



2014 REMEDIAL ACTION PROGRESS REPORT

FORMER BINGHAMTON PLASTICS FACILITY
BINGHAMTON, NEW YORK
NYSDEC SITE NO. 7-04-024



Verina Engineering, P.C.
1011 U.S. Highway 22, Suite 302
Bridgewater, New Jersey 08807

January 2015

CONTENTS

CONTENTS	1
LIST OF FIGURES.....	2
LIST OF TABLES	2
APPENDICES	2
INTRODUCTION	3
SITE HISTORY AND BACKGROUND	3
REMEIDAL ACTIVITIES	3
GROUNDWATER MONITORING AND ISCO INJECTION PROGRAM.....	5
GROUNDWATER MONITORING AND SAMPLING	5
ISCO INJECTION PROGRAM.....	6
GROUNDWATER ELEVATION AND FLOW DIRECTION	6
GROUNDWATER MONITORING ANALYTICAL RESULTS	6
ACTIVE SUB-SLAB DEPRESSURIZATION (ASD) OM&M	8
CONCLUSIONS AND RECOMMENDATIONS	9
REFERENCES	10

LIST OF FIGURES

FIGURE 1 – Regional Location Map

FIGURE 2 – Site Map with Monitoring Well Locations

FIGURE 3 – Perched Groundwater Elevation Contour Map - March 2014

FIGURE 4 – Perched Groundwater Elevation Contour Map - September 2014

FIGURE 5 – Perched Groundwater Estimated PCE and Daughter Compound Total Molar Isoconcentration Map - September 2014

FIGURE 6 – ASD System Layout with Indoor Air Sampling Locations

LIST OF TABLES

TABLE 1 – Groundwater Elevation Data – March 2014

TABLE 2 – Groundwater Elevation Data – September 2014

TABLE 3 – Summary of Residual Sodium Permanganate Results

TABLE 4 – Summary of Sodium Permanganate Manual Injection Events

TABLE 5 – Groundwater Analytical Results – March 2014

TABLE 6 – Groundwater Analytical Results – September 2014

TABLE 7 – Historical Groundwater Volatile Organic Compound Analytical Results

TABLE 8 – Proposed 2015 Groundwater Monitoring Matrix

APPENDICES

APPENDIX A – Groundwater Gauging Logs – March 2014 & September 2014

APPENDIX B – Groundwater Sampling Logs – March 2014 & September 2014

APPENDIX C – Groundwater Laboratory Analytical Reports – March 2014 & September 2014

APPENDIX D – Monthly ASD Inspection Logs

INTRODUCTION

This Remedial Action Progress Report (RAPR) was prepared by Verina Engineering, P.C. (VERINA), on behalf of Dover Corporation (Dover), for the remedial activities implemented in 2014 at the former Binghamton Plastics site in Binghamton, Broome County, New York (Site No.: 7-04-024).

The activities implemented in 2014 include:

- Quarterly in-situ chemical oxidation (ISCO) injections;
- Semi-annual groundwater monitoring; and
- Monthly monitoring of the Active Sub-Slab Depressurization (ASD) System.

The project was implemented in accordance with the executed Order on Consent between Dover and the New York State of Environmental Conservation (NYSDEC), dated January 19, 2001, and subsequent approvals from the NYSDEC.

SITE HISTORY AND BACKGROUND

The former Binghamton Plastics site is located at 498 Conklin Avenue in Binghamton, Broome County, New York. The site occupies approximately two acres and consists of a one-story industrial building (approximately 44,800 square feet [ft²]) with associated parking, landscaping, and storage areas. The site is located in a combined industrial and residential setting. Figure 1 shows the site location. A site map is presented on Figure 2.

Binghamton Plastics operated the facility until the early 1980s when Universal Instruments Corporation (UIC), a former subsidiary of Dover, purchased the property and converted the facility into a circuit board manufacturing plant. UIC operated the facility until it was taken over by Dover Electronics Corporation in the late 1980s. Manufacturing activities ceased in the early 1990s. In 1993 Dover Electronics was separated from Dover and re-named Dovatron, Inc. In 1996, Dovatron changed its name to DII Group.

In the early 1990s, the property was transferred to Flextronics International, Inc. but UIC retained responsibilities for the remediation of pre-existing environmental conditions. From the early 1990s until August 2001, the facility was leased to and used by McIntosh Laboratories for electronics repair operations. The site was then sold to TeamWorld, Inc., and the building is now used for silk screening, embroidery, packaging of clothing, and storage.

REMEDIAL ACTIVITIES

Remedial actions were implemented following the approval of the Remedial Design (RD) Package (BBL 2002) by the NYSDEC on June 29, 2002. The remedial action consisted of excavating the main source areas of constituents of concern (COCs) within the perched groundwater zone. Excavation and groundwater extraction activities were conducted to remove residual contamination in the form of phase-separated hydrocarbons (PSH), adsorbed volatile organic compounds (VOCs), and impacted

groundwater. Groundwater that drained from the excavated perched-zone soil during the remedial action or that accumulated in the open excavations was removed for offsite treatment and disposal.

Since 2004, the groundwater monitoring program has been implemented to assess the effectiveness of the remedial action in mitigating COC concentrations within the perched groundwater at the site. The groundwater monitoring program consists of a baseline groundwater monitoring event that was conducted on April 1, 2002 prior to remedial activities and subsequent post-remedial quarterly groundwater monitoring events. The groundwater monitoring frequency was reduced from a quarterly to a semi-annual basis in 2011 based on the NYSDEC approval on December 23, 2010.

Pursuant to approval from NYSDEC in its letter dated November 14, 2008, the ISCO injection program was initiated in June 2009 to further reduce the residual COCs in groundwater. The injection of sodium permanganate solution has been conducted in the upgradient monitoring wells (MW-9, MW-10, and MW-17) as well as in the source area (MW-8, MW-11, and MW-16). Since June 2009, a total of 20 rounds of sodium permanganate manual injections have been conducted at the site. The injection frequency was reduced from quarterly to semi-annual basis in 2011, yet returned to a quarterly injection schedule in 2012. Additionally, one direct-push injection event was conducted at the site in May 2013.

In accordance with the 2012 Remedial Design Work Plan - Active Sub-slab Depressurization System (VERINA 2012), an ASD system was installed at the site in July 2012 to mitigate the indoor air quality at the site. Monthly inspections of the ASD system were implemented since its full-time operation in July 2012.

GROUNDWATER MONITORING AND ISCO INJECTION PROGRAM

GROUNDWATER MONITORING AND SAMPLING

Two rounds of semi-annual groundwater monitoring events were conducted in 2014 to monitor site groundwater conditions and to assess the effectiveness of the ISCO to remediate COCs at the site. The first semi-annual groundwater sampling event was conducted on March 17 and March 18, 2014 and the second semi-annual/annual groundwater sampling event was conducted on September 20 and September 21, 2014.

Prior to sampling, the depth to groundwater was measured from all 14 monitoring wells (DMW-3, DMW-4, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, MW-14, MW-16, MW-17, and TMP-A) on site and recorded on VERINA's groundwater gauging logs (Appendix A) to establish the groundwater elevations and groundwater flow direction at the site. Monitoring point TMP-B was not included in either the March or the September well gauging event since it has been paved over and is inaccessible. Water level measurements were taken with a Solinst® laser-marked water level meter equipped with a stainless steel probe and measuring tape graduated in units of 0.01 foot. Groundwater elevation measurements for March 2014 and September 2014 are summarized in Tables 1 and 2, respectively. A map showing the groundwater elevation isocontours and groundwater flow direction is included as Figure 3 for the March 2014 event and as Figure 4 for the September 2014 event.

After well gauging was completed, select monitoring wells including DMW-3, MW-8, MW-9, MW-10, MW-11, MW-13, MW-14, MW-16, MW-17, and TMP-A were purged by the low-flow method using bladder pumps. Monitoring wells DMW-3, TMP-A, MW-13, and MW-14 were not sampled in March 2014 in accordance with VERINA'S 2013 Remedial Action Progress Report. Groundwater quality parameters, including pH, dissolved oxygen (DO), conductivity, temperature, turbidity, and oxidation-reduction potential (ORP), were measured via a YSI® 600 XL water quality instrument coupled with a flow-through cell. In addition to measuring field parameters, the water from each well was visually inspected for the presence of a purple/pink color, which would indicate the presence of un-reacted permanganate. A change in color of the water in the wells from dark purple to light pink (i.e., > visual concentration of 0.5 milligrams per liter [mg/L]) or clear (i.e., < visual concentration of 0.5 mg/L) indicates that the permanganate would have been consumed, diluted, or transported with groundwater. The field procedures implemented during each groundwater monitoring event follow the previously approved Field Sampling and Analysis Plan (FSAP) and its two parts: the Field Sampling Plan and Quality Assurance Project Plan (QAPP) that were included in the Remedial Investigation/Feasibility Study Work Plan (Shield Environmental 1998) and the RD Package (BBL 2002) for the site.

Groundwater samples from monitoring wells that exhibited residual permanganate were collected in laboratory-provided unpreserved vials pre-charged in the field with approximately 1 milliliter (ml) of a 20 percent, by weight, sodium thiosulfate solution. The sodium thiosulfate solution was added to neutralize the residual permanganate in the water as it may influence the performance of the laboratory's analytical instruments. During the March 2014 sampling event, monitoring wells MW-8, MW-9, MW-11, MW-16, and MW-17 exhibited residual permanganate; monitoring wells MW-8, MW-9, MW-11, MW-16, and MW-17 exhibited residual permanganate during the September 2014 sampling event. The purge water from each of these wells had a visible purple/pink color and therefore had its residual sodium permanganate concentration analyzed for in the field immediately subsequent to site-specific parameter list (SSPL) VOC sampling using a Hach® 890DR colorimeter. A summary of the residual sodium permanganate groundwater concentrations is presented in Table 3.

As part of the QA/QC procedures, one duplicate sample, one matrix spike sample, one matrix spike duplicate sample, one trip blank, and two field blanks were also collected during each sampling event. All samples were collected in laboratory-supplied glassware, packaged on ice, and shipped to ALS Environmental (formerly Columbia Analytical Services, Inc.), of Rochester, New York (New York Laboratory Certification 10145) for analysis. All samples were analyzed for SSPL VOCs using United States Environmental Protection Agency (USEPA) Method 8260B following Contract Laboratory Protocol Statement of Work, document OLM04.2, as modified by the NYSDEC ASP dated June 2000. The SSPL VOCs analyzed for were: tetrachloroethylene (PCE); trichloroethylene (TCE); 1,1,1-trichloroethane (TCA); 1,1-dichloroethane (1,1-DCA); 1,1-dichloroethene (1,1-DCE); cis-1,2-dichloroethene (cis-1,2-DCE); trans-1,2-dichloroethene (trans-1,2-DCE); and vinyl chloride (VC).

ISCO INJECTION PROGRAM

As approved by the NYSDEC, sodium permanganate is injected manually at six monitoring wells including MW-8, MW-9, MW-10, MW-11, MW-16, and MW-17 on a quarterly basis to further reduce the dissolved COC mass present in the groundwater. The ISCO injection program was initiated in June 2009. For 2014, manual injections occurred in the months of March, June, September, and December.

The manual injections were performed at the above mentioned wells, via gravity feed, to deliver a 10 percent by weight sodium permanganate solution during each of the 2014 injection events. A total of 60 gallons were injected during each injection event. The ISCO injections occurring in March and September were conducted following that month's respective groundwater monitoring activities. A manual injection summary is presented in Table 4.

GROUNDWATER ELEVATION AND FLOW DIRECTION

The groundwater elevation data from March and September 2014 are summarized in Tables 1 and 2, respectively. The groundwater elevation contour map for the March and September 2014 event are provided as Figure 3 and Figure 4.. The groundwater gauging logs are enclosed as Appendix A.

The groundwater contour maps indicate that the hydraulic gradient is low across the site and the groundwater flow within the perched groundwater zone is to the northwest, consistent with historical groundwater flow data. Although the groundwater flow is to the northwest, the low hydraulic gradient as well as the fact that the groundwater plume has not migrated from the site supports the perched groundwater site model.

GROUNDWATER MONITORING ANALYTICAL RESULTS

The groundwater analytical data for the March and September 2014 monitoring events are summarized in Tables 5 and 6, respectively. The historical distribution of SSPL VOCs, including pre-full scale ISCO injection initiation sampling results, is summarized in Table 7. An isoconcentration map showing the total molar concentration of PCE and its daughter products as of September 2014 is presented as Figure 5. The groundwater sampling field logs are provided in Appendix B. The complete laboratory data packages for the groundwater sampling events are presented in Appendix C. The electronic data deliverables (EDDs) for each groundwater sampling events will be included under a separate submission.

Based on the information collected during injection and from two rounds of semi-annual groundwater monitoring, VERINA made the following conclusions:

- The results of the March and September 2014 sampling events indicate that the overall concentrations of COCs have decreased significantly since the ISCO injection was implemented since June 2009.
- The plume of PCE and its daughter products continue to be contained within the perched groundwater on site.
- In comparing the June 2009 and September 2014 total molar concentration of PCE and its daughter products, the plume size of the highest molar concentration observed within the source zone near MW-8 and MW-16 has decreased significantly. This indicates an overall COC mass reduction (as represented by both PCE and daughter products) within the perched groundwater beneath the site. Approximately 99% mass reduction of COCs in groundwater was estimated since the ISCO injection was implemented in 2009.

ACTIVE SUB-SLAB DEPRESSURIZATION (ASD) OM&M

In accordance with the approved 2012 Remedial Design Work Plan – Active Sub-Slab Depressurization System (VERINA 2012), an ASD system was installed at the site. This System, shown on Figure 6, was installed in July 2012 serve as a mitigation measure for elevated COC concentrations (specifically PCE and TCE) detected in the indoor air at the facility. Since installation and start-up, the ASD system has been operated continuously without disruption. Two rounds of indoor air sampling were conducted on December 19, 2012 and December 10, 2013.

The ASD system has been effective at reducing the indoor air concentrations of COCs when comparing the December 2012 and December 2013 indoor air sampling results to the indoor air sampling results collected in March 2009 prior to the installation of the ASD system. Since no site specific COC concentrations in the indoor air samples exceeded the NYSDOH's Indoor Air Guidance Values during the 2013 indoor air sampling event, VERINA proposed that no additional indoor air sampling events being conducted unless changes or modifications to the ASD system and/or to the building are identified during the monthly ASD system inspections in the January 2014 Periodic Review Report (PRP). NYSDEC approved the PRP on August 1, 2014.

Since no changes or modifications to the ASD system in 2014, no indoor air samples were collected from the onsite building in 2014. Monthly inspections of the ASD system were implemented including observing and documenting the conditions of ASD system components and any structural changes or modifications to the buildings, as well as recording the pressure gauge measurements at each of the four vapor extraction points. Monthly ASD inspection logs are included as Appendix D.

CONCLUSIONS AND RECOMMENDATIONS

Based on the findings and conclusions of the groundwater monitoring program, field observation of the ISCO injection events, and ASD System OM&M results, VERINA has drawn the following conclusions:

- Based on the analytical results of the historic and current groundwater sampling events, COCs have not been detected in monitoring wells DMW-3, TMP-A, MW-13, and MW-14 during several of the recent sampling events. This data supports the conclusion that the COC plume is contained at the site.
- A comparison of the 2014 groundwater sampling results to that of the historical sampling results indicates that the total VOC mass (as measured in molar concentration of PCE and its daughter products) in the groundwater at the site has decreased significantly. A total of approximately 99% reduction of COCs in groundwater was estimated since the remedial action was implemented in June 2009.
- The ASD system has operated continuously since its installation in July 2012. The ASD system has effectively mitigated the indoor air COCs at the site.

Based on these observations, we recommend the following:

- Due to multiple rounds of SSPL VOC sampling with non-detect results for the upgradient, non-detect wells in the area of MW-14, VERINA recommends removing MW-14 from the 2015 groundwater monitoring program. Multiple rounds of sampling results from MW-14 have been consistently non-detect and monitoring well DMW3 located upgradient of MW-14 presented the similar monitoring results, thus MW-14 does not provide any additional information to evaluate the progress of ISCO remediation at the site. The wells will be included in the semi-annual sampling program in March and September 2015 will include MW-8, MW-9, MW-10, MW-16, and MW-17. In addition to these wells, monitoring wells DMW-3, TMP-A, MW-11, and MW-13 will be included in the annual sampling program in September 2015. The proposed groundwater monitoring matrix for 2015 is presented in Table 8.
- VERINA will continue the current quarterly oxidant injection schedule utilizing a 10% by weight sodium permanganate solution to continue the oxidation of COCs in groundwater. It is estimated a total of 60 gallons of 10% by weight sodium permanganate oxidant solution will be manually injected into selected monitoring wells on site during each of the injection events.
- VERINA recommends continuing the current ISCO injection and groundwater monitoring schedule (as outlined above) and progressing into NYSDEC Category 4 site management phase.
- VERINA will continue monthly inspections of the ASD system. No additional indoor air sampling will be conducted unless changes or modifications to the ASD system and/or to the building are identified during the monthly ASD system inspections.

REFERENCES

Blasland, Bouck, & Lee, Inc. (BBL). June 2002. *Remedial Design Package: Universal Instruments Corporation, Binghamton, New York.*

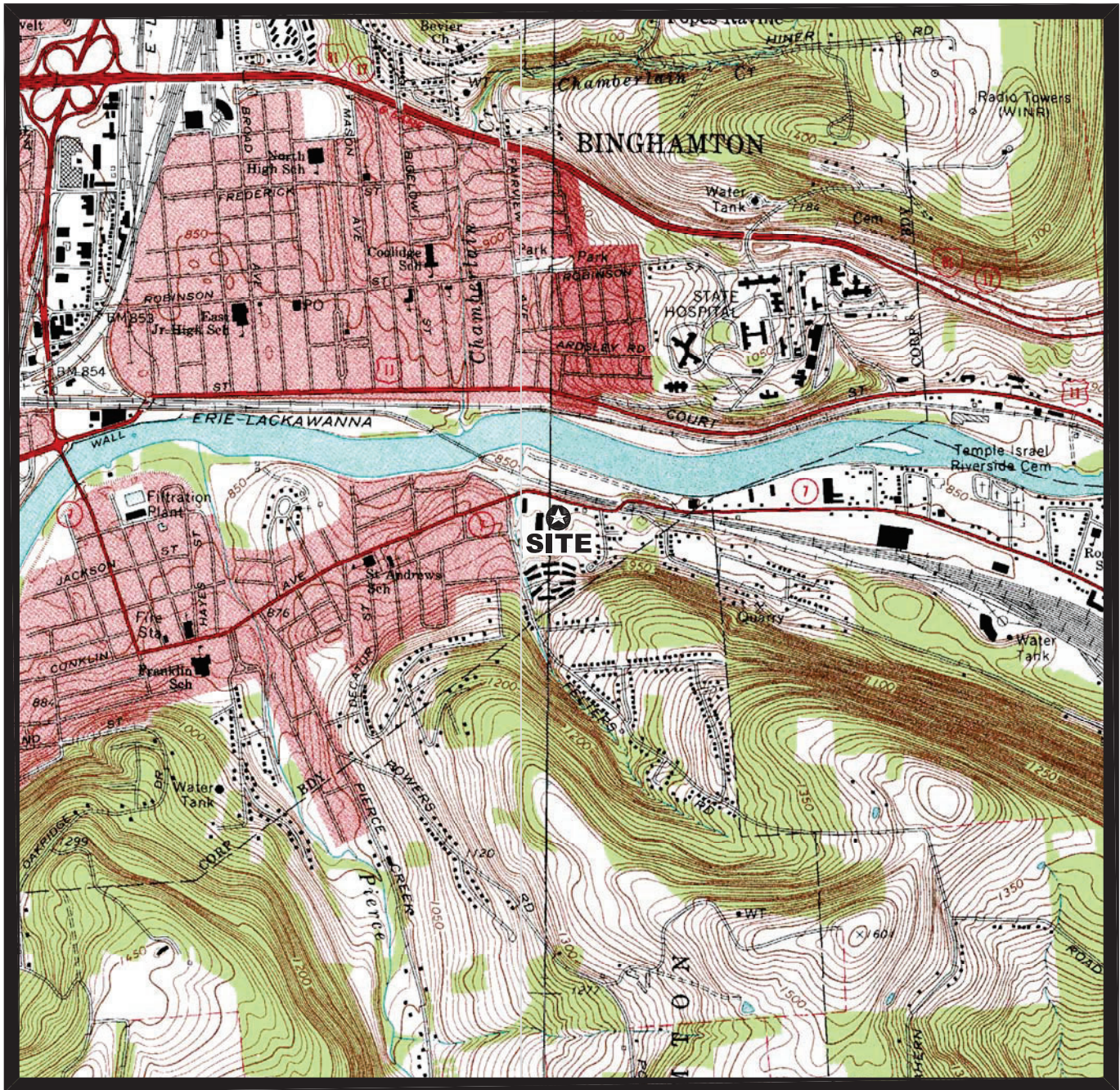
Shield Environmental. 1998. *Remedial Investigation/Feasibility Study Work Plan.*

Verina Engineering, P.C. (VERINA). May 2012. *Remedial Design Work Plan – Active Sub-slab Depressurization System.*

Verina Engineering, P.C. (VERINA). December 2012. *2012 Remedial Action Progress Report*

Verina Engineering, P.C. (VERINA). January 2014. *2013 Remedial Action Progress Report*

Figures



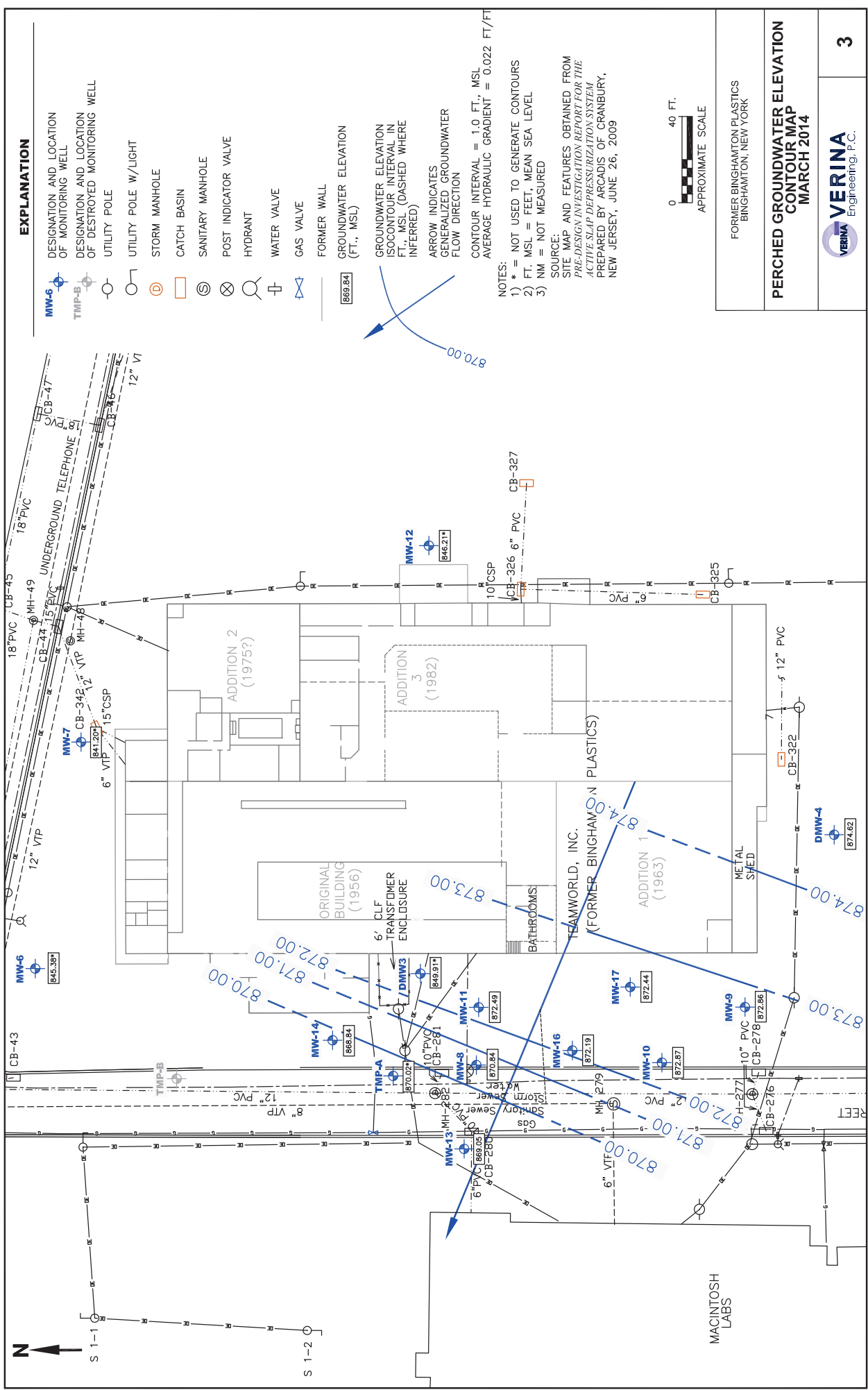
WEST BINGHAMTON AND
EAST BINGHAMTON QUADRANGLES
7.5-MINUTE SERIES



FORMER BINGHAMTON PLASTICS
BINGHAMTON, NEW YORK

REGIONAL LOCATION MAP

VERINA
Engineering, P.C.



EXPLANATION

- MW-6** DESIGNATION AND LOCATION OF MONITORING WELL
- TMP-B** DESIGNATION AND LOCATION OF DESTROYED MONITORING WELL
- UTILITY POLE
- UTILITY POLE W/LIGHT
- STORM MANHOLE
- CATCH BASIN
- SANITARY MANHOLE
- POST INDICATOR VALVE
- HYDRANT
- WATER VALVE
- GAS VALVE
- FORMER WALL
- GROUNDWATER ELEVATION (FT., MSL)

GROUNDWATER ELEVATION ISOCONTOUR INTERVAL IN FT., MSL (DASHED WHERE INFERRED)

ARROW INDICATES GENERALIZED GROUNDWATER FLOW DIRECTION

- NOTES:
- * = NOT USED TO GENERATE CONTOURS
 - FT. MSL = FEET, MEAN SEA LEVEL
 - NM = NOT MEASURED

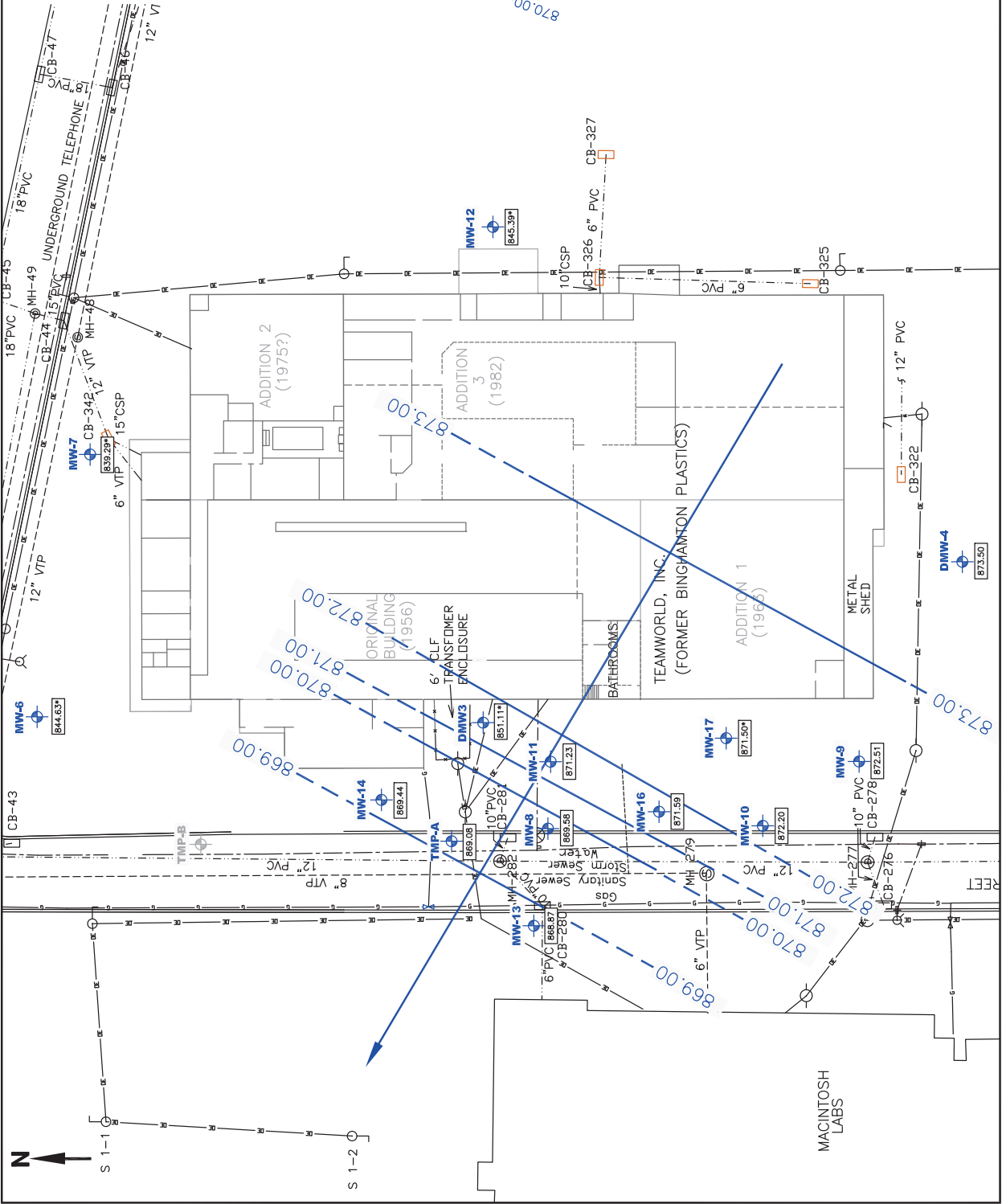
SOURCE: SITE MAP AND FEATURES OBTAINED FROM PRE-DESIGN INVESTIGATION REPORT FOR THE ACTIVE SLAP DEPRESSURIZATION SYSTEM PREPARED BY ARCADIS OF CRANBURY, NEW JERSEY, JUNE 26, 2009



FORMER BINGHAMTON PLASTICS
BINGHAMTON, NEW YORK

PERCHED GROUNDWATER ELEVATION CONTOUR MAP MARCH 2014





EXPLANATION

- DESIGNATION AND LOCATION OF MONITORING WELL
- DESIGNATION AND LOCATION OF DESTROYED MONITORING WELL
- UTILITY POLE
- UTILITY POLE W/LIGHT
- STORM MANHOLE
- CATCH BASIN
- SANITARY MANHOLE
- POST INDICATOR VALVE
- HYDRANT
- WATER VALVE
- GAS VALVE
- FORMER WALL
- GROUNDWATER ELEVATION (FT., MSL)

GROUNDWATER ELEVATION ISOCONTOUR INTERVAL IN FT., MSL (DASHED WHERE INFERRED)

ARROW INDICATES GENERALIZED GROUNDWATER FLOW DIRECTION

NOTES:

- * = NOT USED TO GENERATE CONTOURS
- FT. MSL = FEET, MEAN SEA LEVEL
- NM = NOT MEASURED

SOURCE: SITE MAP AND FEATURES OBTAINED FROM PRE-DESIGN INVESTIGATION REPORT FOR THE ACTIVE SLAP DEPRESSURIZATION SYSTEM PREPARED BY ARCADIS OF CRANBURY, NEW JERSEY, JUNE 26, 2009



FORMER BINGHAMTON PLASTICS
BINGHAMTON, NEW YORK

PERCHED GROUNDWATER ELEVATION CONTOUR MAP SEPTEMBER 2014



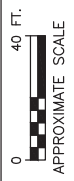


EXPLANATION

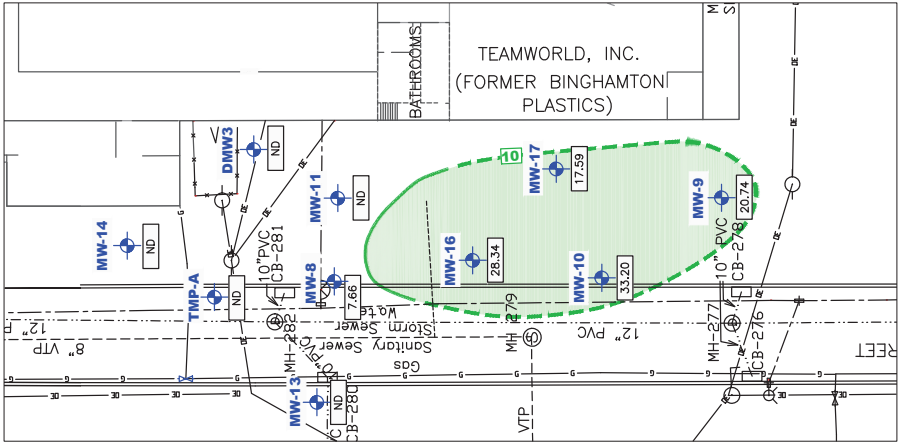
- DESIGNATION AND APPROXIMATE LOCATION OF MONITORING WELL
- MW-6
 - UTILITY POLE
 - UTILITY POLE W/LIGHT
 - STORM MANHOLE
 - CATCH BASIN
 - SANITARY MANHOLE
 - POST INDICATOR VALVE
 - HYDRANT
 - WATER VALVE
 - GAS VALVE

- NOTES:
- 1) DAUGHTER COMPOUNDS INCLUDE TCE, 1,2-DCE AND VC
 - 2) TCE = TRICHLOROETHENE
 - 3) 1,2-DCE = 1,2-DICHLOROETHENE
 - 4) VC = VINYL CHLORIDE
 - 5) ND = NOT DETECTED
 - 6) NS = NOT SAMPLED
 - 7) * = RESULT SHOWN IS FROM MARCH 2009 SINCE MW-11 WAS NOT SAMPLED IN JUNE 2009
 - 8) JUNE 2009 DATA REPRESENTS BASELINE CONCENTRATIONS
 - 9) UNITS = (mol x 10³)/L
 - 10) IF RESULT CONCENTRATION IS BELOW REPORTING LIMIT (RL) AND REPORTING LIMIT IS ABOVE GWQS, 1/4 OF THE REPORTING LIMIT USED IN THE MOLAR CALCULATIONS, IF THE CONCENTRATION IS BELOW THE RL AND RL IS LESS THAN GWQS, 0 WAS USED IN THE CALCULATION.
 - 11) GWQS = NYSDEC'S GROUNDWATER QUALITY STANDARDS

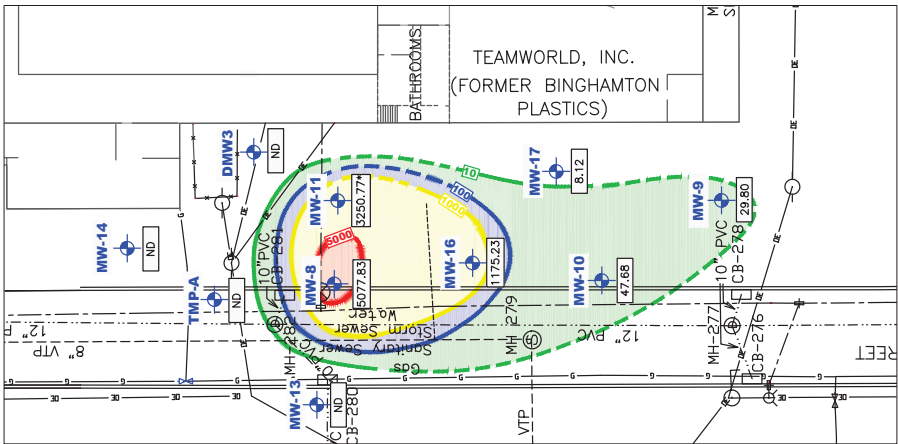
	MOLAR CONCENTRATION > 10 (mol x 10 ³)/L
	MOLAR CONCENTRATION > 100 (mol x 10 ³)/L
	MOLAR CONCENTRATION > 1000 (mol x 10 ³)/L
	MOLAR CONCENTRATION > 5000 (mol x 10 ³)/L



SEPTEMBER 2014



JUNE 2009

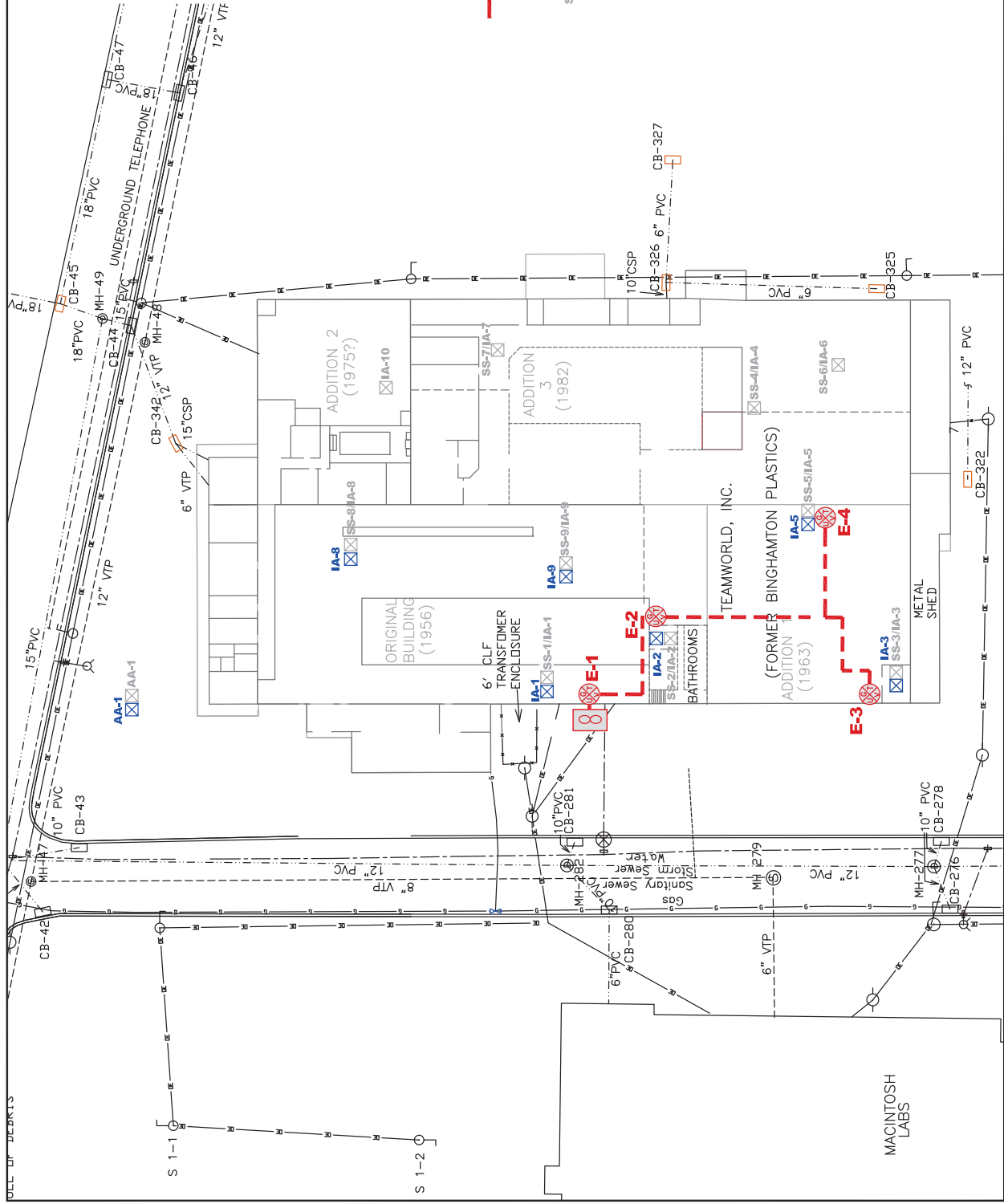


SOURCE:
SITE MAP AND FEATURES OBTAINED FROM
PRE-DESIGN INVESTIGATION REPORT FOR THE
ACTIVATED SLUDGE DEPRESSURIZATION SYSTEM,
PREPARED BY ARCADIS OF CRANBURY,
NEW JERSEY, JUNE 26, 2009

FORMER BINGHAMTON PLASTICS
BINGHAMTON, NEW YORK

**PERCHED GROUNDWATER ESTIMATED
PCE AND DAUGHTER COMPOUND
TOTAL MOLAR ISOCONCENTRATION MAP
JUNE 2009 AND SEPTEMBER 2014**





EXPLANATION

- UTILITY POLE
- UTILITY POLE W/LIGHT
- STORM MANHOLE
- CATCH BASIN
- SANITARY MANHOLE
- POST INDICATOR VALVE
- HYDRANT
- WATER VALVE
- GAS VALVE
- FORMER WALL

DESIGNATION AND APPROXIMATE LOCATION OF SUCTION POINT WITH GATE VALVE AND VACUUM GAUGE

APPROXIMATE LOCATION OF EXHAUST FAN

APPROXIMATE LOCATION OF PIPE ROUTE

DESIGNATION AND APPROXIMATE LOCATION OF INDOOR OR AMBIENT AIR SAMPLING LOCATION (DECEMBER 2012)

APPROXIMATE LOCATION OF SUB-SLAB SOIL GAS, INDOOR AND AMBIENT AIR SAMPLING LOCATION (MARCH 2009)

SS-1/IA-1

SOURCE:

- 1) SITE MAP AND FEATURES OBTAINED FROM PRE-DESIGN INVESTIGATION REPORT FOR THE ACTIVE SLAB DEPRESSURIZATION SYSTEM PREPARED BY ARCADIS OF CRANBURY, NEW JERSEY, JUNE 26, 2009
- 2) ASD SYSTEM LAYOUT OBTAINED FROM SUB SLAB DEPRESSURIZATION AS BUILT SKETCH PREPARED BY KEYSTONE MATERIAL TESTING, LLC OF BINGHAMTON, NEW YORK, AUGUST 1, 2012



APPROXIMATE SCALE

FORMER BINGHAMTON PLASTICS
BINGHAMTON, NEW YORK

ASD SYSTEM LAYOUT WITH
INDOOR AIR SAMPLING LOCATIONS



Tables

Table 1 - Groundwater Elevation Data - March 2014, Former Binghamton PLastics, Binghamton, New York

Monitoring Well	Well Diameter (in)	Total Depth (ft, bg)	Screened Interval (ft, bg)	Surface Elevation (ft, msl)	Top of Casing Elevation (ft, msl)	Top of PVC Elevation (ft, msl)	Depth to Water (ft, TOC)	Groundwater Elevation (ft, msl)
DMW-1	4	15	5-15	876.19	876.44	874.21	Abandoned	NA
DMW-3	2	48.02	41-48	875.16	875.16	874.22	24.31	849.91
DMW-4	2	15.36	4-14	878.32	878.38	877.91	3.29	874.62
MW-5	2	20	10-20	874.18	874.17	873.83	Abandoned	NA
MW-6	2	39.76	30-40	869.62	869.63	869.37	23.99	845.38
MW-7	2	39.98	30-40	869.96	869.99	869.60	28.40	841.20
MW-8	2	14.13	5-15	873.22	873.18	872.83	1.99	870.84
MW-9	2	15	5-15	875.02	875.04	874.76	1.90	872.86
MW-10	2	14.32	5-15	875.70	875.71	875.47	2.60	872.87
MW-11	2	19.08	10-20	874.53	874.52	874.14	1.65	872.49
MW-12	2	44.05	35-45	873.70	873.70	873.38	27.17	846.21
MW-13	2	13.72	5-15	874.08	874.09	873.60	4.55	869.05
MW-14	2	14.20	5-15	871.06	871.07	870.57	1.73	868.84
MW-15	2	15	5-15	874.06	874.16	873.69	Abandoned	NA
MW-16	2	14.18	5-15	874.56	NS	874.11	1.92	872.19
MW-17	2	14.84	5-15	874.03	NS	873.74	1.30	872.44
TMP-A	1	8	3-8	871.59	NS	871.39	1.37	870.02
TMP-B	1	10	5-10	869.57	NS	869.36	Paved Over	NA

NOTES:

Elevation is surveyed to National Vertical Datum - 1929

in = Inches

ft, bg = Feet below grade

ft, msl = Feet above mean sea level

ft, TOC = Feet from top of inner well casing

NA = Not available

BS = Not surveyed

Groundwater elevation measured on March 17, 2014

Table 2 - Groundwater Elevation Data - September 2014, Former Binghamton PLastics, Binghamton, New York

Monitoring Well	Well Diameter (in)	Total Depth (ft, bg)	Screened Interval (ft, bg)	Surface Elevation (ft, msl)	Top of Casing Elevation (ft, msl)	Top of PVC Elevation (ft, msl)	Depth to Water (ft, TOC)	Groundwater Elevation (ft, msl)
DMW-1	4	15	5-15	876.19	876.44	874.21	Abandoned	NA
DMW-3	2	48.12	41-48	875.16	875.16	874.22	23.11	851.11
DMW-4	2	15.44	4-14	878.32	878.38	877.91	4.41	873.50
MW-5	2	20	10-20	874.18	874.17	873.83	Abandoned	NA
MW-6	2	39.81	30-40	869.62	869.63	869.37	24.74	844.63
MW-7	2	39.86	30-40	869.96	869.99	869.60	30.31	839.29
MW-8	2	14.16	5-15	873.22	873.18	872.83	3.25	869.58
MW-9	2	14	5-15	875.02	875.04	874.76	2.25	872.51
MW-10	2	14.37	5-15	875.70	875.71	875.47	3.27	872.20
MW-11	2	19.12	10-20	874.53	874.52	874.14	2.91	871.23
MW-12	2	44.10	35-45	873.70	873.70	873.38	27.99	845.39
MW-13	2	13.80	5-15	874.08	874.09	873.60	4.73	868.87
MW-14	2	14.26	5-15	871.06	871.07	870.57	1.13	869.44
MW-15	2	15	5-15	874.06	874.16	873.69	Abandoned	NA
MW-16	2	14.24	5-15	874.56	NS	874.11	2.52	871.59
MW-17	2	14.9	5-15	874.03	NS	873.74	2.24	871.50
TMP-A	1	7.21	3-8	871.59	NS	871.39	2.31	869.08
TMP-B	1	10	5-10	869.57	NS	869.36	Abandoned	NA

NOTES:

Elevation is surveyed to National Vertical Datum - 1929

in = Inches

ft, bg = Feet below grade

ft, msl = Feet above mean sea level

ft, TOC = Feet from top of inner well casing

NA = Not available

BS = Not surveyed

Groundwater elevation measured on September 18, 2014

Table 3 Summary of Residual Sodium Permanganate Results, Former Binghamton Plastics, Binghamton, New York

Well ID No.	Residual Sodium Permanganate by Permanganate Ion Analysis (ppm)					
	December 2009	March 2010	June 2010	September 2010	December 2010	March 2011
MW-8	131.5	149	105.50	9.56	>19.8	3.74
MW-9	0.30	1.736	1.47	10.04	NS	18.91
MW-10	3.07	4.268	NS	3.57	>19.8	156.34
MW-11	132.2	149.1	151.70	120.80	>19.8	155.98
MW-16	29.71	95.1	76.99	105.60	>19.8	0.835
MW-17	NS	NS	103.00	11.21	>19.8	155.98

Well ID No.	Residual Sodium Permanganate by Permanganate Ion Analysis (ppm)					
	October 2011	March 2012	September 2012	March 2013	September 2013	March 2014
MW-8	0.16	17.2	1.3	0.5	70	14
MW-9	NS	7.3	NS	0.2	NS	3.0
MW-10	NS	2.4	NS	NS	NS	NS
MW-11	35.80	26.1	10.7	30	34	20
MW-16	146.46	4.6	1.7	1.1	1.3	3.1
MW-17	NS	NS	4.7	2.5	1.0	2.9

Well ID No.	Residual Sodium Permanganate by Permanganate Ion Analysis (ppm)				
	September 2014				
MW-8	10.0				
MW-9	1.1				
MW-10	NS				
MW-11	11.1				
MW-16	114				
MW-17	24.4				

NOTES:

ppm = parts per million

NS = Not sampled because the water was colorless

A Hach DR990 colorimeter was used to measure the concentration of residual sodium permanganate

Table 4 Summary of Sodium Permanganate Manual Injection Events, Former Binghamton Plastics, Binghamton, New York

Well ID No.	Injection Date				
	6/11/2009*	9/18/2009*	12/10/2009*	3/9/2010-3/10/2010*	6/23/2010*
MW-8	5	11	11	12.125	11
MW-9	5	11	11	11	11
MW-10	7	11	11	11	11
MW-11	3	5	5	2.75	5
MW-16	5	11	11	12.125	11
MW-17	5	11	11	11	11
Total	30	60	60	60	60

Well ID No.	Injection Date				
	9/22/2010*	12/16/2010*	3/24/2011**	11/4/2011**	3/22/2012**
MW-8	11	11	11	5	1.25
MW-9	11	11	11	22	35
MW-10	11	11	11	13	4.5
MW-11	5	5	5	2	1.25
MW-16	11	11	11	13	4.5
MW-17	11	11	11	5	1.5
Total	60	60	60	60	48

Well ID No.	Injection Date				
	6/22/2012**	9/17/2012-9/18/2012**	3/12/2013**	6/12/2013**	9/2/2013-9/6/2013*
MW-8	11	12	10	13	12.5
MW-9	11	12	13	10	11
MW-10	12	10	13	10	11
MW-11	3	4	2	4	4.5
MW-16	12	11	13	13	11
MW-17	11	11	9	10	10
Total	60	60	60	60	60

Well ID No.	Injection Date				
	12/10/2013*	3/20/2014-3/21/2014*	6/16/2014*	9/25/2014-9/26/2014*	12/17/2014 *
MW-8	10	10	12	6	6.5
MW-9	10	10	10	18	13
MW-10	12	10	10	15	15.5
MW-11	2	1.5	3	5	2
MW-16	15	12.5	15	13	13
MW-17	11	16	10	10	10
Total	60	60	60	67	60

NOTES:

All units are presented in gallons.

* A 10% of sodium permanganate solution was injected during this event .

** A 5% of sodium permanganate solution was injected during this event .

Table 5 - Groundwater Analytical Data -March 2014, Former Binghamton Plastics, Binghamton, New York

Sample ID Laboratory ID Date Sampled Units	NYSDEC GWQS	MW-8 R1401882-007 3/17/2014 µg/l	MW-9 R1401882-004 3/17/2014 µg/l	MW-10 R1401882-003 3/17/2014 µg/l	DUP-031714 R1401882-008 3/17/2014 µg/l	MW-11 R1401882-010 3/18/2014 µg/l
1,1-Dichloroethane	5	1.3 J	5.0 U	0.82 J	0.82 J	5.0 U
1,1-Dichloroethene	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	5	0.85 J	0.41 J	3.4 J	3.6 J	5.0 U
trans-1,2-Dichloroethene	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	5	5.0 U	5.0 U	0.63 J	0.62 J	5.0 U
1,1,1-Trichloroethane	5	0.72 J	5.0 U	1.0 J	0.88 J	5.0 U
Trichloroethene	5	12	14	7.3	7.5	5.0 U
Vinyl Chloride	2	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Sample ID Laboratory ID Date Sampled Units	NYSDEC GWQS	MW-16 R1401882-005 3/17/2014 µg/l	MW-17 R1401882-002 3/17/2014 µg/l	FB-031714 R1401882-006 3/17/2014 µg/l	FB-031814 R1401882-009 3/18/2014 µg/l	TRIP BLANK R1401882-001 3/17/2014 µg/l
1,1-Dichloroethane	5	10	8.7	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	5	49	18	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	5	1.4 J	1.0 J	5.0 U	5.0 U	5.0 U
Tetrachloroethene	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	5	2.1 J	1.1 J	5.0 U	5.0 U	5.0 U
Trichloroethene	5	10	3.3 J	5.0 U	5.0 U	5.0 U
Vinyl Chloride	2	14	5.0 U	5.0 U	5.0 U	5.0 U

Notes:

J = Estimated value; compound detected below Detection Limit.

D = Compound identified in an analysis at a secondary dilution factor

U = Compound analyzed for but not detected

DUP-031714 is a field duplicate of MW-10

Bold = concentration exceeds NYSDEC GWQS

µg/l = micrograms per liter

NYSDEC = New York State Department of Environmental Conservation

GWQS = Ground Water Quality Standards

FB-031714 & FB-031814 are the field blank samples

Table 6 - Groundwater Analytical Data -September 2014, Former Binghamton Plastics, Binghamton, New York

Sample ID Laboratory ID Date Sampled Units	NYSDEC GWQS	TMP-A R1407422-003 9/20/2014 µg/l	MW-8 R1407422-004 9/20/2014 µg/l	MW-9 R1407422-012 9/21/2014 µg/l	MW-10 R1407422-013 9/21/2014 µg/l	MW-11 R1407422-008 9/20/2014 µg/l	DUP-092014 R1407422-009 9/20/2014 µg/l	MW-13 R1407422-001 9/20/2014 µg/l
1,1-Dichloroethane	5	0.52 J	5.0 U	5.0 U	1.1 J	1.8 J	1.7 J	5.0 U
1,1-Dichloroethene	5	5.0 U	5.0 U	5.0 U	5.0 U	25 U	25 U	5.0 U
cis-1,2-Dichloroethene	5	5.0 U	5.0 U	5.0 U	8.9	25 U	25 U	5.0 U
trans-1,2-Dichloroethene	5	5.0 U	5.0 U	5.0 U	5.0 U	25 U	25 U	5.0 U
Tetrachloroethene	5	5.0 U	5.0 U	5.0 U	1.4 J	25 U	25 U	5.0 U
1,1,1-Trichloroethane	5	5.0 U	5.0 U	0.56 J	3.7 J	6.0 J	6.1 J	5.0 U
Trichloroethene	5	5.0 U	5.0 U	22	29	25 U	25 U	5.0 U
Vinyl Chloride	2	5.0 U	5.0 U	5.0 U	0.69 J	25 U	25 U	5.0 U

Sample ID Laboratory ID Date Sampled Units	NYSDEC GWQS	MW-14 R1407422-006 9/20/2014 µg/l	MW-16 R1407422-011 9/21/2014 µg/l	MW-17 R1407422-010 9/21/2014 µg/l	DMW-3 R1407422-005 9/20/2014 µg/l	FB-092014 R1407422-007 9/20/2014 µg/l	FB-092114 R1407422-014 9/21/2014 µg/l	TRIP BLANK R1407422-002 9/20/2014 µg/l
1,1-Dichloroethane	5	5.0 U	41	17	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	5	5.0 U	17	10	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	5	5.0 U	0.43 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	5	5.0 U	6.0	2.6 J	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	5	5.0 U	8.6	4.3 J	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl Chloride	2	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Notes:

J = Estimated value; compound detected below Detection Limit.

D = Compound identified in an analysis at a secondary dilution factor

U = Compound analyzed for but not detected

DUP-092014 is a blind duplicate of MW-11

Bold = concentration exceeds NYSDEC GWQS

µg/l = micrograms per liter

NYSDEC = New York State Department of Environmental Conservation

GWQS = Ground Water Quality Standards

FB-092014 & FB-092114 are the field blank samples

Table 7 - Historical Groundwater Volatile Organic Compound Analytical Results, Former Binghamton Plastics, Binghamton, New York

Sample Location Units:	Sampling Date	cis-1,2-Dichloroethene µg/l	trans-1,2-Dichloroethene µg/l	Tetrachloroethene µg/l	Trichloroethene µg/l	Vinyl Chloride µg/l
DMW-1	2/8/1999	1000	< 180	< 360	8200	71
DMW-3	12/10/1998	<2.5	<2.5	<0.5	1.1 J	<10
	9/18/2001	< 0.5	< 0.5	< 0.5	0.5 J	< 0.5
	4/1/2002	0.03 J	< 0.5	< 0.5	0.3 J	< 0.5
	9/19/2002	0.2 J	<0.5	0.07 J	0.3 J	<0.5
	3/28/2003	<0.5	<0.5	0.2 J	0.1 J	<0.5
	6/19/2003	0.8	<0.5	0.3 J	0.8	<0.5
	9/16/2003	<0.5	<0.5	0.3 J	0.08 J	<0.5
	1/6/2004	<0.5	0.091 J	0.31 J	0.16 J	<0.5
	4/6/2004	0.2 J	<0.5	0.25 J	0.15 J	<0.5
	6/24/2004	<0.5	<0.5	0.17	<0.5	<0.5
	9/20/2004	<0.5	<0.5	0.23 J	0.13 J	<0.5
	3/23/2005	<0.5	<0.5	<0.5	0.13J	<0.5
	9/27/2005	<2	<2	<1	<1	<2
	3/7/2006	<5	<5	0.43J	<5	<5
	5/25/2006	<5	<5	<5	<5	<5
	9/19/2006	<5	<5	<5	<5	<5
	4/2/2007	<5.0	<5.0	<5.0	<5.0	<5.0
	8/28/2007	<5.0	<5.0	<5.0	<5.0	<5.0
	10/15/2007	<5.0	<5.0	<5.0	<5.0	<5.0
	3/24/2008	<5.0	<5.0	<5.0	<5.0	<5.0
	7/22/2008	<5.0	<5.0	<5.0	0.88 J	<5.0
	10/7/2008	<5.0	<5.0	<5.0	0.40 J	<5.0
	12/2/2008	<5.0	<5.0	<5.0	<5.0	<5.0
	3/11/2009	<5.0	<5.0	<5.0	<5.0	<5.0
	6/9/2009	<5.0	<5.0	<5.0	<5.0	<5.0
	9/15/2009	<5.0	<5.0	<5.0	<5.0	<5.0
	12/9/2009	<5.0	<5.0	<5.0	<5.0	<5.0
	3/9/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	6/21/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	9/21/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	12/14/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	3/21/2011	<5.0	<5.0	<5.0	<5.0	<5.0
	10/27/2011	<5.0	<5.0	<5.0	<5.0	<5.0
	3/14/2012	<5.0	<5.0	<5.0	<5.0	<5.0
	9/18/2012	<5.0	<5.0	<5.0	<5.0	<5.0
	9/6/2013	<5.0	<5.0	<5.0	<5.0	<5.0
	9/20/2014	<5.0	<5.0	<5.0	<5.0	<5.0
DMW-4	12/9/1998	< 2.5	< 2.5	< 5	1.2J	< 10
TMP-A	3/22/2005	<0.5	<0.5	<0.5	<0.5	<0.5
	9/27/2005	<2	<2	<1	<2	<2
	3/7/2006	<5	<5	<5	<5	<5
	5/25/2006	<5	<5	<5	<5	<5
	9/19/2006	<5	<5	<5	<5	<5
	4/2/2007	<5	<5	<5	<5	<5
	7/23/2008	<5	<5	<5	<5	<5
	10/7/2008	<5	<5	<5	<5	<5
	3/9/2009	<5	<5	<5	<5	<5
	6/9/2009	<5	<5	<5	<5	<5
	9/16/2009	<5	<5	<5	<5	<5
	3/8/2010	<5	<5	<5	<5	<5
	10/27/2011	<5	<5	<5	<5	<5
	3/13/2012	<5.0	<5.0	<5.0	<5.0	<5.0
	9/18/2012	<5.0	<5.0	<5.0	<5.0	<5.0
	3/11/2013	<5.0	<5.0	<5.0	<5.0	<5.0
	9/5/2013	<5.0	<5.0	<5.0	<5.0	<5.0
	9/20/2014	<5.0	<5.0	<5.0	<5.0	<5.0
MW-2	12/10/1998	7.9	< 2.5	1.3 J	86	< 10
MW-5	12/10/1998	480	11	1	17,000	20
	9/18/2001	370 J	< 500	<500	23,000	< 500
	4/1/2002	0.3 J	< 0.5	0.06 J	48	< 0.5
MW-6	12/9/1998	< 2.5	< 2.5	< 5	< 5	< 10
MW-7	12/8/1998	< 2.5	< 2.5	< 5	< 5	< 10

See notes on last page.

Table 7 - Historical Groundwater Volatile Organic Compound Analytical Results, Former Binghamton Plastics, Binghamton, New York

Sample Location Units:	Sampling Date	cis-1,2-Dichloroethene µg/l	trans-1,2-Dichloroethene µg/l	Tetrachloroethene µg/l	Trichloroethene µg/l	Vinyl Chloride µg/l
MW-8	12/10/1998	0.25	< 5	< 0.01	0.35	<20
	9/18/2001	650	< 25	< 25	100	44
	4/1/2002	170	2	6	230	6
	9/18/2002	240	3 J	<6	560	<6
	3/28/2003	370	4	0.4 J	420	16
	6/19/2003	1,000	19	<13	810	36
	9/16/2003	960	14 J	<31	250	240
	1/6/2004	670	7.3 J	<18	500	7.7 J
	4/6/2004	1,900	12 J	<50	420	300
	6/24/2004	2,500	27	83	170	430
	9/20/2004	6,200	75	<210	380	740
	3/23/2005	4,000	44 J	<0.5	930	490
	6/14/2005	<2	<2	<1	<1	<2
	9/27/2005	<2	<2	<1	<1	<2
	3/7/2006	<50	<50	<50	<50	<50
	4/2/2007	110	0.69J	<5.0	360D	<5.0
	10/15/2007	640 D	9.8 J	<13	2700 D	66
	3/24/2008	170	3.3 J	<13	790 D	4.2 J
	7/22/2008	900	14 J	<100	3400	120
	10/7/2008	640	18 J	<100	3200	82 J
	12/2/2008	440	6.4 J	<25	2200 D	3.6 J
	3/10/2009	450	<100	<100	2200	38 J
	6/9/2009	680	14 J	<50	5600 D	53
	9/14/2009	NS	NS	NS	NS	NS
	12/8/2009	NS	NS	NS	NS	NS
	3/8/2010	NS	NS	NS	NS	NS
	6/21/2010	NS	NS	NS	NS	NS
	9/20/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	12/15/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	3/23/2011	100	0.43 J	<5.0	940 D	3.9 J
	10/27/2011	330 D	1.6 J	<5.0	2700 D	21
	3/13/2012	290	3.2 J	<50	1800	32 J
	9/17/2012	360	<50	<50	1000	33 J
	3/11/2013	210	11 J	<50	1200	5.3 J
	9/2/2013	1.7 J	<5.0	<5.0	16	<5.0
	3/17/2014	0.85 J	<5.0	<5.0	12	<5.0
	9/20/2014	0.67 J	<5.0	<5.0	3.9 J	<5.0
MW-9	12/10/1998	7.3	< 2.5	1.2J	77	< 10
	4/1/2002	0.6	< 0.5	0.2 J	20	< 0.5
	9/18/2002	7	0.08 J	1	57 J	0.9 J
	3/28/2003	1	<0.5	0.4 J	16	<0.5
	6/19/2003	3	0.04 J	0.5	26	0.09 J
	9/16/2003	4.1	<1.3	0.61 J	40	<1.3
	1/6/2004	2.4	0.083 J	0.48 J	23	<0.5
	4/6/2004	0.8 J	<1	0.61 J	30	<1
	6/24/2004	4.7	<0.5	0.53	27	0.52
	9/20/2004	6.2	<2.0	0.79 J	57	<2.0
	3/23/2005	0.78	<0.5	0.23 J	17	<0.5
	9/27/2005	5.5	<2	<2	46	<2
	3/7/2006	<5	<5	<5	<5	<5
	4/2/2007	0.85J	<5.0	<5.0	24	<5.0
	8/28/2007	8.4	<5.0	0.88 J	55	0.67 J
	10/15/2007	10	<5.0	0.81 J	55	<5.0
	3/24/2008	0.44 J	<5.0	<5.0	19	<5.0
	7/21/2008	12	<5.0	0.55 J	45	0.55 J
	10/8/2008	7.1	<5.0	0.59 J	49	<5.0
	12/2/2008	5.8	<5.0	0.47 J	49	<5.0
	3/10/2009	2.1 J	<5.0	<5.0	24	<5.0
	6/10/2009	1.4 J	<5.0	<5.0	32	<5.0
	9/16/2009	1.9 J	<5.0	0.83 J	24	<5.0
	12/8/2009	2.2 J	<5.0	0.43 J	32	<5.0
	3/8/2010	0.78 J	<5.0	<5.0	16	<5.0
	6/21/2010	1.60 J	<5.0	<5.0	37	<5.0
	9/20/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	12/16/2010	<5.0	<5.0	<5.0	3.6 J	<5.0
	3/23/2011	<5.0	<5.0	<5.0	14	<5.0
	10/26/2011	0.76 J	<5.0	0.38 J	34	<5.0
	3/13/2012	0.21 J	<5.0	<5.0	17	<5.0
	9/18/2012	1.1 J	<5.0	0.39 J	39	<5.0
	3/11/2013	<5.0	<5.0	<5.0	14	<5.0
	9/5/2013	0.94 J	<5.0	0.31 J	28	<5.0
	3/17/2014	0.41 J	<5.0	<5.0	14	<5.0
	9/21/2014	<5.0	<5.0	<5.0	22	<5.0

See notes on last page.

