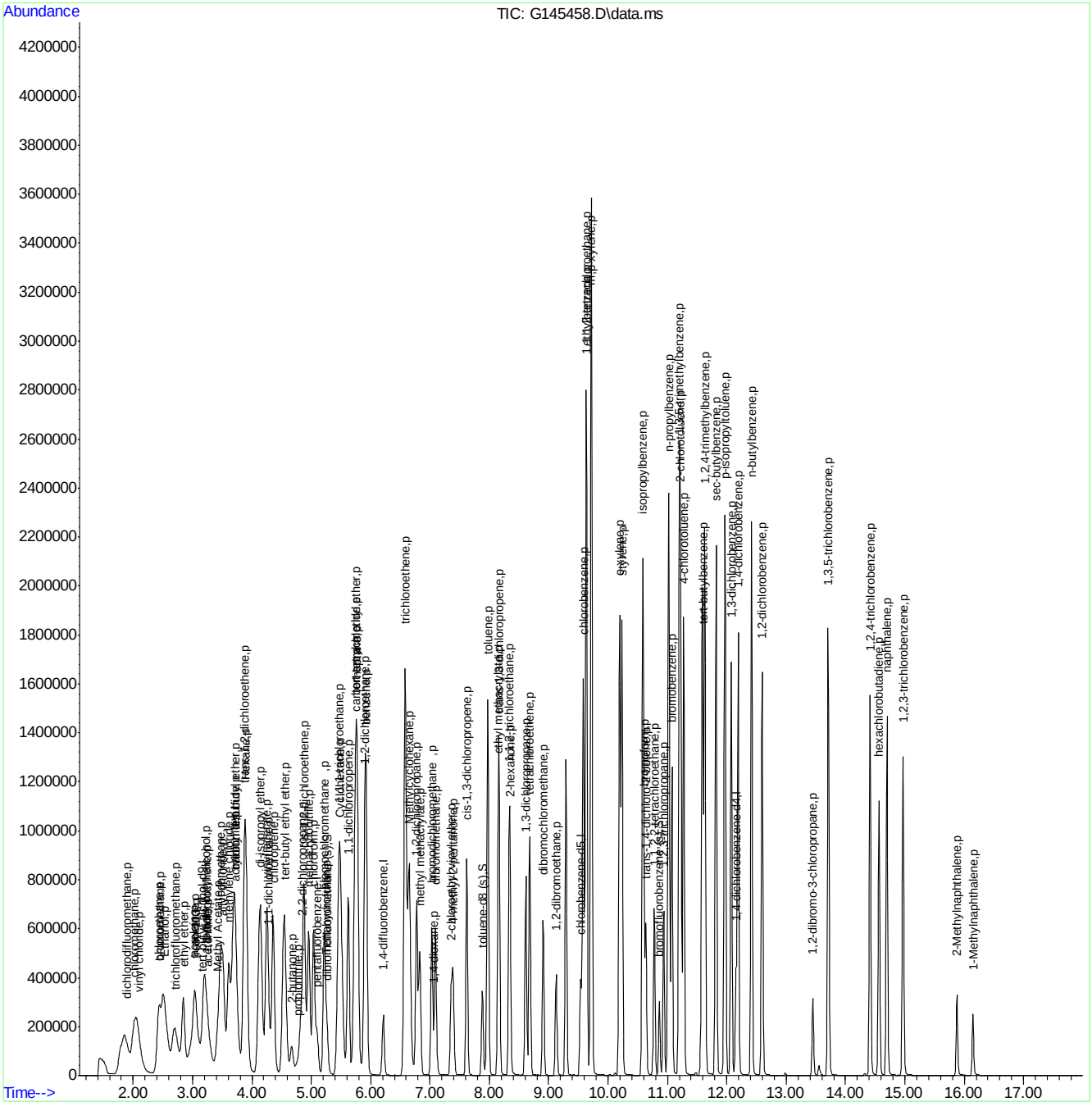
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
95)	1,4-dichlorobenzene	12.192	146	793479	187.76	ppb		97
96)	1,2-dichlorobenzene	12.597	146	772211	195.25	ppb		97
97)	n-butylbenzene	12.416	91	1452833	228.29	ppb		90
98)	1,2-dibromo-3-chloropr...	13.452	75	91682	232.70	ppb	#	69
99)	1,3,5-trichlorobenzene	13.712	180	664635	227.66	ppb		100
100)	1,2,4-trichlorobenzene	14.414	180	550086	270.58	ppb		99
101)	hexachlorobutadiene	14.566	225	250104	206.35	ppb		97
102)	naphthalene	14.701	128	1337949	332.64	ppb		100
103)	2-Methylnaphthalene	15.883	142	178466	208.43	ppb		98
104)	1-Methylnaphthalene	16.151	142	140452	181.09	ppb		94
105)	1,2,3-trichlorobenzene	14.971	180	470134	268.67	ppb		99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145458.D
Acq On : 13 Sep 2015 12:26 pm
Operator : andrewd1
Sample : ic5447-200.0
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

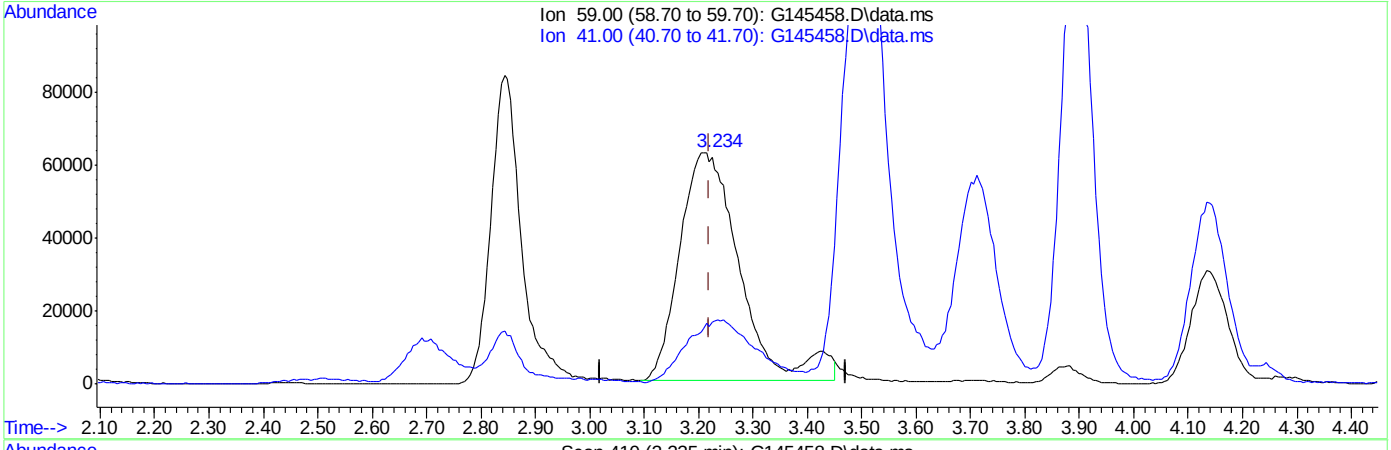
Quant Time: Sep 14 09:00:21 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:59:19 2015
Response via : Initial Calibration

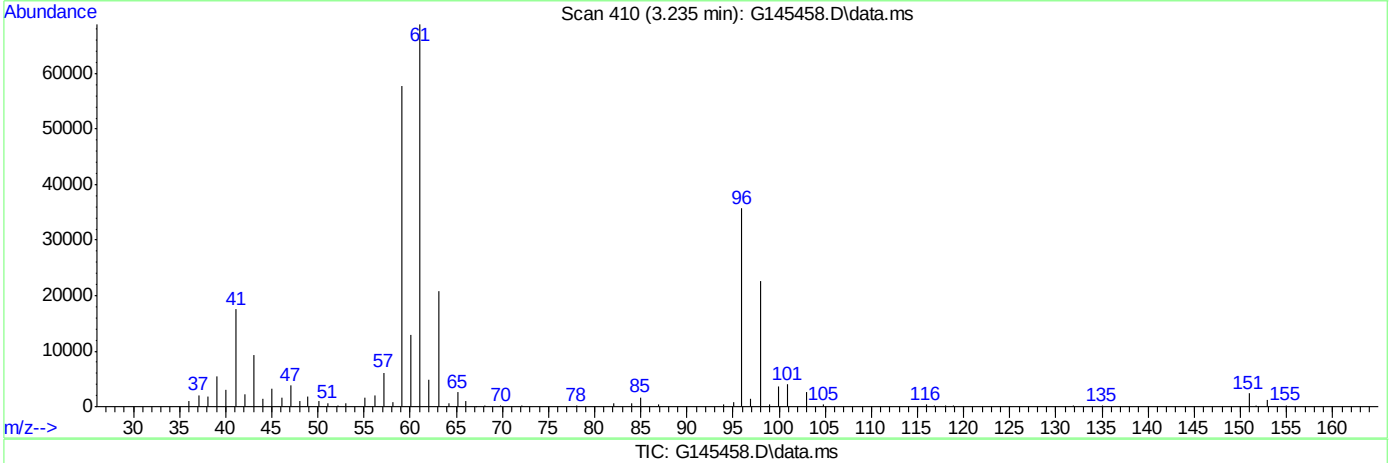


Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145458.D
Acq On : 13 Sep 2015 12:26 pm
Operator : andrewd1
Sample : ic5447-200.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 14 08:59:23 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:59:19 2015
Response via : Initial Calibration





TIC: G145458.D\data.ms

(2) tertiary butyl alcohol (p)

3.234min (+0.013) 2043.77ppb

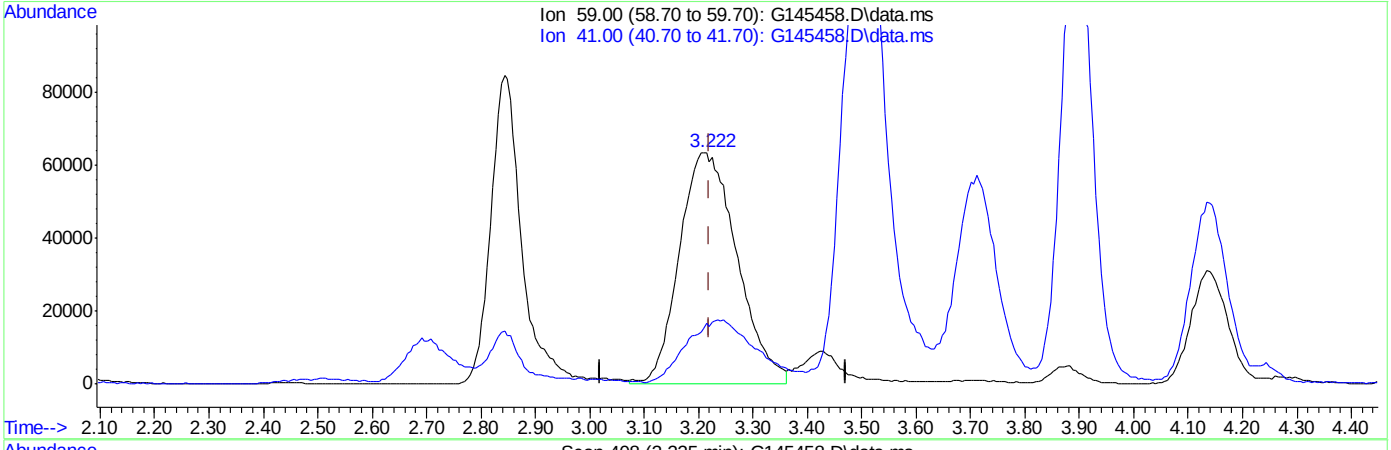
response 481851

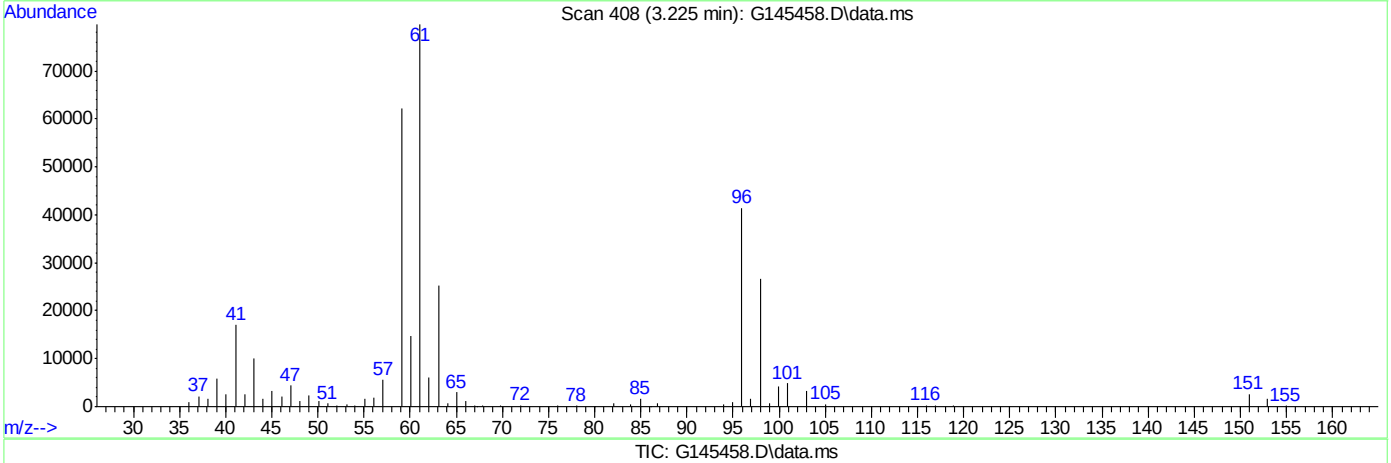
Ion	Exp%	Act%
59.00	100	100
41.00	22.50	29.78
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145458.D
Acq On : 13 Sep 2015 12:26 pm
Operator : andrewd1
Sample : ic5447-200.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 14 08:59:23 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:59:19 2015
Response via : Initial Calibration





TIC: G145458.D\data.ms

(2) tertiary butyl alcohol (p)

3.225min (+0.003) 1984.03ppb m

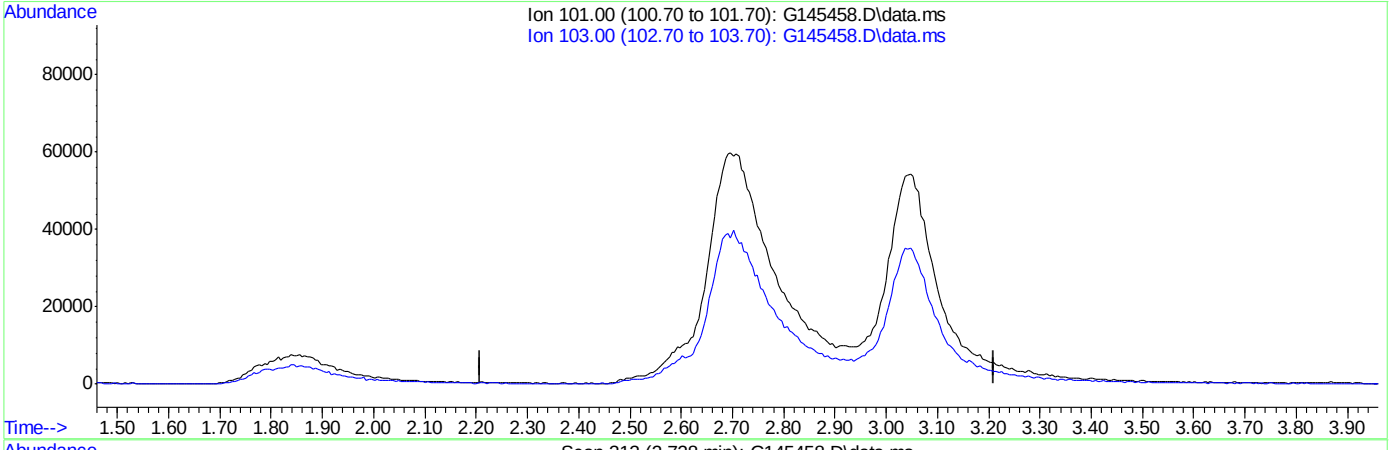
response 467765

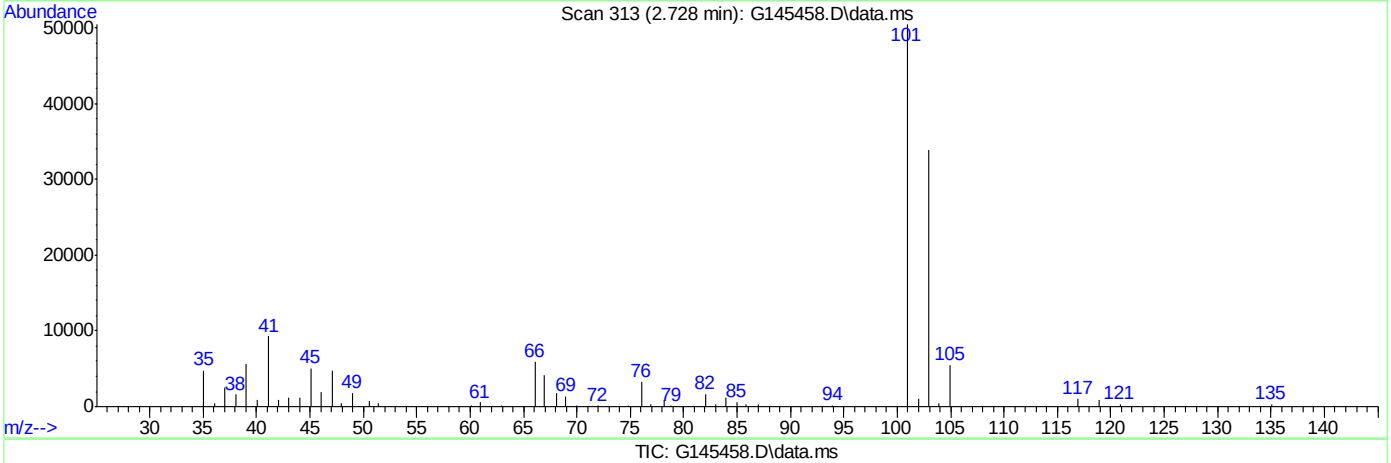
Ion	Exp%	Act%
59.00	100	100
41.00	22.50	27.35
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145458.D
Acq On : 13 Sep 2015 12:26 pm
Operator : andrewd1
Sample : ic5447-200.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 14 08:59:23 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:59:19 2015
Response via : Initial Calibration





TIC: G145458.D\data.ms

(12) trichlorofluoromethane (p)

2.730min (-2.730) 0.00ppb

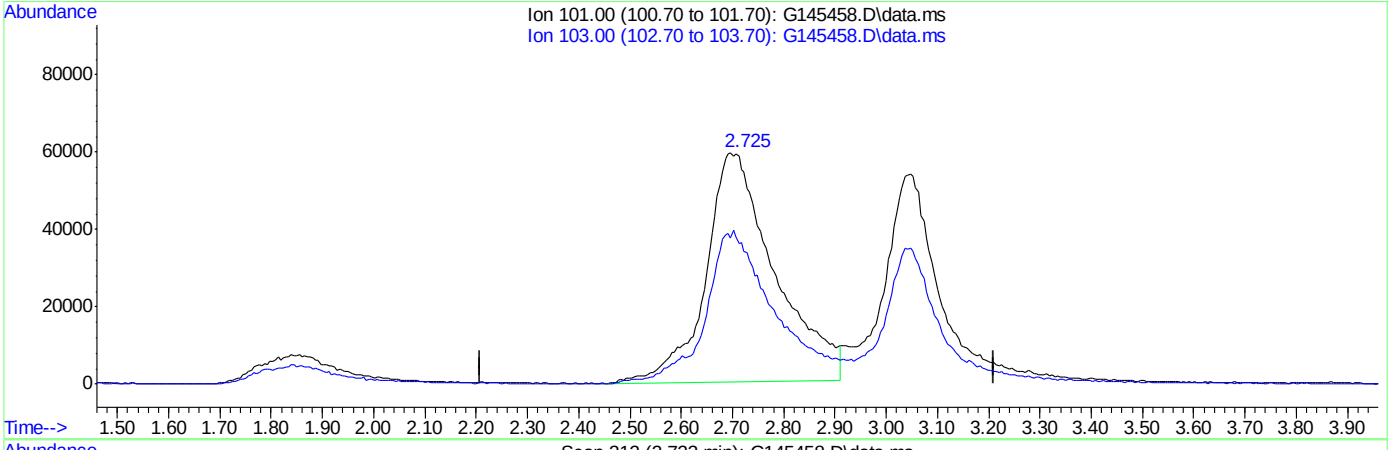
response 0

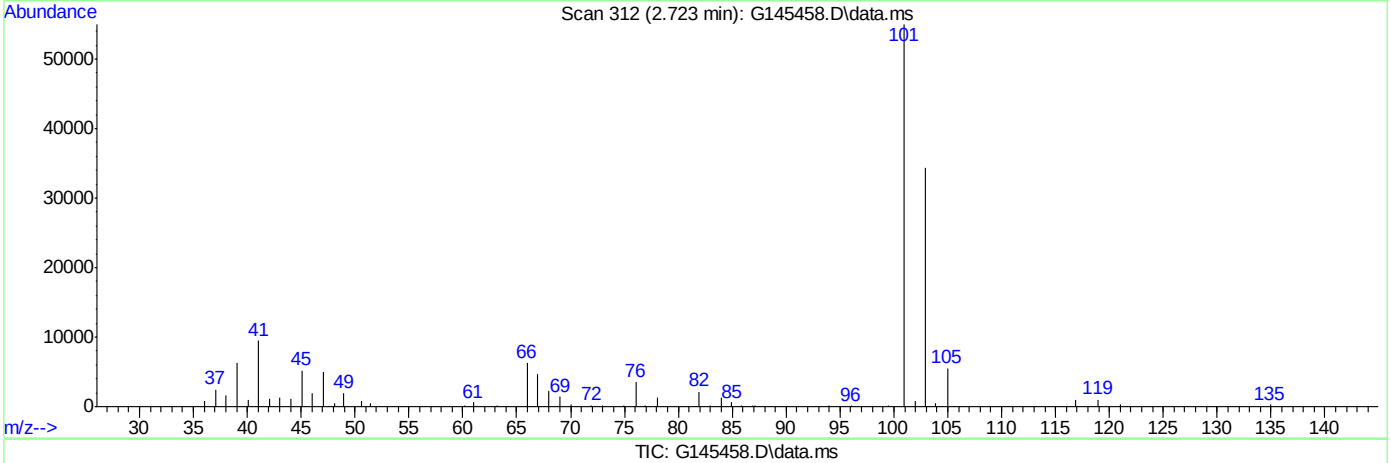
Ion	Exp%	Act%
101.00	100	0.00
103.00	62.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145458.D
Acq On : 13 Sep 2015 12:26 pm
Operator : andrewd1
Sample : ic5447-200.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 14 08:59:23 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:59:19 2015
Response via : Initial Calibration





TIC: G145458.D\data.ms

(12) trichlorofluoromethane (p)

2.723min (-0.007) 192.74ppb m

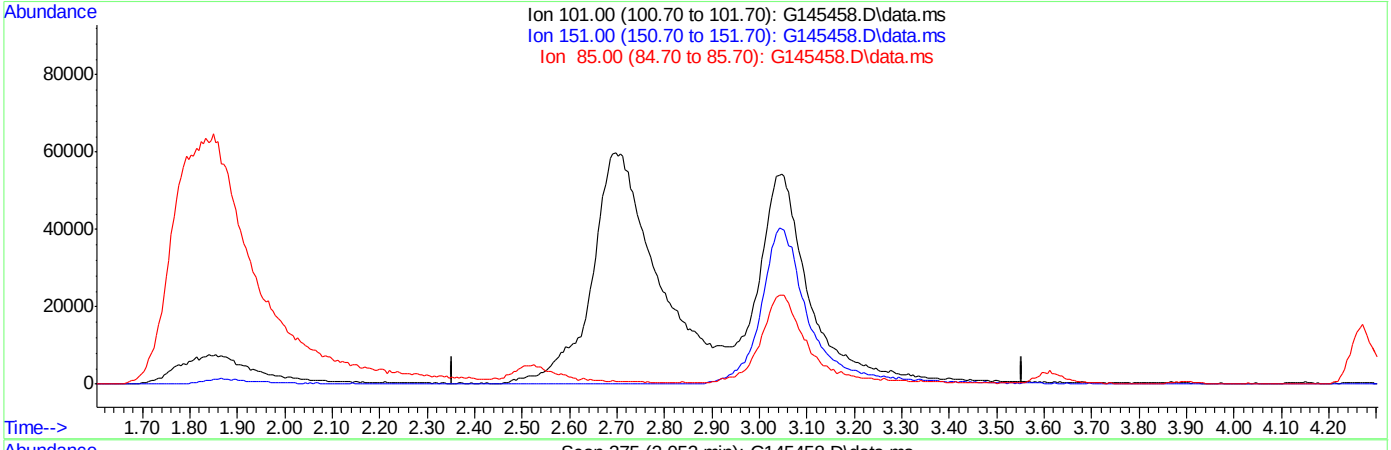
response 561093

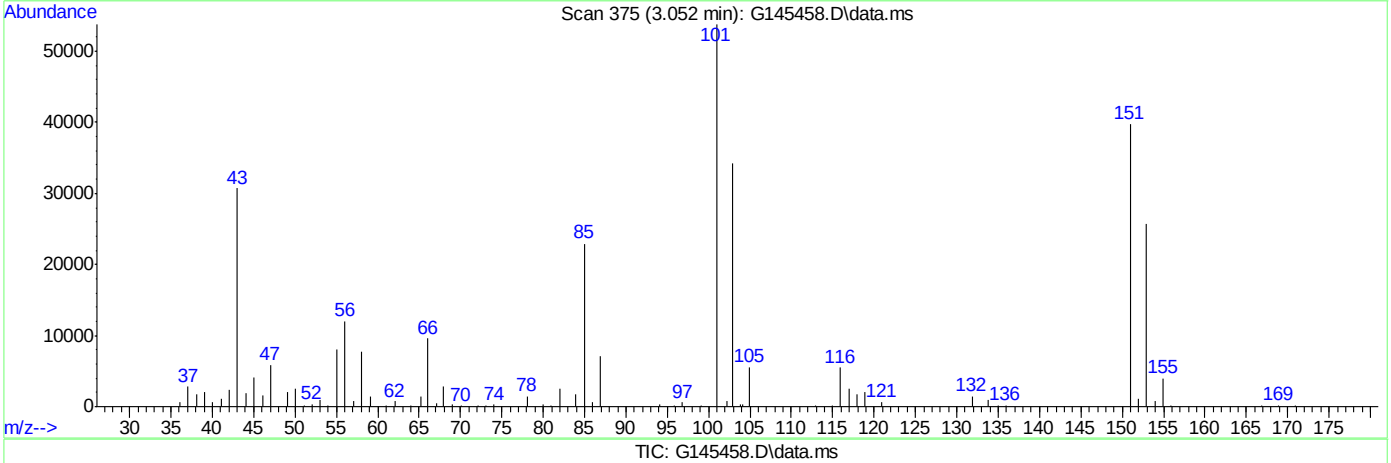
Ion	Exp%	Act%
101.00	100	100
103.00	62.20	62.45
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145458.D
Acq On : 13 Sep 2015 12:26 pm
Operator : andrewd1
Sample : ic5447-200.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 14 08:59:23 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:59:19 2015
Response via : Initial Calibration





TIC: G145458.D\data.ms

(13) freon-113 (p)

3.054min (-3.054) 0.00ppb

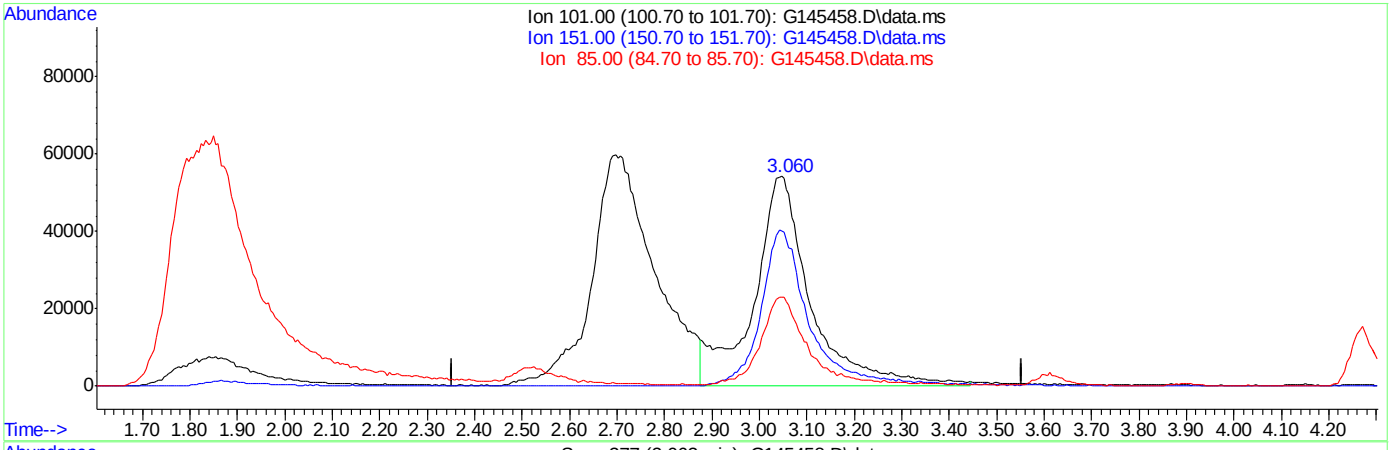
response 0

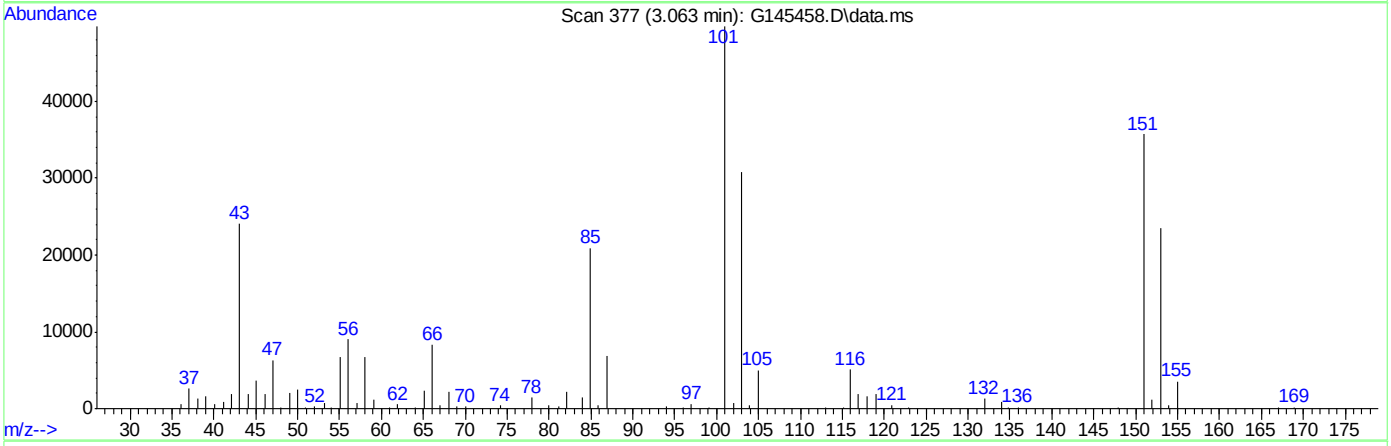
Ion	Exp%	Act%
101.00	100	0.00
151.00	91.80	0.00#
85.00	39.40	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145458.D
Acq On : 13 Sep 2015 12:26 pm
Operator : andrewd1
Sample : ic5447-200.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 14 08:59:23 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:59:19 2015
Response via : Initial Calibration





TIC: G145458.D\data.ms

(13) freon-113 (p)

3.063min (+0.009) 213.63ppb m

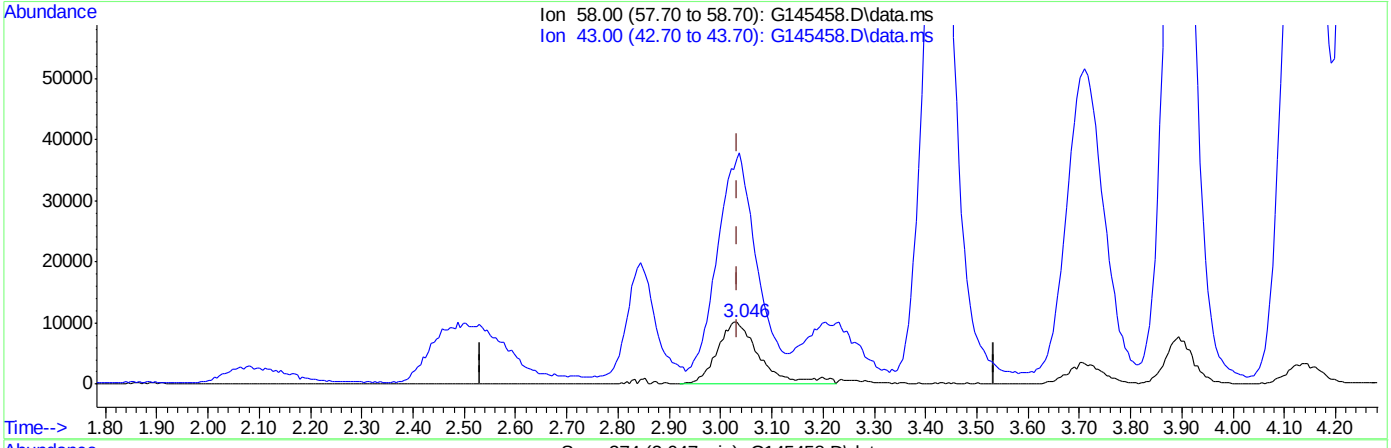
response 456407

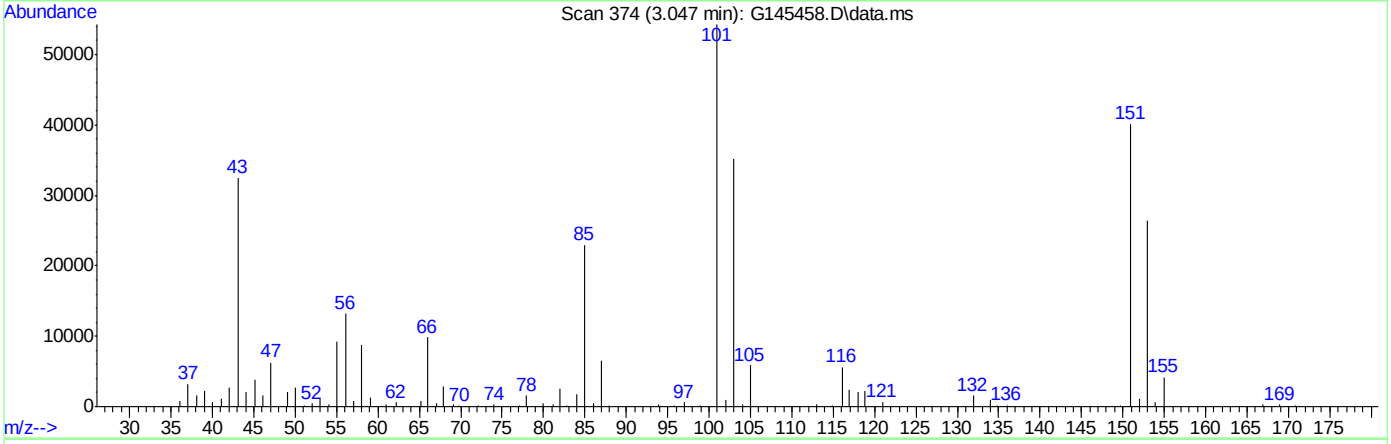
Ion	Exp%	Act%
101.00	100	100
151.00	91.80	71.74
85.00	39.40	42.05
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145458.D
Acq On : 13 Sep 2015 12:26 pm
Operator : andrewd1
Sample : ic5447-200.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 14 08:59:23 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:59:19 2015
Response via : Initial Calibration