Table 7 - Historical Groundwater Volatile Organic Compound Analytical Results, Former Binghamton Plastics, Binghamton, New York

Sample Location Units:	Sampling Date	cis-1,2-Dichloroethene µg/l	trans-1,2-Dichloroethene µg/l	Tetrachloroethene µg/l	Trichloroethene µg/l	Vinyl Chloride µg/l
MW-10	12/10/1998	18	< 2.5	54	64	2.3 J
	9/18/2001	10	< 1.4	2	21	18
	4/1/2002	11	0.3 J	1	16	2
	9/18/2002	14	0.4 J	4	53 J	21
	3/28/2003	11	0.2 J	2	25	2
	6/19/2003	13	0.5 J	3	32	9
	9/16/2003	15	0.39 J	2.4	42	12
	1/6/2004	4.3	0.26 J	1.6	13	0.43 J
	4/6/2004	4.7	<0.5	0.89	13	0.38 J
	6/24/2004	16	0.65	2.6	45	8.6
	9/20/2004	3.4	0.15 J	2.7	16	0.9
	3/23/2005	3.8	0.11 J	1.1	12	0.57
	9/27/2005	13	<2	3	50	6.6
	3/7/2006	9.3	<5	1.6J	27	2.5J
	9/19/2006	17	0.48J	2.2J	32	5.9
	8/28/2007	12	0.33 J	2.2 J	31	5.9
	10/15/2007	4.8 J	<5.0	2.1 J	16	1.7 J
	3/24/2008	3.9 J	<5.0	0.53 J	6.6	<5.0
	7/21/2008	3.7 J	<5.0	0.45 J	5.3	0.72 J
	10/8/2008	12	0.26 J	1.4 J	25	5.3
	12/2/2008	4.4 J	<5.0	1.2 J	9.4	<5.0
	3/10/2009	4.3 J	<5.0	0.77 J	9.2	<5.0
	6/8/2009	15	<5.0	1.6 J	36	2.4 J
	9/14/2009	18	<5.0	2.0 J	37	4.8 J
	12/9/2009	13	<5.0	1.3 J	23	1.1 J
	3/8/2010	5.3	<5.0	0.71 J	9.7	<5.0
	6/22/2010	19	0.29 J	1.6 J	37	3.5 J
	9/21/2010	18	0.32 J	1.8 J	33	4.5 J
	12/15/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	3/23/2011	86	<5.0	0.67 J	180	1.8 J
	10/26/2011	11	0.21 J	1.7 J	28	2.2 J
	3/13/2012	6	<5.0	0.81 J	18	0.46 J
	9/17/2012	14	<5.0	1.8 J	40	2.7 J
	3/11/2013	7.9	<5.0	0.72 J	18	0.49 J
	9/2/2013	11	<5.0	1.7 J	32	1.1 J
	3/17/2014	3.4 J	<5.0	0.63 J	7.3	<5.0
	9/21/2014	8.9	<5.0	1.4 J	29	0.69 J
MW-11	12/9/1998	1,100	11	< 5	1,400	140
	9/18/2001	850	< 31	<31	700	77
	4/1/2002	1,100	12	<50	1,500	23
	9/19/2002	1,600	12 J	<25	2,100	82
	3/28/2003	1,200	11	0.2 J	2,400	58
	6/19/2003	1,300	10 J	<25	2,500	24 J
	9/16/2003	1,700	13 J	<83	2,500	170
	1/6/2004	1,200	31 J	<53	1,500	28 J
	4/6/2004	1,700	17	<83	2,300	6.8
	6/24/2004	1,600	18	<63	1,900	29
	9/20/2004	2,300 D	26 DJ	<63	2,200 D	58 DJ
	3/23/2005	1,500 D	21	<0.5	1,300 D	7.8
	6/14/2005	<2	<2	<1	<1	<2
	9/27/2005	<2	<2	<1	<1	<2
	3/7/2006	<500	<500	<500	<500	<500
	10/15/2007	<5.0	<5.0	<5.0	<5.0	< 5.0
	3/24/2008	130	<25	<25	520	5.2 J
	7/22/2008	1900	15 J	<100	2900	140
	10/7/2008	NS	NS	NS	NS	NS
	12/2/2008	NS	NS	NS	NS	NS
	3/11/2009	990	9.1 J	<25	3200 D	67
	6/8/2009	NS	NS	NS	NS	NS
	9/14/2009	NS	NS	NS	NS	NS
	12/8/2009	NS	NS	NS	NS	NS
	3/9/2010	NS	NS	NS	NS	NS
	6/21/2010	NS	NS	NS	NS	NS
	9/20/2010	NS	NS	NS	NS	NS
	12/16/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	3/23/2011	<5.0	<5.0	<5.0	<5.0	<5.0
	10/27/2011	<5.0	<5.0	<5.0	0.57 J	<5.0
	3/14/2012	<5.0	<5.0	<5.0	<5.0	<5.0
	9/17/2012	<5.0	<5.0	<5.0	0.62 J	<5.0
	3/11/2013	<5.0	<5.0	<5.0	<5.0	<5.0
	9/2/2013	1.2 J	<5.0	<5.0	4.3 J	<5.0
	3/18/2014	<5.0	<5.0	<5.0	<5.0	<5.0
	9/20/2014	<25	<25	<25	<25	<25

See notes on last page.

Table 7 - Historical Groundwater Volatile Organic Compound Analytical Results, Former Binghamton Plastics, Binghamton, New York

Sample Location Units:	Sampling Date	cis-1,2-Dichloroethene µg/l	trans-1,2-Dichloroethene µg/l	Tetrachloroethene µg/l	Trichloroethene µg/l	Vinyl Chloride µg/l
MW-12	12/7/1998	< 2.5	< 2.5	< 5	< 5	< 10
MW-13	12/9/1998	< 2.5	< 2.5	< 5	< 5	< 10
	3/24/2008	NS	NS	NS	NS	NS
	7/23/2008	NS	NS	NS	NS	NS
	10/9/2008	<5.0	<5.0	<5.0	<5.0	<5.0
	12/2/2008	<5.0	<5.0	<5.0	0.96 J	<5.0
	3/9/2009	<5.0	<5.0	<5.0	<5.0	<5.0
	6/10/2009	<5.0	<5.0	<5.0	<5.0	<5.0
	9/15/2009	<5.0	<5.0	<5.0	<5.0	<5.0
	12/7/2009	<5.0	<5.0	<5.0	<5.0	<5.0
	3/9/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	6/22/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	9/21/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	12/16/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	3/23/2011	<5.0	<5.0	<5.0	<5.0	<5.0
	10/26/2011	<5.0	<5.0	<5.0	<5.0	<5.0
	3/14/2012	<5.0	<5.0	<5.0	<5.0	<5.0
	9/18/2012	<5.0	<5.0	<5.0	<5.0	<5.0
	9/6/2013	<5.0	<5.0	<5.0	<5.0	<5.0
	9/20/2014	<5.0	<5.0	<5.0	<5.0	<5.0
MW-14	12/9/1998	< 2.5	< 2.5	< 5	< 5	< 10
	9/18/2001	< 0.5	< 0.5	< 0.5	0.2J	< 0.5
	3/28/2003	<0.5	<0.5	0.08 J	<0.5	<0.5
	6/19/2003	<0.5	<0.5	0.3 J	0.04 J	<0.5
	9/16/2003	<0.5	<0.5	0.087 J	<0.5	<0.5
	1/6/2004	<0.5	<0.5	<0.5	0.064 J	<0.5
	4/6/2004	<0.5	<0.5	<0.5	<0.5	<0.5
	6/24/2004	2.1	<0.5	0.27 J	6.5	<0.5
	9/20/2004	<0.5	<0.5	<0.5	<0.5	<0.5
	3/23/2005	<0.5	<0.5	<0.5	<0.5	<0.5
	3/7/2006	<5.0	<5.0	<5.0	<5.0	<5.0
	5/25/2006	<5.0	<5.0	<5.0	<5.0	<5.0
	9/19/2006	<5.0	<5.0	<5.0	<5.0	<5.0
	4/2/2007	<5.0	<5.0	<5.0	<5.0	<5.0
	8/28/2007	<5.0	<5.0	<5.0	<5.0	<5.0
	10/15/2007	<5.0	<5.0	<5.0	<5.0	<5.0
	3/24/2008	<5.0	<5.0	<5.0	0.62 J	<5.0
	7/23/2008	<5.0	<5.0	<5.0	<5.0	<5.0
	10/7/2008	<5.0	<5.0	<5.0	0.32 J	<5.0
	12/3/2008	<5.0	<5.0	<5.0	<5.0	<5.0
	3/11/2009	<5.0	<5.0	<5.0	<5.0	<5.0
	6/10/2009	<5.0	<5.0	<5.0	<5.0	<5.0
	9/15/2009	<5.0	<5.0	<5.0	<5.0	<5.0
	12/9/2009	<5.0	<5.0	<5.0	<5.0	<5.0
	3/9/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	6/22/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	9/21/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	12/14/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	3/21/2011	<5.0	<5.0	<5.0	<5.0	<5.0
	10/26/2011	<5.0	<5.0	<5.0	<5.0	<5.0
	3/13/2012	<5.0	<5.0	<5.0	<5.0	<5.0
	9/18/2012	<5.0	<5.0	<5.0	<5.0	<5.0
	9/6/2013	<5.0	<5.0	<5.0	<5.0	<5.0
	9/20/2014	<5.0	<5.0	<5.0	<5.0	<5.0
MW-15	12/10/1998	960	11	14	6,900	23
	9/18/2001	790	< 84	< 84	4,000	68 J
	4/1/2002	510	10	17	3,400	34

See notes on last page.

Table 7 - Historical Groundwater Volatile Organic Compound Analytical Results, Former Binghamton Plastics, Binghamton, New York

Sample Location Units:	Sampling Date	cis-1,2-Dichloroethene µg/l	trans-1,2-Dichloroethene µg/l	Tetrachloroethene µg/l	Trichloroethene µg/l	Vinyl Chloride µg/l
MW-16	9/19/2002	1,500	11 J	<32	340	38
	3/28/2003	440	7	0.2 J	15	59
	6/19/2003	400	12	0.3 J	48	58
	9/16/2003	87	4.8	0.323 J	9	24
	1/6/2004	68	3.3	<2.5	6.6	20
	4/6/2004	22	1.1	0.23 J	2.6	5.6
	6/24/2004	6.8	2	0.23 J	4.1	2.3
	9/20/2004	78 D	5.2 D	<2.5	17	27 D
	3/23/2005	9.3	5.4	<0.5	0.95	4.4
	9/25/2005	12	5.4	<1	6.2	11
	3/7/2006	<500	<500	<500	<500	<500
	10/15/2007	240 D	13	0.64 J	110	140
	3/24/2008	NS	NS	NS	NS	NS
	7/22/2008	240	8.7 J	<13	69	87
	10/8/2008	710	13 J	1.1 J	330	180
	12/2/2008	450 D	10	0.94 J	320	88
	3/10/2009	270	4.6 J	1.1 J	280	42
	6/10/2009	650	10 J	<25	480	76
	9/15/2009	<5	<5	0.55 J	<5	<5
	12/8/2009	NS	NS	NS	NS	NS
	3/9/2010	NS	NS	NS	NS	NS
	6/22/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	9/20/2010	NS	NS	NS	NS	NS
	12/16/2010	16	<5.0	<5.0	38	<5.0
	3/23/2011	4.1 J	<5.0	0.70 J	7.4	<5.0
	10/27/2011	140	5.6	1.8 J	240 D	<5.0
	3/13/2012	94	2.7 J	0.44 J	96	10
	9/17/2012	140	2.0 J	0.71 J	160	11
	3/11/2013	96	7.5	0.34 J	38	1.9 J
	9/5/2013	170	10	0.50 J	72	9.3
	3/17/2014	49	1.4 J	<5.0	10	14
	9/21/2014	17	<5.0	0.43 J	8.6	<5.0
MW-17	9/19/2002	1,800	18 J	<42	2,800	38 J
	3/28/2003	280	11	0.3 J	2	180
	6/19/2003	50	13	<6	1	65
	9/16/2003	4	11	1.6 J	0.74 J	9.1
	1/6/2004	3.3 J	6.4	<4.2	0.81 J	2.4 J
	4/6/2004	3 J	6.8	<5	1.6 J	4.5 J
	6/24/2004	<4.2	9.8	2.2	1.1	1.5
	9/20/2004	3.3 J	11	2.1 J	<5.0	6.7
	3/25/2005	7.9	7.3	<0.5	0.8	5.9
	9/27/2005	150	8	<1	71	24
	3/7/2006	<50	<50	<50	<50	<50
	9/19/2006	0.33	24	3.2	31	17
	8/28/2007	55	2.4 J	0.82 J	110	82
	10/15/2007	37	1.5 J	0.38 J	73	6.6
	3/24/2008	3.0 J	0.33 J	<5.0	1.2 J	0.93 J
	7/21/2008	2.4 J	0.94 J	<5.0	0.66 J	1.1 J
	10/8/2008	16	1.6 J	0.21 J	35	5.7
	12/2/2008	6.6	0.46 J	<5.0	15	1.3 J
	3/10/2009	3.7 J	0.46 J	<5.0	4.4 J	1.9 J
	6/9/2009	2.8 J	0.78 J	<5.0	3.5 J	1.1 J
	9/14/2009	38	2.5 J	0.60 J	110	9.1
	12/8/2009	7.4	0.61 J	<5.0	23	2.1 J
	3/9/2010	4.5 J	<5.0	<5.0	6.5	1.1 J
	6/21/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	9/20/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	12/15/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	3/23/2011	5.6	<5.0	<5.0	2.2 J	<5.0
	10/26/2011	87	4.2 J	0.53 J	65	20
	3/14/2012	77	3.3 J	0.27 J	40	18
	9/17/2012	200	10	0.44 J	74	8.2
	3/11/2013	53	2.8 J	<5.0	14	0.41 J
	9/5/2013	84	3.6 J	<5.0	45	1.3 J
	3/17/2014	18	1.0 J	<5.0	3.3 J	<5.0
	9/21/2014	10	<5.0	<5.0	4.3 J	<5.0

NOTES:

J = Estimated value; compound detected below Detection Limit.

D = Compound identified in an analysis at a secondary dilution factor

= Baseline result

NS=Not sampled

µg/l = Micrograms per liter

< = Not detected above laboratory reporting limit given

Table 8 - Proposed 2015 Groundwater Monitoring Matrix, Former Binghamton Plastics, Binghamton, New York

Current Monitoring Matrix Implemented in 2014		
Well ID	Monitoring Schedule	Analysis
DMW-3	Annual	SSPL VOCs
TMP-A	Annual	SSPL VOCs
MW-8	Semiannual	SSPL VOCs
MW-9	Semiannual	SSPL VOCs
MW-10	Semiannual	SSPL VOCs
MW-11	Semiannual	SSPL VOCs
MW-13	Annual	SSPL VOCs
MW-14	Annual	SSPL VOCs
MW-16	Semiannual	SSPL VOCs
MW-17	Semiannual	SSPL VOCs

Proposed Monitoring Matrix to be Implemented in 2015		
Well ID	Monitoring Schedule	Analysis
DMW-3	Annual	SSPL VOCs
TMP-A	Annual	SSPL VOCs
MW-8	Semiannual	SSPL VOCs
MW-9	Semiannual	SSPL VOCs
MW-10	Semiannual	SSPL VOCs
MW-11	Annual	SSPL VOCs
MW-13	Annual	SSPL VOCs
MW-16	Semiannual	SSPL VOCs
MW-17	Semiannual	SSPL VOCs

Appendix A



WELL GAUGING LOG
Former Binghamton Plastics Site, Binghamton, NY (5101.0003)

Date: 3/17/2014
 Weather: Cold, 12-20 °F

Personnel: KFS & MIF

Well No.	Well Diameter (in.)	Total Constructed Depth (ft, btoc)	Screened Interval (ft, btoc)	Surface Elevation (ft, MSL)	Top of Outer Casing Elevation (ft, MSL)	Top of Inner Casing Elevation (ft, MSL)	Depth to Water (ft, btoc)	Groundwater Elevation (ft, MSL)	Total Measured Depth (ft, btoc)	Comments
DMW-1	4	15	5 - 15	876.19	876.44	874.21	Abandoned			
DMW-3	2	48	41 - 48	875.16	875.16	874.22	24.31	849.91	48.02	
DMW-4	2	15	5 - 15	878.32	878.38	877.91	3.29	874.62	15.36	
MW-5	2	20	10 - 20	874.18	874.17	873.83	Abandoned			
MW-6	2	40	30 - 40	869.62	869.63	869.37	23.99	845.38	39.76	
MW-7	2	40	30 - 40	869.96	869.99	869.6	28.40	841.2	39.98	
MW-8	2	15	5 - 15	873.22	873.18	872.83	1.99	870.84	14.13	
MW-9	2	15	5 - 15	875.02	875.04	874.76	1.90	872.86	-	
MW-10	2	15	5 - 15	875.7	875.71	875.47	2.60	872.87	14.32	
MW-11	2	20	10 - 20	874.53	874.52	874.14	1.65	872.49	19.08	
MW-12	2	45	35 - 45	873.7	873.7	873.38	27.17	846.21	44.05	
MW-13	2	15	5 - 15	874.08	874.09	873.6	4.55	869.05	13.72	
MW-14	2	15	5 - 15	871.06	871.07	870.57	1.73	868.84	14.20	
MW-15	2	15	5 - 15	874.06	874.16	873.69	Abandoned			
MW-16	2	15	5 - 15	874.56	NS	874.11	1.92	872.19	14.18	
MW-17	2	15	5 - 15	874.03	NS	873.74	1.30	872.44	14.84	
TMP-A	1	8	3 - 8	871.59	NS	871.39	1.37	870.02	-	
TMP-B	1	10	5 - 10	869.57	NS	869.36	Abandoned			

Notes:
 ft, btoc = Feet below top of inner casing
 ft, MSL = Feet above mean sea level
 NS = Not surveyed



WELL GAUGING LOG
Former Binghamton Plastics Site, Binghamton, NY (5101.0003)

Date: 9/16/2014
 Weather: Sun and clouds, 60s, breezy

Personnel: SJT & DLC

Well No.	Well Diameter (in.)	Total Constructed Depth (ft, btoc)	Screened Interval (ft, btoc)	Surface Elevation (ft, MSL)	Top of Outer Casing Elevation (ft, MSL)	Top of Inner Casing Elevation (ft, MSL)	Depth to Water (ft, btoc)	Groundwater Elevation (ft, MSL)	Total Measured Depth (ft, btoc)	Comments
DMW-1	4	15	5 - 15	876.19	876.44	874.21	Abandoned			
DMW-3	2	48	41 - 48	875.16	875.16	874.22	23.11	851.11	48.12	
DMW-4	2	15	5 - 15	878.32	878.38	877.91	4.41	873.50	15.44	
MW-5	2	20	10 - 20	874.18	874.17	873.83	Abandoned			
MW-6	2	40	30 - 40	869.62	869.63	869.37	24.74	844.63	39.81	
MW-7	2	40	30 - 40	869.96	869.99	869.6	30.31	839.29	39.86	
MW-8	2	15	5 - 15	873.22	873.18	872.83	3.25	869.58	14.16	
MW-9	2	15	5 - 15	875.02	875.04	874.76	2.25	872.51	14.39	
MW-10	2	15	5 - 15	875.7	875.71	875.47	3.27	872.20	14.37	
MW-11	2	20	10 - 20	874.53	874.52	874.14	2.91	871.23	19.12	
MW-12	2	45	35 - 45	873.7	873.7	873.38	27.99	845.39	44.10	
MW-13	2	15	5 - 15	874.08	874.09	873.6	4.73	868.87	13.80	
MW-14	2	15	5 - 15	871.06	871.07	870.57	1.13	869.44	14.26	
MW-15	2	15	5 - 15	874.06	874.16	873.69	Abandoned			
MW-16	2	15	5 - 15	874.56	NS	874.11	2.52	871.59	14.24	
MW-17	2	15	5 - 15	874.03	NS	873.74	2.24	871.50	14.90	
TMP-A	1	8	3 - 8	871.59	NS	871.39	2.31	869.08	7.21	
TMP-B	1	10	5 - 10	869.57	NS	869.36	Abandoned			

Notes:
 ft, btoc = Feet below top of inner casing
 ft, MSL = Feet above mean sea level
 NS = Not surveyed

Appendix B



LOW FLOW GROUND WATER PURGE/SAMPLING LOG and FIELD PARAMETERS

Former Binghamton Plastics Site, Binghamton, NY (5101.0003)

Monitoring Well:	MW-8	Date:	3/17/2014	Page	1	of	1			
Field Personnel:	KFS	Weather:	Below freezing, partly cloudy, light winds							
PRE-PURGE INFO:										
Well Depth (ft btoc):	15	Depth to Water (ft btoc):	1.99							
PID Beneath PVC Cap (ppm)	N/A	Screened/Open Interval (ft btoc)	5-15							
Pump Used:	QED 1.75" bladder	Depth of Pump (ft btoc):	~10							
POST-PURGE INFO:										
Color :	Purple	Mn/MnO ₄ (mg/L):	3/14							
Volume Purged (gal):	~4	Sample ID:	MW-8							
Final Depth to Water (ft btoc):	4.62	Sample Time:	16:30							
WELL PURGE DATA:										
Time 5 minute intervals	Temperature (°C)	pH (units)	Conductivity (ms/cm)	REDOX (Eh-mV)	DO (mg/L)	Turbidity (NTU)	Depth to Water (ft)	Salinity (PPT)	Pumping Rate (ml/min)	Comment
	Reading	Reading	Reading	Reading	Reading	Reading	Reading			
	3%	0.1 unit	3%	10 mV	10%	10%	0.3 ft		100 - 500	
15:40	5.00	8.40	2.045	569.2	8.65	760 AU	2.39	1.03	200	
15:45	4.65	8.62	1.588	557.4	8.32	150	4.48	0.78	200	
15:50	4.36	8.61	1.340	549.9	8.30	147	4.51	0.66	200	
15:55	3.93	8.51	1.201	552.6	8.40	25.7	4.56	0.59	200	
16:00	3.67	8.42	1.026	551.8	8.70	22.8	4.57	0.50	200	
16:05	3.57	8.36	0.886	557.9	8.78	15.6	4.54	0.43	200	
16:10	3.43	8.40	0.815	553.7	8.86	16.9	4.58	0.40	200	
16:15	3.38	8.43	0.807	565.2	8.84	14.0	4.59	0.39	200	
16:20	3.41	8.44	0.804	564.5	8.81	13.8	4.60	0.39	200	
16:25	3.38	8.44	0.806	565.1	8.79	13.6	4.60	0.39	200	



LOW FLOW GROUND WATER PURGE/SAMPLING LOG and FIELD PARAMETERS

Former Binghamton Plastics Site, Binghamton, NY (5101.0003)

Monitoring Well: MW-9 Date: 3/17/2014 Page 1 of 1
Field Personnel: KFS Weather: Partly cloudy, below freezing, light wind

PRE-PURGE INFO:

Well Depth (ft btoc): 15 Depth to Water (ft btoc): 1.39
PID Beneath PVC Cap (ppm) N/A Screened/Open Interval (ft btoc) 5-15
Pump Used: QED 1.75" bladder Depth of Pump (ft btoc): ~10

POST-PURGE INFO:

Color : Purple then light pink Mn/MnO₄ (mg/L): 1.5/3.0
Volume Purged (gal): ~3 Sample ID: MW-9
Final Depth to Water (ft btoc): 1.50 Sample Time: 15:15

WELL PURGE DATA:

Time 5 minute intervals	Temperature (°C)	pH (units)	Conductivity (ms/cm)	REDOX (Eh-mV)	DO (mg/L)	Turbidity (NTU)	Depth to Water (ft)	Salinity (PPT)	Pumping Rate (ml/min)	Comment
	Reading	Reading	Reading	Reading	Reading	Reading	Reading			
	3%	0.1 unit	3%	10 mV	10%	10%	0.3 ft		100 - 500	
14:25	6.25	6.95	1.689	570.5	6.62	110	1.48	0.85	200	
14:30	6.04	6.94	1.694	582.8	6.54	104	1.48	0.86	200	
14:35	5.89	6.93	1.696	591.4	6.94	58.9	1.47	0.86	200	
14:40	5.68	6.93	1.685	597.4	6.93	44.3	1.47	0.85	200	
14:45	5.47	6.93	1.666	598.5	6.92	30.8	1.47	0.84	200	
14:50	5.37	6.92	1.638	600.0	6.88	25.6	1.47	0.83	200	
14:55	5.30	6.92	1.616	600.8	6.92	21.7	1.46	0.81	200	
15:00	5.32	6.92	1.582	601.3	7.38	19.8	1.46	0.80	200	
15:05	5.25	6.91	1.557	600.5	7.49	19.4	1.46	0.78	200	
15:10	5.25	6.92	1.554	600.4	7.45	19.9	1.47	0.78	200	



LOW FLOW GROUND WATER PURGE/SAMPLING LOG and FIELD PARAMETERS

Former Binghamton Plastics Site, Binghamton, NY (5101.0003)

Monitoring Well:	MW-10	Date:	3/17/2014	Page	1	of	1			
Field Personnel:	KFS	Weather:	Sunny, -1 C, slight wind							
PRE-PURGE INFO:										
Well Depth (ft btoc):	15	Depth to Water (ft btoc):	2.56							
PID Beneath PVC Cap (ppm)	N/A	Screened/Open Interval (ft btoc)	5-15							
Pump Used:	QED 1.75" bladder	Depth of Pump (ft btoc):	~10							
POST-PURGE INFO:										
Color :	Purple/turbid/then clear	Mn/MnO ₄ (mg/L):	N/A							
Volume Purged (gal):	~3.5	Sample ID:	MW-10 (DUP-031714)							
Final Depth to Water (ft btoc):	2.68	Sample Time:	13:50							
WELL PURGE DATA:										
Time 5 minute intervals	Temperature (°C)	pH (units)	Conductivity (ms/cm)	REDOX (Eh-mV)	DO (mg/L)	Turbidity (NTU)	Depth to Water (ft)	Salinity (PPT)	Pumping Rate (ml/min)	Comment
	Reading	Reading	Reading	Reading	Reading	Reading	Reading			
	3%	0.1 unit	3%	10 mV	10%	10%	0.3 ft		100 - 500	
12:45	5.10	6.95	0.601	310.0	9.97	69.3	2.67	0.29	200	
12:50	4.87	6.96	0.603	308.9	9.02	N/A	N/A	N/A	N/A	Pause to change DO probe membrane
12:55										
13:00										
13:05	4.46	6.98	0.586	391.3	9.74	37.2	2.78	0.28	200	
13:10	3.84	6.97	0.591	373.6	9.24	15.7	2.77	0.29	200	
13:15	3.68	6.97	0.605	359.7	8.76	11.96	2.77	0.29	200	
13:20	3.83	6.98	0.620	345.2	8.45	10.15	2.77	0.30	200	
13:25	3.59	6.98	0.625	340.5	8.26	8.57	2.77	0.30	200	
13:30	3.78	6.99	0.631	333.3	8.13	6.34	2.78	0.31	200	
13:35	3.72	7.00	0.639	326.4	7.92	5.77	2.78	0.31	200	
13:40	3.59	7.00	0.643	321.6	7.84	5.63	2.77	0.31	200	
13:45	3.72	7.00	0.642	320.2	7.76	5.68	2.77	0.31	200	



LOW FLOW GROUND WATER PURGE/SAMPLING LOG and FIELD PARAMETERS

Former Binghamton Plastics Site, Binghamton, NY (5101.0003)

Monitoring Well: MW-11 Date: 3/18/2014 Page 1 of 1
Field Personnel: KFS Weather: Cold, partly cloudy, light wind

PRE-PURGE INFO:

Well Depth (ft btoc): 20 Depth to Water (ft btoc): 1.75
PID Beneath PVC Cap (ppm) N/A Screened/Open Interval (ft btoc) 10-20
Pump Used: QED 1.75" bladder Depth of Pump (ft btoc): ~15

POST-PURGE INFO:

Color : Purple Mn/MnO₄ (mg/L): 10/20
Volume Purged (gal): ~2.75 Sample ID: MW-11
Final Depth to Water (ft btoc): 8.36 Sample Time: 10:50

WELL PURGE DATA:

Time 5 minute intervals	Temperature (°C)	pH (units)	Conductivity (ms/cm)	REDOX (Eh-mV)	DO (mg/L)	Turbidity (NTU)	Depth to Water (ft)	Salinity (PPT)	Pumping Rate (ml/min)	Comment
	Reading	Reading	Reading	Reading	Reading	Reading	Reading			
	3%	0.1 unit	3%	10 mV	10%	10%	0.3 ft		100 - 500	
10:00	6.54	7.79	0.344	629.1	10.02	26	2.05	0.17	200	
10:05	6.32	7.93	0.343	616.6	9.55	150	5.29	0.16	200	
10:10	6.20	7.94	0.346	616.0	9.52	20.1	6.65	0.17	200	
10:15	6.81	7.97	0.360	615.9	9.60	21	7.15	0.17	100	Lower flow
10:20	5.92	7.98	0.381	616.8	9.65	20.7	7.62	0.18	100	
10:25	5.90	8.00	0.400	617.2	9.71	16.6	8.01	0.19	100	
10:30	5.90	8.02	0.417	616.6	9.71	13.7	8.01	0.20	100	
10:35	5.88	8.02	0.431	616.8	9.72	10.04	8.03	0.21	100	
10:40	5.90	8.04	0.440	615.4	9.72	9.88	8.08	0.21	100	
10:45	5.92	8.05	0.439	614.8	9.72	10.01	8.12	0.21	100	



LOW FLOW GROUND WATER PURGE/SAMPLING LOG and FIELD PARAMETERS

Former Binghamton Plastics Site, Binghamton, NY (5101.0003)

Monitoring Well: <u> MW-16 </u>		Date: <u> 3/17/2014 </u>		Page <u> 1 </u> of <u> 1 </u>						
Field Personnel: <u> MIF </u>		Weather: <u> Sunny, below freezing, slight wind </u>								
PRE-PURGE INFO:										
Well Depth (ft btoc): <u> 14.18 </u>		Depth to Water (ft btoc): <u> 1.71 </u>								
PID Beneath PVC Cap (ppm) <u> N/A </u>		Screened/Open Interval (ft btoc) <u> 5-15 </u>								
Pump Used: <u> QED 1.75" bladder </u>		Depth of Pump (ft btoc): <u> ~10 </u>								
POST-PURGE INFO:										
Color : <u> Light pink </u>		Mn/MnO ₄ (mg/L): <u> 1.5/3.1 </u>								
Volume Purged (gal): <u> ~6 </u>		Sample ID: <u> MW-16 </u>								
Final Depth to Water (ft btoc): <u> 2.20 </u>		Sample Time: <u> 15:40 </u>								
WELL PURGE DATA:										
Time 5 minute intervals	Temperature (°C)	pH (units)	Conductivity (ms/cm)	REDOX (Eh-mV)	DO (mg/L)	Turbidity (NTU)	Depth to Water (ft)	Salinity (PPT)	Pumping Rate (ml/min)	Comment
	Reading	Reading	Reading	Reading	Reading	Reading	Reading			
	3%	0.1 unit	3%	10 mV	10%	10%	0.3 ft		100 - 500	
14:25	5.66	7.22	0.144	601.8	8.54	1296	2.25	0.07	250	
14:30	5.57	6.98	0.138	605.9	8.59	1010	2.31	0.06	250	
14:35	5.17	6.68	0.131	600.6	9.08	50.5	2.31	0.06	250	
14:40	4.81	6.56	0.141	595.9	8.95	40.3	2.31	0.07	250	
14:45	4.79	6.42	0.173	596.4	8.24	37.8	2.31	0.08	250	
14:50	4.86	6.39	0.201	599.1	7.66	40.1	2.31	0.10	250	
14:55	4.90	6.38	0.212	600.3	7.40	42.8	2.31	0.11	250	
15:00	4.97	6.37	0.225	608.8	7.34	44.0	2.31	0.12	250	
15:05	4.82	6.36	0.276	611.6	6.32	44.4	2.31	0.13	250	
15:10	4.86	6.32	0.292	613.5	6.04	49.9	2.31	0.14	250	
15:15	4.91	6.33	0.306	616.7	5.72	33.0	2.31	0.15	250	
15:20	4.93	6.34	0.335	620.6	5.38	30.7	2.31	0.16	250	
15:25	4.93	6.36	0.350	623.7	5.23	25.9	2.31	0.17	250	
15:30	5.01	6.36	0.357	626.4	5.25	24.4	2.31	0.18	250	
15:35	5.01	6.36	0.358	629.3	5.29	23.1	2.31	0.18	250	



LOW FLOW GROUND WATER PURGE/SAMPLING LOG and FIELD PARAMETERS

Former Binghamton Plastics Site, Binghamton, NY (5101.0003)

Monitoring Well: MW-17 Date: 3/17/2014 Page 1 of 1
Field Personnel: MIF Weather: Sunny, below freezing, no wind, dry

PRE-PURGE INFO:

Well Depth (ft btoc): 14.84 Depth to Water (ft btoc): 1.31
PID Beneath PVC Cap (ppm) N/A Screened/Open Interval (ft btoc) 5-15
Pump Used: QED 1.75" bladder Depth of Pump (ft btoc): ~10

POST-PURGE INFO:

Color : Dark pink Mn/MnO₄ (mg/L): 1.3/2.9
Volume Purged (gal): ~ 4 Sample ID: MW-17
Final Depth to Water (ft btoc): 3.50 Sample Time: 13:35

WELL PURGE DATA:

Time 5 minute intervals	Temperature (°C)	pH (units)	Conductivity (ms/cm)	REDOX (Eh-mV)	DO (mg/L)	Turbidity (NTU)	Depth to Water (ft)	Salinity (PPT)	Pumping Rate (ml/min)	Comment
	Reading	Reading	Reading	Reading	Reading	Reading	Reading			
	3%	0.1 unit	3%	10 mV	10%	10%	0.3 ft		100 - 500	
12:45	7.51	6.03	0.479	543.6	3.86	1385 AU	2.31	0.25	300	
12:50	7.44	6.11	0.482	559.0	3.83	93	2.99	0.25	300	
12:55	7.54	6.20	0.498	574.5	3.97	87	3.60	0.25	300	
13:00	7.48	6.22	0.508	580.6	3.88	95	3.54	0.25	300	
13:05	7.58	6.26	0.536	586.8	3.84	73.0	3.54	0.26	300	
13:10	7.71	6.32	0.555	590.7	3.81	50.9	3.54	0.27	300	
13:15	7.73	6.34	0.585	594.0	3.71	29.7	3.54	0.29	300	
13:20	7.81	6.36	0.608	597.0	3.53	28.3	3.54	0.30	300	
13:25	7.81	6.38	0.620	599.2	3.58	27.8	3.54	0.30	300	
13:30	7.89	6.38	0.628	600.8	3.51	25.9	3.54	0.31	300	

[illegible]

[illegible]



Project Name:	Dover-Binghamton	Project #:	5101.0003	Page: <u>1</u> of <u>1</u>
Monitoring Well:	MW-10	Date:	9/21/2014	
Field Personnel:	SJT	Weather:	Sun and clouds, chance rain, 60s	

PRE-PURGE INFO:

Well Depth (ft btoc):	14.37	Depth to Water (ft btoc):	3.78
PID Beneath PVC Cap (ppm)	NA	Screened/Open Interval (ft btoc):	5-15
Pump Used:	QED 1.75" Bladder	Depth of Pump (ft btoc):	~10

POST-PURGE INFO:

Color:	Rusty, no purple or pink color	Mn/MnO4 (mg/L):	NA
Volume Purged (gal):	~2	Sample ID:	MW-10 (MS/MSD)
Final Depth to Water (ft btoc):	4.24	Sample Time:	10:45

WELL PURGE DATA:

[illegible]

[illegible]



Project Name:	Dover-Binghamton	Project #:	5101.0003	Page: _1_ of _1_
Monitoring Well:	MW-13	Date:	9/20/2014	
Field Personnel:	SJT	Weather:	Windy, cloudy, 60s	

PRE-PURGE INFO:

Well Depth (ft btoc):	13.80	Depth to Water (ft btoc):	4.78
PID Beneath PVC Cap (ppm)	NA	Screened/Open Interval (ft btoc):	5-15
Pump Used:	QED 1.75" Bladder	Depth of Pump (ft btoc):	~10

POST-PURGE INFO:

Color:	Clear	Mn/MnO4 (mg/L):	NA
Volume Purged (gal):	~1.5	Sample ID:	MW-13
Final Depth to Water (ft btoc):	5.47	Sample Time:	12:14

WELL PURGE DATA:

[illegible]



Project Name:	Dover-Binghamton	Project #:	5101.0003	Page: _1_ of _1_
Monitoring Well:	MW-14	Date:	9/20/2014	
Field Personnel:	SJT	Weather:	Sun and clouds, 60s, windy	

PRE-PURGE INFO:

Well Depth (ft btoc):	14.26	Depth to Water (ft btoc):	1.16
PID Beneath PVC Cap (ppm)	NA	Screened/Open Interval (ft btoc):	5-15
Pump Used:	QED 1.75" Bladder	Depth of Pump (ft btoc):	~10

POST-PURGE INFO:

Color:	Clear	Mn/MnO4 (mg/L):	NA
Volume Purged (gal):	~1.25	Sample ID:	MW-14
Final Depth to Water (ft btoc):	5.62	Sample Time:	14:37

WELL PURGE DATA:

[illegible]

[illegible]

[illegible]



Project Name:	Dover-Binghamton	Project #:	5101.0003	Page: <u>1</u> of <u>1</u>
Monitoring Well:	DMW-3	Date:	9/20/2014	
Field Personnel:	DLC	Weather:	Cloudy, ~65 F	

PRE-PURGE INFO:

Well Depth (ft btoc):	48.12	Depth to Water (ft btoc):	23.03
PID Beneath PVC Cap (ppm)	NA	Screened/Open Interval (ft btoc):	41-48
Pump Used:	QED 1.75" Bladder	Depth of Pump (ft btoc):	~44

POST-PURGE INFO:

Color:	Clear	Mn/MnO4 (mg/L):	NA
Volume Purged (gal):	~1.5	Sample ID:	DMW-3
Final Depth to Water (ft btoc):	32.34	Sample Time:	13:35

WELL PURGE DATA:

[illegible]

Appendix C



April 7, 2014

1565 Jefferson Rd., Bldg 300, Suite 360
Rochester, NY 14623
T: +1 585 288 5380
F: +1 585 288 8475
www.alsglobal.com

Ms. Tammy Yuan
Verina Consulting Group
220 Davidson Avenue
Suite 105
Somerset, NJ 08873

Re: Dover Binghamton 5101.0003
Service Request #R1401882

Dear Ms. Yuan:

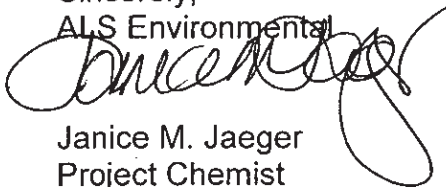
Enclosed is the analytical data report for the above referenced facility. A total of ten samples were received by our laboratory on March 19, 2014.

Any problems encountered with this project are addressed in a case narrative section which is presented later in this report.

This report consists of two (2) packages: the sample data package and the sample data summary package. All data presented in this package has been reviewed prior to report submission. If you should have any questions or concerns, please contact me at (585) 288-5380.

Thank you for your continued use of our services.

Sincerely,
ALS Environmental



Janice M. Jaeger
Project Chemist

enc.

This report contains a total of 20 pages.

CASE NARRATIVE

Client: Verina Consulting
Project: Binghamton
Sample Matrix: Water

Service Request: R1401882
Project Number: 5101.003
Date Received: 03/19/14

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV deliverables. When appropriate to the method, method blank and LCS results have been reported with each analytical test.

Sample Receipt

Samples were collected on 03/17-18/14 and received at ALS Rochester on 03/19/14 at a cooler temperature of 2.5 °C in good condition except as noted on the cooler receipt and preservation check form. Soluble Metals were filtered by Field personnel.

Volatile Organics

Water samples were analyzed for a site list of Volatile Organics by Method 8260C from SW-846.

All Tuning criteria for BFB were within QC limits.

All the initial and continuing calibration criteria were met for all analytes.

All Internal Standard Areas were within QC limits.

The Laboratory Control Sample (LCS) recoveries were all acceptable.

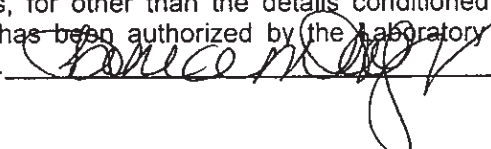
All surrogate standard recoveries were within acceptable limits.

Site specific QC was performed on MW-17 as requested. All Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries and RPD's were acceptable.

The Method Blanks associated with these samples were free of contamination.

All samples were analyzed within recommended holding times.

No other analytical or QC problems were encountered.

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

ALS ASP/CLP Batching Form/Login Sheet

Client Proj #: 5101.0003	Batch Complete: Yes	Date Revised:
Submission: R1401882	Diskette Requested: No	Date Due: 4/9/14
Client: Verina Consulting Group, LLC	Date: 3/19/14	Protocol: SW846
Client Rep: JJAEGGER	Custody Seal: Present/Absent:	Shipping No.:
Project: Dover Binghamton	Chain of Custody: Present/Absent:	SDG #:

CAS Job #	Client/EPA ID	Matrix	Requested Parameters	Date Sampled	Date Received	pH (Solids)	% Solids	Remarks Sample Condition
R1401882-001	TRIP BLANK	Water	8260C	3/17/14	3/19/14			
R1401882-002QC	MW-17	Water	8260C	3/17/14	3/19/14			
R1401882-003	MW-10	Water	8260C	3/17/14	3/19/14			
R1401882-004	MW-9	Water	8260C	3/17/14	3/19/14			
R1401882-005	MW-16	Water	8260C	3/17/14	3/19/14			
R1401882-006	FB-031714	Water	8260C	3/17/14	3/19/14			
R1401882-007	MW-8	Water	8260C	3/17/14	3/19/14			
R1401882-008	DUP-031714	Water	8260C	3/17/14	3/19/14			
R1401882-009	RB-031814	Water	8260C	3/18/14	3/19/14			
R1401882-010	MW-11	Water	8260C	3/18/14	3/19/14			



Folder Comments:

Printed 3/19/14 11:07

CLP Batching Form

REPORT QUALIFIERS AND DEFINITIONS

- | | |
|---|--|
| <p>U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.</p> <p>J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Aroclors).</p> <p>B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.</p> <p>E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.</p> <p>E Organics- Concentration has exceeded the calibration range for that specific analysis.</p> <p>D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.</p> <p>* Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.</p> <p>H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.</p> <p># Spike was diluted out.</p> | <p>+ Correlation coefficient for MSA is <0.995.</p> <p>N Inorganics- Matrix spike recovery was outside laboratory limits.</p> <p>N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.</p> <p>S Concentration has been determined using Method of Standard Additions (MSA).</p> <p>W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.</p> <p>P Concentration >40% (25% for CLP) difference between the two GC columns.</p> <p>C Confirmed by GC/MS</p> <p>Q DoD reports: indicates a pesticide/Aroclor is not confirmed ($\geq 100\%$ Difference between two GC columns).</p> <p>X See Case Narrative for discussion.</p> <p>MRL Method Reporting Limit. Also known as:</p> <p>LOQ Limit of Quantitation (LOQ)
The lowest concentration at which the method analyte may be reliably quantified under the method conditions.</p> <p>MDL Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).</p> <p>LOD Limit of Detection. A value at or above the MDL which has been verified to be detectable.</p> <p>ND Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.</p> |
|---|--|



Rochester Lab ID # for State Certifications¹

NELAP Accredited	Maine ID #NY0032	New Hampshire ID #
Connecticut ID # PH0556	Nebraska Accredited	294100 A/B
Delaware Accredited	Nevada ID # NY-00032	North Carolina #676
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047		Virginia #460167

¹ Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to <http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads>

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM 14396



1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE 1 OF 1

Project Name Dover - Binghamton		Project Number 5101.0003		ANALYSIS REQUESTED (Include Method Number and Container Preservative)															
Project Manager Taming Youth		Report CC		PRESERVATIVE		METALS, TOTAL (List in comments below)										METALS, DISSOLVED (List in comments below)		PRESERVATIVE KEY	
Company/Address Verian Consulting Group 220 Davidson Ave, Suite 105 Somerset, NY 08873		Email TYUAN@VCG-LLC.COM		NUMBER OF CONTAINERS		GC/MS SVOCs 8260 & 824 • CLP		GC/MS SVOCs 8270 & 825		GC/MS SVOCs 8021 & 801/802		PESTICIDES 8081 & 808		PCBS 8082 & 808		METALS, DISSOLVED (List in comments below)		PRESERVATIVE KEY	
Sample/Signature Michael Fradkin, Kevla Solik		Sampler's Printed Name Michael Fradkin, Kevla Solik		DATE		SAMPLING TIME		MATRIX		FOR OFFICE USE ONLY LAB ID		CLIENT SAMPLE ID		REMARKS/ALTERNATE DESCRIPTION		PRESERVATIVE KEY			
Strip Blank				03/10/14		11:30		TB										0. NONE	
MW-17 (MS&MSD)		X		03/17/14		13:35		GW										1. HCL	
MW-10				03/17/14		13:50		GW										2. HNO3	
MW-9				03/17/14		15:15		GW										3. H2SO4	
MW-16		X		03/17/14		15:40		GW										4. NaOH	
FB-031714				03/17/14		16:15		FB										5. Zn, Acetate	
MW-8		X		03/17/14		16:30		GW										6. MeOH	
DUP-031714				03/17/14		-		GW										7. NaHSO4	
FB-031814				03/18/14		10:00		FB										8. Other Solvent	
MW-11		X		03/18/14		10:50		GW										Two Solvents	
																		Field Blank	
																		Duplicate Sample	
																		Field Blank	

SPECIAL INSTRUCTIONS/COMMENTS
Metals: SSRL VOC's: PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, 1,1-DCE, 1,1-DCA, 1,1,1-TCA, and VC
* Call if you have any questions

TURNAROUND REQUIREMENTS RUSH (SURCHARGES APPLY) 1 day / 2 day / 3 day 4 day / 5 day		REPORT REQUIREMENTS I. Results Only II. Results + QC Summaries (LCS, DUP, MS/MSD as required) III. Results + QC and Calibration Summaries IV. Data Validation Report with Raw Data		INVOICE INFORMATION PO # BILL TO:	
REQUESTED REPORT DATE Standard		Edata ☒ Yes ☐ No RELINQUISHED BY		RECEIVED BY R1401882	

STATE WHERE SAMPLES WERE COLLECTED RELINQUISHED BY		RECEIVED BY	
Signature Michael Fradkin	Signature Taming Youth	Signature Taming Youth	Signature Taming Youth
Printed Name Michael Fradkin	Printed Name Taming Youth	Printed Name Taming Youth	Printed Name Taming Youth
Firm Verian	Firm Verian	Firm Verian	Firm Verian
Date/Time 03/18/14 12:00	Date/Time 03/18/14 09:30	Date/Time 03/18/14 09:30	Date/Time 03/18/14 09:30

R1401882
Verian Consulting Group, LLC
Dover Binghamton

5

© 2012 by ALS Group



Cooler Receipt and Preservation Check Form

Project/Client Vermon Folder Number R1401862

Cooler received on 3/19/14 by: AD COURIER: ALS UPS FEDEX VELOCITY CLIENT

1. Were custody seals on outside of cooler? YES NO
2. Were custody papers properly filled out (ink, signed, etc.)? YES NO
3. Did all bottles arrive in good condition (unbroken)? YES NO
4. Did VOA vials, Alkalinity, or Sulfide have significant* air bubbles? YES NO N/A
5. Were Ice or Ice packs present? YES NO
6. Where did the bottles originate? ALS/ROC, CLIENT
7. Soil VOA samples received as: Bulk Jar Encore TerraCore Lab5035set N/A
8. Temperature of cooler(s) upon receipt: 2.5°

Is the temperature within 0° - 6° C?: Y N Y N Y N Y N Y N

If No, Explain Below Date/Time Temperatures Taken: 3/19/14 0949

Thermometer ID: IR GUN#3 / IR GUN#4 Reading From: Temp Blank / Sample Bottle

If out of Temperature, note packing/ice condition & Client Approval to Run Samples:

All Samples held in storage location R-002 by AD on 3/19/14 at 0950
 5035 samples placed in storage location by on at

PC Secondary Review: 3/19/14

Cooler Breakdown: Date: 3/19/14 Time: 1258 by: dm

1. Were all bottle labels complete (i.e. analysis, preservation, etc.)? YES NO
2. Did all bottle labels and tags agree with custody papers? YES NO
3. Were correct containers used for the tests indicated? YES NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated N/A

Explain any discrepancies:

pH	Reagent	YES	NO	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH	Yes = All samples OK
≥12	NaOH									
≤2	HNO ₃									
≤2	H ₂ SO ₄									
<4	NaHSO ₄									
Residual Chlorine (-)	For TCN Phenol and 522			If present, contact PM to add ascorbic acid Or sodium sulfite (522)						No = Samples were preserved at lab as listed PM OK to Adjust:
	Na ₂ S ₂ O ₃	-	-							
	Zn Aceta	-	-							
	HCl	*	*	<u>4117128</u>	<u>2/15</u>					

*Not to be tested before analysis – pH tested and recorded by VOAs or GenChem on a separate worksheet

Bottle lot numbers: 4-002-003, 2-143-002

Other Comments:

PC Secondary Review: JMS 4/2/14

*significant air bubbles: VOA > 5-6 mm : WC > 1 in. diameter

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1401882
Date Collected: 3/17/14 1335
Date Received: 3/19/14
Date Analyzed: 3/20/14 11:35

Sample Name: TRIP BLANK
Lab Code: R1401882-001

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA6\DATA\032014\L3727.D\

Analysis Lot: 384553
Instrument Name: R-MS-06
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0 U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	5.0 U	5.0	0.22	
75-01-4	Vinyl Chloride	5.0 U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	5.0 U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0 U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85-122	3/20/14 11:35	
Dibromofluoromethane	100	89-119	3/20/14 11:35	
Toluene-d8	100	87-121	3/20/14 11:35	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1401882
Date Collected: 3/17/14 1335
Date Received: 3/19/14
Date Analyzed: 3/20/14 13:21

Sample Name: MW-17
Lab Code: R1401882-002

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA6\DATA\032014\L3730.D\

Analysis Lot: 384553
Instrument Name: R-MS-06
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	1.1 J	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	8.7	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0 U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	3.3 J	5.0	0.22	
75-01-4	Vinyl Chloride	5.0 U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	18	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	1.0 J	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	85-122	3/20/14 13:21	
Dibromofluoromethane	98	89-119	3/20/14 13:21	
Toluene-d8	100	87-121	3/20/14 13:21	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
 Project: Dover Binghamton/5101.0003
 Sample Matrix: Water

Service Request: R1401882
 Date Collected: 3/17/14 1350
 Date Received: 3/19/14
 Date Analyzed: 3/20/14 13:51

Sample Name: MW-10
 Lab Code: R1401882-003

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: I:\ACQU\DATA\MSVOA6\DATA\032014\L3731.D\

Analysis Lot: 384553
 Instrument Name: R-MS-06
 Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	1.0 J	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	0.82 J	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	0.63 J	5.0	0.30	
79-01-6	Trichloroethene (TCE)	7.3	5.0	0.22	
75-01-4	Vinyl Chloride	5.0 U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	3.4 J	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0 U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85-122	3/20/14 13:51	
Dibromofluoromethane	98	89-119	3/20/14 13:51	
Toluene-d8	100	87-121	3/20/14 13:51	

Analytical Report

Client: Verina Consulting Group, LLC
 Project: Dover Binghamton/5101.0003
 Sample Matrix: Water

Service Request: R1401882
 Date Collected: 3/17/14 1515
 Date Received: 3/19/14
 Date Analyzed: 3/20/14 14:20

Sample Name: MW-9
 Lab Code: R1401882-004

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: I:\ACQU\DATA\MSVOA6\DATA\032014\L3732.D\

Analysis Lot: 384553
 Instrument Name: R-MS-06
 Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0 U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	14	5.0	0.22	
75-01-4	Vinyl Chloride	5.0 U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	0.41 J	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0 U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85-122	3/20/14 14:20	
Dibromofluoromethane	98	89-119	3/20/14 14:20	
Toluene-d8	101	87-121	3/20/14 14:20	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1401882
Date Collected: 3/17/14 1540
Date Received: 3/19/14
Date Analyzed: 3/20/14 14:49

Sample Name: MW-16
Lab Code: R1401882-005

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA6\DATA\032014\L3733.D\

Analysis Lot: 384553
Instrument Name: R-MS-06
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	2.1 J	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	10	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0 U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	10	5.0	0.22	
75-01-4	Vinyl Chloride	14	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	49	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	1.4 J	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85-122	3/20/14 14:49	
Dibromofluoromethane	99	89-119	3/20/14 14:49	
Toluene-d8	100	87-121	3/20/14 14:49	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1401882
Date Collected: 3/17/14 1615
Date Received: 3/19/14
Date Analyzed: 3/20/14 12:06

Sample Name: FB-031714
Lab Code: R1401882-006

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA6\DATA\032014\L3728.D\

Analysis Lot: 384553
Instrument Name: R-MS-06
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0 U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	5.0 U	5.0	0.22	
75-01-4	Vinyl Chloride	5.0 U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	5.0 U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0 U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	85-122	3/20/14 12:06	
Dibromofluoromethane	97	89-119	3/20/14 12:06	
Toluene-d8	99	87-121	3/20/14 12:06	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1401882
Date Collected: 3/17/14 1630
Date Received: 3/19/14
Date Analyzed: 3/20/14 15:19

Sample Name: MW-8
Lab Code: R1401882-007

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA6\DATA\032014\3734.D\

Analysis Lot: 384553
Instrument Name: R-MS-06
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	0.72 J	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	1.3 J	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0 U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	12	5.0	0.22	
75-01-4	Vinyl Chloride	5.0 U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	0.85 J	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0 U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85-122	3/20/14 15:19	
Dibromofluoromethane	96	89-119	3/20/14 15:19	
Toluene-d8	98	87-121	3/20/14 15:19	

Analytical Report

Client: Verina Consulting Group, LLC
 Project: Dover Binghamton/5101.0003
 Sample Matrix: Water

Service Request: R1401882
 Date Collected: 3/17/14
 Date Received: 3/19/14
 Date Analyzed: 3/20/14 15:48

Sample Name: DUP-031714
 Lab Code: R1401882-008

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: I:\ACQUDATA\MSVOA6\DATA\032014\L3735.D\

Analysis Lot: 384553
 Instrument Name: R-MS-06
 Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	0.88 J	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	0.82 J	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	0.62 J	5.0	0.30	
79-01-6	Trichloroethene (TCE)	7.5	5.0	0.22	
75-01-4	Vinyl Chloride	5.0 U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	3.6 J	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0 U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	85-122	3/20/14 15:48	
Dibromofluoromethane	100	89-119	3/20/14 15:48	
Toluene-d8	100	87-121	3/20/14 15:48	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1401882
Date Collected: 3/18/14 1000
Date Received: 3/19/14
Date Analyzed: 3/20/14 12:37

Sample Name: FB-031814
Lab Code: R1401882-009

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA6\DATA\032014\L3729.D\

Analysis Lot: 384553
Instrument Name: R-MS-06
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	5.0	U	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	5.0	U	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0	U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	5.0	U	5.0	0.22	
75-01-4	Vinyl Chloride	5.0	U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85-122	3/20/14 12:37	
Dibromofluoromethane	99	89-119	3/20/14 12:37	
Toluene-d8	100	87-121	3/20/14 12:37	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1401882
Date Collected: 3/18/14 1050
Date Received: 3/19/14
Date Analyzed: 3/20/14 16:47

Sample Name: MW-11
Lab Code: R1401882-010

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C
Data File Name: I:\ACQU\DATA\MSVOA6\DATA\032014\L3737.D\

Analysis Lot: 384553
Instrument Name: R-MS-06
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	5.0	U	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	5.0	U	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0	U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	5.0	U	5.0	0.22	
75-01-4	Vinyl Chloride	5.0	U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85-122	3/20/14 16:47	
Dibromofluoromethane	101	89-119	3/20/14 16:47	
Toluene-d8	99	87-121	3/20/14 16:47	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1401882
Date Collected: NA
Date Received: NA
Date Analyzed: 3/20/14 10:56

Sample Name: Method Blank
Lab Code: RQ1402642-04

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA6\DATA\032014\L3726.D\

Analysis Lot: 384553
Instrument Name: R-MS-06
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0 U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	5.0 U	5.0	0.22	
75-01-4	Vinyl Chloride	5.0 U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	5.0 U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0 U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	85-122	3/20/14 10:56	
Dibromofluoromethane	97	89-119	3/20/14 10:56	
Toluene-d8	98	87-121	3/20/14 10:56	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1401882
Date Collected: 3/17/14
Date Received: 3/19/14
Date Analyzed: 3/20/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS, Unpreserved

Sample Name: MW-17
Lab Code: R1401882-002
Analytical Method: 8260C

Units: µg/L
Basis: NA

Analyte Name	Sample Result	MW-17MS Matrix Spike RQ1402642-05			MW-17DMS Duplicate Matrix Spike RQ1402642-06			% Rec Limits	RPD	RPD Limit
		Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
1,1,1-Trichloroethane (TCA)	1.1	55.7	50.0	109	53.2	50.0	104	74 - 127	5	30
1,1-Dichloroethane (1,1-DCA)	8.7	63.7	50.0	110	60.2	50.0	103	74 - 132	6	30
1,1-Dichloroethene (1,1-DCE)	ND	59.2	50.0	118	56.7	50.0	113	72 - 125	4	30
Tetrachloroethene (PCE)	ND	53.9	50.0	108	49.4	50.0	99	78 - 130	9	30
Trichloroethene (TCE)	3.3	56.3	50.0	106	56.1	50.0	105	68 - 135	<1	30
Vinyl Chloride	ND	54.2	50.0	108	50.2	50.0	100	72 - 148	8	30
cis-1,2-Dichloroethene	18	71.7	50.0	107	70.0	50.0	104	72 - 133	2	30
trans-1,2-Dichloroethene	1.0	55.7	50.0	109	53.2	50.0	104	77 - 125	5	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1401882
Date Analyzed: 3/20/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C

Units: µg/L

Basis: NA

Analysis Lot: 384553

Lab Control Sample RQ1402642-03				
Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	20.7	20.0	104	67 - 121
1,1-Dichloroethane (1,1-DCA)	21.0	20.0	105	76 - 128
1,1-Dichloroethene (1,1-DCE)	22.7	20.0	114	74 - 135
Tetrachloroethene (PCE)	20.6	20.0	103	71 - 127
Trichloroethene (TCE)	20.3	20.0	101	75 - 122
Vinyl Chloride	20.9	20.0	105	68 - 139
cis-1,2-Dichloroethene	20.0	20.0	100	77 - 123
trans-1,2-Dichloroethene	20.5	20.0	102	72 - 120

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1401882
Date Analyzed: 3/20/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L

Basis: NA

Analysis Lot: 384553

Lab Control Sample
RQ1402642-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	20.7	20.0	104	67 - 121
1,1-Dichloroethane (1,1-DCA)	21.0	20.0	105	76 - 128
1,1-Dichloroethene (1,1-DCE)	22.7	20.0	114	74 - 135
Tetrachloroethene (PCE)	20.6	20.0	103	71 - 127
Trichloroethene (TCE)	20.3	20.0	101	75 - 122
Vinyl Chloride	20.9	20.0	105	68 - 139
cis-1,2-Dichloroethene	20.0	20.0	100	77 - 123
trans-1,2-Dichloroethene	20.5	20.0	102	72 - 120

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.



April 7, 2014

1565 Jefferson Rd., Bldg 300, Suite 360
Rochester, NY 14623
T: +1 585 288 5380
F: +1 585 288 8475
www.alsglobal.com

Ms. Tammy Yuan
Verina Consulting Group
220 Davidson Avenue
Suite 105
Somerset, NJ 08873

Re: Dover Binghamton 5101.0003
Service Request #R1401882

Dear Ms. Yuan:

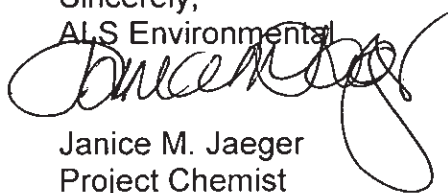
Enclosed is the analytical data report for the above referenced facility. A total of ten samples were received by our laboratory on March 19, 2014.

Any problems encountered with this project are addressed in a case narrative section which is presented later in this report.

This report consists of two (2) packages: the sample data package and the sample data summary package. All data presented in this package has been reviewed prior to report submission. If you should have any questions or concerns, please contact me at (585) 288-5380.

Thank you for your continued use of our services.

Sincerely,
ALS Environmental



Janice M. Jaeger
Project Chemist

enc.

This report contains a total of 279 pages.



SDG NARRATIVE

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

CASE NARRATIVE

Client: Verina Consulting
Project: Binghamton
Sample Matrix: Water

Service Request: R1401882
Project Number: 5101.003
Date Received: 03/19/14

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV deliverables. When appropriate to the method, method blank and LCS results have been reported with each analytical test.

Sample Receipt

Samples were collected on 03/17-18/14 and received at ALS Rochester on 03/19/14 at a cooler temperature of 2.5 °C in good condition except as noted on the cooler receipt and preservation check form. Soluble Metals were filtered by Field personnel.

Volatile Organics

Water samples were analyzed for a site list of Volatile Organics by Method 8260C from SW-846.

All Tuning criteria for BFB were within QC limits.

All the initial and continuing calibration criteria were met for all analytes.

All Internal Standard Areas were within QC limits.

The Laboratory Control Sample (LCS) recoveries were all acceptable.

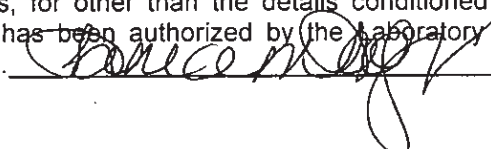
All surrogate standard recoveries were within acceptable limits.

Site specific QC was performed on MW-17 as requested. All Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries and RPD's were acceptable.

The Method Blanks associated with these samples were free of contamination.

All samples were analyzed within recommended holding times.

No other analytical or QC problems were encountered.

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

ALS ASP/CLP Batching Form/Login Sheet

Client Proj #: 5101.0003	Batch Complete: Yes	Date Revised:
Submission: R1401882	Diskette Requested: No	Date Due: 4/9/14
Client: Verina Consulting Group, LLC	Date: 3/19/14	Protocol: SW846
Client Rep: JJAEGGER	Custody Seal: Present/Absent:	Shipping No.:
Project: Dover Binghamton	Chain of Custody: Present/Absent:	SDG #:

CAS Job #	Client/EPA ID	Matrix	Requested Parameters	Date Sampled	Date Received	pH (Solids)	% Solids	Remarks Sample Condition
R1401882-001	TRIP BLANK	Water	8260C	3/17/14	3/19/14			
R1401882-002QC	MW-17	Water	8260C	3/17/14	3/19/14			
R1401882-003	MW-10	Water	8260C	3/17/14	3/19/14			
R1401882-004	MW-9	Water	8260C	3/17/14	3/19/14			
R1401882-005	MW-16	Water	8260C	3/17/14	3/19/14			
R1401882-006	FB-031714	Water	8260C	3/17/14	3/19/14			
R1401882-007	MW-8	Water	8260C	3/17/14	3/19/14			
R1401882-008	DUP-031714	Water	8260C	3/17/14	3/19/14			
R1401882-009	RB-031814	Water	8260C	3/18/14	3/19/14			
R1401882-010	MW-11	Water	8260C	3/18/14	3/19/14			

00004

Folder Comments:

Printed 3/19/14 11:07

CLP Batching Form

Page 1



REPORT QUALIFIERS AND DEFINITIONS

- | | |
|---|--|
| <p>U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.</p> <p>J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Aroclors).</p> <p>B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.</p> <p>E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.</p> <p>E Organics- Concentration has exceeded the calibration range for that specific analysis.</p> <p>D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.</p> <p>* Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.</p> <p>H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.</p> <p># Spike was diluted out.</p> | <p>+ Correlation coefficient for MSA is <0.995.</p> <p>N Inorganics- Matrix spike recovery was outside laboratory limits.</p> <p>N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.</p> <p>S Concentration has been determined using Method of Standard Additions (MSA).</p> <p>W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.</p> <p>P Concentration >40% (25% for CLP) difference between the two GC columns.</p> <p>C Confirmed by GC/MS</p> <p>Q DoD reports: indicates a pesticide/Aroclor is not confirmed ($\geq 100\%$ Difference between two GC columns).</p> <p>X See Case Narrative for discussion.</p> <p>MRL Method Reporting Limit. Also known as:</p> <p>LOQ Limit of Quantitation (LOQ)
The lowest concentration at which the method analyte may be reliably quantified under the method conditions.</p> <p>MDL Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).</p> <p>LOD Limit of Detection. A value at or above the MDL which has been verified to be detectable.</p> <p>ND Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.</p> |
|---|--|



Rochester Lab ID # for State Certifications¹

NELAP Accredited	Maine ID #NY0032	New Hampshire ID #
Connecticut ID # PH0556	Nebraska Accredited	294100 A/B
Delaware Accredited	Nevada ID # NY-00032	North Carolina #676
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047		Virginia #460167

¹ Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to <http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads>



CHAINS OF CUSTODY

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

[illegible]



Cooler Receipt and Preservation Check Form

Project/Client Verina Folder Number R1401862

Cooler received on 3/19/14 by: AL **COURIER:** ALS UPS FEDEX VELOCITY CLIENT

1. Were custody seals on outside of cooler? YES NO
2. Were custody papers properly filled out (ink, signed, etc.)? YES NO
3. Did all bottles arrive in good condition (unbroken)? YES NO
4. Did VOA vials, Alkalinity, or Sulfide have significant* air bubbles? YES NO N/A
5. Were Ice or Ice packs present? YES NO
6. Where did the bottles originate? ALS/ROC, CLIENT
7. Soil VOA samples received as: Bulk Jar Encore TerraCore Lab5035set N/A
8. Temperature of cooler(s) upon receipt: 2.5°

Is the temperature within 0° - 6° C?: Y N Y N Y N Y N Y N

If No, Explain Below Date/Time Temperatures Taken: 3/19/14 0949

Thermometer ID: IR GUN#3 / IR GUN#4 Reading From: Temp Blank Sample Bottle

If out of Temperature, note packing/ice condition & Client Approval to Run Samples:

All Samples held in storage location R-002 by AL on 3/19/14 at 0950
 5035 samples placed in storage location _____ by _____ on _____ at _____

PC Secondary Review: ALB 3/19/14

Cooler Breakdown: Date: 3/19/14 Time: 1258 by: AL

1. Were all bottle labels complete (i.e. analysis, preservation, etc.)? YES NO
2. Did all bottle labels and tags agree with custody papers? YES NO
3. Were correct containers used for the tests indicated? YES NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated N/A

Explain any discrepancies:

pH	Reagent	YES	NO	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO ₃								
≤2	H ₂ SO ₄								
<4	NaHSO ₄								
Residual Chlorine (-)	For TCN Phenol and 522			If present, contact PM to add ascorbic acid Or sodium sulfite (522)					
	Na ₂ S ₂ O ₃	-	-						
	Zn Aceta	-	-						
	HCl	*	*	4112120	2/15				

Yes = All samples OK

No = Samples were preserved at lab as listed

PM OK to Adjust:

*Not to be tested before analysis – pH tested and recorded by VOAs or GenChem on a separate worksheet

Bottle lot numbers: 4-002-003, 2-143-002

Other Comments:

PC Secondary Review: ALB 4/2/14

*significant air bubbles: VOA > 5-6 mm : WC > 1 in. diameter

ALS ENVIRONMENTAL

Chain of Custody Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003

Service Request: R1401882

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1401882-001.01		3/19/14	1314	SMO / GLAFORCE	
		3/19/14	1314	R-001 / GLAFORCE	
R1401882-001.02		3/19/14	1314	SMO / GLAFORCE	
		3/19/14	1314	R-001 / GLAFORCE	
R1401882-001.03	8260C	3/19/14	1314	SMO / GLAFORCE	
		3/19/14	1314	R-001 / GLAFORCE	
		3/20/14	1116	In Lab / DLIPANI	
		3/20/14	2002	R-001-S11 / DLIPANI	
R1401882-002.01	8260C	3/19/14	1314	SMO / GLAFORCE	
		3/19/14	1314	R-001 / GLAFORCE	
		3/20/14	1116	In Lab / DLIPANI	
		3/20/14	2002	R-001-S11 / DLIPANI	
R1401882-002.02		3/19/14	1314	SMO / GLAFORCE	
		3/19/14	1314	R-001 / GLAFORCE	
R1401882-002.03		3/19/14	1314	SMO / GLAFORCE	
		3/19/14	1314	R-001 / GLAFORCE	
R1401882-002.04		3/19/14	1314	SMO / GLAFORCE	
R1401882-002.05		3/19/14	1314	SMO / GLAFORCE	
R1401882-002.06		3/19/14	1314	SMO / GLAFORCE	
R1401882-002.07		3/19/14	1314	SMO / GLAFORCE	
R1401882-002.08		3/19/14	1314	SMO / GLAFORCE	
R1401882-002.09		3/19/14	1314	SMO / GLAFORCE	
R1401882-003.01	8260C	3/19/14	1314	SMO / GLAFORCE	



ALS ENVIRONMENTAL

Chain of Custody Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003

Service Request: R1401882

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
		3/19/14	1314	R-001 / GLAFORCE	
		3/20/14	1116	In Lab / DLIPANI	
		3/20/14	2002	R-001-S11 / DLIPANI	
R1401882-003.02		3/19/14	1314	SMO / GLAFORCE	
		3/19/14	1314	R-001 / GLAFORCE	
R1401882-003.03		3/19/14	1314	SMO / GLAFORCE	
		3/19/14	1314	R-001 / GLAFORCE	
R1401882-004.01	8260C	3/19/14	1314	SMO / GLAFORCE	
		3/19/14	1314	R-001 / GLAFORCE	
		3/20/14	1116	In Lab / DLIPANI	
		3/20/14	2001	R-001-S11 / DLIPANI	
R1401882-004.02		3/19/14	1314	SMO / GLAFORCE	
		3/19/14	1314	R-001 / GLAFORCE	
R1401882-004.03		3/19/14	1314	SMO / GLAFORCE	
		3/19/14	1314	R-001 / GLAFORCE	
R1401882-005.01		3/19/14	1314	SMO / GLAFORCE	
		3/19/14	1314	R-001 / GLAFORCE	
R1401882-005.02		3/19/14	1314	SMO / GLAFORCE	
		3/19/14	1314	R-001 / GLAFORCE	
R1401882-005.03	8260C	3/19/14	1314	SMO / GLAFORCE	
		3/19/14	1314	R-001 / GLAFORCE	
		3/20/14	1116	In Lab / DLIPANI	
		3/20/14	2002	R-001-S11 / DLIPANI	
R1401882-006.01		3/19/14	1314	SMO / GLAFORCE	
		3/19/14	1314	R-001 / GLAFORCE	
R1401882-006.02		3/19/14	1314	SMO / GLAFORCE	
		3/19/14	1314	R-001 / GLAFORCE	
R1401882-006.03					

00010

ALS ENVIRONMENTAL

Chain of Custody Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003

Service Request: R1401882

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
	8260C	3/19/14	1314	SMO / GLAFORCE	
		3/19/14	1314	R-001 / GLAFORCE	
		3/20/14	1116	In Lab / DLIPANI	
		3/20/14	2002	R-001-S11 / DLIPANI	
R1401882-007.01		3/19/14	1314	SMO / GLAFORCE	
		3/19/14	1314	R-001 / GLAFORCE	
R1401882-007.02		3/19/14	1314	SMO / GLAFORCE	
		3/19/14	1314	R-001 / GLAFORCE	
R1401882-007.03	8260C	3/19/14	1314	SMO / GLAFORCE	
		3/19/14	1314	R-001 / GLAFORCE	
		3/20/14	1116	In Lab / DLIPANI	
		3/20/14	2002	R-001-S11 / DLIPANI	
R1401882-008.01		3/19/14	1314	SMO / GLAFORCE	
		3/19/14	1314	R-001 / GLAFORCE	
R1401882-008.02		3/19/14	1314	SMO / GLAFORCE	
		3/19/14	1314	R-001 / GLAFORCE	
R1401882-008.03	8260C	3/19/14	1314	SMO / GLAFORCE	
		3/19/14	1314	R-001 / GLAFORCE	
		3/20/14	1116	In Lab / DLIPANI	
		3/20/14	2002	R-001-S11 / DLIPANI	
R1401882-009.01	8260C	3/19/14	1314	SMO / GLAFORCE	
		3/19/14	1314	R-001 / GLAFORCE	
		3/20/14	1116	In Lab / DLIPANI	
		3/20/14	2002	R-001-S11 / DLIPANI	
R1401882-009.02		3/19/14	1314	SMO / GLAFORCE	
		3/19/14	1314	R-001 / GLAFORCE	
R1401882-009.03		3/19/14	1314	SMO / GLAFORCE	
		3/19/14	1314	R-001 / GLAFORCE	

00011

ALS ENVIRONMENTAL**Chain of Custody Report**

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003

Service Request: R1401882

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1401882-010.01	8260C	3/19/14	1314	SMO / GLAFORCE	
		3/19/14	1314	R-001 / GLAFORCE	
		3/20/14	1116	In Lab / DLIPANI	
		3/20/14	2002	R-001-S11 / DLIPANI	
R1401882-010.02		3/19/14	1314	SMO / GLAFORCE	
		3/19/14	1314	R-001 / GLAFORCE	
R1401882-010.03		3/19/14	1314	SMO / GLAFORCE	
		3/19/14	1314	R-001 / GLAFORCE	



VOLATILE ORGANICS QC SUMMARY

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1401882
Date Collected: 3/17/14
Date Received: 3/19/14
Date Analyzed: 3/20/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS, Unpreserved

Sample Name: MW-17
Lab Code: R1401882-002
Analytical Method: 8260C

Units: µg/L
Basis: NA

Analyte Name	Sample Result	MW-17MS Matrix Spike RQ1402642-05			MW-17DMS Duplicate Matrix Spike RQ1402642-06			% Rec Limits	RPD	
		Result	Spike Amount	% Rec	Result	Spike Amount	% Rec		RPD	Limit
1,1,1-Trichloroethane (TCA)	1.1	55.7	50.0	109	53.2	50.0	104	74 - 127	5	30
1,1-Dichloroethane (1,1-DCA)	8.7	63.7	50.0	110	60.2	50.0	103	74 - 132	6	30
1,1-Dichloroethene (1,1-DCE)	ND	59.2	50.0	118	56.7	50.0	113	72 - 125	4	30
Tetrachloroethene (PCE)	ND	53.9	50.0	108	49.4	50.0	99	78 - 130	9	30
Trichloroethene (TCE)	3.3	56.3	50.0	106	56.1	50.0	105	68 - 135	<1	30
Vinyl Chloride	ND	54.2	50.0	108	50.2	50.0	100	72 - 148	8	30
cis-1,2-Dichloroethene	18	71.7	50.0	107	70.0	50.0	104	72 - 133	2	30
trans-1,2-Dichloroethene	1.0	55.7	50.0	109	53.2	50.0	104	77 - 125	5	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1401882
Date Analyzed: 3/20/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 384553

Lab Control Sample RQ1402642-03				
Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	20.7	20.0	104	67 - 121
1,1-Dichloroethane (1,1-DCA)	21.0	20.0	105	76 - 128
1,1-Dichloroethene (1,1-DCE)	22.7	20.0	114	74 - 135
Tetrachloroethene (PCE)	20.6	20.0	103	71 - 127
Trichloroethene (TCE)	20.3	20.0	101	75 - 122
Vinyl Chloride	20.9	20.0	105	68 - 139
cis-1,2-Dichloroethene	20.0	20.0	100	77 - 123
trans-1,2-Dichloroethene	20.5	20.0	102	72 - 120

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1401882
Date Analyzed: 3/20/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 384553

Lab Control Sample
RQ1402642-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	20.7	20.0	104	67 - 121
1,1-Dichloroethane (1,1-DCA)	21.0	20.0	105	76 - 128
1,1-Dichloroethene (1,1-DCE)	22.7	20.0	114	74 - 135
Tetrachloroethene (PCE)	20.6	20.0	103	71 - 127
Trichloroethene (TCE)	20.3	20.0	101	75 - 122
Vinyl Chloride	20.9	20.0	105	68 - 139
cis-1,2-Dichloroethene	20.0	20.0	100	77 - 123
trans-1,2-Dichloroethene	20.5	20.0	102	72 - 120

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1401882
Date Analyzed: 3/20/14 10:56

**Method Blank Summary
Volatile Organic Compounds by GC/MS**

Sample Name: Method Blank **Instrument ID:** R-MS-06
Lab Code: RQ1402642-04 **File ID:** I:\ACQUDATA\MSVOA6\DATA\032014\L3726.D\
Analytical Method: 8260C

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1402642-03	I:\ACQUDATA\MSVOA6\DATA\032014\L3724.D\	3/20/14 09:48
TRIP BLANK	R1401882-001	I:\ACQUDATA\MSVOA6\DATA\032014\L3727.D\	3/20/14 11:35
FB-031714	R1401882-006	I:\ACQUDATA\MSVOA6\DATA\032014\L3728.D\	3/20/14 12:06
FB-031814	R1401882-009	I:\ACQUDATA\MSVOA6\DATA\032014\L3729.D\	3/20/14 12:37
MW-10	R1401882-003	I:\ACQUDATA\MSVOA6\DATA\032014\L3731.D\	3/20/14 13:51
MW-9	R1401882-004	I:\ACQUDATA\MSVOA6\DATA\032014\L3732.D\	3/20/14 14:20
DUP-031714	R1401882-008	I:\ACQUDATA\MSVOA6\DATA\032014\L3735.D\	3/20/14 15:48

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1401882
Date Analyzed: 3/20/14 10:56

Method Blank Summary
Volatile Organic Compounds by GC/MS, Unpreserved

Sample Name: Method Blank **Instrument ID:** R-MS-06
Lab Code: RQ1402642-04 **File ID:** I:\ACQUDATA\MSVOA6\DATA\032014\L3726.D\
Analytical Method: 8260C

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1402642-03	I:\ACQUDATA\MSVOA6\DATA\032014\L3724.D\	3/20/14 09:48
MW-17	R1401882-002	I:\ACQUDATA\MSVOA6\DATA\032014\L3730.D\	3/20/14 13:21
MW-16	R1401882-005	I:\ACQUDATA\MSVOA6\DATA\032014\L3733.D\	3/20/14 14:49
MW-8	R1401882-007	I:\ACQUDATA\MSVOA6\DATA\032014\L3734.D\	3/20/14 15:19
MW-11	R1401882-010	I:\ACQUDATA\MSVOA6\DATA\032014\L3737.D\	3/20/14 16:47
MW-17MS	RQ1402642-05	I:\ACQUDATA\MSVOA6\DATA\032014\L3742.D\	3/20/14 19:13
MW-17DMS	RQ1402642-06	I:\ACQUDATA\MSVOA6\DATA\032014\L3743.D\	3/20/14 19:56

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003

Service Request: R1401882
Date Analyzed: 3/19/14 11:21

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA6\DATA\031914\3686.D\
Instrument ID: R-MS-06

Analytical Method: 8260C
Analysis Lot: 215796

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	19.57	52136	Pass
75	95	30	60	47.11	125477	Pass
95	95	100	100	100.00	266368	Pass
96	95	5	9	6.69	17809	Pass
173	174	0	2	0.00	0	Pass
174	95	50	120	90.60	241323	Pass
175	174	5	9	8.27	19968	Pass
176	174	95	101	98.21	236992	Pass
177	176	5	9	6.70	15875	Pass

Sample Name	Lab Code	File ID	Date Analyzed	Q
Initial CalibrationICAL	0.5 ppb	I:\ACQUDATA\MSVOA6\DATA\031914\3688.D\	3/19/14 12:33	
Initial CalibrationICAL	1.0 ppb	I:\ACQUDATA\MSVOA6\DATA\031914\3689.D\	3/19/14 13:32	
Initial CalibrationICAL	2.0 ppb	I:\ACQUDATA\MSVOA6\DATA\031914\3690.D\	3/19/14 14:02	
Initial CalibrationICAL	5.0 ppb	I:\ACQUDATA\MSVOA6\DATA\031914\3691.D\	3/19/14 14:36	
Initial CalibrationICAL	10 ppb	I:\ACQUDATA\MSVOA6\DATA\031914\3692.D\	3/19/14 15:12	
Initial CalibrationICAL	20 ppb	I:\ACQUDATA\MSVOA6\DATA\031914\3693.D\	3/19/14 15:44	
Initial CalibrationICAL	50 ppb	I:\ACQUDATA\MSVOA6\DATA\031914\3694.D\	3/19/14 16:16	
Initial CalibrationICAL	100 ppb	I:\ACQUDATA\MSVOA6\DATA\031914\3695.D\	3/19/14 16:53	
Initial CalibrationICAL	150 ppb	I:\ACQUDATA\MSVOA6\DATA\031914\3696.D\	3/19/14 17:28	
Initial CalibrationICAL	200 ppb	I:\ACQUDATA\MSVOA6\DATA\031914\3697.D\	3/19/14 17:59	

BFB

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3686.D

Vial: 8

Acq On : 19 Mar 2014 11:21 am

Operator: D.Lipani

Sample : TUNE CHECK

Inst : MS#6

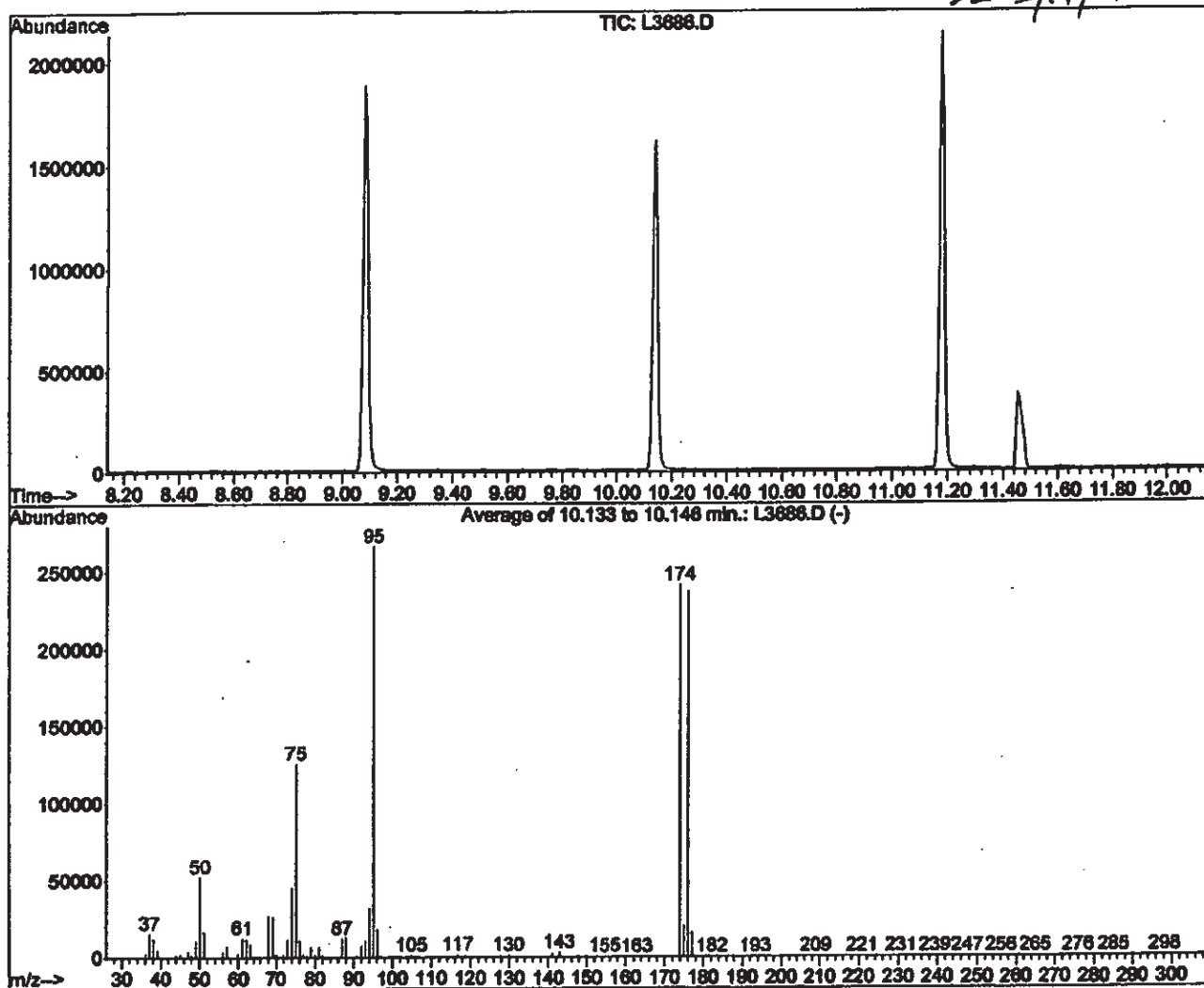
Misc : 8260C

Multiplr: 1.00

MS Integration Params: CPD4.P

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)

Title : 8260C WATERS



AutoFind: Scans 1509, 1510, 1511; Background Corrected with Scan 1501

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.6	52136	PASS
75	95	30	60	47.1	125477	PASS
95	95	100	100	100.0	266368	PASS
96	95	5	9	6.7	17809	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	90.6	241323	PASS
175	174	5	9	8.3	19968	PASS
176	174	95	101	98.2	236992	PASS
177	176	5	9	6.7	15875	PASS

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003

Service Request: R1401882
Date Analyzed: 3/20/14 08:29

**Tune Summary
Volatile Organic Compounds by GC/MS**

File ID: I:\ACQUDATA\MSVOA6\DATA\032014\L3722.D\
Instrument ID: R-MS-06

Analytical Method: 8260C
Analysis Lot: 384553

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	21.52	73032	Pass
75	95	30	60	48.27	163780	Pass
95	95	100	100	100.00	339319	Pass
96	95	5	9	6.99	23720	Pass
173	174	0	2	0.00	0	Pass
174	95	50	120	85.45	289935	Pass
175	174	5	9	8.74	25336	Pass
176	174	95	101	95.60	277184	Pass
177	176	5	9	7.02	19472	Pass

Sample Name	Lab Code	File ID	Date Analyzed	Q
Continuing Calibration Verification	RQ1402642-02	I:\ACQUDATA\MSVOA6\DATA\032014\L3723.D\	3/20/14 09:10	
Lab Control Sample	RQ1402642-03	I:\ACQUDATA\MSVOA6\DATA\032014\L3724.D\	3/20/14 09:48	
Method Blank	RQ1402642-04	I:\ACQUDATA\MSVOA6\DATA\032014\L3726.D\	3/20/14 10:56	
TRIP BLANK	R1401882-001	I:\ACQUDATA\MSVOA6\DATA\032014\L3727.D\	3/20/14 11:35	
FB-031714	R1401882-006	I:\ACQUDATA\MSVOA6\DATA\032014\L3728.D\	3/20/14 12:06	
FB-031814	R1401882-009	I:\ACQUDATA\MSVOA6\DATA\032014\L3729.D\	3/20/14 12:37	
MW-10	R1401882-003	I:\ACQUDATA\MSVOA6\DATA\032014\L3731.D\	3/20/14 13:51	
MW-9	R1401882-004	I:\ACQUDATA\MSVOA6\DATA\032014\L3732.D\	3/20/14 14:20	
DUP-031714	R1401882-008	I:\ACQUDATA\MSVOA6\DATA\032014\L3735.D\	3/20/14 15:48	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003

Service Request: R1401882
Date Analyzed: 3/20/14 08:29

Tune Summary
Volatile Organic Compounds by GC/MS, Unpreserved

File ID: I:\ACQUDATA\MSVOA6\DATA\032014\3722.D\
Instrument ID: R-MS-06

Analytical Method: 8260C
Analysis Lot: 384553

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	21.52	73032	Pass
75	95	30	60	48.27	163780	Pass
95	95	100	100	100.00	339319	Pass
96	95	5	9	6.99	23720	Pass
173	174	0	2	0.00	0	Pass
174	95	50	120	85.45	289935	Pass
175	174	5	9	8.74	25336	Pass
176	174	95	101	95.60	277184	Pass
177	176	5	9	7.02	19472	Pass

Sample Name	Lab Code	File ID	Date Analyzed	Q
Continuing Calibration Verification	RQ1402642-02	I:\ACQUDATA\MSVOA6\DATA\032014\3723.D\	3/20/14 09:10	
Lab Control Sample	RQ1402642-03	I:\ACQUDATA\MSVOA6\DATA\032014\3724.D\	3/20/14 09:48	
Method Blank	RQ1402642-04	I:\ACQUDATA\MSVOA6\DATA\032014\3726.D\	3/20/14 10:56	
MW-17	R1401882-002	I:\ACQUDATA\MSVOA6\DATA\032014\3730.D\	3/20/14 13:21	
MW-16	R1401882-005	I:\ACQUDATA\MSVOA6\DATA\032014\3733.D\	3/20/14 14:49	
MW-8	R1401882-007	I:\ACQUDATA\MSVOA6\DATA\032014\3734.D\	3/20/14 15:19	
MW-11	R1401882-010	I:\ACQUDATA\MSVOA6\DATA\032014\3737.D\	3/20/14 16:47	
MW-17MS	RQ1402642-05	I:\ACQUDATA\MSVOA6\DATA\032014\3742.D\	3/20/14 19:13	
MW-17DMS	RQ1402642-06	I:\ACQUDATA\MSVOA6\DATA\032014\3743.D\	3/20/14 19:56	

Data File : I:\ACQUDATA\MSVOA6\DATA\032014\L3722.D

Vial: 4

Acq On : 20 Mar 2014 8:29 am

Operator: D.Lipani

Sample : TUNE CHECK

Inst : MS#6

Misc : 8260C

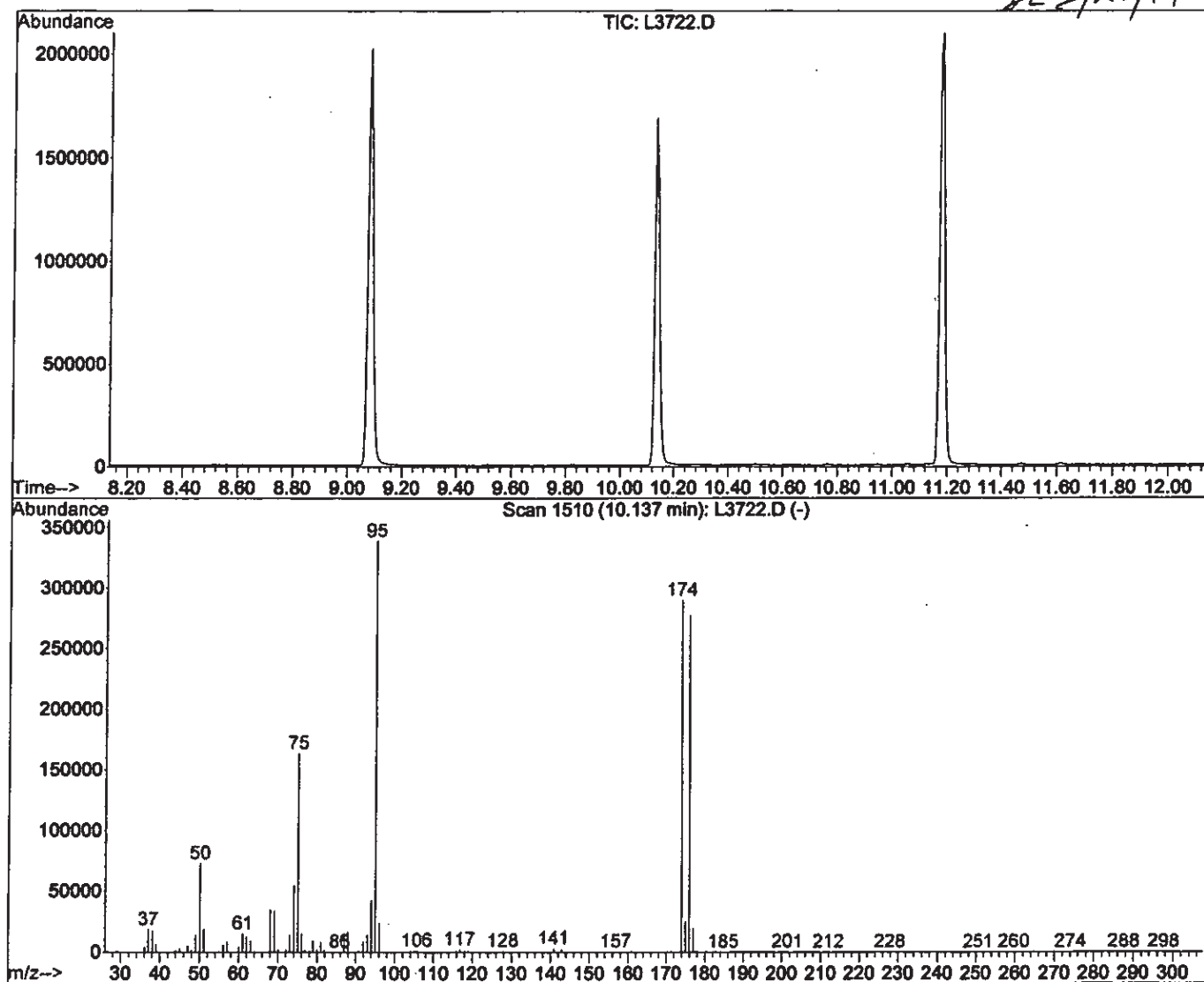
Multiplr: 1.00

MS Integration Params: CPD4.P

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)

Title : 8260C WATERS

DL 3/20/14



Spectrum Information: Scan 1510

Sub Scan = 1505

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.5	73032	PASS
75	95	30	60	48.3	163780	PASS
95	95	100	100	100.0	339319	PASS
96	95	5	9	7.0	23720	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	85.4	289935	PASS
175	174	5	9	8.7	25336	PASS
176	174	95	101	95.6	277184	PASS
177	176	5	9	7.0	19472	PASS

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003

Service Request: R1401882
Date Analyzed: 3/20/14 09:10

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA6\DATA\032014\L3723.D\
Instrument ID: R-MS-06
Analytical Method: 8260C

Lab Code: RQ1402642-02
Analysis Lot: 384553
Signal ID:

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	RT	Area	RT	Area	RT
Results ==>		426,089	11.18	864,375	5.71	819,291	9.08
Upper Limit ==>		852,178	11.68	1,728,750	6.21	1,638,582	9.58
Lower Limit ==>		213,045	10.68	432,188	5.21	409,646	8.58
ICAL Result ==>		438,312	11.18	885,735	5.71	798,889	9.09
Associated Analyses							
Lab Control Sample	RQ1402642-03	446,360	11.18	924,977	5.71	838,657	9.08
Method Blank	RQ1402642-04	434,582	11.18	901,307	5.71	828,472	9.08
TRIP BLANK	R1401882-001	430,356	11.18	898,444	5.71	831,335	9.08
FB-031714	R1401882-006	428,686	11.18	896,477	5.71	833,971	9.09
FB-031814	R1401882-009	441,272	11.18	908,841	5.71	845,321	9.08
MW-10	R1401882-003	447,208	11.18	907,930	5.71	840,853	9.09
MW-9	R1401882-004	440,760	11.18	909,485	5.71	842,886	9.08
DUP-031714	R1401882-008	432,041	11.18	903,394	5.71	841,660	9.09

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003

Service Request: R1401882
Date Analyzed: 3/20/14 09:10

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA6\DATA\032014\L3723.D\
Instrument ID: R-MS-06
Analytical Method: 8260C

Lab Code: RQ1402642-02
Analysis Lot: 384553
Signal ID:

		Pentafluorobenzene	
		<u>Area</u>	<u>RT</u>
Results ==>		599,642	4.40
Upper Limit ==>		1,199,284	4.90
Lower Limit ==>		299,821	3.90
ICAL Result ==>		613,124	4.40
Associated Analyses			
Lab Control Sample	RQ1402642-03	633,361	4.40
Method Blank	RQ1402642-04	609,656	4.40
TRIP BLANK	R1401882-001	612,783	4.40
FB-031714	R1401882-006	611,983	4.40
FB-031814	R1401882-009	612,942	4.40
MW-10	R1401882-003	622,163	4.40
MW-9	R1401882-004	619,294	4.40
DUP-031714	R1401882-008	624,732	4.40

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003

Service Request: R1401882
Date Analyzed: 3/20/14 09:10

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS, Unpreserved

File ID: I:\ACQUDATA\MSVOA6\DATA\032014\L3723.D\
Instrument ID: R-MS-06
Analytical Method: 8260C

Lab Code: RQ1402642-02
Analysis Lot: 384553
Signal ID:

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	RT	Area	RT	Area	RT
Results ==>		426,089	11.18	864,375	5.71	819,291	9.08
Upper Limit ==>		852,178	11.68	1,728,750	6.21	1,638,582	9.58
Lower Limit ==>		213,045	10.68	432,188	5.21	409,646	8.58
ICAL Result ==>		438,312	11.18	885,735	5.71	798,889	9.09
Associated Analyses							
Lab Control Sample	RQ1402642-03	446,360	11.18	924,977	5.71	838,657	9.08
Method Blank	RQ1402642-04	434,582	11.18	901,307	5.71	828,472	9.08
MW-17	R1401882-002	416,053	11.18	875,169	5.71	812,909	9.09
MW-16	R1401882-005	424,562	11.18	871,386	5.71	801,916	9.09
MW-8	R1401882-007	445,584	11.18	909,440	5.71	836,964	9.08
MW-11	R1401882-010	445,597	11.18	897,066	5.71	844,420	9.08
MW-17MS	RQ1402642-05	448,925	11.18	913,968	5.71	820,990	9.09
MW-17DMS	RQ1402642-06	470,532	11.18	929,628	5.71	872,862	9.09

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003

Service Request: R1401882
Date Analyzed: 3/20/14 09:10

Internal Standard Area and RT Summary Volatile Organic Compounds by GC/MS, Unpreserved

File ID: I:\ACQUDATA\MSVOA6\DATA\032014\3723.D\
Instrument ID: R-MS-06
Analytical Method: 8260C

Lab Code: RQ1402642-02
Analysis Lot: 384553
Signal ID:

		Pentafluorobenzene	
		Area	RT
Results ==>		599,642	4.40
Upper Limit ==>		1,199,284	4.90
Lower Limit ==>		299,821	3.90
ICAL Result ==>		613,124	4.40
Associated Analyses			
Lab Control Sample	RQ1402642-03	633,361	4.40
Method Blank	RQ1402642-04	609,656	4.40
MW-17	R1401882-002	587,317	4.40
MW-16	R1401882-005	594,618	4.40
MW-8	R1401882-007	618,776	4.40
MW-11	R1401882-010	612,714	4.40
MW-17MS	RQ1402642-05	607,864	4.40
MW-17DMS	RQ1402642-06	638,971	4.40

Results flagged with an asterisk (*) indicate values outside control criteria.



VOLATILE ORGANICS SAMPLE DATA

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1401882
Date Collected: 3/17/14 1335
Date Received: 3/19/14
Date Analyzed: 3/20/14 11:35

Sample Name: TRIP BLANK
Lab Code: R1401882-001

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA6\DATA\032014\L3727.D\

Analysis Lot: 384553
Instrument Name: R-MS-06
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0 U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	5.0 U	5.0	0.22	
75-01-4	Vinyl Chloride	5.0 U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	5.0 U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0 U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85-122	3/20/14 11:35	
Dibromofluoromethane	100	89-119	3/20/14 11:35	
Toluene-d8	100	87-121	3/20/14 11:35	

Data File : I:\ACQUDATA\MSVOA6\DATA\032014\L3727.D

Vial: 9

Acq On : 20 Mar 2014 11:35 am

Operator: D.Lipani

Sample : R1401882-001|1.0

Inst : MS#6

Misc : Verina 8260C 6646 T4

Multiplr: 1.00

MS Integration Params: CPD4.P

Quant Time: Mar 20 19:22 2014

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)

Title : 8260C WATERS

Last Update : Thu Mar 20 15:48:07 2014

Response via : Initial Calibration

DataAcq Meth : W031914

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.40	168	612783	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.71	114	898444	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.08	117	831335	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.18	152	430356	50.00	ug/L	0.00

System Monitoring Compounds

40) surr4,Dibrlmethane	3.68	113	302487	49.81	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	99.62%
42) surr1,1,2-dichloroethane-d	4.28	65	285580	49.03	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	98.06%
62) SURR3,Toluene-d8	7.77	98	1113647	50.25	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	100.50%
82) SURR2,BFB	10.14	95	405735	46.83	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	93.66%

Target Compounds

					Qvalue
10) Acrolein	1.69	56	243	0.26 ug/L	# 2
13) 2-Propanol	1.80	45	108	0.45 ug/L	71
14) Acetone	1.77	43	1431	0.72 ug/L	# 64
17) Iodomethane	2.00	142	277	1.09 ug/L	84
41) Iso-Butyl Alcohol	3.80	43	105	0.54 ug/L	80
78) Cyclohexanone	9.75	55	369	0.56 ug/L	# 38
100) Nitrobenzene	12.01	77	70	0.29 ug/L	97
101) 1,2,4-Tclbenzene	12.91	180	2453	0.27 ug/L	95 NIS
102) Naphthalen	13.09	128	5671	0.40 ug/L	91
103) Hexachlorobt	13.17	225	1186	0.31 ug/L	89
104) 1,2,3-Tclbenzene	13.24	180	2379	0.34 ug/L	97

(#) = qualifier out of range (m) = manual integration

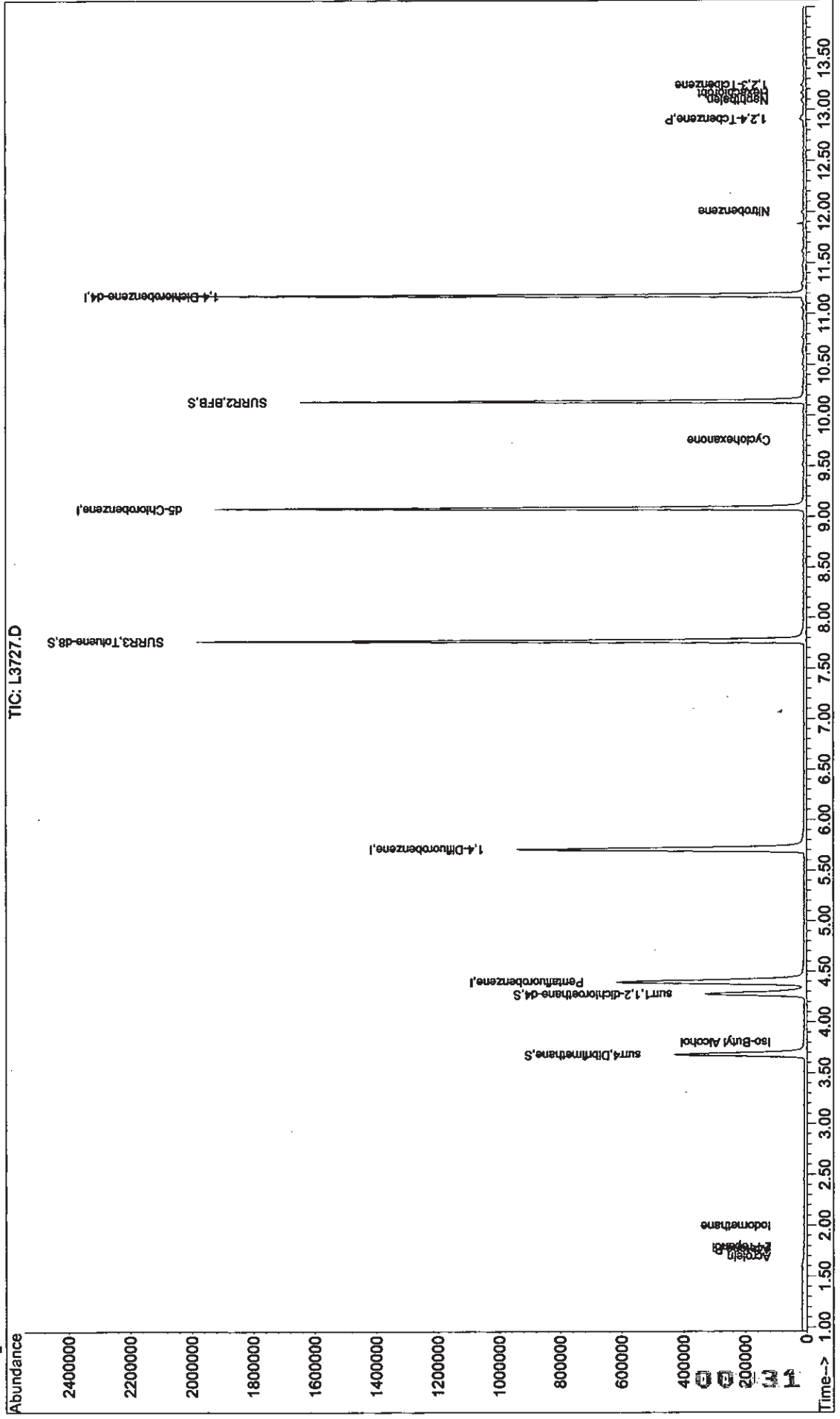
L3727.D W031914.M

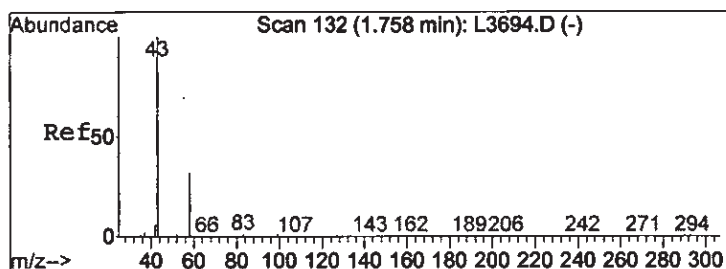
Thu Mar 20 19:14:47 2014

Quantitation Report

Data File : I:\ACQDATA\MSVOA6\DATA\032014\L3727.D Vial: 9
 Acq On : 20 Mar 2014 11:35 am Operator: D.Lipani
 Sample : R1401882-001|1.0 Inst : MS#6
 Misc : Verina 8260C 6646 T4 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 19:22 2014 Quant Results File: W031914.RES

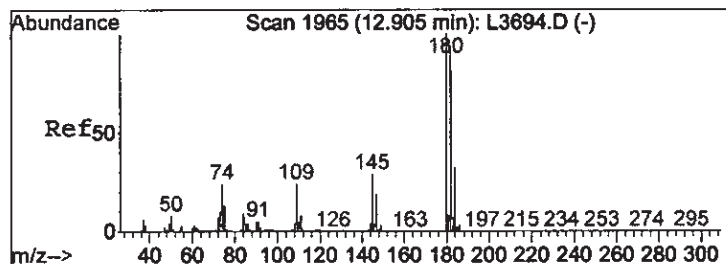
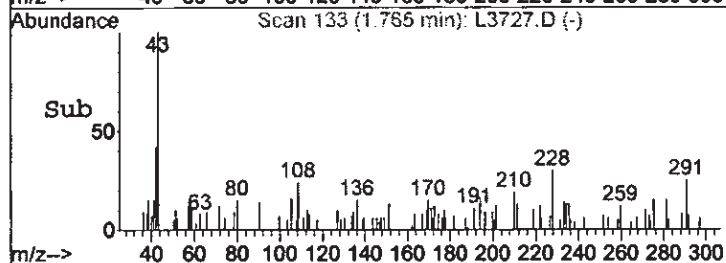
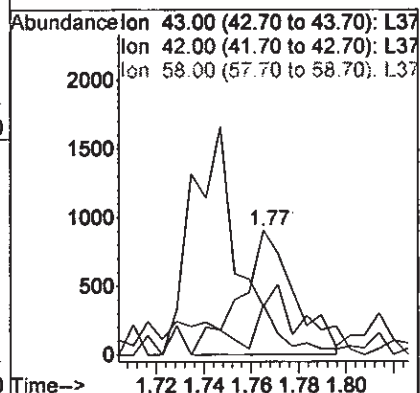
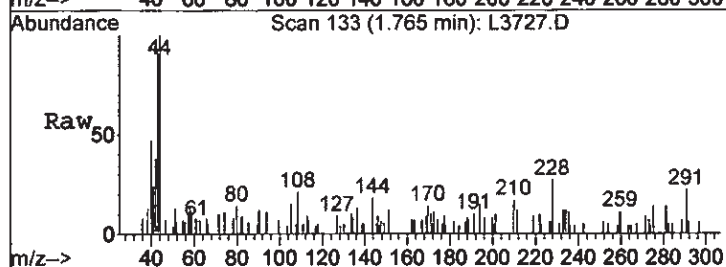
Method : I:\ACQDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 15:48:07 2014
 Response via : Initial Calibration





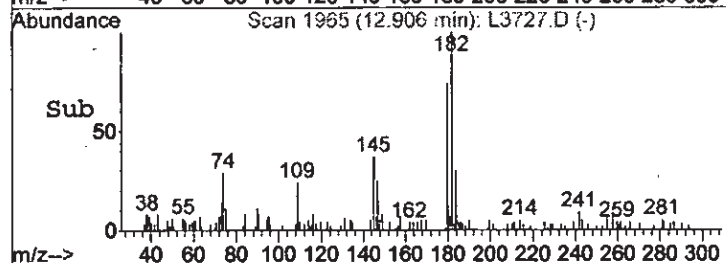
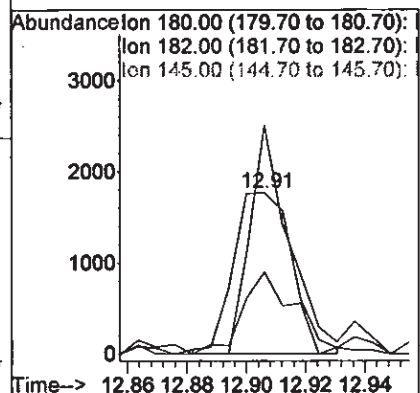
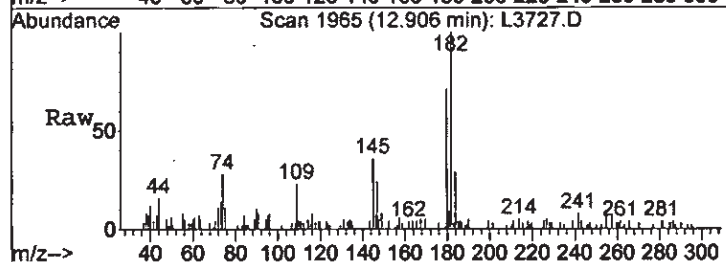
#14
Acetone
Concen: 0.72 ug/L
RT: 1.77 min Scan# 133
Delta R.T. 0.01 min
Lab File: L3727.D
Acq: 20 Mar 2014 11:35 am

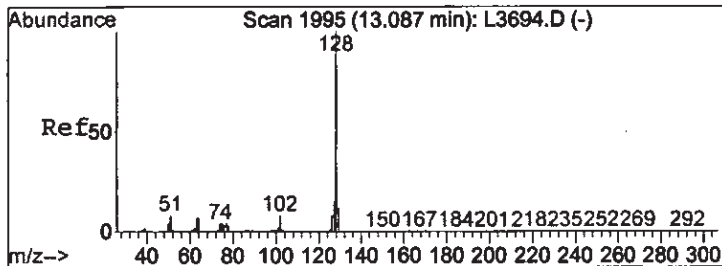
Tgt Ion	43	Ratio	Resp	1431
43	100			
42	40.5	0.0	29.9	
58	38.9	8.5	48.5	



#101
1,2,4-Tcbenzene
Concen: 0.27 ug/L
RT: 12.91 min Scan# 1965
Delta R.T. 0.00 min
Lab File: L3727.D
Acq: 20 Mar 2014 11:35 am

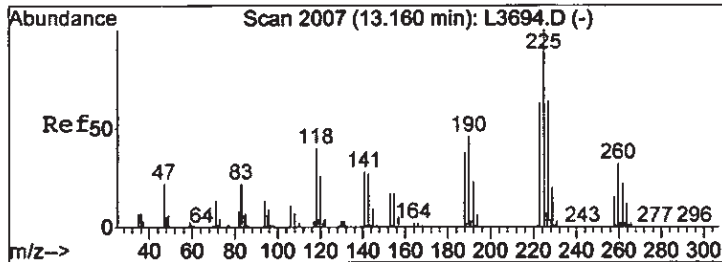
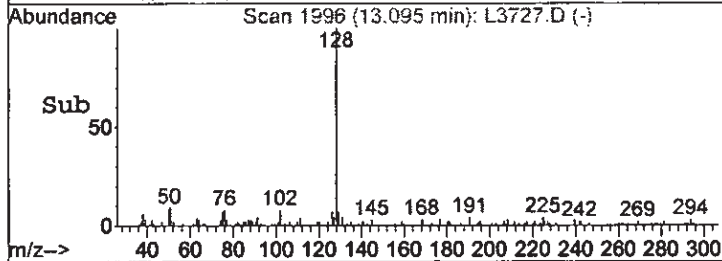
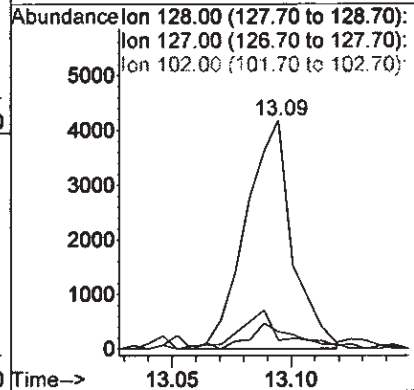
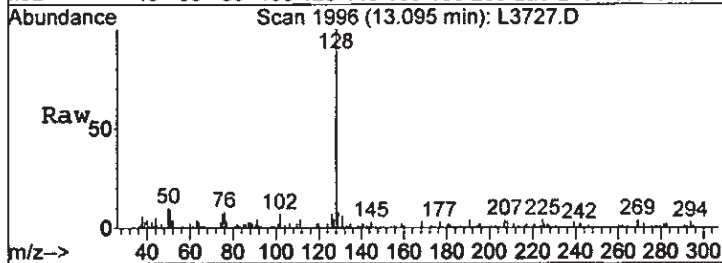
Tgt Ion	180	Ratio	Resp	2453
180	100			
182	94.1	74.0	114.0	
145	41.4	9.2	49.2	





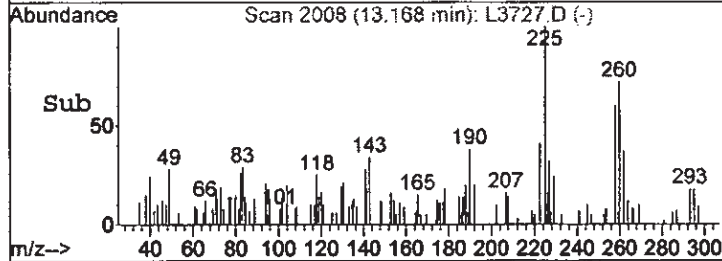
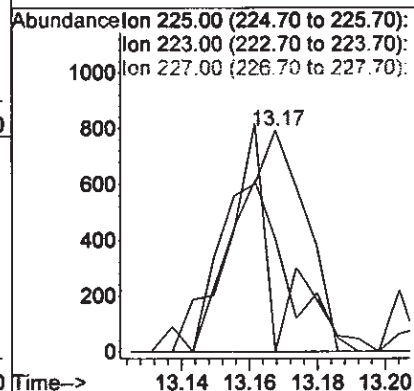
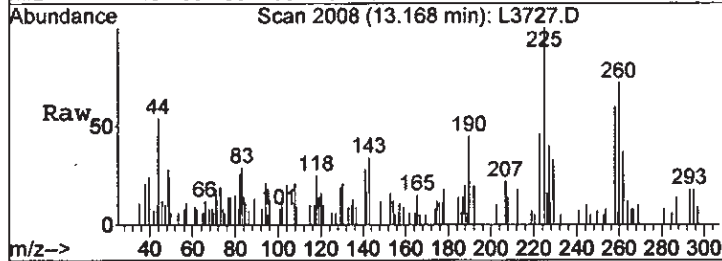
#102
Naphthalen
Concen: 0.40 ug/L
RT: 13.09 min Scan# 1996
Delta R.T. 0.01 min
Lab File: L3727.D
Acq: 20 Mar 2014 11:35 am

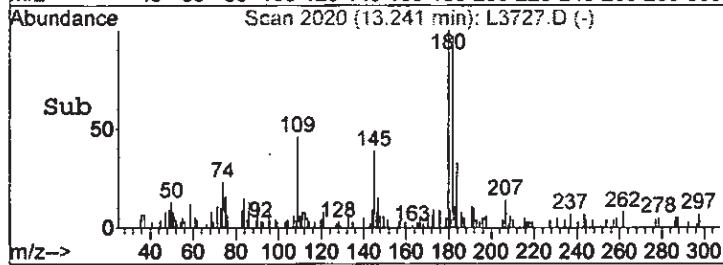
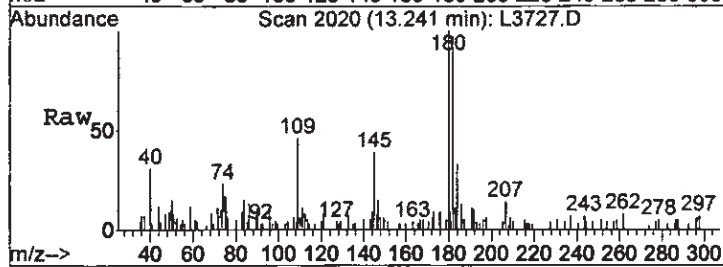
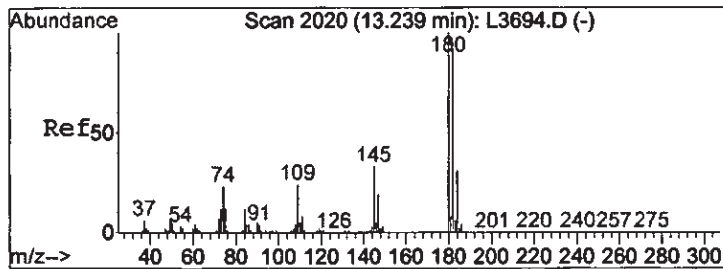
Tgt Ion	Ratio	Lower	Upper
128	100		
127	10.6	0.0	33.7
102	11.5	0.0	27.9



#103
Hexachlorobt
Concen: 0.31 ug/L
RT: 13.17 min Scan# 2008
Delta R.T. 0.01 min
Lab File: L3727.D
Acq: 20 Mar 2014 11:35 am

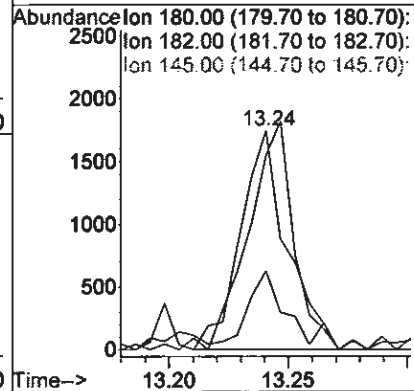
Tgt Ion	Ratio	Lower	Upper
225	100		
223	50.5	43.9	83.9
227	63.5	47.0	87.0





#104
 1,2,3-Trichlorobenzene
 Concen: 0.34 ug/L
 RT: 13.24 min Scan# 2020
 Delta R.T. 0.00 min
 Lab File: L3727.D
 Acq: 20 Mar 2014 11:35 am

Tgt Ion	Ratio	Lower	Upper
180	100		
182	100.1	76.2	116.2
145	31.4	11.5	51.5



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1401882
Date Collected: 3/17/14 1335
Date Received: 3/19/14
Date Analyzed: 3/20/14 13:21

Sample Name: MW-17
Lab Code: R1401882-002

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA6\DATA\032014\L3730.D\

Analysis Lot: 384553
Instrument Name: R-MS-06
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	1.1 J	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	8.7	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0 U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	3.3 J	5.0	0.22	
75-01-4	Vinyl Chloride	5.0 U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	18	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	1.0 J	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	85-122	3/20/14 13:21	
Dibromofluoromethane	98	89-119	3/20/14 13:21	
Toluene-d8	100	87-121	3/20/14 13:21	

Data File : I:\ACQUDATA\MSVOA6\DATA\032014\L3730.D

Vial: 12

Acq On : 20 Mar 2014 1:21 pm

Operator: D.Lipani

Sample : R1401882-002|1.0

Inst : MS#6

Misc : Verina 8260C 6646 T4

Multiplr: 1.00

MS Integration Params: CPD4.P

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)

Title : 8260C WATERS

Last Update : Thu Mar 20 15:48:07 2014

Response via : Initial Calibration

DataAcq Meth : W031914

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.40	168	587317	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.71	114	875169	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.09	117	812909	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.18	152	416053	50.00	ug/L	0.00

System Monitoring Compounds

40) surr4,Dibromomethane	3.68	113	290084	49.03	ug/L	0.00
Spiked Amount	50.000	Range 89 - 119	Recovery	=	98.06%	
42) surr1,1,2-dichloroethane-d	4.27	65	284857	50.20	ug/L	0.00
Spiked Amount	50.000	Range 65 - 130	Recovery	=	100.40%	
62) SURR3,Toluene-d8	7.77	98	1082205	50.13	ug/L	0.00
Spiked Amount	50.000	Range 87 - 121	Recovery	=	100.26%	
82) SURR2,BFB	10.14	95	390492	46.10	ug/L	0.00
Spiked Amount	50.000	Range 85 - 122	Recovery	=	92.20%	

Target Compounds

Target Compounds					Qvalue
6) Chloroethane	1.40	64	330095	58.96 ug/L	99
9) Freon 123a	1.62	67	17214	1.74 ug/L	95
10) Acrolein	1.69	56	323	0.36 ug/L	81
12) Acetonitrile	1.70	41	244	0.33 ug/L #	1
13) 2-Propanol	1.73	45	1119	4.84 ug/L	80
14) Acetone	1.76	43	36345	19.13 ug/L	91
17) Iodomethane	2.00	142	270	1.09 ug/L #	64
18) TBA	2.02	59	1840	5.17 ug/L	75
25) trans-1,2-Dichloroethene	2.55	96	8065	1.01 ug/L	94
27) 1,1-Diclcethane	2.75	63	127701	8.68 ug/L	96
31) 2-Butanone	3.24	43	7612	3.23 ug/L	88
33) cis-1,2-Dichloroethene	3.30	96	163477	18.10 ug/L	98
38) 1,1,1-Trichloroethane	4.51	97	13584	1.10 ug/L	91
41) Iso Butyl Alcohol	3.76	43	301	1.50 ug/L #	43
51) Trichloroethene	6.16	130	30150	3.34 ug/L	98
63) Toluene	7.84	91	11693	0.32 ug/L	91
68) 2-Hexanone	8.20	43	1824	0.45 ug/L	87
78) Cyclohexanone	9.75	55	498	0.78 ug/L #	70
100) Nitrobenzene	11.97	77	86	0.37 ug/L	91
101) 1,2,4-Tcbenzene	12.91	180	2168	0.24 ug/L	96
102) Naphthalen	13.09	128	4352	0.32 ug/L	97
104) 1,2,3-Tclbenzene	13.24	180	2107	0.31 ug/L	97

3L 04/02/14

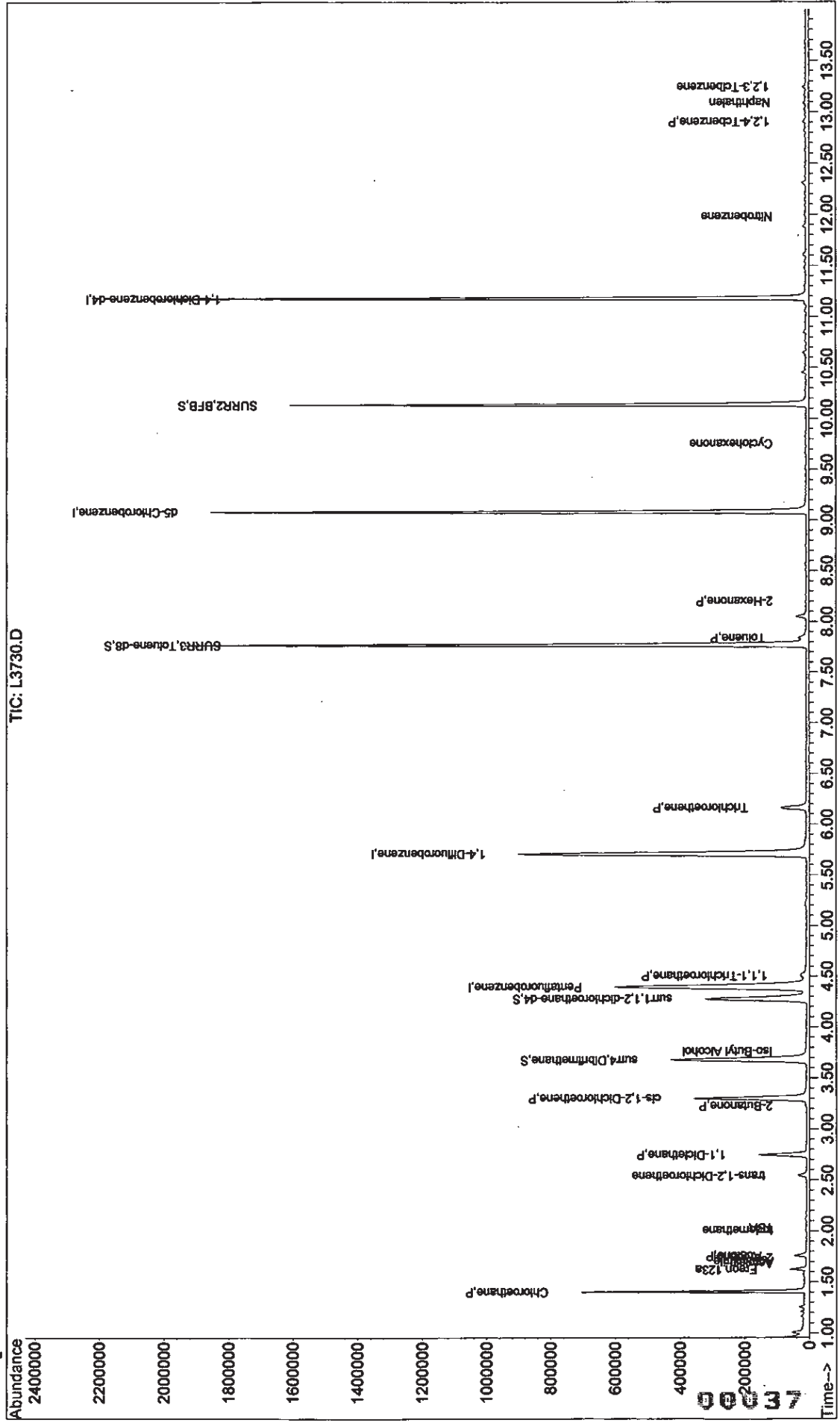
(#) = qualifier out of range (m) = manual integration