TIC: G145458.D\data.ms

(16) acetone (p)

3.046min (+0.013) 198.36ppb

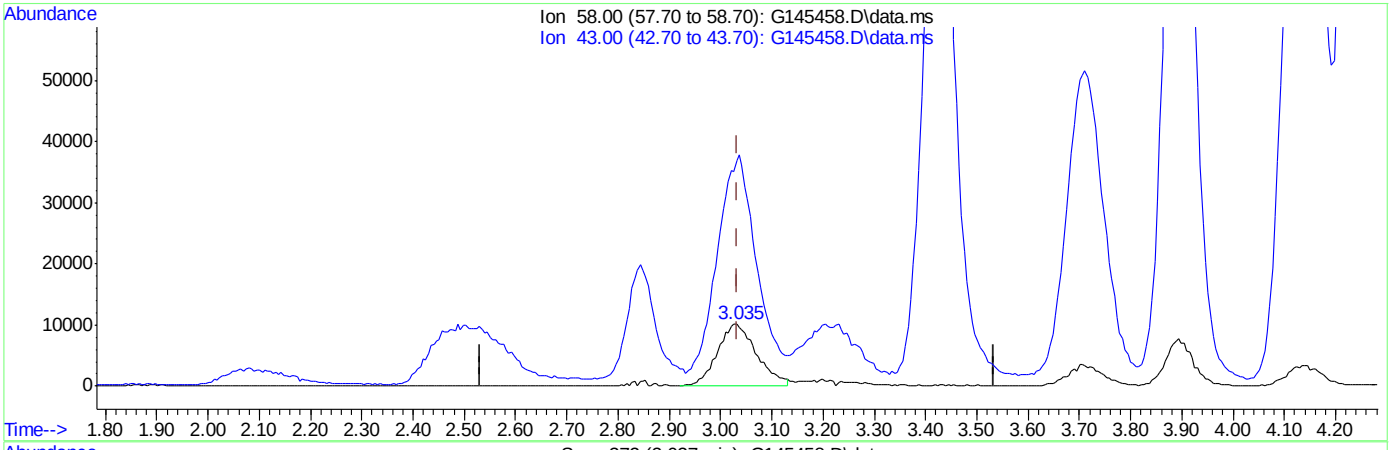
response 58676

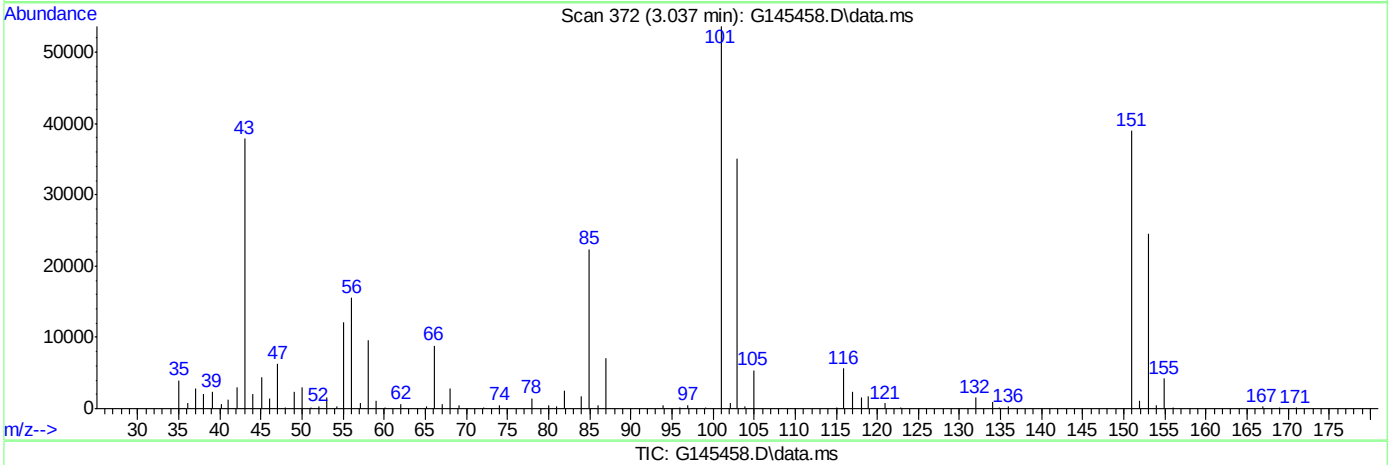
Ion	Exp%	Act%
58.00	100	100
43.00	336.30	338.95
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145458.D
Acq On : 13 Sep 2015 12:26 pm
Operator : andrewd1
Sample : ic5447-200.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 14 08:59:23 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:59:19 2015
Response via : Initial Calibration





(16) acetone (p)

3.037min (+0.003) 183.13ppb m

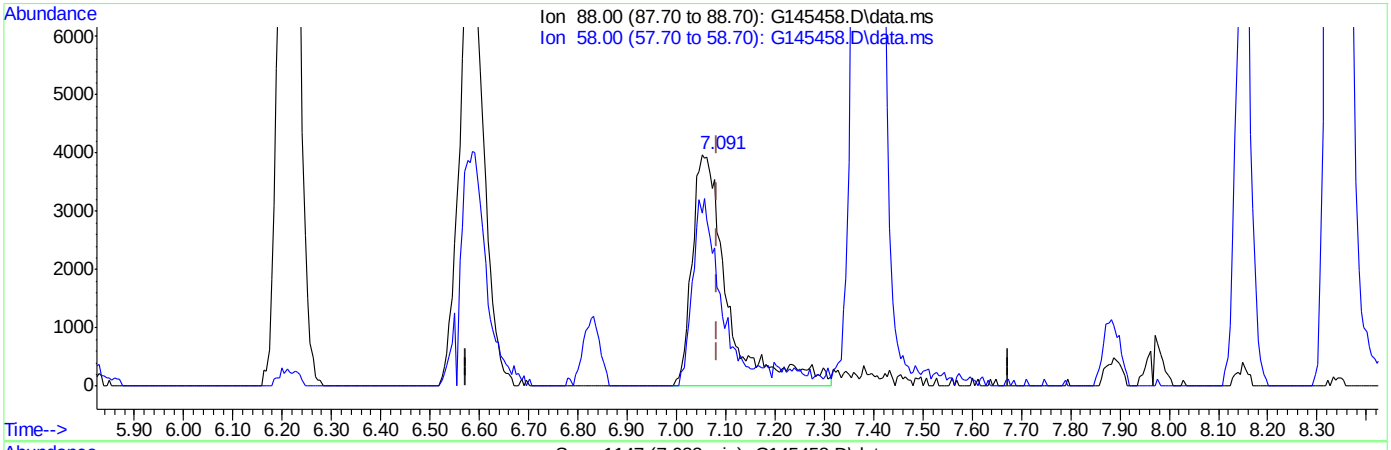
response 54171

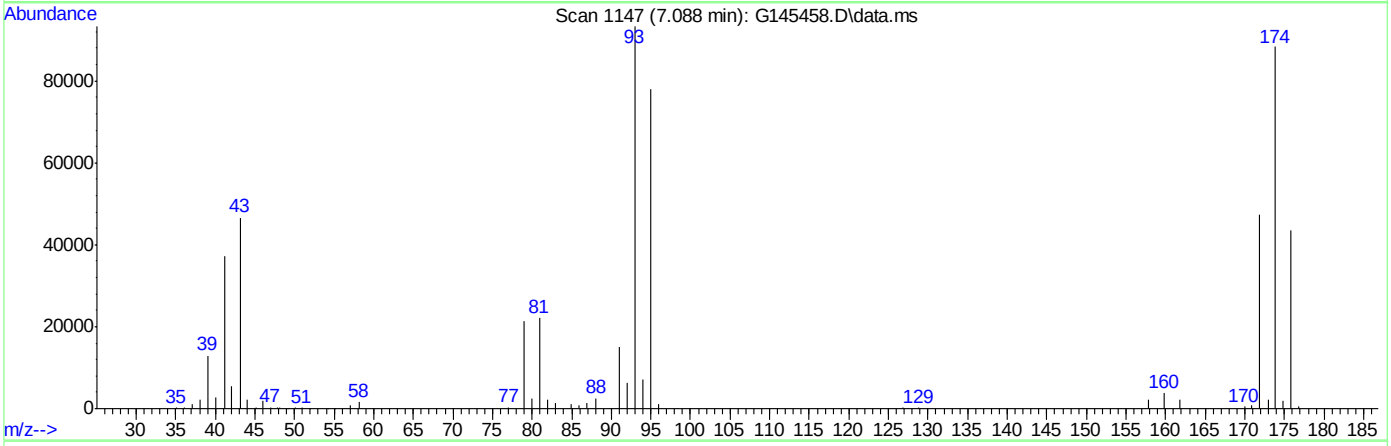
Ion	Exp%	Act%
58.00	100	100
43.00	336.30	396.11#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145458.D
Acq On : 13 Sep 2015 12:26 pm
Operator : andrewd1
Sample : ic5447-200.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 14 08:59:23 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:59:19 2015
Response via : Initial Calibration





(58) 1,4-dioxane (p)

7.091min (+0.006) 1423.65ppb

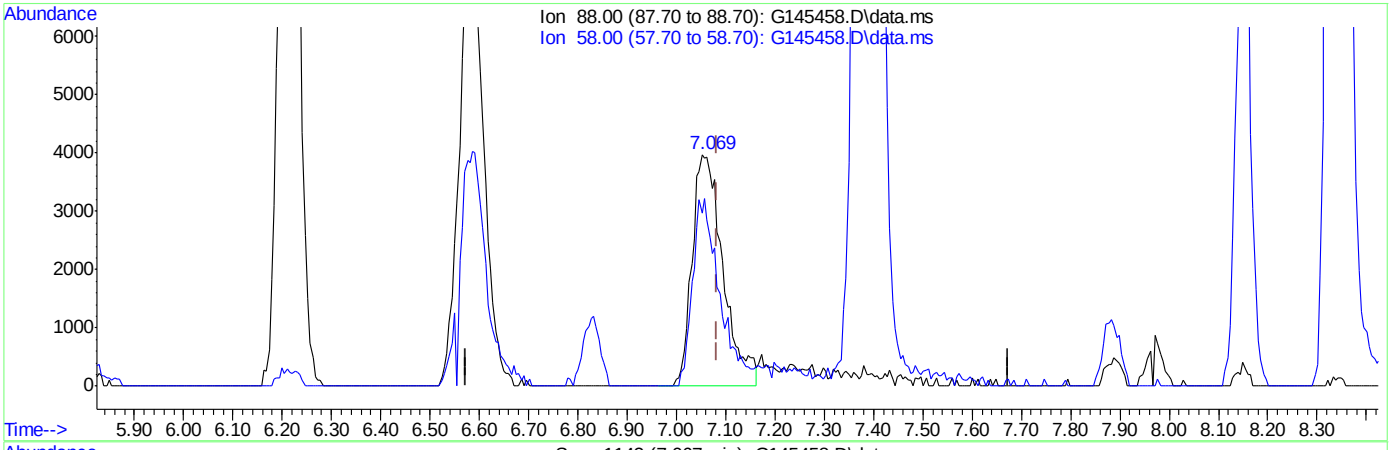
response 19973

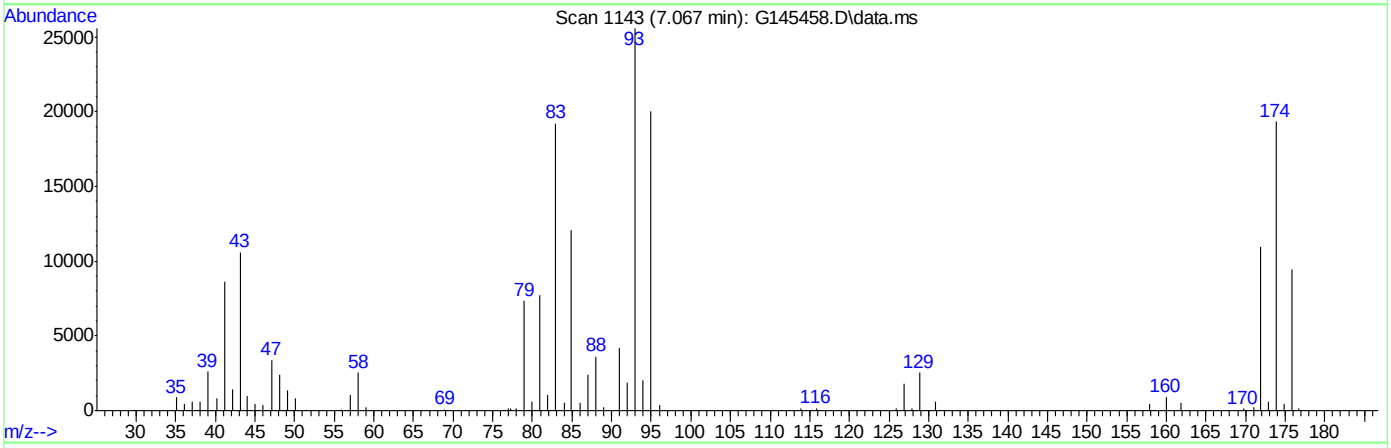
Ion	Exp%	Act%
88.00	100	100
58.00	88.20	64.16
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145458.D
Acq On : 13 Sep 2015 12:26 pm
Operator : andrewd1
Sample : ic5447-200.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 14 08:59:23 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 08:59:19 2015
Response via : Initial Calibration





(58) 1,4-dioxane (p)

7.067min (-0.017) 1234.48ppb m

response 17319

Ion	Exp%	Act%
88.00	100	100
58.00	88.20	70.13
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Doug Yargeau
09/14/15 19:20

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145459.D
Acq On : 13 Sep 2015 12:56 pm
Operator : andrewd1
Sample : ic5447-400.0
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 14 09:01:53 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:00:49 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	3.150	65	97978	500.00	ppb		-0.01
4) pentafluorobenzene	5.099	168	166780	50.00	ppb		0.00
43) 1,4-difluorobenzene	6.215	114	287478	50.00	ppb		0.00
66) chlorobenzene-d5	9.539	82	125775	50.00	ppb		0.00
80) 1,4-dichlorobenzene-d4	12.158	152	128635	50.00	ppb		0.00
System Monitoring Compounds							
40) dibromofluoromethane (s)	5.269	113	91574	48.95	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 97.90%				
60) toluene-d8 (s)	7.886	98	299173	47.02	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 94.04%				
82) bromofluorobenzene (s)	10.864	95	119824	48.04	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 96.08%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	3.222	59	1015005m	3919.21	ppb		
3) Ethanol	2.530	45	1027226	34261.71	ppb	#	41
5) dichlorodifluoromethane	1.938	85	1748492	411.84	ppb		100
6) chloromethane	2.018	50	1024794	275.41	ppb		98
7) vinyl chloride	2.101	62	943805	362.94	ppb		97
8) bromomethane	2.457	96	548045	390.49	ppb		96
9) chloroethane	2.448	64	466210	376.70	ppb		81
10) ethyl ether	2.856	59	693072	389.17	ppb		99
11) acetonitrile	3.251	41	324223	371.48	ppb	#	61
12) trichlorofluoromethane	2.730	101	1213201m	404.36	ppb		
13) freon-113	3.081	101	924507m	413.27	ppb		
14) acrolein	3.015	56	418122	2173.63	ppb		100
15) 1,1-dichloroethene	3.253	96	686505	380.79	ppb		83
16) acetone	3.034	58	112692m	373.22	ppb		
17) Methyl Acetate	3.427	43	907980	332.50	ppb	#	96
18) methylene chloride	3.619	84	717246	371.76	ppb		90
19) methyl tert butyl ether	3.720	73	2136184	383.82	ppb		99
20) acrylonitrile	3.722	53	474306	433.74	ppb		97
21) allyl chloride	3.514	41	1575296	376.97	ppb		97
22) trans-1,2-dichloroethene	3.881	96	692909	371.29	ppb		87
23) iodomethane	3.486	142	1176795	373.82	ppb		83
24) carbon disulfide	3.723	76	2251417	386.68	ppb		98
25) propionitrile	4.765	54	158369	426.53	ppb		100
26) vinyl acetate	4.244	43	2302207	391.03	ppb		94
27) chloroprene	4.361	53	1475863	387.04	ppb		92
28) di-isopropyl ether	4.142	45	3142772	363.81	ppb		96
29) methacrylonitrile	4.956	41	749310	400.90	ppb		85
30) 2-butanone	4.678	72	95306	429.05	ppb	#	59
32) Hexane	3.895	41	1035932	360.94	ppb		98
33) 1,1-dichloroethane	4.281	63	1556167	367.54	ppb		99
34) tert-butyl ethyl ether	4.550	59	2731016	393.01	ppb		99
36) 2,2-dichloropropane	4.853	77	1016439	365.61	ppb		98
37) cis-1,2-dichloroethene	4.883	96	763230	378.46	ppb		95
38) bromochloromethane	5.219	128	394024	387.90	ppb	#	86

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145459.D
Acq On : 13 Sep 2015 12:56 pm
Operator : andrewd1
Sample : ic5447-400.0
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 14 09:01:53 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:00:49 2015
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39)	chloroform	5.043	83	1391972	365.95	ppb		100
41)	Tetrahydrofuran	5.247	42	327891	407.98	ppb		94
42)	1,1,1-trichloroethane	5.473	97	1136661	401.82	ppb		96
44)	Cyclohexane	5.496	56	1579839	376.03	ppb		98
45)	carbon tetrachloride	5.747	117	1120200	373.55	ppb		98
46)	1,1-dichloropropene	5.623	75	1031443	371.17	ppb		96
47)	benzene	5.922	78	2737318	360.80	ppb		99
48)	1,2-dichloroethane	5.901	62	1154513	365.26	ppb		96
49)	tert-amyl methyl ether	5.754	73	2104150	394.47	ppb	#	63
50)	heptane	5.766	43	2183325	370.24	ppb		97
51)	trichloroethene	6.580	95	744794	353.32	ppb		84
52)	1,2-dichloropropane	6.775	63	802447	373.90	ppb		99
53)	dibromomethane	7.092	93	455992	347.25	ppb		89
54)	bromodichloromethane	7.033	83	993592	353.16	ppb		99
55)	Methylcyclohexane	6.655	83	1246206	393.95	ppb		99
56)	2-chloroethyl vinyl ether	7.356	63	392524	530.10	ppb		98
57)	methyl methacrylate	6.829	69	524080	428.64	ppb		98
58)	1,4-dioxane	7.080	88	38825m	2401.55	ppb		
59)	cis-1,3-dichloropropene	7.619	75	1135062	373.37	ppb		95
61)	4-methyl-2-pentanone	7.382	43	1259749	429.91	ppb		98
62)	toluene	7.973	92	1552066	345.07	ppb		98
63)	trans-1,3-dichloropropene	8.167	75	1077470	370.43	ppb		94
64)	1,1,2-trichloroethane	8.341	83	509500	345.05	ppb		94
65)	ethyl methacrylate	8.153	69	860030	401.12	ppb		97
67)	tetrachloroethene	8.683	166	680931	368.35	ppb		95
68)	1,3-dichloropropane	8.615	76	990936	390.36	ppb		98
69)	dibromochloromethane	8.908	129	833430	407.42	ppb		99
70)	1,2-dibromoethane	9.126	107	691957	398.39	ppb		96
71)	2-hexanone	8.348	43	683319	439.77	ppb		100
72)	chlorobenzene	9.582	112	1849570	365.63	ppb		93
73)	1,1,1,2-tetrachloroethane	9.629	131	687967	375.10	ppb		98
74)	ethylbenzene	9.636	91	3072531	383.71	ppb		93
75)	m,p-xylene	9.722	106	2399984	783.90	ppb		86
76)	o-xylene	10.198	106	1182022	389.94	ppb		83
77)	styrene	10.236	104	2016504	393.60	ppb		88
78)	bromoform	10.609	173	536836	426.57	ppb		96
79)	trans-1,4-dichloro-2-b...	10.640	53	327019	491.79	ppb		97
81)	isopropylbenzene	10.588	105	3184530	370.26	ppb		96
83)	bromobenzene	11.079	156	798491	347.51	ppb		85
84)	1,1,2,2-tetrachloroethane	10.778	83	846234	363.21	ppb		94
85)	1,2,3-trichloropropane	10.938	75	630824	394.07	ppb		98
86)	n-propylbenzene	11.026	91	3801194	364.95	ppb		92
87)	2-chlorotoluene	11.222	91	2647915	371.54	ppb		88
88)	4-chlorotoluene	11.276	91	2364794	366.38	ppb		89
89)	1,3,5-trimethylbenzene	11.202	105	2805272	372.73	ppb		95
90)	tert-butylbenzene	11.595	91	2014807	382.28	ppb		84
91)	1,2,4-trimethylbenzene	11.631	105	2934431	388.23	ppb		94
92)	sec-butylbenzene	11.821	105	3672018	387.64	ppb		94
93)	1,3-dichlorobenzene	12.077	146	1570879	356.27	ppb		94
94)	p-isopropyltoluene	11.972	119	3210816	405.35	ppb		94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145459.D
Acq On : 13 Sep 2015 12:56 pm
Operator : andrewd1
Sample : ic5447-400.0
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 14 09:01:53 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:00:49 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
95) 1,4-dichlorobenzene	12.194	146	1607698	357.42	ppb		96
96) 1,2-dichlorobenzene	12.598	146	1554306	367.69	ppb		95
97) n-butylbenzene	12.417	91	2922688	421.11	ppb		90
98) 1,2-dibromo-3-chloropr...	13.452	75	203115	468.30	ppb	#	70
99) 1,3,5-trichlorobenzene	13.713	180	1302124	408.14	ppb		100
100) 1,2,4-trichlorobenzene	14.416	180	1122788	486.73	ppb		98
101) hexachlorobutadiene	14.568	225	494465	378.68	ppb		97
102) naphthalene	14.703	128	2960572	627.41	ppb		100
103) 2-Methylnaphthalene	15.882	142	534038	478.29	ppb		97
104) 1-Methylnaphthalene	16.149	142	383161	396.66	ppb		96
105) 1,2,3-trichlorobenzene	14.973	180	995287	502.03	ppb		99

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

Quantitation Report (QT Reviewed)

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Sample : ic5447-400.0
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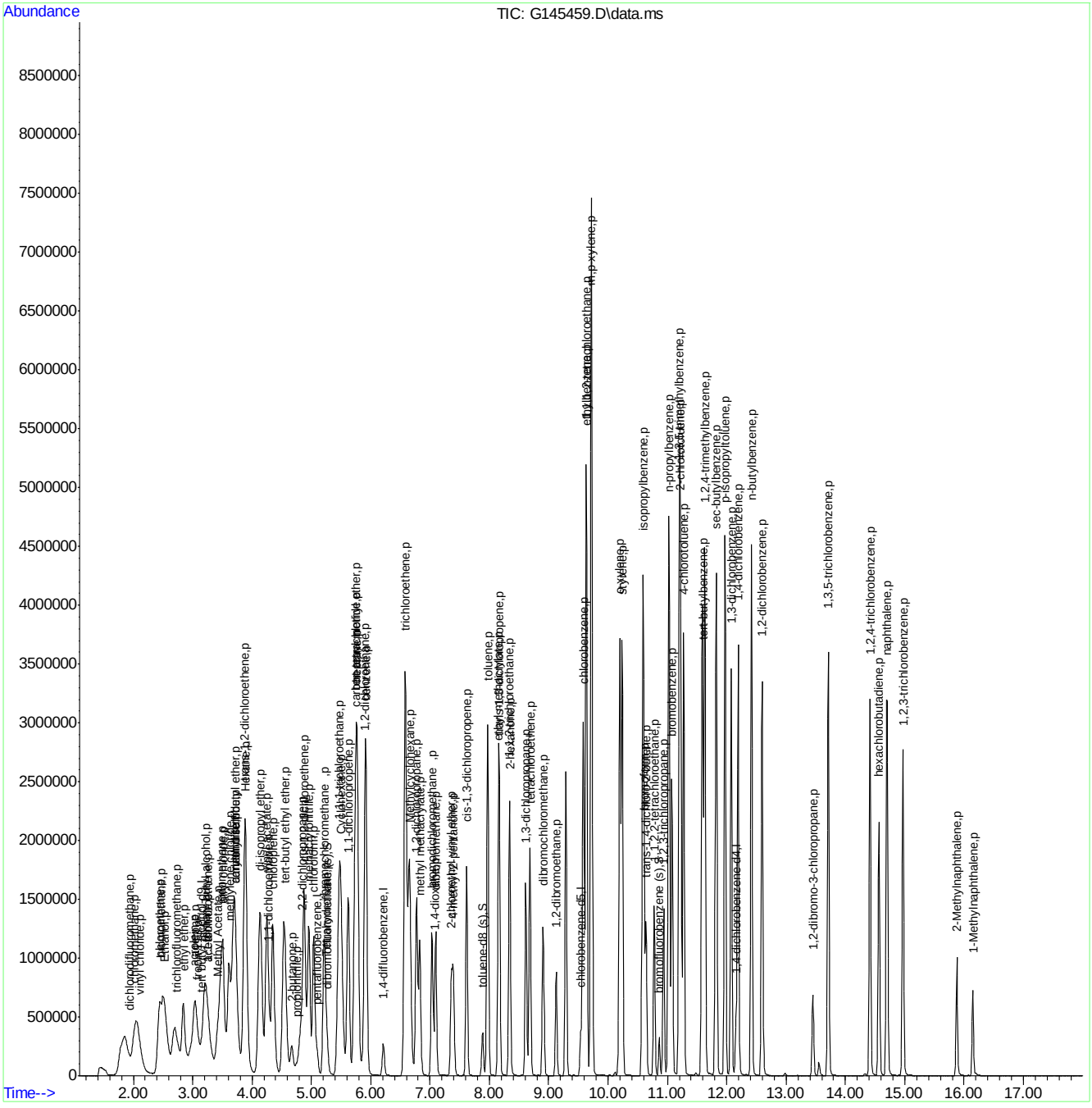
Quant Time: Sep 14 09:01:53 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:00:49 2015
Response via : Initial Calibration

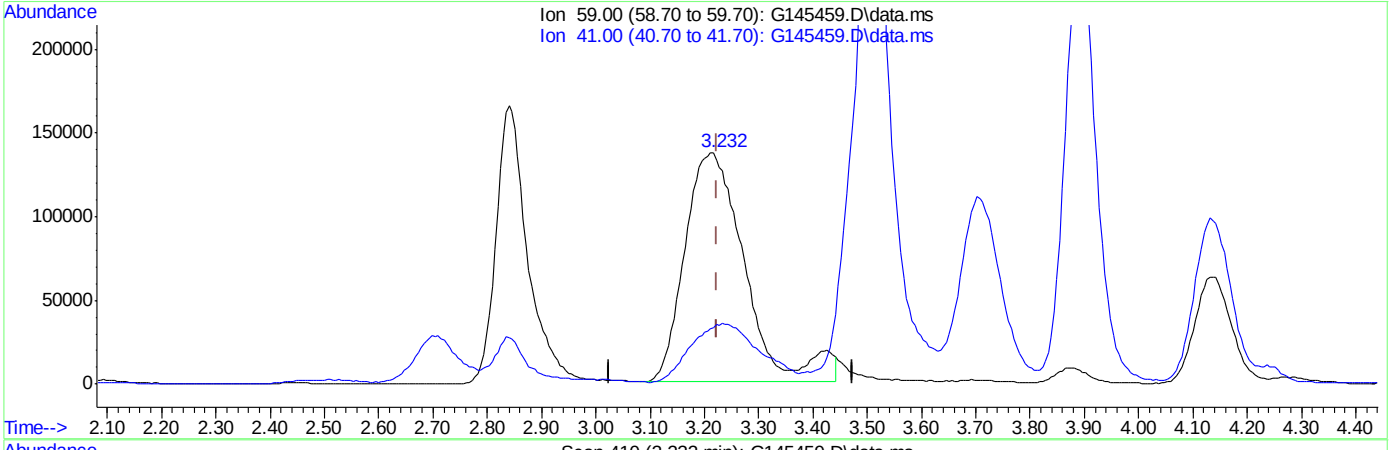


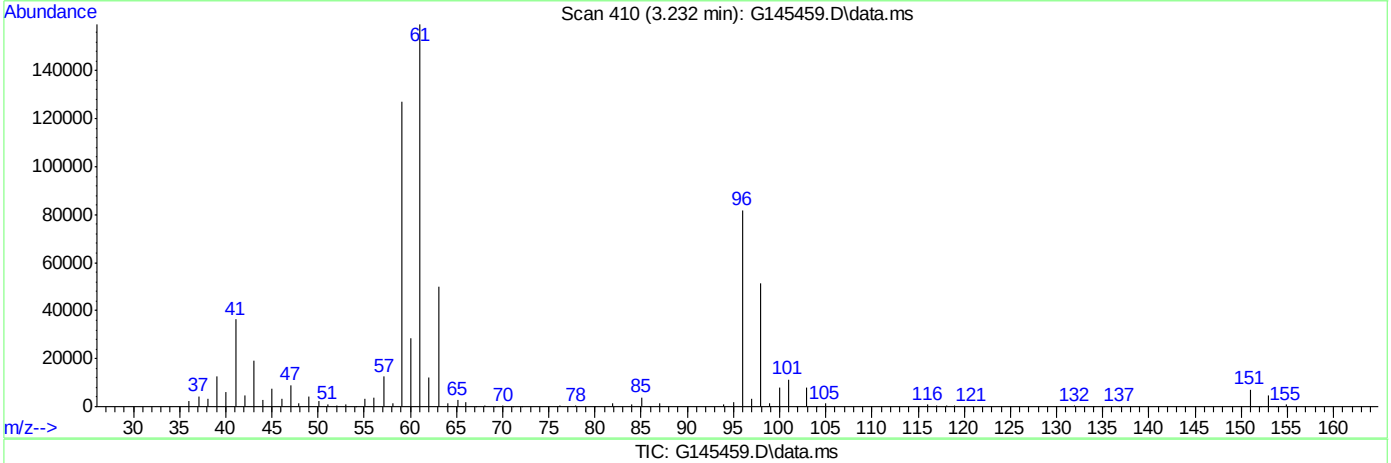
ACCUTEST LABORATORIES MC41356

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145459.D
Acq On : 13 Sep 2015 12:56 pm
Operator : andrewd1
Sample : ic5447-400.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 14 09:00:53 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:00:49 2015
Response via : Initial Calibration





TIC: G145459.D\data.ms

(2) tertiary butyl alcohol (p)

3.232min (+0.007) 4070.14ppb

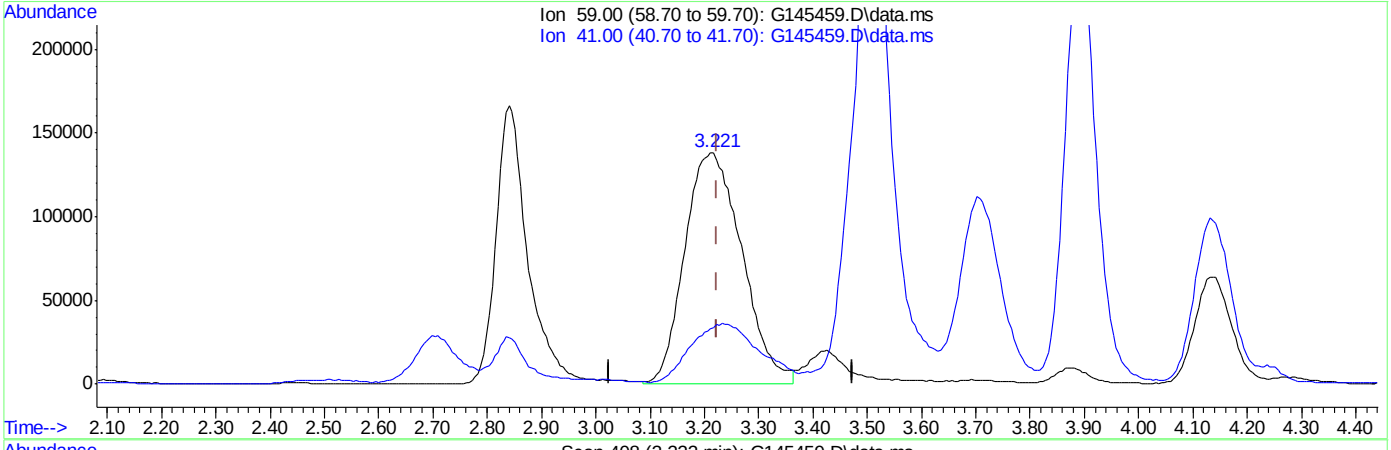
response 1054091

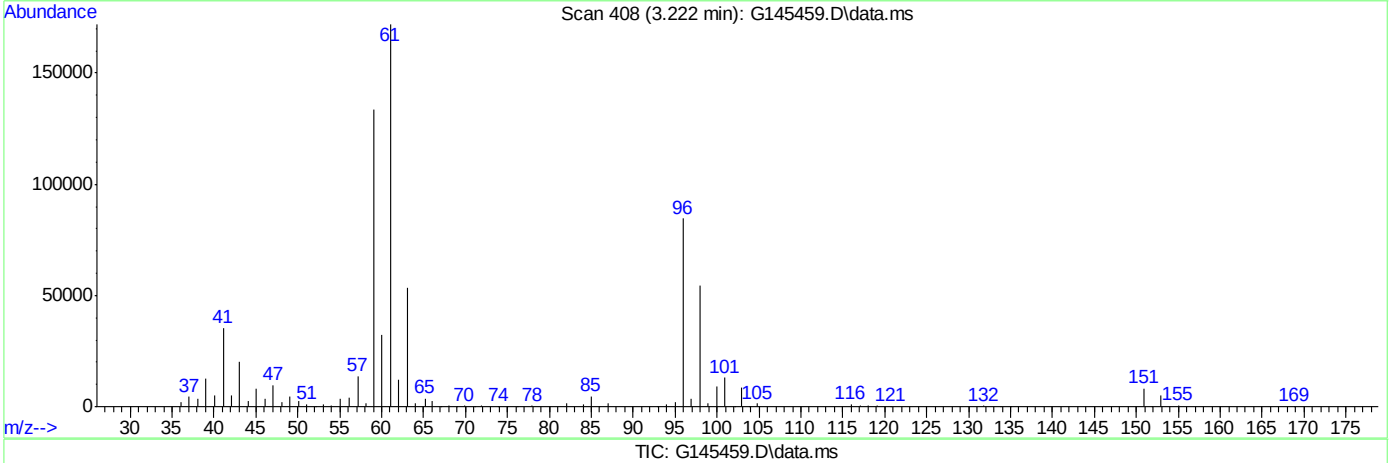
Ion	Exp%	Act%
59.00	100	100
41.00	22.50	27.73
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145459.D
Acq On : 13 Sep 2015 12:56 pm
Operator : andrewd1
Sample : ic5447-400.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 14 09:00:53 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:00:49 2015
Response via : Initial Calibration