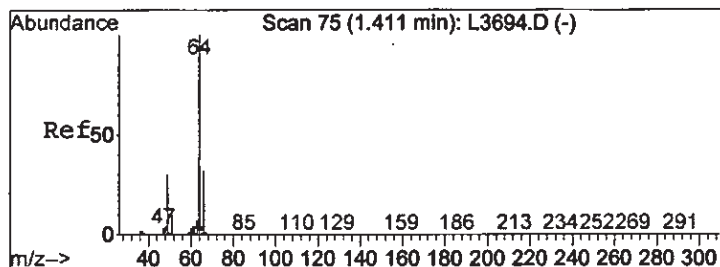
L3730.D W031914.M Thu Mar 20 19:15:35 2014

Quantitation Report

Data File : I:\ACQDATA\MSVOA6\DATA\032014\L3730.D Vial: 12
Acq On : 20 Mar 2014 1:21 pm Operator: D.Lipani
Sample : R1401882-002|1.0 Inst : MS#6
Misc : Verina 8260C 6646 T4 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 20 19:23 2014 Quant Results File: W031914.RES

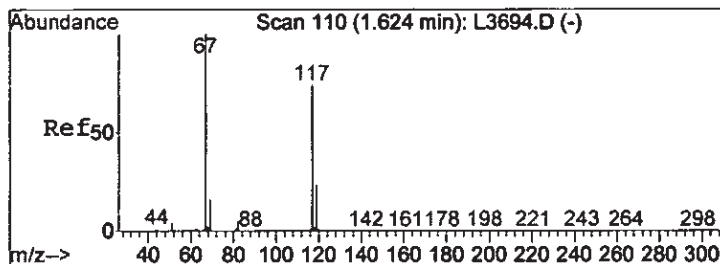
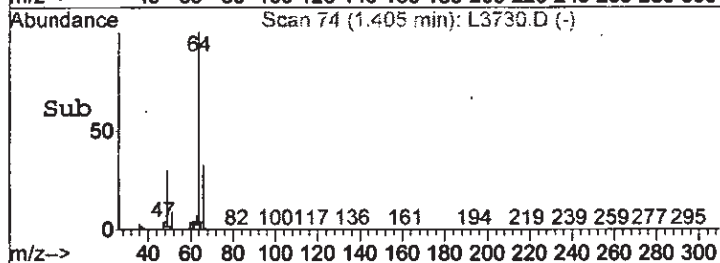
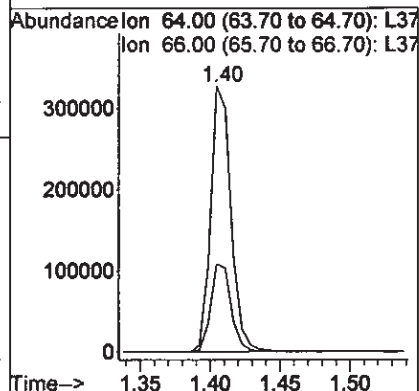
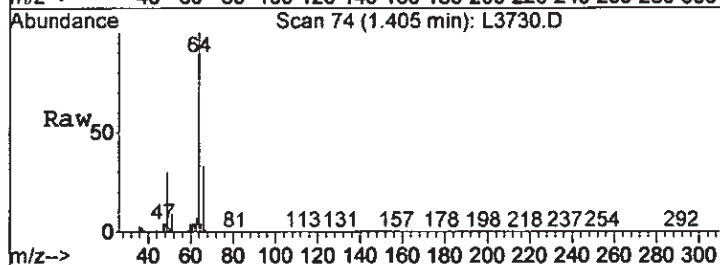
```
Method      : I:\ACQDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
Title       : 8260C WATERS
Last Update : Thu Mar 20 15:48:07 2014
Response via : Initial Calibration
```





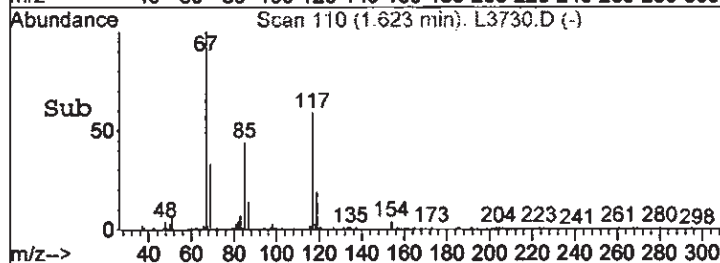
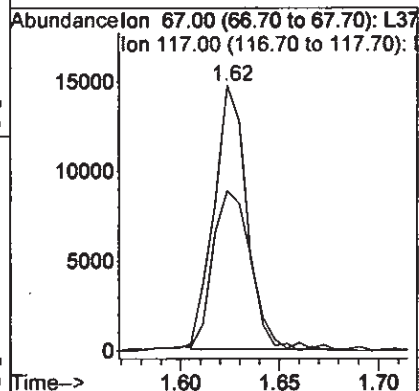
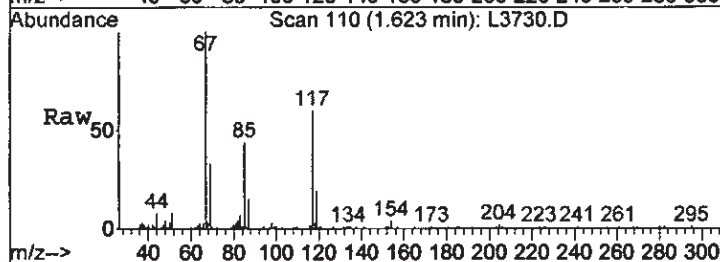
#6
Chloroethane
Concen: 58.96 ug/L
RT: 1.40 min Scan# 74
Delta R.T. -0.01 min
Lab File: L3730.D
Acq: 20 Mar 2014 1:21 pm

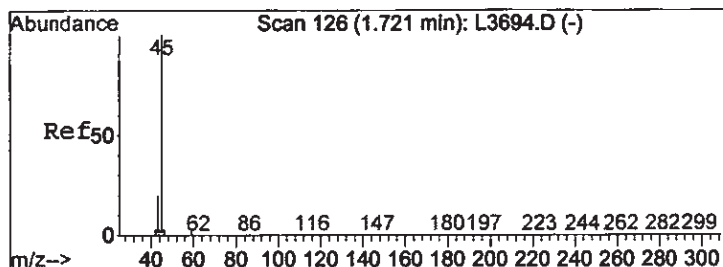
Tgt Ion: 64 Resp: 330095
Ion Ratio Lower Upper
64 100
66 33.2 12.4 52.4



#9
Freon 123a
Concen: 1.74 ug/L
RT: 1.62 min Scan# 110
Delta R.T. -0.00 min
Lab File: L3730.D
Acq: 20 Mar 2014 1:21 pm

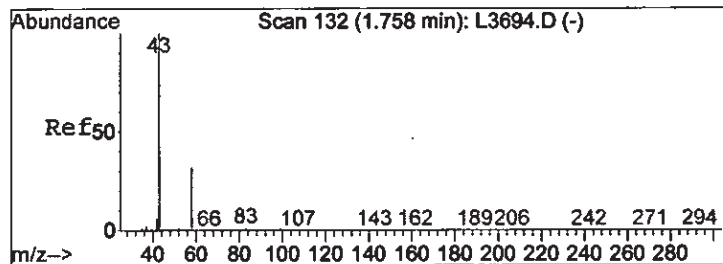
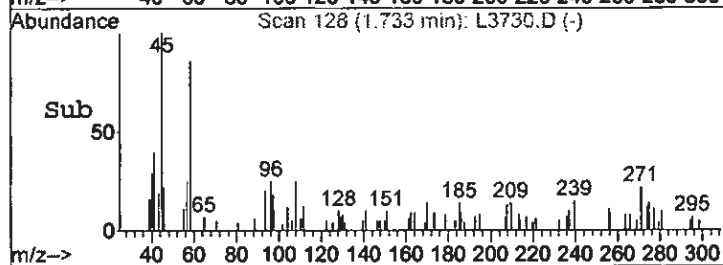
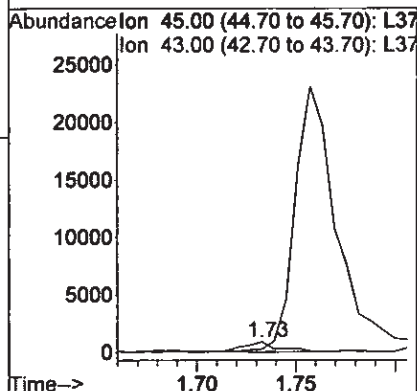
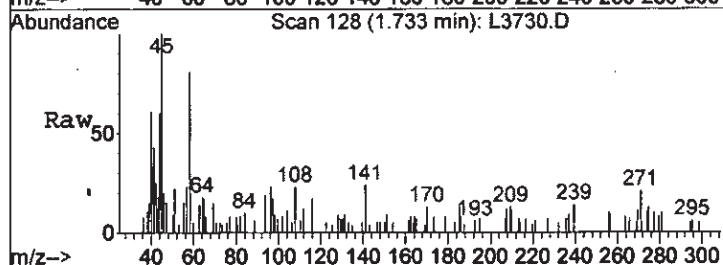
Tgt Ion: 67 Resp: 17214
Ion Ratio Lower Upper
67 100
117 60.3 44.1 84.1





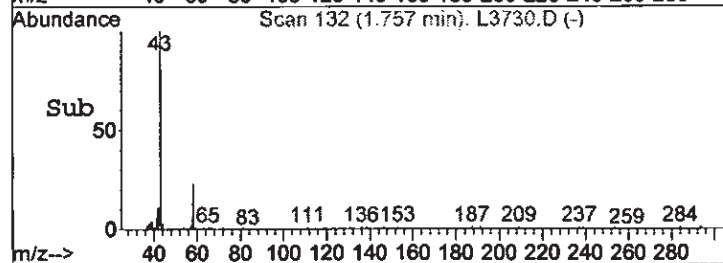
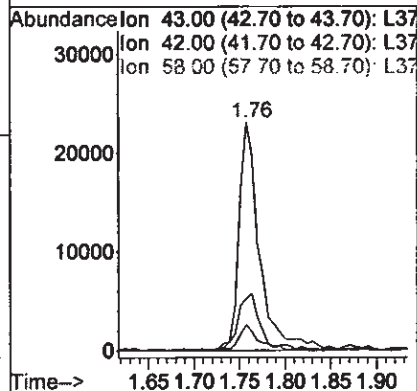
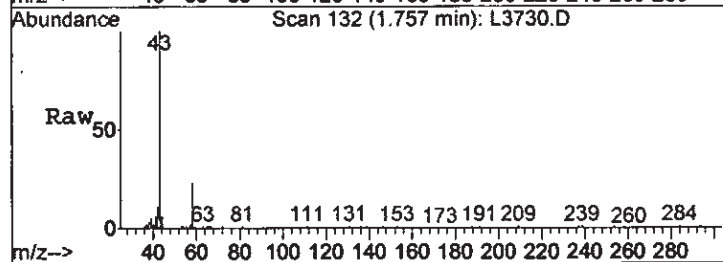
#13
2-Propanol
Concen: 4.84 ug/L
RT: 1.73 min Scan# 128
Delta R.T. 0.01 min
Lab File: L3730.D
Acq: 20 Mar 2014 1:21 pm

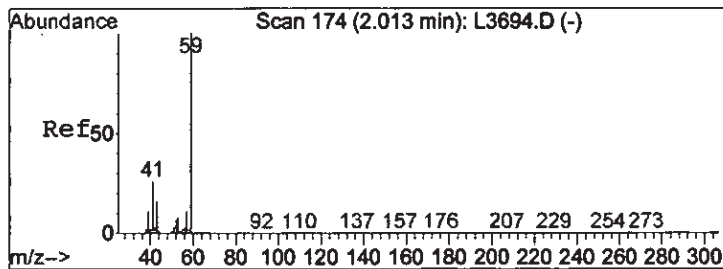
Tgt Ion: 45 Resp: 1119
Ion Ratio Lower Upper
45 100
43 29.7 0.3 40.3



#14
Acetone
Concen: 19.13 ug/L
RT: 1.76 min Scan# 132
Delta R.T. -0.00 min
Lab File: L3730.D
Acq: 20 Mar 2014 1:21 pm

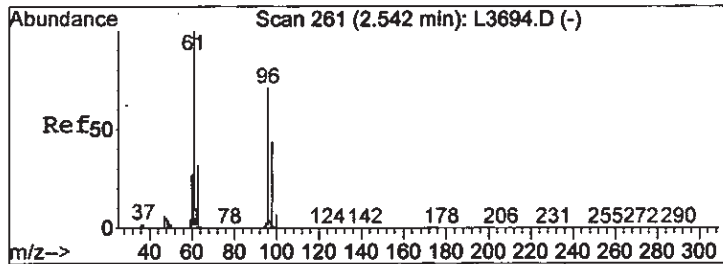
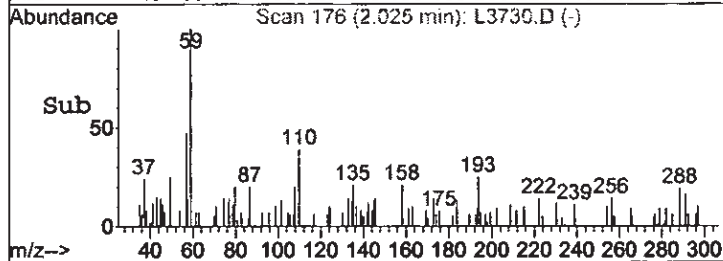
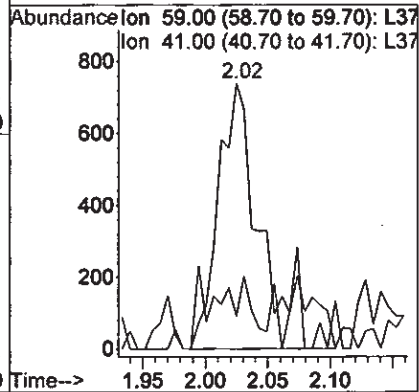
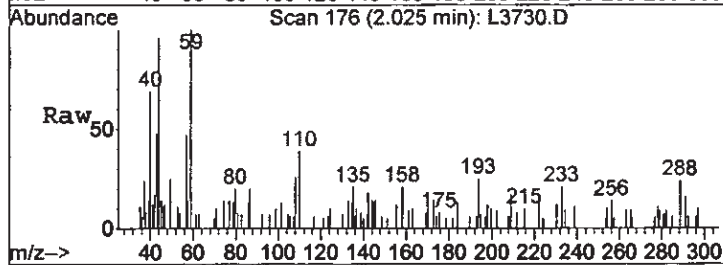
Tgt Ion: 43 Resp: 36345
Ion Ratio Lower Upper
43 100
42 11.2 0.0 29.9
58 22.7 8.5 48.5





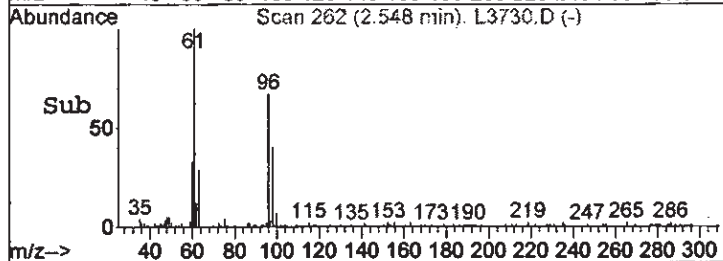
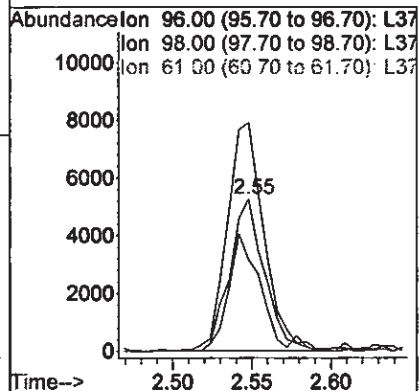
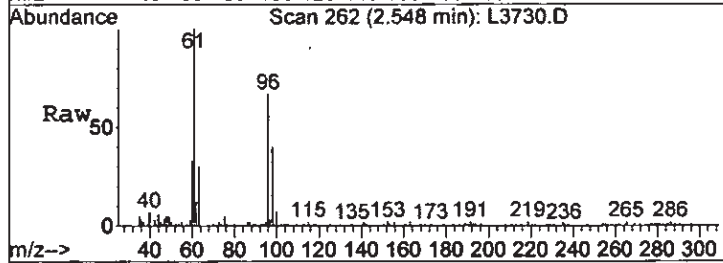
#18
TBA
Concen: 5.17 ug/L
RT: 2.02 min Scan# 176
Delta R.T. 0.01 min
Lab File: L3730.D
Acq: 20 Mar 2014 1:21 pm

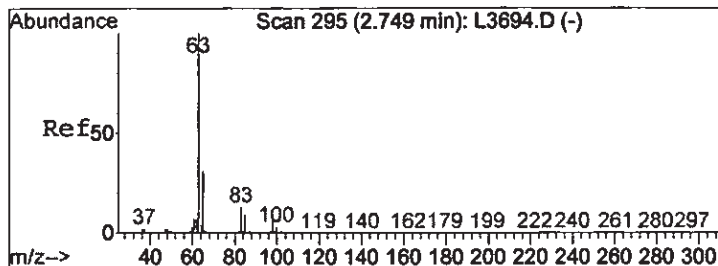
Tgt Ion: 59 Resp: 1840
Ion Ratio Lower Upper
59 100
41 12.3 4.8 44.8



#25
trans-1,2-Dichloroethene
Concen: 1.01 ug/L
RT: 2.55 min Scan# 262
Delta R.T. 0.01 min
Lab File: L3730.D
Acq: 20 Mar 2014 1:21 pm

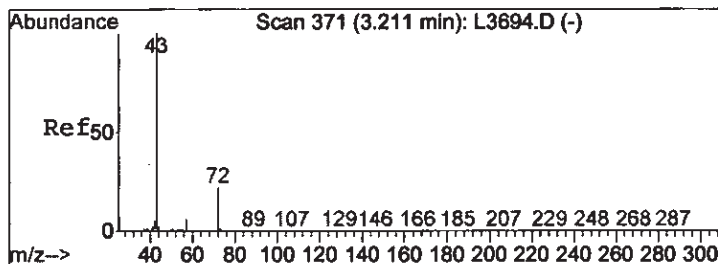
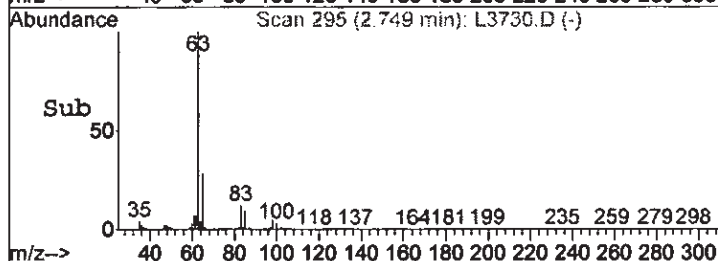
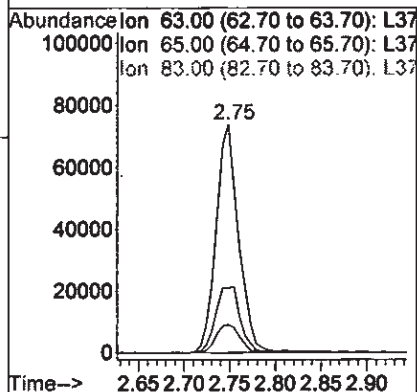
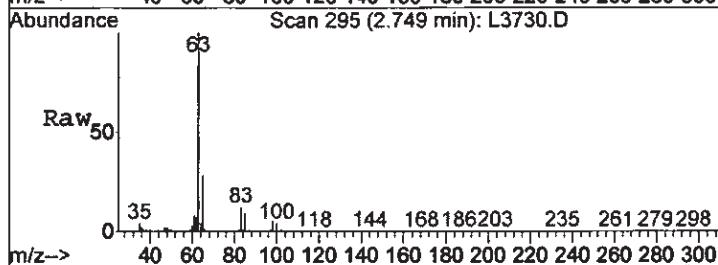
Tgt Ion: 96 Resp: 8065
Ion Ratio Lower Upper
96 100
98 60.1 42.6 82.6
61 150.2 121.3 161.3





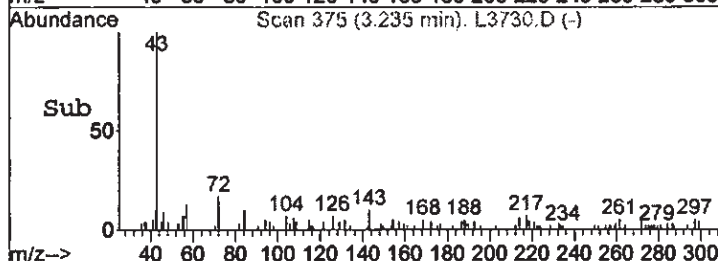
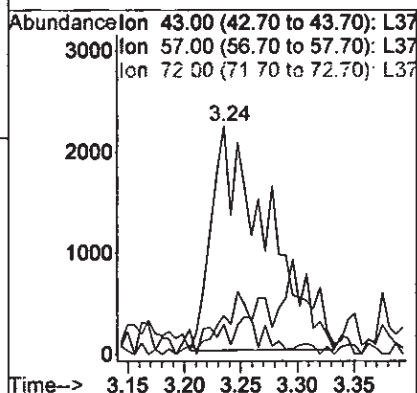
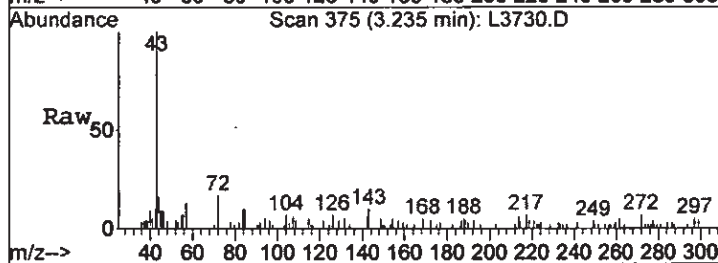
#27
1,1-Dicloroethane
Concen: 8.68 ug/L
RT: 2.75 min Scan# 295
Delta R.T. -0.00 min
Lab File: L3730.D
Acq: 20 Mar 2014 1:21 pm

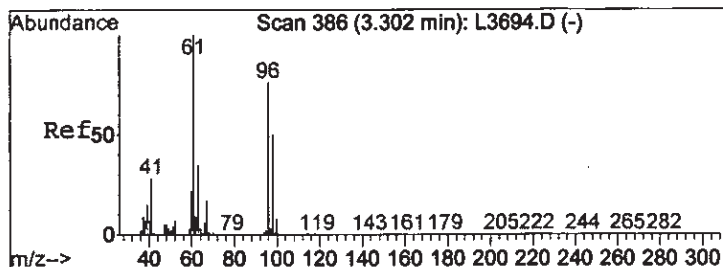
Tgt Ion	Ratio	Lower	Upper
63	100		
65	28.4	11.3	51.3
83	12.4	0.0	33.2



#31
2-Butanone
Concen: 3.23 ug/L
RT: 3.24 min Scan# 375
Delta R.T. 0.02 min
Lab File: L3730.D
Acq: 20 Mar 2014 1:21 pm

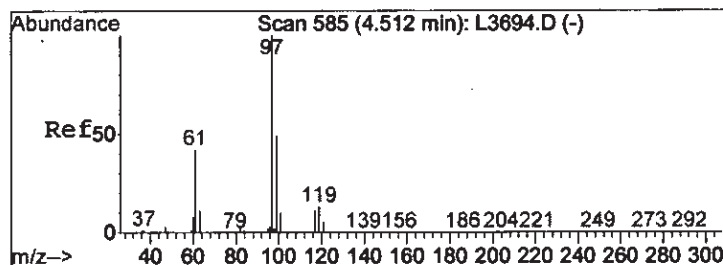
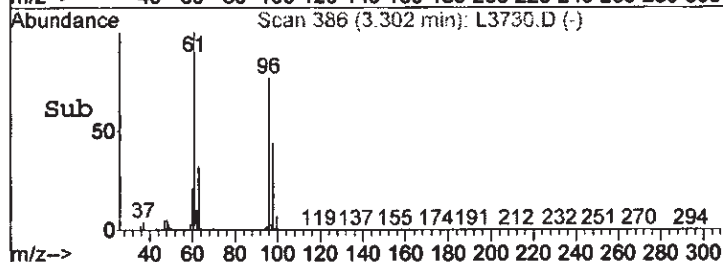
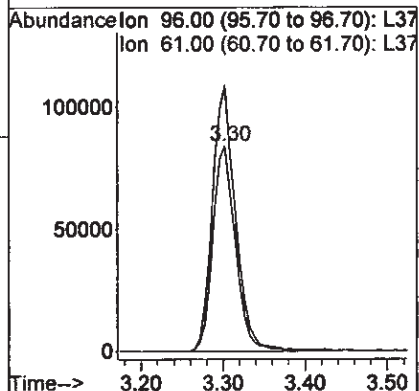
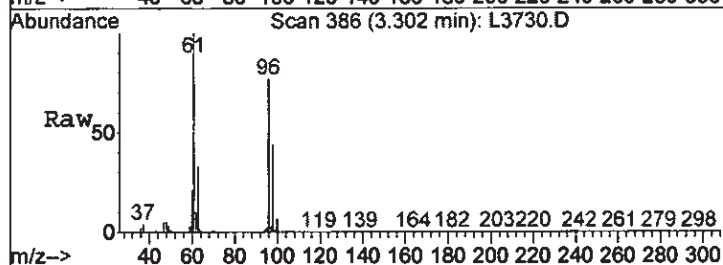
Tgt Ion	Ratio	Lower	Upper
43	100		
57	13.0	0.0	26.6
72	17.0	1.5	41.5





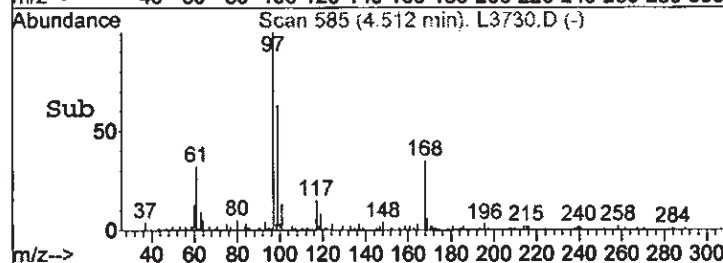
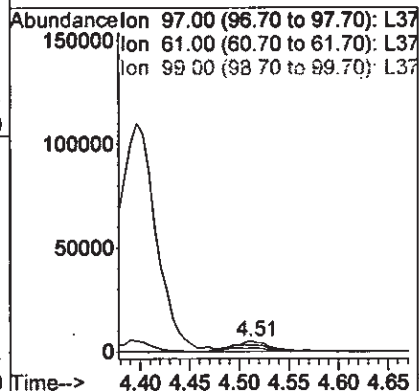
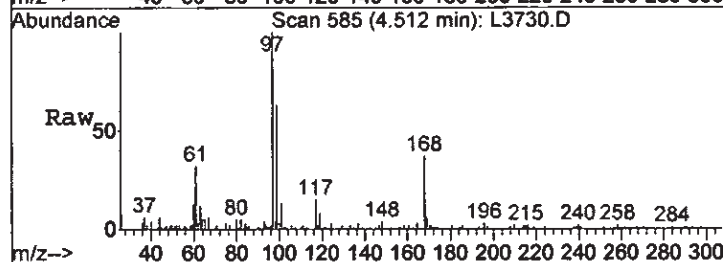
#33
 cis-1,2-Dichloroethene
 Concen: 18.10 ug/L
 RT: 3.30 min Scan# 386
 Delta R.T. -0.00 min
 Lab File: L3730.D
 Acq: 20 Mar 2014 1:21 pm

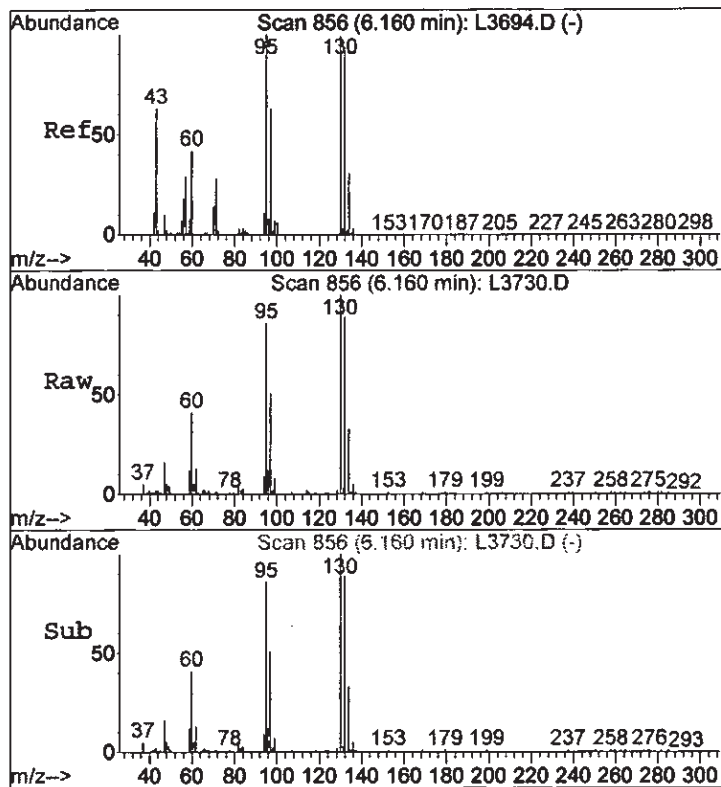
Tgt Ion: 96 Resp: 163477
 Ion Ratio Lower Upper
 96 100
 61 129.4 111.6 151.6



#38
 1,1,1-Trichloroethane
 Concen: 1.10 ug/L
 RT: 4.51 min Scan# 585
 Delta R.T. -0.00 min
 Lab File: L3730.D
 Acq: 20 Mar 2014 1:21 pm

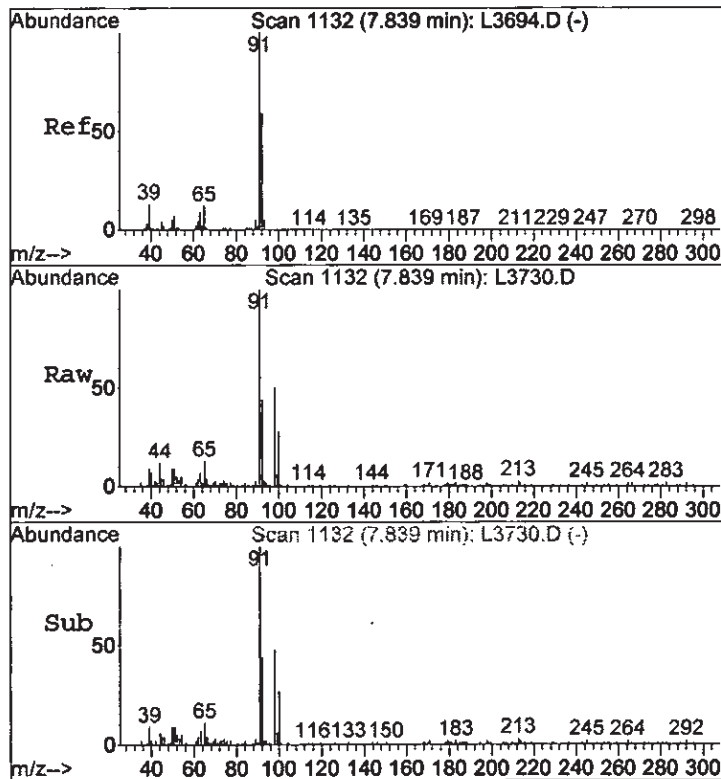
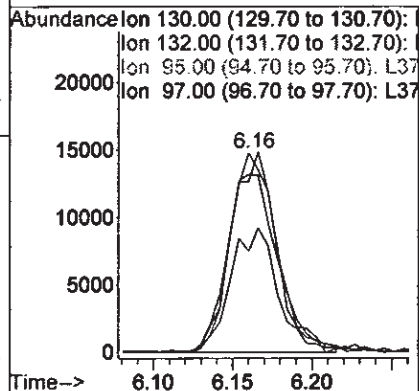
Tgt Ion: 97 Resp: 13584
 Ion Ratio Lower Upper
 97 100
 61 32.5 24.2 64.2
 99 63.4 45.1 85.1





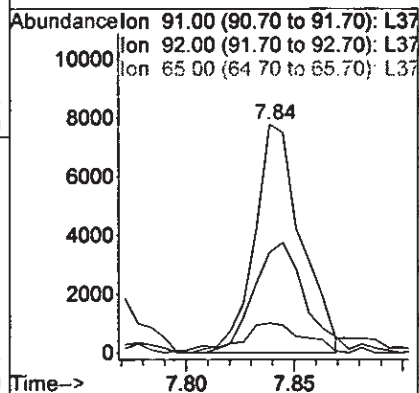
#51
Trichloroethene
Concen: 3.34 ug/L
RT: 6.16 min Scan# 856
Delta R.T. -0.00 min
Lab File: L3730.D
Acq: 20 Mar 2014 1:21 pm

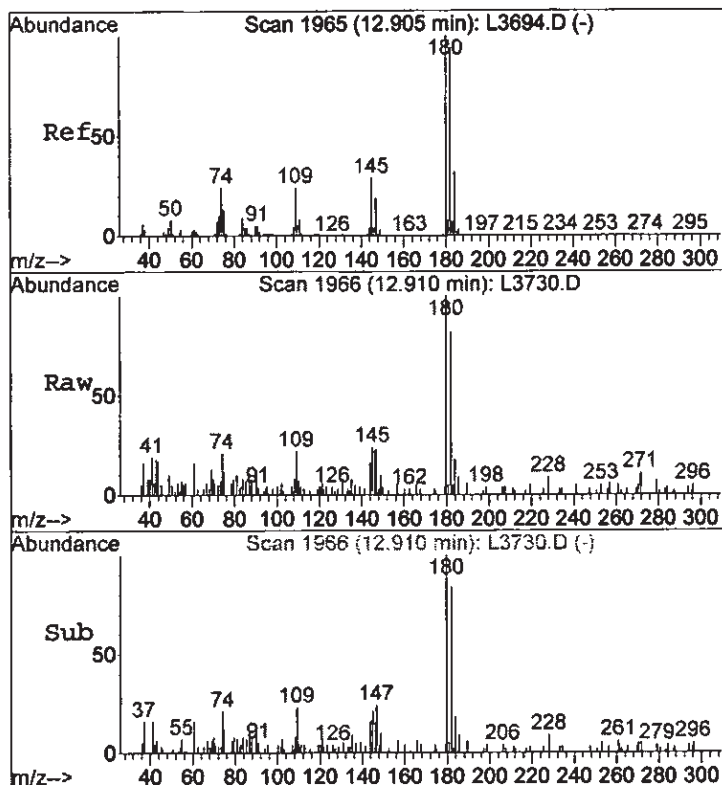
Tgt Ion	Ratio	Resp	Lower	Upper
130	100	30150		
132	96.8	76.0	116.0	
95	103.3	78.5	118.5	
97	64.1	43.7	83.7	



#63
Toluene
Concen: 0.32 ug/L
RT: 7.84 min Scan# 1132
Delta R.T. -0.00 min
Lab File: L3730.D
Acq: 20 Mar 2014 1:21 pm

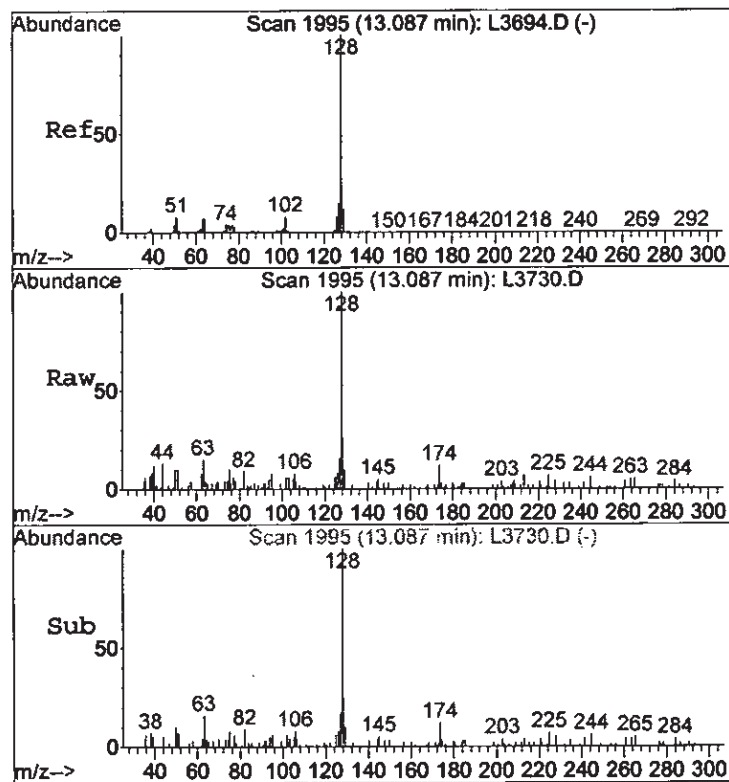
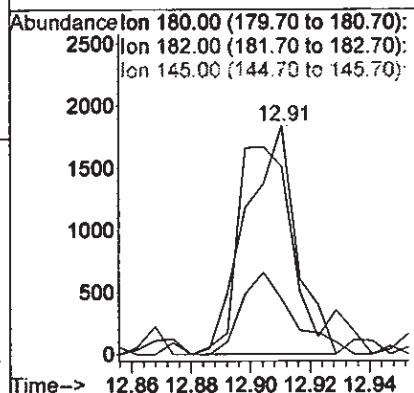
Tgt Ion	Ratio	Resp	Lower	Upper
91	100	11693		
92	52.8	39.1	79.1	
65	16.0	0.0	31.9	





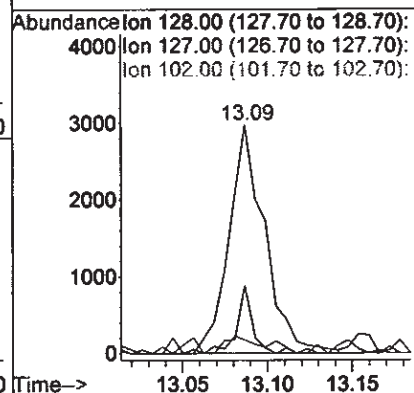
#101
1,2,4-Tcbenzene
Concen: 0.24 ug/L
RT: 12.91 min Scan# 1966
Delta R.T. 0.01 min
Lab File: L3730.D
Acq: 20 Mar 2014 1:21 pm

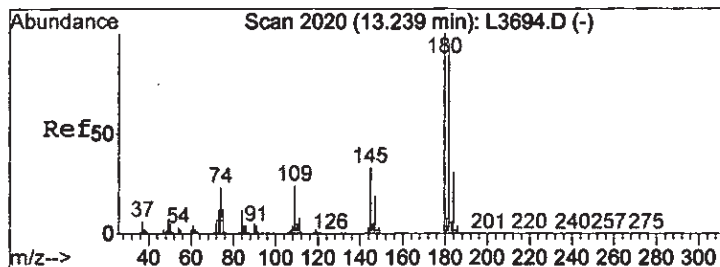
Tgt Ion	Ratio	Lower	Upper
180	100		
182	95.2	74.0	114.0
145	36.3	9.2	49.2



#102
Naphthalen
Concen: 0.32 ug/L
RT: 13.09 min Scan# 1995
Delta R.T. -0.00 min
Lab File: L3730.D
Acq: 20 Mar 2014 1:21 pm

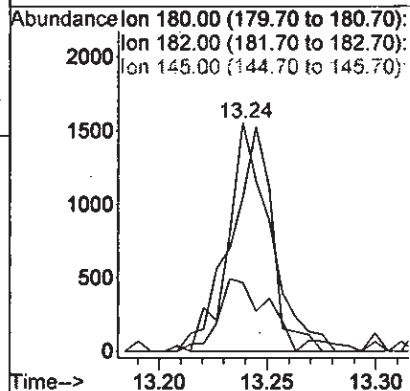
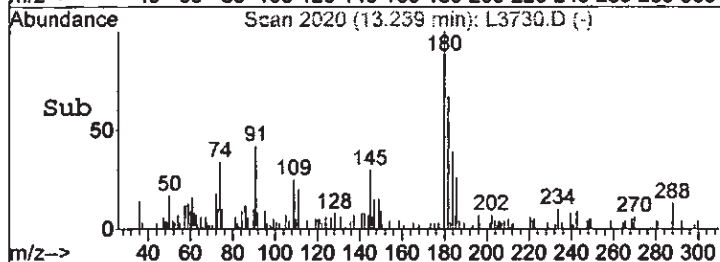
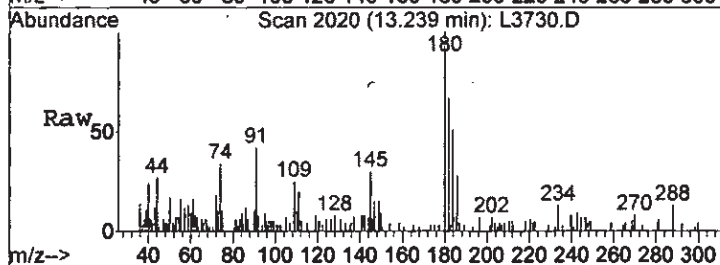
Tgt Ion	Ratio	Lower	Upper
128	100		
127	12.6	0.0	33.7
102	6.3	0.0	27.9





#104
 1,2,3-Tribenzene
 Concen: 0.31 ug/L
 RT: 13.24 min Scan# 2020
 Delta R.T. -0.00 min
 Lab File: L3730.D
 Acq: 20 Mar 2014 1:21 pm

Tgt Ion: 180 Resp: 2107
 Ion Ratio Lower Upper
 180 100
 182 95.3 76.2 116.2
 145 36.2 11.5 51.5



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1401882
Date Collected: 3/17/14 1350
Date Received: 3/19/14
Date Analyzed: 3/20/14 13:51

Sample Name: MW-10
Lab Code: R1401882-003

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQU\DATA\MSVOA6\DATA\032014\L3731.D\

Analysis Lot: 384553
Instrument Name: R-MS-06
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	1.0 J	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	0.82 J	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	0.63 J	5.0	0.30	
79-01-6	Trichloroethene (TCE)	7.3	5.0	0.22	
75-01-4	Vinyl Chloride	5.0 U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	3.4 J	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0 U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85-122	3/20/14 13:51	
Dibromofluoromethane	98	89-119	3/20/14 13:51	
Toluene-d8	100	87-121	3/20/14 13:51	

Data File : I:\ACQUDATA\MSVOA6\DATA\032014\L3731.D

Vial: 13

Acq On : 20 Mar 2014 1:51 pm

Operator: D.Lipani

Sample : R1401882-003|1.0

Inst : MS#6

Misc : Verina 8260C 6646 T4

Multiplr: 1.00

MS Integration Params: CPD4.P

Quant Time: Mar 20 19:23 2014

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)

Title : 8260C WATERS

Last Update : Thu Mar 20 15:48:07 2014

Response via : Initial Calibration

DataAcq Meth : W031914

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.40	168	622163	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.71	114	907930	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.09	117	840853	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.18	152	447208	50.00	ug/L	0.00

System Monitoring Compounds

40) surr4,Dibrflmethane	3.68	113	300722	49.00	ug/L	0.00
Spiked Amount	50.000	Range 89 - 119	Recovery	=	98.00%	
42) surr1,1,2-dichloroethane-d	4.28	65	303319	51.53	ug/L	0.00
Spiked Amount	50.000	Range 65 - 130	Recovery	=	103.06%	
62) SURR3,Toluene-d8	7.77	98	1119831	50.00	ug/L	0.00
Spiked Amount	50.000	Range 87 - 121	Recovery	=	100.00%	
82) SURR2,BFB	10.14	95	410473	46.84	ug/L	0.00
Spiked Amount	50.000	Range 85 - 122	Recovery	=	93.68%	

Target Compounds

						Qvalue
8) Freon 123	(1.63)	83	3053	0.25	ug/L	# 1
9) Freon 123a	(1.63)	67	33545	3.20	ug/L	91 NT/SP
13) 2-Propanol	1.74	45	139	0.57	ug/L	73
14) Acetone	1.76	43	2682	1.33	ug/L	91
17) Iodomethane	2.01	142	306	1.09	ug/L	# 33
18) TBA	2.02	59	109	0.29	ug/L	96
21) Freon 113	2.12	101	20414	2.63	ug/L	98 NT
27) 1,1-Dicethane	2.75	63	12830	0.82	ug/L	96
33) cis-1,2-Dichloroethene	3.30	96	32625	3.41	ug/L	100
38) 1,1,1-Trichloroethane	4.52	97	13025	1.00	ug/L	90
41) Iso-Butyl Alcohol	3.87	43	166	0.84	ug/L	96
51) Trichloroethene	6.17	130	68235	7.28	ug/L	97
71) Tetrachloroethene	8.51	164	4990	0.63	ug/L	96
100) Nitrobenzene	12.02	77	107	0.43	ug/L	# 67
102) Naphthalen	13.09	128	3311	0.23	ug/L	95 NT
103) Hexachlorobt	13.17	225	910	0.23	ug/L	# 67

3/31/14

(#) = qualifier out of range (m) = manual integration

L3731.D W031914.M

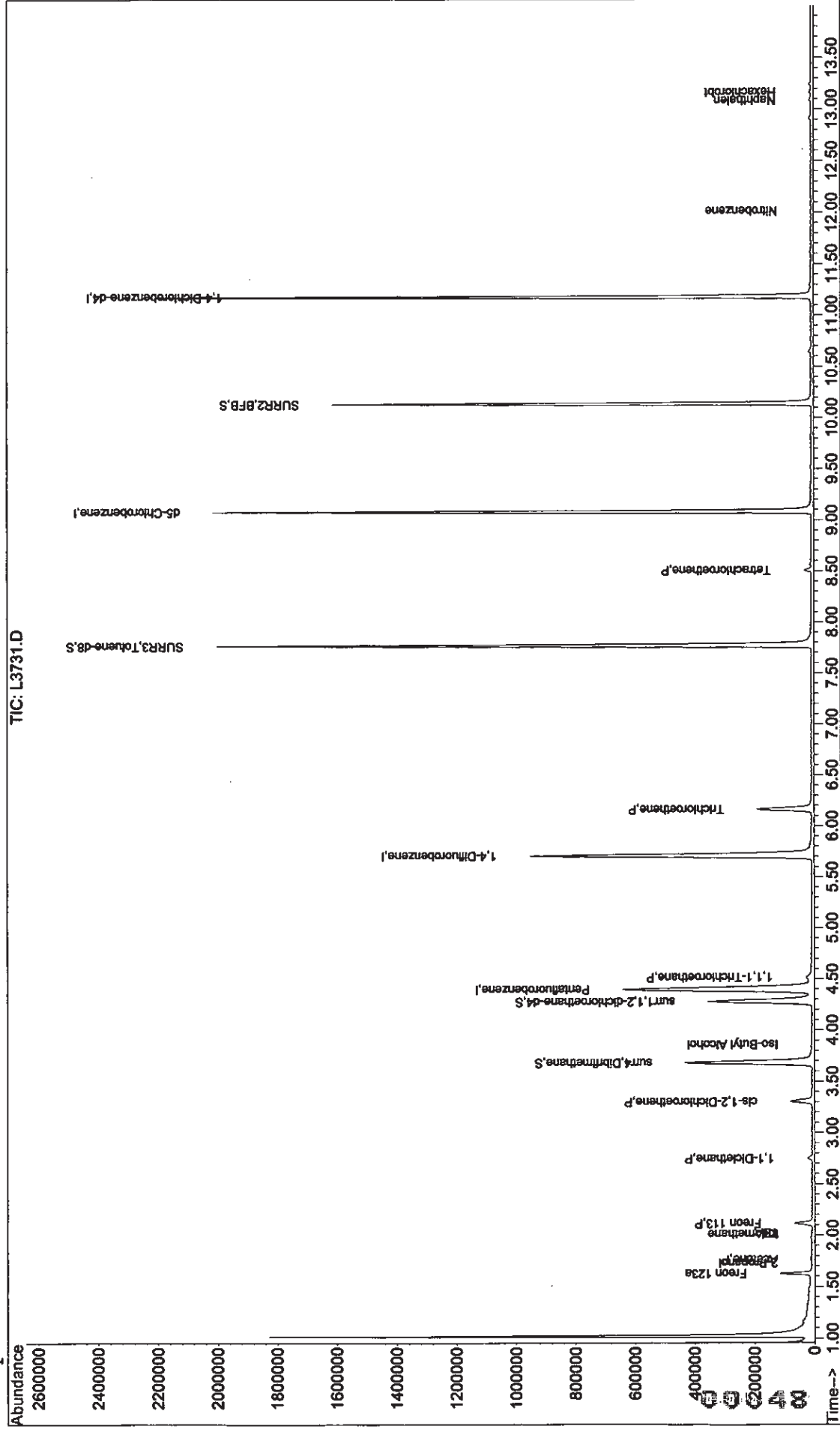
Thu Mar 20 19:15:52 2014

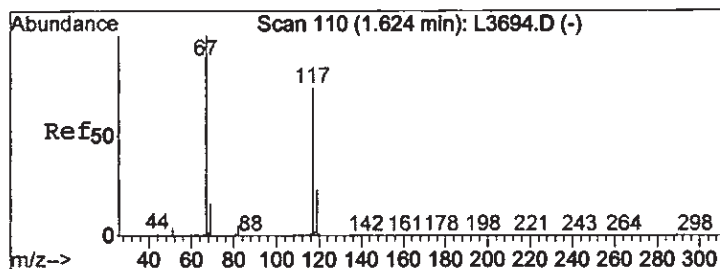
00047 Page 1

Quantitation Report

Data File : I:\ACQDATA\MSVOA6\DATA\032014\L3731.D Vial: 13
 Acq On : 20 Mar 2014 1:51 pm Operator: D.Lipani
 Sample : R1401882-003|1.0 Inst : MS#6
 Misc : Verina 8260C 6646 T4 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 19:23 2014 Quant Results File: W031914.RES

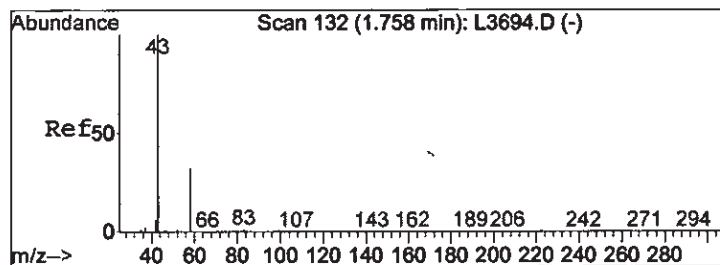
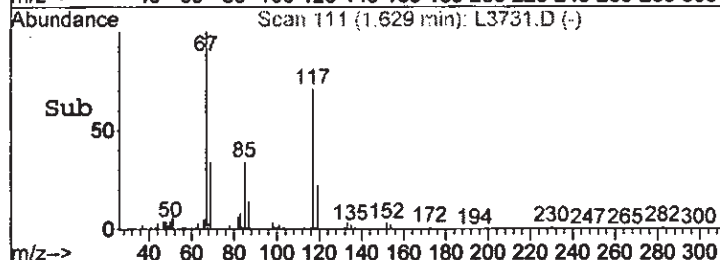
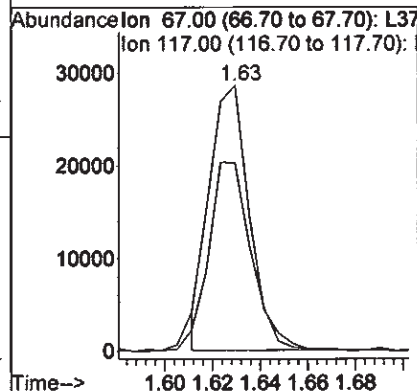
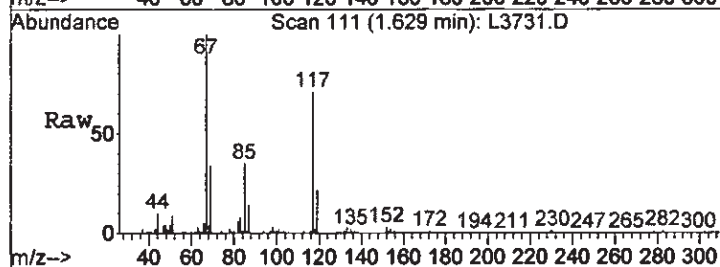
Method : I:\ACQDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 15:48:07 2014
 Response via : Initial Calibration





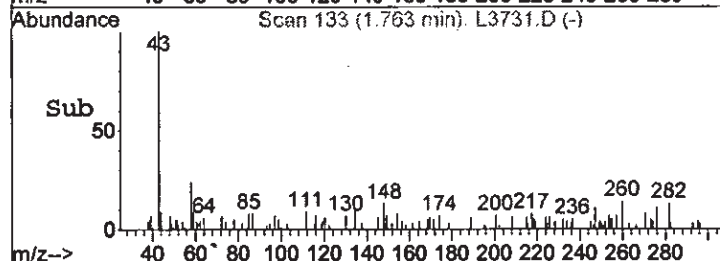
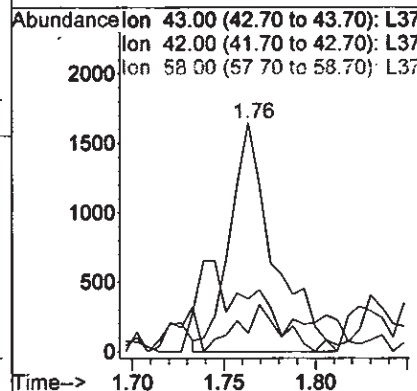
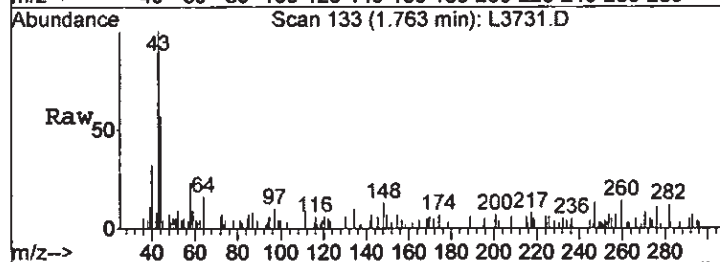
#9
 Freon 123a
 Concen: 3.20 ug/L
 RT: 1.63 min Scan# 111
 Delta R.T. 0.01 min
 Lab File: L3731.D
 Acq: 20 Mar 2014 1:51 pm

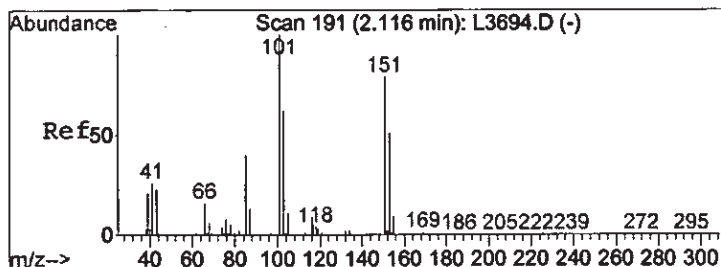
Tgt Ion: 67 Resp: 33545
 Ion Ratio Lower Upper
 67 100
 117 70.9 44.1 84.1



#14
 Acetone
 Concen: 1.33 ug/L
 RT: 1.76 min Scan# 133
 Delta R.T. 0.01 min
 Lab File: L3731.D
 Acq: 20 Mar 2014 1:51 pm

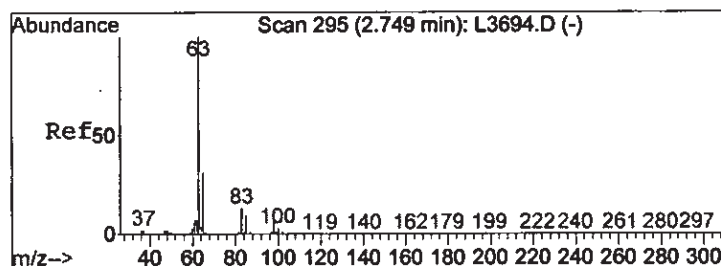
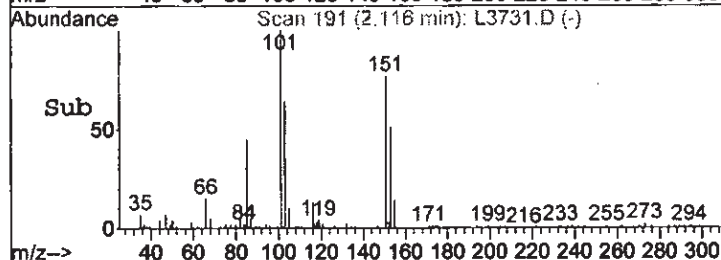
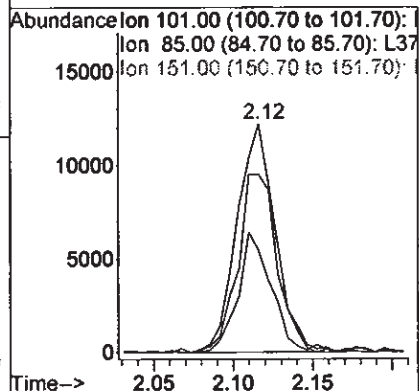
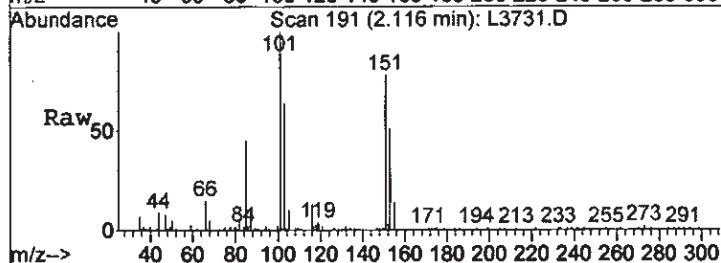
Tgt Ion: 43 Resp: 2682
 Ion Ratio Lower Upper
 43 100
 42 8.0 0.0 29.9
 58 23.0 8.5 48.5





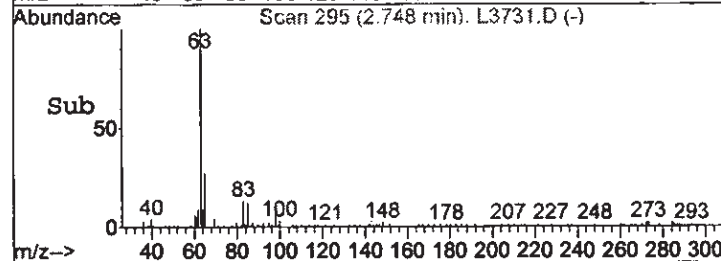
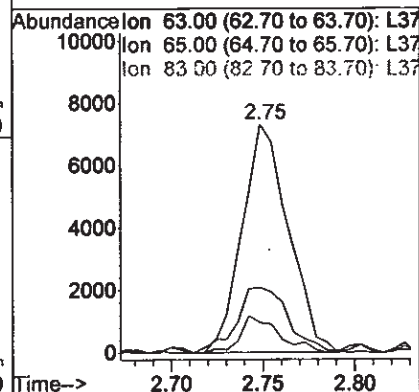
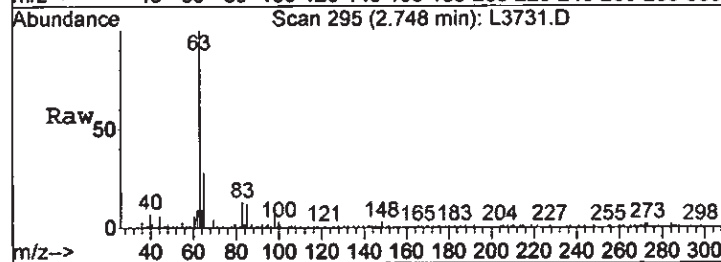
#21
Freon 113
Concen: 2.63 ug/L
RT: 2.12 min Scan# 191
Delta R.T. -0.00 min
Lab File: L3731.D
Acq: 20 Mar 2014 1:51 pm

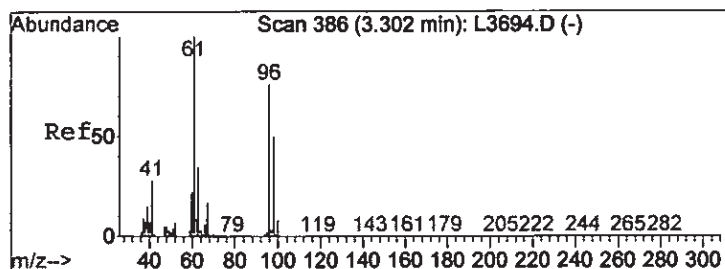
Tgt Ion	Ratio	Lower	Upper
101	100		
85	44.6	23.7	63.7
151	77.9	59.3	99.3



#27
1,1-Dicloroethane
Concen: 0.82 ug/L
RT: 2.75 min Scan# 295
Delta R.T. -0.00 min
Lab File: L3731.D
Acq: 20 Mar 2014 1:51 pm

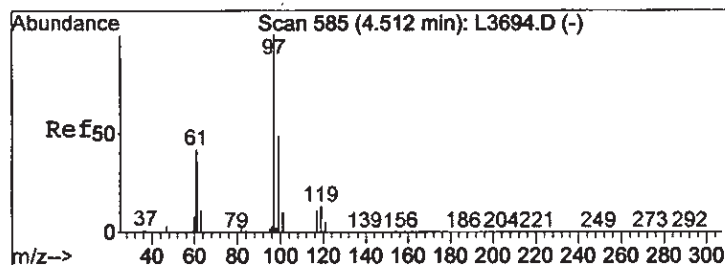
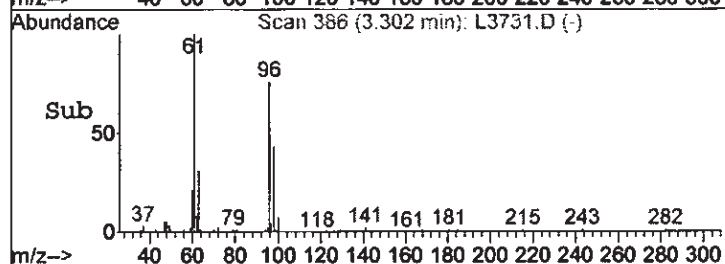
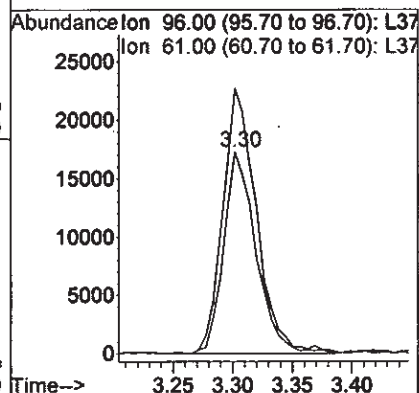
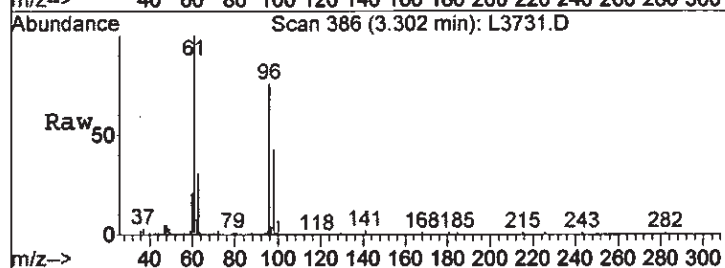
Tgt Ion	Ratio	Lower	Upper
63	100		
65	28.5	11.3	51.3
83	13.1	0.0	33.2