(2) tertiary butyl alcohol (p)

3.222min (-0.003) 3919.21ppb m

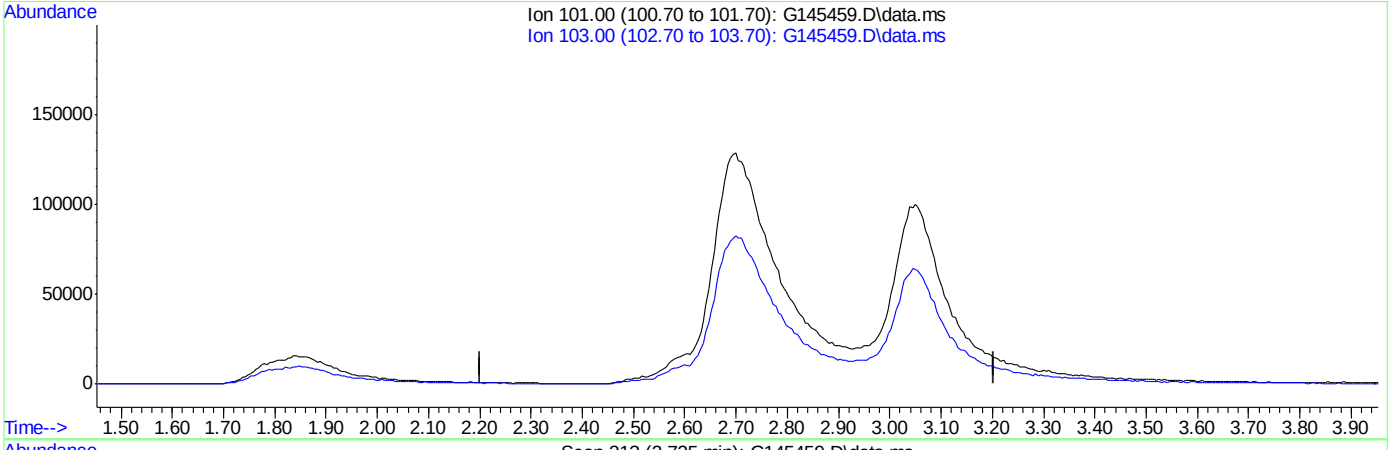
response 1015005

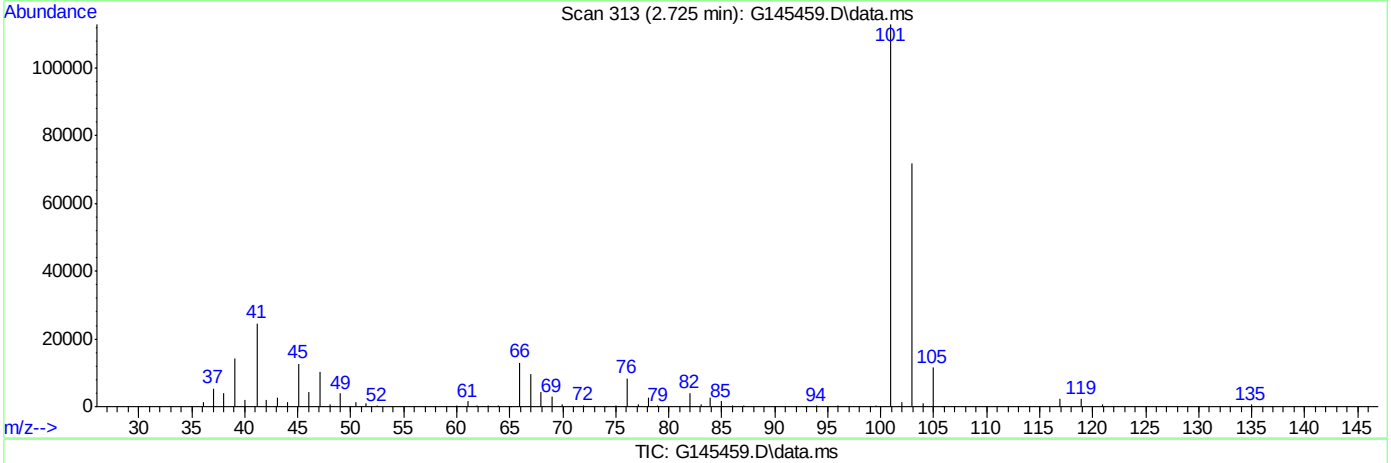
Ion	Exp%	Act%
59.00	100	100
41.00	22.50	26.57
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145459.D
Acq On : 13 Sep 2015 12:56 pm
Operator : andrewd1
Sample : ic5447-400.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 14 09:00:53 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:00:49 2015
Response via : Initial Calibration





TIC: G145459.D\data.ms

(12) trichlorofluoromethane (p)

2.723min (-2.723) 0.00ppb

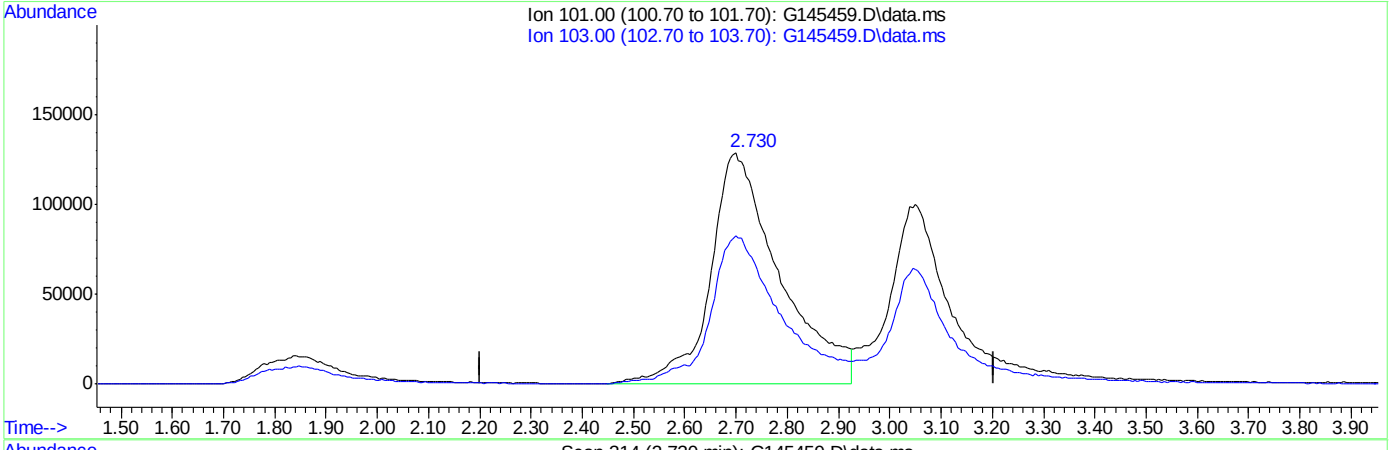
response 0

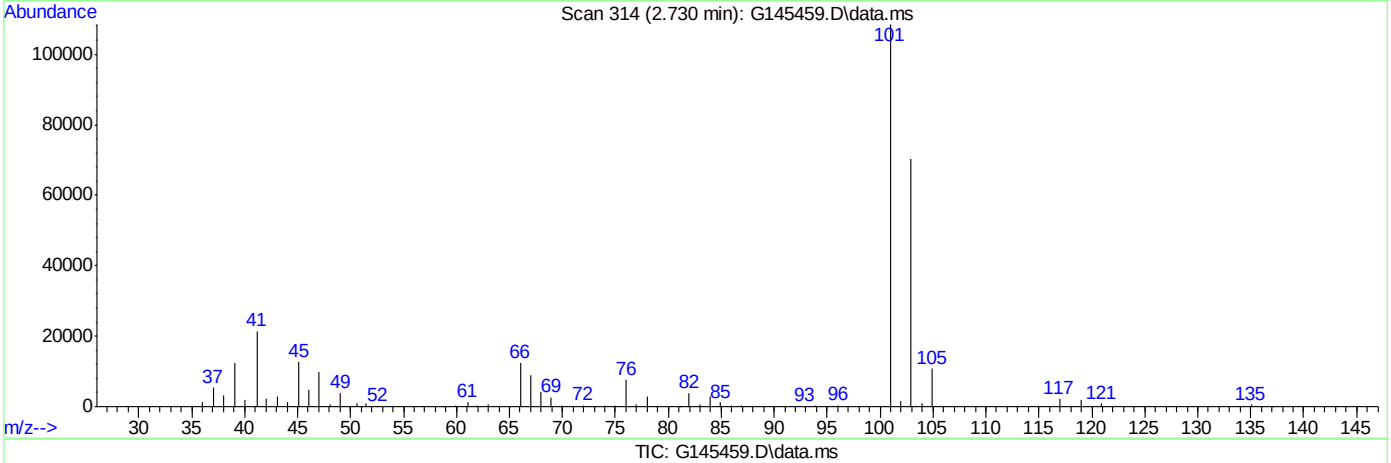
Ion	Exp%	Act%
101.00	100	0.00
103.00	62.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145459.D
Acq On : 13 Sep 2015 12:56 pm
Operator : andrewd1
Sample : ic5447-400.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 14 09:00:53 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:00:49 2015
Response via : Initial Calibration





TIC: G145459.D\data.ms

(12) trichlorofluoromethane (p)

2.730min (+0.008) 404.36ppb m

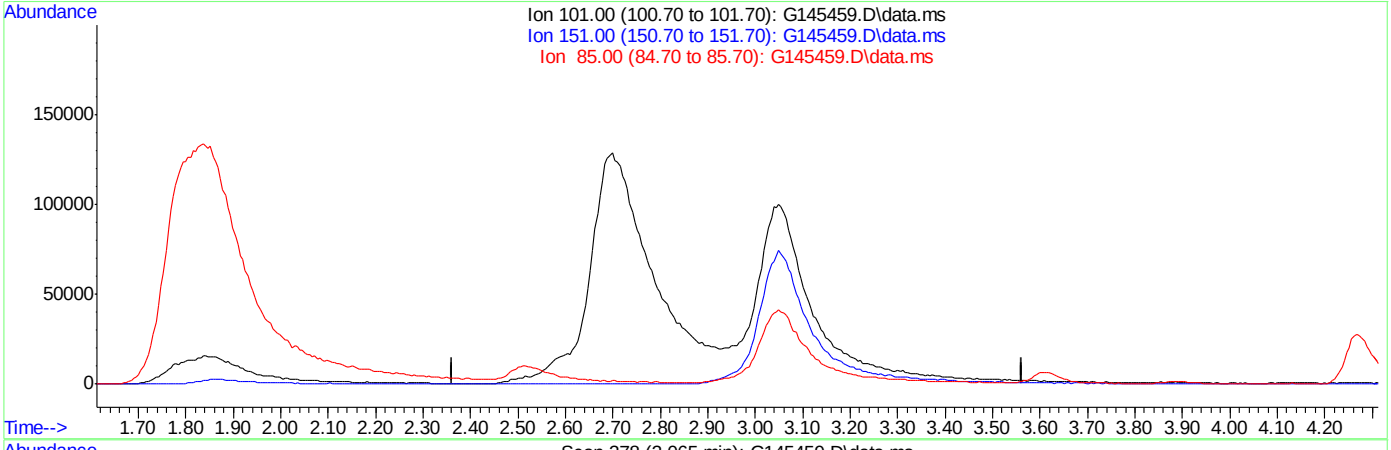
response 1213201

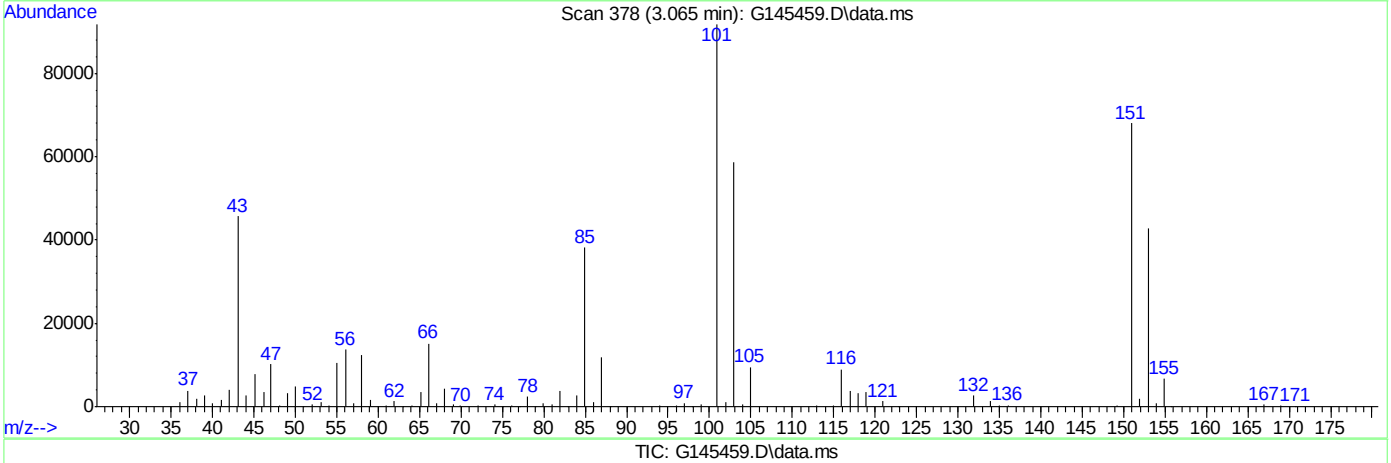
Ion	Exp%	Act%
101.00	100	100
103.00	62.20	64.93
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145459.D
Acq On : 13 Sep 2015 12:56 pm
Operator : andrewd1
Sample : ic5447-400.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 14 09:00:53 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:00:49 2015
Response via : Initial Calibration





(13) freon-113 (p)

3.063min (-3.063) 0.00ppb

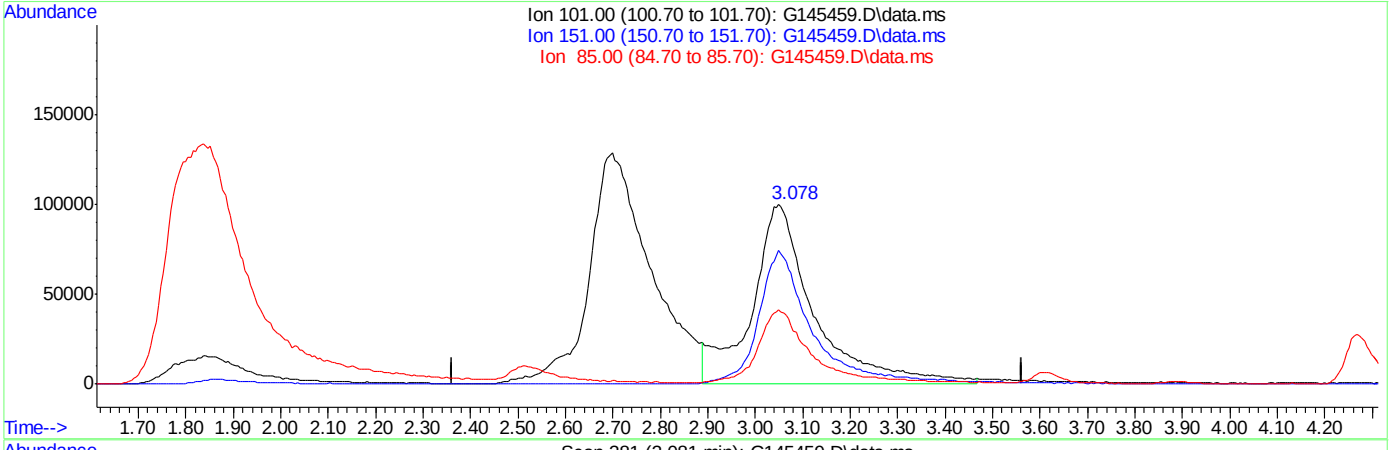
response 0

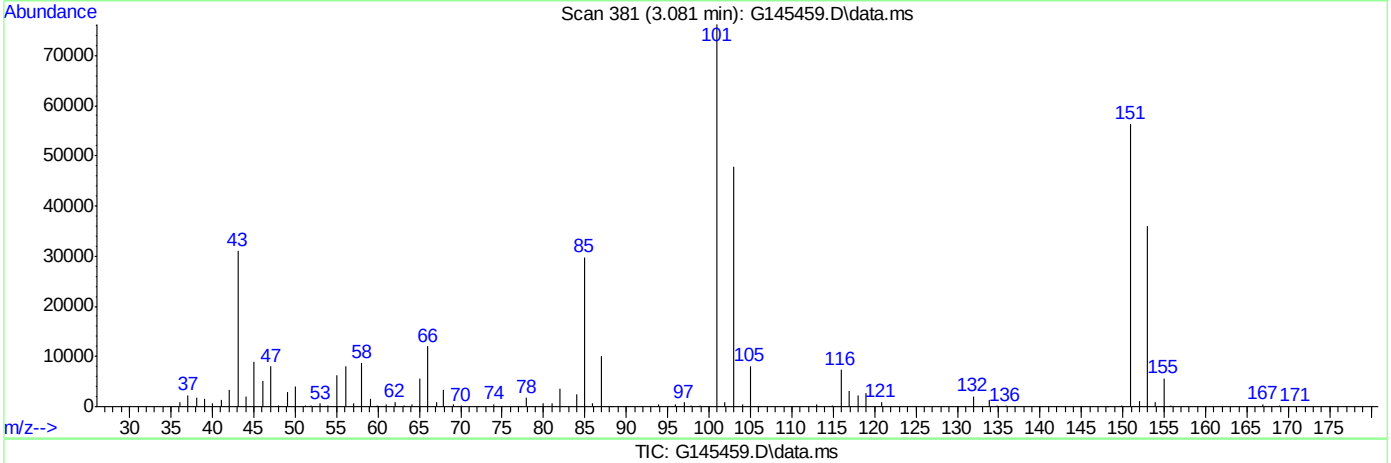
Ion	Exp%	Act%
101.00	100	0.00
151.00	91.80	0.00#
85.00	39.40	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145459.D
Acq On : 13 Sep 2015 12:56 pm
Operator : andrewd1
Sample : ic5447-400.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 14 09:00:53 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:00:49 2015
Response via : Initial Calibration





TIC: G145459.D\data.ms

(13) freon-113 (p)

3.081min (+0.018) 413.27ppb m

response 924507

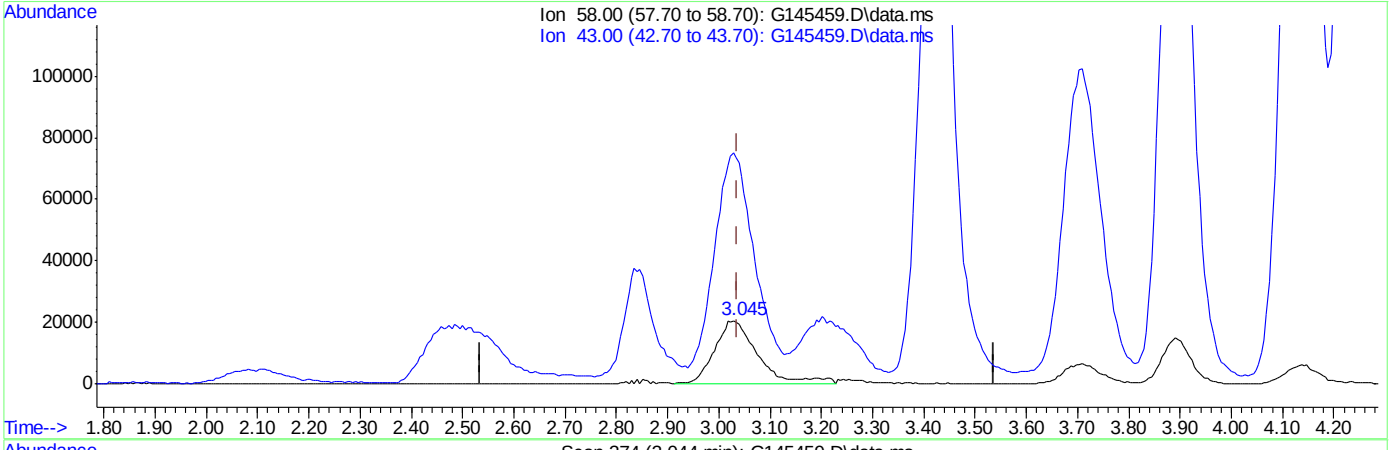
Ion	Exp%	Act%
101.00	100	100
151.00	91.80	73.99
85.00	39.40	39.11
0.00	0.00	0.00

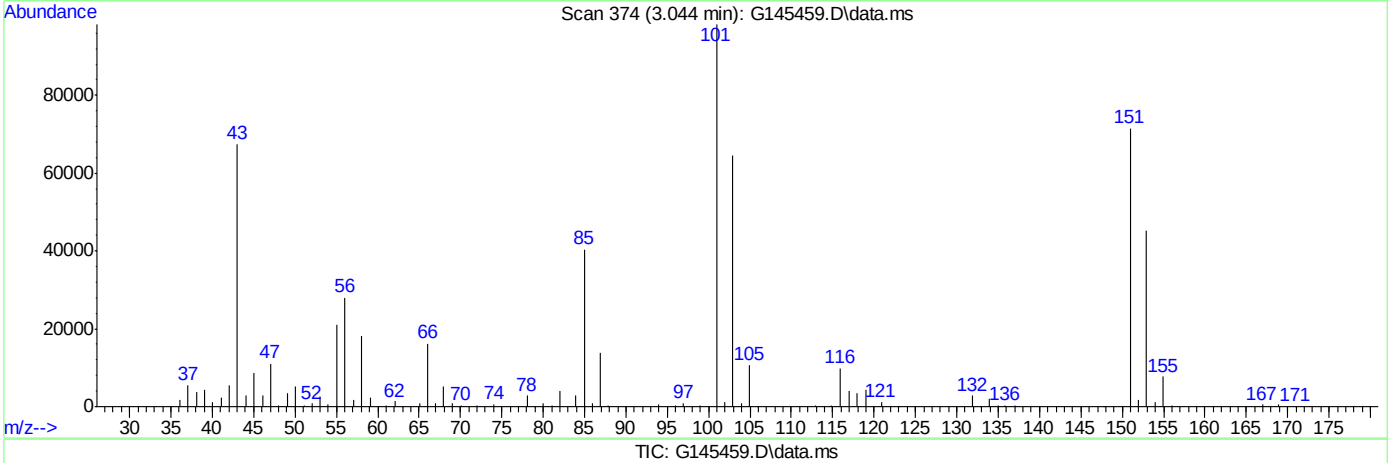
ACCUTEST LABORATORIES MC41356

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145459.D
Acq On : 13 Sep 2015 12:56 pm
Operator : andrewd1
Sample : ic5447-400.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 14 09:00:53 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:00:49 2015
Response via : Initial Calibration





(16) acetone (p)

3.045min (+0.008) 402.92ppb

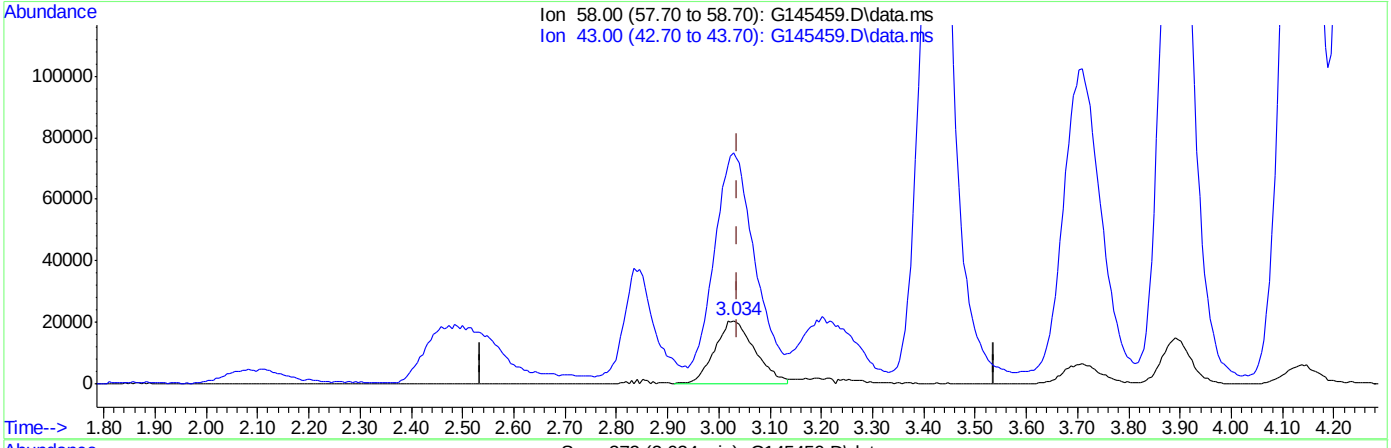
response 121660

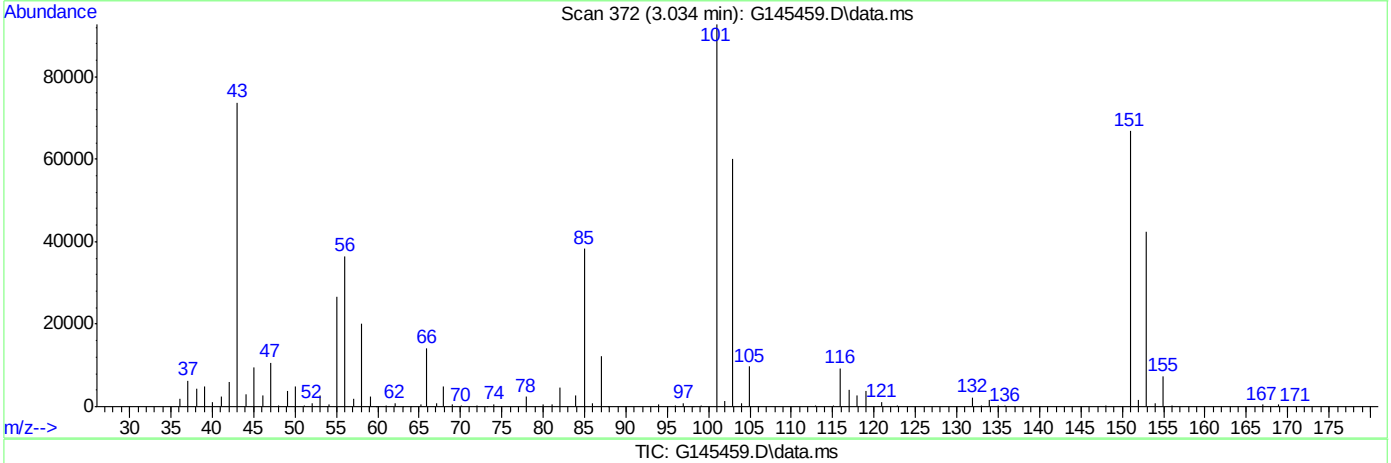
Ion	Exp%	Act%
58.00	100	100
43.00	336.30	329.79
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145459.D
Acq On : 13 Sep 2015 12:56 pm
Operator : andrewd1
Sample : ic5447-400.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 14 09:00:53 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:00:49 2015
Response via : Initial Calibration





TIC: G145459.D\data.ms

(16) acetone (p)

3.034min (-0.003) 373.22ppb m

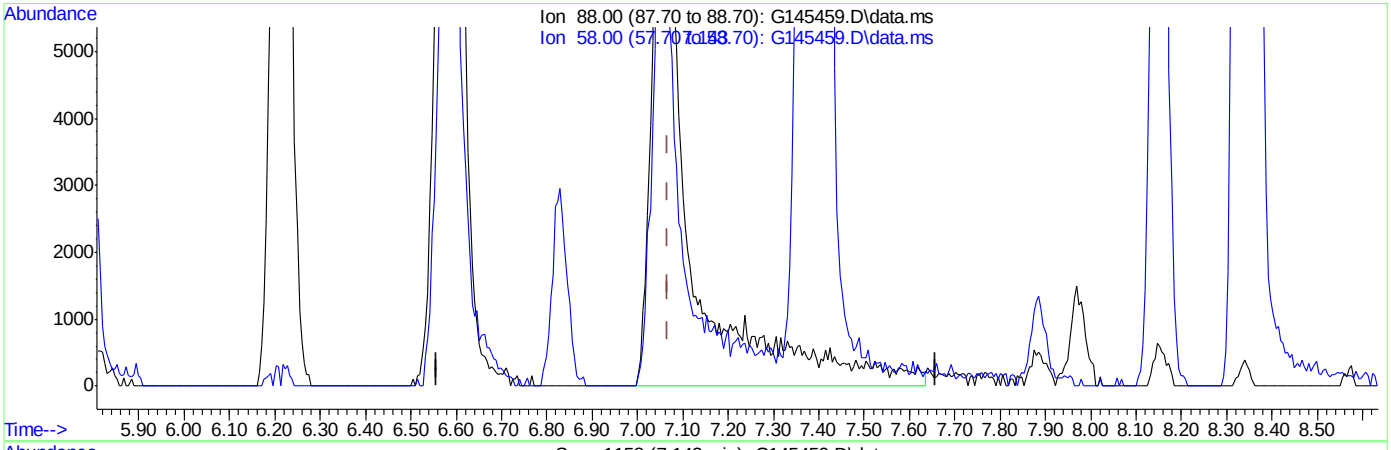
response 112692

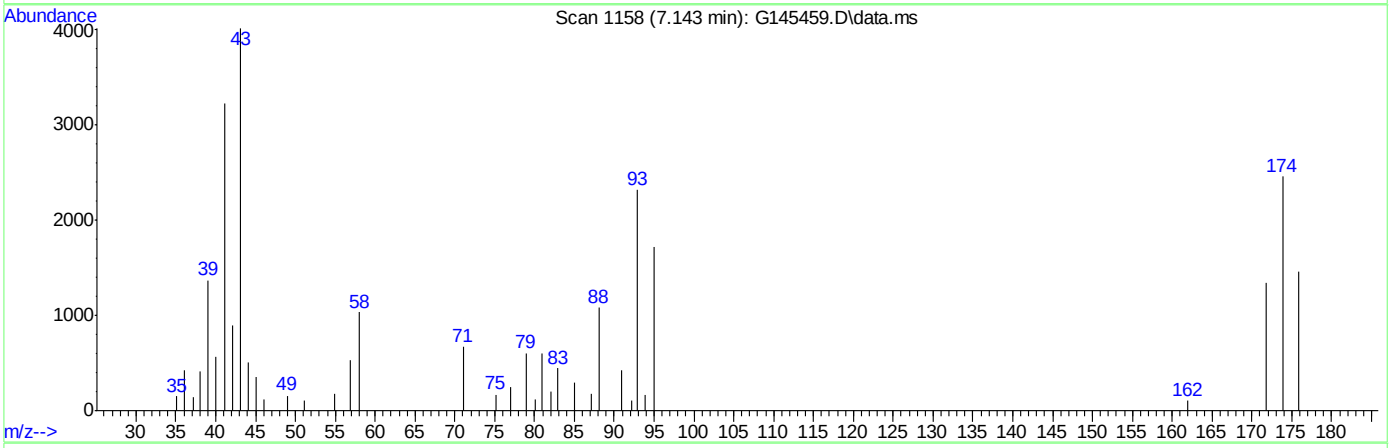
Ion	Exp%	Act%
58.00	100	100
43.00	336.30	367.52#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145459.D
Acq On : 13 Sep 2015 12:56 pm
Operator : andrewd1
Sample : ic5447-400.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 14 09:00:53 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:00:49 2015
Response via : Initial Calibration





TIC: G145459.D\data.ms

(58) 1,4-dioxane (p)

7.143min (+0.076) 3050.42ppb

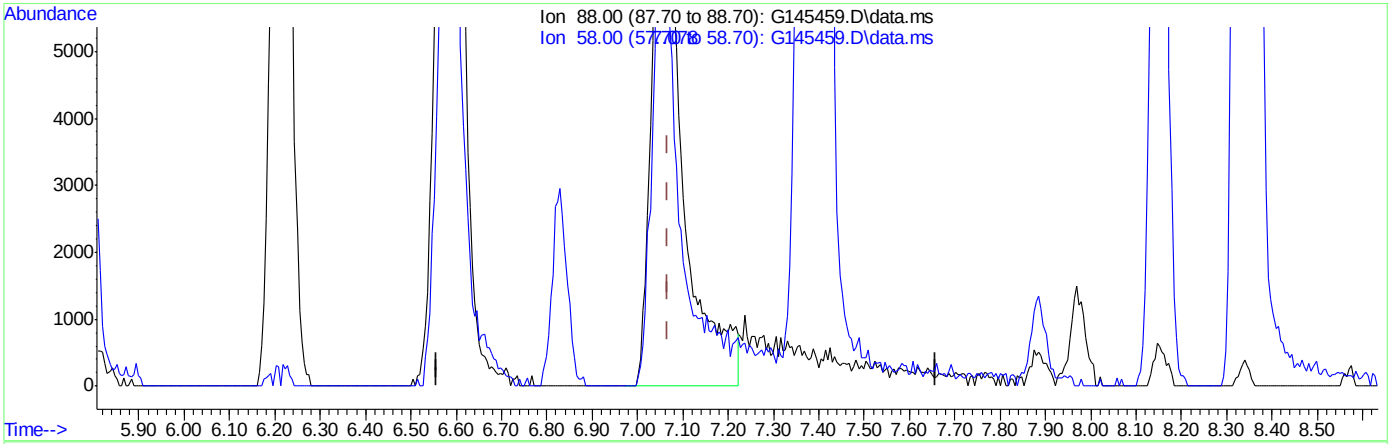
response 49315

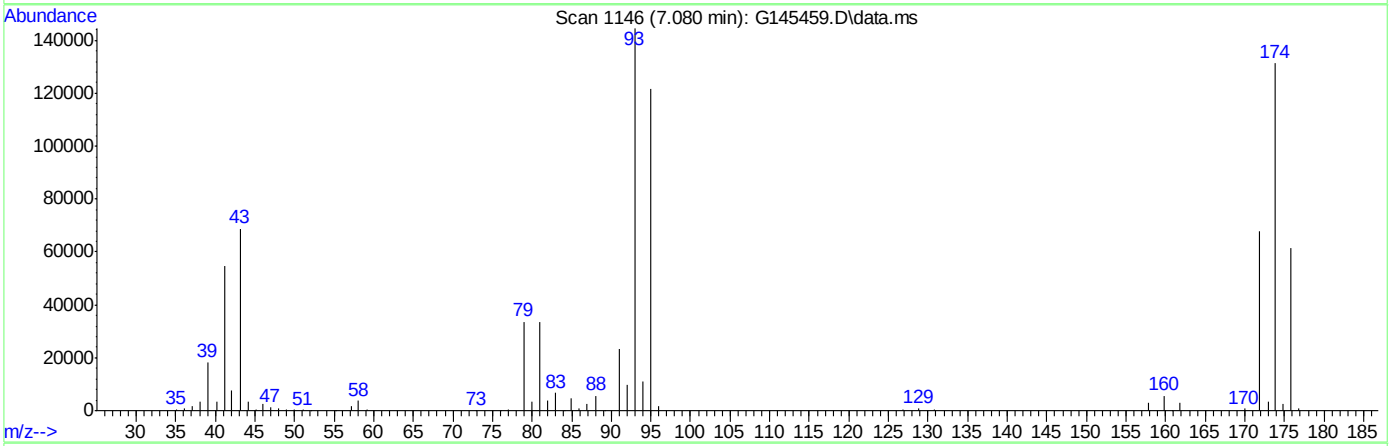
Ion	Exp%	Act%
88.00	100	100
58.00	88.20	95.46
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145459.D
Acq On : 13 Sep 2015 12:56 pm
Operator : andrewd1
Sample : ic5447-400.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 14 09:00:53 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:00:49 2015
Response via : Initial Calibration





TIC: G145459.D\data.ms

(58) 1,4-dioxane (p)

7.080min (+0.013) 2401.55ppb m

response 38825

Ion	Exp%	Act%
88.00	100	100
58.00	88.20	65.16
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Doug Yargeau
09/14/15 19:20

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145463.D
Acq On : 13 Sep 15 2:50 pm
Operator : andrewd1
Sample : icv5447-50.0
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 14 09:22:32 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	3.168	65	87649	500.00	ppb		0.02
4) pentafluorobenzene	5.100	168	152823	50.00	ppb		0.00
43) 1,4-difluorobenzene	6.216	114	253464	50.00	ppb		0.00
66) chlorobenzene-d5	9.537	82	115847	50.00	ppb		0.00
80) 1,4-dichlorobenzene-d4	12.156	152	114502	50.00	ppb		0.00
System Monitoring Compounds							
40) dibromofluoromethane (s)	5.269	113	86567	50.61	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.22%				
60) toluene-d8 (s)	7.885	98	271453	48.68	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 97.36%				
82) bromofluorobenzene (s)	10.862	95	107555	48.64	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 97.28%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	3.239	59	115722	500.76	ppb		85
3) Ethanol	2.529	45	112371	4266.16	ppb		94
5) dichlorodifluoromethane	1.891	85	123926	31.74	ppb		94
6) chloromethane	2.014	50	145356m	43.51	ppb		
7) vinyl chloride	2.100	62	101249	42.93	ppb		96
8) bromomethane	2.431	96	60769	47.39	ppb		98
9) chloroethane	2.441	64	54372	48.30	ppb		81
10) ethyl ether	2.858	59	77530	47.99	ppb		93
11) acetonitrile	3.247	41	34433	43.50	ppb	#	59
12) trichlorofluoromethane	2.725	101	122288m	44.43	ppb		
13) freon-113	3.054	101	96930m	47.06	ppb		
14) acrolein	3.018	56	65467	366.87	ppb		97
15) 1,1-dichloroethene	3.223	96	76825	46.75	ppb	#	81
16) acetone	3.033	58	14215m	51.87	ppb		
17) Methyl Acetate	3.431	43	115142	55.58	ppb	#	94
18) methylene chloride	3.616	84	81133	46.26	ppb		93
19) methyl tert butyl ether	3.724	73	238667	46.99	ppb		97
20) acrylonitrile	3.706	53	47848	47.18	ppb		88
21) allyl chloride	3.513	41	168514	45.91	ppb		96
22) trans-1,2-dichloroethene	3.878	96	78346	46.18	ppb		90
23) iodomethane	3.477	142	130684	46.92	ppb		88
24) carbon disulfide	3.723	76	229332	43.64	ppb		100
25) propionitrile	4.770	54	17291	50.35	ppb		100
26) vinyl acetate	4.249	43	236854	46.00	ppb		94
27) chloroprene	4.359	53	151213	43.92	ppb		97
28) di-isopropyl ether	4.144	45	362407	46.20	ppb		95
29) methacrylonitrile	4.964	41	100299	58.94	ppb		94
30) 2-butanone	4.678	72	10018	48.71	ppb	#	57
32) Hexane	3.897	41	113018	44.33	ppb	#	95
33) 1,1-dichloroethane	4.277	63	167564	43.54	ppb		100
34) tert-butyl ethyl ether	4.553	59	291918	45.93	ppb		98
36) 2,2-dichloropropane	4.848	77	118114	47.92	ppb		97
37) cis-1,2-dichloroethene	4.883	96	88813	48.35	ppb		96
38) bromochloromethane	5.219	128	44928	48.48	ppb	#	82

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145463.D
Acq On : 13 Sep 15 2:50 pm
Operator : andrewd1
Sample : icv5447-50.0
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 14 09:22:32 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39)	chloroform	5.042	83	157989	45.72	ppb		100
41)	Tetrahydrofuran	5.252	42	36396	49.28	ppb		92
42)	1,1,1-trichloroethane	5.471	97	130097	50.17	ppb		98
44)	Cyclohexane	5.490	56	157543	43.10	ppb		96
45)	carbon tetrachloride	5.745	117	123414	47.02	ppb		98
46)	1,1-dichloropropene	5.624	75	112267	46.72	ppb		97
47)	benzene	5.921	78	301708	45.55	ppb		97
48)	1,2-dichloroethane	5.901	62	127790	46.26	ppb		99
49)	tert-amyl methyl ether	5.754	73	232851	49.58	ppb	#	62
50)	heptane	5.766	43	253268	49.64	ppb		95
51)	trichloroethene	6.581	95	83012	45.19	ppb		89
52)	1,2-dichloropropane	6.775	63	86927	46.27	ppb		99
53)	dibromomethane	7.093	93	52471	46.08	ppb		88
54)	bromodichloromethane	7.033	83	112184	45.82	ppb		97
55)	Methylcyclohexane	6.651	83	126570	45.38	ppb		97
56)	2-chloroethyl vinyl ether	7.357	63	33047	46.92	ppb		98
57)	methyl methacrylate	6.830	69	52740	48.43	ppb		96
58)	1,4-dioxane	7.067	88	4096	247.19	ppb		80
59)	cis-1,3-dichloropropene	7.619	75	123074	46.22	ppb		96
61)	4-methyl-2-pentanone	7.387	43	139301	52.79	ppb		96
62)	toluene	7.972	92	176030	45.01	ppb		98
63)	trans-1,3-dichloropropene	8.167	75	109661	43.08	ppb		97
64)	1,1,2-trichloroethane	8.339	83	59692	46.56	ppb		93
65)	ethyl methacrylate	8.152	69	96441	50.17	ppb		96
67)	tetrachloroethene	8.682	166	80588	47.71	ppb		96
68)	1,3-dichloropropane	8.614	76	116907	50.52	ppb		99
69)	dibromochloromethane	8.907	129	88309	46.78	ppb		99
70)	1,2-dibromoethane	9.126	107	77913	48.73	ppb		97
71)	2-hexanone	8.352	43	76759	52.88	ppb		99
72)	chlorobenzene	9.580	112	207009	44.81	ppb		94
73)	1,1,1,2-tetrachloroethane	9.626	131	81347	48.49	ppb		98
74)	ethylbenzene	9.633	91	349079	47.52	ppb		95
75)	m,p-xylene	9.717	106	266824	94.81	ppb		90
76)	o-xylene	10.195	106	129518	46.51	ppb		89
77)	styrene	10.234	104	226961	48.08	ppb		93
78)	bromoform	10.608	173	60668	51.95	ppb		97
79)	trans-1,4-dichloro-2-b...	10.640	53	36096	51.91	ppb		95
81)	isopropylbenzene	10.585	105	373975	50.27	ppb		96
83)	bromobenzene	11.076	156	92043	47.17	ppb		88
84)	1,1,2,2-tetrachloroethane	10.776	83	96572	47.00	ppb		94
85)	1,2,3-trichloropropane	10.935	75	70615	49.66	ppb		94
86)	n-propylbenzene	11.023	91	415987	46.66	ppb		93
87)	2-chlorotoluene	11.218	91	286727	46.38	ppb		90
88)	4-chlorotoluene	11.271	91	259501	46.36	ppb		94
89)	1,3,5-trimethylbenzene	11.197	105	321823	48.37	ppb		97
90)	tert-butylbenzene	11.591	91	218638	47.97	ppb		83
91)	1,2,4-trimethylbenzene	11.627	105	316165	47.13	ppb		98
92)	sec-butylbenzene	11.818	105	408274	48.34	ppb		96
93)	1,3-dichlorobenzene	12.074	146	173675	44.74	ppb		96
94)	p-isopropyltoluene	11.968	119	354790	48.97	ppb		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145463.D
Acq On : 13 Sep 15 2:50 pm
Operator : andrewd1
Sample : icv5447-50.0
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 14 09:22:32 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

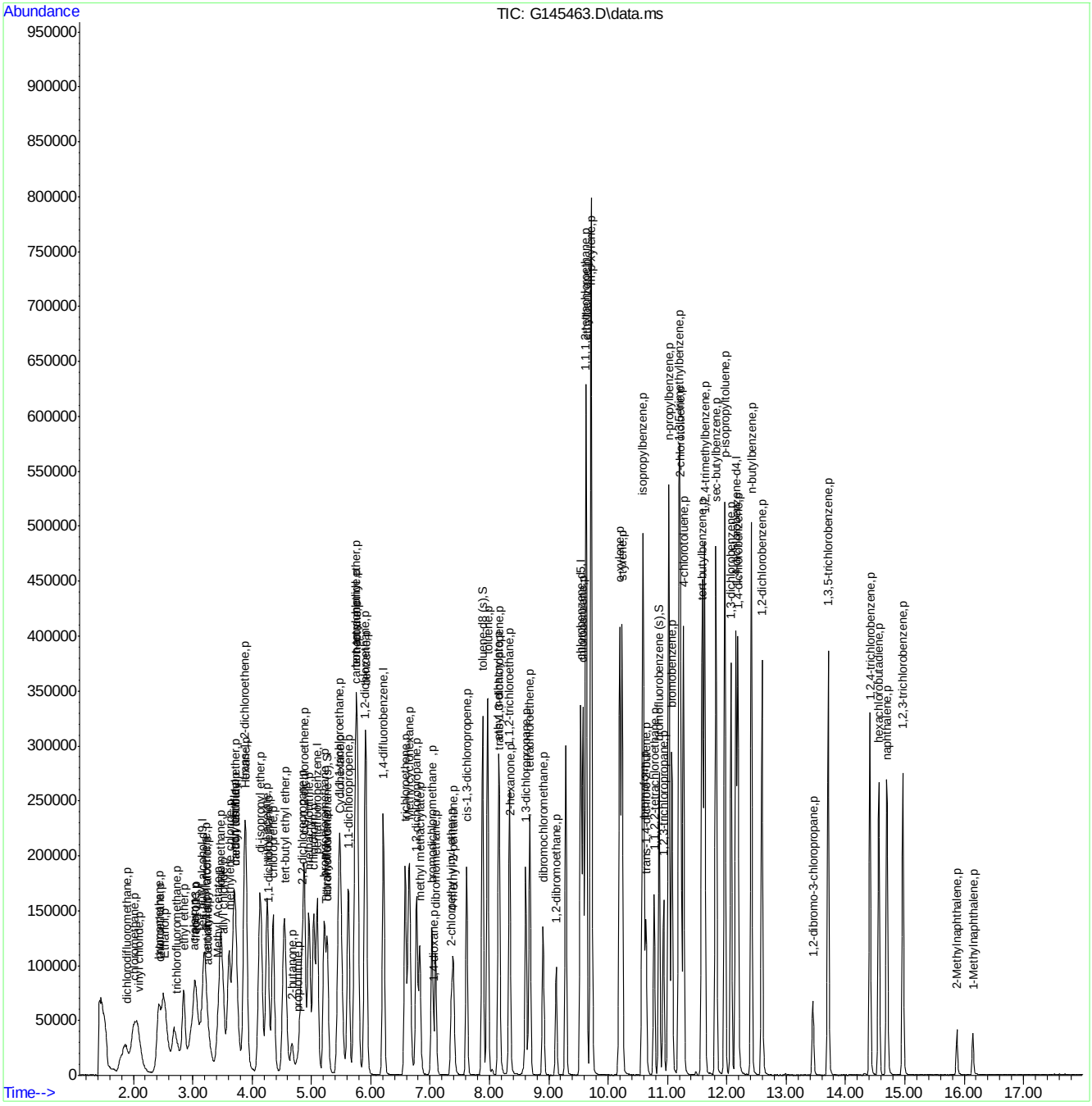
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
95)	1,4-dichlorobenzene	12.191	146	179308	45.27	ppb		98
96)	1,2-dichlorobenzene	12.596	146	174448	46.74	ppb		97
97)	n-butylbenzene	12.415	91	328347	50.70	ppb		92
98)	1,2-dibromo-3-chloropr...	13.453	75	20407	51.60	ppb	#	74
99)	1,3,5-trichlorobenzene	13.710	180	138731	47.73	ppb		100
100)	1,2,4-trichlorobenzene	14.413	180	113794	47.77	ppb		100
101)	hexachlorobutadiene	14.565	225	60780	52.69	ppb		97
102)	naphthalene	14.702	128	249593	43.05	ppb		100
103)	2-Methylnaphthalene	15.884	142	24743	24.34	ppb		96
104)	1-Methylnaphthalene	16.149	142	21695	23.92	ppb		96
105)	1,2,3-trichlorobenzene	14.971	180	100019	48.31	ppb		97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145463.D
Acq On : 13 Sep 15 2:50 pm
Operator : andrewd1
Sample : icv5447-50.0
Misc : MS35214,MSG5447,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

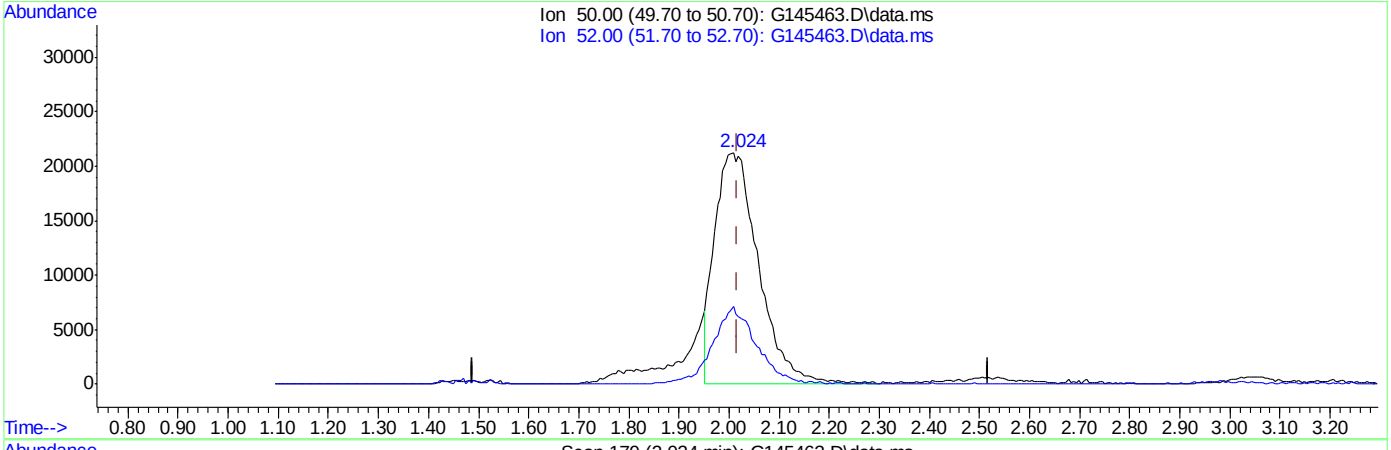
Quant Time: Sep 14 09:22:32 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

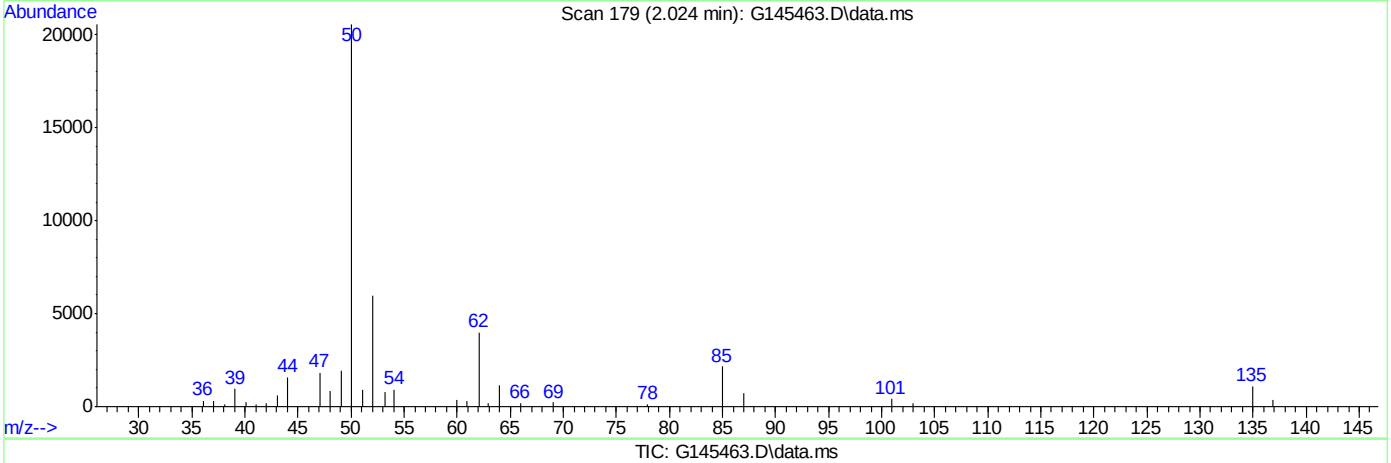


Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145463.D
Acq On : 13 Sep 2015 2:50 pm
Operator : andrewd1
Sample : icv5447-50.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 14 09:19:09 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration





TIC: G145463.D\data.ms

(6) chloromethane (p)

2.024min (+0.006) 38.87ppb

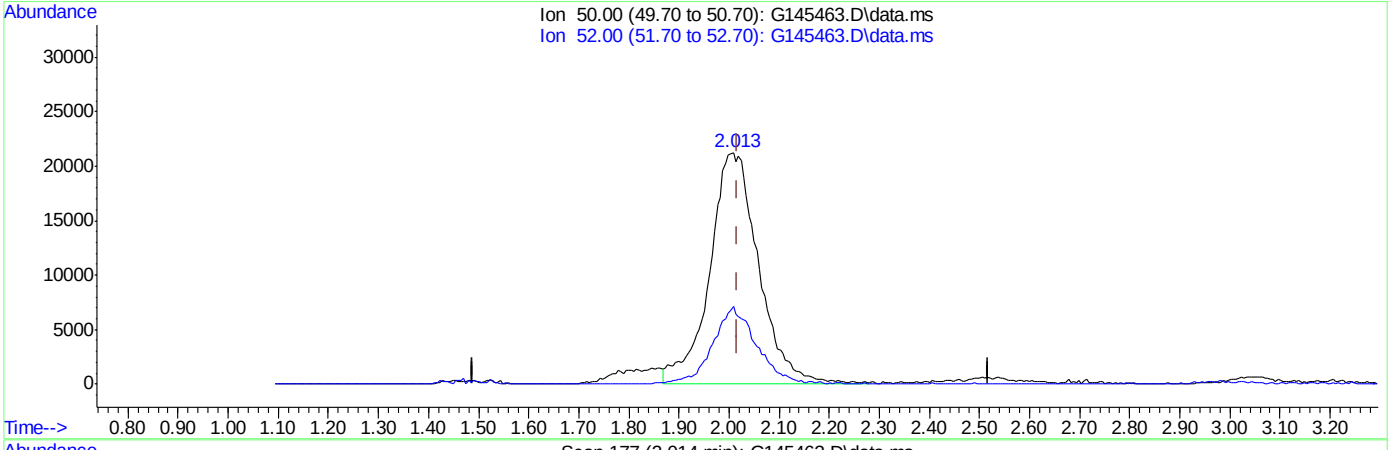
response 129871

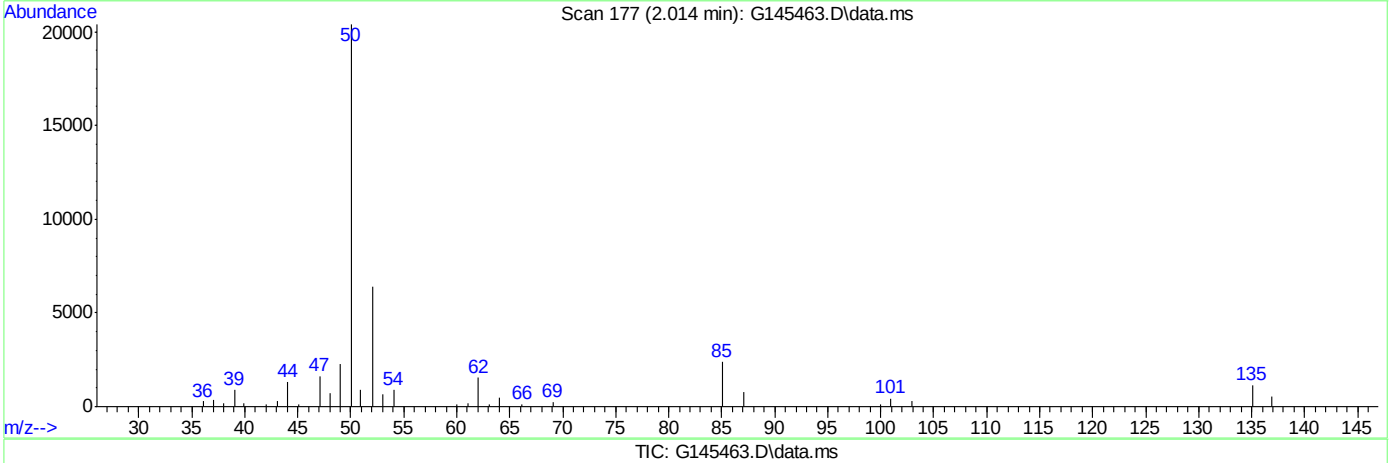
Ion	Exp%	Act%
50.00	100	100
52.00	30.70	28.98
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145463.D
Acq On : 13 Sep 2015 2:50 pm
Operator : andrewd1
Sample : icv5447-50.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 14 09:19:09 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration





TIC: G145463.D\data.ms

(6) chloromethane (p)

2.014min (-0.004) 43.51ppb m

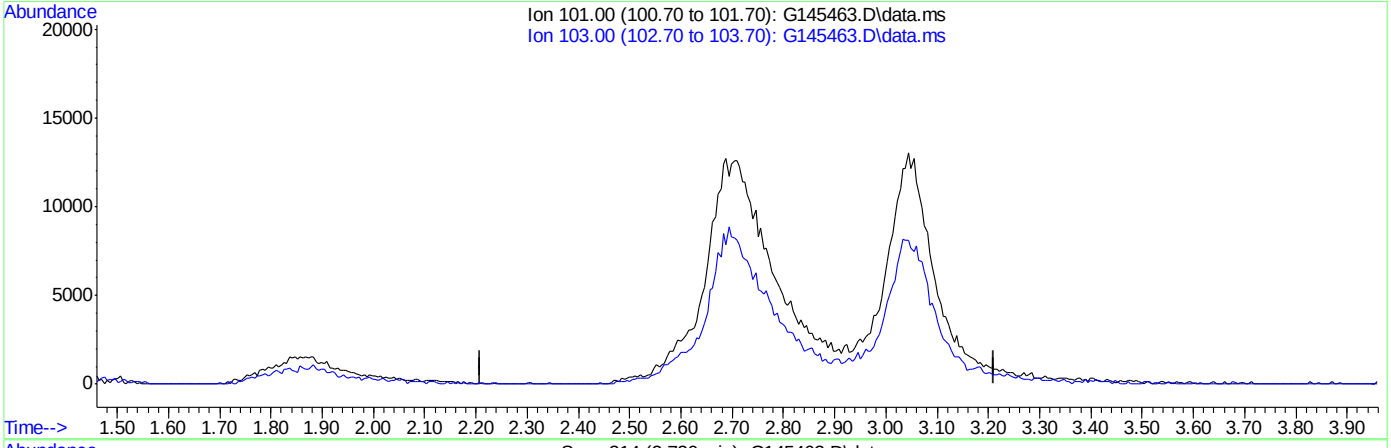
response 145356

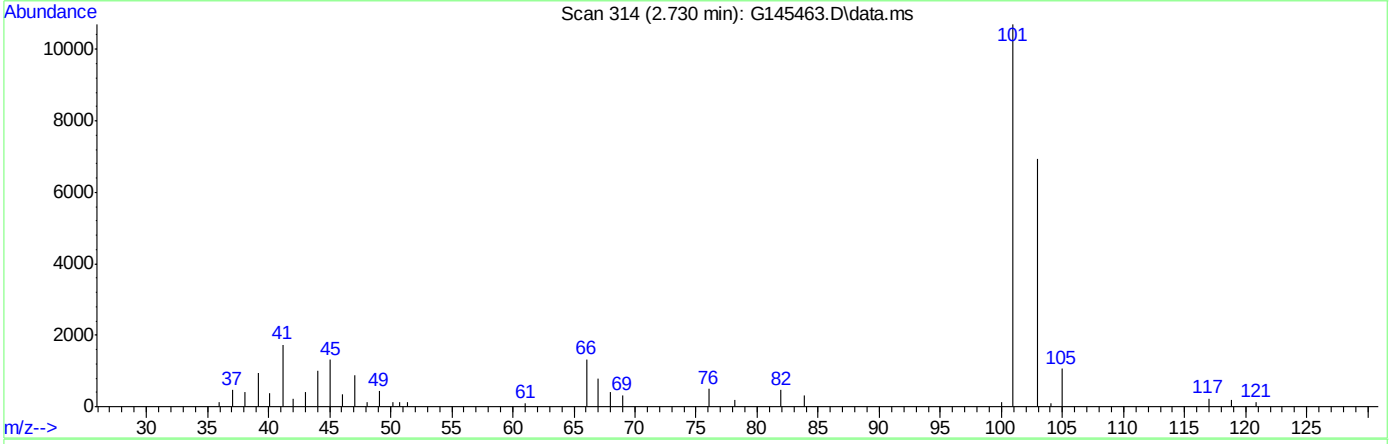
Ion	Exp%	Act%
50.00	100	100
52.00	30.70	31.32
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145463.D
Acq On : 13 Sep 2015 2:50 pm
Operator : andrewd1
Sample : icv5447-50.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 14 09:19:09 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration





TIC: G145463.D\data.ms

(12) trichlorofluoromethane (p)

2.730min (-2.730) 0.00ppb

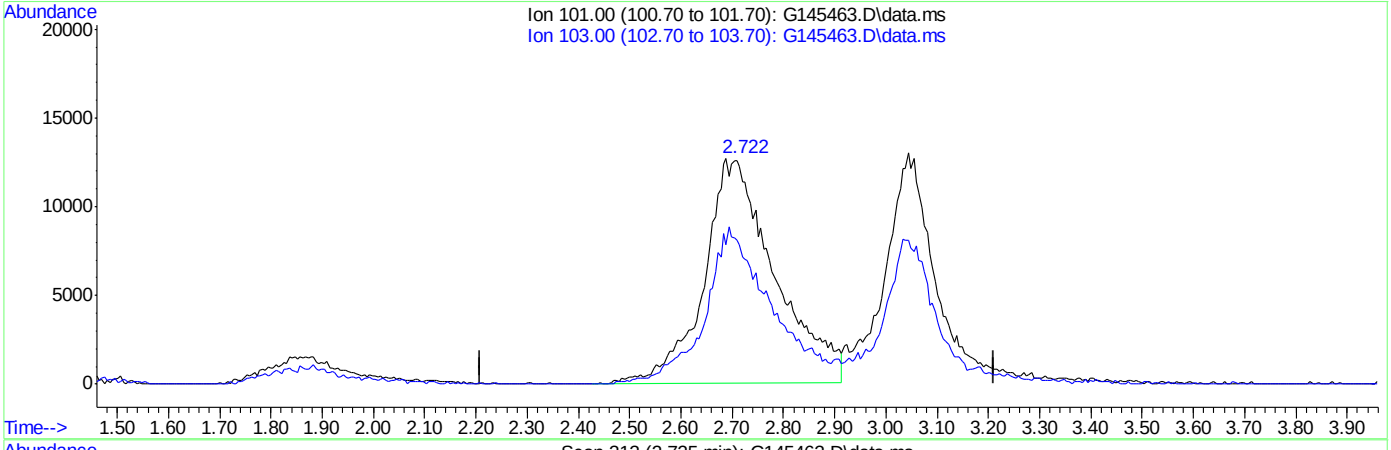
response 0

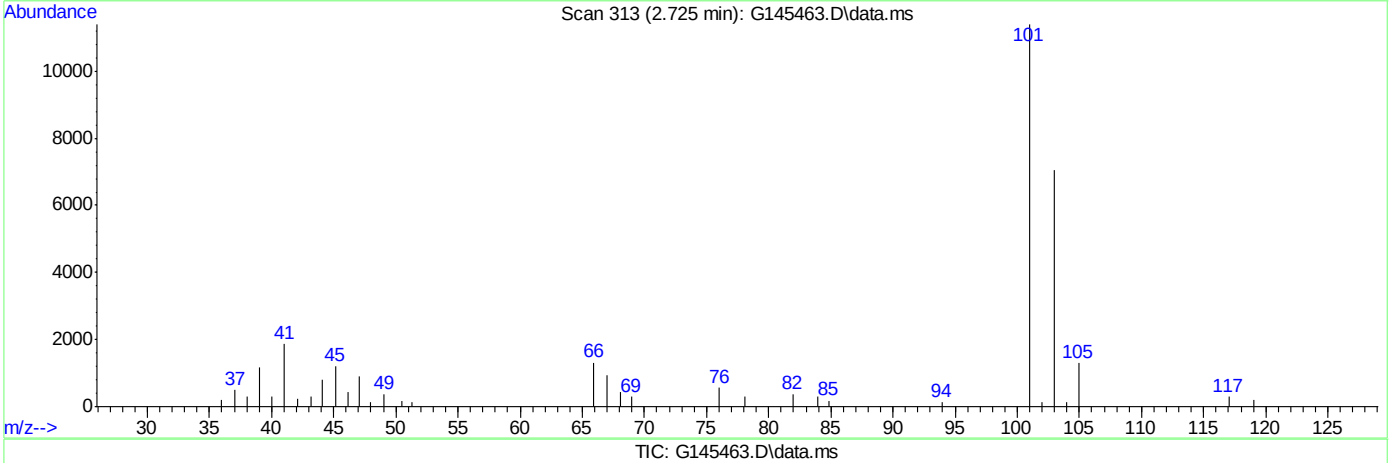
Ion	Exp%	Act%
101.00	100	0.00
103.00	62.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145463.D
Acq On : 13 Sep 2015 2:50 pm
Operator : andrewd1
Sample : icv5447-50.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 14 09:19:09 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration





TIC: G145463.D\data.ms

(12) trichlorofluoromethane (p)