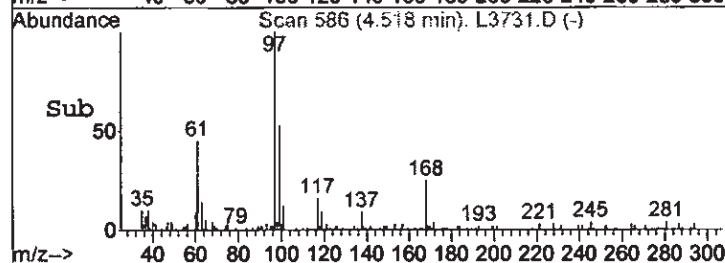
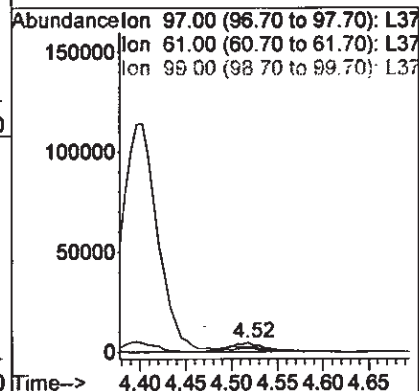
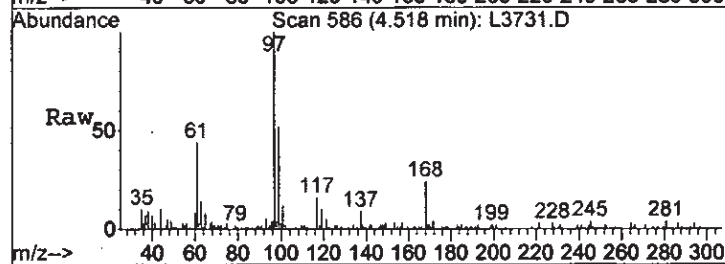
#33
 cis-1,2-Dichloroethene
 Concen: 3.41 ug/L
 RT: 3.30 min Scan# 386
 Delta R.T. -0.00 min
 Lab File: L3731.D
 Acq: 20 Mar 2014 1:51 pm

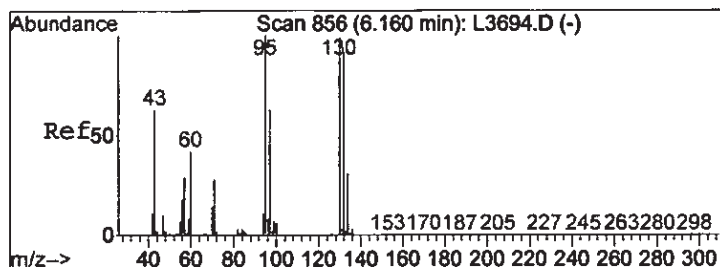
Tgt Ion: 96 Resp: 32625
 Ion Ratio Lower Upper
 96 100
 61 131.5 111.6 151.6



#38
 1,1,1-Trichloroethane
 Concen: 1.00 ug/L
 RT: 4.52 min Scan# 586
 Delta R.T. 0.01 min
 Lab File: L3731.D
 Acq: 20 Mar 2014 1:51 pm

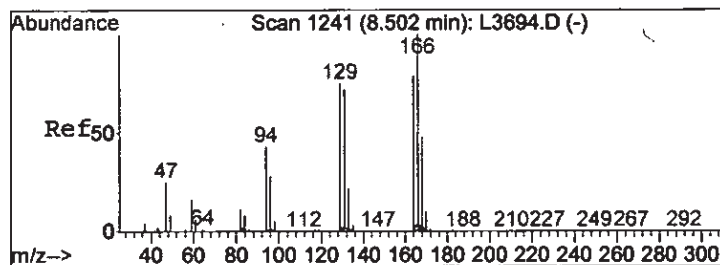
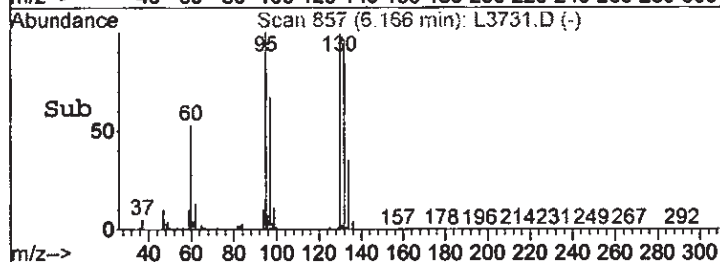
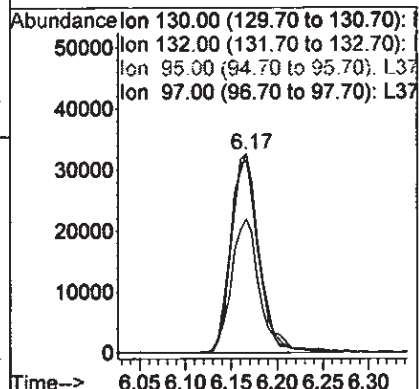
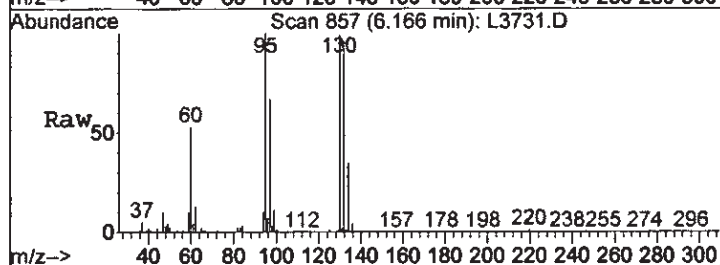
Tgt Ion: 97 Resp: 13025
 Ion Ratio Lower Upper
 97 100
 61 43.7 24.2 64.2
 99 52.2 45.1 85.1





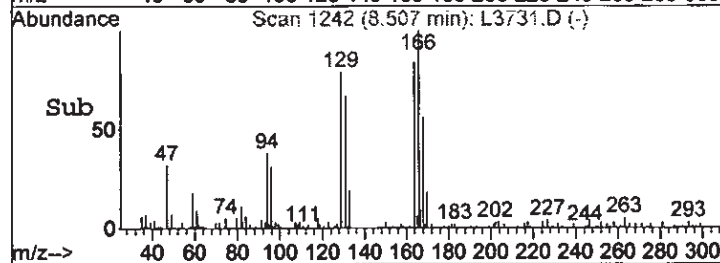
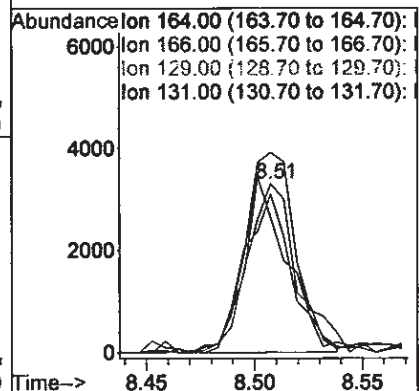
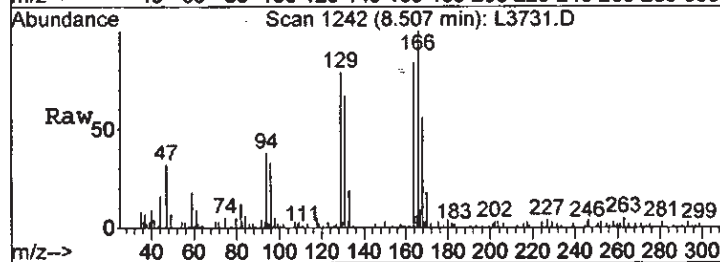
#51
Trichloroethene
Concen: 7.28 ug/L
RT: 6.17 min Scan# 857
Delta R.T. 0.01 min
Lab File: L3731.D
Acq: 20 Mar 2014 1:51 pm

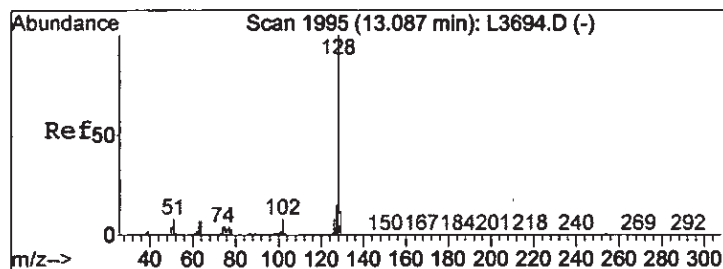
Tgt Ion:	130	Resp:	68235
Ion	Ratio	Lower	Upper
130	100		
132	98.6	76.0	116.0
95	100.6	78.5	118.5
97	67.8	43.7	83.7



#71
Tetrachloroethene
Concen: 0.63 ug/L
RT: 8.51 min Scan# 1242
Delta R.T. 0.01 min
Lab File: L3731.D
Acq: 20 Mar 2014 1:51 pm

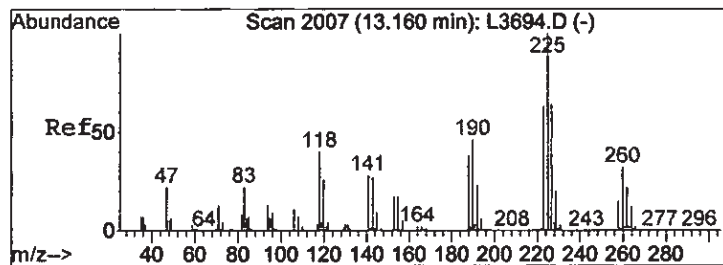
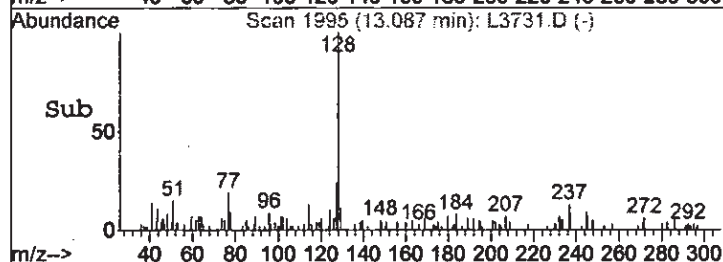
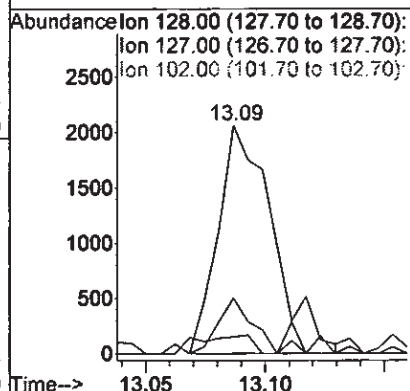
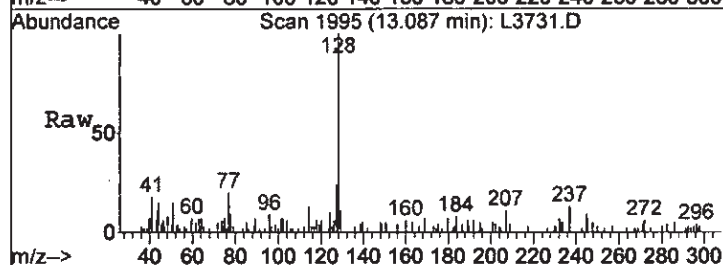
Tgt Ion:	164	Resp:	4990
Ion	Ratio	Lower	Upper
164	100		
166	131.5	107.4	147.4
129	95.0	72.6	112.6
131	94.1	68.5	108.5





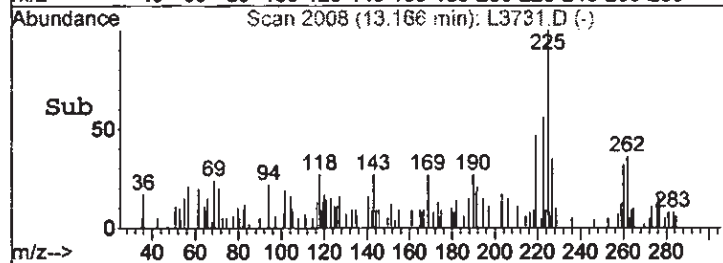
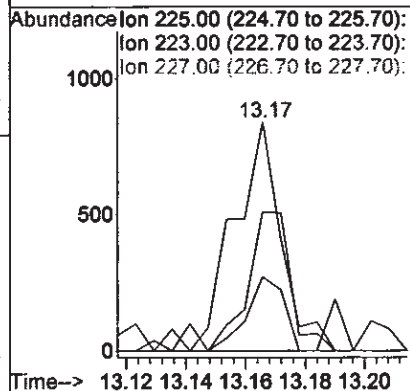
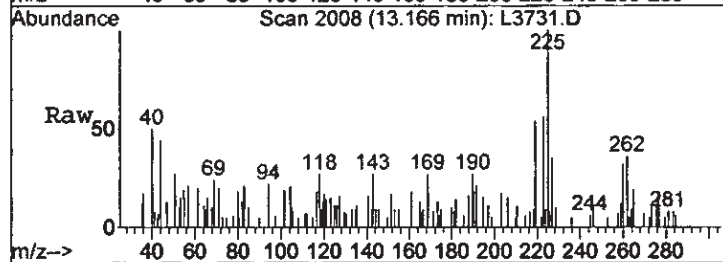
#102
Naphthalen
Concen: 0.23 ug/L
RT: 13.09 min Scan# 1995
Delta R.T. -0.00 min
Lab File: L3731.D
Acq: 20 Mar 2014 1:51 pm

Tgt Ion:128 Resp: 3311
Ion Ratio Lower Upper
128 100
127 15.0 0.0 33.7
102 5.1 0.0 27.9



#103
Hexachlorobt
Concen: 0.23 ug/L
RT: 13.17 min Scan# 2008
Delta R.T. 0.01 min
Lab File: L3731.D
Acq: 20 Mar 2014 1:51 pm

Tgt Ion:225 Resp: 910
Ion Ratio Lower Upper
225 100
223 52.7 43.9 83.9
227 25.9 47.0 87.0#



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1401882
Date Collected: 3/17/14 1515
Date Received: 3/19/14
Date Analyzed: 3/20/14 14:20

Sample Name: MW-9
Lab Code: R1401882-004

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA6\DATA\032014\L3732.D\

Analysis Lot: 384553
Instrument Name: R-MS-06
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0 U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	14	5.0	0.22	
75-01-4	Vinyl Chloride	5.0 U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	0.41 J	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0 U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85-122	3/20/14 14:20	
Dibromofluoromethane	98	89-119	3/20/14 14:20	
Toluene-d8	101	87-121	3/20/14 14:20	

Data File : I:\ACQUDATA\MSVOA6\DATA\032014\L3732.D

Vial: 14

Acq On : 20 Mar 2014 2:20 pm

Operator: D.Lipani

Sample : R1401882-004|1.0

Inst : MS#6

Misc : Verina 8260C 6646 T4

Multiplr: 1.00

MS Integration Params: CPD4.P

Quant Time: Mar 20 19:24 2014

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)

Title : 8260C WATERS

Last Update : Thu Mar 20 15:48:07 2014

Response via : Initial Calibration

DataAcq Meth : W031914

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.40	168	619294	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.71	114	909485	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.08	117	842886	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.18	152	440760	50.00	ug/L	0.00

System Monitoring Compounds

40) surr4,Dibromomethane	3.68	113	301040	48.97	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	97.94%
42) surr1,1,2-dichloroethane-d	4.28	65	298245	50.58	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	101.16%
62) SURR3,Toluene-d8	7.77	98	1127826	50.27	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	100.54%
82) SURR2,BFB	10.14	95	417317	47.51	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	95.02%

Target Compounds

					Qvalue	
10) Acrolein	1.70	56	214	0.22 ug/L	95	
13) 2-Propanol	1.72	45	126	0.52 ug/L #	26	
14) Acetone	1.76	43	3017	1.51 ug/L	88	NT
17) Iodomethane	2.00	142	136	1.08 ug/L #	33	
18) TBA	2.05	59	214	0.57 ug/L	86	
21) Freon 113	2.12	101	21902	2.84 ug/L	99	NT
33) cis-1,2-Dichloroethene	3.31	96	3861	0.41 ug/L	96	
38) 1,1,1-Trichloroethane	4.52	97	3238	0.25 ug/L #	34	LT-2° interference also
41) Iso Butyl Alcohol	3.77	43	130	0.66 ug/L #	12	
51) Trichloroethene	6.16	130	127330	13.56 ug/L	99	
78) Cyclohexanone	9.75	55	259	0.39 ug/L #	84	
100) Nitrobenzene	11.95	77	92	0.38 ug/L	87	
104) 1,2,3-Trclbenzene	13.24	180	1479	0.21 ug/L #	80	

DL
3/31/14

(#) = qualifier out of range (m) = manual integration

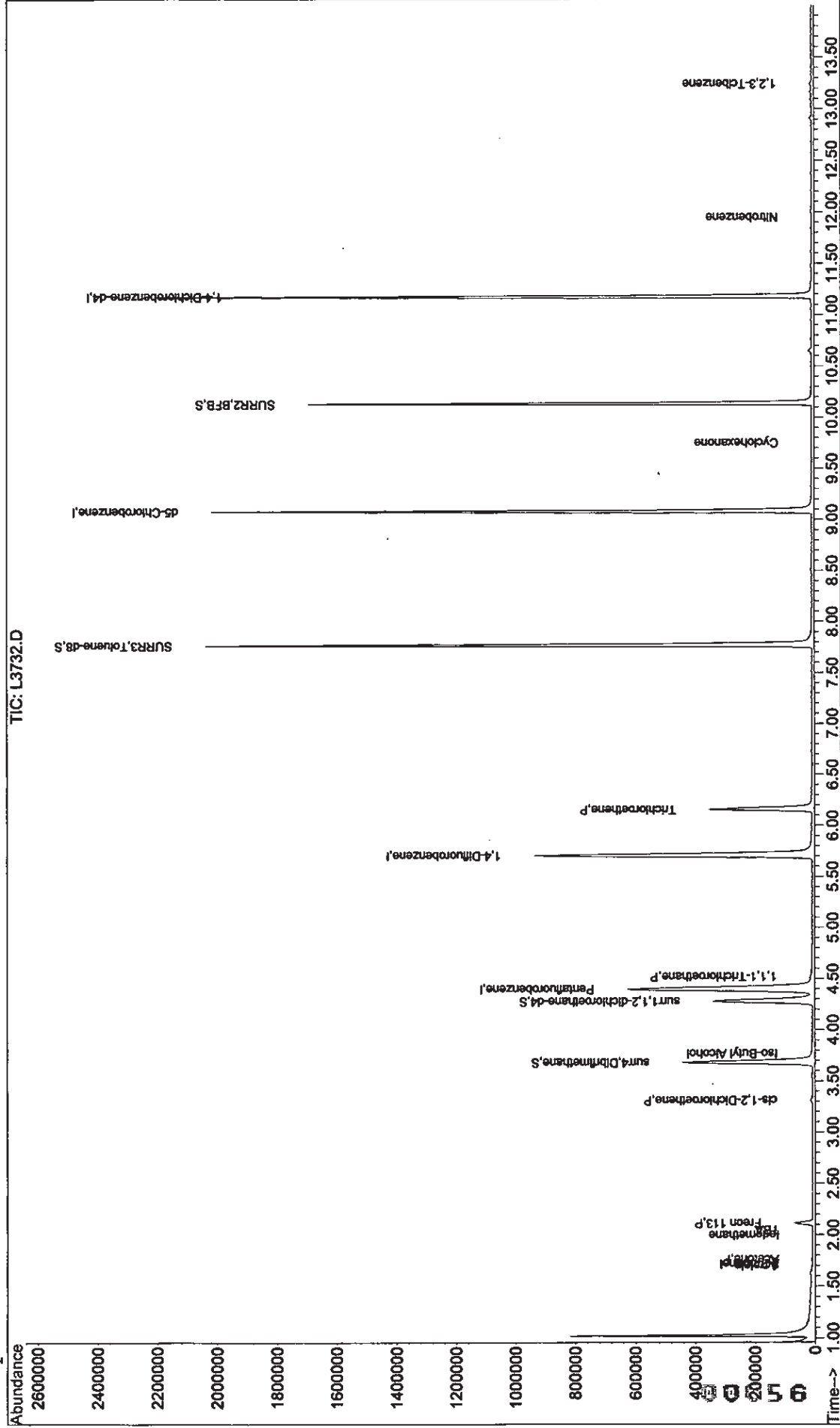
L3732.D W031914.M

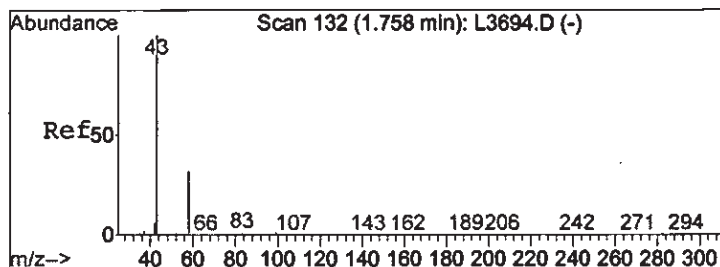
Thu Mar 20 19:16:08 2014

Quantitation Report

Data File : I:\ACQDATA\MSVOA6\DATA\032014\L3732.D Vial: 14
 Acq On : 20 Mar 2014 2:20 pm Operator: D.Lipani
 Sample : R1401882-004|1.0 Inst : MS#6
 Misc : Verina 8260C 6646 T4 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 19:24 2014 Quant Results File: W031914.RES

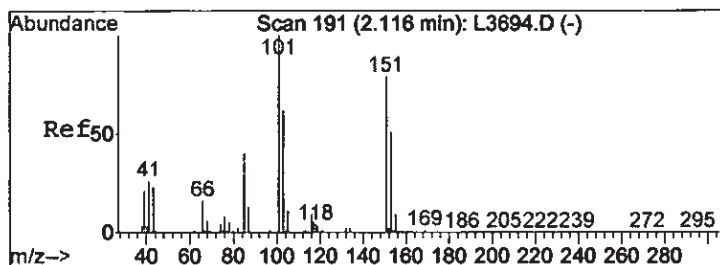
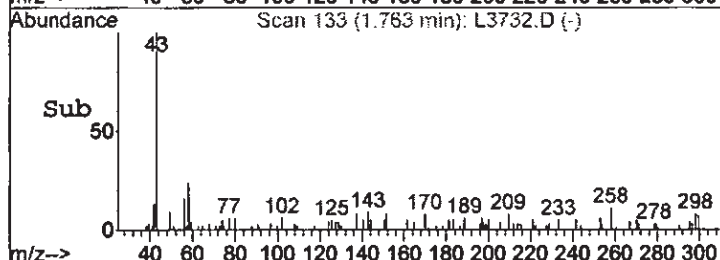
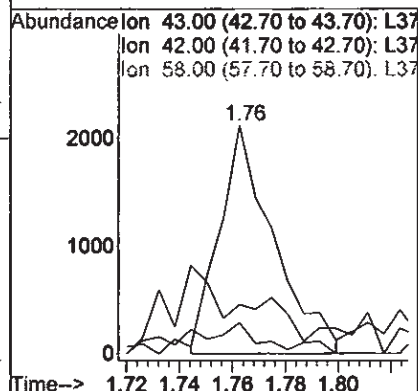
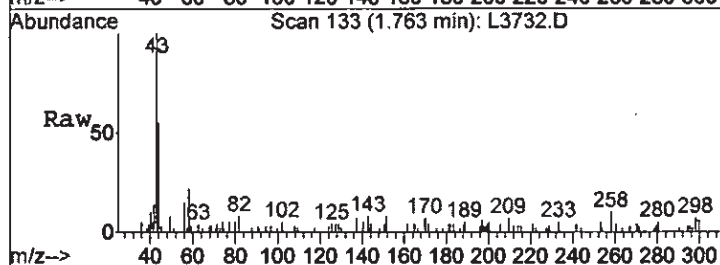
Method : I:\ACQDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 15:48:07 2014
 Response via : Initial Calibration





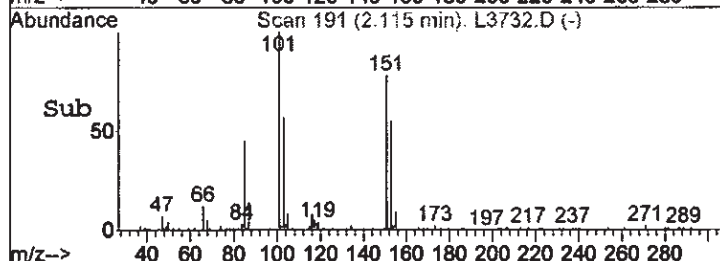
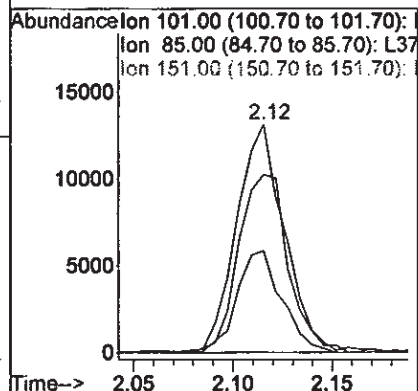
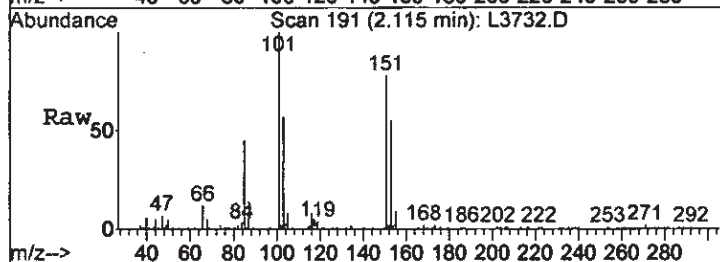
#14
Acetone
Concen: 1.51 ug/L
RT: 1.76 min Scan# 133
Delta R.T. 0.01 min
Lab File: L3732.D
Acq: 20 Mar 2014 2:20 pm

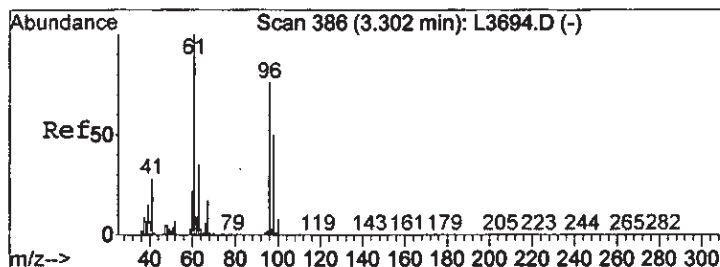
Tgt Ion	Ratio	Lower	Upper
43	100		
42	13.6	0.0	29.9
58	21.5	8.5	48.5



#21
Freon 113
Concen: 2.84 ug/L
RT: 2.12 min Scan# 191
Delta R.T. -0.00 min
Lab File: L3732.D
Acq: 20 Mar 2014 2:20 pm

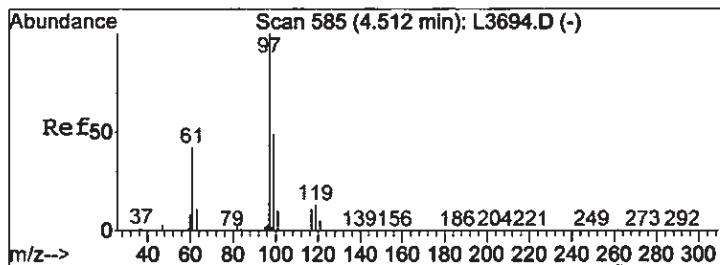
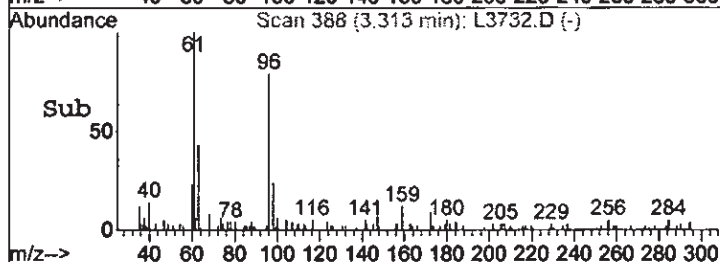
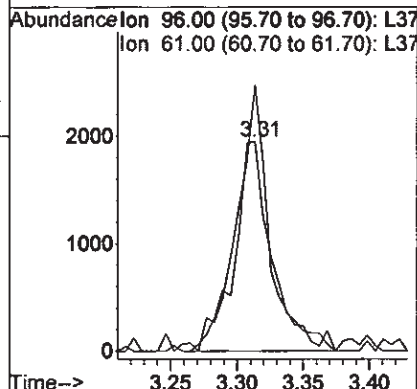
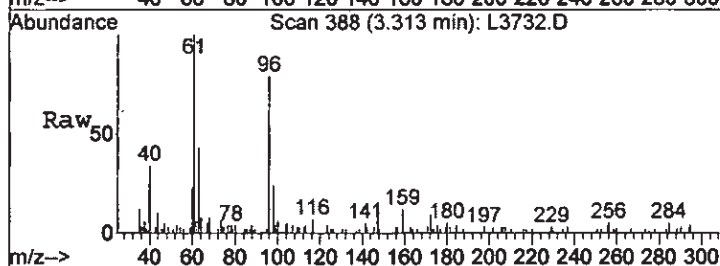
Tgt Ion	Ratio	Lower	Upper
101	100		
85	44.5	23.7	63.7
151	78.0	59.3	99.3





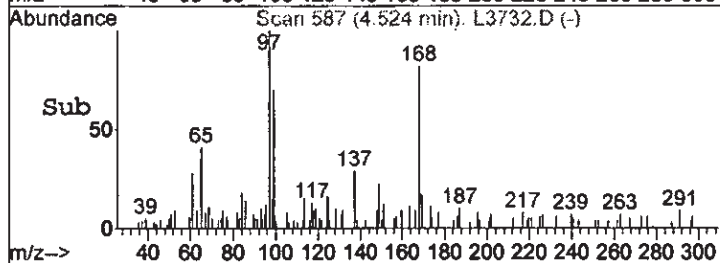
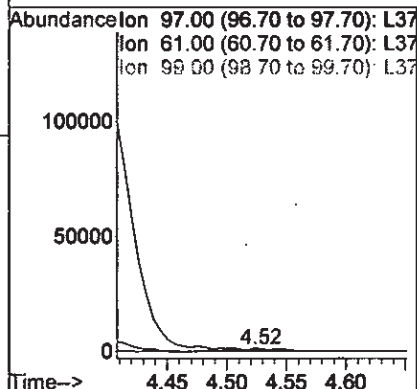
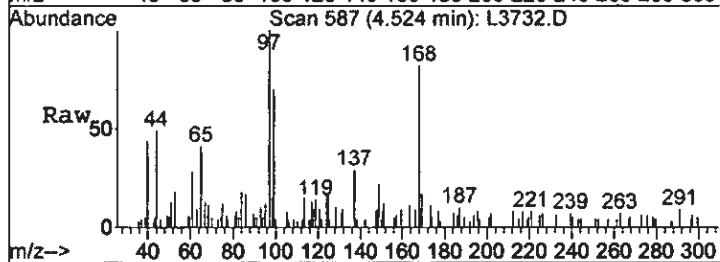
#33
 cis-1,2-Dichloroethene
 Concen: 0.41 ug/L
 RT: 3.31 min Scan# 388
 Delta R.T. 0.01 min
 Lab File: L3732.D
 Acq: 20 Mar 2014 2:20 pm

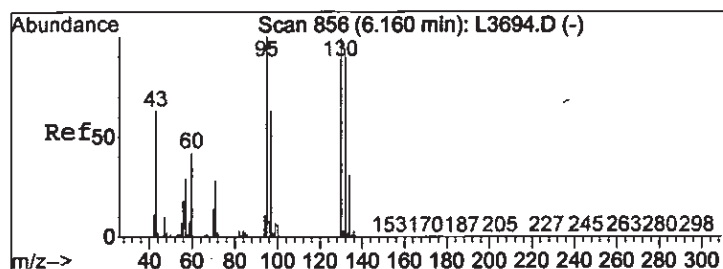
Tgt Ion: 96 Resp: 3861
 Ion Ratio Lower Upper
 96 100
 61 126.7 111.6 151.6



#38
 1,1,1-Trichloroethane
 Concen: 0.25 ug/L
 RT: 4.52 min Scan# 587
 Delta R.T. 0.01 min
 Lab File: L3732.D
 Acq: 20 Mar 2014 2:20 pm

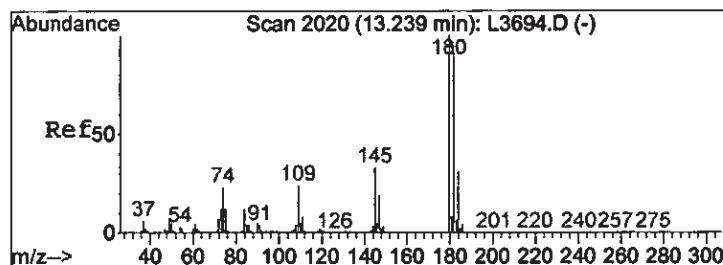
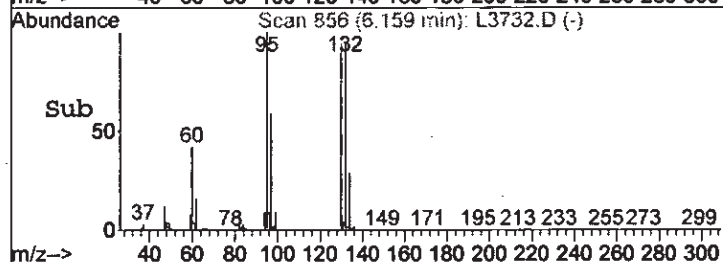
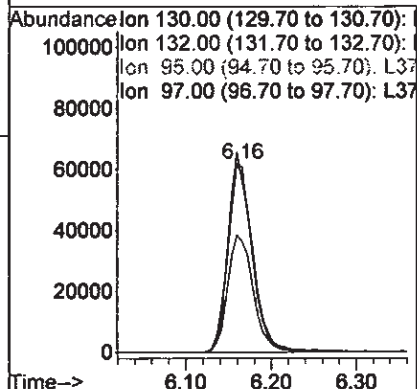
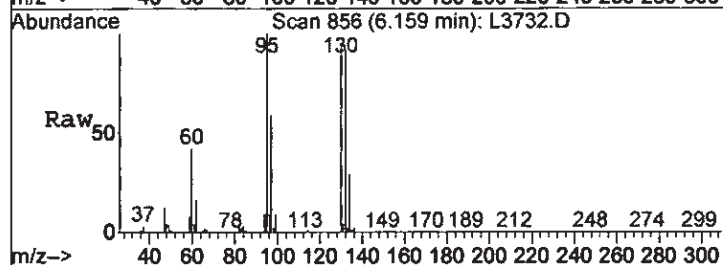
Tgt Ion: 97 Resp: 3238
 Ion Ratio Lower Upper
 97 100
 61 27.7 24.2 64.2
 99 139.5 45.1 85.1#





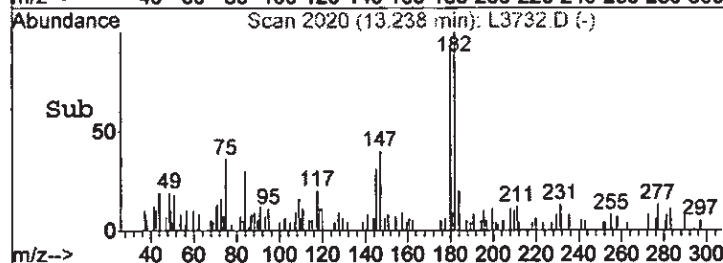
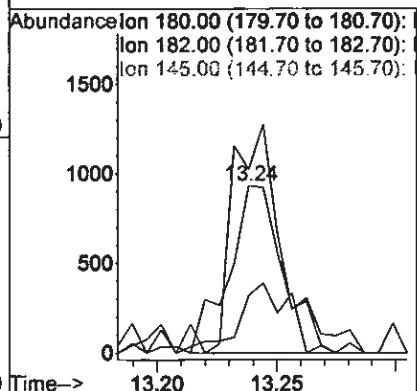
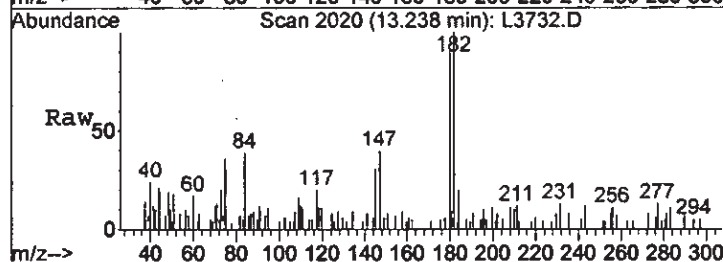
#51
 Trichloroethene
 Concen: 13.56 ug/L
 RT: 6.16 min Scan# 856
 Delta R.T. -0.00 min
 Lab File: L3732.D
 Acq: 20 Mar 2014 2:20 pm

Tgt Ion	Ratio	Lower	Upper
130	100		
132	97.7	76.0	116.0
95	98.5	78.5	118.5
97	63.3	43.7	83.7



#104
 1,2,3-Trichlorobenzene
 Concen: 0.21 ug/L
 RT: 13.24 min Scan# 2020
 Delta R.T. -0.00 min
 Lab File: L3732.D
 Acq: 20 Mar 2014 2:20 pm

Tgt Ion	Ratio	Lower	Upper
180	100		
182	121.2	76.2	116.2#
145	33.4	11.5	51.5



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1401882
Date Collected: 3/17/14 1540
Date Received: 3/19/14
Date Analyzed: 3/20/14 14:49

Sample Name: MW-16
Lab Code: R1401882-005

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C
Data File Name: I:\ACQU\DATA\MSVOA6\DATA\032014\L3733.D\

Analysis Lot: 384553
Instrument Name: R-MS-06
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	2.1 J	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	10	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0 U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	10	5.0	0.22	
75-01-4	Vinyl Chloride	14	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	49	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	1.4 J	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85-122	3/20/14 14:49	
Dibromofluoromethane	99	89-119	3/20/14 14:49	
Toluene-d8	100	87-121	3/20/14 14:49	

Data File : I:\ACQUDATA\MSVOA6\DATA\032014\L3733.D

Vial: 15

Acq On : 20 Mar 2014 2:49 pm

Operator: D.Lipani

Sample : R1401882-005|1.0

Inst : MS#6

Misc : Verina 8260C 7979 T4

Multiplr: 1.00

MS Integration Params: CPD4.P

Quant Time: Mar 20 19:24 2014

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)

Title : 8260C WATERS

Last Update : Thu Mar 20 15:48:07 2014

Response via : Initial Calibration

DataAcq Meth : W031914

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.40	168	594618	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.71	114	871386	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.09	117	801916	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.18	152	424562	50.00	ug/L	0.00

System Monitoring Compounds

40) surr4, Dibrflmethane	3.68	113	290425	49.30	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	98.60%
42) surr1, 1,2-dichloroethane-d	4.28	65	292829	51.83	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	103.66%
62) SURR3, Toluene-d8	7.77	98	1079664	50.23	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	100.46%
82) SURR2, BFB	10.14	95	399509	47.81	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	95.62%

Target Compounds

						Qvalue
4) Vinyl Chloride	1.18	62	148783	14.44	ug/L	99
6) Chloroethane	1.41	64	2285	0.40	ug/L	76 NT, BLC
9) Freon 123a	1.63	67	28801	2.87	ug/L	95 NT, SP
12) Acetonitrile	1.70	41	186	0.25	ug/L #	7
13) 2-Propanol	1.72	45	577	2.46	ug/L #	56
14) Acetone	1.76	43	6943	3.61	ug/L	93 NT
16) 1,1-Dicethene	1.97	96	2584	0.39	ug/L #	81
17) Iodomethane	2.02	142	262	1.09	ug/L	77
18) TBA	2.01	59	184	0.51	ug/L	76
21) Freon 113	2.11	101	17050	2.30	ug/L	98 NT
25) trans-1,2-Dichloroethene	2.55	96	11352	1.40	ug/L #	81
27) 1,1-Dicethane	2.75	63	152392	10.24	ug/L	97
33) cis-1,2-Dichloroethene	3.30	96	450159	49.22	ug/L	99
38) 1,1,1-Trichloroethane	4.51	97	26202	2.10	ug/L	88
41) Iso Butyl Alcohol	3.79	43	111	0.59	ug/L #	12
51) Trichloroethene	6.16	130	91720	10.20	ug/L	98
78) Cyclohexanone	9.74	55	173	0.27	ug/L #	51
100) Nitrobenzene	12.05	77	263	1.11	ug/L	76
102) Naphthalen	13.09	128	2877	0.21	ug/L #	76

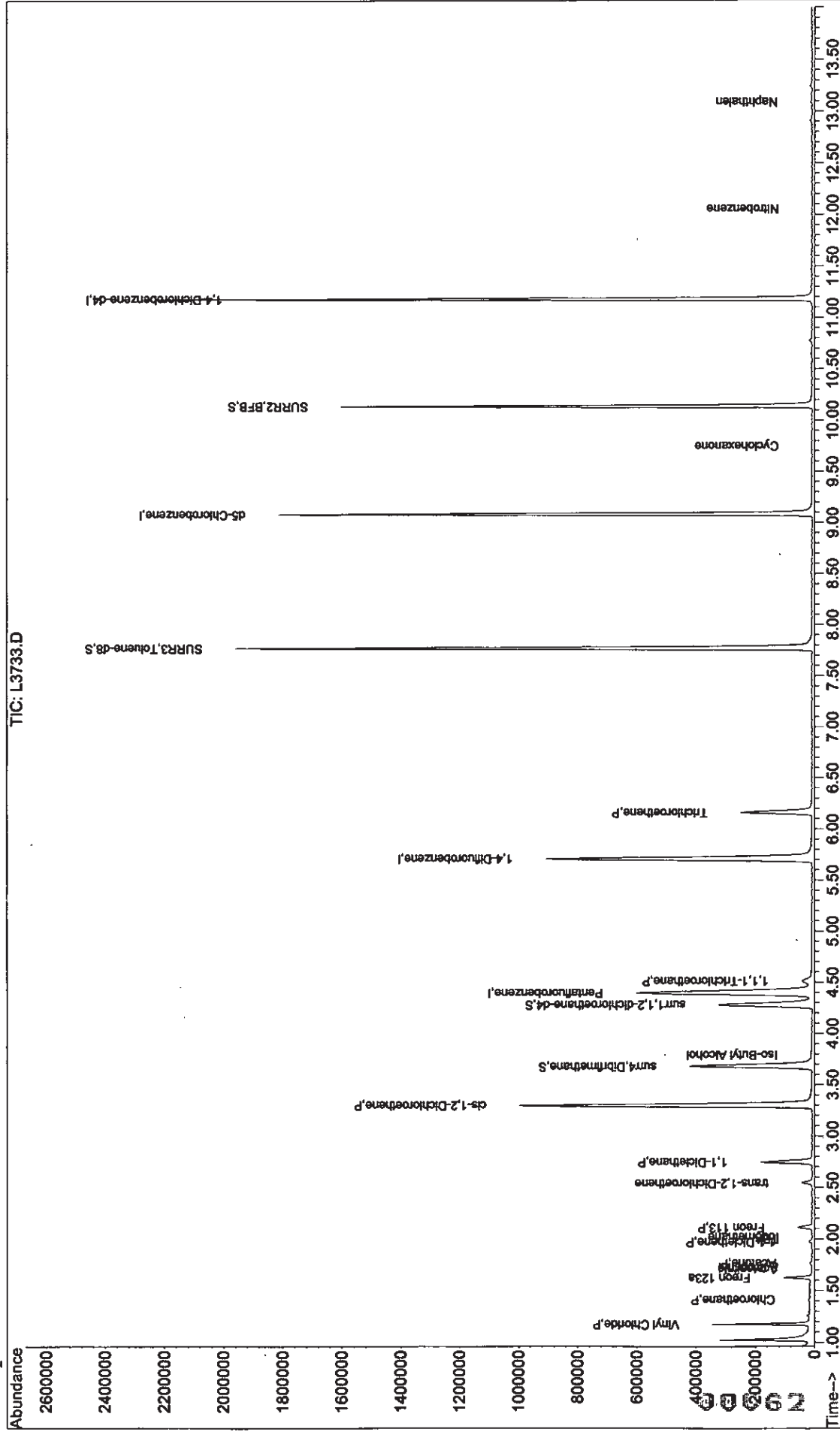
104) 123-TCB NT, BLC 13.25min.

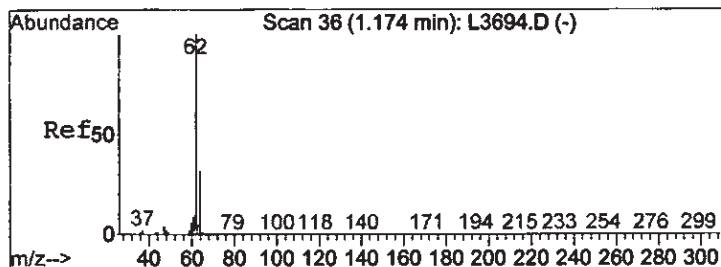
DL
3/31/14

Quantitation Report

Data File : I:\ACQDATA\MSVOA6\DATA\032014\L3733.D Vial: 15
 Acq On : 20 Mar 2014 2:49 pm Operator: D.Lipani
 Sample : R1401882-005|1.0 Inst : MS#6
 Misc : Verina 8260C 7979 T4 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 19:24 2014 Quant Results File: W031914.RES

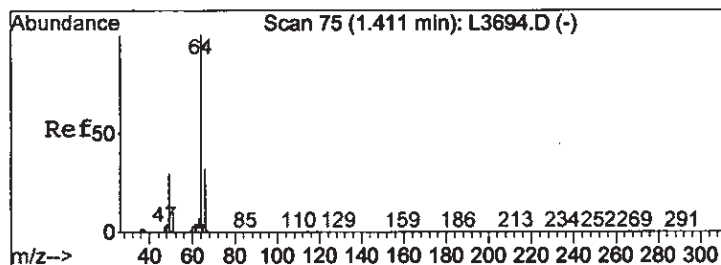
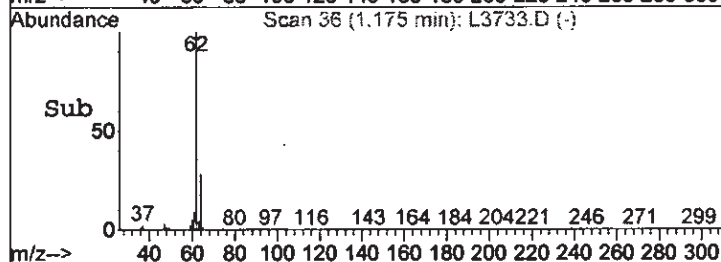
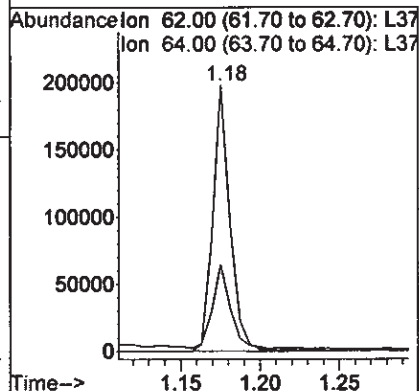
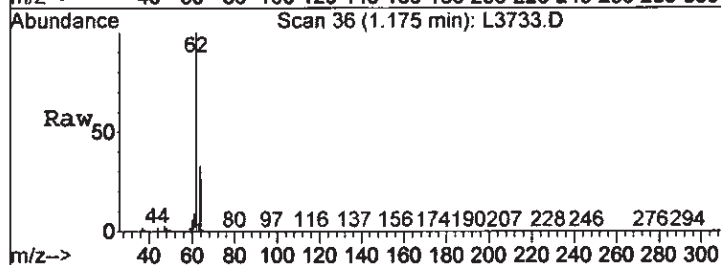
Method : I:\ACQDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 15:48:07 2014
 Response via : Initial Calibration





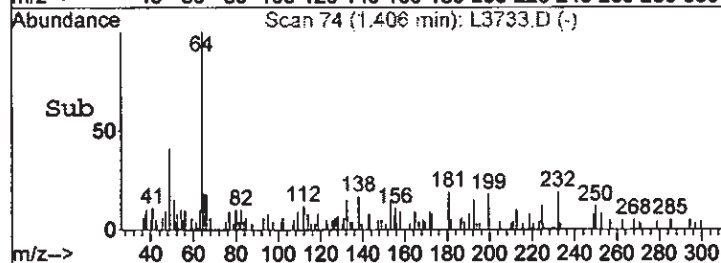
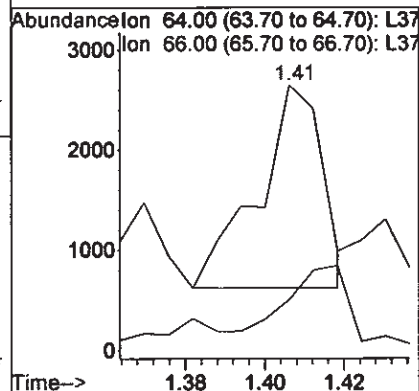
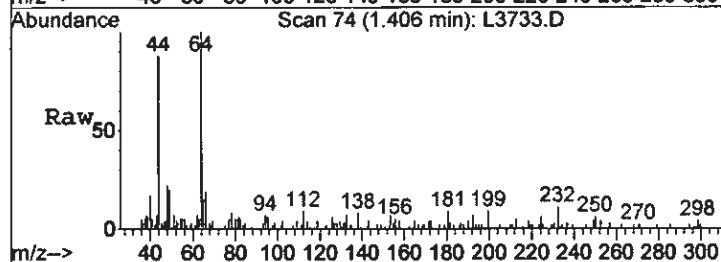
#4
 Vinyl Chloride
 Concen: 14.44 ug/L
 RT: 1.18 min Scan# 36
 Delta R.T. 0.00 min
 Lab File: L3733.D
 Acq: 20 Mar 2014 2:49 pm

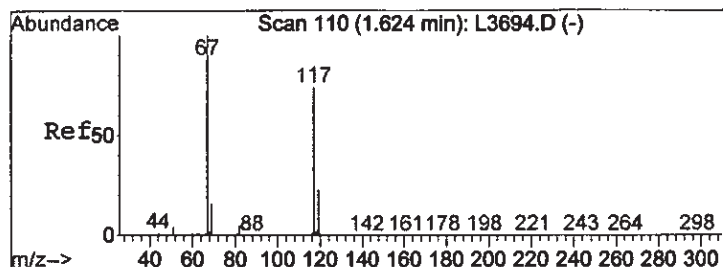
Tgt Ion: 62 Resp: 148783
 Ion Ratio Lower Upper
 62 100
 64 32.8 12.3 52.3



#6
 Chloroethane
 Concen: 0.40 ug/L
 RT: 1.41 min Scan# 74
 Delta R.T. -0.00 min
 Lab File: L3733.D
 Acq: 20 Mar 2014 2:49 pm

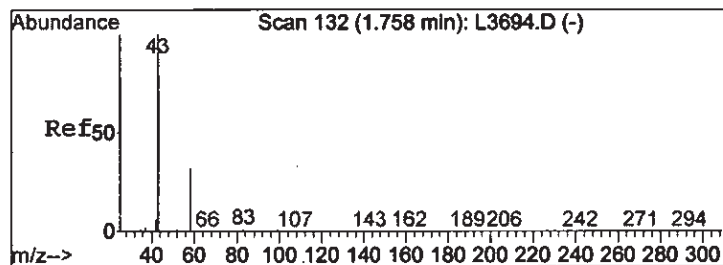
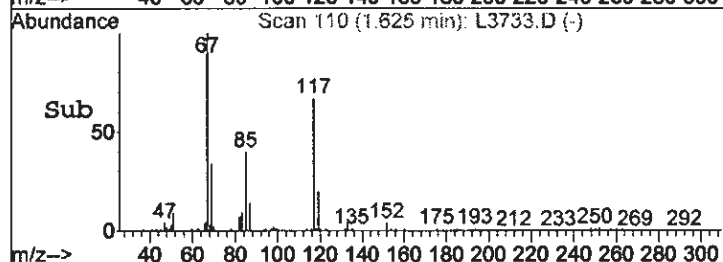
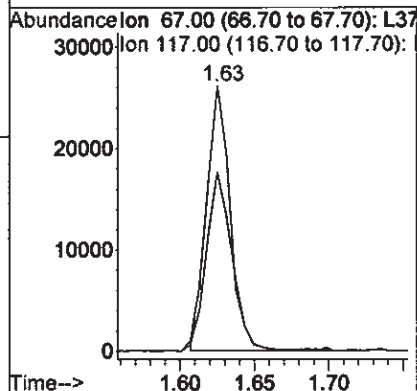
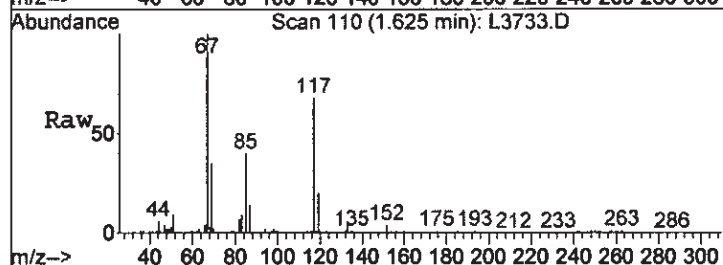
Tgt Ion: 64 Resp: 2285
 Ion Ratio Lower Upper
 64 100
 66 19.1 12.4 52.4





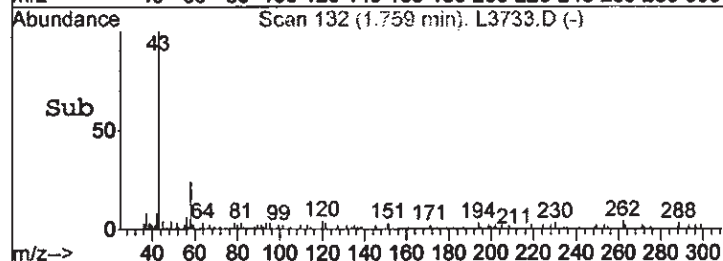
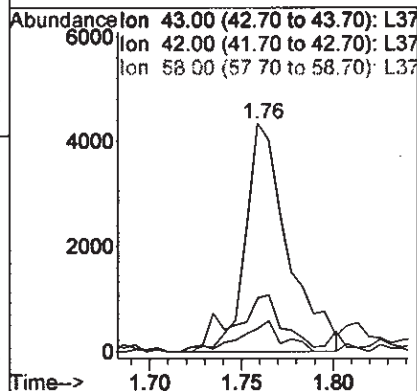
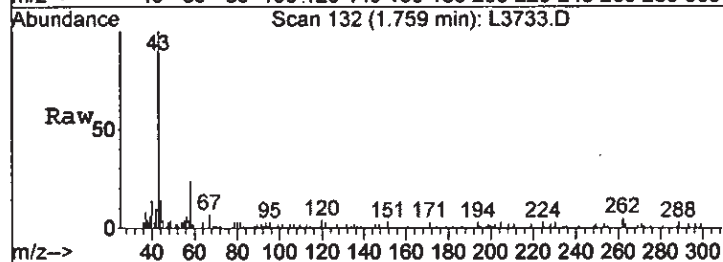
#9
Freon 123a
Concen: 2.87 ug/L
RT: 1.63 min Scan# 110
Delta R.T. 0.00 min
Lab File: L3733.D
Acq: 20 Mar 2014 2:49 pm

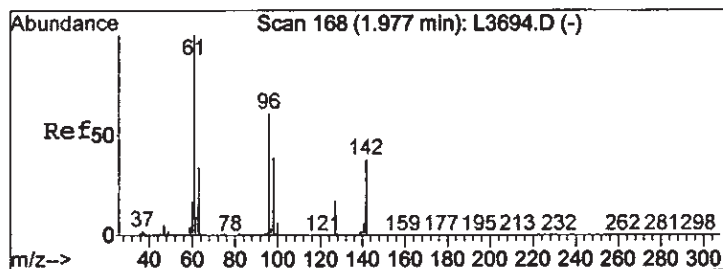
Tgt Ion: 67 Resp: 28801
Ion Ratio Lower Upper
67 100
117 67.7 44.1 84.1



#14
Acetone
Concen: 3.61 ug/L
RT: 1.76 min Scan# 132
Delta R.T. 0.00 min
Lab File: L3733.D
Acq: 20 Mar 2014 2:49 pm

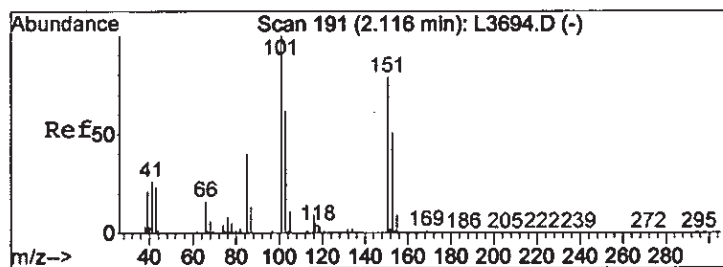
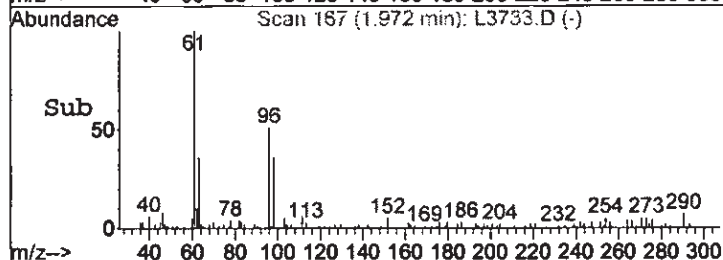
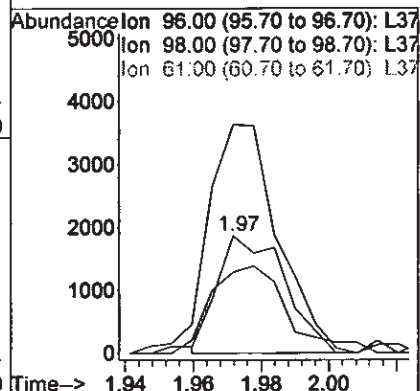
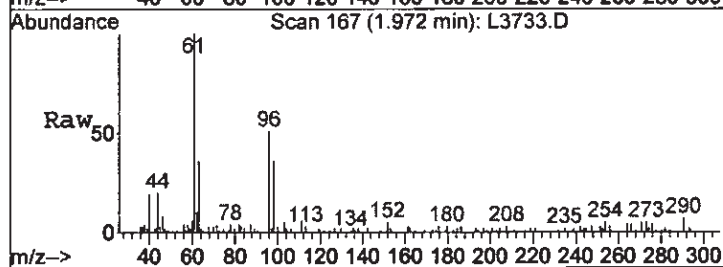
Tgt Ion: 43 Resp: 6943
Ion Ratio Lower Upper
43 100
42 10.1 0.0 29.9
58 23.5 8.5 48.5





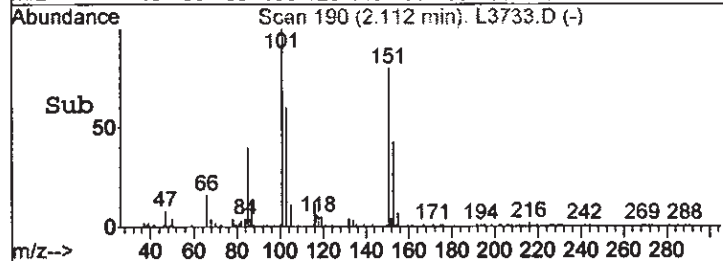
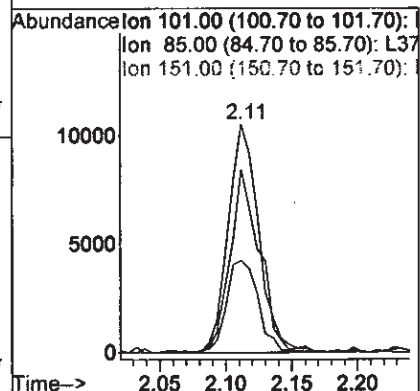
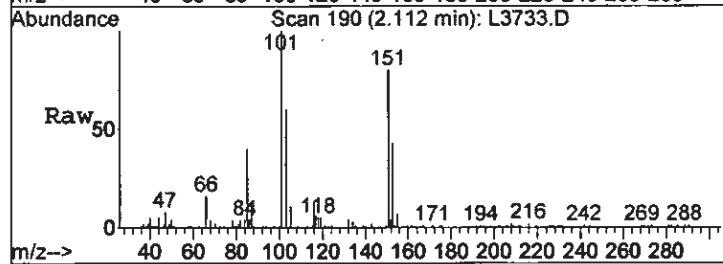
#16
1,1-Dicloroethene
Concen: 0.39 ug/L
RT: 1.97 min Scan# 167
Delta R.T. -0.00 min
Lab File: L3733.D
Acq: 20 Mar 2014 2:49 pm

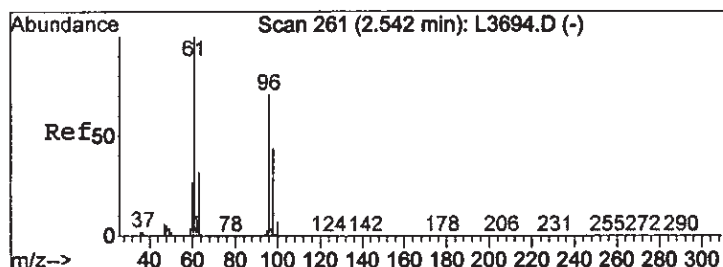
Tgt Ion: 96 Resp: 2584
Ion Ratio Lower Upper
96 100
98 69.0 44.3 84.3
61 194.3 142.8 182.8#



#21
Freon 113
Concen: 2.30 ug/L
RT: 2.11 min Scan# 190
Delta R.T. -0.00 min
Lab File: L3733.D
Acq: 20 Mar 2014 2:49 pm

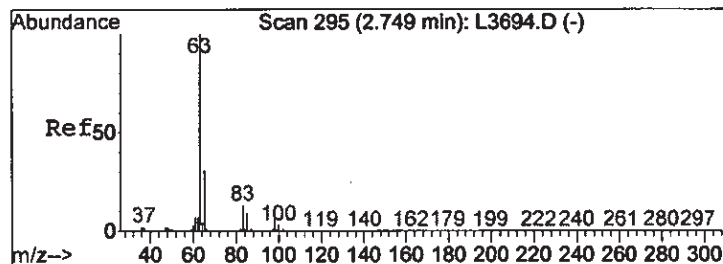
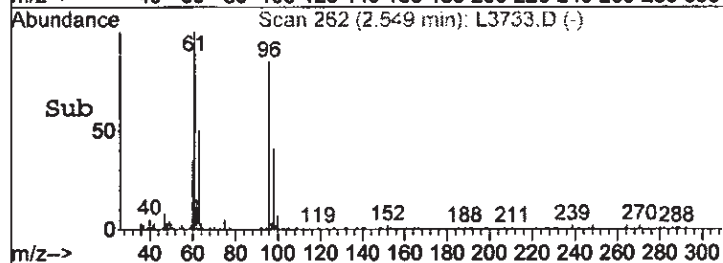
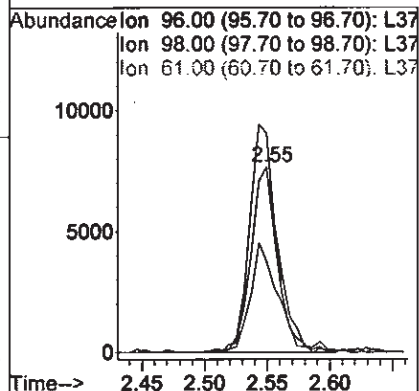
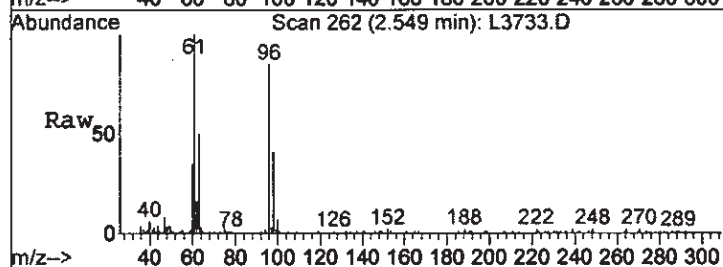
Tgt Ion: 101 Resp: 17050
Ion Ratio Lower Upper
101 100
85 40.3 23.7 63.7
151 80.1 59.3 99.3