2.725min (-0.006) 44.43ppb m

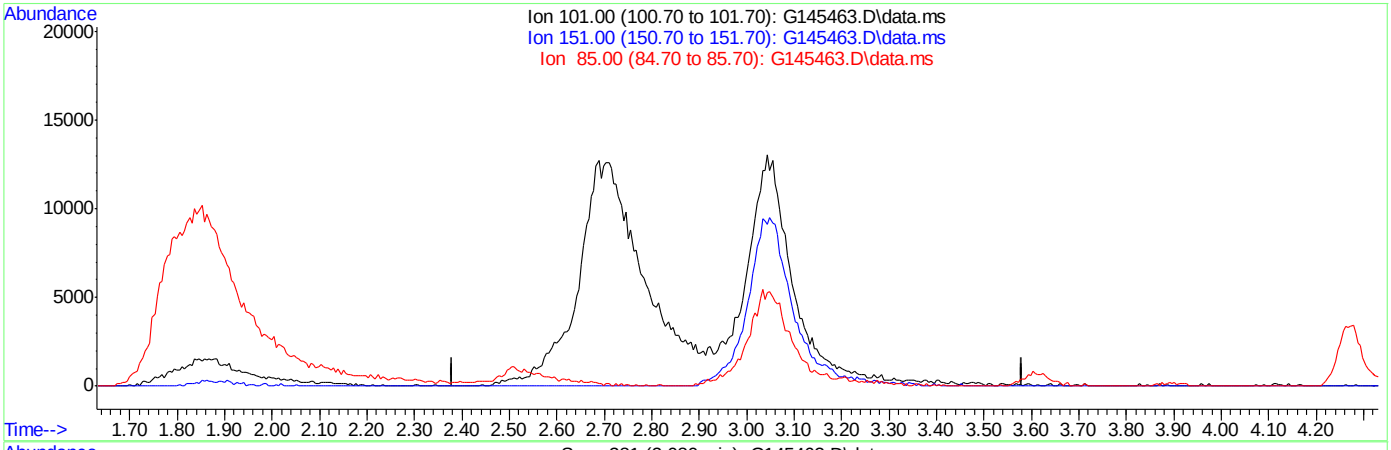
response 122288

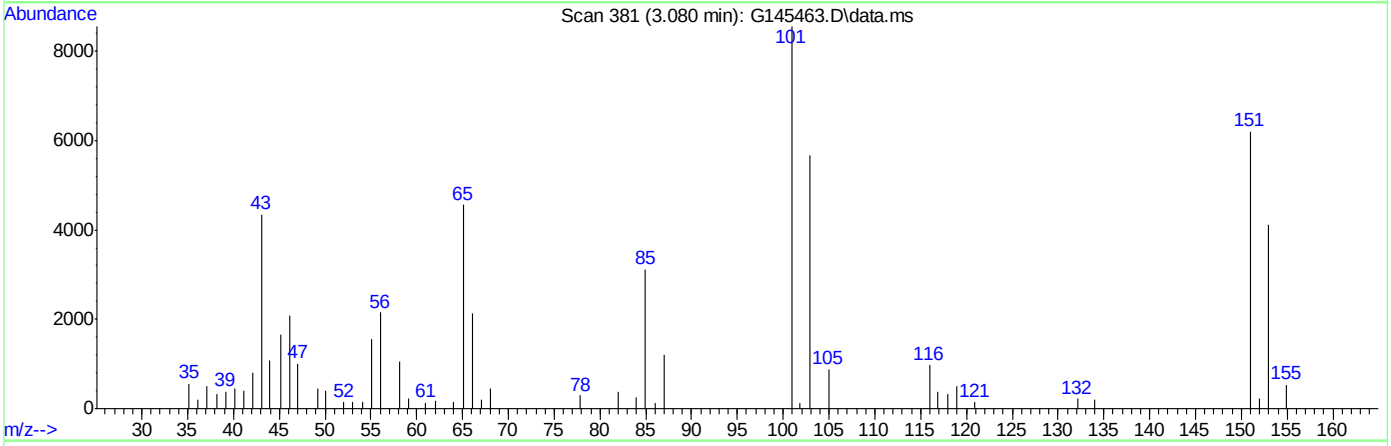
Ion	Exp%	Act%
101.00	100	100
103.00	62.20	62.01
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145463.D
Acq On : 13 Sep 2015 2:50 pm
Operator : andrewd1
Sample : icv5447-50.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 14 09:19:09 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration





TIC: G145463.D\data.ms

(13) freon-113 (p)

3.081min (-3.081) 0.00ppb

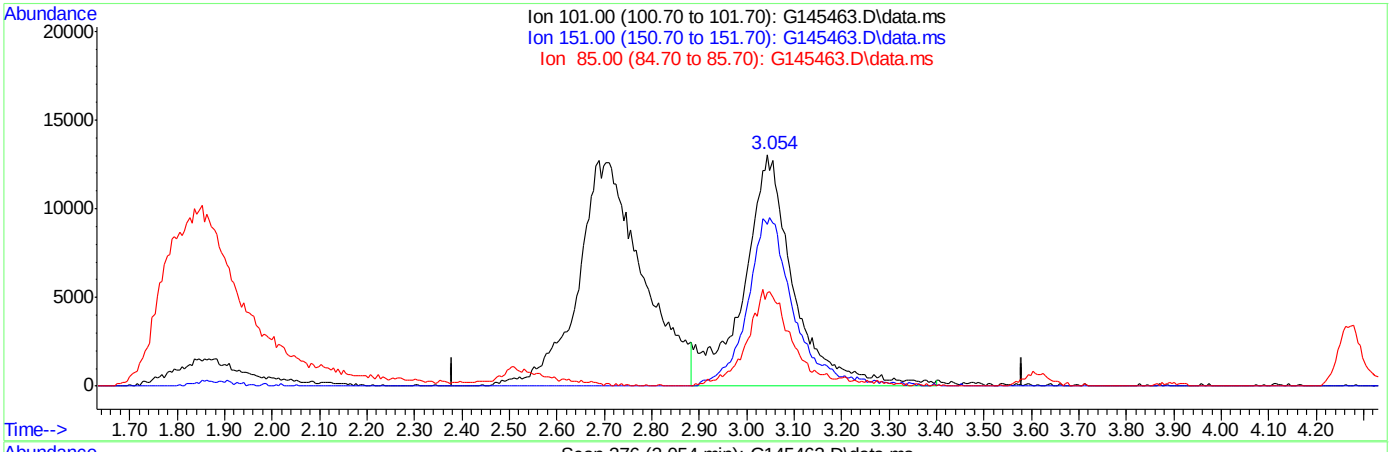
response 0

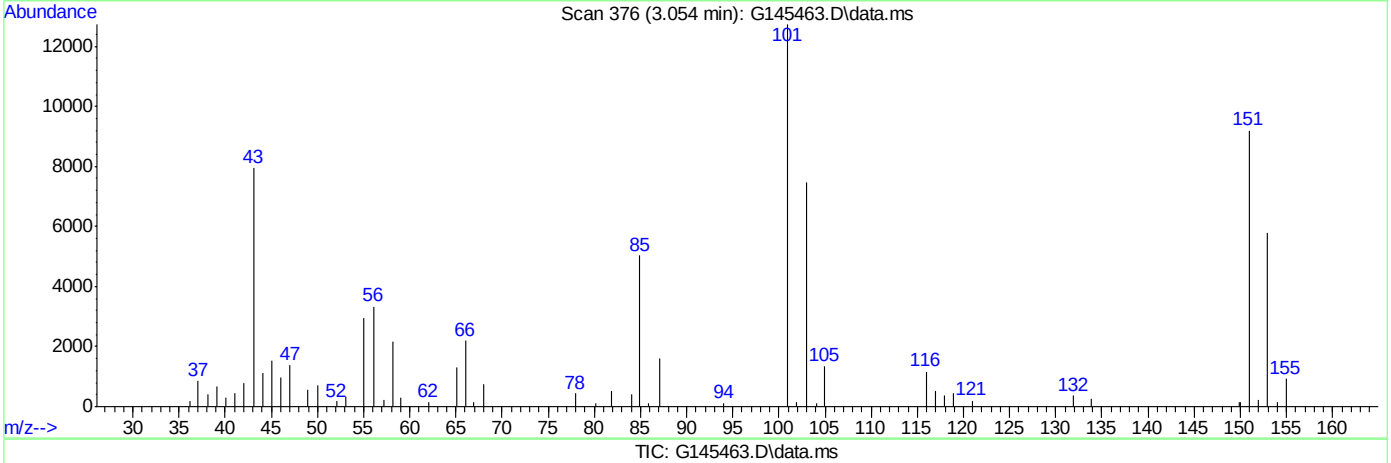
Ion	Exp%	Act%
101.00	100	0.00
151.00	91.80	0.00#
85.00	39.40	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145463.D
Acq On : 13 Sep 2015 2:50 pm
Operator : andrewd1
Sample : icv5447-50.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 14 09:19:09 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration





TIC: G145463.D\data.ms

(13) freon-113 (p)

3.054min (-0.026) 47.06ppb m

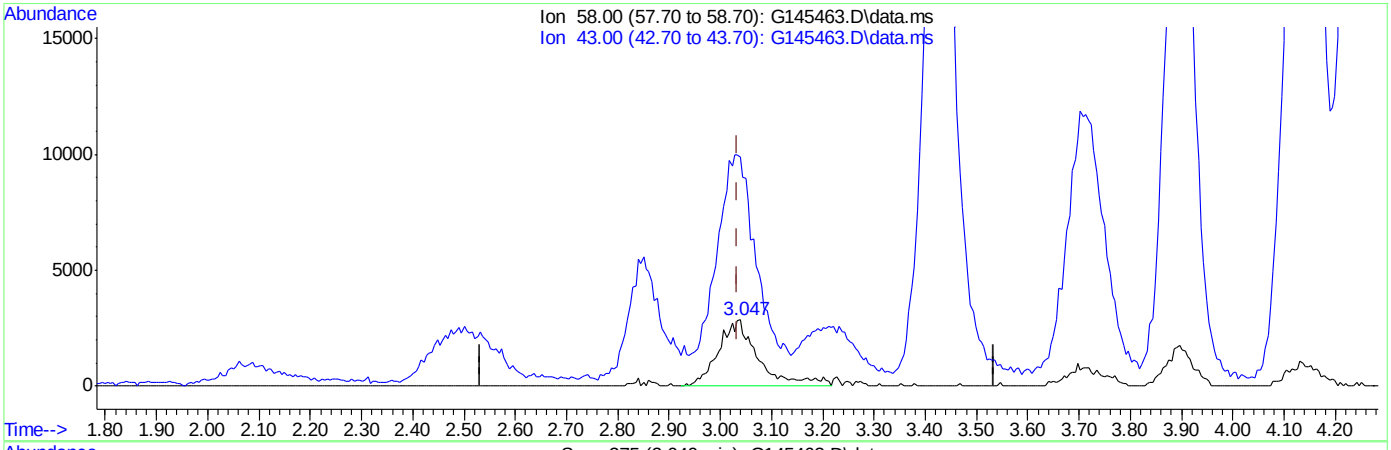
response 96930

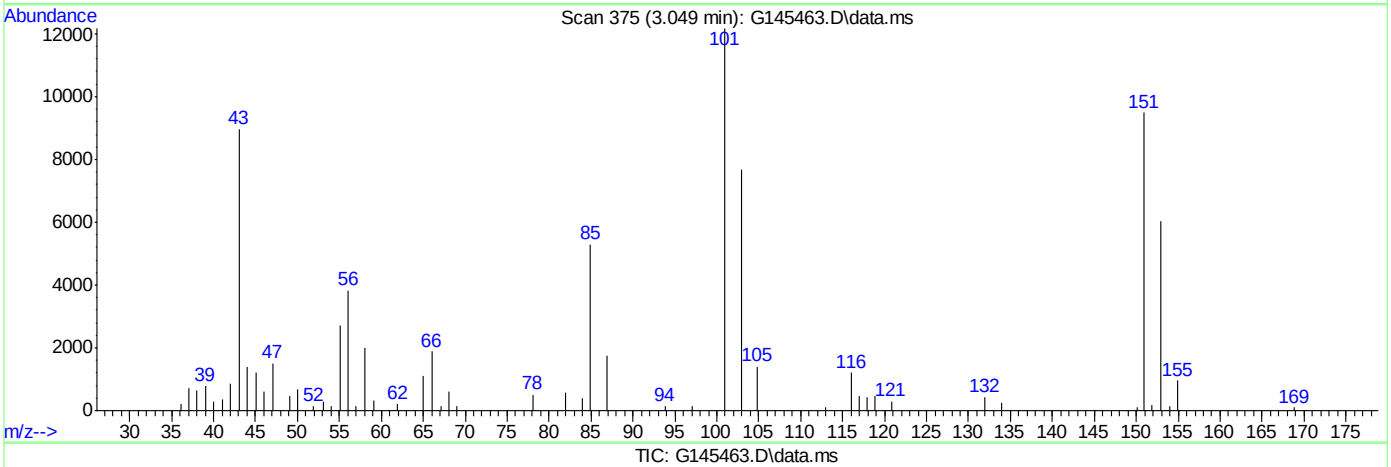
Ion	Exp%	Act%
101.00	100	100
151.00	91.80	72.14
85.00	39.40	39.52
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145463.D
Acq On : 13 Sep 2015 2:50 pm
Operator : andrewd1
Sample : icv5447-50.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 14 09:19:09 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration





TIC: G145463.D\data.ms

(16) acetone (p)

3.047min (+0.013) 56.41ppb

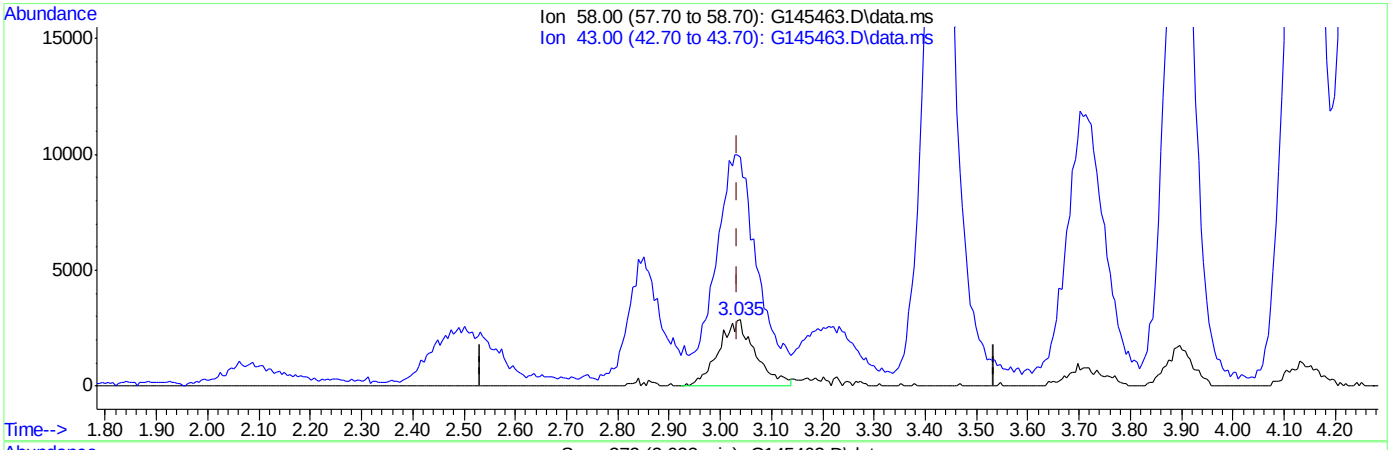
response 15459

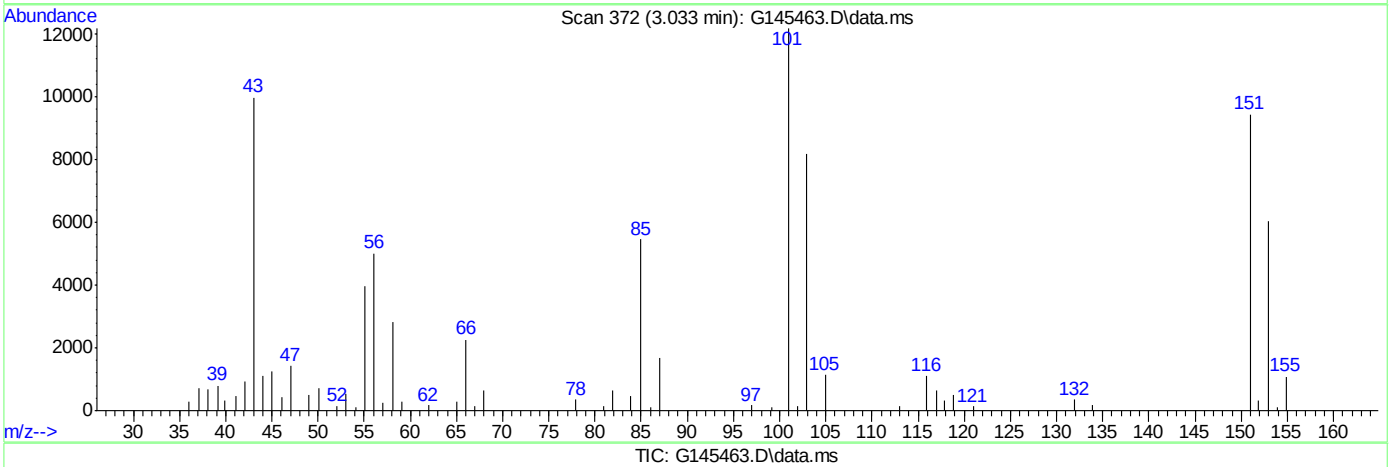
Ion	Exp%	Act%
58.00	100	100
43.00	336.30	382.92#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\G150913\
Data File : G145463.D
Acq On : 13 Sep 2015 2:50 pm
Operator : andrewd1
Sample : icv5447-50.0
Misc : MS35209,MSG5447,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 14 09:19:09 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration





(16) acetone (p)

3.033min (-0.000) 51.87ppb m

response 14215

Ion	Exp%	Act%
58.00	100	100
43.00	336.30	354.45
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Sona Liskova
09/18/15 14:32

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145647.D
Acq On : 18 Sep 2015 8:37 am
Operator : andrewd1
Sample : cc5447-50
Misc : MS35241,MSG5455,,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 18 09:02:32 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	3.171	65	70672	500.00	ppb		0.02
4) pentafluorobenzene	5.099	168	138849	50.00	ppb		0.00
43) 1,4-difluorobenzene	6.214	114	232591	50.00	ppb		0.00
66) chlorobenzene-d5	9.537	82	111014	50.00	ppb		0.00
80) 1,4-dichlorobenzene-d4	12.157	152	115072	50.00	ppb		0.00
System Monitoring Compounds							
40) dibromofluoromethane (s)	5.266	113	80986	52.11	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 104.22%				
60) toluene-d8 (s)	7.885	98	266225	52.03	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 104.06%				
82) bromofluorobenzene (s)	10.863	95	106260	47.81	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 95.62%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	3.241	59	84809	455.15	ppb		70
3) Ethanol	2.544	45	82834	3900.24	ppb	#	41
5) dichlorodifluoromethane	1.890	85	165713m	46.71	ppb		
6) chloromethane	2.025	50	129645	42.71	ppb		100
7) vinyl chloride	2.099	62	95980	44.79	ppb		96
8) bromomethane	2.438	96	54962	47.18	ppb		99
9) chloroethane	2.452	64	46651	45.61	ppb		74
10) ethyl ether	2.855	59	68321	46.55	ppb		98
11) acetonitrile	3.259	41	29979	41.68	ppb	#	68
12) trichlorofluoromethane	2.727	101	120997m	48.38	ppb		
13) freon-113	3.072	101	86963m	46.47	ppb		
14) acrolein	2.992	56	32494	200.42	ppb		98
15) 1,1-dichloroethene	3.229	96	71706	48.03	ppb		92
16) acetone	3.040	58	11271m	45.27	ppb		
17) Methyl Acetate	3.432	43	82023	43.57	ppb	#	94
18) methylene chloride	3.627	84	76417	47.95	ppb		92
19) methyl tert butyl ether	3.731	73	195993	42.47	ppb		96
20) acrylonitrile	3.708	53	40971	44.47	ppb		97
21) allyl chloride	3.516	41	154188m	46.24	ppb		
22) trans-1,2-dichloroethene	3.883	96	72421	46.99	ppb		86
23) iodomethane	3.485	142	125606	49.63	ppb		79
24) carbon disulfide	3.719	76	232274	48.64	ppb		99
25) propionitrile	4.769	54	13738	44.03	ppb		100
26) vinyl acetate	4.246	43	206126	44.06	ppb		95
27) chloroprene	4.357	53	138041	44.13	ppb		98
28) di-isopropyl ether	4.142	45	294945	41.39	ppb		92
29) methacrylonitrile	4.959	41	70476	45.58	ppb		88
30) 2-butanone	4.679	72	8141	43.57	ppb	#	69
32) Hexane	3.895	41	105154	45.40	ppb		94
33) 1,1-dichloroethane	4.276	63	152079	43.50	ppb		98
34) tert-butyl ethyl ether	4.555	59	251237	43.50	ppb		98
36) 2,2-dichloropropane	4.851	77	98619	44.04	ppb		99
37) cis-1,2-dichloroethene	4.881	96	77135	46.22	ppb		98
38) bromochloromethane	5.217	128	39233	46.59	ppb		93

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145647.D
Acq On : 18 Sep 2015 8:37 am
Operator : andrewd1
Sample : cc5447-50
Misc : MS35241,MSG5455,,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 18 09:02:32 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39)	chloroform	5.040	83	137897	43.92	ppb		100
41)	Tetrahydrofuran	5.250	42	28921	43.10	ppb		97
42)	1,1,1-trichloroethane	5.471	97	107633	45.68	ppb		95
44)	Cyclohexane	5.491	56	145572	43.40	ppb		96
45)	carbon tetrachloride	5.744	117	106698	44.30	ppb		95
46)	1,1-dichloropropene	5.622	75	100039	45.37	ppb		96
47)	benzene	5.919	78	267045	43.94	ppb		100
48)	1,2-dichloroethane	5.900	62	110819	43.71	ppb		96
49)	tert-amyl methyl ether	5.749	73	187042	43.40	ppb	#	68
50)	heptane	5.765	43	204816	43.74	ppb		98
51)	trichloroethene	6.580	95	75429	44.75	ppb		83
52)	1,2-dichloropropane	6.773	63	78585	45.59	ppb		97
53)	dibromomethane	7.092	93	49476	47.35	ppb		91
54)	bromodichloromethane	7.031	83	102013	45.41	ppb		98
55)	Methylcyclohexane	6.651	83	118285	46.21	ppb		93
56)	2-chloroethyl vinyl ether	7.357	63	26972	42.05	ppb		99
57)	methyl methacrylate	6.829	69	45509	45.54	ppb		94
58)	1,4-dioxane	7.067	88	2846	187.17	ppb		70
59)	cis-1,3-dichloropropene	7.619	75	115146	47.13	ppb		95
61)	4-methyl-2-pentanone	7.385	43	106502	43.98	ppb		97
62)	toluene	7.971	92	163525	45.56	ppb		99
63)	trans-1,3-dichloropropene	8.168	75	108411	46.41	ppb		99
64)	1,1,2-trichloroethane	8.339	83	55487	47.17	ppb		90
65)	ethyl methacrylate	8.153	69	80592	45.69	ppb		93
67)	tetrachloroethene	8.681	166	73217	45.23	ppb		98
68)	1,3-dichloropropane	8.613	76	102138	46.06	ppb		100
69)	dibromochloromethane	8.906	129	82928	45.84	ppb		98
70)	1,2-dibromoethane	9.126	107	70068	45.73	ppb		97
71)	2-hexanone	8.352	43	62794	45.15	ppb		97
72)	chlorobenzene	9.580	112	196468	44.38	ppb		96
73)	1,1,1,2-tetrachloroethane	9.626	131	72534	45.12	ppb		98
74)	ethylbenzene	9.633	91	314818	44.73	ppb		96
75)	m,p-xylene	9.718	106	245365	90.98	ppb		92
76)	o-xylene	10.195	106	123730	46.36	ppb		92
77)	styrene	10.234	104	212517	46.98	ppb		92
78)	bromoform	10.608	173	51581	46.10	ppb		97
79)	trans-1,4-dichloro-2-b...	10.640	53	27811	42.21	ppb		98
81)	isopropylbenzene	10.586	105	326921	43.73	ppb		97
83)	bromobenzene	11.077	156	86355	44.03	ppb		90
84)	1,1,2,2-tetrachloroethane	10.777	83	86465	41.87	ppb		95
85)	1,2,3-trichloropropane	10.936	75	61627	43.13	ppb		96
86)	n-propylbenzene	11.023	91	397811	44.40	ppb		95
87)	2-chlorotoluene	11.217	91	265857	42.79	ppb		94
88)	4-chlorotoluene	11.271	91	249589	44.37	ppb		91
89)	1,3,5-trimethylbenzene	11.197	105	288542	43.15	ppb		99
90)	tert-butylbenzene	11.592	91	201535	44.00	ppb		88
91)	1,2,4-trimethylbenzene	11.627	105	302701	44.90	ppb		97
92)	sec-butylbenzene	11.818	105	377777	44.51	ppb		97
93)	1,3-dichlorobenzene	12.074	146	168571	43.21	ppb		94
94)	p-isopropyltoluene	11.968	119	322231	44.26	ppb		96

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145647.D
Acq On : 18 Sep 2015 8:37 am
Operator : andrewd1
Sample : cc5447-50
Misc : MS35241,MSG5455,,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 18 09:02:32 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
95) 1,4-dichlorobenzene	12.192	146	171697	43.13	ppb		96
96) 1,2-dichlorobenzene	12.597	146	167861	44.75	ppb		97
97) n-butylbenzene	12.416	91	296560	45.57	ppb		92
98) 1,2-dibromo-3-chloropr...	13.453	75	17113	43.06	ppb	#	74
99) 1,3,5-trichlorobenzene	13.711	180	134699	46.11	ppb		100
100) 1,2,4-trichlorobenzene	14.414	180	98240	41.47	ppb		94
101) hexachlorobutadiene	14.565	225	50712	43.75	ppb		100
102) naphthalene	14.702	128	217145	37.86	ppb		100
103) 2-Methylnaphthalene	15.884	142	15845	17.37	ppb		98
104) 1-Methylnaphthalene	16.149	142	14748	17.59	ppb		97
105) 1,2,3-trichlorobenzene	14.971	180	84560	41.14	ppb		97

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

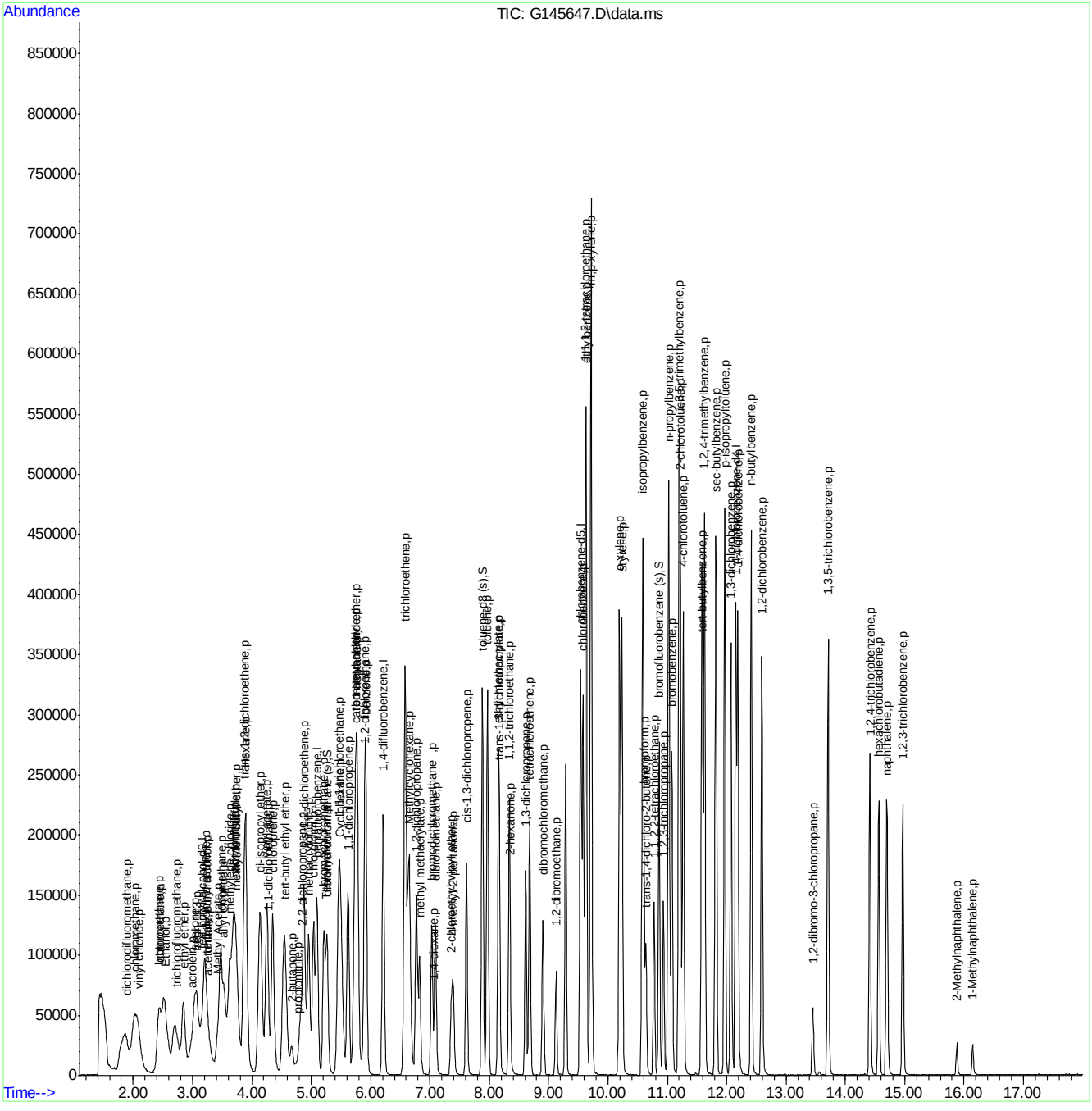
7.6.12

7

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145647.D
Acq On : 18 Sep 2015 8:37 am
Operator : andrewd1
Sample : cc5447-50
Misc : MS35241,MSG5455,,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 18 09:02:32 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Sona Liskova
09/21/15 14:25

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145673.D
Acq On : 18 Sep 2015 8:57 pm
Operator : andrewd1
Sample : ecc5447-50
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 20 08:45:48 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	3.161	65	69214	500.00	ppb		0.01
4) pentafluorobenzene	5.099	168	143382	50.00	ppb		0.00
43) 1,4-difluorobenzene	6.215	114	237951	50.00	ppb		0.00
66) chlorobenzene-d5	9.537	82	112135	50.00	ppb		0.00
80) 1,4-dichlorobenzene-d4	12.157	152	115377	50.00	ppb		0.00
System Monitoring Compounds							
40) dibromofluoromethane (s)	5.267	113	82402	51.35	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.70%				
60) toluene-d8 (s)	7.885	98	270636	51.70	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.40%				
82) bromofluorobenzene (s)	10.863	95	107814	48.38	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 96.76%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	3.241	59	88462	484.75	ppb		69
3) Ethanol	2.553	45	92097	4427.73	ppb	#	41
5) dichlorodifluoromethane	1.896	85	177042	48.33	ppb		96
6) chloromethane	2.004	50	166917	53.25	ppb		97
7) vinyl chloride	2.107	62	105645	47.75	ppb		99
8) bromomethane	2.436	96	60890	50.62	ppb		96
9) chloroethane	2.461	64	52278	49.49	ppb		81
10) ethyl ether	2.852	59	67185	44.32	ppb		90
11) acetonitrile	3.261	41	32992	44.42	ppb	#	57
12) trichlorofluoromethane	2.731	101	131336m	50.86	ppb		
13) freon-113	3.076	101	88696m	45.90	ppb		
14) acrolein	3.007	56	37981	226.85	ppb		95
15) 1,1-dichloroethene	3.232	96	73481	47.66	ppb		93
16) acetone	3.040	58	11549m	44.92	ppb		
17) Methyl Acetate	3.430	43	78173	40.22	ppb	#	95
18) methylene chloride	3.634	84	79077	48.05	ppb		93
19) methyl tert butyl ether	3.732	73	194445	40.80	ppb		97
20) acrylonitrile	3.708	53	40050	42.09	ppb		91
21) allyl chloride	3.514	41	158486	46.02	ppb		98
22) trans-1,2-dichloroethene	3.886	96	74270	46.66	ppb		92
23) iodomethane	3.490	142	128355	49.12	ppb		84
24) carbon disulfide	3.731	76	237950	48.26	ppb		98
25) propionitrile	4.769	54	13411	41.62	ppb		100
26) vinyl acetate	4.247	43	145822	30.18	ppb		94
27) chloroprene	4.360	53	142483	44.11	ppb		97
28) di-isopropyl ether	4.143	45	299173	40.65	ppb		95
29) methacrylonitrile	4.961	41	65642	41.11	ppb		86
30) 2-butanone	4.676	72	7832	40.59	ppb	#	74
32) Hexane	3.894	41	99913	41.77	ppb	#	96
33) 1,1-dichloroethane	4.275	63	156175	43.26	ppb		98
34) tert-butyl ethyl ether	4.554	59	253514	42.51	ppb		99
36) 2,2-dichloropropane	4.848	77	100335	43.39	ppb		99
37) cis-1,2-dichloroethene	4.881	96	78018	45.27	ppb		99
38) bromochloromethane	5.217	128	41086	47.25	ppb		88

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145673.D
Acq On : 18 Sep 2015 8:57 pm
Operator : andrewd1
Sample : ecc5447-50
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 20 08:45:48 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39)	chloroform	5.040	83	140208	43.24	ppb		99
41)	Tetrahydrofuran	5.252	42	28132	40.60	ppb		85
42)	1,1,1-trichloroethane	5.470	97	111671	45.90	ppb		97
44)	Cyclohexane	5.494	56	149507	43.57	ppb		96
45)	carbon tetrachloride	5.746	117	107986	43.83	ppb		93
46)	1,1-dichloropropene	5.622	75	101329	44.92	ppb		95
47)	benzene	5.920	78	273070	43.91	ppb		98
48)	1,2-dichloroethane	5.900	62	111869	43.13	ppb		97
49)	tert-amyl methyl ether	5.753	73	192158	43.58	ppb	#	54
50)	heptane	5.765	43	200420	41.84	ppb		95
51)	trichloroethene	6.580	95	79357	46.02	ppb		90
52)	1,2-dichloropropane	6.774	63	79812	45.26	ppb		98
53)	dibromomethane	7.091	93	50111	46.88	ppb		88
54)	bromodichloromethane	7.031	83	103286	44.94	ppb		98
55)	Methylcyclohexane	6.651	83	116290	44.41	ppb		94
56)	2-chloroethyl vinyl ether	7.356	63	28227	42.95	ppb		99
57)	methyl methacrylate	6.829	69	44524	43.55	ppb		88
58)	1,4-dioxane	7.067	88	3215	206.67	ppb		73
59)	cis-1,3-dichloropropene	7.619	75	114280	45.72	ppb		96
61)	4-methyl-2-pentanone	7.385	43	104955	42.37	ppb		96
62)	toluene	7.971	92	165921	45.19	ppb		95
63)	trans-1,3-dichloropropene	8.168	75	108403	45.36	ppb		97
64)	1,1,2-trichloroethane	8.338	83	54122	44.97	ppb		92
65)	ethyl methacrylate	8.153	69	79367	43.98	ppb		93
67)	tetrachloroethene	8.682	166	74015	45.27	ppb		99
68)	1,3-dichloropropane	8.614	76	101508	45.32	ppb		98
69)	dibromochloromethane	8.906	129	82645	45.23	ppb		98
70)	1,2-dibromoethane	9.126	107	69623	44.98	ppb		97
71)	2-hexanone	8.352	43	61039	43.44	ppb		99
72)	chlorobenzene	9.580	112	198459	44.39	ppb		95
73)	1,1,1,2-tetrachloroethane	9.626	131	74093	45.63	ppb		99
74)	ethylbenzene	9.633	91	320326	45.05	ppb		96
75)	m,p-xylene	9.717	106	247927	91.01	ppb		91
76)	o-xylene	10.195	106	124361	46.13	ppb		87
77)	styrene	10.234	104	214680	46.98	ppb		93
78)	bromoform	10.608	173	51020	45.14	ppb		95
79)	trans-1,4-dichloro-2-b...	10.640	53	25732	38.86	ppb		92
81)	isopropylbenzene	10.586	105	331977	44.29	ppb		96
83)	bromobenzene	11.077	156	87261	44.38	ppb		99
84)	1,1,2,2-tetrachloroethane	10.777	83	79761	38.52	ppb		96
85)	1,2,3-trichloropropane	10.936	75	59421	41.47	ppb		100
86)	n-propylbenzene	11.024	91	390673	43.48	ppb		94
87)	2-chlorotoluene	11.218	91	273305	43.88	ppb		92
88)	4-chlorotoluene	11.273	91	242817	43.05	ppb		93
89)	1,3,5-trimethylbenzene	11.197	105	286752	42.77	ppb		97
90)	tert-butylbenzene	11.592	91	200477	43.65	ppb		85
91)	1,2,4-trimethylbenzene	11.627	105	301045	44.54	ppb		97
92)	sec-butylbenzene	11.818	105	374134	43.96	ppb		98
93)	1,3-dichlorobenzene	12.074	146	165075	42.20	ppb		95
94)	p-isopropyltoluene	11.968	119	319601	43.78	ppb		96