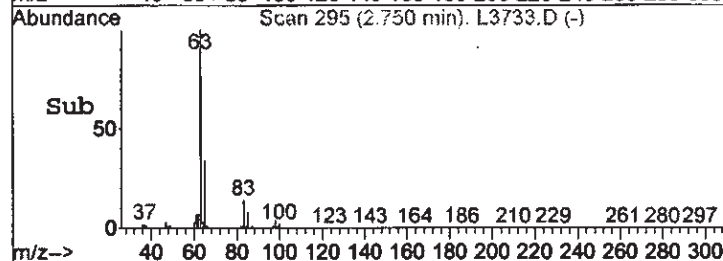
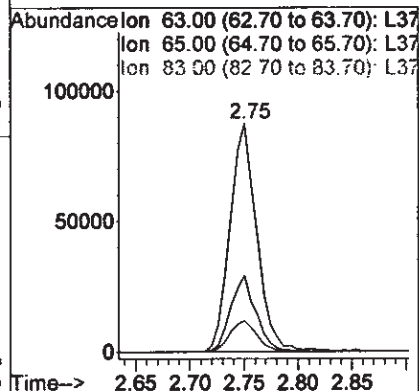
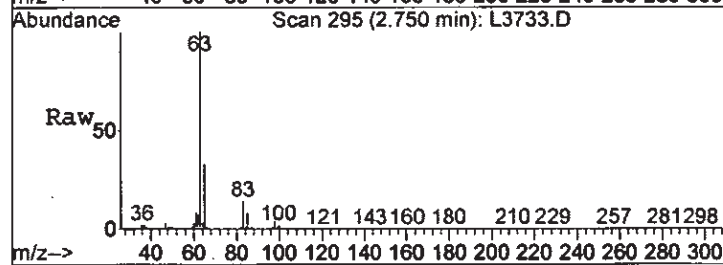
#25
trans-1,2-Dichloroethene
Concen: 1.40 ug/L
RT: 2.55 min Scan# 262
Delta R.T. 0.01 min
Lab File: L3733.D
Acq: 20 Mar 2014 2:49 pm

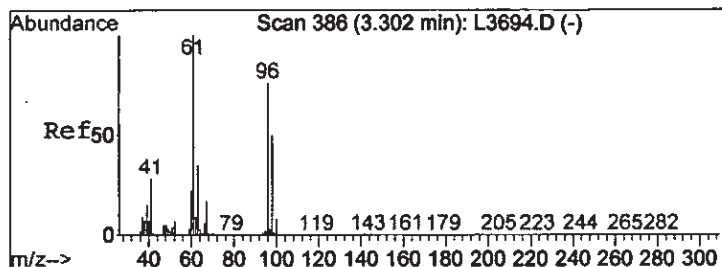
Tgt Ion	96	Resp	11352
Ion Ratio	Lower	Upper	
96	100		
98	48.7	42.6	82.6
61	117.9	121.3	161.3#



#27
1,1-Dicethane
Concen: 10.24 ug/L
RT: 2.75 min Scan# 295
Delta R.T. 0.00 min
Lab File: L3733.D
Acq: 20 Mar 2014 2:49 pm

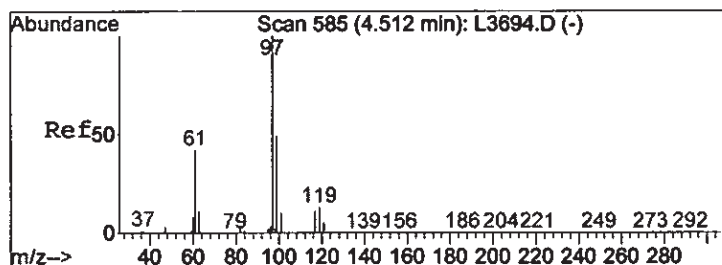
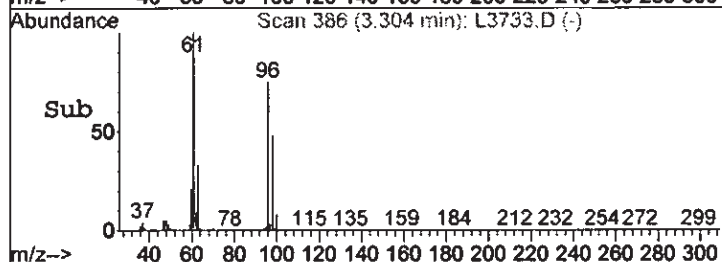
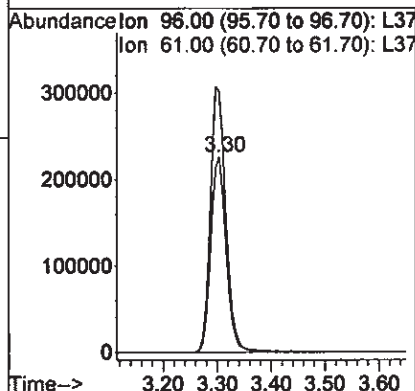
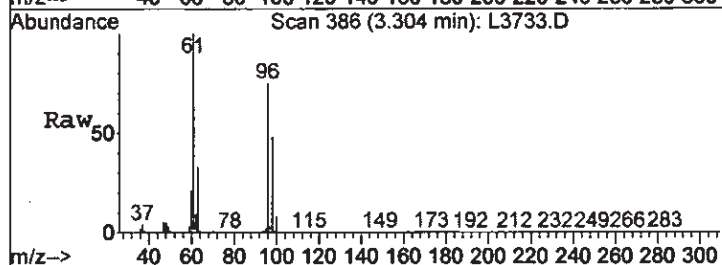
Tgt Ion	63	Resp	152392
Ion Ratio	Lower	Upper	
63	100		
65	33.4	11.3	51.3
83	13.6	0.0	33.2





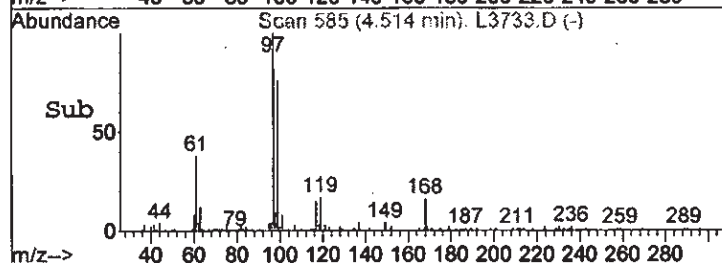
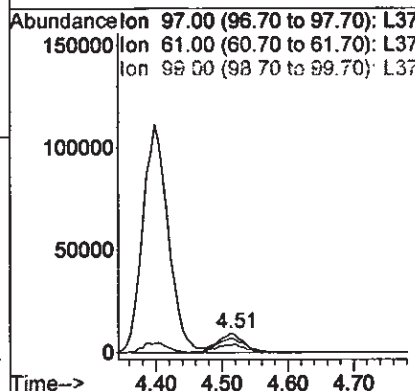
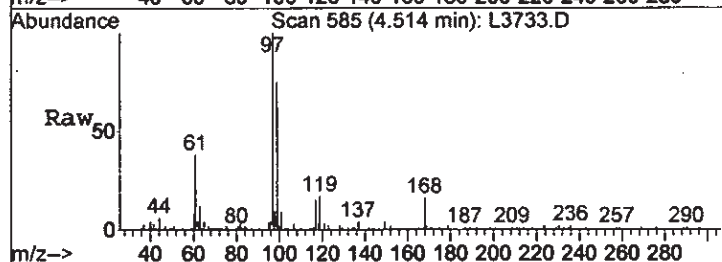
#33
 cis-1,2-Dichloroethene
 Concen: 49.22 ug/L
 RT: 3.30 min Scan# 386
 Delta R.T. 0.00 min
 Lab File: L3733.D
 Acq: 20 Mar 2014 2:49 pm

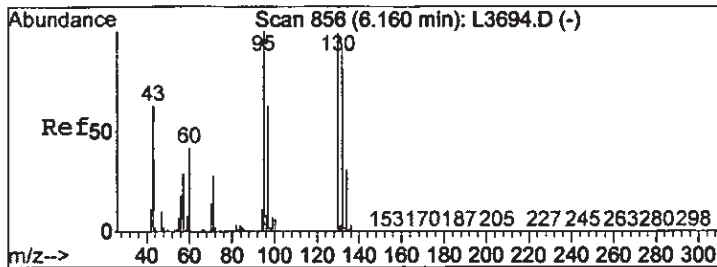
Tgt Ion: 96 Resp: 450159
 Ion Ratio Lower Upper
 96 100
 61 133.2 111.6 151.6



#38
 1,1,1-Trichloroethane
 Concen: 2.10 ug/L
 RT: 4.51 min Scan# 585
 Delta R.T. 0.00 min
 Lab File: L3733.D
 Acq: 20 Mar 2014 2:49 pm

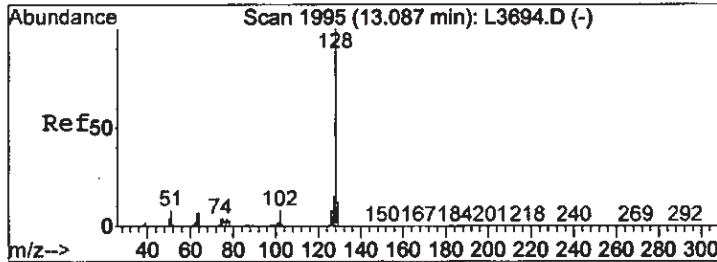
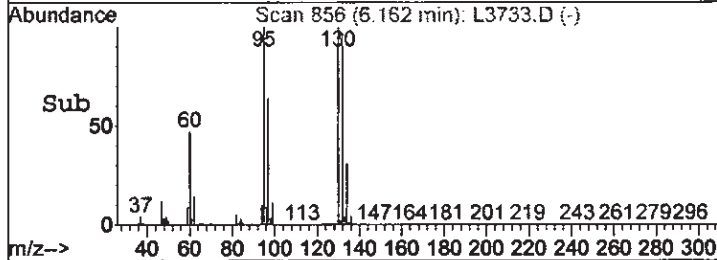
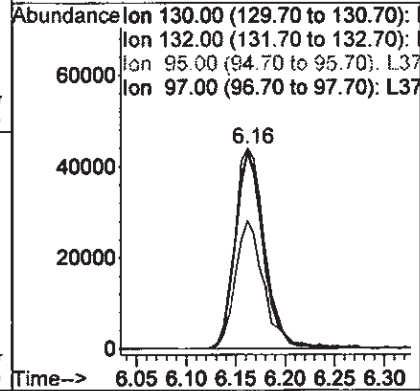
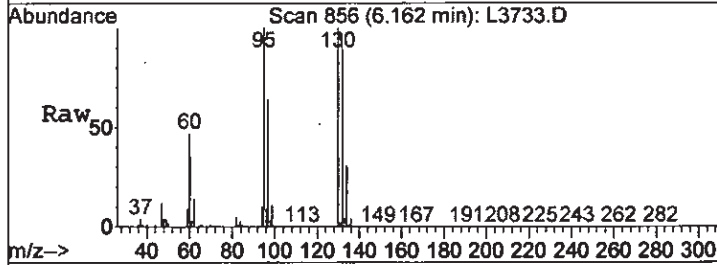
Tgt Ion: 97 Resp: 26202
 Ion Ratio Lower Upper
 97 100
 61 37.9 24.2 64.2
 99 75.4 45.1 85.1





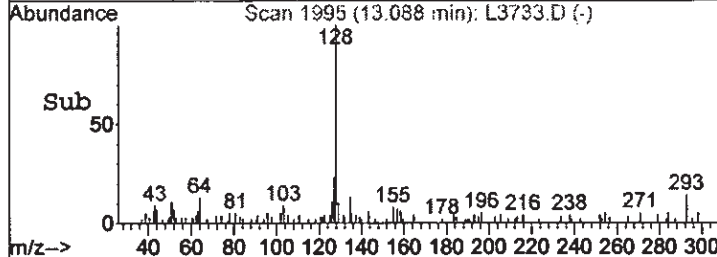
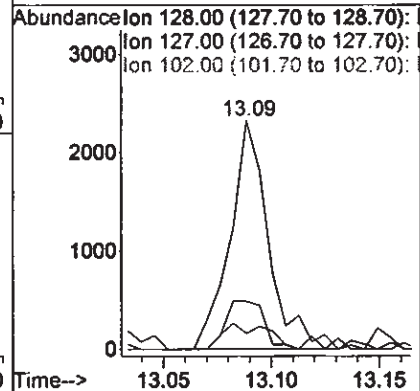
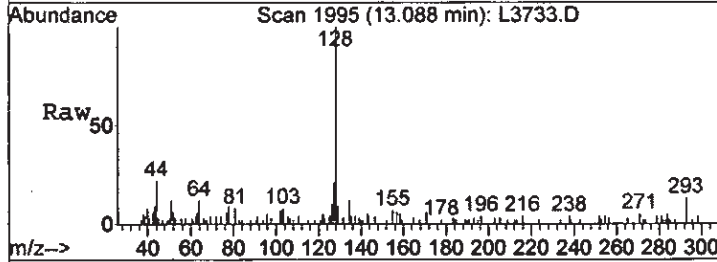
#51
Trichloroethene
Concen: 10.20 ug/L
RT: 6.16 min Scan# 856
Delta R.T. 0.00 min
Lab File: L3733.D
Acq: 20 Mar 2014 2:49 pm

Tgt Ion:	130	Resp:	91720
Ion	Ratio	Lower	Upper
130	100		
132	95.2	76.0	116.0
95	95.6	78.5	118.5
97	61.0	43.7	83.7



#102
Naphthalen
Concen: 0.21 ug/L
RT: 13.09 min Scan# 1995
Delta R.T. 0.00 min
Lab File: L3733.D
Acq: 20 Mar 2014 2:49 pm

Tgt Ion:	128	Resp:	2877
Ion	Ratio	Lower	Upper
128	100		
127	0.0	0.0	33.7
102	5.8	0.0	27.9



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1401882
Date Collected: 3/17/14 1615
Date Received: 3/19/14
Date Analyzed: 3/20/14 12:06

Sample Name: FB-031714
Lab Code: R1401882-006

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA6\DATA\032014\L3728.D\

Analysis Lot: 384553
Instrument Name: R-MS-06
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	5.0	U	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	5.0	U	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0	U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	5.0	U	5.0	0.22	
75-01-4	Vinyl Chloride	5.0	U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	85-122	3/20/14 12:06	
Dibromofluoromethane	97	89-119	3/20/14 12:06	
Toluene-d8	99	87-121	3/20/14 12:06	

Data File : I:\ACQUDATA\MSVOA6\DATA\032014\L3728.D

Vial: 10

Acq On : 20 Mar 2014 12:06 pm

Operator: D.Lipani

Sample : R1401882-006|1.0

Inst : MS#6

Misc : Verina 8260C 6646 T4

Multiplr: 1.00

MS Integration Params: CPD4.P

Quant Time: Mar 20 19:23 2014

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)

Title : 8260C WATERS

Last Update : Thu Mar 20 15:48:07 2014

Response via : Initial Calibration

DataAcq Meth : W031914

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.40	168	611983	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.71	114	896477	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.09	117	833971	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.18	152	428686	50.00	ug/L	0.00

System Monitoring Compounds

40) surr4,Dibrfilmethane	3.69	113	294291	48.56	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	97.12%
42) surr1,1,2-dichloroethane-d	4.28	65	296905	51.08	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	102.16%
62) SURR3,Toluene-d8	7.77	98	1097672	49.64	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	99.28%
82) SURR2,BFB	10.14	95	404536	46.55	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	93.10%

Target Compounds

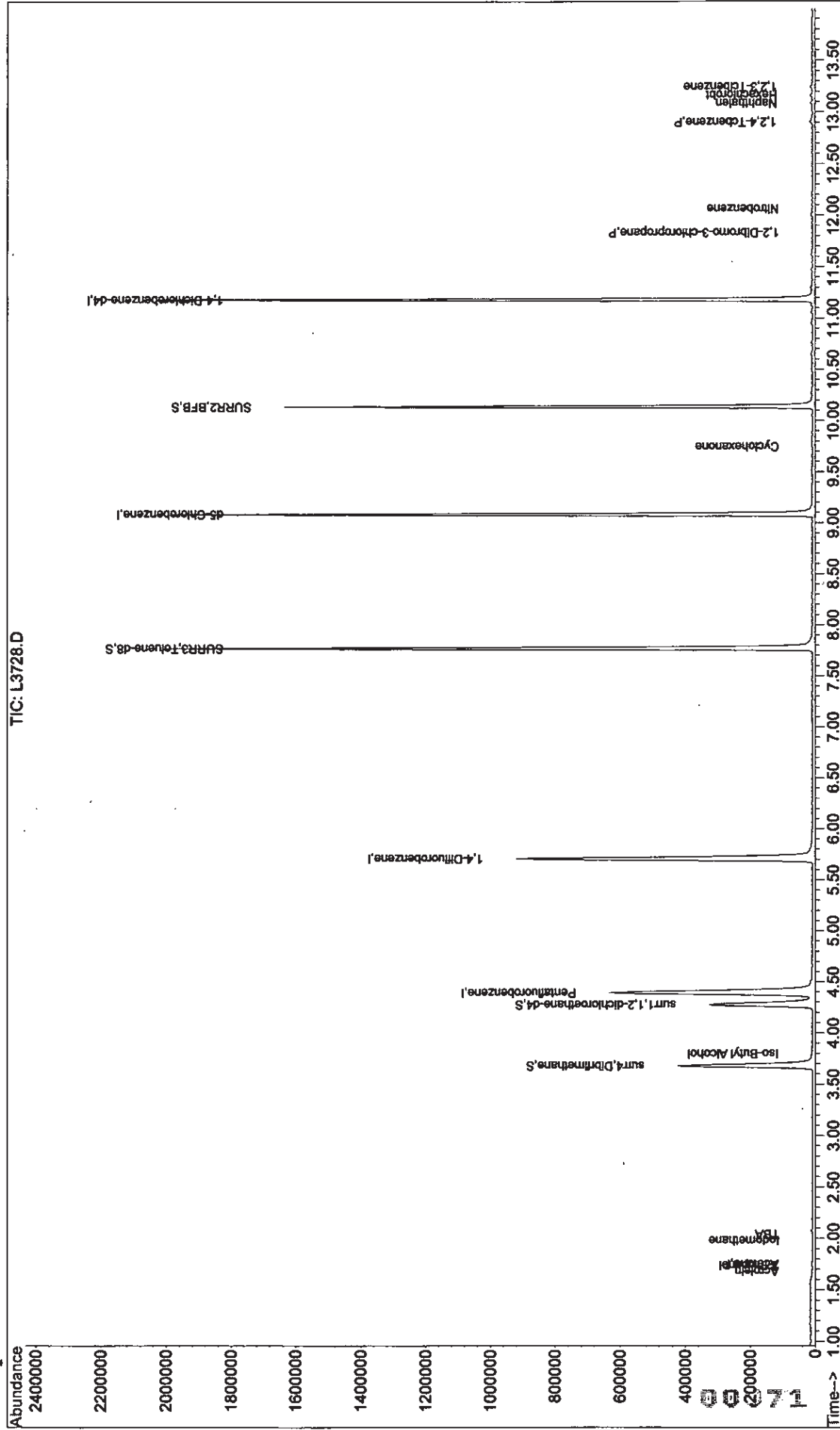
					Qvalue
10) Acrolein	1.68	56	228	0.24 ug/L #	62
13) 2-Propanol	1.74	45	133	0.55 ug/L #	1
14) Acetone	1.76	43	1924	0.97 ug/L	92
17) Iodomethane	1.98	142	18	1.07 ug/L #	33
18) TBA	2.04	59	182	0.49 ug/L	90
41) Iso-Butyl Alcohol	3.81	43	189	0.97 ug/L	93
78) Cyclohexanone	9.75	55	259	0.40 ug/L #	62
99) 1,2-Dibromo-3-chloropropan	11.83	75	243	0.24 ug/L #	14
100) Nitrobenzene	12.07	77	78	0.33 ug/L	72
101) 1,2,4-Tc benzene	12.90	180	2470	0.27 ug/L #	75
102) Naphthalen	13.09	128	4173	0.30 ug/L	97
103) Hexachlorobt	13.17	225	951	0.25 ug/L	86
104) 1,2,3-Tcl benzene	13.24	180	1898	0.27 ug/L	94

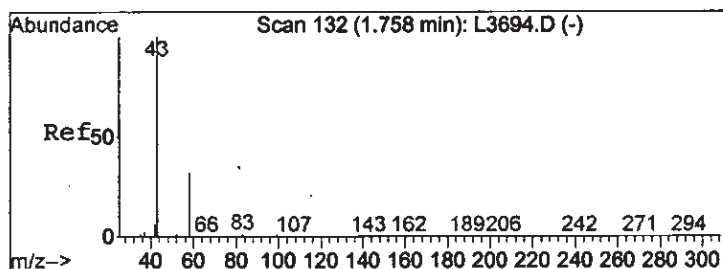
DL
3/21/14

Quantitation Report

Data File : I:\ACQDATA\MSVOA6\DATA\032014\L3728.D Vial: 10
Acq On : 20 Mar 2014 12:06 pm Operator: D.Lipani
Sample : R1401882-006|1.0 Inst : MS#6
Misc : Verina 8260C 6646 T4 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 20 19:23 2014 Quant Results File: W031914.RES

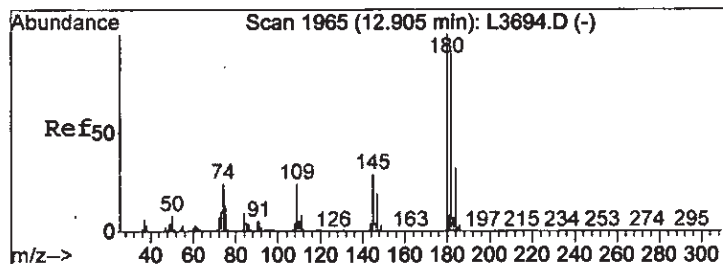
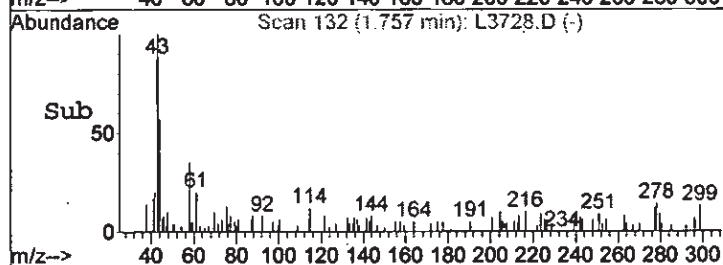
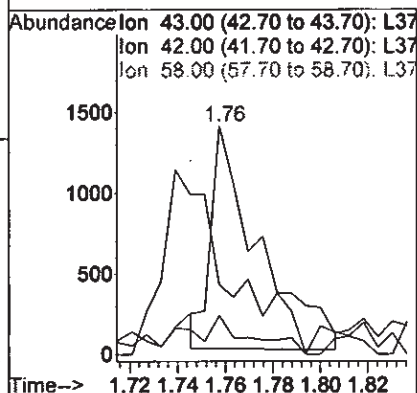
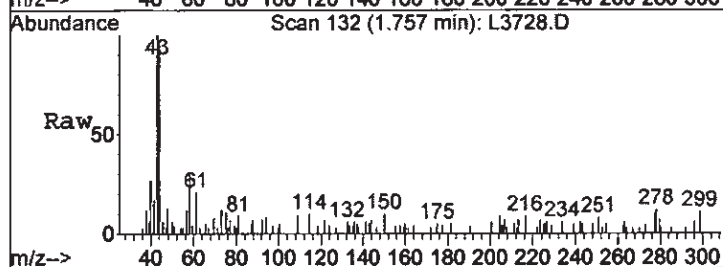
```
Method : I:\ACQDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
Title   : 8260C WATERS
Last Update : Thu Mar 20 15:48:07 2014
Response via : Initial Calibration
```





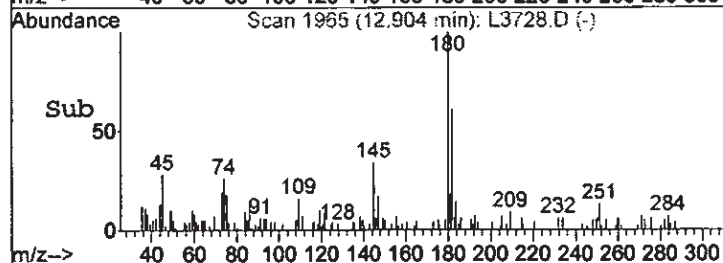
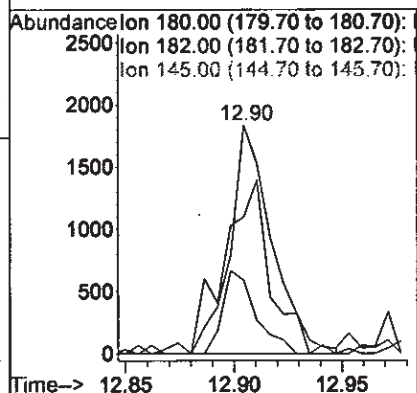
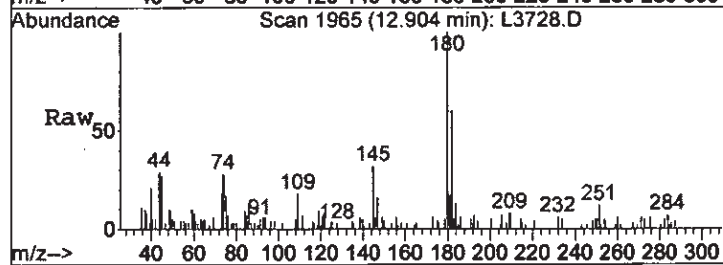
#14
Acetone
Concen: 0.97 ug/L
RT: 1.76 min Scan# 132
Delta R.T. -0.00 min
Lab File: L3728.D
Acq: 20 Mar 2014 12:06 pm

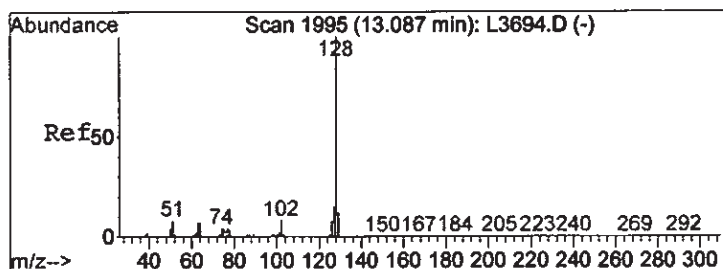
Tgt Ion: 43	Resp: 1924
Ion Ratio	Lower Upper
43	100
42	17.0 0.0 29.9
58	30.5 8.5 48.5



#101
1,2,4-Tribenzene
Concen: 0.27 ug/L
RT: 12.90 min Scan# 1965
Delta R.T. -0.00 min
Lab File: L3728.D
Acq: 20 Mar 2014 12:06 pm

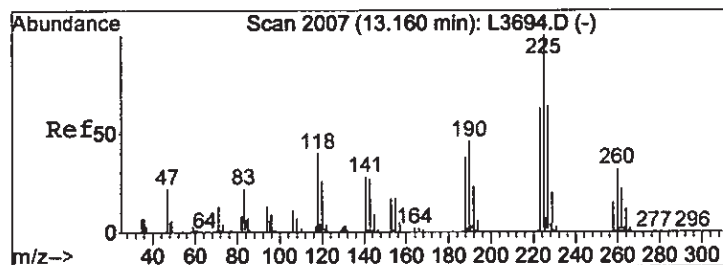
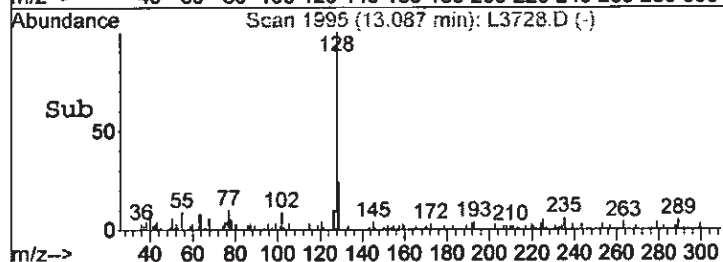
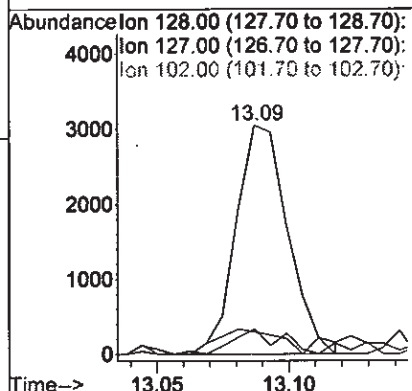
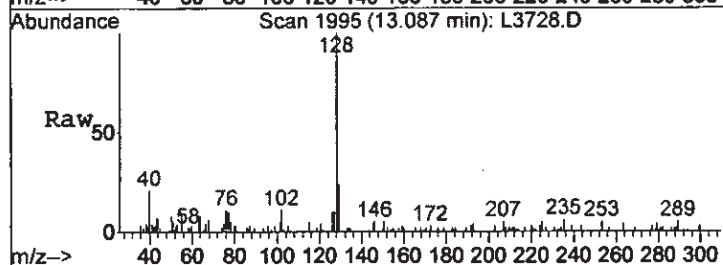
Tgt Ion: 180	Resp: 2470
Ion Ratio	Lower Upper
180	100
182	61.9 74.0 114.0#
145	29.1 9.2 49.2





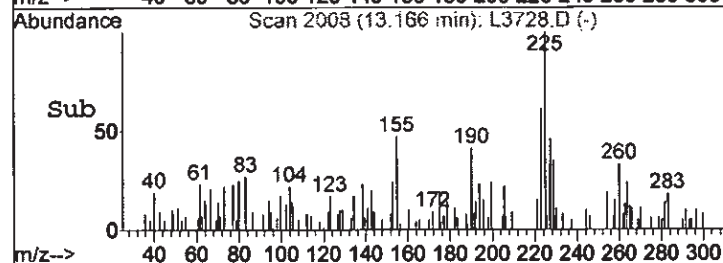
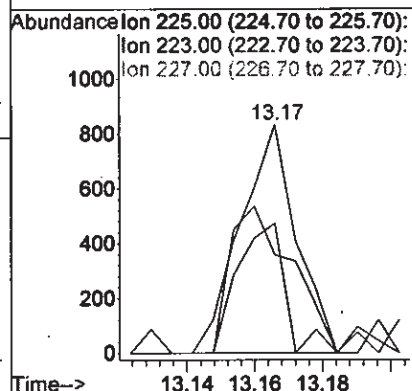
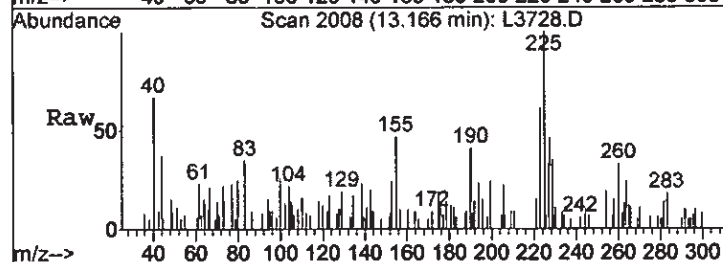
#102
Naphthalen
Concen: 0.30 ug/L
RT: 13.09 min Scan# 1995
Delta R.T. -0.00 min
Lab File: L3728.D
Acq: 20 Mar 2014 12:06 pm

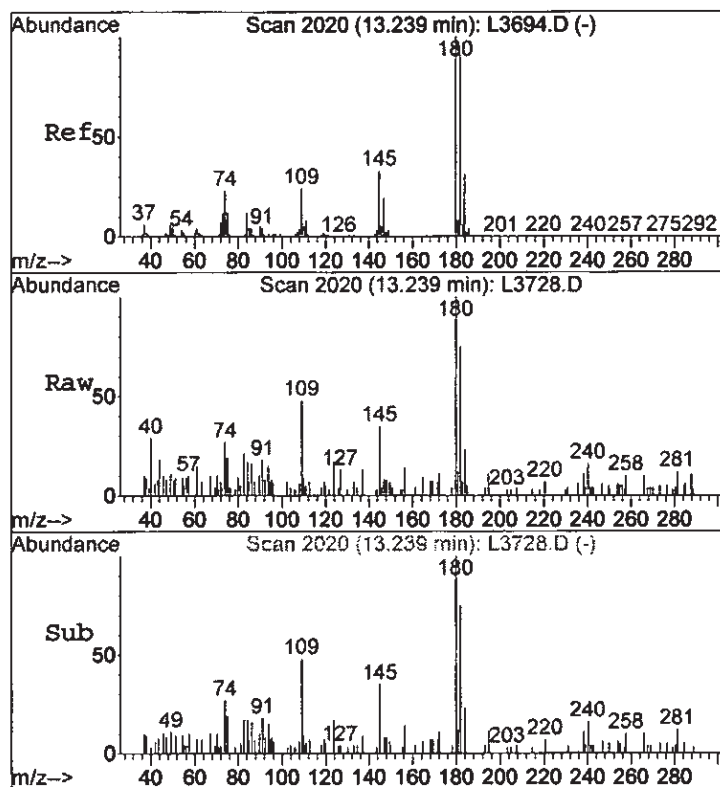
Tgt Ion	Ratio	Resp	Lower	Upper
128	100	4173		
127	12.8	0.0	33.7	
102	9.6	0.0	27.9	



#103
Hexachlorobt
Concen: 0.25 ug/L
RT: 13.17 min Scan# 2008
Delta R.T. 0.01 min
Lab File: L3728.D
Acq: 20 Mar 2014 12:06 pm

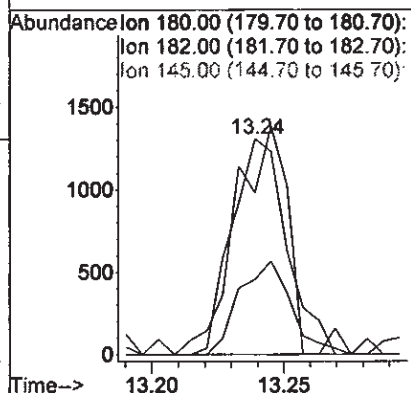
Tgt Ion	Ratio	Resp	Lower	Upper
225	100	951		
223	45.1	43.9	83.9	
227	70.9	47.0	87.0	





#104
 1,2,3-Tolbenzene
 Concen: 0.27 ug/L
 RT: 13.24 min Scan# 2020
 Delta R.T. -0.00 min
 Lab File: L3728.D
 Acq: 20 Mar 2014 12:06 pm

Tgt Ion:	180	Resp:	1898
Ion Ratio	Lower	Upper	
180	100		
182	98.5	76.2	116.2
145	40.7	11.5	51.5



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1401882
Date Collected: 3/17/14 1630
Date Received: 3/19/14
Date Analyzed: 3/20/14 15:19

Sample Name: MW-8
Lab Code: R1401882-007

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA6\DATA\032014\L3734.D\

Analysis Lot: 384553
Instrument Name: R-MS-06
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	0.72 J	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	1.3 J	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0 U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	12	5.0	0.22	
75-01-4	Vinyl Chloride	5.0 U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	0.85 J	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0 U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85-122	3/20/14 15:19	
Dibromofluoromethane	96	89-119	3/20/14 15:19	
Toluene-d8	98	87-121	3/20/14 15:19	

Data File : I:\ACQUDATA\MSVOA6\DATA\032014\L3734.D

Vial: 16

Acq On : 20 Mar 2014 3:19 pm

Operator: D.Lipani

Sample : R1401882-007|1.0

Inst : MS#6

Misc : Verina 8260C 7979 T4

Multiplr: 1.00

MS Integration Params: CPD4.P

Quant Time: Mar 20 19:24 2014

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)

Title : 8260C WATERS

Last Update : Thu Mar 20 15:48:07 2014

Response via : Initial Calibration

DataAcq Meth : W031914

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.40	168	618776	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.71	114	909440	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.08	117	836964	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.18	152	445584	50.00	ug/L	0.00

System Monitoring Compounds

40) surr4,Dibromomethane	3.68	113	296099	48.16	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	96.32%
42) surr1,1,2-dichloroethane-d	4.28	65	301031	51.06	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	102.12%
62) SURR3,Toluene-d8	7.77	98	1098941	48.98	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	97.96%
82) SURR2,BFB	10.14	95	411228	47.15	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	94.30%

Target Compounds

					Qvalue	
9) Freon 123a	1.63	67	6185	0.59	ug/L	86
10) Acrolein	1.70	56	198	0.21	ug/L	# 14
12) Acetonitrile	1.70	41	510	0.65	ug/L	# 1
13) 2-Propanol	1.74	45	911	3.74	ug/L	# 1
14) Acetone	1.76	43	26645	13.31	ug/L	93
17) Iodomethane	2.03	142	99	1.08	ug/L	79
18) TBA	2.01	59	296	0.79	ug/L	98
21) Freon 113	2.12	101	6927	0.90	ug/L	86
27) 1,1-Dichloroethane	2.75	63	20687	1.34	ug/L	97
33) cis-1,2-Dichloroethene	3.31	96	8120	0.85	ug/L	# 80
38) 1,1,1-Trichloroethane	4.52	97	9374	0.72	ug/L	# 79
41) Iso-Butyl Alcohol	3.78	43	65	0.33	ug/L	# 37
51) Trichloroethene	6.17	130	109131	11.62	ug/L	96
78) Cyclohexanone	9.76	55	282	0.43	ug/L	# 20
100) Nitrobenzene	12.03	77	114	0.46	ug/L	# 32

NT, SP

PL
3/31/14-----
(#) = qualifier out of range (m) = manual integration

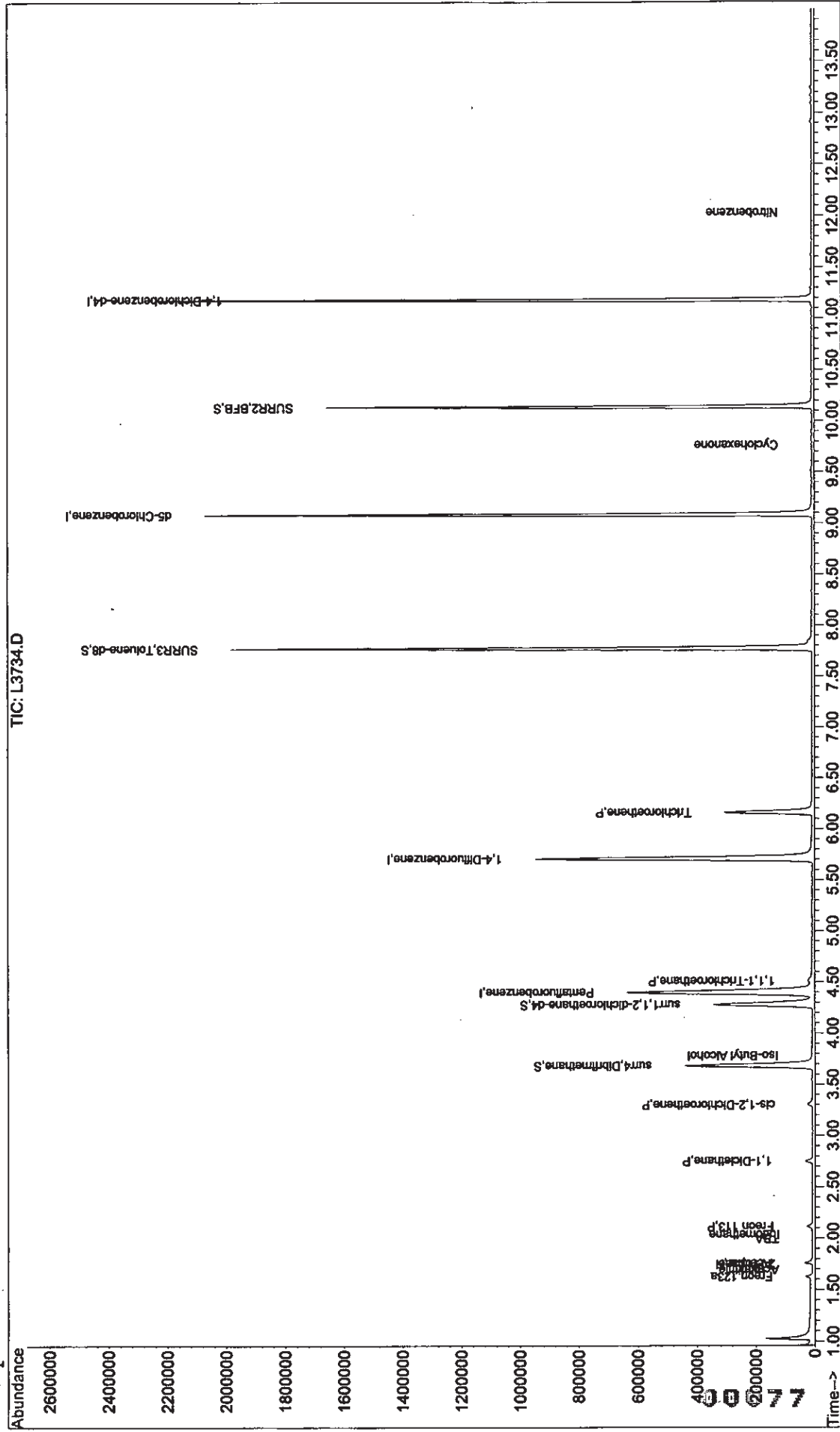
L3734.D W031914.M

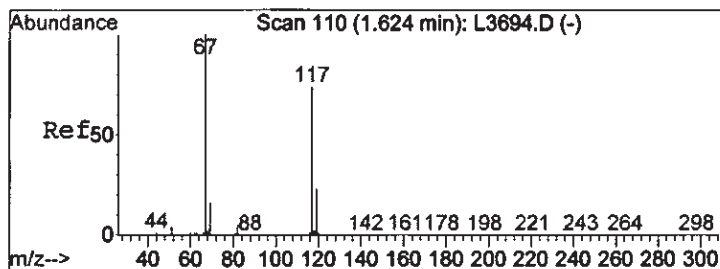
Thu Mar 20 19:16:40 2014

Quantitation Report

Data File : I:\ACQDATA\MSVOA6\DATA\032014\L3734.D Vial: 16
Acq On : 20 Mar 2014 3:19 pm Operator: D.Lipani
Sample : R1401882-007|1.0 Inst : MS#6
Misc : Verina 8260C 7979 T4 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 20 19:24 2014 Quant Results File: W031914.RES

```
Method      : I:\ACQDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
Title       : 8260C WATERS
Last Update : Thu Mar 20 15:48:07 2014
Response via : Initial Calibration
```





#9

Freon 123a

Concen: 0.59 ug/L

RT: 1.63 min Scan# 111

Delta R.T. 0.01 min

Lab File: L3734.D

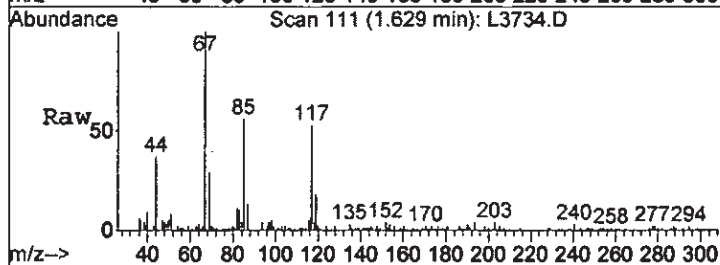
Acq: 20 Mar 2014 3:19 pm

Tgt Ion: 67 Resp: 6185

Ion Ratio Lower Upper

67 100

117 53.0 44.1 84.1



Abundance Ion 67.00 (66.70 to 67.70): L37

Ion 117.00 (116.70 to 117.70): L37

1.63

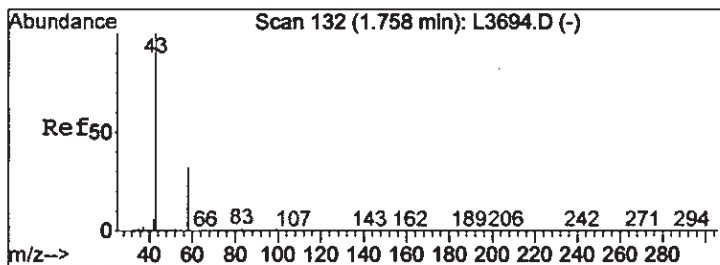
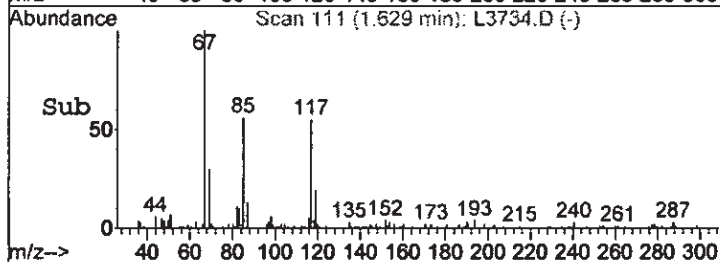
6000

4000

2000

0

Time-->



#14

Acetone

Concen: 13.31 ug/L

RT: 1.76 min Scan# 132

Delta R.T. -0.00 min

Lab File: L3734.D

Acq: 20 Mar 2014 3:19 pm

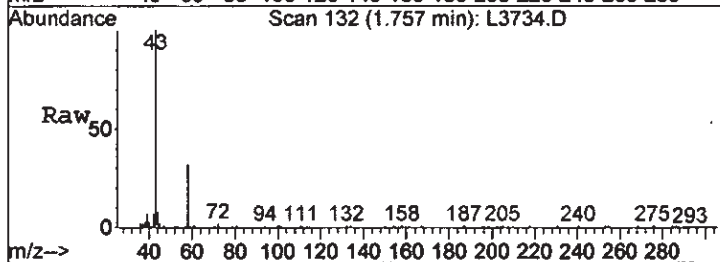
Tgt Ion: 43 Resp: 26645

Ion Ratio Lower Upper

43 100

42 7.1 0.0 29.9

58 32.4 8.5 48.5



Abundance Ion 43.00 (42.70 to 43.70): L37

Ion 42.00 (41.70 to 42.70): L37

Ion 58.00 (57.70 to 58.70): L37

1.76

20000

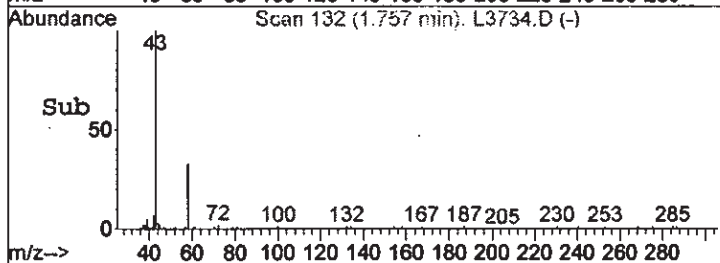
15000

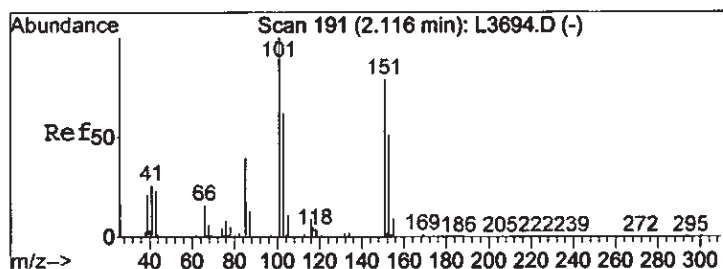
10000

5000

0

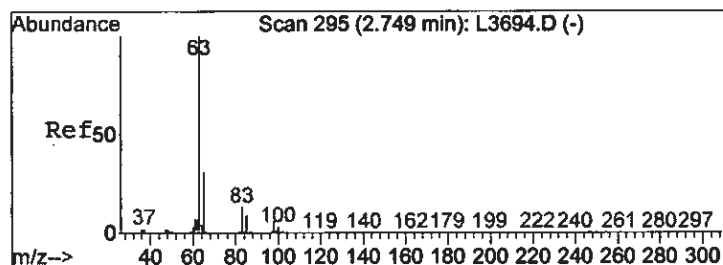
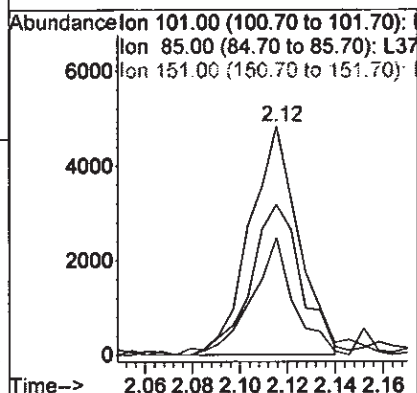
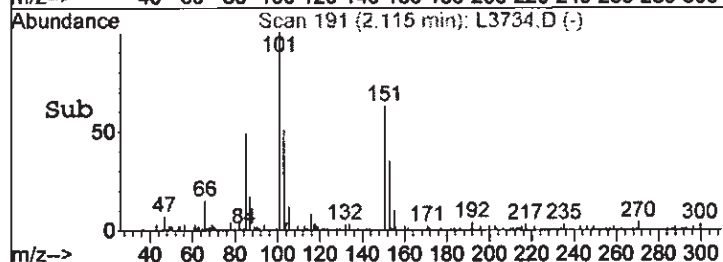
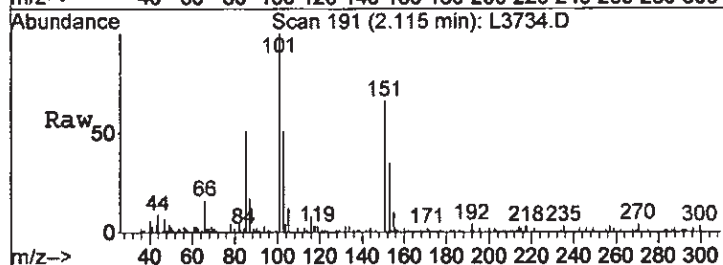
Time-->





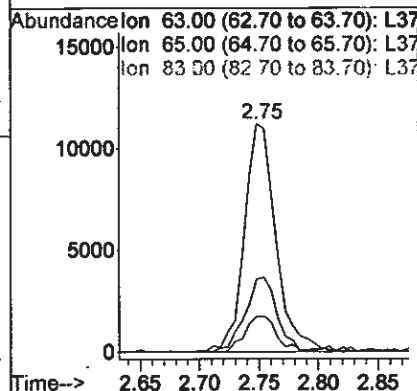
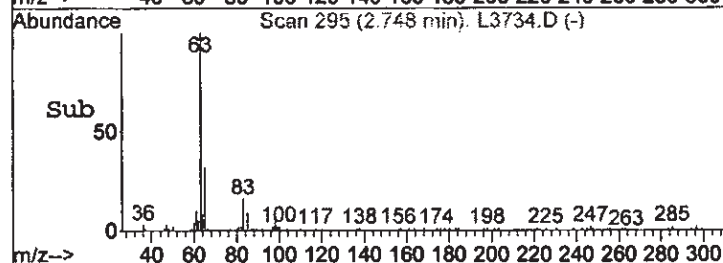
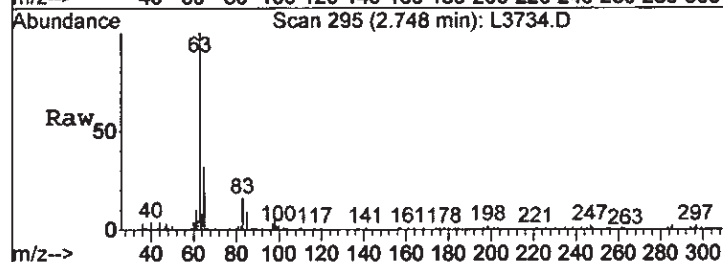
#21
Freon 113
Concen: 0.90 ug/L
RT: 2.12 min Scan# 191
Delta R.T. -0.00 min
Lab File: L3734.D
Acq: 20 Mar 2014 3:19 pm

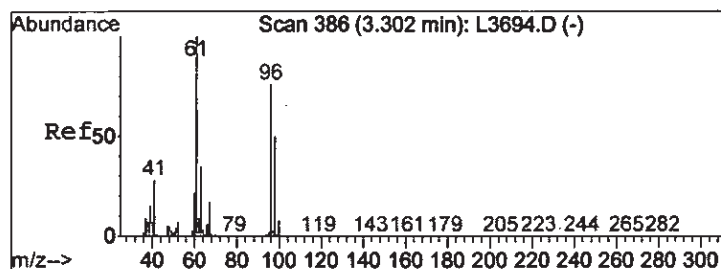
Tgt Ion: 101 Resp: 6927
Ion Ratio Lower Upper
101 100
85 51.3 23.7 63.7
151 65.8 59.3 99.3



#27
1,1-Dicloroethane
Concen: 1.34 ug/L
RT: 2.75 min Scan# 295
Delta R.T. -0.00 min
Lab File: L3734.D
Acq: 20 Mar 2014 3:19 pm

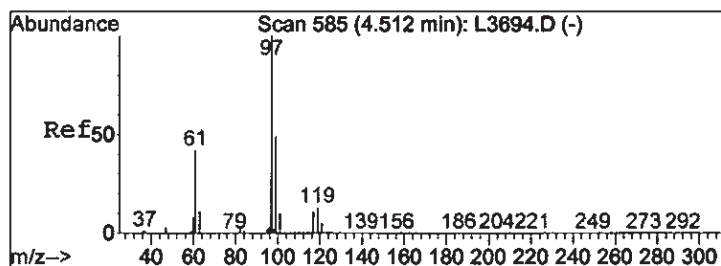
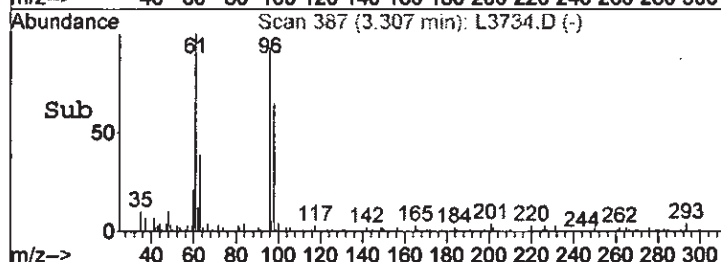
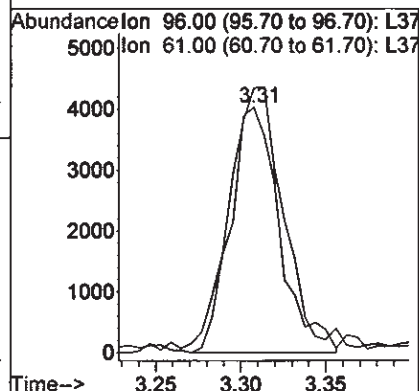
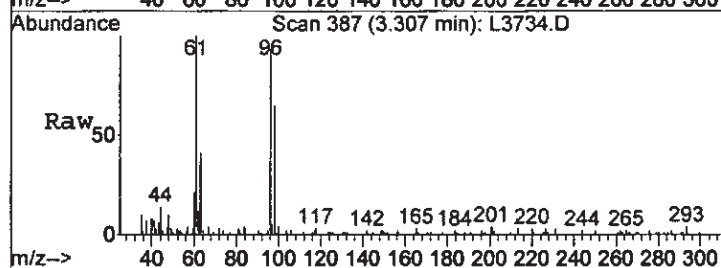
Tgt Ion: 63 Resp: 20687
Ion Ratio Lower Upper
63 100
65 31.9 11.3 51.3
83 15.5 0.0 33.2





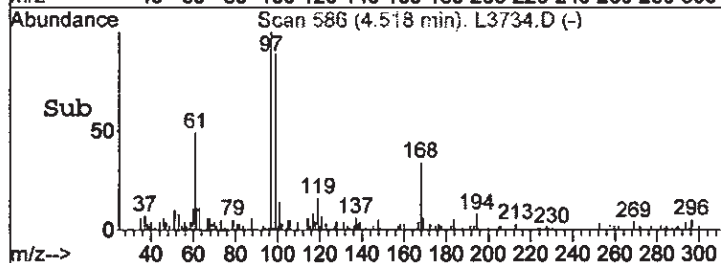
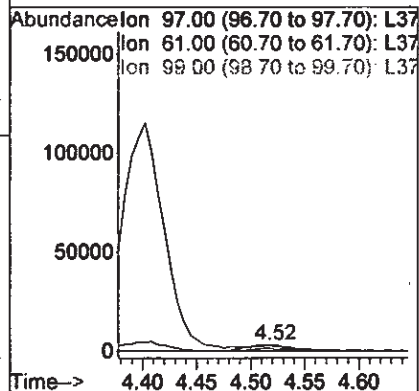
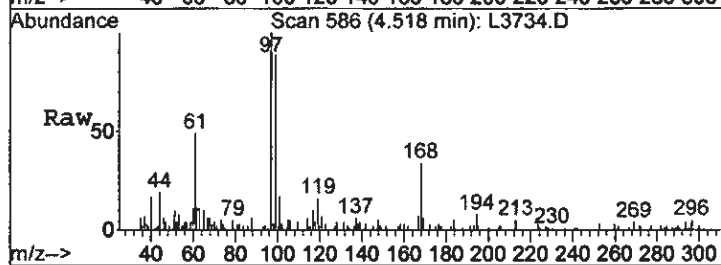
#33
 cis-1,2-Dichloroethene
 Concen: 0.85 ug/L
 RT: 3.31 min Scan# 387
 Delta R.T. 0.01 min
 Lab File: L3734.D
 Acq: 20 Mar 2014 3:19 pm

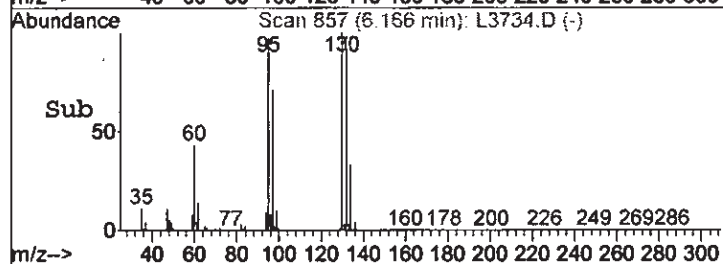
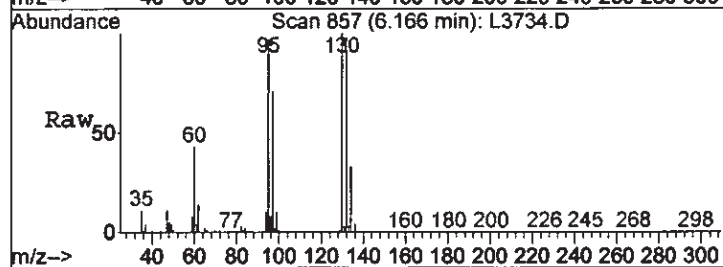
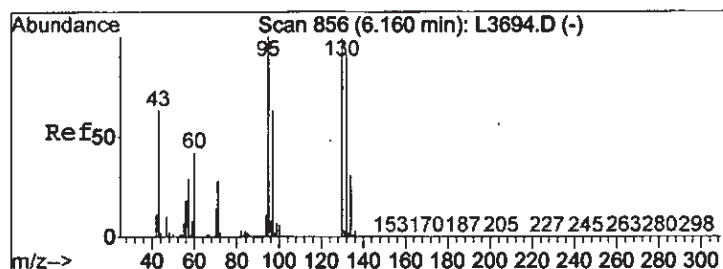
Tgt Ion: 96 Resp: 8120
 Ion Ratio Lower Upper
 96 100
 61 107.8 111.6 151.6#



#38
 1,1,1-Trichloroethane
 Concen: 0.72 ug/L
 RT: 4.52 min Scan# 586
 Delta R.T. 0.01 min
 Lab File: L3734.D
 Acq: 20 Mar 2014 3:19 pm

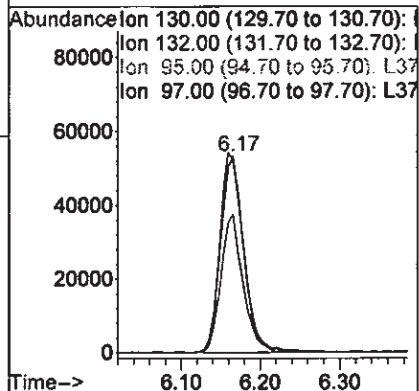
Tgt Ion: 97 Resp: 9374
 Ion Ratio Lower Upper
 97 100
 61 49.3 24.2 64.2
 99 89.2 45.1 85.1#





#51
 Trichloroethene
 Concen: 11.62 ug/L
 RT: 6.17 min Scan# 857
 Delta R.T. 0.01 min
 Lab File: L3734.D
 Acq: 20 Mar 2014 3:19 pm

Tgt Ion:	130	Resp:	109131
Ion	Ratio	Lower	Upper
130	100		
132	99.2	76.0	116.0
95	103.4	78.5	118.5
97	66.7	43.7	83.7



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1401882
Date Collected: 3/17/14
Date Received: 3/19/14
Date Analyzed: 3/20/14 15:48

Sample Name: DUP-031714
Lab Code: R1401882-008

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA6\DATA\032014\L3735.D\

Analysis Lot: 384553
Instrument Name: R-MS-06
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	0.88 J	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	0.82 J	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	0.62 J	5.0	0.30	
79-01-6	Trichloroethene (TCE)	7.5	5.0	0.22	
75-01-4	Vinyl Chloride	5.0 U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	3.6 J	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0 U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	85-122	3/20/14 15:48	
Dibromofluoromethane	100	89-119	3/20/14 15:48	
Toluene-d8	100	87-121	3/20/14 15:48	

Data File : I:\ACQUDATA\MSVOA6\DATA\032014\L3735.D

Vial: 17

Acq On : 20 Mar 2014 3:48 pm

Operator: D.Lipani

Sample : R1401882-008|1.0

Inst : MS#6

Misc : Verina 8260C 6646 T4

Multiplr: 1.00

MS Integration Params: CPD4.P

Quant Time: Mar 20 19:24 2014

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)

Title : 8260C WATERS

Last Update : Thu Mar 20 15:48:07 2014

Response via : Initial Calibration

DataAcq Meth : W031914

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.40	168	624732	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.71	114	903394	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.09	117	841660	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.18	152	432041	50.00	ug/L	0.00

System Monitoring Compounds

40) surr4,Dibrlmethane	3.69	113	303939	49.77	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	99.54%
42) surr1,1,2-dichloroethane-d	4.28	65	311718	53.22	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	106.44%
62) SURR3,Toluene-d8	7.77	98	1110831	49.85	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	99.70%
82) SURR2,BFB	10.14	95	408844	46.61	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	93.22%