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145673.D
Acq On : 18 Sep 2015 8:57 pm
Operator : andrewd1
Sample : ecc5447-50
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 20 08:45:48 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

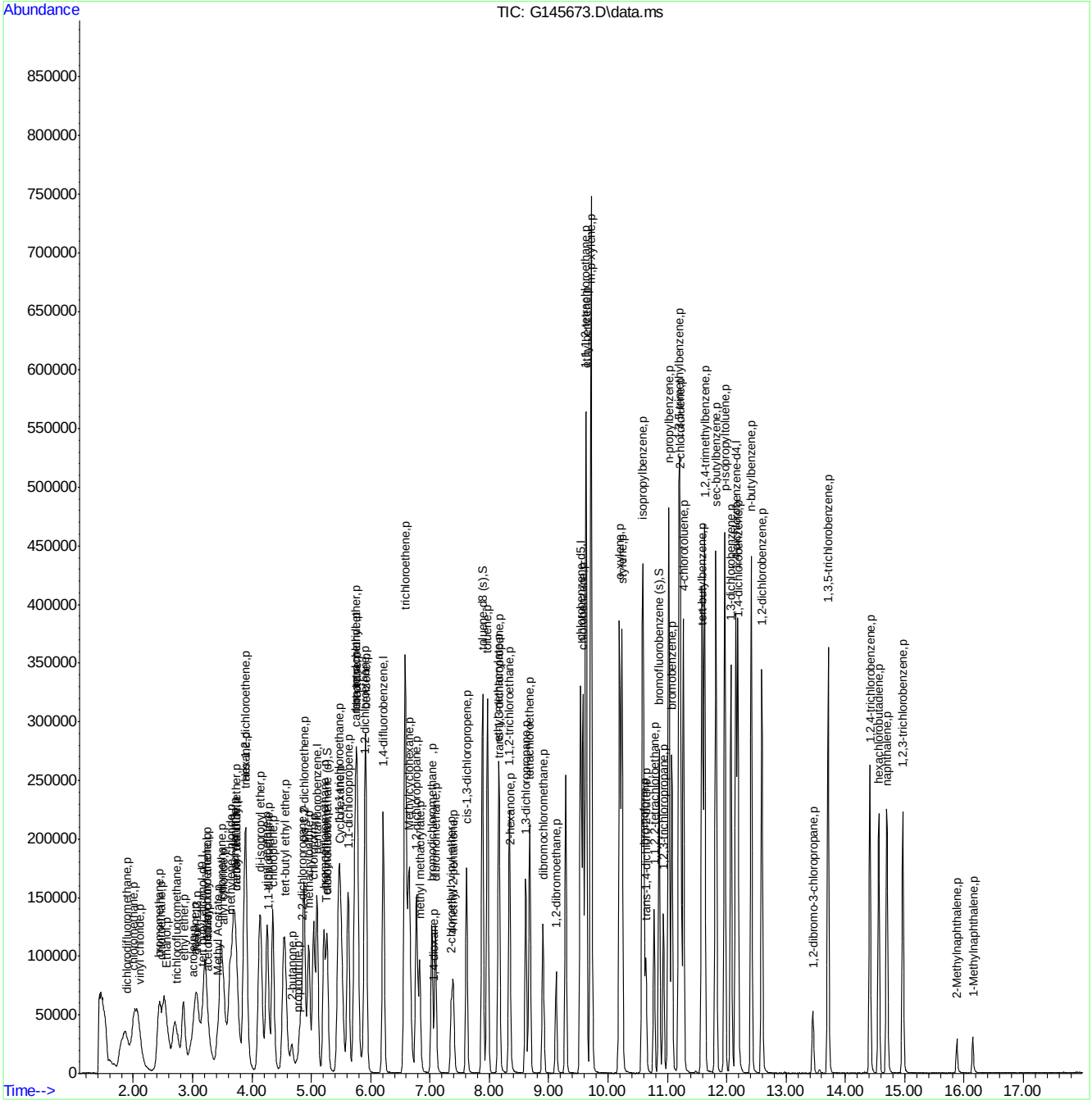
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
95) 1,4-dichlorobenzene	12.192	146	170043	42.60	ppb		97
96) 1,2-dichlorobenzene	12.596	146	165684	44.05	ppb		96
97) n-butylbenzene	12.416	91	286811	43.95	ppb		91
98) 1,2-dibromo-3-chloropr...	13.453	75	16378	41.10	ppb	#	70
99) 1,3,5-trichlorobenzene	13.711	180	132509	45.24	ppb		100
100) 1,2,4-trichlorobenzene	14.414	180	95386	40.25	ppb		98
101) hexachlorobutadiene	14.565	225	49555	42.64	ppb		99
102) naphthalene	14.702	128	210320	36.72	ppb		100
103) 2-Methylnaphthalene	15.884	142	18207	19.21	ppb		94
104) 1-Methylnaphthalene	16.150	142	17172	19.76	ppb		95
105) 1,2,3-trichlorobenzene	14.971	180	81944	39.86	ppb		97

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

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150918\
Data File : G145673.D
Acq On : 18 Sep 2015 8:57 pm
Operator : andrewd1
Sample : ecc5447-50
Misc : MS35242,MSG5455,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 20 08:45:48 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration



ACCUTEST LABORATORIES MC41356

Manual Integrations APPROVED (compounds with "m" flag)
Sona Liskova
09/21/15 14:50

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145711.D
Acq On : 20 Sep 2015 9:36 am
Operator : andrewd1
Sample : bs
Misc : MS35249,MSG5457,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 20 10:00:41 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	3.182	65	71564	500.00	ppb		0.03
4) pentafluorobenzene	5.099	168	144520	50.00	ppb		0.00
43) 1,4-difluorobenzene	6.215	114	237289	50.00	ppb		0.00
66) chlorobenzene-d5	9.537	82	112504	50.00	ppb		0.00
80) 1,4-dichlorobenzene-d4	12.156	152	113821	50.00	ppb		0.00
System Monitoring Compounds							
40) dibromofluoromethane (s)	5.268	113	82335	50.90	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.80%				
60) toluene-d8 (s)	7.884	98	267314	51.21	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.42%				
82) bromofluorobenzene (s)	10.863	95	104984	47.76	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 95.52%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	3.243	59	88829	470.78	ppb		71
3) Ethanol	2.545	45	66948	3112.96	ppb		92
5) dichlorodifluoromethane	1.904	85	182337	49.38	ppb		99
6) chloromethane	2.017	50	168630	53.37	ppb		97
7) vinyl chloride	2.112	62	108756	48.77	ppb		96
8) bromomethane	2.450	96	61563	50.77	ppb		99
9) chloroethane	2.459	64	56959	53.50	ppb		81
10) ethyl ether	2.862	59	75643	49.51	ppb		95
11) acetonitrile	3.247	41	26424	35.30	ppb	#	56
12) trichlorofluoromethane	2.728	101	129231m	49.65	ppb		
13) freon-113	3.073	101	100804m	51.76	ppb		
14) acrolein	3.009	56	58264	345.26	ppb		99
15) 1,1-dichloroethene	3.235	96	81928	52.72	ppb		88
16) acetone	3.036	58	15472m	59.70	ppb		
17) Methyl Acetate	3.433	43	104337	53.25	ppb	#	98
18) methylene chloride	3.631	84	85073	51.29	ppb		89
19) methyl tert butyl ether	3.754	73	229278	47.73	ppb		98
20) acrylonitrile	3.712	53	44641	46.55	ppb		93
21) allyl chloride	3.517	41	172955m	49.83	ppb		
22) trans-1,2-dichloroethene	3.885	96	80949	50.46	ppb		92
23) iodomethane	3.492	142	143009	54.29	ppb		80
24) carbon disulfide	3.735	76	260876	52.49	ppb		99
25) propionitrile	4.771	54	15874	48.88	ppb		100
26) vinyl acetate	4.248	43	223430	45.88	ppb		94
27) chloroprene	4.362	53	150984	46.37	ppb		94
28) di-isopropyl ether	4.148	45	334848	45.14	ppb		94
29) methacrylonitrile	4.963	41	88827	55.19	ppb		91
30) 2-butanone	4.678	72	11727	60.30	ppb	#	77
32) Hexane	3.896	41	117793	48.86	ppb	#	88
33) 1,1-dichloroethane	4.278	63	165059	45.36	ppb		99
34) tert-butyl ethyl ether	4.573	59	277014	46.08	ppb		98
36) 2,2-dichloropropane	4.853	77	118518	50.85	ppb		100
37) cis-1,2-dichloroethene	4.882	96	87049	50.11	ppb		93
38) bromochloromethane	5.218	128	43878	50.07	ppb		88

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145711.D
Acq On : 20 Sep 2015 9:36 am
Operator : andrewd1
Sample : bs
Misc : MS35249,MSG5457,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 20 10:00:41 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39)	chloroform	5.041	83	152276	46.60	ppb		99
41)	Tetrahydrofuran	5.250	42	30762	44.05	ppb		99
42)	1,1,1-trichloroethane	5.474	97	127060	51.81	ppb		98
44)	Cyclohexane	5.495	56	158629	46.36	ppb		94
45)	carbon tetrachloride	5.747	117	122556	49.88	ppb		100
46)	1,1-dichloropropene	5.623	75	110066	48.93	ppb		96
47)	benzene	5.920	78	288684	46.56	ppb		100
48)	1,2-dichloroethane	5.901	62	120630	46.64	ppb		97
49)	tert-amyl methyl ether	5.762	73	209336	47.61	ppb	#	18
50)	heptane	5.771	43	237227	49.66	ppb		97
51)	trichloroethene	6.580	95	83030	48.28	ppb		89
52)	1,2-dichloropropane	6.774	63	86065	48.94	ppb		100
53)	dibromomethane	7.092	93	53521	50.21	ppb		89
54)	bromodichloromethane	7.031	83	107507	46.90	ppb		99
55)	Methylcyclohexane	6.653	83	129996	49.78	ppb		98
56)	2-chloroethyl vinyl ether	7.356	63	30590	46.42	ppb		99
57)	methyl methacrylate	6.829	69	49322	48.38	ppb		98
58)	1,4-dioxane	7.071	88	3175	204.67	ppb		77
59)	cis-1,3-dichloropropene	7.618	75	120279	48.25	ppb		98
61)	4-methyl-2-pentanone	7.386	43	120720	48.87	ppb		97
62)	toluene	7.971	92	176648	48.24	ppb		99
63)	trans-1,3-dichloropropene	8.167	75	107331	45.04	ppb		96
64)	1,1,2-trichloroethane	8.338	83	58503	48.74	ppb		91
65)	ethyl methacrylate	8.152	69	85860	47.71	ppb		95
67)	tetrachloroethene	8.681	166	80310	48.96	ppb		96
68)	1,3-dichloropropane	8.613	76	112588	50.10	ppb		98
69)	dibromochloromethane	8.906	129	86879	47.39	ppb		99
70)	1,2-dibromoethane	9.126	107	75689	48.74	ppb		93
71)	2-hexanone	8.353	43	83571	59.29	ppb		96
72)	chlorobenzene	9.580	112	206145	45.95	ppb		96
73)	1,1,1,2-tetrachloroethane	9.626	131	79111	48.56	ppb		97
74)	ethylbenzene	9.633	91	342353	47.99	ppb		96
75)	m,p-xylene	9.717	106	261829	95.80	ppb		94
76)	o-xylene	10.195	106	128665	47.57	ppb		90
77)	styrene	10.234	104	222550	48.55	ppb		92
78)	bromoform	10.607	173	55137	48.62	ppb		97
79)	trans-1,4-dichloro-2-b...	10.640	53	32212	47.90	ppb		94
81)	isopropylbenzene	10.585	105	346736	46.89	ppb		99
83)	bromobenzene	11.076	156	91236	47.03	ppb		100
84)	1,1,2,2-tetrachloroethane	10.776	83	92854	45.46	ppb		93
85)	1,2,3-trichloropropane	10.935	75	64157	45.39	ppb		99
86)	n-propylbenzene	11.023	91	411678	46.45	ppb		94
87)	2-chlorotoluene	11.217	91	280135	45.59	ppb		94
88)	4-chlorotoluene	11.271	91	261009	46.91	ppb		93
89)	1,3,5-trimethylbenzene	11.197	105	318642	48.18	ppb		97
90)	tert-butylbenzene	11.591	91	215511	47.57	ppb		88
91)	1,2,4-trimethylbenzene	11.626	105	317164	47.56	ppb		97
92)	sec-butylbenzene	11.818	105	398848	47.51	ppb		95
93)	1,3-dichlorobenzene	12.074	146	173161	44.87	ppb		96
94)	p-isopropyltoluene	11.968	119	346748	48.15	ppb		94

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145711.D
Acq On : 20 Sep 2015 9:36 am
Operator : andrewd1
Sample : bs
Misc : MS35249,MSG5457,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 20 10:00:41 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

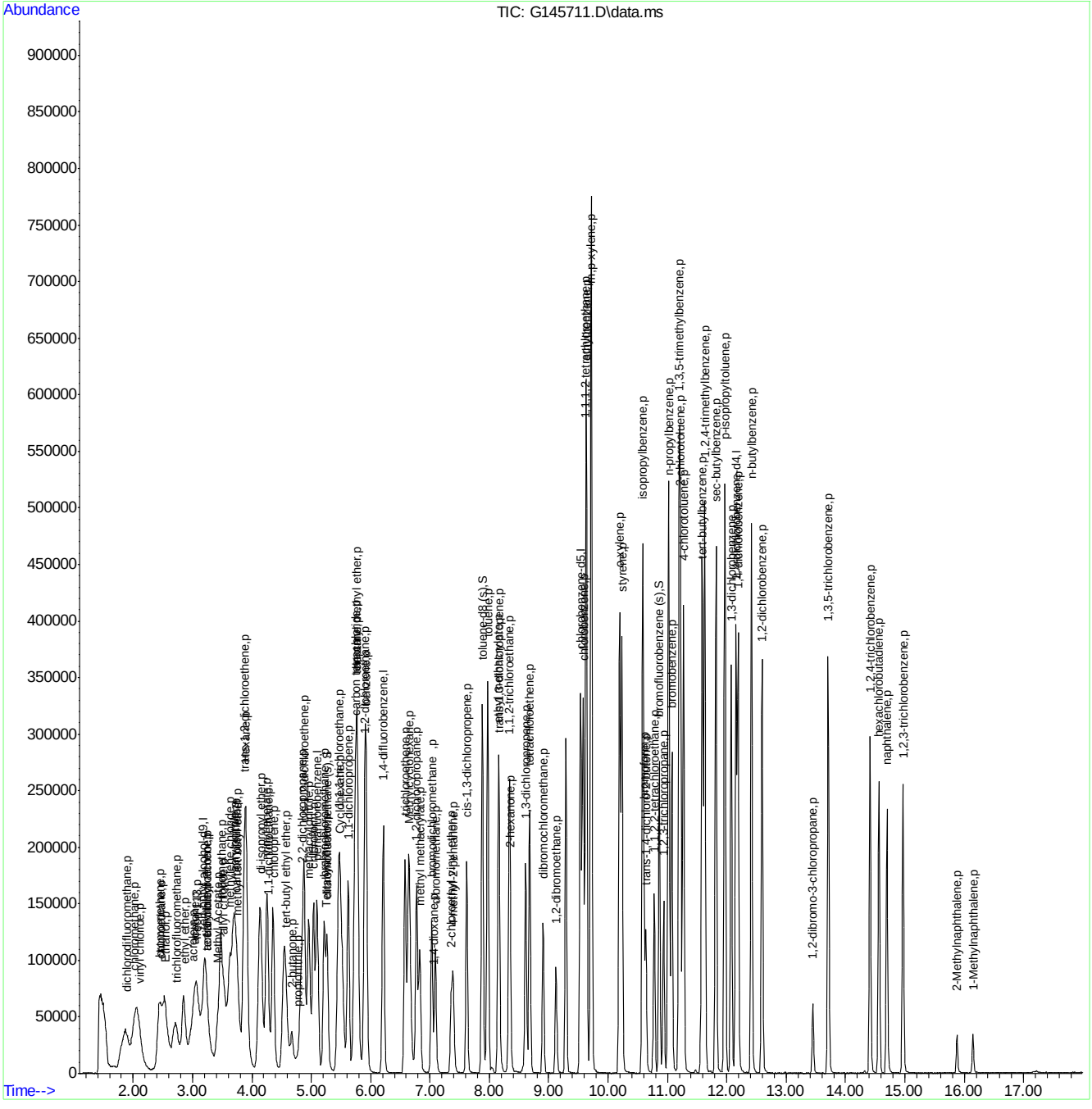
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
95) 1,4-dichlorobenzene	12.191	146	177583	45.10	ppb		98
96) 1,2-dichlorobenzene	12.596	146	172707	46.55	ppb		98
97) n-butylbenzene	12.415	91	319052	49.56	ppb		90
98) 1,2-dibromo-3-chloropr...	13.452	75	18317	46.59	ppb	#	66
99) 1,3,5-trichlorobenzene	13.711	180	134704	46.62	ppb		100
100) 1,2,4-trichlorobenzene	14.414	180	105619	44.81	ppb		98
101) hexachlorobutadiene	14.565	225	57690	50.31	ppb		98
102) naphthalene	14.701	128	216728	38.16	ppb		100
103) 2-Methylnaphthalene	15.884	142	19726	20.60	ppb		97
104) 1-Methylnaphthalene	16.148	142	19075	21.69	ppb		97
105) 1,2,3-trichlorobenzene	14.971	180	91314	44.62	ppb		99

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

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145711.D
Acq On : 20 Sep 2015 9:36 am
Operator : andrewd1
Sample : bs
Misc : MS35249,MSG5457,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 20 10:00:41 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Sona Liskova
09/21/15 13:37

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145736.D
Acq On : 20 Sep 2015 9:27 pm
Operator : andrewd1
Sample : ecc5447-50
Misc : MS35252,MSG5457,,,,5,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Sep 21 09:00:11 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	3.178	65	65337	500.00	ppb		0.03
4) pentafluorobenzene	5.100	168	144257	50.00	ppb		0.00
43) 1,4-difluorobenzene	6.215	114	234848	50.00	ppb		0.00
66) chlorobenzene-d5	9.537	82	110334	50.00	ppb		0.00
80) 1,4-dichlorobenzene-d4	12.157	152	111034	50.00	ppb		0.00
System Monitoring Compounds							
40) dibromofluoromethane (s)	5.269	113	81374	50.40	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.80%				
60) toluene-d8 (s)	7.885	98	260907	50.50	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.00%				
82) bromofluorobenzene (s)	10.863	95	104227	48.60	ppb		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 97.20%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	3.220	59	77602	450.48	ppb		91
3) Ethanol	2.536	45	66675	3395.74	ppb	#	41
5) dichlorodifluoromethane	1.891	85	187667	50.92	ppb		95
6) chloromethane	2.001	50	171559	54.40	ppb		99
7) vinyl chloride	2.102	62	111957	50.29	ppb		96
8) bromomethane	2.436	96	60543	50.02	ppb		94
9) chloroethane	2.448	64	51092	48.08	ppb		84
10) ethyl ether	2.866	59	75220	49.32	ppb		100
11) acetonitrile	3.251	41	28641	38.33	ppb	#	59
12) trichlorofluoromethane	2.720	101	136266m	52.45	ppb		
13) freon-113	3.070	101	96050m	49.41	ppb		
14) acrolein	3.018	56	40316	239.34	ppb		99
15) 1,1-dichloroethene	3.230	96	76986	49.63	ppb	#	75
16) acetone	3.039	58	11258m	43.52	ppb		
17) Methyl Acetate	3.435	43	83590	42.74	ppb	#	92
18) methylene chloride	3.622	84	79595	48.07	ppb		86
19) methyl tert butyl ether	3.756	73	213558	44.54	ppb		97
20) acrylonitrile	3.735	53	46423	48.50	ppb		93
21) allyl chloride	3.514	41	163843	47.29	ppb		93
22) trans-1,2-dichloroethene	3.882	96	77534	48.42	ppb		95
23) iodomethane	3.481	142	134924	51.32	ppb		83
24) carbon disulfide	3.724	76	254309	51.26	ppb		99
25) propionitrile	4.772	54	13956	43.05	ppb		100
26) vinyl acetate	4.251	43	131805	27.12	ppb		95
27) chloroprene	4.360	53	155437	47.83	ppb		97
28) di-isopropyl ether	4.147	45	321270	43.39	ppb		95
29) methacrylonitrile	4.959	41	72243	44.97	ppb		84
30) 2-butanone	4.679	72	8648	44.55	ppb	#	59
32) Hexane	3.899	41	112366	46.69	ppb		93
33) 1,1-dichloroethane	4.279	63	168422	46.36	ppb		98
34) tert-butyl ethyl ether	4.570	59	277000	46.17	ppb		99
36) 2,2-dichloropropane	4.850	77	97931	42.09	ppb		97
37) cis-1,2-dichloroethene	4.884	96	82887	47.80	ppb		96
38) bromochloromethane	5.220	128	42366	48.43	ppb		89

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145736.D
Acq On : 20 Sep 2015 9:27 pm
Operator : andrewd1
Sample : ecc5447-50
Misc : MS35252,MSG5457,,,,5,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Sep 21 09:00:11 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39)	chloroform	5.043	83	150579	46.16	ppb		99
41)	Tetrahydrofuran	5.253	42	30546	43.82	ppb		93
42)	1,1,1-trichloroethane	5.471	97	121885	49.79	ppb		92
44)	Cyclohexane	5.491	56	160569	47.41	ppb		97
45)	carbon tetrachloride	5.745	117	121006	49.76	ppb		99
46)	1,1-dichloropropene	5.624	75	110165	49.48	ppb		95
47)	benzene	5.921	78	286817	46.74	ppb		97
48)	1,2-dichloroethane	5.901	62	121135	47.32	ppb		98
49)	tert-amyl methyl ether	5.756	73	204832	47.07	ppb	#	38
50)	heptane	5.767	43	213534	45.17	ppb		98
51)	trichloroethene	6.580	95	85862	50.45	ppb		86
52)	1,2-dichloropropane	6.774	63	83158	47.78	ppb		98
53)	dibromomethane	7.092	93	52620	49.87	ppb		87
54)	bromodichloromethane	7.031	83	110547	48.73	ppb		99
55)	Methylcyclohexane	6.651	83	127854	49.47	ppb		95
56)	2-chloroethyl vinyl ether	7.356	63	31198	47.74	ppb		98
57)	methyl methacrylate	6.828	69	47252	46.83	ppb		96
58)	1,4-dioxane	7.062	88	2714	176.77	ppb		92
59)	cis-1,3-dichloropropene	7.618	75	120415	48.81	ppb		96
61)	4-methyl-2-pentanone	7.385	43	116345	47.59	ppb		97
62)	toluene	7.971	92	174827	48.24	ppb		98
63)	trans-1,3-dichloropropene	8.167	75	113775	48.24	ppb		98
64)	1,1,2-trichloroethane	8.338	83	57755	48.62	ppb		93
65)	ethyl methacrylate	8.152	69	84304	47.33	ppb		97
67)	tetrachloroethene	8.681	166	79663	49.52	ppb		98
68)	1,3-dichloropropane	8.613	76	107570	48.81	ppb		99
69)	dibromochloromethane	8.906	129	90635	50.41	ppb		98
70)	1,2-dibromoethane	9.126	107	74867	49.16	ppb		98
71)	2-hexanone	8.353	43	67342	48.71	ppb		98
72)	chlorobenzene	9.580	112	207597	47.19	ppb		97
73)	1,1,1,2-tetrachloroethane	9.626	131	78589	49.19	ppb		96
74)	ethylbenzene	9.633	91	336697	48.13	ppb		96
75)	m,p-xylene	9.717	106	261069	97.40	ppb		93
76)	o-xylene	10.195	106	133289	50.25	ppb		93
77)	styrene	10.234	104	223941	49.81	ppb		90
78)	bromoform	10.608	173	55120	49.56	ppb		100
79)	trans-1,4-dichloro-2-b...	10.640	53	28606	43.60	ppb		92
81)	isopropylbenzene	10.585	105	351432	48.72	ppb		97
83)	bromobenzene	11.076	156	90618	47.89	ppb		96
84)	1,1,2,2-tetrachloroethane	10.776	83	82215	41.26	ppb		97
85)	1,2,3-trichloropropane	10.936	75	63917	46.36	ppb		99
86)	n-propylbenzene	11.023	91	415131	48.01	ppb		94
87)	2-chlorotoluene	11.218	91	287993	48.04	ppb		90
88)	4-chlorotoluene	11.272	91	260168	47.93	ppb		91
89)	1,3,5-trimethylbenzene	11.197	105	302543	46.89	ppb		97
90)	tert-butylbenzene	11.592	91	214547	48.54	ppb		86
91)	1,2,4-trimethylbenzene	11.627	105	318698	48.99	ppb		98
92)	sec-butylbenzene	11.818	105	399901	48.83	ppb		95
93)	1,3-dichlorobenzene	12.075	146	174652	46.40	ppb		93
94)	p-isopropyltoluene	11.968	119	342758	48.79	ppb		95

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145736.D
Acq On : 20 Sep 2015 9:27 pm
Operator : andrewd1
Sample : ecc5447-50
Misc : MS35252,MSG5457,,,,5,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Sep 21 09:00:11 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration

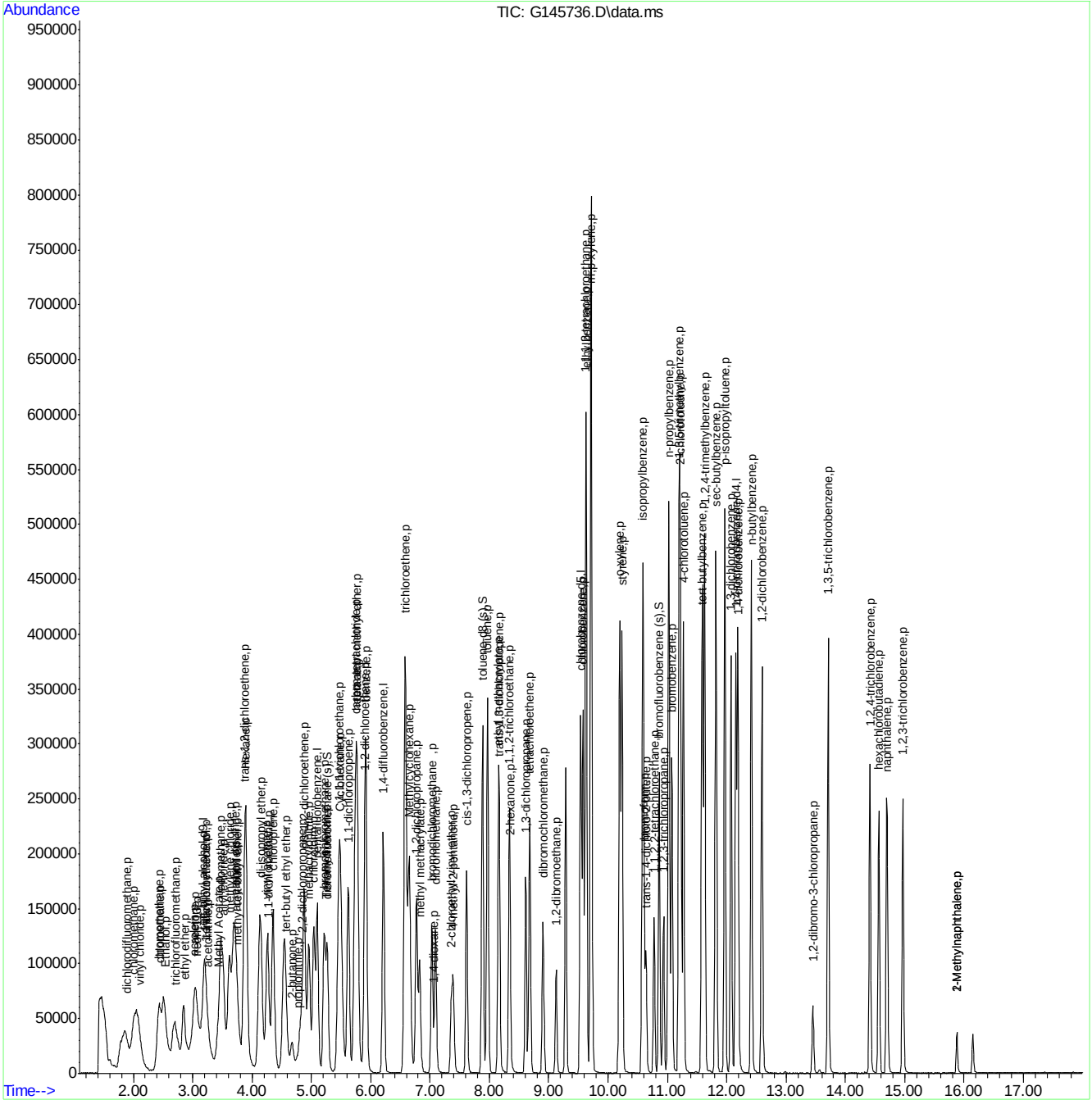
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
95) 1,4-dichlorobenzene	12.192	146	179564	46.75	ppb		98
96) 1,2-dichlorobenzene	12.596	146	175239	48.42	ppb		96
97) n-butylbenzene	12.416	91	304131	48.43	ppb		94
98) 1,2-dibromo-3-chloropr...	13.453	75	18043	47.05	ppb	#	69
99) 1,3,5-trichlorobenzene	13.711	180	138064	48.98	ppb		99
100) 1,2,4-trichlorobenzene	14.414	180	103135	44.85	ppb		96
101) hexachlorobutadiene	14.566	225	52528	46.96	ppb		100
102) naphthalene	14.702	128	233475	41.68	ppb		100
103) 2-Methylnaphthalene	15.884	142	20857	21.89	ppb		96
104) 1-Methylnaphthalene	15.884	142	20857	23.76	ppb		93
105) 1,2,3-trichlorobenzene	14.972	180	90889	45.47	ppb		98

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

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\G150920\
Data File : G145736.D
Acq On : 20 Sep 2015 9:27 pm
Operator : andrewd1
Sample : ecc5447-50
Misc : MS35252,MSG5457,,,,5,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Sep 21 09:00:11 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration



Accutest Laboratories of New England, Inc. **Instrument: GCMS G**

VOLATILE ORGANICS BY GC/MS ANALYSIS LOG

Standards Data

Lot #	Description	Conc
MS10326	8260CC	200ug/mL
~~338325MA~~	CCgas	
329	BS	
330	BSgas	
315	IS+SS	250ng/mL

Daily Saved File

Tune file 1:	G145449
Tune file 2:	NA
Initial Cal:	9/13/15
ID File:	G150913W.M
ICAL Verified:	KH
Sequence verified:	KH

Date: 9/13/15

Batch ID: MSG5447

Analysts KH

Signature: [signature]

*Note: If sample matrix is soil – method SW846 5035 used for preparation. SW846 5030 is purge and trap method for soil and water

pH paper LOT# exp:

Data File	Sample ID	Bot No.	Work Group	Test	ALS #	*MTX	Samp Amt.	% Sol	Dil. Fact.	pH	Comments
G145448	ibIK	NA	NA	Water	1	W	5mL	NA	1:1	NA	
449	ibIK			curve	2						bfb vv
450	ICS449.5	3,1			3						vv
451	1.0				4						vv
452	2.0				5						vv
453	5.0				6						vv
454	10.0				7						vv
455	20.0				8						vv
456	ICS447-60				9						vv
457	ICS447-80				10						vv
458	-200				11						vv
459	-400				12						vv
460	ibIK	NA			13						
461	ibIK				14						
462	ibIK				15						vv
463	ICV447-50	1,1			16						
464	ICV447-50				17						
465	ibIK	NA			18						
466	ibIK				19						
467	ibIK				20						
468	ibIK				21						

9/14/15 KH

MTX = Matrix: Designate **W** for water, **S** for soil, **O** for oil.
Sample amount is reported in grams (wet) for soil and oil, mls for water.

Review:_____

MS001-06 Date: 11/20/14

ACCUTEST LABORATORIES MC41356

Accutest Laboratories of New England, Inc. **Instrument: GCMS G**

VOLATILE ORGANICS BY GC/MS ANALYSIS LOG

Standards Data

Lot #	Description	Conc
MS103145	LL	200 ug/mL
338	LL gas	
329	bs	
330	bs gas	
315	IS/SS	250 ug/mL

Daily Saved File

Tune file 1: G145647	
Tune file 2: N/A	
Initial Cal: 9/13/15	
ID File: G15-913.w.m	
ICAL Verified: VH	
Sequence verified:	

Date: 9/18/15

Batch ID: MS65455

Analysts AO

Signature: AM

*Note: If sample matrix is soil – method SW846 5035 used for preparation. SW846 5030 is purge and trap method for soil and water

pH paper LOT# exp:

Data File	Sample ID	Bot No.	Work Group	Test	ALS #	*MTX	Samp Amt.	% Sol	Dil. Fact.	pH	Comments
G145646	iblk	N/A	N/A	8260	1	N/A	5 mL	N/A	1:1	NA	
647	CC544750	1,2			2						bfb ✓✓
648	bs	2,2			3						✓✓
649	bsd	1			4						✓✓
650	RLV-22V	1,2			5						
651	mb	N/A			6						✓✓
652	MC41355-2	2 /	MS35237	SL	7	WTB				LZ	✓✓
653	MC41356-6	2 /	MS35242	STD	8	WTB					✓✓
654	-7	2 /			9	WFB					✓✓
655	MC41341-6	2 /		RCP	10	GW					✓✓
656	MC41303-8	2 /	MS35241	STD	11	GW					✓✓
657	-1	2 /			12						✓✓
658	MC41356-1	1 /	MS35242	STD	13	GW					✓✓
659	-2	3 /			14	SW					✓✓
660	-3	1 /			15						✓✓
661	-4	1 /			16						✓✓
662	-5	1 /			17						✓✓
663	-8	1 /			18	GW					✓✓
664	-9	2 /			19						✓✓
665	-10	1 /			4						✓✓
666	-11	1 /			5						✓✓
667	-12	1 /			6						✓✓
668	-13	1 /			7						✓✓
669	-14	1 /			8						✓✓
670	-15	1 /			9						✓✓
671	MC41356-7	4,3,1			10	GW	5mL		1:1		✓✓
672	-2MS	1 /		STD	11					LZ	✓✓
673	CC544750	1,2	N/A	8260	12	N/A				N/A	✓✓
674	iblk	N/A			13						
675	iblk				14						
											9-20-15

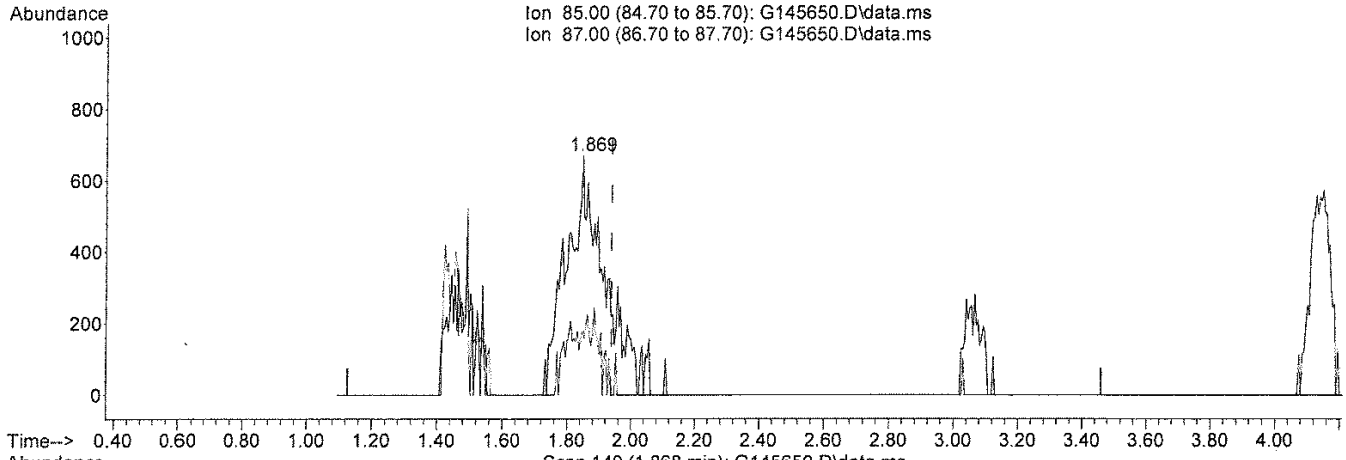
MTX = Matrix: Designate **W** for water, **S** for soil, **O** for oil.
Sample amount is reported in grams (wet) for soil and oil, mls for water.

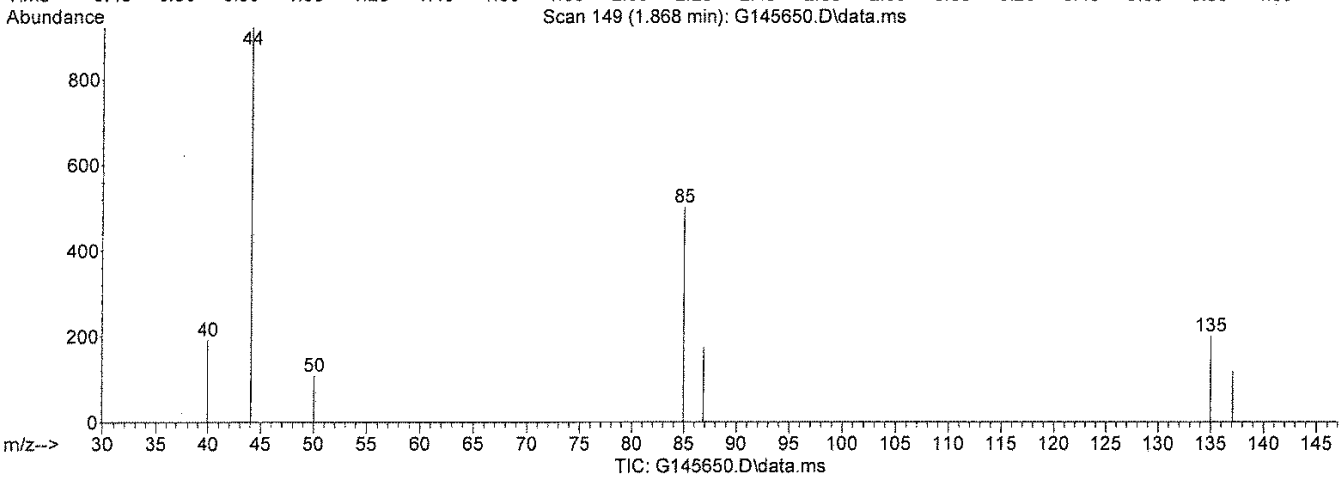
MS001-06 Date: 11/20/14 **Review:**

Quantitation Report (Qedit)

Data Path : G:\1\DATA\G150918\
Data File : G145650.D
Acq On : 18 Sep 2015 10:03 am
Operator : andrewd1
Sample : RLV-2LV
Misc : MS35241,MSG5455,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 18 10:25:27 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration





(5) dichlorodifluoromethane (p)

1.868min (-0.070) 1.49ppb m

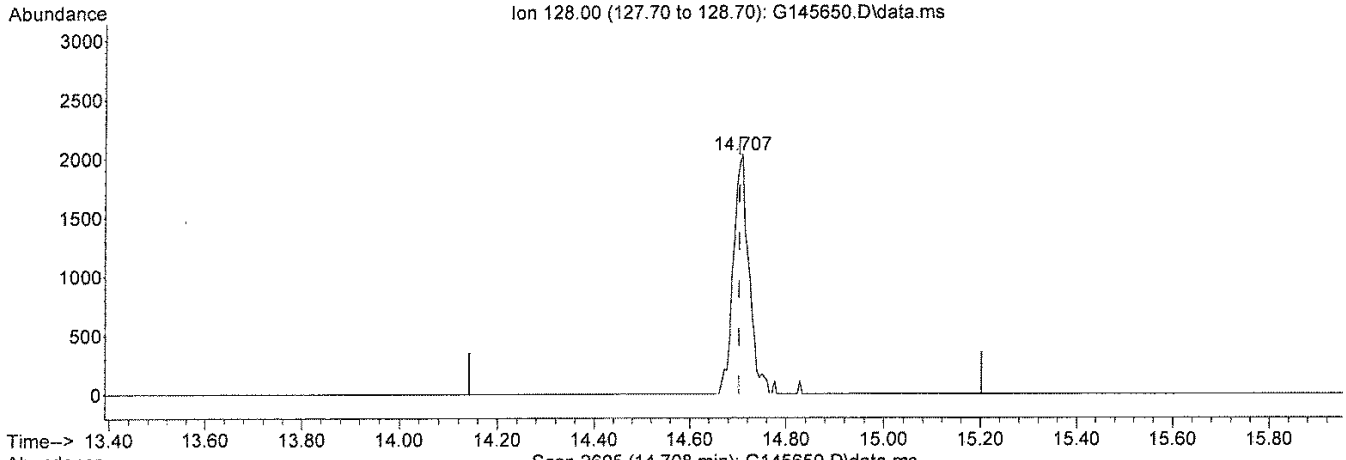
response 5516

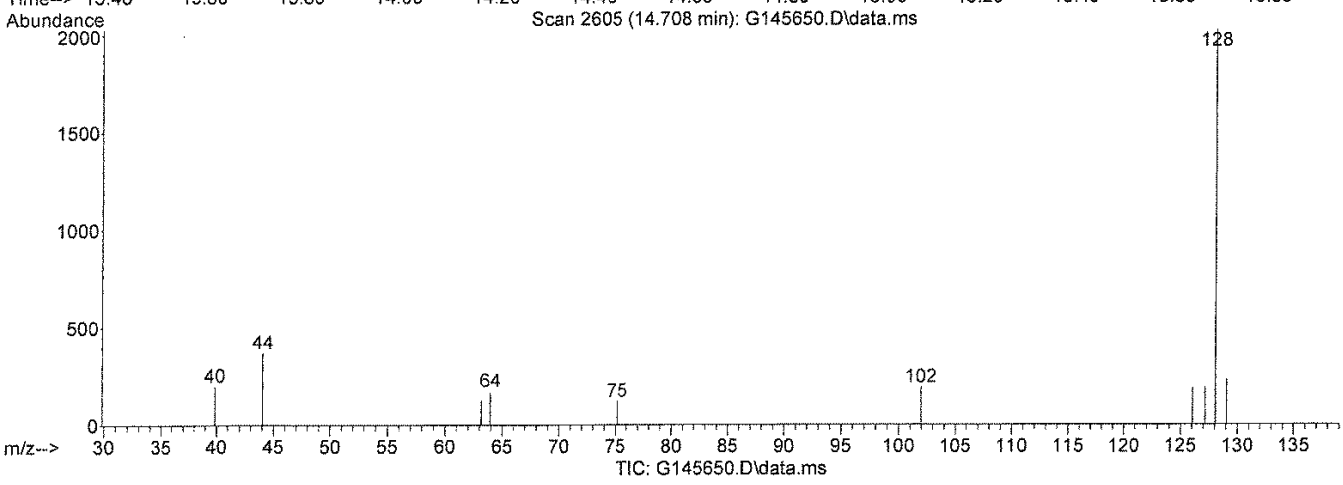
Ion	Exp%	Act%
85.00	100	100
87.00	32.00	34.66
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : G:\1\DATA\G150918\
Data File : G145650.D
Acq On : 18 Sep 2015 10:03 am
Operator : andrewd1
Sample : RLV-2LV
Misc : MS35241,MSG5455,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 18 10:25:27 2015
Quant Method : C:\msdchem\1\METHODS\g150913w.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Sep 14 09:18:26 2015
Response via : Initial Calibration





(102) naphthalene (p)

14.707min (+0.005) 5.20ppb

response 4571

Ion	Exp%	Act%
128.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Accutest Laboratories of New England, Inc.

Instrument: GCMS G

VOLATILE ORGANICS BY GC/MS ANALYSIS LOG

Standards Data

Lot #	Description	Conc
MS103715	8260 ic	200 ug/mL
338	cc gas	
329	bs	
330	bs gas	
315	IS/SS	200 ug/mL

Daily Saved File

Tune file 1:	6145711
Tune file 2:	N/A
Initial Cal:	9/13/15
ID File:	615-913 W.M
ICAL Verified:	KH
Sequence verified:	CB

Date: ~~MSG5457~~ 9/20/15 (9/20/16 mo)

Batch ID: MSG5457

Analysts AD

Signature: AD

*Note: If sample matrix is soil – method SW846 5035 used for preparation. SW846 5030 is purge and trap method for soil and water

pH paper LOT# exp:

Data File	Sample ID	Bot No.	Work Group	Test	ALS #	*MTX	Samp Amt.	% Sol	Dil. Fact.	pH	Comments
6145709	iblk	N/A	N/A	8260	1	N/A	5mL	N/A	1:1	N/A	
710	CC54475	1,2			2						
711	bs	2,2			3						cc/bfb ✓
712	~~bsd~~	+			4						✓
713	BLV	1,2			5						✓
714	MB	N/A			6						✓
715	MC41445	2/	MCP	MS35252	7	WB				<2	✓
716	-3	1/			8	HW					✓
717	-2	2/			9						✓
718	-1	2/			10		1mL		1:5	N/A	purgen air
719	-4	1/			11		5mL		1:1	<2	✓
720	MC41356-K	2/	STD MIXTURE		12						✓
721	-17	1/			13						✓
722	-18	1/			14						✓
723	-19	2/			15						✓
724	-20	5/			16						✓
725	-21	2/			17						✓
726	-22	2/			18						✓
727	-23	2/			19						✓
728	-24	1/			20						✓
729	-25	2/			21						✓
730	-26	2/			22						✓
731	MC41344-1	3/	RCP	MS35248	23		250 mL		1:20		✓
732	MC41445-1	2/	MCP	MS35252	24		1 mL		1:5		✓
733	MC41345-2	4	RCP	MS35249	25		5 mL		1:1		✓
734	MC41356-20	2,3,4	STD MIXTURE	MS35252	26						✓
735	-26 MSD	+	+	+	27					-	✓
736	ccc	1,2	8260	N/A	28					N/A	
737	iblk	+	+	+	29-34					+	
-742											

MTX = Matrix: Designate W for water, S for soil, O for oil.
Sample amount is reported in grams (wet) for soil and oil, mls for water.

Review:

MS001-06 Date: 11/20/14

ACCUTEST LABORATORIES MC41356

MCGI

USEPA

Organic

Data Validation Report

Picatinny Arsenal
Route 15, NJ

Accutest Lab SDG's No. MC41356, MC41366, MC41413 & MC41544

MCGI Project No. EA881501-1356-O

Prepared for:

EA Engineering, Science & Technology, Inc.
Hunt Valley, MD

Prepared by:

"MCGI"
Meridian Consultant Group, Inc.

Environmental Services & Data Validation

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November 2015

CONTENTS

- GLOSSARY OF ACRONYMS & TERMS
- COMMUNICATION RECORDS
- GLOSSARY OF DATA VALIDATION QUALIFIERS
- DATA VALIDATION REPORT NARRATIVE
- ELECTRONIC DATA DELIVERABLE (EDD) with applicable qualifiers, Refer to the EDD Excel file.
- SUPPORT DOCUMENTATION, Refer to the electronic Data Package PDF file.

GLOSSARY OF ACRONYMS & TERMS

GLOSSARY OF ACRONYMS & TERMS

One or more of the following acronyms and terms may have been used in the descriptive process of the **Organic** Data Validation.

Acronyms:

BFB Bromofluorobenzene (volatile instrument performance check)
BNA Base/Neutral/Acid
CARD CLP Analytical Results Database
CCCs Calibration Check Compounds
CCS Contract Compliance Screening
CF Calibration Factor
CLP Contract Laboratory Program
COC Chain of Custody
CRDL Contract Required Detection Limit
CRQL Contract Required Quantitation Limit
CSF Complete SDG File
%D Percent Difference
DAS Delivery of Analytical Services
DCB Decachlorobiphenyl (Pesticide/PCB/ surrogate compound)
DFTPP Decafluorotriphenylphosphine (semivolatile instrument performance check)
DSF Data Summary Form
ECD Electron-Capture Detector
EICP Extended Ion Current Profile
EMSL-LV Environmental Monitoring Support Laboratory - Las Vegas
EPA United States Environmental Protection Agency
GC Gas Chromatography
GC/EC Gas Chromatography/Electron Capture
GC/MS Gas Chromatography/Mass Spectra
GPC Gel Permeation Chromatography (Clean Up)
ICAL Initial Calibration
IS Internal Standard
LCS Laboratory Control Sample
LCL Lower Control Limit
MCL Maximum Contamination Level
MDL Method Detection Limit
MS/MSD Matrix Spike/Matrix Spike Duplicate
m/z The ratio of mass (m) to charge (z) of ions measured by GC/MS
OADS Organic Analysis Data Sheet (Form 1)
ORDA Organic Regional Data Assessment
PCB Poly Chlorinated Biphenyl
PEM Performance Evaluation Mixture
PRP Potential Responsible Party

QA/QC	Quality Assurance/Quality Control
QAPjP	Quality Assurance Project Plan
QC	Quality Control
%R	Percent Recovery of spiked amount
RAS	Routine Analytical Services
RF	Response Factor
RIC	Reconstructed Ion Chromatogram
RPD	Relative Percent Difference
RRF	Relative Response Factor
RSD	Relative Standard Deviation
RT	Retention Time
RTW	Retention Time Window
SDG	Sample Delivery Group
SMC	System Monitoring Compound
SMO	Sample Management Office
SOP	Standard Operation Procedures
SOW	Statement of Work
SPCCs	System Performance Check Compounds
SSL	Samples Shipping Log
SVOA	Semivolatile Organic Analyte
TCL	Target Compound List
TCX	Tetrachloro-m-Xylene (Pesticide/PCB surrogate compound)
TIC	Tentatively Identified Compound
TPH	Total Petroleum Hydrocarbons
TR	Traffic Report
UCL	Upper Control Limit
VOA	Volatile Organic Analyte
VTSR	Validated Time of Sample Receipt

Terms:

Associated Samples
Any sample related to a particular QC analysis.

Case A finite, usually predetermined number of samples collected over a given time period for a particular site. A Case consists of one or more Sample Delivery Group(s).

Contract Compliance Screening (CCS)
A process in which the SMO inspects the data for contractual compliance and provides EMSL-LV laboratories and the Regions with their findings.

Contractual Holding Time

The time from VTSR (validated time of sample receipt) to laboratory extraction and /or analysis.

Data Validation Qualifier (DVQ)

This refers to the column on the data summary form in which EPA Region III and other qualifiers have been placed by the data validator.

Data Validation Result (DVR)

This refers to the column on the data summary form used to report results that have been modified by the data validator. A result in the DVR column that is qualified "U" indicates a modification of the reporting limit.

Field Blank Field blanks are intended to identify contaminants that may have been introduced in the field. Examples are rinsate blank (RB), field blanks (FB) and trip blank (TB).

Field Duplicate

A duplicate sample generated in the field; not in the laboratory.

Initial Calibration (ICAL)

The establishment of a calibration curve with the appropriate number of standards and concentration ranges. The calibration curve plots absorbances and/or emissions versus concentration of the standards. .

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Introduction of a known concentration of a compound into a sample to provide information about the effect of sample matrix on the extraction and/or measurement methodology.

Performance Evaluation Mixture

A standard used to verify that the ICAL sequence is stable throughout the GC or GC/MS analyses.

Sample Delivery Group (SDG)

Defined by one of the following, whichever occurs first:

- case of sample
- each twenty field samples in a case or
- each 14-day calendar period during which field samples in a case are received, beginning with the receipt of the first sample in the SDG.

Technical Holding Time

The time from sample collection to laboratory extraction and /or analysis

COMMUNICATION RECORDS

N/A

GLOSSARY OF DATA VALIDATION QUALIFIERS

GLOSSARY OF DATA QUALIFIER CODES (ORGANIC)

CODES RELATED TO IDENTIFICATION:
(Confidence concerning presence or absence of compounds)

U	=	Not detected above the level of the associated value. The associated value is either the approximate sample quantitation or detection limit.
NO CODE	=	Confirmed identification
U1	=	Not detected substantially above the level reported in laboratory or field blanks.
R	=	Unusable results. Analyte may or may not be present in the sample.
N	=	Tentative identification. Consider present. Special methods may be needed to confirm its presence or absence in future sampling efforts.

CODES RELATED TO QUANTITATION:
(Can be used for both positive results and sample quantitation limits)

J	=	Analyte present. Reported value may not be accurate or precise (estimated value).
J+	=	Analyte present. Reported value may be biased high. Result is estimated high.
J-	=	Analyte present. Reported value may be biased low. Result is estimated low.
UJ	=	Not detected. Quantitation limit may be inaccurate or imprecise (Estimated).
UJ-	=	Not detected. Quantitation limit is probably higher.

OTHER CODES:

NJ	=	Qualitative identification questionable. Presumptively present at approximate quantity.
Q	=	No analytical result.
X	=	Data not Validated.

DATA VALIDATION REPORT NARRATIVE

MCGI

Meridian Consultant Group, Inc.
Environmental Services & Data Validation
1997 Annapolis Exchange Pkwy., Suite 300
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(301)803-9207 Phone
(410)972-4701 Fax
www.meridiancgi.com

DATE: November 3, 2015

SUBJECT: USEPA Organic Data Validation Report
Volatile & Explosives
Accutest Lab SDG's No. MC41356, MC41366, MC41413 & MC41544
Site: Picatinny Arsenal, Route 15, NJ
MCGI Project No. EA881501-1356-O

FROM: Sherif N. Mina
Meridian Consultant Group, Inc.

TO: Mr. Frank DeSantis
EA Engineering, Science & Technology, Inc.

OVERVIEW

This report consists of four (4) Sample Delivery Groups (SDGs) for a total of eighty-three (83) samples submitted to Accutest Laboratories, Marlborough, MA, for Volatile & Explosive analyses according to SW-846 Methods 8260C & 8330B, respectively. Details about each SDG are listed in separate sections below. The samples were analyzed in accordance with the Chain-of-Custody (COC).

The analytical results were validated according to the pertinent parts of U.S. Environmental Protection Agency (USEPA) National Functional Guideline for Organic Data Review, dated August 2014; along with the Quality Assurance/Quality Control (QA/QC) requirements for the analytical methods used for the analyses.

Deviation from USEPA NFG: The "U" qualifier recommended by USEPA NFG for blank contamination was replaced by the "U1" qualifier to clearly indicate blank contamination on the EDDs.

Calibrations: SW-846 Method 8260C was used for the volatile analysis. For the data validation purpose, a 30% RSD for the initial calibrations & 25% D for the continuing calibrations were used as the QC limits for all compounds of concern, as the basis for qualifying the data.

GENERAL NOTES

- ***Electronic Data Deliverable (EDD):*** Several rows in an electronic data deliverable (EDD) are marked with an "X" and hidden before printing a data summary form. These rows may include quality control samples such as Method Blanks, Laboratory Control Samples, Matrix Spikes, or Matrix Spike Duplicates which are not validated. Additionally, some field sample results may not be used since only one (1) result for each compound is reported after validation. The following list indicates some instances in which an "X" may be placed in the DVQ column:
  1. The compounds in an analysis that have exceeded the instrument calibration range.
  2. All compounds in a diluted analysis that were within the calibration range in the initial analysis.
  3. All compounds in either the initial analysis or re-analysis of a sample, depending on which analysis is not reported on the EDD.

  Although QC samples and some field samples results may not be used, all data were reviewed and considered in the overall assessment.

- ***Data Validation Qualifier (DVQ)*:**This refers to the column on the data summary form in which EPA Region III and other qualifiers have been placed by the data validator.

- ***Data Validation Result (DVR):***This refers to the column on the data summary form used to report results that have been modified by the data validator. A result in the DVR column that is qualified "U" indicates a modification of the reporting limit. Results in the DVR column supersede those reported by the laboratory.

- ***Tentatively Identified Compounds (TICs):*** The TICs, if applicable, were reviewed during data validation.

- ***Compound Quantitation:*** Positive results for compounds which are below the CRQL were qualified as estimated "J" on the EDD.

1-SDG: MC41356

This SDG consisted of twenty-six (26) aqueous samples submitted to Accutest Laboratories, Marlborough, MA, for Volatile analysis according to SW-846 Method 8260C. One (1) field & one (1) trip blanks; and three (3) aqueous field duplicate pairs were identified in this sample set. The samples were analyzed in accordance with the Chain-of-Custody (COC), see Sample Identification Summary.

Sample Identification Summary

SAMPLE INFORMATION				Analysis
Field ID	**Lab ID**	**SDG**	**Matrix**	**V**
E-MW-01	MC41356-01	MC41356	Aqueous	x
D-SW-5	MC41356-02		Aqueous	x
E-38SW-1	MC41356-03		Aqueous	x
E-38SW-4	MC41356-04		Aqueous	x
DUP-D090815SW	MC41356-05		Aqueous	x
TRIP BLANK	MC41356-06		Aqueous	x
FIELD BLANK	MC41356-07		Aqueous	x
12-H	MC41356-08		Aqueous	x
WG11-1	MC41356-09		Aqueous	x
WG11-2	MC41356-10		Aqueous	x
E80-3	MC41356-11		Aqueous	x
E82-2	MC41356-12		Aqueous	x
E82-1	MC41356-13		Aqueous	x
70-2	MC41356-14		Aqueous	x
70-3	MC41356-15		Aqueous	x
70-4	MC41356-16		Aqueous	x
D12-1	MC41356-17		Aqueous	x
DUP1 AREA E	MC41356-18		Aqueous	x
DUP2 AREA E	MC41356-19		Aqueous	x
D12-D	MC41356-20		Aqueous	x
W63-1	MC41356-21		Aqueous	x
W63-2	MC41356-22		Aqueous	x
W63-3	MC41356-23		Aqueous	x
95-3	MC41356-24		Aqueous	x
MW-11	MC41356-25		Aqueous	x
E-MW-02	MC41356-26		Aqueous	x

V=Volatile

Duplicates: DUP-D090815SW/D-SW-5
DUP1 AREA E/D12-D
DUP2 AREA E/70-4

SUMMARY

All samples were successfully analyzed for all target compounds according to U.S. Environmental Protection Agency (USEPA) National Functional Guideline for Organic Data Review, dated August 2014; along with the Quality Assurance/Quality Control (QA/QC) requirements for the analytical methods used for the analyses. All instruments and method sensitivities were according to the specified analytical methods, except as noted in the Major Problem section. Refer to Minor Problems for information regarding biases identified during data validation.

Data Validation Summary

	Parameters	V		
		q	t	a
*	Data Completeness		26	0
*	Holding Time		26	0
	Calibrations	x	26	26
*	Laboratory and Field Blanks analyses		26	0
*	Surrogate Recoveries		26	0
*	Matrix Spike/Matrix Spike Duplicate		26	0
*	Laboratory Control Sample(LCS)		26	0
	Laboratory and/or Field Duplicates	x	26	2
*	Internal Standards		26	0
*	Pesticide Instrument Performance		26	0
*	Sample Cleanup		26	0
*	Compound Identification		26	0
*	Compound Quantitation		26	0
*	Sample Preservation		26	0
* All Criteria were met for that Parameter, V=Volatiles				

q=qualified; t=total number of samples analyzed; a=number of samples affected

MAJOR PROBLEMS

- None noted.

MINOR PROBLEMS

- ***Calibrations:*** The initial calibration, 9/13/15, failed the %RSD precision criteria, of 30%, for Naphthalene, associated with all samples. No positive results were detected for this compound. Quantitation limits for this compound in this associated samples were qualified "UJ".

  The end continuing calibration verification ECC5447-50, 9/18/15, failed the %D precision criteria, of 25%, for Vinyl Acetate & Naphthalene. Lab sample ID's MC41356-1 thru -15 are associated with this calibration. No positive results were detected for these compounds. Quantitation limits for these compounds in this associated sample were qualified "UJ".

The continuing calibration verification CC5447-50, 9/20/15, failed the %D precision criteria of 25%, for Vinyl Acetate. Also, the end continuing calibration verification ECC5447-50, 9/20/15, failed the %D precision criteria of 25%, for Vinyl Acetate. Lab sample ID's MC41356-16 thru -25 are associated with these calibrations. No positive results were detected for this compound. Quantitation limit for this compound in these associated samples were qualified "UJ".

- ***Field Duplicates:*** For the associated aqueous & soil field duplicate pairs, an RPD of 50% was used as the QC limit for results that are at or above the CRQL, no qualification was applied based on the RPD when results are less than CRQL. Whenever a positive result for a compound is detected in one sample but not in the other, regardless of the CRQL, "J" & "UJ" qualifiers were applied to that compound in the field duplicate pair. A table summarizing the RPDs for the associated aqueous field duplicate pair is provided below.

Compound	**D-SW-5**	**DUP-D090815SW**	**RPD**	**Qualifier**
	ND	ND		
	D12-D	**DUP1 AREA E**		
Acetone	27.3	26.1	4	
Trichloroethene	9.7	9.2	5	
	70-4	**DUP2 AREA E**		
1,1-Dichloroethane	24.2	5	132	J
1,1-Dichloroethene	6.4	1.3	132	J
Acetone	90.5	19.6	129	J
cis-1,2-Dichloroethene	13.5	2.8	131	J
Vinyl Chloride	14.3	2.9	133	J

NOTES

- ***Blank Contaminants:*** The maximum concentration of all compounds found in the analyses of the trip, field or laboratory method blanks are listed in the following table. Associated samples with positive results of theses contaminants were qualified "U1" based on the concentration level found in the samples, according to USEPA National Functional Guideline for Organic Data Review, dated August 2014.

Analytical Fraction	**Compound**	Maximum Concentration	Units	Blank Type	Associated Samples
Volatiles	None				

*Common lab contaminant

- ***Calibrations:*** The initial calibration verification ICV5447-50, 9/13/15 failed the %D precision criteria, of 25%, for Dichlorodifluoromethane. No action was taken.

4-SDG: MC41544

This SDG consisted of three (3) aqueous samples submitted to Accutest Laboratories, Marlborough, MA, for Volatile analysis according to SW-846 Method 8260C. One (1) field & one (1) trip blanks were identified in this sample set. The samples were analyzed in accordance with the Chain-of-Custody (COC), see Sample Identification Summary.

Sample Identification Summary

SAMPLE INFORMATION				Analysis
Field ID	**Lab ID**	**SDG**	**Matrix**	**V**
W611-3	MC41544-01	MC41544	Aqueous	x
FIELD BLANK	MC41544-02		Aqueous	x
TRIP BLANK	MC41544-03		Aqueous	x

V=Volatile

Duplicates: N/A

SUMMARY

All samples were successfully analyzed for all target compounds according to U.S. Environmental Protection Agency (USEPA) National Functional Guideline for Organic Data Review, dated August 2014; along with the Quality Assurance/Quality Control (QA/QC) requirements for the analytical methods used for the analyses. All instruments and method sensitivities were according to the specified analytical methods, except as noted in the Major Problem section. Refer to Minor Problems for information regarding biases identified during data validation.

Data Validation Summary

Parameters		V		
		q	t	a
*	Data Completeness		3	0
*	Holding Time		3	0
	Calibrations	x	3	3
*	Laboratory and Field Blanks analyses		3	0
*	Surrogate Recoveries		3	0
*	Matrix Spike/Matrix Spike Duplicate		3	0
*	Laboratory Control Sample(LCS)		3	0
*	Laboratory and/or Field Duplicates		3	0
*	Internal Standards		3	0
*	Pesticide Instrument Performance		3	0
*	Sample Cleanup		3	0
*	Compound Identification		3	0
*	Compound Quantitation		3	0
*	Sample Preservation		3	0
* All Criteria were met for that Parameter, V=Volatiles				

q=qualified; t=total number of samples analyzed; a=number of samples affected

MAJOR PROBLEMS

- None noted.

MINOR PROBLEMS

- ***Calibrations:*** The continuing calibration verification CC1316-50, 9/27/15, failed the %D precision criteria of 25%, for Hexachlorobutadiene. Lab sample ID's MC41544-1 thru -3 are associated with this calibration. No positive results were detected for this compound. Quantitation limits for this compound in this associated samples were qualified "UJ".

NOTES

- ***Blank Contaminants:*** The maximum concentration of all compounds found in the analyses of the trip, field or laboratory method blanks are listed in the following table. Associated samples with positive results of theses contaminants were qualified "U1" based on the concentration level found in the samples, according to USEPA National Functional Guideline for Organic Data Review, dated August 2014.

Analytical Fraction	**Compound**	Maximum Concentration	Units	Blank Type	Associated Samples
Volatiles	Methylene Chloride*	0.39	ug/L	Method	All Samples

*Common lab contaminant

- ***Matrix Spike/Matrix Spike Duplicate (MS/MSD):*** The MS/MSD were performed on another sample from a different SDG, for the same site. No data were qualified in this SDG based on this MS/MSD.

REPORT CONTENT STATEMENT

All data for this project were reviewed in accordance with the pertinent parts of the U.S. Environmental Protection Agency (USEPA) National Functional Guideline for Organic Data Review, dated August 2014; along with the Quality Assurance/Quality Control (QA/QC) requirements for the analytical methods used for the analyses. The text of the report addresses only those problems affecting data usability.