Target Compounds

					Qvalue	
9) Freon 123a	1.63	67	34089	3.24	ug/L	86 NT/SP
13) 2-Propanol	1.73	45	296	1.20	ug/L	# 48
14) Acetone	1.76	43	2060	1.02	ug/L	68 NT
17) Iodomethane	1.99	142	88	1.08	ug/L	79
18) TBA	2.02	59	139	0.37	ug/L	91
21) Freon 113	2.12	101	20620	2.65	ug/L	93
27) 1,1-Dicethane	2.76	63	12881	0.82	ug/L	95
33) cis-1,2-Dichloroethene	3.31	96	34753	3.62	ug/L	95
38) 1,1,1-Trichloroethane	4.51	97	11505	0.88	ug/L	98
41) Iso Butyl Alcohol	3.77	43	133	0.68	ug/L	# 12
51) Trichloroethene	6.16	130	70106	7.52	ug/L	99
71) Tetrachloroethene	8.51	164	4864	0.62	ug/L	90
100) Nitrobenzene	12.01	77	82	0.34	ug/L	75

DL
3/31/14

Sw 040214

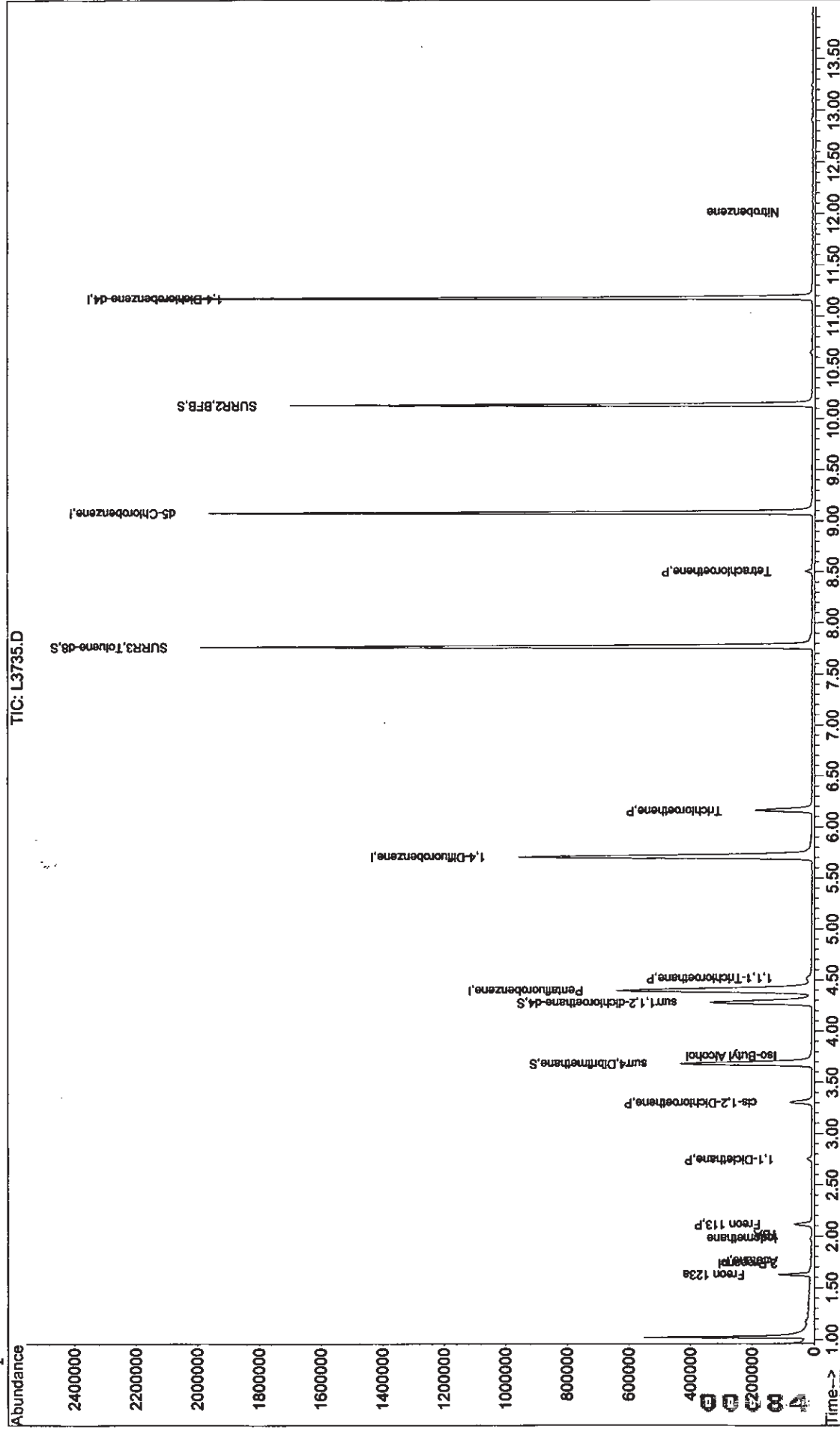
Quantitation Report

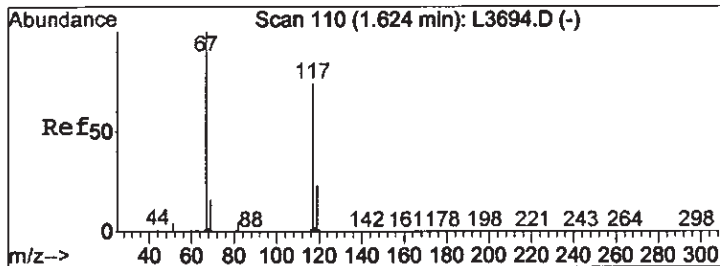
Data File : I:\ACQDATA\MSVOA6\DATA\032014\L3735.D Vial: 17
Acq On : 20 Mar 2014 3:48 pm Operator: D.Lipani
Sample : R1401882-008|1.0 Inst : MS#6
Misc : Verina 8260C 6646 T4 Multiplr: 1.00
MS Integration Params: CPD4.p
Quant Time: Mar 20 19:24 2014 Quant Results File: W031914.RES

```

Method      : I:\ACQDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
Title       : 8260C WATERS
Last Update : Thu Mar 20 15:48:07 2014
Response via : Initial Calibration

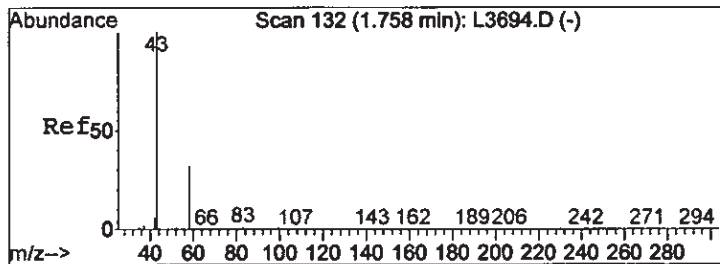
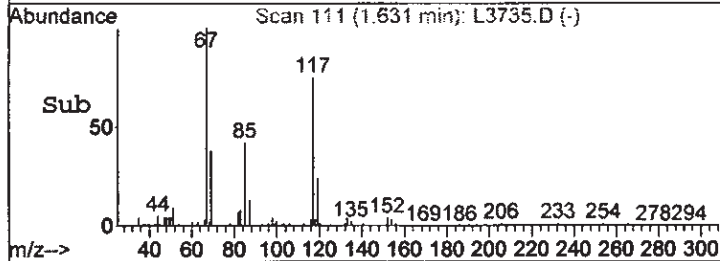
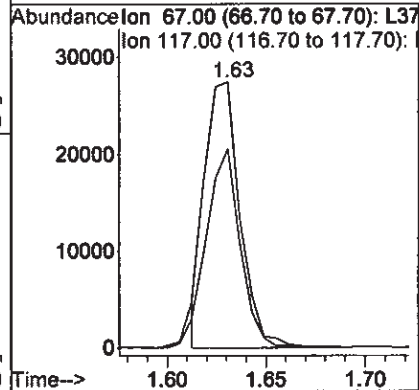
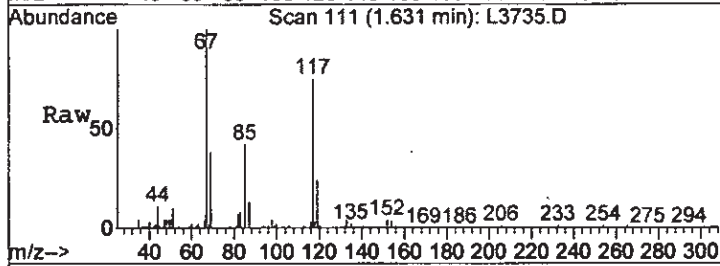
```





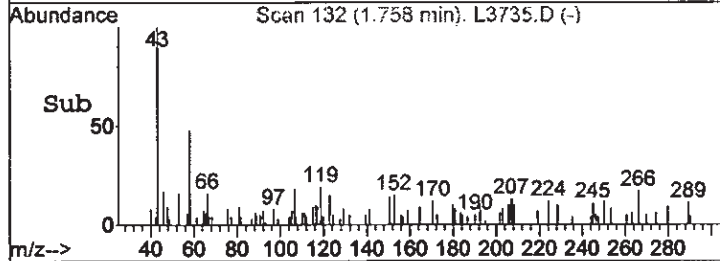
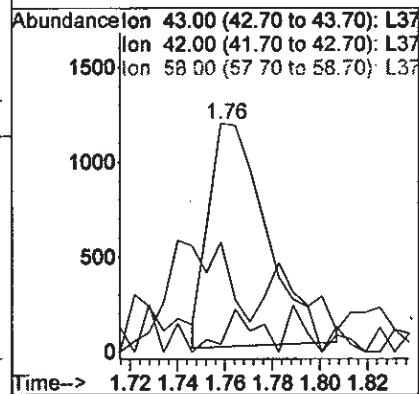
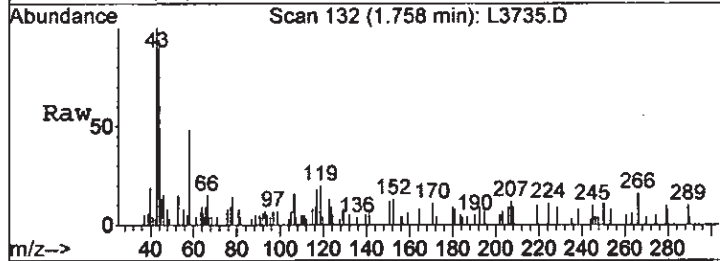
#9
 Freon 123a
 Concen: 3.24 ug/L
 RT: 1.63 min Scan# 111
 Delta R.T. 0.01 min
 Lab File: L3735.D
 Acq: 20 Mar 2014 3:48 pm

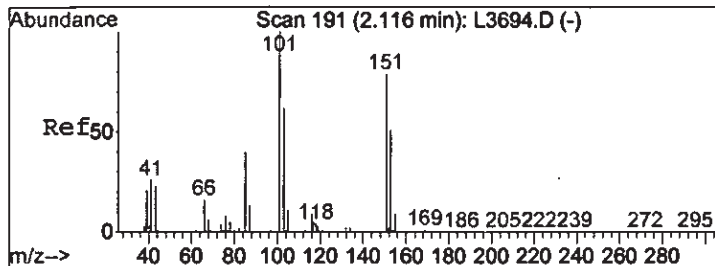
Tgt Ion	Resp	Lower	Upper
67	100		
117	74.9	44.1	84.1



#14
 Acetone
 Concen: 1.02 ug/L
 RT: 1.76 min Scan# 132
 Delta R.T. 0.00 min
 Lab File: L3735.D
 Acq: 20 Mar 2014 3:48 pm

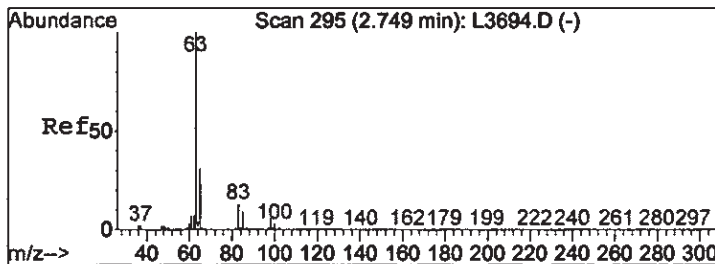
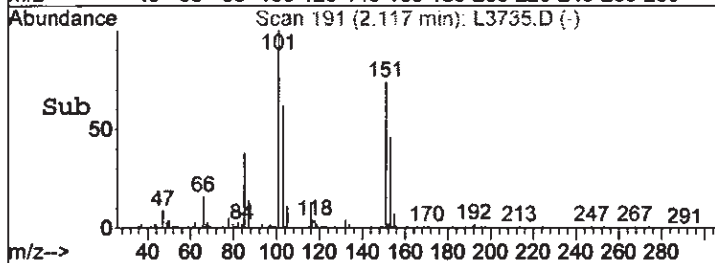
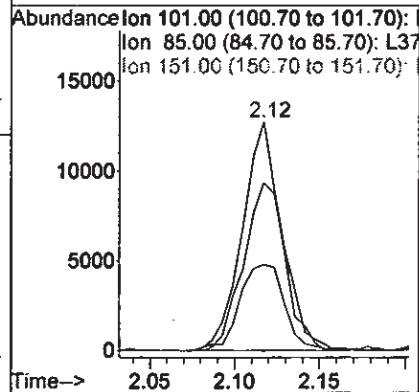
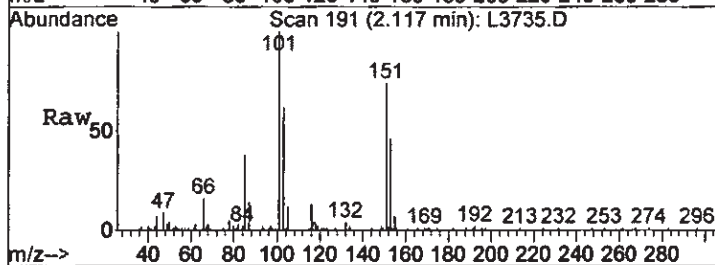
Tgt Ion	Resp	Lower	Upper
43	100		
42	3.5	0.0	29.9
58	48.1	8.5	48.5





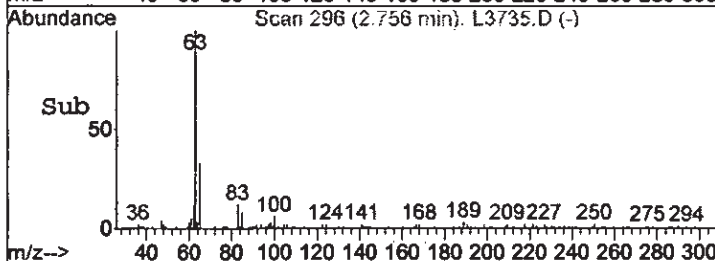
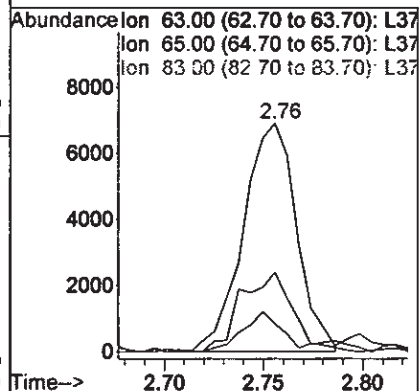
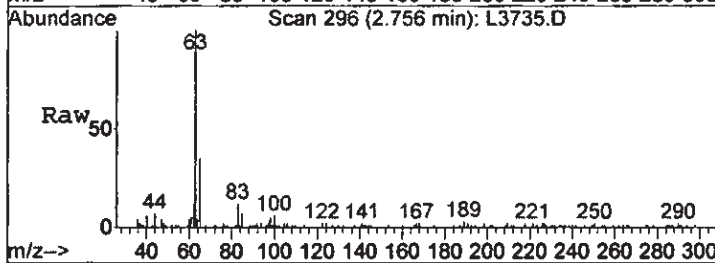
#21
Freon 113
Concen: 2.65 ug/L
RT: 2.12 min Scan# 191
Delta R.T. 0.00 min
Lab File: L3735.D
Acq: 20 Mar 2014 3:48 pm

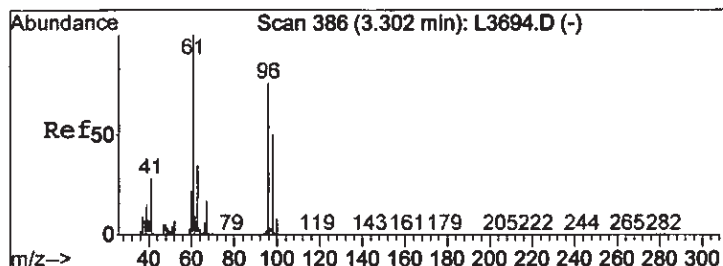
Tgt Ion	Ratio	Lower	Upper
101	100		
85	37.8	23.7	63.7
151	73.6	59.3	99.3



#27
1,1-Dicloroethane
Concen: 0.82 ug/L
RT: 2.76 min Scan# 296
Delta R.T. 0.01 min
Lab File: L3735.D
Acq: 20 Mar 2014 3:48 pm

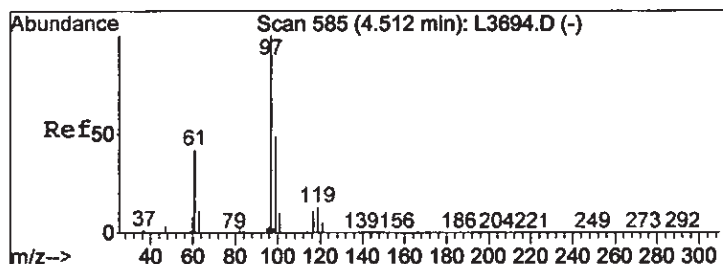
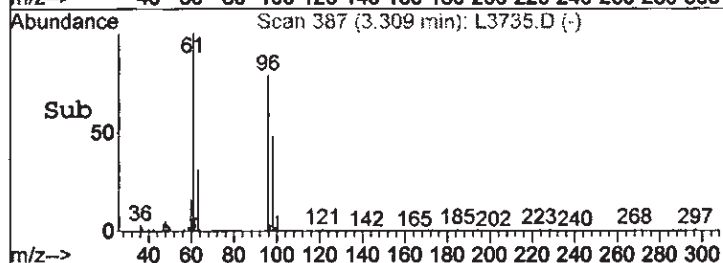
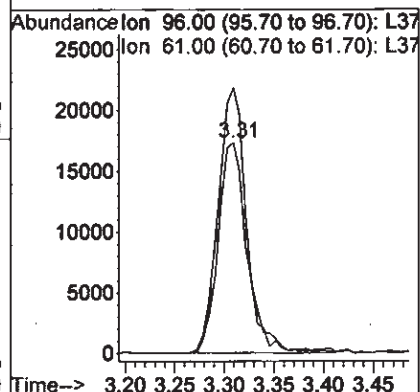
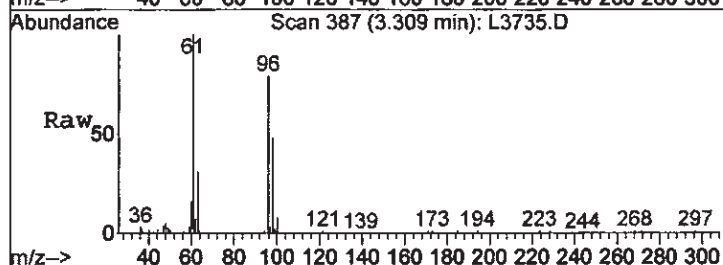
Tgt Ion	Ratio	Lower	Upper
63	100		
65	34.8	11.3	51.3
83	12.3	0.0	33.2





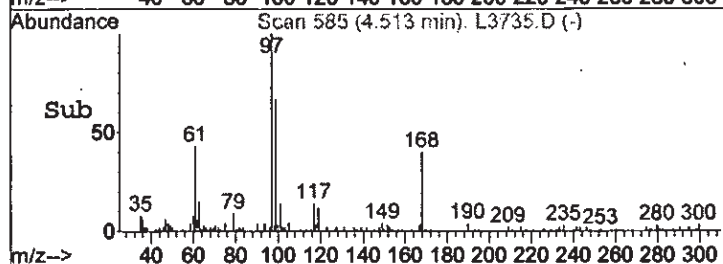
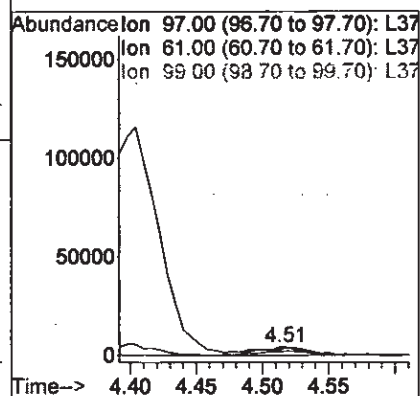
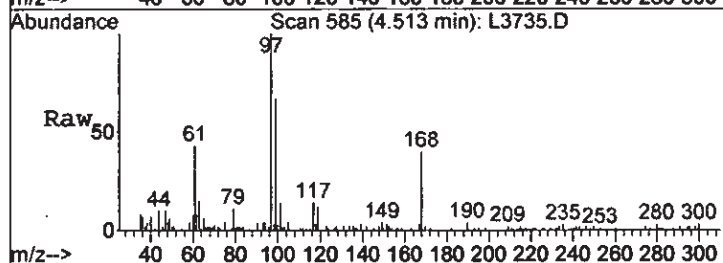
#33
 cis-1,2-Dichloroethene
 Concen: 3.62 ug/L
 RT: 3.31 min Scan# 387
 Delta R.T. 0.01 min
 Lab File: L3735.D
 Acq: 20 Mar 2014 3:48 pm

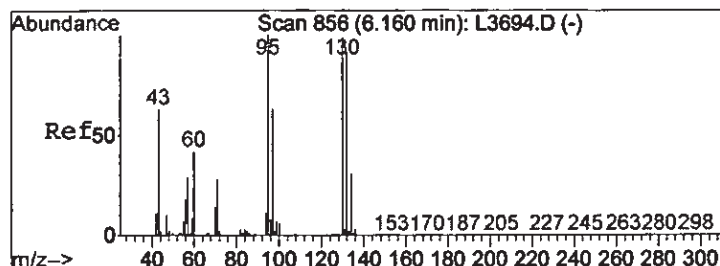
Tgt Ion: 96 Resp: 34753
 Ion Ratio Lower Upper
 96 100
 61 126.0 111.6 151.6



#38
 1,1,1-Trichloroethane
 Concen: 0.88 ug/L
 RT: 4.51 min Scan# 585
 Delta R.T. 0.00 min
 Lab File: L3735.D
 Acq: 20 Mar 2014 3:48 pm

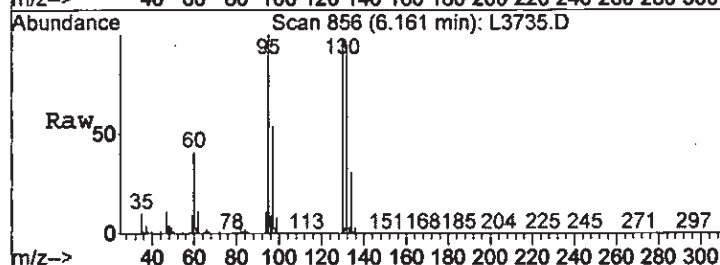
Tgt Ion: 97 Resp: 11505
 Ion Ratio Lower Upper
 97 100
 61 42.7 24.2 64.2
 99 66.6 45.1 85.1



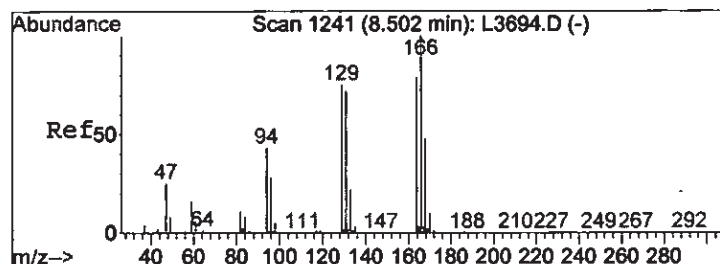
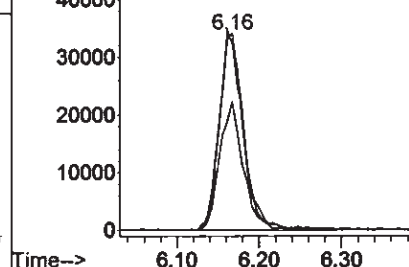
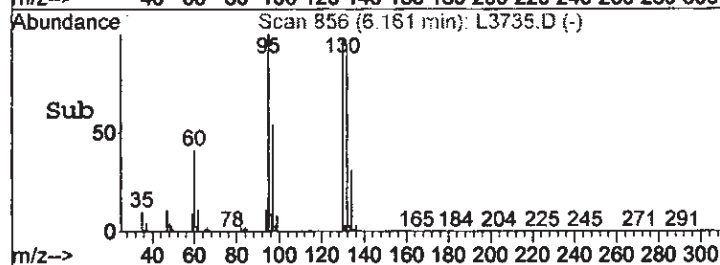


#51
Trichloroethene
Concen: 7.52 ug/L
RT: 6.16 min Scan# 856
Delta R.T. 0.00 min
Lab File: L3735.D
Acq: 20 Mar 2014 3:48 pm

Tgt Ion:130	Resp:	70106
Ion	Ratio	Lower Upper
130	100	
132	96.8	76.0 116.0
95	99.9	78.5 118.5
97	63.4	43.7 83.7

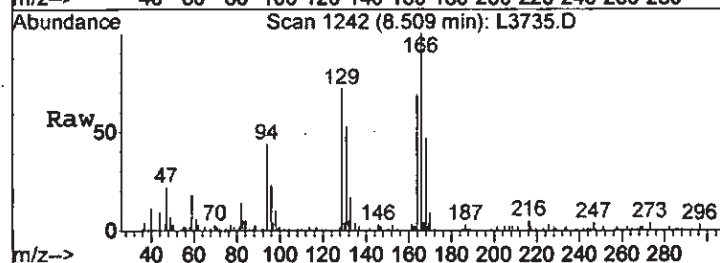


Abundance Ion 130.00 (129.70 to 130.70):
Ion 132.00 (131.70 to 132.70):
Ion 95.00 (94.70 to 95.70): L37
Ion 97.00 (96.70 to 97.70): L37

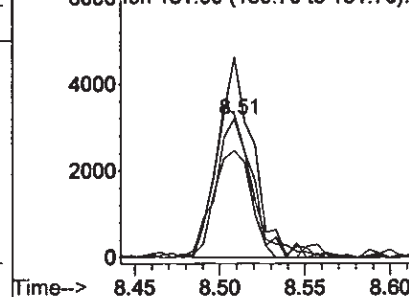
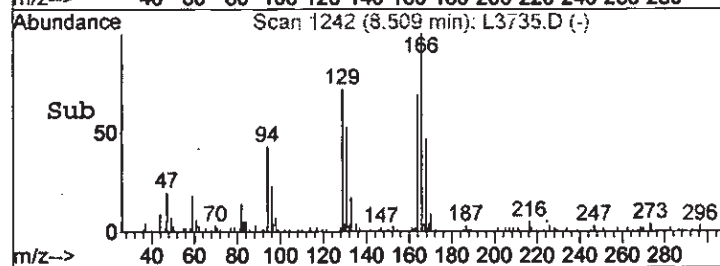


#71
Tetrachloroethene
Concen: 0.62 ug/L
RT: 8.51 min Scan# 1242
Delta R.T. 0.01 min
Lab File: L3735.D
Acq: 20 Mar 2014 3:48 pm

Tgt Ion:164	Resp:	4864
Ion	Ratio	Lower Upper
164	100	
166	130.7	107.4 147.4
129	109.3	72.6 112.6
131	75.6	68.5 108.5



Abundance Ion 164.00 (163.70 to 164.70):
Ion 166.00 (165.70 to 166.70):
Ion 129.00 (128.70 to 129.70):
Ion 131.00 (130.70 to 131.70):



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1401882
Date Collected: 3/18/14 1000
Date Received: 3/19/14
Date Analyzed: 3/20/14 12:37

Sample Name: FB-031814
Lab Code: R1401882-009

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA6\DATA\032014\3729.D\

Analysis Lot: 384553
Instrument Name: R-MS-06
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	5.0	U	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	5.0	U	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0	U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	5.0	U	5.0	0.22	
75-01-4	Vinyl Chloride	5.0	U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85-122	3/20/14 12:37	
Dibromofluoromethane	99	89-119	3/20/14 12:37	
Toluene-d8	100	87-121	3/20/14 12:37	

Data File : I:\ACQUDATA\MSVOA6\DATA\032014\L3729.D

Vial: 11

Acq On : 20 Mar 2014 12:37 pm

Operator: D.Lipani

Sample : R1401882-009|1.0

Inst : MS#6

Misc : Verina 8260C 6646 T4

Multiplr: 1.00

MS Integration Params: CPD4.P

Quant Time: Mar 20 19:23 2014

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)

Title : 8260C WATERS

Last Update : Thu Mar 20 15:48:07 2014

Response via : Initial Calibration

DataAcq Meth : W031914

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.40	168	612942	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.71	114	908841	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.08	117	845321	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.18	152	441272	50.00	ug/L	0.00

System Monitoring Compounds

40) surr4,Dibrflmethane	3.68	113	303170	49.35	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	98.70%
42) surr1,1,2-dichloroethane-d	4.28	65	291057	49.40	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	98.80%
62) SURR3,Toluene-d8	7.77	98	1115278	49.75	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	99.50%
82) SURR2,BFB	10.14	95	414232	47.02	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	94.04%

Target Compounds

					Qvalue
10) Acrolein	1.69	56	215	0.23 ug/L	# 59
12) Acetonitrile	1.68	41	240	0.31 ug/L	# 1
13) 2-Propanol	1.74	45	246	1.02 ug/L	90
14) Acetone	1.77	43	1693	0.85 ug/L	85
17) Iodomethane	1.90	142	71	1.07 ug/L	77
18) TBA	2.08	59	422	1.14 ug/L	95
41) Iso-Butyl Alcohol	3.78	43	105	0.53 ug/L	# 42
78) Cyclohexanone	9.75	55	236	0.36 ug/L	# 21
99) 1,2-Dibromo-3-chloropropan	11.83	75	237	0.23 ug/L	# 12
101) 1,2,4-Tcbenzene	12.90	180	2140	0.23 ug/L	93
102) Naphthalen	13.09	128	3732	0.26 ug/L	95
103) Hexachlorobt.	13.16	225	811	0.21 ug/L	81
104) 1,2,3-Tclbenzene	13.24	180	1804	0.25 ug/L	98

PL
3/31/14

(#) = qualifier out of range (m) = manual integration

L3729.D W031914.M

Thu Mar 20 19:15:19 2014

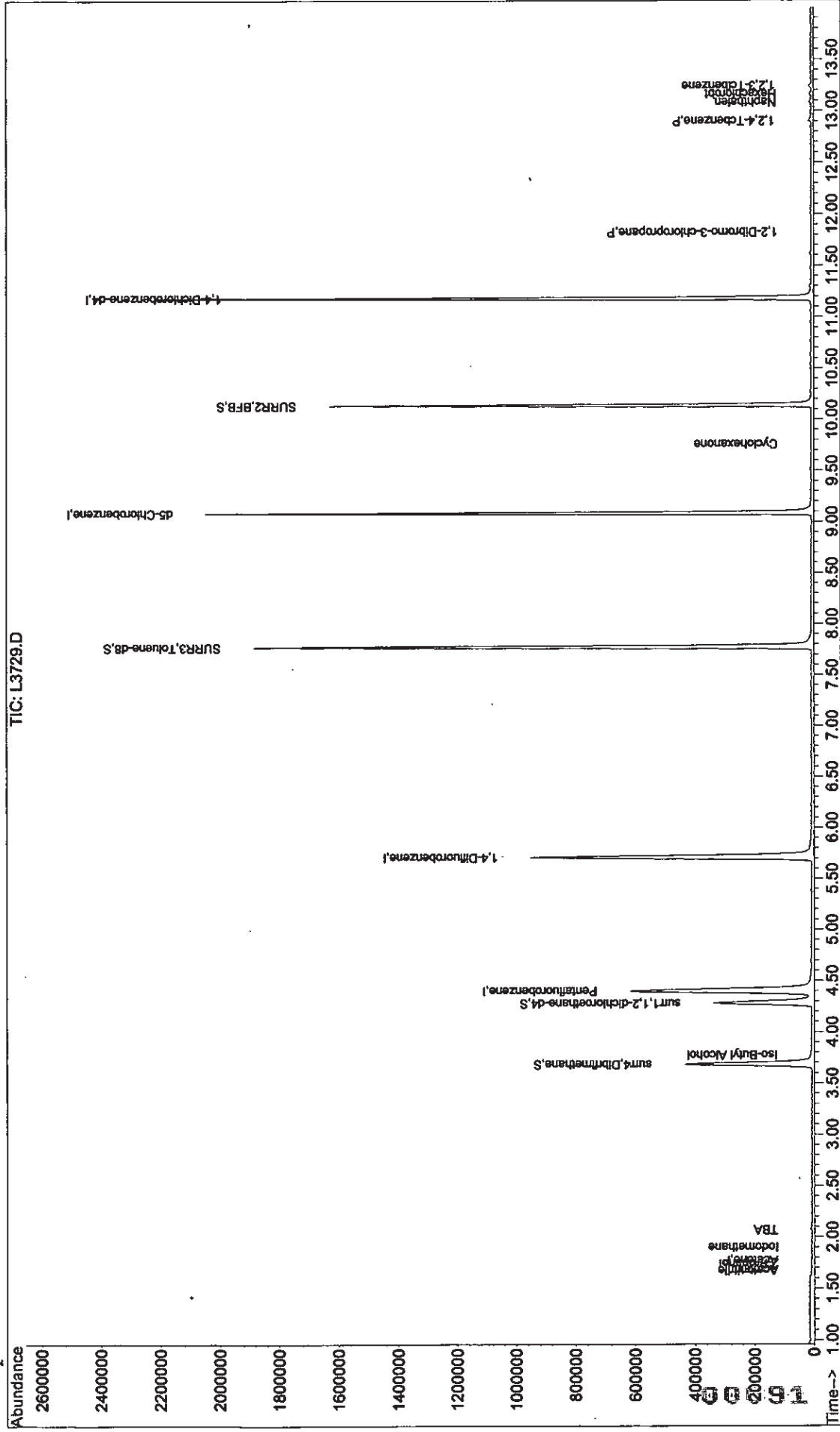
00090

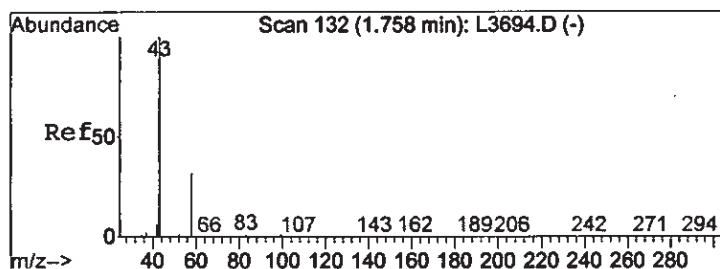
Page 1

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\032014\L3729.D Vial: 11
 Acq On : 20 Mar 2014 12:37 pm Operator: D.Lipani
 Sample : R1401882-009|1.0 Inst : MS#6
 Misc : Verina 8260C 6646 T4 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 19:23 2014 Quant Results File: W031914.RES

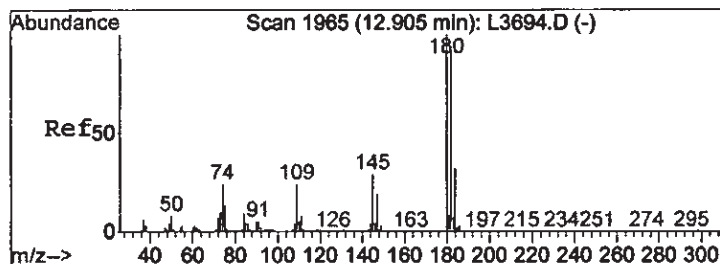
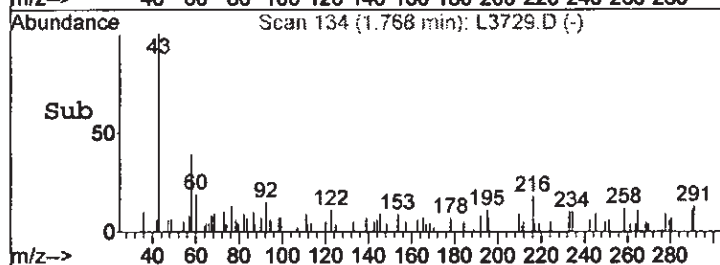
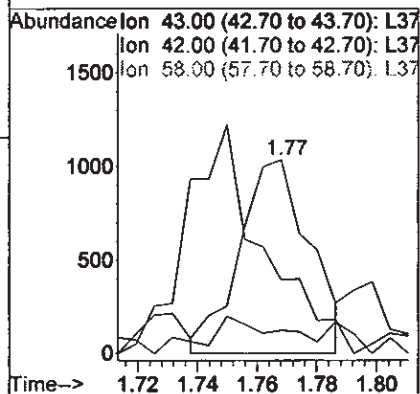
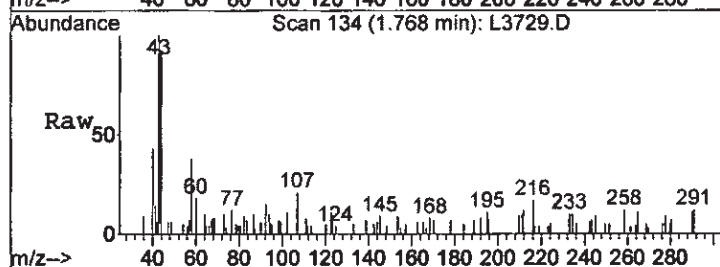
Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 15:48:07 2014
 Response via : Initial Calibration





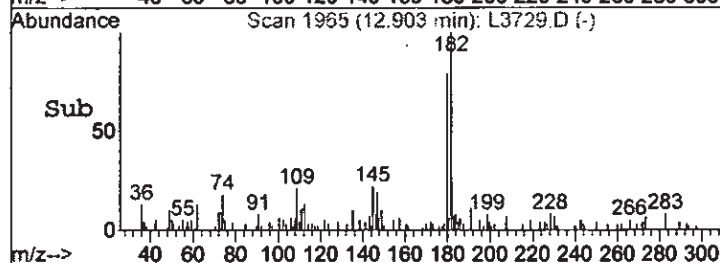
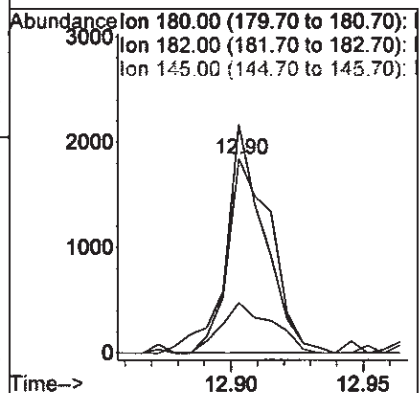
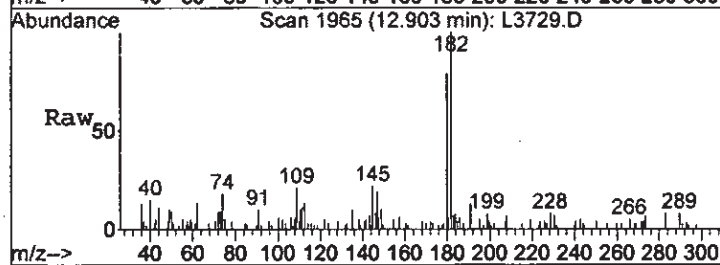
#14
Acetone
Concen: 0.85 ug/L
RT: 1.77 min Scan# 134
Delta R.T. 0.01 min
Lab File: L3729.D
Acq: 20 Mar 2014 12:37 pm

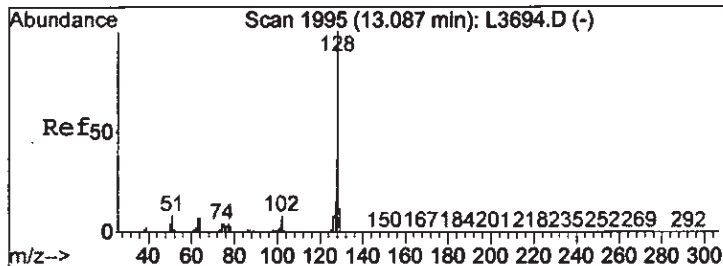
Tgt Ion	Ratio	Lower	Upper
43	100		
42	12.0	0.0	29.9
58	37.9	8.5	48.5



#101
1,2,4-Tcbenzene
Concen: 0.23 ug/L
RT: 12.90 min Scan# 1965
Delta R.T. -0.00 min
Lab File: L3729.D
Acq: 20 Mar 2014 12:37 pm

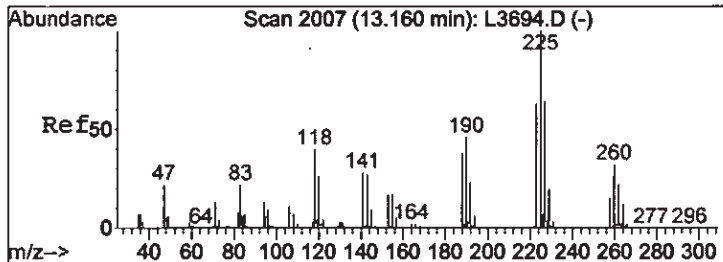
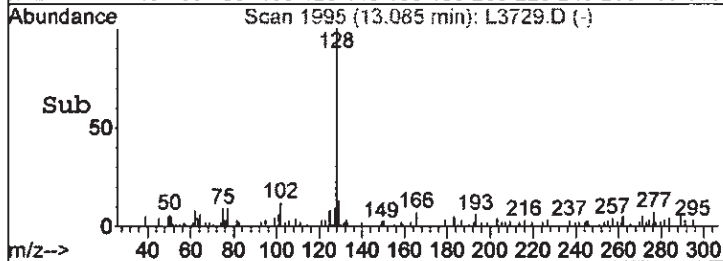
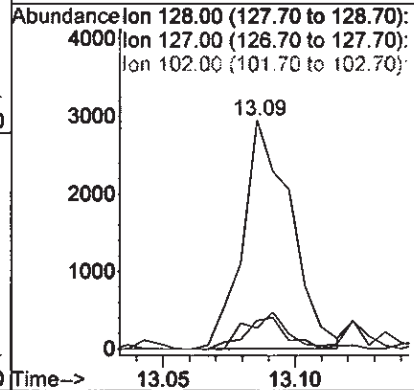
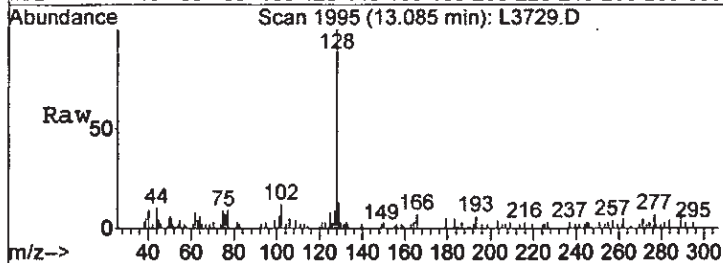
Tgt Ion	Ratio	Lower	Upper
180	100		
182	102.6	74.0	114.0
145	29.9	9.2	49.2





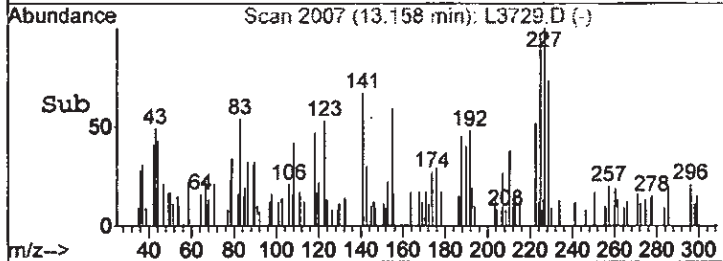
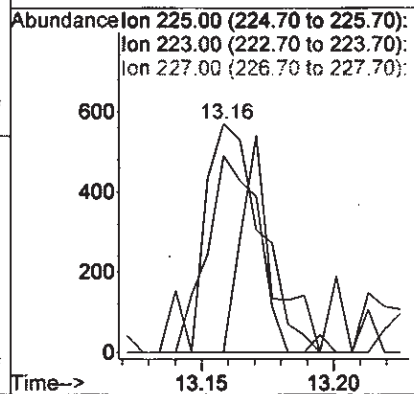
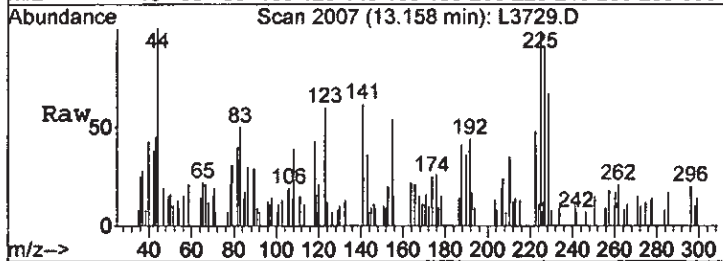
#102
Naphthalen
Concen: 0.26 ug/L
RT: 13.09 min Scan# 1995
Delta R.T. -0.00 min
Lab File: L3729.D
Acq: 20 Mar 2014 12:37 pm

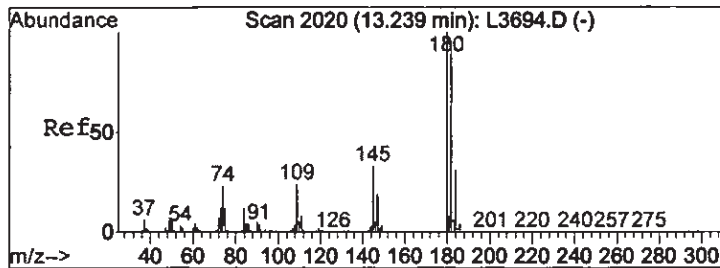
Tgt Ion	Ratio	Lower	Upper
128	100		
127	13.3	0.0	33.7
102	11.7	0.0	27.9



#103
Hexachlorobt
Concen: 0.21 ug/L
RT: 13.16 min Scan# 2007
Delta R.T. -0.00 min
Lab File: L3729.D
Acq: 20 Mar 2014 12:37 pm

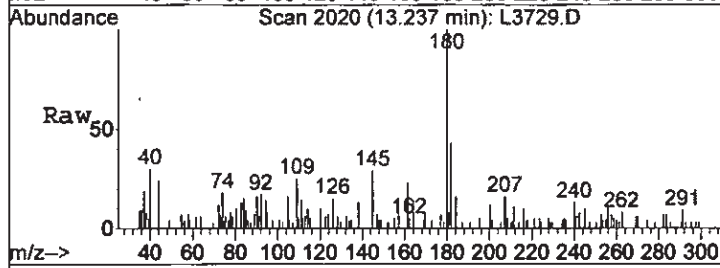
Tgt Ion	Ratio	Lower	Upper
225	100		
223	49.0	43.9	83.9
227	81.4	47.0	87.0





#104
 1,2,3-Tolbenzene
 Concen: 0.25 ug/L
 RT: 13.24 min Scan# 2020
 Delta R.T. -0.00 min
 Lab File: L3729.D
 Acq: 20 Mar 2014 12:37 pm

Tgt Ion	Ratio	Lower	Upper
180	100		
182	93.3	76.2	116.2
145	31.2	11.5	51.5

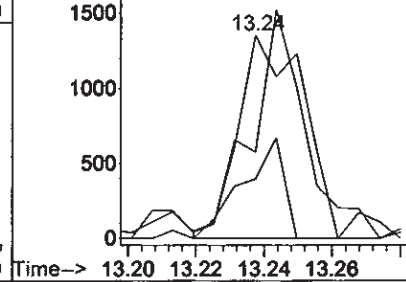
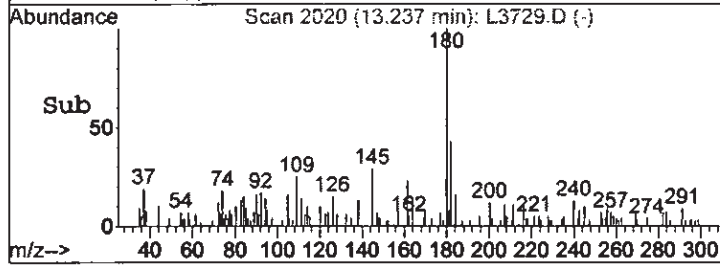


Abundance

Ion 180.00 (179.70 to 180.70):

Ion 182.00 (181.70 to 182.70):

Ion 145.00 (144.70 to 145.70):



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
 Project: Dover Binghamton/5101.0003
 Sample Matrix: Water

Service Request: R1401882
 Date Collected: 3/18/14 1050
 Date Received: 3/19/14
 Date Analyzed: 3/20/14 16:47

Sample Name: MW-11
 Lab Code: R1401882-010

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C
 Data File Name: I:\ACQUDATA\MSVOA6\DATA\032014\L3737.D\

Analysis Lot: 384553
 Instrument Name: R-MS-06
 Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	5.0	U	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	5.0	U	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0	U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	5.0	U	5.0	0.22	
75-01-4	Vinyl Chloride	5.0	U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85-122	3/20/14 16:47	
Dibromofluoromethane	101	89-119	3/20/14 16:47	
Toluene-d8	99	87-121	3/20/14 16:47	

Data File : I:\ACQUDATA\MSVOA6\DATA\032014\L3737.D

Vial: 19

Acq On : 20 Mar 2014 4:47 pm

Operator: D.Lipani

Sample : R1401882-010|1.0

Inst : MS#6

Misc : Verina 8260C 7979 T4

Multiplr: 1.00

MS Integration Params: CPD4.P

Quant Time: Mar 20 19:25 2014

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)

Title : 8260C WATERS

Last Update : Thu Mar 20 15:48:07 2014

Response via : Initial Calibration

DataAcq Meth : W031914

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.40	168	612714	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.71	114	897066	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.08	117	844420	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.18	152	445597	50.00	ug/L	0.00

System Monitoring Compounds

40) surr4,Dibrflmethane	3.68	113	305542	50.39	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	100.78%
42) surr1,1,2-dichloroethane-d	4.28	65	299506	51.50	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	103.00%
62) SURR3,Toluene-d8	7.77	98	1097199	49.58	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	99.16%
82) SURR2,BFB	10.14	95	412393	46.86	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	93.72%

Target Compounds

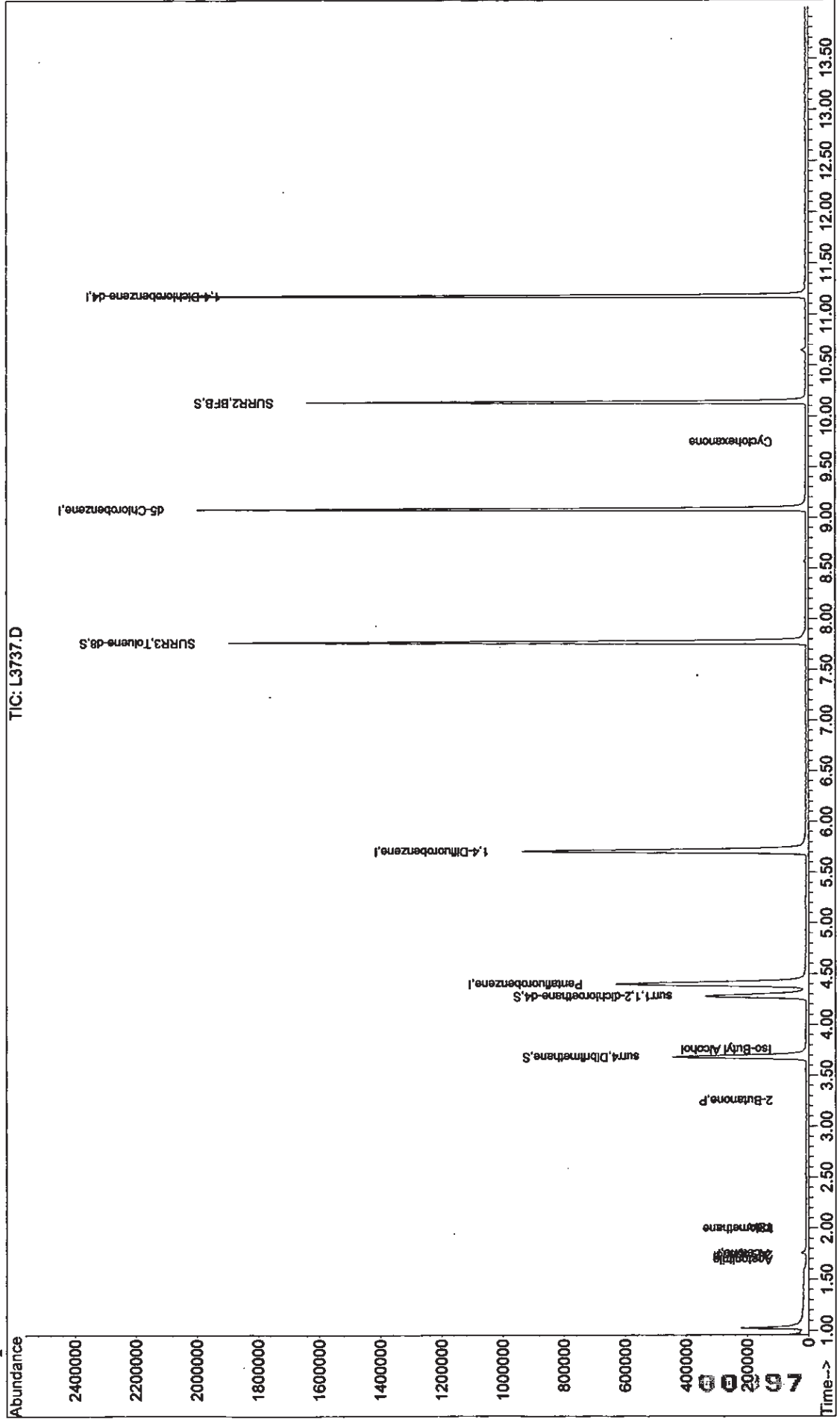
					Qvalue
12) Acetonitrile	1.70	41	395	0.51 ug/L	# 24
13) 2-Propanol	1.73	45	290	1.20 ug/L	# 56
14) Acetone	1.76	43	15538	7.84 ug/L	96
17) Iodomethane	2.00	142	191	1.08 ug/L	87
18) TBA	2.02	59	111	0.30 ug/L	# 50
31) 2-Butanone	3.26	43	928	0.38 ug/L	93 NT, SP
41) Iso Butyl Alcohol	3.76	43	186	0.95 ug/L	# 12
70) Cyclohexanone	9.75	55	227	0.34 ug/L	# 57

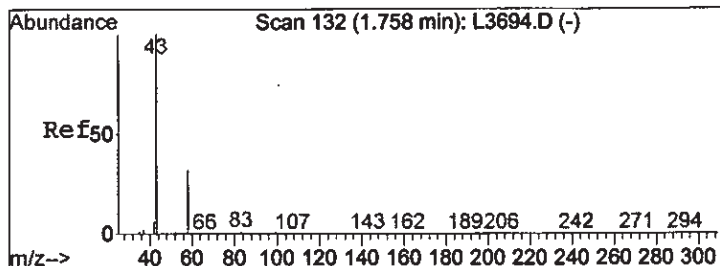
DL
3/31/14

Quantitation Report

Data File : I:\ACQDATA\MSVOA6\DATA\032014\L3737.D Vial: 19
 Acq On : 20 Mar 2014 4:47 pm Operator: D.Lipani
 Sample : R1401882-010|1.0 Inst : MS#6
 Misc : Verina 8260C 7979 T4 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 19:25 2014 Quant Results File: W031914.RES

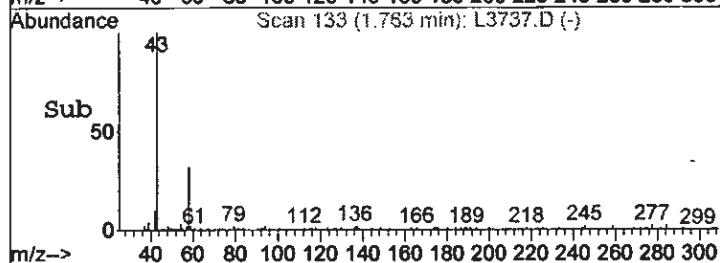
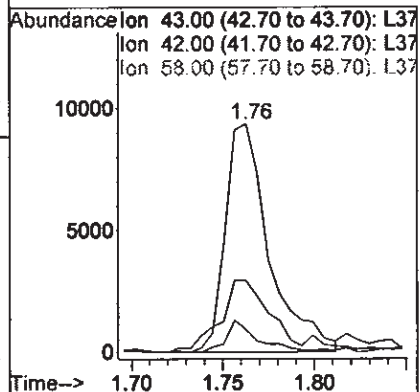
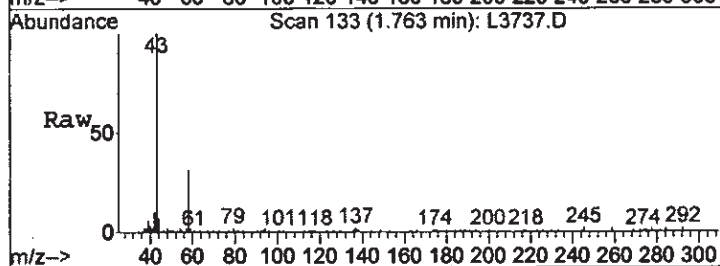
```
Method      : I:\ACQDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
Title       : 8260C WATERS
Last Update : Thu Mar 20 15:48:07 2014
Response via : Initial Calibration
```

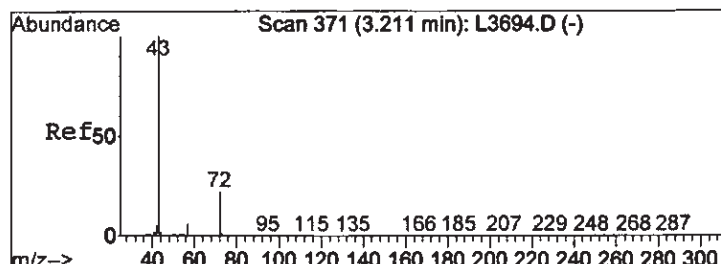




#14
 Acetone
 Concen: 7.84 ug/L
 RT: 1.76 min Scan# 133
 Delta R.T. 0.01 min
 Lab File: L3737.D
 Acq: 20 Mar 2014 4:47 pm

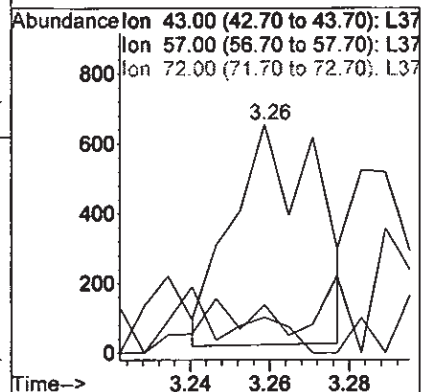
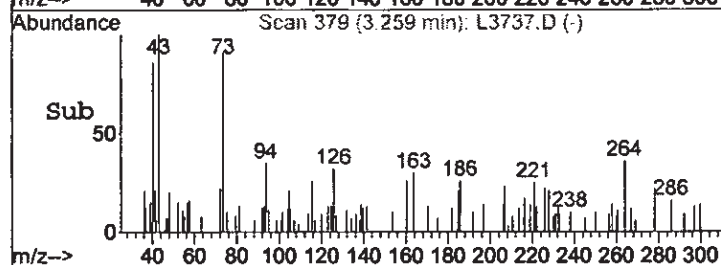
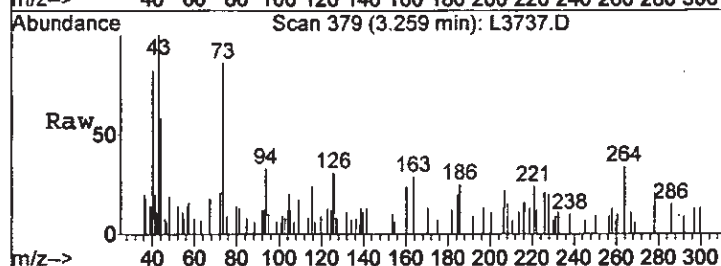
Tgt Ion: 43 Resp: 15538
 Ion Ratio Lower Upper
 43 100
 42 9.9 0.0 29.9
 58 31.3 8.5 48.5





#31
2-Butanone
Concen: 0.38 ug/L
RT: 3.26 min Scan# 379
Delta R.T. 0.05 min
Lab File: L3737.D
Acq: 20 Mar 2014 4:47 pm

Tgt Ion: 43 Resp: 928
Ion Ratio Lower Upper
43 100
57 15.6 0.0 26.6
72 21.1 1.5 41.5





VOLATILE ORGANICS STANDARDS DATA

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Initial Calibration - Summary Report

DL 3/20/14

Calibration ID:	RC1400025	Instrument ID:	R-MS-06
		Column Name:	1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
1,1,1,2-Tetrachloroethane	T	Average RF			0.5315	<=20	4.7
1,1,1-Trichloroethane (TCA)	T	Average RF		0.100	1.049	<=20	3.0
1,1,2,2-Tetrachloroethane	T	Average RF		0.300	0.8847	<=20	4.5
1,1,2-Trichloroethane	T	Average RF		0.100	0.3500	<=20	4.5
1,1,2-Trichlorotrifluoroethane	T	Average RF		0.100	0.6233	<=20	7.5
1,1-Dichloroethane (1,1-DCA)	T	Average RF		0.200	1.252	<=20	5.9
1,1-Dichloroethene (1,1-DCE)	T	Average RF		0.100	0.5565	<=20	4.6
1,1-Dichloropropene	T	Average RF			0.5984	<=20	3.0
1,2,3-Trichlorobenzene	T	Average RF			0.8092	<=20	4.5
1,2,3-Trichloropropane	T	Average RF			0.5813	<=20	5.1
1,2,4-Trichlorobenzene	T	Average RF		0.200	1.070	<=20	4.5
1,2,4-Trimethylbenzene	T	Average RF			3.522	<=20	5.2
1,2-Dibromo-3-chloropropane (DBCP)	T	Average RF		0.050	0.1163	<=20	7.3
1,2-Dibromoethane	T	Average RF		0.100	0.3868	<=20	8.0
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123)	T	Average RF			0.8425	<=20	7.6
1,2-Dichlorobenzene	T	Average RF		0.400	1.952	<=20	6.6
1,2-Dichloroethane	T	Average RF		0.100	0.1783	<=20	5.0
1,2-Dichloropropane	T	Average RF		0.100	0.5147	<=20	3.8
1,3,5-Trimethylbenzene	T	Average RF			3.394	<=20	5.2
1,3-Dichlorobenzene	T	Average RF		0.600	2.163	<=20	6.1
1,3-Dichloropropane	T	Average RF			0.6343	<=20	4.7
1,4-Dichlorobenzene	T	Average RF		0.500	2.178	<=20	8.6
1,4-Dioxane	T	Average RF			0.002141	<=20	9.3
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	T	Average RF			0.9983	<=20	6.4
2,2-Dichloropropane	T	Average RF			1.009	<=20	4.1
2-Butanone (MEK)	T	Average RF		0.05	0.2006	<=20	9.2
2-Chloro-1,3-butadiene	T	Average RF			1.093	<=20	3.7
2-Chloroethyl Vinyl Ether	T	Average RF			0.2212	<=20	9.6
2-Chlorotoluene	T	Average RF			3.181	<=20	5.1
2-Hexanone	T	Average RF		0.05	0.2495	<=20	12.1
2-Methyl-1-propanol	T	Average RF			0.01088	<=20	7.4
2-Methyl-2-propanol	T	Average RF			0.03030	<=20	6.0
2-Nitropropane	T	Average RF			0.07168	<=20	12.8
2-Propanol	T	Average RF			0.01970	<=20	7.2
3-Chloro-1-propene	T	Average RF			0.3507	<=20	4.9
4-Chlorotoluene	T	Average RF			3.299	<=20	6.0
4-Isopropyltoluene	T	Average RF			3.229	<=20	8.7
4-Methyl-2-pentanone	T	Average RF		0.05	0.3143	<=20	7.2
Acetone	T	Average RF		0.05	0.1618	<=20	5.0
Acetonitrile	T	Average RF			0.06334	<=20	4.5
Acrolein	T	Average RF			0.07692	<=20	4.8
Acrylonitrile	T	Average RF			0.1507	<=20	5.1
Benzene	T	Average RF		0.500	1.879	<=20	7.1
Bromobenzene	T	Average RF			1.212	<=20	6.5
Bromochloromethane	T	Average RF			0.3408	<=20	5.4
Bromodichloromethane	T	Average RF		0.200	0.6314	<=20	3.8
Bromoform	T	Average RF		0.100	0.3158	<=20	10.1
Bromomethane	T	Average RF		0.100	0.5866	<=20	10.7
Carbon Disulfide	T	Average RF		0.100	1.942	<=20	6.0
Carbon Tetrachloride	T	Average RF		0.05	0.6018	<=20	1.8
Chlorobenzene	T	Average RF		0.500	1.387	<=20	6.5
Chloroethane	T	Average RF		0.100	0.4766	<=20	7.5