ATTACHMENTS

l) Glossary of Data Qualifiers
2) Electronic Data Deliverable (EDD). These include:
   (a) All results for target compounds with qualifier codes where applicable.
   (b) All unusable detection limits (qualified "R"), where applicable.
3) Electronic Data Package (.pdf file) as Support Documentation

DCN: EA881501-1356-O

Respectfully Submitted,

Sherif N. Mina Date: November 3, 2015
Sherif N. Mina

QA/Review: SM

Appendix C

Trend Plots

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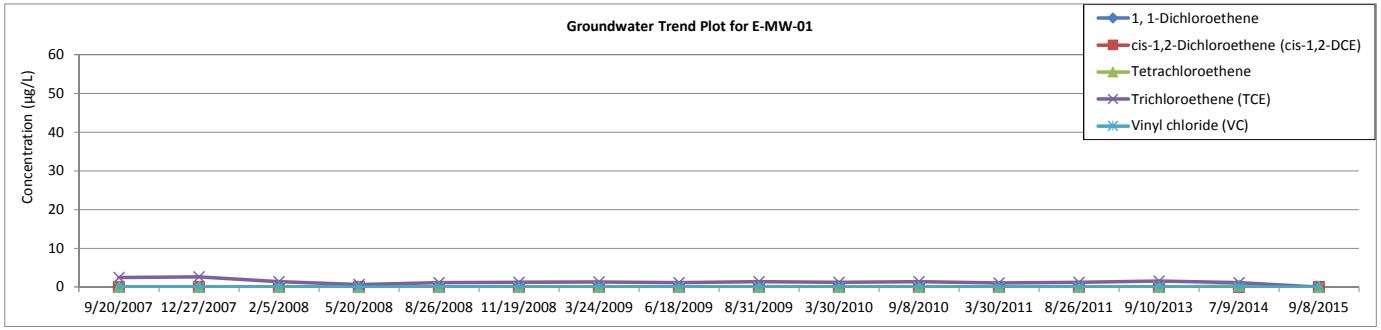
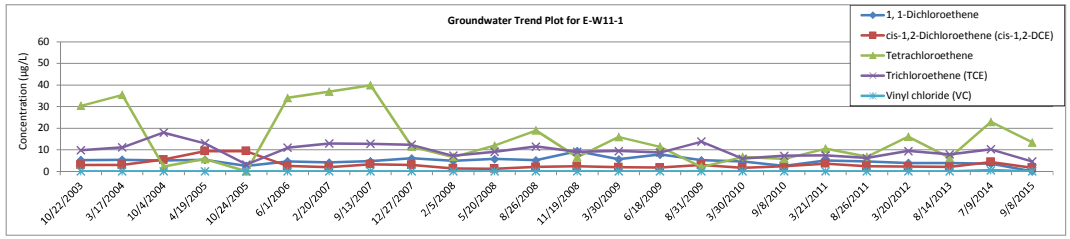
Analyte	9/20/2007	12/27/2007	2/5/2008	5/20/2008	8/26/2008	11/19/2008	3/24/2009	6/18/2009	8/31/2009	3/30/2010	9/8/2010	3/30/2011	8/26/2011	9/10/2013	7/9/2014	9/8/2015
1, 1-Dichloroethene	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
cis-1,2-Dichloroethene (cis-1,2-DCE)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tetrachloroethene	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.306	0
Trichloroethene (TCE)	2.44	2.61	1.43	0.65	1.16	1.25	1.3	1.17	1.36	1.26	1.4	1.09	1.26	1.52	1.14	0
Vinyl chloride (VC)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Analyte	9/20/2007	12/27/2007	2/5/2008	5/20/2008	8/26/2008	11/19/2008	3/24/2009	6/18/2009	8/31/2009	3/30/2010	9/8/2010	3/30/2011
1, 1-Dichloroethene	0	0	0	0	0	0	0	0	0	0	0	0
cis-1,2-Dichloroethene (cis-1,2-DCE)	0	0	0	0	0	0	0	0	0	0	0	0
Tetrachloroethene	0	0	0	0	0	0	0	0	0	0	0	0
Trichloroethene (TCE)	2.44	2.61	1.43	0.65	1.16	1.25	1.3	1.17	1.36	1.26	1.4	1.09
Vinyl chloride (VC)	0	0	0	0	0	0	0	0	0	0	0	0

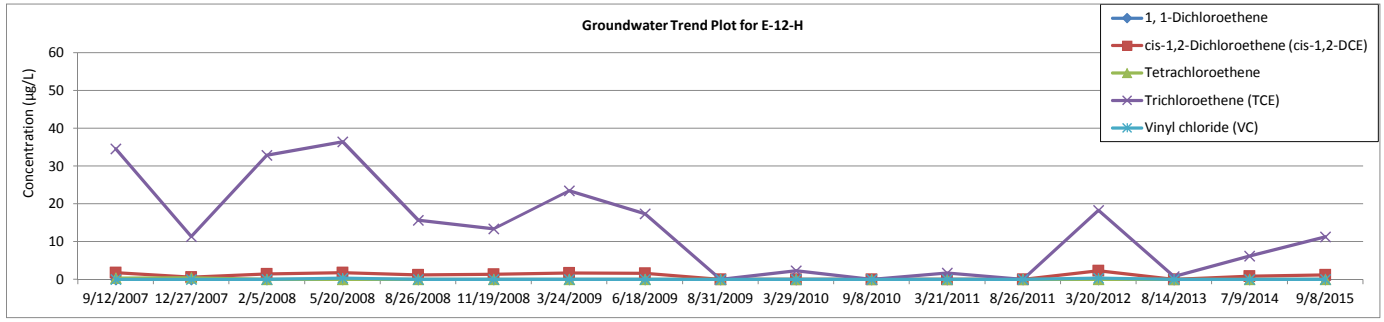
Analyte	10/22/2003	3/17/2004	10/4/2004	4/19/2005	10/24/2005	6/1/2006	2/20/2007	9/13/2007	12/27/2007	2/5/2008	5/20/2008	8/26/2008	11/19/2008	3/30/2009	6/18/2009	8/31/2009	3/30/2010	9/8/2010	3/21/2011	8/26/2011	3/20/2012	8/14/2013	7/9/2014	9/8/2015
1, 1-Dichloroethene	5.15	5.33	5	5.3	2.5	4.6	4.05	4.69	6.03	4.79	5.68	5.14	9.33	5.58	7.8	5.08	4.57	2.43	5.06	4.6	3.81	3.81	3.5	0
cis-1,2-Dichloroethene (cis-1,2-DCE)	2.99	2.93	5.4	9.3	9.3	2.5	1.91	3.26	2.98	1.37	1.2	2	2.35	1.87	1.69	2.95	1.66	2.39	3.55	2.37	2.12	1.99	4.32	1.6
Tetrachloroethene	30.4	35.4	2.2	5.7	0	34	36.9	39.9	11.4	6.63	11.9	19	6.64	15.9	11.4	2.09	6.64	5.79	10.5	6.76	16.1	6.27	22.9	13.4
Trichloroethene (TCE)	9.81	11.1	18	13	3.2	11	12.9	12.7	12.3	7.28	9	11.5	9.05	9.39	8.76	13.8	5.87	7.16	7.4	6.16	9.42	7.88	10.2	4.6
Vinyl chloride (VC)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.548	0



Analyte	10/22/2003	3/17/2004	10/4/2004	4/19/2005	10/24/2005	6/1/2006	2/20/2007	9/13/2007	12/27/2007	2/5/2008	5/20/2008	8/26/2008
1, 1-Dichloroethene	5.15	5.33	5	5.3	2.5	4.6	4.05	4.69	6.03	4.79	5.68	5.14
cis-1,2-Dichloroethene (cis-1,2-DCE)	2.99	2.93	5.4	9.3	9.3	2.5	1.91	3.26	2.98	1.37	1.2	2
Tetrachloroethene	30.4	35.4	2.2	5.7	0	34	36.9	39.9	11.4	6.63	11.9	19
Trichloroethene (TCE)	9.81	11.1	18	13	3.2	11	12.9	12.7	12.3	7.28	9	11.5
Vinyl chloride (VC)	0	0	0	0	0	0	0	0	0	0	0	0

Analyte	11/19/2008	3/30/2009	6/18/2009	8/31/2009	3/30/2010	9/8/2010	3/21/2011	8/26/2011	3/20/2012	8/14/2013	7/9/2014	9/8/2015
1, 1-Dichloroethene	9.33	5.58	7.8	5.08	4.57	2.43	5.06	4.6	3.81	3.81	3.5	0
cis-1,2-Dichloroethene (cis-1,2-DCE)	2.35	1.87	1.69	2.95	1.66	2.39	3.55	2.37	2.12	1.99	4.32	1.6
Tetrachloroethene	6.64	15.9	11.4	2.09	6.64	5.79	10.5	6.76	16.1	6.27	22.9	**13.4**
Trichloroethene (TCE)	9.05	9.39	8.76	13.8	5.87	7.16	7.4	6.16	9.42	7.88	10.2	4.6
Vinyl chloride (VC)	0	0	0	0	0	0	0	0	0	0	0.548	0

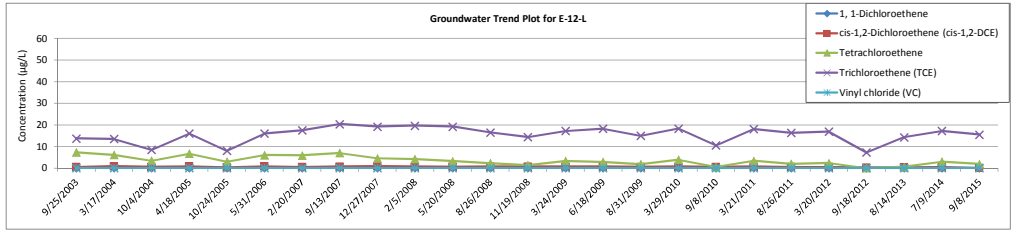
Analyte	9/12/2007	12/27/2007	2/5/2008	5/20/2008	8/26/2008	11/19/2008	3/24/2009	6/18/2009	8/31/2009	3/29/2010	9/8/2010	3/21/2011	8/26/2011	3/20/2012	8/14/2013	7/9/2014	9/8/2015
1, 1-Dichloroethene	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
cis-1,2-Dichloroethene (cis-1,2-DCE)	1.77	0.564	1.4	1.8	1.21	1.35	1.66	1.57	0	0	0	0	0	2.3	0	0.813	1.2
Tetrachloroethene	0.367	0.408	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trichloroethene (TCE)	34.6	11.4	32.9	36.5	15.7	13.4	23.5	17.4	0	2.29	0	1.73	0	18.3	0.724	6.2	11.3
Vinyl chloride (VC)	0	0	0	0.31	0	0	0	0	0	0	0	0	0	0.369	0	0	0



Analyte	9/12/2007	12/27/2007	2/5/2008	5/20/2008	8/26/2008	11/19/2008	3/24/2009	6/18/2009	8/31/2009	3/29/2010	9/8/2010	3/21/2011
1, 1-Dichloroethene	0	0	0	0	0	0	0	0	0	0	0	0
cis-1,2-Dichloroethene (cis-1,2-DCE)	1.77	0.564	1.4	1.8	1.21	1.35	1.66	1.57	0	0	0	0
Tetrachloroethene	0.367	0.408	0	0	0	0	0	0	0	0	0	0
Trichloroethene (TCE)	34.6	11.4	32.9	36.5	15.7	13.4	23.5	17.4	0	2.29	0	1.73
Vinyl chloride (VC)	0	0	0	0.31	0	0	0	0	0	0	0	0

Analyte	8/26/2011	3/20/2012	8/14/2013	7/9/2014	9/8/2015
1, 1-Dichloroethene	0	0	0	0	0
cis-1,2-Dichloroethene (cis-1,2-DCE)	0	2.3	0	0.813	1.2
Tetrachloroethene	0	0	0	0	0
Trichloroethene (TCE)	0	18.3	0.724	6.2	11.3
Vinyl chloride (VC)	0	0.369	0	0	0

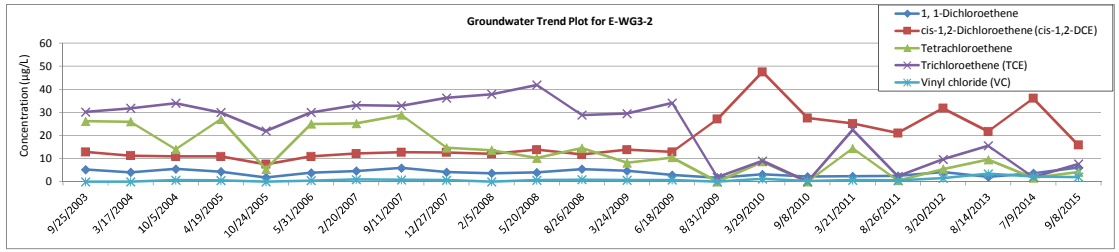
Analyte	9/25/2003	3/17/2004	10/4/2004	4/18/2005	10/24/2005	5/31/2006	2/20/2007	9/13/2007	12/27/2007	2/5/2008	5/20/2008	8/26/2008	11/19/2008	3/24/2009	6/18/2009	8/31/2009	3/29/2010	9/8/2010	3/21/2011	8/26/2011	3/20/2012	9/18/2012	8/14/2013	7/9/2014	9/8/2015
1, 1-Dichloroethene	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
cis-1,2-Dichloroethene (cis-1,2-DCE)	0.51	0.88	0.56	0.77	0.33	0.75	0.503	0.699	0.82	0.691	0.593	0.674	0.697	0.685	0.723	0.555	0.668	0.545	0.666	0.452	0.5	0.29	0.362	0.412	0
Tetrachloroethene	7.26	6.13	3.4	6.7	3	6	5.87	7.02	4.57	4.14	3.2	2.23	1.39	3.27	2.86	1.83	3.91	0.586	3.33	1.95	2.36	0	0.555	3	1.9
Trichloroethene (TCE)	13.7	13.5	8.5	16	8	16	17.5	20.4	19.2	19.6	19.2	16.5	14.4	17.2	18.2	15	18.3	10.5	18.1	16.3	16.9	7.27	14.3	17.2	15.5
Vinyl chloride (VC)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Analyte	9/25/2003	3/17/2004	10/4/2004	4/18/2005	10/24/2005	5/31/2006	2/20/2007	9/13/2007	12/27/2007	2/5/2008	5/20/2008	8/26/2008
1, 1-Dichloroethene	0	0	0	0	0	0	0	0	0	0	0	0
cis-1,2-Dichloroethene (cis-1,2-DCE)	0.51	0.88	0.56	0.77	0.33	0.75	0.503	0.699	0.82	0.691	0.593	0.674
Tetrachloroethene	7.26	6.13	3.4	6.7	3	6	5.87	7.02	4.57	4.14	3.2	2.23
Trichloroethene (TCE)	13.7	13.5	8.5	16	8	16	17.5	20.4	19.2	19.6	19.2	16.5
Vinyl chloride (VC)	0	0	0	0	0	0	0	0	0	0	0	0

Analyte	11/19/2008	3/24/2009	6/18/2009	8/31/2009	3/29/2010	9/8/2010	3/21/2011	8/26/2011	3/20/2012	9/18/2012	8/14/2013	7/9/2014
1, 1-Dichloroethene	0	0	0	0	0	0	0	0	0	0	0	0
cis-1,2-Dichloroethene (cis-1,2-DCE)	0.697	0.685	0.723	0.555	0.668	0.545	0.666	0.452	0.5	0.29	0.362	0.412
Tetrachloroethene	1.39	3.27	2.86	1.83	3.91	0.586	3.33	1.95	2.36	0	0.555	3
Trichloroethene (TCE)	14.4	17.2	18.2	15	18.3	10.5	18.1	16.3	16.9	7.27	14.3	17.2
Vinyl chloride (VC)	0	0	0	0	0	0	0	0	0	0	0	0

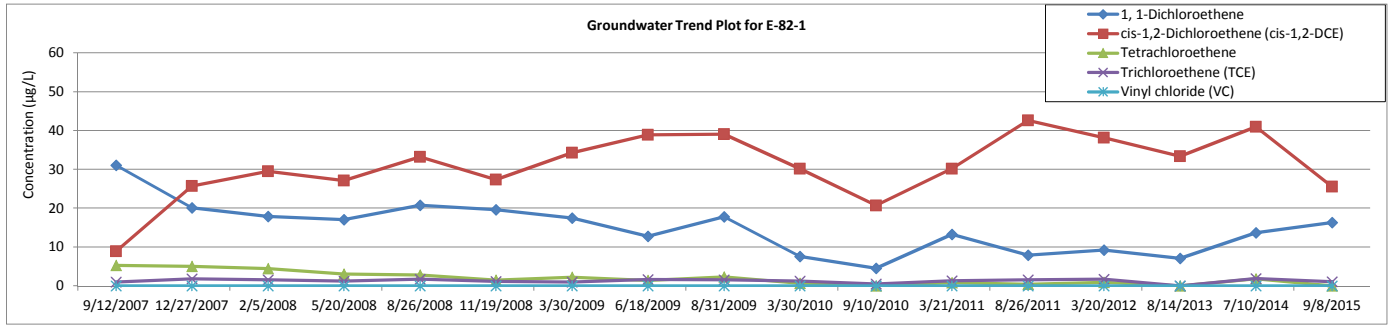
Analyte	9/25/2003	3/17/2004	10/5/2004	4/19/2005	10/24/2005	5/31/2006	2/20/2007	9/11/2007	12/27/2007	2/5/2008	5/20/2008	8/26/2008	3/24/2009	6/18/2009	8/31/2009	3/29/2010	9/8/2010	3/21/2011	8/26/2011	3/20/2012	8/14/2013	7/9/2014	9/8/2015
1, 1-Dichloroethene	5.3	4.09	5.6	4.4	1.9	3.9	4.66	5.97	4.15	3.71	4.07	5.47	4.73	2.94	1.73	3.19	2.23	2.35	2.49	4.21	2.08	3.7	6.1
cis-1,2-Dichloroethene (cis-1,2-DCE)	12.9	11.3	11	11	7.6	11	12.2	12.8	12.7	12.1	13.9	11.8	13.9	12.9	27.1	47.5	27.6	25.2	21.1	31.8	21.8	36.1	15.9
Tetrachloroethene	26.2	26	14	27	5.4	25	25.2	28.9	14.7	13.7	10.3	14.6	8.18	10.5	0	8.68	0	14.4	0.533	5.49	9.6	1.69	4.2
Trichloroethene (TCE)	30.2	31.8	34	30	22	30	33.1	32.9	36.3	37.9	41.9	28.9	29.5	34.1	1.94	9.05	0	22.5	2.38	9.73	15.6	2.04	7.7
Vinyl chloride (VC)	0	0	0.7	0.57	0	0.49	1.02	0.868	0.738	0	0.747	0.949	0.716	0.762	0	1.3	0.284	0.685	0.595	1.52	3.47	2.23	2



Analyte	9/25/2003	3/17/2004	10/5/2004	4/19/2005	10/24/2005	5/31/2006	2/20/2007	9/11/2007	12/27/2007	2/5/2008	5/20/2008	8/26/2008
1, 1-Dichloroethene	5.3	4.09	5.6	4.4	1.9	3.9	4.66	5.97	4.15	3.71	4.07	5.47
cis-1,2-Dichloroethene (cis-1,2-DCE)	12.9	11.3	11	11	7.6	11	12.2	12.8	12.7	12.1	13.9	11.8
Tetrachloroethene	26.2	26	14	27	5.4	25	25.2	28.9	14.7	13.7	10.3	14.6
Trichloroethene (TCE)	30.2	31.8	34	30	22	30	33.1	32.9	36.3	37.9	41.9	28.9
Vinyl chloride (VC)	0	0	0.7	0.57	0	0.49	1.02	0.868	0.738	0	0.747	0.949

Analyte	3/24/2009	6/18/2009	8/31/2009	3/29/2010	9/8/2010	3/21/2011	8/26/2011	3/20/2012	8/14/2013	7/9/2014	9/8/2015
1, 1-Dichloroethene	4.73	2.94	1.73	3.19	2.23	2.35	2.49	4.21	2.08	3.7	6.1
cis-1,2-Dichloroethene (cis-1,2-DCE)	13.9	12.9	27.1	47.5	27.6	25.2	21.1	31.8	21.8	36.1	15.9
Tetrachloroethene	8.18	10.5	0	8.68	0	14.4	0.533	5.49	9.6	1.69	4.2
Trichloroethene (TCE)	29.5	34.1	1.94	9.05	0	22.5	2.38	9.73	15.6	2.04	7.7
Vinyl chloride (VC)	0.716	0.762	0	1.3	0.284	0.685	0.595	1.52	3.47	2.23	2

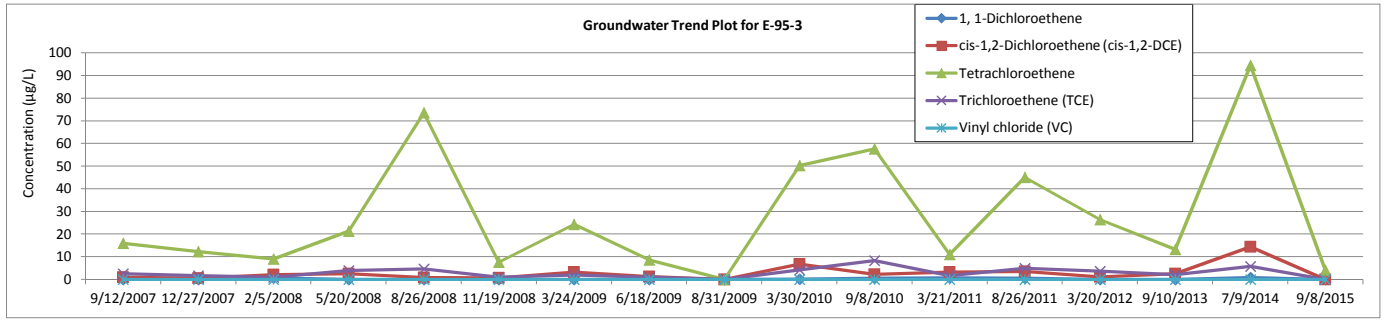
Analyte	9/12/2007	12/27/2007	2/5/2008	5/20/2008	8/26/2008	11/19/2008	3/30/2009	6/18/2009	8/31/2009	3/30/2010	9/10/2010	3/21/2011	8/26/2011	3/20/2012	8/14/2013	7/10/2014	9/8/2015
1, 1-Dichloroethene	31.1	20.1	17.9	17.1	20.8	19.6	17.5	12.8	17.8	7.6	4.5	13.3	7.9	9.23	7.13	13.7	16.3
cis-1,2-Dichloroethene (cis-1,2-DCE)	8.93	25.7	29.5	27.1	33.2	27.4	34.3	38.9	39.1	30.2	20.7	30.2	42.6	38.2	33.4	41	25.6
Tetrachloroethene	5.28	5.07	4.44	3.07	2.8	1.51	2.22	1.44	2.29	0.628	0	0.839	0.391	0.906	0	1.79	0
Trichloroethene (TCE)	0.953	1.78	1.54	1.22	1.74	1.13	1.03	1.62	1.54	1.23	0.486	1.36	1.59	1.77	0	1.86	1.1
Vinyl chloride (VC)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Analyte	9/12/2007	12/27/2007	2/5/2008	5/20/2008	8/26/2008	11/19/2008	3/30/2009	6/18/2009	8/31/2009	3/30/2010	9/10/2010	3/21/2011
1, 1-Dichloroethene	31.1	20.1	17.9	17.1	20.8	19.6	17.5	12.8	17.8	7.6	4.5	13.3
cis-1,2-Dichloroethene (cis-1,2-DCE)	8.93	25.7	29.5	27.1	33.2	27.4	34.3	38.9	39.1	30.2	20.7	30.2
Tetrachloroethene	5.28	5.07	4.44	3.07	2.8	1.51	2.22	1.44	2.29	0.628	0	0.839
Trichloroethene (TCE)	0.953	1.78	1.54	1.22	1.74	1.13	1.03	1.62	1.54	1.23	0.486	1.36
Vinyl chloride (VC)	0	0	0	0	0	0	0	0	0	0	0	0

Analyte	8/26/2011	3/20/2012	8/14/2013	7/10/2014	9/8/2015
1, 1-Dichloroethene	7.9	9.23	7.13	13.7	16.3
cis-1,2-Dichloroethene (cis-1,2-DCE)	42.6	38.2	33.4	41	25.6
Tetrachloroethene	0.391	0.906	0	1.79	0
Trichloroethene (TCE)	1.59	1.77	0	1.86	1.1
Vinyl chloride (VC)	0	0	0	0	0

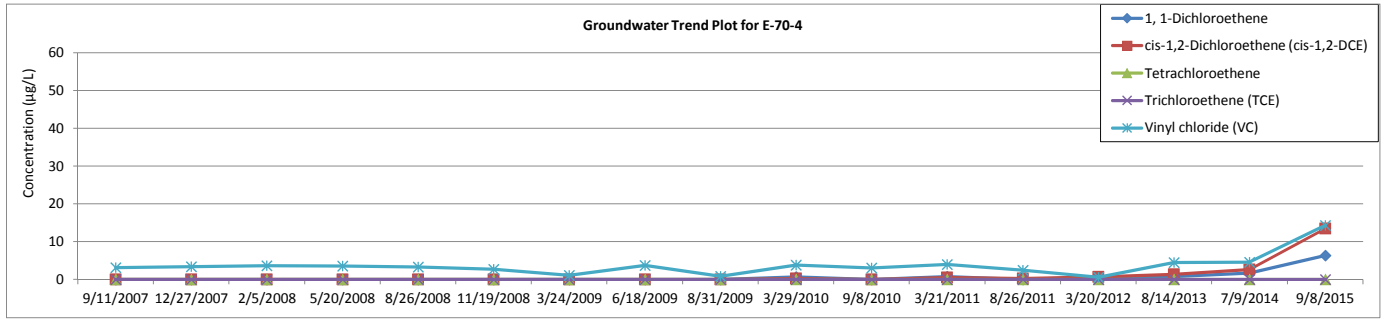
Analyte	9/12/2007	12/27/2007	2/5/2008	5/20/2008	8/26/2008	11/19/2008	3/24/2009	6/18/2009	8/31/2009	3/30/2010	9/8/2010	3/21/2011	8/26/2011	3/20/2012	9/10/2013	7/9/2014	9/8/2015
1, 1-Dichloroethene	0	0	0.685	0	0	0	0	0	0	0.077	0.522	0.665	0.509	0	0	0.851	0
cis-1,2-Dichloroethene (cis-1,2-DCE)	1.04	0.515	2.14	2.54	0.846	0.727	3.32	1.24	0	6.77	2.32	3.23	3.48	1.18	2.6	14.4	0
Tetrachloroethene	16	12.3	9.03	21.3	73.6	7.57	24.3	8.56	0	50.3	57.6	11	45.1	26.4	13.3	94.6	4.1
Trichloroethene (TCE)	2.57	1.76	1.02	3.95	4.67	1.05	1.99	1.02	0	4.19	8.4	1.68	4.92	3.61	2.19	5.75	0
Vinyl chloride (VC)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Analyte	9/12/2007	12/27/2007	2/5/2008	5/20/2008	8/26/2008	11/19/2008	3/24/2009	6/18/2009	8/31/2009	3/30/2010	9/8/2010	3/21/2011
1, 1-Dichloroethene	0	0	0.685	0	0	0	0	0	0	0.077	0.522	0.665
cis-1,2-Dichloroethene (cis-1,2-DCE)	1.04	0.515	2.14	2.54	0.846	0.727	3.32	1.24	0	6.77	2.32	3.23
Tetrachloroethene	16	12.3	9.03	21.3	73.6	7.57	24.3	8.56	0	50.3	57.6	11
Trichloroethene (TCE)	2.57	1.76	1.02	3.95	4.67	1.05	1.99	1.02	0	4.19	8.4	1.68
Vinyl chloride (VC)	0	0	0	0	0	0	0	0	0	0	0	0

Analyte	8/26/2011	3/20/2012	9/10/2013	7/9/2014	9/8/2015
1, 1-Dichloroethene	0.509	0	0	0.851	0
cis-1,2-Dichloroethene (cis-1,2-DCE)	3.48	1.18	2.6	14.4	0
Tetrachloroethene	45.1	26.4	13.3	94.6	4.1
Trichloroethene (TCE)	4.92	3.61	2.19	5.75	0
Vinyl chloride (VC)	0	0	0	0	0

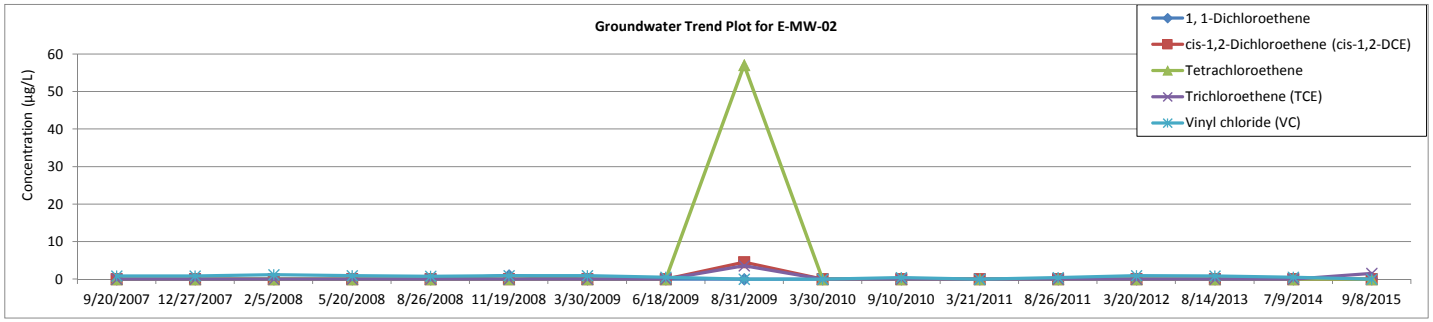
Analyte	9/11/2007	12/27/2007	2/5/2008	5/20/2008	8/26/2008	11/19/2008	3/24/2009	6/18/2009	8/31/2009	3/29/2010	9/8/2010	3/21/2011	8/26/2011	3/20/2012	8/14/2013	7/9/2014	9/8/2015
1, 1-Dichloroethene	0	0	0	0	0	0	0	0	0	0.69	0	0.735	0	0.642	0.736	1.7	6.4
cis-1,2-Dichloroethene (cis-1,2-DCE)	0	0	0	0	0	0	0	0	0	0.29	0	0.47	0.297	0.693	1.35	2.65	13.5
Tetrachloroethene	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trichloroethene (TCE)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vinyl chloride (VC)	3.17	3.39	3.65	3.55	3.28	2.68	1.09	3.72	0.872	3.78	3.03	3.96	2.43	0.596	4.51	4.57	14.3



Analyte	9/11/2007	12/27/2007	2/5/2008	5/20/2008	8/26/2008	11/19/2008	3/24/2009	6/18/2009	8/31/2009	3/29/2010	9/8/2010	3/21/2011
1, 1-Dichloroethene	0	0	0	0	0	0	0	0	0	0.69	0	0.735
cis-1,2-Dichloroethene (cis-1,2-DCE)	0	0	0	0	0	0	0	0	0	0.29	0	0.47
Tetrachloroethene	0	0	0	0	0	0	0	0	0	0	0	0
Trichloroethene (TCE)	0	0	0	0	0	0	0	0	0	0	0	0
Vinyl chloride (VC)	3.17	3.39	3.65	3.55	3.28	2.68	1.09	3.72	0.872	3.78	3.03	3.96

Analyte	8/26/2011	3/20/2012	8/14/2013	7/9/2014	9/8/2015
1, 1-Dichloroethene	0	0.642	0.736	1.7	6.4
cis-1,2-Dichloroethene (cis-1,2-DCE)	0.297	0.693	1.35	2.65	13.5
Tetrachloroethene	0	0	0	0	0
Trichloroethene (TCE)	0	0	0	0	0
Vinyl chloride (VC)	2.43	0.596	4.51	4.57	14.3

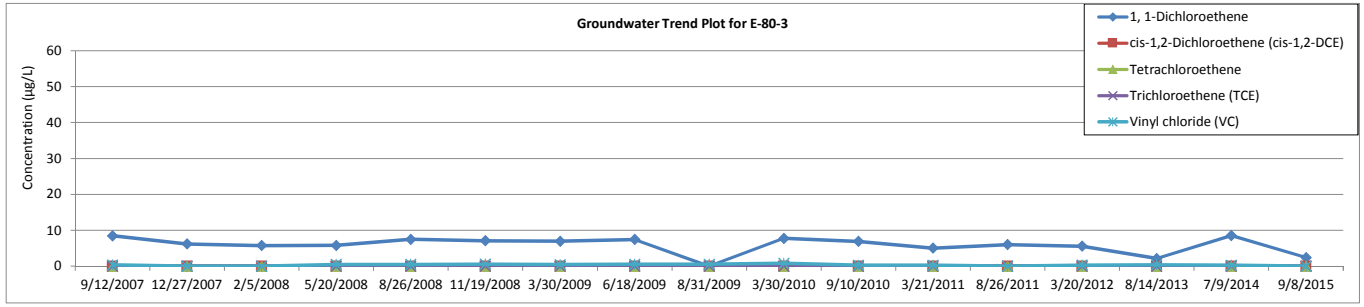
Analyte	9/20/2007	12/27/2007	2/5/2008	5/20/2008	8/26/2008	11/19/2008	3/30/2009	6/18/2009	8/31/2009	3/30/2010	9/10/2010	3/21/2011	8/26/2011	3/20/2012	8/14/2013	7/9/2014	9/8/2015
1, 1-Dichloroethene	0	0	0	0	0	1.06	0	0	0	0	0	0	0	0	0	0	0
cis-1,2-Dichloroethene (cis-1,2-DCE)	0	0	0	0	0	0	0	0	4.51	0	0	0	0	0	0	0	0
Tetrachloroethene	0	0	0	0	0	0	0	0	57.1	0	0	0	0	0	0	0	0
Trichloroethene (TCE)	0	0	0	0	0	0	0	0	3.61	0	0	0	0	0	0	0	1.5
Vinyl chloride (VC)	0.819	0.866	1.2	0.936	0.769	0.906	0.969	0.486	0	0	0.456	0	0.447	0.965	0.862	0.533	0



Analyte	9/20/2007	12/27/2007	2/5/2008	5/20/2008	8/26/2008	11/19/2008	3/30/2009	6/18/2009	8/31/2009	3/30/2010	9/10/2010	3/21/2011
1, 1-Dichloroethene	0	0	0	0	0	1.06	0	0	0	0	0	0
cis-1,2-Dichloroethene (cis-1,2-DCE)	0	0	0	0	0	0	0	0	4.51	0	0	0
Tetrachloroethene	0	0	0	0	0	0	0	0	57.1	0	0	0
Trichloroethene (TCE)	0	0	0	0	0	0	0	0	3.61	0	0	0
Vinyl chloride (VC)	0.819	0.866	1.2	0.936	0.769	0.906	0.969	0.486	0	0	0.456	0

Analyte	8/26/2011	3/20/2012	8/14/2013	7/9/2014	9/8/2015
1, 1-Dichloroethene	0	0	0	0	0
cis-1,2-Dichloroethene (cis-1,2-DCE)	0	0	0	0	0
Tetrachloroethene	0	0	0	0	0
Trichloroethene (TCE)	0	0	0	0	1.5
Vinyl chloride (VC)	0.447	0.965	0.862	0.533	0

Analyte	9/12/2007	12/27/2007	2/5/2008	5/20/2008	8/26/2008	11/19/2008	3/30/2009	6/18/2009	8/31/2009	3/30/2010	9/10/2010	3/21/2011	8/26/2011	3/20/2012	8/14/2013	7/9/2014	9/8/2015
1, 1-Dichloroethene	8.46	6.18	5.75	5.81	7.47	7.09	6.96	7.43	0	7.73	6.9	5.01	6	5.55	2.15	8.55	2.4
cis-1,2-Dichloroethene (cis-1,2-DCE)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tetrachloroethene	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trichloroethene (TCE)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vinyl chloride (VC)	0.371	0	0	0.465	0.502	0.568	0.458	0.545	0.543	0.811	0.262	0.28	0	0.321	0.41	0.259	0



Analyte	9/12/2007	12/27/2007	2/5/2008	5/20/2008	8/26/2008	11/19/2008	3/30/2009	6/18/2009	8/31/2009	3/30/2010	9/10/2010	3/21/2011
1, 1-Dichloroethene	8.46	6.18	5.75	5.81	7.47	7.09	6.96	7.43	0	7.73	6.9	5.01
cis-1,2-Dichloroethene (cis-1,2-DCE)	0	0	0	0	0	0	0	0	0	0	0	0
Tetrachloroethene	0	0	0	0	0	0	0	0	0	0	0	0
Trichloroethene (TCE)	0	0	0	0	0	0	0	0	0	0	0	0
Vinyl chloride (VC)	0.371	0	0	0.465	0.502	0.568	0.458	0.545	0.543	0.811	0.262	0.28

Analyte	8/26/2011	3/20/2012	8/14/2013	7/9/2014
1, 1-Dichloroethene	6	5.55	2.15	8.55
cis-1,2-Dichloroethene (cis-1,2-DCE)	0	0	0	0
Tetrachloroethene	0	0	0	0
Trichloroethene (TCE)	0	0	0	0
Vinyl chloride (VC)	0	0.321	0.41	0.259