Initial Calibration - Summary Report

Calibration ID: RC1400025

Instrument ID: R-MS-06

Column Name: 1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
Chloroform	T	Average RF		0.200	1.246	<=20	3.3
Chloromethane	T	Average RF		0.100	0.9696	<=20	5.4
Cyclohexane	T	Average RF		0.100	0.7567	<=20	4.2
Cyclohexanone	T	Average RF			0.03931	<=20	6.2
Dibromochloromethane	T	Average RF		0.100	0.5082	<=20	8.1
Dibromomethane	T	Average RF			0.2497	<=20	6.3
Dichlorodifluoromethane (CFC 12)	T	Average RF		0.100	0.7918	<=20	6.3
Dichlorofluoromethane (CFC 21)	T	Average RF			1.287	<=20	11.1
Dichloromethane	T	Average RF		0.100	0.7512	<=20	10.7
Diethyl Ether	T	Average RF			0.4490	<=20	5.4
Ethyl Methacrylate	T	Average RF			0.4741	<=20	13.6
Ethylbenzene	T	Average RF		0.100	0.7668	<=20	3.6
Hexachlorobutadiene	T	Average RF			0.4471	<=20	7.3
Iodomethane	T	Linear	1/X		0.8174	>=0.99	0.9968
Isopropylbenzene (Cumene)	T	Average RF		0.100	2.289	<=20	7.0
Methacrylonitrile	T	Average RF			0.2982	<=20	5.6
Methyl Acetate	T	Average RF		0.100	0.3277	<=20	9.4
Methyl Methacrylate	T	Average RF			0.1989	<=20	10.7
Methyl tert-Butyl Ether	T	Average RF		0.100	1.348	<=20	4.2
Methylcyclohexane	T	Average RF		0.100	0.5496	<=20	6.0
Naphthalene	T	Average RF			1.643	<=20	4.4
Nitrobenzene	T	Average RF			0.02782	<=20	19.5
Propionitrile	T	Average RF			0.05483	<=20	3.6
Styrene	T	Average RF		0.300	1.438	<=20	6.1
Tetrachloroethene (PCE)	T	Average RF		0.200	0.4676	<=20	4.0
Tetrahydrofuran (THF)	T	Average RF			0.1330	<=20	4.5
Toluene	T	Average RF		0.400	2.062	<=20	6.3
Trichloroethene (TCE)	T	Average RF		0.200	0.5161	<=20	2.9
Trichlorofluoromethane (CFC 11)	T	Average RF		0.100	1.041	<=20	5.2
Vinyl Acetate	T	Average RF			1.196	<=20	7.5
Vinyl Chloride	T	Average RF		0.100	0.8664	<=20	5.6
cis-1,2-Dichloroethene	T	Average RF		0.100	0.7691	<=20	3.8
cis-1,3-Dichloropropene	T	Average RF		0.200	0.7118	<=20	3.6
m,p-Xylenes	T	Average RF		0.100	0.9003	<=20	5.4
n-Butyl Acetate	T	Average RF			0.5818	<=20	12.0
n-Butylbenzene	T	Average RF			2.997	<=20	8.2
n-Heptane	T	Average RF			0.5047	<=20	3.4
n-Propylbenzene	T	Average RF			5.017	<=20	9.7
o-Xylene	T	Average RF		0.300	0.9191	<=20	4.0
sec-Butylbenzene	T	Average RF			4.023	<=20	6.1
tert-Butylbenzene	T	Average RF			2.757	<=20	6.5
trans-1,2-Dichloroethene	T	Average RF		0.100	0.6794	<=20	3.7
trans-1,3-Dichloropropene	T	Average RF		0.100	0.5744	<=20	7.3
trans-1,4-Dichloro-2-butene	T	Average RF			0.1330	<=20	14.3
1,2-Dichloroethane-d4	S	Average RF			0.3242	<=20	1.3
4-Bromofluorobenzene	S	Average RF			0.5210	<=20	9.0
Dibromofluoromethane	S	Average RF			0.3380	<=20	0.8
Toluene-d8	S	Average RF			1.233	<=20	1.2

Initial Calibration - Detailed Report

DL 3/20/14

Calibration ID: RC1400025

Instrument ID: R-MS-06
Signal ID: 1

#	Lab Code	Sample Name	File Location	Acquisition Date
02	RC1400025-02	STD #10 - 200 PPB	E:\ACQ\DATA\MSVOA6\DATA\031914\3697.D	3/19/14 17:59
03	RC1400025-03	STD #9 - 150 PPB	E:\ACQ\DATA\MSVOA6\DATA\031914\3696.D	3/19/14 17:28
04	RC1400025-04	STD #8 - 100 PPB	E:\ACQ\DATA\MSVOA6\DATA\031914\3695.D	3/19/14 16:53
05	RC1400025-05	STD #7 - 50 PPB	E:\ACQ\DATA\MSVOA6\DATA\031914\3694.D	3/19/14 16:16
06	RC1400025-06	STD #6 - 20 PPB	E:\ACQ\DATA\MSVOA6\DATA\031914\3693.D	3/19/14 15:44
07	RC1400025-07	STD #5 - 10 PPB	E:\ACQ\DATA\MSVOA6\DATA\031914\3692.D	3/19/14 15:12
08	RC1400025-08	STD #4 - 5.0 PPB	E:\ACQ\DATA\MSVOA6\DATA\031914\3691.D	3/19/14 14:36
09	RC1400025-09	STD #3 - 2.0 PPB	E:\ACQ\DATA\MSVOA6\DATA\031914\3690.D	3/19/14 14:02
10	RC1400025-10	STD #2 - 1.0 PPB	E:\ACQ\DATA\MSVOA6\DATA\031914\3689.D	3/19/14 13:32
11	RC1400025-11	STD #1 - 0.5 PPB	E:\ACQ\DATA\MSVOA6\DATA\031914\3688.D	3/19/14 12:33

Analyte			Curve Fit			Weighting		
1,1,1,2-Tetrachloroethane			Average RF			RSD = 4.7		
						Average RF = 0.5315		
#	Amount	RF	#	Amount	RF	#	Amount	RF
11	0.500	0.5330	10	1.000	0.5179	09	2.000	0.4957
07	10.000	0.5108	06	20.000	0.5251	05	50.000	0.5365
03	150.000	0.5634	02	200.000	0.5785	04	100.000	0.5397
1,1,1-Trichloroethane (TCA)			Average RF			RSD = 3.0		
						Average RF = 1.049		
#	Amount	RF	#	Amount	RF	#	Amount	RF
11	0.500	1.062	10	1.000	0.9819	09	2.000	1.055
07	10.000	1.094	06	20.000	1.076	05	50.000	1.040
03	150.000	1.043	02	200.000	1.020	04	100.000	1.064
1,1,2,2-Tetrachloroethane			Average RF			RSD = 4.5		
						Average RF = 0.8847		
#	Amount	RF	#	Amount	RF	#	Amount	RF
11	0.500	0.9441	10	1.000	0.9057	09	2.000	0.9324
07	10.000	0.8037	06	20.000	0.8588	05	50.000	0.8772
03	150.000	0.8883	02	200.000	0.8746	04	100.000	0.8998
1,1,2-Trichloroethane			Average RF			RSD = 4.5		
						Average RF = 0.3500		
#	Amount	RF	#	Amount	RF	#	Amount	RF
11	0.500	0.3406	10	1.000	0.3183	09	2.000	0.3445
07	10.000	0.3449	06	20.000	0.3465	05	50.000	0.3670
03	150.000	0.3604	02	200.000	0.3509	04	100.000	0.3516
1,1,2-Trichlorotrifluoroethane			Average RF			RSD = 7.5		
						Average RF = 0.6233		
#	Amount	RF	#	Amount	RF	#	Amount	RF
11	0.500	0.7125	10	1.000	0.6975	09	2.000	0.6272
07	10.000	0.6225	06	20.000	0.6113	05	50.000	0.5865
03	150.000	0.5914	02	200.000	0.5735	04	100.000	0.5897
1,1-Dichloroethane (1,1-DCA)			Average RF			RSD = 5.9		
						Average RF = 1.252		
#	Amount	RF	#	Amount	RF	#	Amount	RF
11	0.500	1.160	10	1.000	1.194	09	2.000	1.283
07	10.000	1.349	06	20.000	1.302	05	50.000	1.244
03	150.000	1.219	02	200.000	1.165	04	100.000	1.231

Initial Calibration - Detailed Report

Calibration ID:	RC1400025	Instrument ID:	R-MS-06
		Signal ID:	1

Analyte	Curve Fit	Weighting									
1,1-Dichloroethene (1,1-DCE)	Average RF		RSD = 4.6		Average RF = 0.5565						
# Amount RF	# Amount RF		# Amount RF		# Amount RF		# Amount RF		# Amount RF		
11 0.500 0.6071	10 1.000 0.5540		09 2.000 0.5900		08 5.000 0.5472		07 10.000 0.5623		06 20.000 0.5580		05 50.000 0.5301
03 150.000 0.5517	02 200.000 0.5236						04 100.000 0.5410				
1,1-Dichloropropene	Average RF		RSD = 3.0		Average RF = 0.5984						
# Amount RF	# Amount RF		# Amount RF		# Amount RF		# Amount RF		# Amount RF		
11 0.500 0.5793	10 1.000 0.6114		09 2.000 0.6384		08 5.000 0.5816		07 10.000 0.6081		06 20.000 0.6051		05 50.000 0.5967
03 150.000 0.5896	02 200.000 0.5839						04 100.000 0.5901				
1,2,3-Trichlorobenzene	Average RF		RSD = 4.5		Average RF = 0.8092						
# Amount RF	# Amount RF		# Amount RF		# Amount RF		# Amount RF		# Amount RF		
11 0.500 0.8600	10 1.000 0.8694		09 2.000 0.8026		08 5.000 0.8004		07 10.000 0.7642		06 20.000 0.7780		05 50.000 0.7855
03 150.000 0.8297	02 200.000 0.7723						04 100.000 0.8300				
1,2,3-Trichloropropane	Average RF		RSD = 5.1		Average RF = 0.5813						
# Amount RF	# Amount RF		# Amount RF		# Amount RF		# Amount RF		# Amount RF		
11 0.500 0.5116	10 1.000 0.6209		09 2.000 0.5684		08 5.000 0.5982		07 10.000 0.5600		06 20.000 0.5896		05 50.000 0.5983
03 150.000 0.5839	02 200.000 0.5864						04 100.000 0.5956				
1,2,4-Trichlorobenzene	Average RF		RSD = 4.5		Average RF = 1.070						
# Amount RF	# Amount RF		# Amount RF		# Amount RF		# Amount RF		# Amount RF		
11 0.500 1.154	10 1.000 1.140		09 2.000 1.007		08 5.000 1.048		07 10.000 1.036		06 20.000 1.060		05 50.000 1.051
03 150.000 1.076	02 200.000 1.027						04 100.000 1.104				
1,2,4-Trimethylbenzene	Average RF		RSD = 5.2		Average RF = 3.522						
# Amount RF	# Amount RF		# Amount RF		# Amount RF		# Amount RF		# Amount RF		
11 0.500 3.661	10 1.000 3.641		09 2.000 3.548		08 5.000 3.509		07 10.000 3.633		06 20.000 3.657		05 50.000 3.389
							04 100.000 3.137				
1,2-Dibromo-3-chloropropane (DBCP)	Average RF		RSD = 7.3		Average RF = 0.1163						
# Amount RF	# Amount RF		# Amount RF		# Amount RF		# Amount RF		# Amount RF		
10 1.000 0.09596	09 2.000 0.1232		08 5.000 0.1182		07 10.000 0.1142		06 20.000 0.1136		05 50.000 0.1153		04 100.000 0.1218
02 200.000 0.1207							03 150.000 0.1236				
1,2-Dibromoethane	Average RF		RSD = 8.0		Average RF = 0.3868						
# Amount RF	# Amount RF		# Amount RF		# Amount RF		# Amount RF		# Amount RF		
11 0.500 0.3404	10 1.000 0.3398		09 2.000 0.3884		08 5.000 0.3973		07 10.000 0.3755		06 20.000 0.3684		05 50.000 0.4075
03 150.000 0.4213	02 200.000 0.4297						04 100.000 0.4001				
1,2-Dichloro-1,1,2-trifluoroethane (CFC)	Average RF		RSD = 7.6		Average RF = 0.8425						
# Amount RF	# Amount RF		# Amount RF		# Amount RF		# Amount RF		# Amount RF		
11 0.500 0.9837	10 1.000 0.8187		09 2.000 0.9161		08 5.000 0.8489		07 10.000 0.8177		06 20.000 0.8152		05 50.000 0.8103
03 150.000 0.8414	02 200.000 0.7534						04 100.000 0.8200				

Initial Calibration - Detailed Report

Calibration ID: RC1400025

Instrument ID: R-MS-06
Signal ID: 1

Analyte	Curve Fit			Weighting		
1,2-Dichlorobenzene	Average RF			RSD = 6.6		
				Average RF = 1.952		
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
11 0.500 1.968	10 1.000 2.193	09 2.000 2.080	08 5.000 1.965	07 10.000 1.925	06 20.000 1.956	05 50.000 1.871
03 150.000 1.746			04 100.000 1.861			
1,2-Dichloroethane	Average RF			RSD = 5.0		
				Average RF = 0.1783		
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
11 0.500 0.1910	10 1.000 0.1950	09 2.000 0.1698	08 5.000 0.1671	07 10.000 0.1816	06 20.000 0.1775	05 50.000 0.1758
03 150.000 0.1780	02 200.000 0.1749		04 100.000 0.1725			
1,2-Dichloroethane-d4	Average RF			RSD = 1.3		
				Average RF = 0.3242		
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
02 50.000 0.3289	04 50.000 0.3178	08 50.000 0.3273	10 50.000 0.3218	09 50.000 0.3279	03 50.000 0.3284	07 50.000 0.3231
06 50.000 0.3182	05 50.000 0.3276					
1,2-Dichloropropane	Average RF			RSD = 3.8		
				Average RF = 0.5147		
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
11 0.500 0.5101	10 1.000 0.4669	09 2.000 0.5378	08 5.000 0.5161	07 10.000 0.5349	06 20.000 0.5113	05 50.000 0.5218
03 150.000 0.5223	02 200.000 0.5105		04 100.000 0.5155			
1,3,5-Trimethylbenzene	Average RF			RSD = 5.2		
				Average RF = 3.394		
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
11 0.500 3.239	10 1.000 3.418	09 2.000 3.517	08 5.000 3.400	07 10.000 3.603	06 20.000 3.571	05 50.000 3.326
			04 100.000 3.076			
1,3-Dichlorobenzene	Average RF			RSD = 6.1		
				Average RF = 2.163		
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
11 0.500 2.091	10 1.000 2.369	09 2.000 2.268	08 5.000 2.222	07 10.000 2.246	06 20.000 2.175	05 50.000 2.095
03 150.000 1.927			04 100.000 2.072			
1,3-Dichloropropane	Average RF			RSD = 4.7		
				Average RF = 0.6343		
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
11 0.500 0.6149	10 1.000 0.5752	09 2.000 0.6454	08 5.000 0.6260	07 10.000 0.6197	06 20.000 0.6223	05 50.000 0.6646
03 150.000 0.6709	02 200.000 0.6696		04 100.000 0.6346			
1,4-Dichlorobenzene	Average RF			RSD = 8.6		
				Average RF = 2.178		
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
11 0.500 2.546	10 1.000 2.363	09 2.000 2.195	08 5.000 2.114	07 10.000 2.134	06 20.000 2.220	05 50.000 2.080
03 150.000 1.900			04 100.000 2.050			
1,4-Dioxane	Average RF			RSD = 9.3		
				Average RF = 0.002141		
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
09 40.000 0.002219	08 100.000 0.002501	07 200.000 0.002287	06 400.000 0.001874	05 1000.000 0.002136	04 2000.000 0.002082	03 3000.000 0.002087
			02 4000.000 0.001936			

Initial Calibration - Detailed Report

Calibration ID: RC1400025

Instrument ID: R-MS-06

Signal ID: 1

Analyte	Curve Fit	Weighting									
2,2-Dichloro-1,1,1-trifluoroethane (CFC)			Average RF		RSD = 6.4		Average RF = 0.9983				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
11	0.500	1.047	10	1.000	1.100	09	2.000	1.082	08	5.000	1.017
07	10.000	0.9890	06	20.000	0.9787	05	50.000	0.9547	04	100.000	0.9691
03	150.000	0.9499	02	200.000	0.8955						
2,2-Dichloropropane			Average RF		RSD = 4.1		Average RF = 1.009				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
11	0.500	0.9231	10	1.000	0.9919	09	2.000	1.087	08	5.000	0.9944
07	10.000	1.024	06	20.000	1.030	05	50.000	0.9974	04	100.000	1.019
03	150.000	1.031	02	200.000	0.9924						
2-Butanone (MEK)			Average RF		RSD = 9.2		Average RF = 0.2006				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
08	5.000	0.1776	07	10.000	0.1742	06	20.000	0.1949	05	50.000	0.2113
04	100.000	0.2173	03	150.000	0.2157	02	200.000	0.2128			
2-Chloro-1,3-butadiene			Average RF		RSD = 3.7		Average RF = 1.093				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
11	0.500	1.099	10	1.000	1.039	09	2.000	1.096	08	5.000	1.059
07	10.000	1.138	06	20.000	1.066	05	50.000	1.099	04	100.000	1.167
03	150.000	1.120	02	200.000	1.049						
2-Chloroethyl Vinyl Ether			Average RF		RSD = 9.6		Average RF = 0.2212				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	1.000	0.2160	09	2.000	0.1882	08	5.000	0.1990	07	10.000	0.2027
06	20.000	0.2203	05	50.000	0.2393	04	100.000	0.2444	03	150.000	0.2412
02	200.000	0.2401									
2-Chlorotoluene			Average RF		RSD = 5.1		Average RF = 3.181				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
11	0.500	3.244	10	1.000	3.133	09	2.000	3.283	08	5.000	3.314
07	10.000	3.300	06	20.000	3.276	05	50.000	3.033	04	100.000	2.861
2-Hexanone			Average RF		RSD = 12.1		Average RF = 0.2495				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
08	5.000	0.2166	07	10.000	0.2104	06	20.000	0.2330	05	50.000	0.2535
04	100.000	0.2688	03	150.000	0.2806	02	200.000	0.2839			
2-Methyl-1-propanol			Average RF		RSD = 7.4		Average RF = 0.01088				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
09	40.000	0.01043	08	100.000	0.01087	07	200.000	0.009345	06	400.000	0.01033
05	1000.000	0.01143	04	2000.000	0.01137	03	3000.000	0.01173	02	4000.000	0.01152
2-Methyl-2-propanol			Average RF		RSD = 6.0		Average RF = 0.03030				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	20.000	0.02842	09	40.000	0.02703	08	100.000	0.03200	07	200.000	0.02973
06	400.000	0.02916	05	1000.000	0.03160	04	2000.000	0.03135	03	3000.000	0.03246
02	4000.000	0.03092									
2-Nitropropane			Average RF		RSD = 12.8		Average RF = 0.07168				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
09	4.000	0.05611	08	10.000	0.07034	07	20.000	0.05989	06	40.000	0.07207
05	100.000	0.07775	04	200.000	0.07806	03	300.000	0.08048	02	400.000	0.07878

Initial Calibration - Detailed Report

Calibration ID: RC1400025

Instrument ID: R-MS-06
Signal ID: 1

Analyte	Curve Fit	Weighting									
2-Propanol											
Average RF			RSD = 7.2			Average RF = 0.01970					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	20.000	0.01949	09	40.000	0.01850	08	100.000	0.02222	07	200.000	0.01809
06	400.000	0.01790	05	1000.000	0.02045	04	2000.000	0.02059	03	3000.000	0.02071
02	4000.000	0.01938									
3-Chloro-1-propene											
Average RF			RSD = 4.9			Average RF = 0.3507					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
11	0.500	0.3197	10	1.000	0.3439	09	2.000	0.3651	08	5.000	0.3532
07	10.000	0.3843	06	20.000	0.3606	05	50.000	0.3410	04	100.000	0.3535
03	150.000	0.3459	02	200.000	0.3399						
4-Bromofluorobenzene											
Average RF			RSD = 9.0			Average RF = 0.5210					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	0.5161	05	50.000	0.5339	09	50.000	0.4901	10	50.000	0.4793
02	50.000	0.6120	03	50.000	0.5845	07	50.000	0.5017	04	50.000	0.5392
11	50.000	0.4751	08	50.000	0.4786						
4-Chlorotoluene											
Average RF			RSD = 6.0			Average RF = 3.299					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
11	0.500	3.466	10	1.000	3.323	09	2.000	3.507	08	5.000	3.362
07	10.000	3.342	06	20.000	3.364	05	50.000	3.128	04	100.000	2.900
4-Isopropyltoluene											
Average RF			RSD = 8.7			Average RF = 3.229					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
11	0.500	3.270	10	1.000	3.380	09	2.000	3.432	08	5.000	3.322
07	10.000	3.361	06	20.000	3.502	05	50.000	3.196	04	100.000	3.018
03	150.000	2.578									
4-Methyl-2-pentanone											
Average RF			RSD = 7.2			Average RF = 0.3143					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
08	5.000	0.3149	07	10.000	0.2705	06	20.000	0.2999	05	50.000	0.3278
04	100.000	0.3333	03	150.000	0.3322	02	200.000	0.3217			
Acetone											
Average RF			RSD = 5.0			Average RF = 0.1618					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
08	5.000	0.1796	07	10.000	0.1575	06	20.000	0.1576	05	50.000	0.1561
04	100.000	0.1620	03	150.000	0.1606	02	200.000	0.1590			
Acetonitrile											
Average RF			RSD = 4.5			Average RF = 0.06334					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	5.000	0.06785	09	10.000	0.05989	08	25.000	0.06700	07	50.000	0.06369
06	100.000	0.06145	05	250.000	0.06245	04	500.000	0.06242	03	750.000	0.06521
02	1000.000	0.06008									
Acrolein											
Average RF			RSD = 4.8			Average RF = 0.07692					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
11	2.500	0.07329	10	5.000	0.07615	09	10.000	0.08021	08	25.000	0.07643
07	50.000	0.07058	06	100.000	0.07509	05	250.000	0.07703	04	500.000	0.08079
03	750.000	0.08309	02	1000.000	0.07653						
Acrylonitrile											
Average RF			RSD = 5.1			Average RF = 0.1507					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
11	2.500	0.1538	10	5.000	0.1363	09	10.000	0.1482	08	25.000	0.1665
07	50.000	0.1464	06	100.000	0.1514	05	250.000	0.1527	04	500.000	0.1536
03	750.000	0.1522	02	1000.000	0.1456						

Initial Calibration - Detailed Report

Calibration ID: RC1400025

Instrument ID: R-MS-06
Signal ID: 1

Analyte			Curve Fit			Weighting		
Benzene			Average RF			RSD = 7.1		
						Average RF = 1.879		
#	Amount	RF	#	Amount	RF	#	Amount	RF
11	0.500	1.891	10	1.000	2.074	09	2.000	2.006
07	10.000	1.963	06	20.000	1.943	05	50.000	1.861
03	150.000	1.748	02	200.000	1.618			
Bromobenzene			Average RF			RSD = 6.5		
						Average RF = 1.212		
#	Amount	RF	#	Amount	RF	#	Amount	RF
11	0.500	1.237	10	1.000	1.364	09	2.000	1.317
07	10.000	1.190	06	20.000	1.223	05	50.000	1.176
03	150.000	1.130	02	200.000	1.111			
Bromochloromethane			Average RF			RSD = 5.4		
						Average RF = 0.3408		
#	Amount	RF	#	Amount	RF	#	Amount	RF
11	0.500	0.3647	10	1.000	0.3083	09	2.000	0.3378
07	10.000	0.3514	06	20.000	0.3393	05	50.000	0.3409
03	150.000	0.3376	02	200.000	0.3207			
Bromodichloromethane			Average RF			RSD = 3.8		
						Average RF = 0.6314		
#	Amount	RF	#	Amount	RF	#	Amount	RF
11	0.500	0.5798	10	1.000	0.6194	09	2.000	0.6058
07	10.000	0.6265	06	20.000	0.6461	05	50.000	0.6497
03	150.000	0.6542	02	200.000	0.6382			
Bromoform			Average RF			RSD = 10.1		
						Average RF = 0.3158		
#	Amount	RF	#	Amount	RF	#	Amount	RF
11	0.500	0.3113	10	1.000	0.3107	09	2.000	0.2860
07	10.000	0.2820	06	20.000	0.3023	05	50.000	0.3392
03	150.000	0.3765						
Bromomethane			Average RF			RSD = 10.7		
						Average RF = 0.5866		
#	Amount	RF	#	Amount	RF	#	Amount	RF
11	0.500	0.7086	10	1.000	0.6310	09	2.000	0.6509
07	10.000	0.5997	06	20.000	0.5370	05	50.000	0.5243
03	150.000	0.5444	02	200.000	0.5275			
Carbon Disulfide			Average RF			RSD = 6.0		
						Average RF = 1.942		
#	Amount	RF	#	Amount	RF	#	Amount	RF
11	0.500	2.113	10	1.000	1.972	09	2.000	2.030
07	10.000	2.001	06	20.000	1.957	05	50.000	1.908
03	150.000	1.697						
Carbon Tetrachloride			Average RF			RSD = 1.8		
						Average RF = 0.6018		
#	Amount	RF	#	Amount	RF	#	Amount	RF
11	0.500	0.5806	10	1.000	0.6047	09	2.000	0.5880
07	10.000	0.5978	06	20.000	0.6070	05	50.000	0.6047
03	150.000	0.6167	02	200.000	0.6118			
Chlorobenzene			Average RF			RSD = 6.5		
						Average RF = 1.387		
#	Amount	RF	#	Amount	RF	#	Amount	RF
11	0.500	1.379	10	1.000	1.436	09	2.000	1.473
07	10.000	1.463	06	20.000	1.457	05	50.000	1.427
03	150.000	1.295	02	200.000	1.191			

Initial Calibration - Detailed Report

Calibration ID: RC1400025

Instrument ID: R-MS-06
Signal ID: 1

Analyte	Curve Fit			Weighting								
Chloroethane	Average RF			RSD = 7.5			Average RF = 0.4766					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
11	0.500	0.4381	10	1.000	0.5574	09	2.000	0.5011	08	5.000	0.4968	
07	10.000	0.4774	06	20.000	0.4807	05	50.000	0.4576	04	100.000	0.4622	
03	150.000	0.4529	02	200.000	0.4418							
Chloroform	Average RF			RSD = 3.3			Average RF = 1.246					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
11	0.500	1.207	10	1.000	1.235	09	2.000	1.270	08	5.000	1.289	
07	10.000	1.307	06	20.000	1.284	05	50.000	1.233	04	100.000	1.241	
03	150.000	1.227	02	200.000	1.170							
Chloromethane	Average RF			RSD = 5.4			Average RF = 0.9696					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
11	0.500	0.9670	10	1.000	1.017	09	2.000	0.9504	08	5.000	1.039	
07	10.000	1.010	06	20.000	0.9956	05	50.000	0.9522	04	100.000	0.9293	
03	150.000	0.8668										
Cyclohexane	Average RF			RSD = 4.2			Average RF = 0.7567					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
11	0.500	0.7735	10	1.000	0.7845	09	2.000	0.8272	08	5.000	0.7414	
07	10.000	0.7220	06	20.000	0.7367	05	50.000	0.7299	04	100.000	0.7551	
03	150.000	0.7627	02	200.000	0.7336							
Cyclohexanone	Average RF			RSD = 6.2			Average RF = 0.03931					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
11	10.000	0.03824	10	20.000	0.03836	09	40.000	0.03732	08	100.000	0.03995	
07	200.000	0.03501	06	400.000	0.03771	05	1000.000	0.04247	04	2000.000	0.04110	
03	3000.000	0.04266	02	4000.000	0.04028							
Dibromochloromethane	Average RF			RSD = 8.1			Average RF = 0.5082					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
11	0.500	0.4445	10	1.000	0.5201	09	2.000	0.4771	08	5.000	0.4560	
07	10.000	0.4894	06	20.000	0.5051	05	50.000	0.5358	04	100.000	0.5331	
03	150.000	0.5547	02	200.000	0.5657							
Dibromofluoromethane	Average RF			RSD = 0.8			Average RF = 0.3380					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
07	50.000	0.3351	03	50.000	0.3417	09	50.000	0.3381	04	50.000	0.3358	
06	50.000	0.3382	11	50.000	0.3343	02	50.000	0.3394	08	50.000	0.3360	
05	50.000	0.3428	10	50.000	0.3386							
Dibromomethane	Average RF			RSD = 6.3			Average RF = 0.2497					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
11	0.500	0.2403	10	1.000	0.2096	09	2.000	0.2659	08	5.000	0.2555	
07	10.000	0.2484	06	20.000	0.2594	05	50.000	0.2571	04	100.000	0.2522	
03	150.000	0.2567	02	200.000	0.2521							
Dichlorodifluoromethane (CFC 12)	Average RF			RSD = 6.3			Average RF = 0.7918					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
11	0.500	0.8037	10	1.000	0.7709	09	2.000	0.8025	08	5.000	0.7992	
07	10.000	0.8645	06	20.000	0.8563	05	50.000	0.7968	04	100.000	0.7873	
03	150.000	0.7434	02	200.000	0.6932							

Initial Calibration - Detailed Report

Calibration ID: RC1400025

Instrument ID: R-MS-06

Signal ID: 1

Analyte	Curve Fit			Weighting								
Dichlorofluoromethane (CFC 21)	Average RF			RSD = 11.1			Average RF = 1.287					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
11	0.500	1.414	10	1.000	1.308	09	2.000	1.500	08	5.000	1.397	
07	10.000	1.364	06	20.000	1.272	05	50.000	1.236	04	100.000	1.222	
03	150.000	1.147	02	200.000	1.009							
Dichloromethane	Average RF			RSD = 10.7			Average RF = 0.7512					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
11	0.500	0.8936	10	1.000	0.8637	09	2.000	0.7637	08	5.000	0.8088	
07	10.000	0.7342	06	20.000	0.7197	05	50.000	0.6899	04	100.000	0.6909	
03	150.000	0.6908	02	200.000	0.6567							
Diethyl Ether	Average RF			RSD = 5.4			Average RF = 0.4490					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
11	0.500	0.4529	10	1.000	0.4907	09	2.000	0.4888	08	5.000	0.4470	
07	10.000	0.4160	06	20.000	0.4339	05	50.000	0.4456	04	100.000	0.4387	
03	150.000	0.4492	02	200.000	0.4271							
Ethyl Methacrylate	Average RF			RSD = 13.6			Average RF = 0.4741					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
11	0.500	0.4110	10	1.000	0.3641	09	2.000	0.4535	08	5.000	0.4461	
07	10.000	0.4296	06	20.000	0.4811	05	50.000	0.5240	04	100.000	0.5239	
03	150.000	0.5416	02	200.000	0.5658							
Ethylbenzene	Average RF			RSD = 3.6			Average RF = 0.7668					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
11	0.500	0.7476	10	1.000	0.7125	09	2.000	0.7589	08	5.000	0.7388	
07	10.000	0.7862	06	20.000	0.7694	05	50.000	0.7960	04	100.000	0.7687	
03	150.000	0.7976	02	200.000	0.7923							
Hexachlorobutadiene	Average RF			RSD = 7.3			Average RF = 0.4471					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
11	0.500	0.5313	10	1.000	0.4433	09	2.000	0.4171	08	5.000	0.4413	
07	10.000	0.4459	06	20.000	0.4524	05	50.000	0.4080	04	100.000	0.4480	
03	150.000	0.4440	02	200.000	0.4396							
Iodomethane	Linear			1/X			R2 = 0.9968			Y = 0.9278 X + -0.01982		
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
09	2.000	0.4765	08	5.000	0.6520	07	10.000	0.7873	06	20.000	0.8857	
05	50.000	0.9440	04	100.000	0.9808	03	150.000	0.9474	02	200.000	0.8657	
Isopropylbenzene (Cumene)	Average RF			RSD = 7.0			Average RF = 2.289					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
11	0.500	2.397	10	1.000	2.265	09	2.000	2.442	08	5.000	2.284	
07	10.000	2.372	06	20.000	2.345	05	50.000	2.281	04	100.000	1.926	
Methacrylonitrile	Average RF			RSD = 5.6			Average RF = 0.2982					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
10	1.000	0.3076	09	2.000	0.2664	08	5.000	0.3091	07	10.000	0.2749	
06	20.000	0.2921	05	50.000	0.3100	04	100.000	0.3054	03	150.000	0.3124	
02	200.000	0.3056										

Initial Calibration - Detailed Report

Calibration ID:	RC1400025	Instrument ID:	R-MS-06
		Signal ID:	1

Analyte	Curve Fit			Weighting							
Methyl Acetate	Average RF			RSD = 9.4			Average RF = 0.3277				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	1.000	0.2610	09	2.000	0.3305	08	5.000	0.3254	07	10.000	0.2962
06	20.000	0.3395	05	50.000	0.3445	04	100.000	0.3535	03	150.000	0.3581
02	200.000	0.3408									
Methyl Methacrylate	Average RF			RSD = 10.7			Average RF = 0.1989				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	1.000	0.1691	09	2.000	0.1705	08	5.000	0.1887	07	10.000	0.1888
06	20.000	0.1971	05	50.000	0.2143	04	100.000	0.2149	03	150.000	0.2264
02	200.000	0.2199									
Methyl tert-Butyl Ether	Average RF			RSD = 4.2			Average RF = 1.348				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
11	0.500	1.234	10	1.000	1.333	09	2.000	1.360	08	5.000	1.436
07	10.000	1.354	06	20.000	1.365	05	50.000	1.390	04	100.000	1.375
03	150.000	1.355	02	200.000	1.276						
Methylcyclohexane	Average RF			RSD = 6.0			Average RF = 0.5496				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
11	0.500	0.5838	10	1.000	0.6225	09	2.000	0.5699	08	5.000	0.5204
07	10.000	0.5193	06	20.000	0.5287	05	50.000	0.5270	04	100.000	0.5396
03	150.000	0.5463	02	200.000	0.5388						
Naphthalene	Average RF			RSD = 4.4			Average RF = 1.643				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
11	0.500	1.655	10	1.000	1.742	09	2.000	1.555	08	5.000	1.635
07	10.000	1.578	06	20.000	1.620	05	50.000	1.698	04	100.000	1.733
03	150.000	1.678	02	200.000	1.536						
Nitrobenzene	Average RF			RSD = 19.5			Average RF = 0.02782				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
07	20.000	0.02136	06	40.000	0.02189	05	100.000	0.02622	04	200.000	0.03113
03	300.000	0.03283	02	400.000	0.03350						
Propionitrile	Average RF			RSD = 3.6			Average RF = 0.05483				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	5.000	0.05244	09	10.000	0.05755	08	25.000	0.05287	07	50.000	0.05246
06	100.000	0.05405	05	250.000	0.05569	04	500.000	0.05617	03	750.000	0.05717
02	1000.000	0.05505									
Styrene	Average RF			RSD = 6.1			Average RF = 1.438				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
11	0.500	1.252	10	1.000	1.488	09	2.000	1.460	08	5.000	1.444
07	10.000	1.518	06	20.000	1.489	05	50.000	1.522	04	100.000	1.413
03	150.000	1.353									
Tetrachloroethene (PCE)	Average RF			RSD = 4.0			Average RF = 0.4676				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
11	0.500	0.4786	10	1.000	0.4653	09	2.000	0.4657	08	5.000	0.4409
07	10.000	0.4436	06	20.000	0.4617	05	50.000	0.4685	04	100.000	0.4632
03	150.000	0.4826	02	200.000	0.5055						

Initial Calibration - Detailed Report

Calibration ID: RC1400025

Instrument ID: R-MS-06
Signal ID: 1

Analyte	Curve Fit			Weighting					
Tetrahydrofuran (THF)	Average RF			RSD = 4.5			Average RF = 0.1330		
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
09 2.000 0.1429	08 5.000 0.1337	07 10.000 0.1302	06 20.000 0.1217	05 50.000 0.1360	04 100.000 0.1358	03 150.000 0.1319	02 200.000 0.1319		
Toluene	Average RF			RSD = 6.3			Average RF = 2.062		
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
11 0.500 2.161	10 1.000 2.143	09 2.000 2.181	08 5.000 2.062	07 10.000 2.102	06 20.000 2.091	05 50.000 1.972	04 100.000 1.784		
Toluene-d8	Average RF			RSD = 1.2			Average RF = 1.233		
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
08 50.000 1.221	05 50.000 1.251	10 50.000 1.234	07 50.000 1.239	09 50.000 1.243	04 50.000 1.224	03 50.000 1.210	06 50.000 1.225		
11 50.000 1.257	02 50.000 1.230								
Trichloroethene (TCE)	Average RF			RSD = 2.9			Average RF = 0.5161		
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
11 0.500 0.5299	10 1.000 0.5329	09 2.000 0.5000	08 5.000 0.4889	07 10.000 0.5277	06 20.000 0.5334	05 50.000 0.5154	04 100.000 0.5152		
03 150.000 0.5152	02 200.000 0.5028								
Trichlorofluoromethane (CFC 11)	Average RF			RSD = 5.2			Average RF = 1.041		
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
11 0.500 1.013	10 1.000 1.142	09 2.000 1.066	08 5.000 1.076	07 10.000 1.048	06 20.000 1.075	05 50.000 1.014	04 100.000 1.027		
03 150.000 1.013	02 200.000 0.9373								
Vinyl Acetate	Average RF			RSD = 7.5			Average RF = 1.196		
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
11 0.500 1.062	10 1.000 1.071	09 2.000 1.123	08 5.000 1.229	07 10.000 1.159	06 20.000 1.265	05 50.000 1.285	04 100.000 1.308		
03 150.000 1.272	02 200.000 1.188								
Vinyl Chloride	Average RF			RSD = 5.6			Average RF = 0.8664		
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
11 0.500 0.8993	10 1.000 0.8969	09 2.000 0.8456	08 5.000 0.9005	07 10.000 0.9116	06 20.000 0.9020	05 50.000 0.8567	04 100.000 0.8087		
03 150.000 0.7759									
cis-1,2-Dichloroethene	Average RF			RSD = 3.8			Average RF = 0.7691		
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
11 0.500 0.7844	10 1.000 0.8357	09 2.000 0.7936	08 5.000 0.7607	07 10.000 0.7514	06 20.000 0.7724	05 50.000 0.7568	04 100.000 0.7503		
03 150.000 0.7552	02 200.000 0.7307								
cis-1,3-Dichloropropene	Average RF			RSD = 3.6			Average RF = 0.7118		
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
11 0.500 0.6665	10 1.000 0.6945	09 2.000 0.6913	08 5.000 0.6985	07 10.000 0.7333	06 20.000 0.7329	05 50.000 0.7496	04 100.000 0.7301		
03 150.000 0.7227	02 200.000 0.6983								

Initial Calibration - Detailed Report

Calibration ID:	RC1400025	Instrument ID:	R-MS-06
		Signal ID:	1

Analyte	Curve Fit	Weighting								
m,p-Xylenes	Average RF		RSD = 5.4		Average RF = 0.9003					
# Amount RF	# Amount RF		# Amount RF		# Amount RF		# Amount RF			
11 1.000 0.8116	10 2.000 0.8929		09 4.000 0.9326		08 10.000 0.9043		07 10.000 0.9043			
07 20.000 0.9506	06 40.000 0.9423		05 100.000 0.9432		04 200.000 0.8838					
03 300.000 0.8412										
n-Butyl Acetate	Average RF		RSD = 12.0		Average RF = 0.5818					
# Amount RF	# Amount RF		# Amount RF		# Amount RF		# Amount RF			
10 1.000 0.4788	09 2.000 0.5246		08 5.000 0.5653		07 10.000 0.5022		06 20.000 0.5677			
06 20.000 0.5677	05 50.000 0.6482		04 100.000 0.6410		03 150.000 0.6566		02 200.000 0.6517			
02 200.000 0.6517										
n-Butylbenzene	Average RF		RSD = 8.2		Average RF = 2.997					
# Amount RF	# Amount RF		# Amount RF		# Amount RF		# Amount RF			
11 0.500 2.926	10 1.000 3.173		09 2.000 3.069		08 5.000 3.007		07 10.000 3.239			
07 10.000 3.239	06 20.000 3.255		05 50.000 3.017		04 100.000 2.829		03 150.000 2.460			
03 150.000 2.460										
n-Heptane	Average RF		RSD = 3.4		Average RF = 0.5047					
# Amount RF	# Amount RF		# Amount RF		# Amount RF		# Amount RF			
11 0.500 0.5024	10 1.000 0.5035		09 2.000 0.4799		08 5.000 0.4733		07 10.000 0.5107			
07 10.000 0.5107	06 20.000 0.5247		05 50.000 0.4973		04 100.000 0.5162		03 150.000 0.5222			
03 150.000 0.5222	02 200.000 0.5171									
n-Propylbenzene	Average RF		RSD = 9.7		Average RF = 5.017					
# Amount RF	# Amount RF		# Amount RF		# Amount RF		# Amount RF			
11 0.500 4.728	10 1.000 5.222		09 2.000 5.517		08 5.000 5.151		07 10.000 5.352			
07 10.000 5.352	06 20.000 5.347		05 50.000 4.790		04 100.000 4.030					
o-Xylene	Average RF		RSD = 4.0		Average RF = 0.9191					
# Amount RF	# Amount RF		# Amount RF		# Amount RF		# Amount RF			
11 0.500 0.8514	10 1.000 0.8593		09 2.000 0.9584		08 5.000 0.9238		07 10.000 0.9322			
07 10.000 0.9322	06 20.000 0.9396		05 50.000 0.9478		04 100.000 0.9250		03 150.000 0.9442			
03 150.000 0.9442	02 200.000 0.9094									
sec-Butylbenzene	Average RF		RSD = 6.1		Average RF = 4.023					
# Amount RF	# Amount RF		# Amount RF		# Amount RF		# Amount RF			
11 0.500 3.906	10 1.000 4.153		09 2.000 4.131		08 5.000 4.032		07 10.000 4.281			
07 10.000 4.281	06 20.000 4.254		05 50.000 3.886		04 100.000 3.538					
tert-Butylbenzene	Average RF		RSD = 6.5		Average RF = 2.757					
# Amount RF	# Amount RF		# Amount RF		# Amount RF		# Amount RF			
11 0.500 2.794	10 1.000 2.813		09 2.000 2.935		08 5.000 2.838		07 10.000 2.834			
07 10.000 2.834	06 20.000 2.912		05 50.000 2.724		04 100.000 2.606		03 150.000 2.358			
03 150.000 2.358										
trans-1,2-Dichloroethene	Average RF		RSD = 3.7		Average RF = 0.6794					
# Amount RF	# Amount RF		# Amount RF		# Amount RF		# Amount RF			
11 0.500 0.6977	10 1.000 0.6432		09 2.000 0.7160		08 5.000 0.6883		07 10.000 0.7045			
07 10.000 0.7045	06 20.000 0.6937		05 50.000 0.6685		04 100.000 0.6754		03 150.000 0.6659			
03 150.000 0.6659	02 200.000 0.6410									

Initial Calibration - Detailed Report

Calibration ID: RC1400025

Instrument ID: R-MS-06

Signal ID: 1

Analyte			Curve Fit			Weighting		
trans-1,3-Dichloropropene			Average RF			RSD = 7.3		
						Average RF = 0.5744		
#	Amount	RF	#	Amount	RF	#	Amount	RF
11	0.500	0.4641	10	1.000	0.5922	09	2.000	0.5904
07	10.000	0.5619	06	20.000	0.5805	05	50.000	0.6125
03	150.000	0.6032	02	200.000	0.5814			
trans-1,4-Dichloro-2-butene			Average RF			RSD = 14.3		
						Average RF = 0.1330		
#	Amount	RF	#	Amount	RF	#	Amount	RF
10	1.000	0.1204	09	2.000	0.1121	08	5.000	0.1221
06	20.000	0.1335	05	50.000	0.1584	04	100.000	0.1600

Initial Calibration - Detailed Report

Calibration ID: RC1400025

Instrument ID: R-MS-06
Signal ID: 1

Analyte

1,1,1,2-Tetrachloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.50	0.3	10	1.000	0.97	-2.6	09	2.000	1.87	-6.7
08	5.000	4.84	-3.2	07	10.000	9.61	-3.9	06	20.000	19.76	-1.2
05	50.000	50.46	0.9	04	100.000	101.53	1.5	03	150.000	159.00	6.0
02	200.000	217.66	8.8								

1,1,1-Trichloroethane (TCA)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.51	1.2	10	1.000	0.94	-6.4	09	2.000	2.01	0.5
08	5.000	5.03	0.7	07	10.000	10.42	4.2	06	20.000	20.51	2.6
05	50.000	49.54	-0.9	04	100.000	101.44	1.4	03	150.000	149.14	-0.6
02	200.000	194.45	-2.8								

1,1,2,2-Tetrachloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.53	6.7	10	1.000	1.02	2.4	09	2.000	2.11	5.4
08	5.000	4.87	-2.5	07	10.000	9.08	-9.2	06	20.000	19.41	-2.9
05	50.000	49.57	-0.9	04	100.000	101.70	1.7	03	150.000	150.61	0.4
02	200.000	197.72	-1.1								

1,1,2-Trichloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.49	-2.7	10	1.000	0.91	-9.1	09	2.000	1.97	-1.6
08	5.000	5.36	7.3	07	10.000	9.86	-1.4	06	20.000	19.80	-1.0
05	50.000	52.42	4.8	04	100.000	100.45	0.5	03	150.000	154.46	3.0
02	200.000	200.51	0.3								

1,1,2-Trichlorotrifluoroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.57	14.3	10	1.000	1.12	11.9	09	2.000	2.01	0.6
08	5.000	4.98	-0.4	07	10.000	9.99	-0.1	06	20.000	19.62	-1.9
05	50.000	47.05	-5.9	04	100.000	94.61	-5.4	03	150.000	142.33	-5.1
02	200.000	184.01	-8.0								

1,1-Dichloroethane (1,1-DCA)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.46	-7.3	10	1.000	0.95	-4.6	09	2.000	2.05	2.5
08	5.000	5.48	9.6	07	10.000	10.77	7.7	06	20.000	20.80	4.0
05	50.000	49.70	-0.6	04	100.000	98.33	-1.7	03	150.000	146.03	-2.6
02	200.000	186.05	-7.0								

1,1-Dichloroethene (1,1-DCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.55	9.1	10	1.000	1.00	-0.5	09	2.000	2.12	6.0
08	5.000	4.92	-1.7	07	10.000	10.10	1.0	06	20.000	20.05	0.3
05	50.000	47.63	-4.7	04	100.000	97.21	-2.8	03	150.000	148.70	-0.9
02	200.000	188.17	-5.9								

Initial Calibration - Detailed Report

Calibration ID: RC1400025

Instrument ID: R-MS-06
Signal ID: 1

Analyte

1,1-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.48	-3.2	10	1.000	1.02	2.2	09	2.000	2.13	6.7
08	5.000	4.86	-2.8	07	10.000	10.16	1.6	06	20.000	20.22	1.1
05	50.000	49.86	-0.3	04	100.000	98.62	-1.4	03	150.000	147.79	-1.5
02	200.000	195.13	-2.4								

1,2,3-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.53	6.3	10	1.000	1.07	7.4	09	2.000	1.98	-0.8
08	5.000	4.95	-1.1	07	10.000	9.44	-5.6	06	20.000	19.23	-3.9
05	50.000	48.54	-2.9	04	100.000	102.57	2.6	03	150.000	153.79	2.5
02	200.000	190.86	-4.6								

1,2,3-Trichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.44	-12.0	10	1.000	1.07	6.8	09	2.000	1.96	-2.2
08	5.000	5.15	2.9	07	10.000	9.63	-3.7	06	20.000	20.29	1.4
05	50.000	51.46	2.9	04	100.000	102.46	2.5	03	150.000	150.66	0.4
02	200.000	201.75	0.9								

1,2,4-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.54	7.8	10	1.000	1.07	6.5	09	2.000	1.88	-5.9
08	5.000	4.90	-2.1	07	10.000	9.68	-3.2	06	20.000	19.81	-0.9
05	50.000	49.11	-1.8	04	100.000	103.10	3.1	03	150.000	150.74	0.5
02	200.000	191.91	-4.0								

1,2,4-Trimethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.52	4.0	10	1.000	1.03	3.4	09	2.000	2.01	0.7
08	5.000	4.98	-0.4	07	10.000	10.32	3.2	06	20.000	20.77	3.8
05	50.000	48.11	-3.8	04	100.000	89.06	-10.9				

1,2-Dibromo-3-chloropropane (DBCP)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	1.000	0.83	-17.5	09	2.000	2.12	5.9	08	5.000	5.08	1.7
07	10.000	9.82	-1.8	06	20.000	19.54	-2.3	05	50.000	49.60	-0.8
04	100.000	104.74	4.7	03	150.000	159.49	6.3	02	200.000	207.53	3.8

1,2-Dibromoethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.44	-12.0	10	1.000	0.88	-12.2	09	2.000	2.01	0.4
08	5.000	5.13	2.7	07	10.000	9.71	-2.9	06	20.000	19.05	-4.8
05	50.000	52.67	5.3	04	100.000	103.43	3.4	03	150.000	163.35	8.9
02	200.000	222.17	11.1								

Initial Calibration - Detailed Report

Calibration ID: RC140025

Instrument ID: R-MS-06
Signal ID: 1

Analyte

1,2-Dichloro-1,1,2-trifluoroethane (CFC)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.58	16.8	10	1.000	0.97	-2.8	09	2.000	2.17	8.7
08	5.000	5.04	0.8	07	10.000	9.71	-2.9	06	20.000	19.35	-3.2
05	50.000	48.08	-3.8	04	100.000	97.33	-2.7	03	150.000	149.81	-0.1
02	200.000	178.85	-10.6								

1,2-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.50	0.8	10	1.000	1.12	12.4	09	2.000	2.13	6.6
08	5.000	5.03	0.7	07	10.000	9.86	-1.4	06	20.000	20.05	0.2
05	50.000	47.93	-4.1	04	100.000	95.37	-4.6	03	150.000	134.20	-10.5

1,2-Dichloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.54	7.1	10	1.000	1.09	9.3	09	2.000	1.90	-4.8
08	5.000	4.69	-6.3	07	10.000	10.19	1.9	06	20.000	19.90	-0.5
05	50.000	49.28	-1.4	04	100.000	96.75	-3.2	03	150.000	149.70	-0.2
02	200.000	196.16	-1.9								

1,2-Dichloroethane-d4

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	50.000	50.73	1.5	04	50.000	49.01	-2.0	08	50.000	50.49	1.0
10	50.000	49.64	-0.7	09	50.000	50.57	1.1	03	50.000	50.65	1.3
11	50.000	49.48	-1.0	07	50.000	49.84	-0.3	06	50.000	49.07	-1.9
05	50.000	50.52	1.0								

1,2-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.50	-0.9	10	1.000	0.91	-9.3	09	2.000	2.09	4.5
08	5.000	5.01	0.3	07	10.000	10.39	3.9	06	20.000	19.87	-0.7
05	50.000	50.69	1.4	04	100.000	100.14	0.1	03	150.000	152.20	1.5
02	200.000	198.37	-0.8								

1,3,5-Trimethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.48	-4.6	10	1.000	1.01	0.7	09	2.000	2.07	3.6
08	5.000	5.01	0.2	07	10.000	10.62	6.2	06	20.000	21.04	5.2
05	50.000	49.01	-2.0	04	100.000	90.64	-9.4				

1,3-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.48	-3.3	10	1.000	1.10	9.5	09	2.000	2.10	4.8
08	5.000	5.14	2.7	07	10.000	10.38	3.8	06	20.000	20.12	0.6
05	50.000	48.43	-3.1	04	100.000	95.79	-4.2	03	150.000	133.64	-10.9

Initial Calibration - Detailed Report

Calibration ID: RC1400025

Instrument ID: R-MS-06
Signal ID: 1

Analyte

1,3-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.48	-3.1	10	1.000	0.91	-9.3	09	2.000	2.03	1.7
08	5.000	4.93	-1.3	07	10.000	9.77	-2.3	06	20.000	19.62	-1.9
05	50.000	52.38	4.8	04	100.000	100.05	0.0	03	150.000	158.66	5.8
02	200.000	211.13	5.6								

1,4-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.58	16.9	10	1.000	1.09	8.5	09	2.000	2.02	0.8
08	5.000	4.85	-2.9	07	10.000	9.80	-2.0	06	20.000	20.39	1.9
05	50.000	47.75	-4.5	04	100.000	94.11	-5.9	03	150.000	130.85	-12.8

1,4-Dioxane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
09	40.000	41.47	3.7	08	100.000	116.85	16.9	07	200.000	213.73	6.9
06	400.000	350.23	-12.4	05	1000.000	997.91	-0.2	04	2000.000	1,945.51	-2.7
03	3000.000	2,925.33	-2.5	02	4000.000	3,618.57	-9.5				

2,2-Dichloro-1,1,1-trifluoroethane (CFC)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.52	4.9	10	1.000	1.10	10.2	09	2.000	2.17	8.4
08	5.000	5.09	1.8	07	10.000	9.91	-0.9	06	20.000	19.61	-2.0
05	50.000	47.82	-4.4	04	100.000	97.08	-2.9	03	150.000	142.73	-4.8
02	200.000	179.41	-10.3								

2,2-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.46	-8.5	10	1.000	0.98	-1.7	09	2.000	2.15	7.7
08	5.000	4.93	-1.4	07	10.000	10.14	1.4	06	20.000	20.41	2.0
05	50.000	49.43	-1.1	04	100.000	101.03	1.0	03	150.000	153.22	2.1
02	200.000	196.73	-1.6								

2-Butanone (MEK)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
08	5.000	4.43	-11.4	07	10.000	8.69	-13.1	06	20.000	19.44	-2.8
05	50.000	52.68	5.4	04	100.000	108.34	8.3	03	150.000	161.36	7.6
02	200.000	212.23	6.1								

2-Chloro-1,3-butadiene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.50	0.6	10	1.000	0.95	-4.9	09	2.000	2.00	0.2
08	5.000	4.84	-3.2	07	10.000	10.41	4.1	06	20.000	19.51	-2.4
05	50.000	50.25	0.5	04	100.000	106.79	6.8	03	150.000	153.63	2.4
02	200.000	191.91	-4.0								

Initial Calibration - Detailed Report

Calibration ID: RC1400025

Instrument ID: R-MS-06
Signal ID: 1

Analyte

2-Chloroethyl Vinyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	1.000	0.98	-2.4	09	2.000	1.70	-14.9	08	5.000	4.50	-10.1
07	10.000	9.16	-8.4	06	20.000	19.92	-0.4	05	50.000	54.08	8.2
04	100.000	110.47	10.5	03	150.000	163.52	9.0	02	200.000	217.01	8.5

2-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.51	2.0	10	1.000	0.98	-1.5	09	2.000	2.06	3.2
08	5.000	5.21	4.2	07	10.000	10.38	3.8	06	20.000	20.60	3.0
05	50.000	47.68	-4.6	04	100.000	89.94	-10.1				

2-Hexanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
08	5.000	4.34	-13.2	07	10.000	8.43	-15.7	06	20.000	18.67	-6.6
05	50.000	50.79	1.6	04	100.000	107.70	7.7	03	150.000	168.70	12.5
02	200.000	227.56	13.8								

2-Methyl-1-propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
09	40.000	38.35	-4.1	08	100.000	99.96	0.0	07	200.000	171.80	-14.1
06	400.000	379.87	-5.0	05	1000.000	1,050.56	5.1	04	2000.000	2,089.62	4.5
03	3000.000	3,234.58	7.8	02	4000.000	4,237.57	5.9				

2-Methyl-2-propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	20.000	18.76	-6.2	09	40.000	35.69	-10.8	08	100.000	105.63	5.6
07	200.000	196.28	-1.9	06	400.000	384.95	-3.8	05	1000.000	1,042.91	4.3
04	2000.000	2,069.55	3.5	03	3000.000	3,214.37	7.1	02	4000.000	4,082.45	2.1

2-Nitropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
09	4.000	3.13	-21.7	08	10.000	9.81	-1.9	07	20.000	16.71	-16.5
06	40.000	40.21	0.5	05	100.000	108.47	8.5	04	200.000	217.78	8.9
03	300.000	336.80	12.3	02	400.000	439.61	9.9				

2-Propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	20.000	19.79	-1.1	09	40.000	37.55	-6.1	08	100.000	112.79	12.8
07	200.000	183.60	-8.2	06	400.000	363.37	-9.2	05	1000.000	1,038.02	3.8
04	2000.000	2,089.67	4.5	03	3000.000	3,153.41	5.1	02	4000.000	3,934.82	-1.6

3-Chloro-1-propene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.46	-8.8	10	1.000	0.98	-1.9	09	2.000	2.08	4.1
08	5.000	5.04	0.7	07	10.000	10.96	9.6	06	20.000	20.57	2.8
05	50.000	48.62	-2.8	04	100.000	100.79	0.8	03	150.000	147.94	-1.4
02	200.000	193.82	-3.1								

Initial Calibration - Detailed Report

Calibration ID: RC1400025

Instrument ID: R-MS-06
Signal ID: 1

Analyte

4-Bromofluorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	50.000	49.52	-1.0	05	50.000	51.23	2.5	09	50.000	47.03	-5.9
10	50.000	46.00	-8.0	02	50.000	58.73	17.5	03	50.000	56.09	12.2
07	50.000	48.15	-3.7	04	50.000	51.74	3.5	11	50.000	45.59	-8.8
08	50.000	45.93	-8.1								

4-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.53	5.1	10	1.000	1.01	0.7	09	2.000	2.13	6.3
08	5.000	5.10	1.9	07	10.000	10.13	1.3	06	20.000	20.39	2.0
05	50.000	47.41	-5.2	04	100.000	87.90	-12.1				

4-Isopropyltoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.51	1.3	10	1.000	1.05	4.7	09	2.000	2.13	6.3
08	5.000	5.14	2.9	07	10.000	10.41	4.1	06	20.000	21.69	8.5
05	50.000	49.49	-1.0	04	100.000	93.46	-6.5	03	150.000	119.78	-20.1

4-Methyl-2-pentanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
08	5.000	5.01	0.2	07	10.000	8.60	-14.0	06	20.000	19.08	-4.6
05	50.000	52.14	4.3	04	100.000	106.04	6.0	03	150.000	158.53	5.7
02	200.000	204.69	2.3								

Acetone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
08	5.000	5.55	11.0	07	10.000	9.73	-2.7	06	20.000	19.48	-2.6
05	50.000	48.25	-3.5	04	100.000	100.12	0.1	03	150.000	148.95	-0.7
02	200.000	196.59	-1.7								

Acetonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	5.000	5.36	7.1	09	10.000	9.46	-5.4	08	25.000	26.45	5.8
07	50.000	50.28	0.6	06	100.000	97.02	-3.0	05	250.000	246.51	-1.4
04	500.000	492.75	-1.4	03	750.000	772.20	3.0	02	1000.000	948.49	-5.2

Acrolein

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	2.500	2.38	-4.7	10	5.000	4.95	-1.0	09	10.000	10.43	4.3
08	25.000	24.84	-0.6	07	50.000	45.88	-8.2	06	100.000	97.62	-2.4
05	250.000	250.36	0.1	04	500.000	525.14	5.0	03	750.000	810.17	8.0
02	1000.000	994.95	-0.5								

Initial Calibration - Detailed Report

Calibration ID: RC1400025

Instrument ID: R-MS-06
Signal ID: 1

Analyte

Acrylonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	2.500	2.55	2.1	10	5.000	4.52	-9.5	09	10.000	9.84	-1.6
08	25.000	27.63	10.5	07	50.000	48.57	-2.9	06	100.000	100.48	0.5
05	250.000	253.30	1.3	04	500.000	509.78	2.0	03	750.000	757.83	1.0
02	1000.000	966.22	-3.4								

Benzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.50	0.7	10	1.000	1.10	10.4	09	2.000	2.13	6.7
08	5.000	5.05	0.9	07	10.000	10.45	4.5	06	20.000	20.69	3.4
05	50.000	49.53	-0.9	04	100.000	95.09	-4.9	03	150.000	139.58	-6.9
02	200.000	172.29	-13.9								

Bromobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.51	2.1	10	1.000	1.13	12.6	09	2.000	2.17	8.7
08	5.000	4.90	-2.1	07	10.000	9.82	-1.8	06	20.000	20.18	0.9
05	50.000	48.53	-2.9	04	100.000	97.44	-2.6	03	150.000	139.90	-6.7
02	200.000	183.48	-8.3								

Bromochloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.54	7.0	10	1.000	0.90	-9.5	09	2.000	1.98	-0.9
08	5.000	5.44	8.8	07	10.000	10.31	3.1	06	20.000	19.91	-0.4
05	50.000	50.01	0.0	04	100.000	98.79	-1.2	03	150.000	148.60	-0.9
02	200.000	188.19	-5.9								

Bromodichloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.46	-8.2	10	1.000	0.98	-1.9	09	2.000	1.92	-4.1
08	5.000	5.08	1.6	07	10.000	9.92	-0.8	06	20.000	20.46	2.3
05	50.000	51.44	2.9	04	100.000	103.40	3.4	03	150.000	155.40	3.6
02	200.000	202.13	1.1								

Bromoform

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.49	-1.4	10	1.000	0.98	-1.6	09	2.000	1.81	-9.4
08	5.000	4.57	-8.7	07	10.000	8.93	-10.7	06	20.000	19.14	-4.3
05	50.000	53.70	7.4	04	100.000	109.53	9.5	03	150.000	178.84	19.2

Bromomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.60	20.8	10	1.000	1.08	7.6	09	2.000	2.22	11.0
08	5.000	5.17	3.4	07	10.000	10.22	2.2	06	20.000	18.31	-8.5
05	50.000	44.69	-10.6	04	100.000	91.41	-8.6	03	150.000	139.21	-7.2
02	200.000	179.83	-10.1								

Initial Calibration - Detailed Report

Calibration ID: RC1400025

Instrument ID: R-MS-06
Signal ID: 1

Analyte

Carbon Disulfide

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.54	8.8	10	1.000	1.02	1.5	09	2.000	2.09	4.5
08	5.000	4.97	-0.7	07	10.000	10.30	3.0	06	20.000	20.15	0.8
05	50.000	49.12	-1.8	04	100.000	96.43	-3.6	03	150.000	131.04	-12.6

Carbon Tetrachloride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.48	-3.5	10	1.000	1.00	0.5	09	2.000	1.95	-2.3
08	5.000	5.01	0.3	07	10.000	9.93	-0.7	06	20.000	20.17	0.9
05	50.000	50.24	0.5	04	100.000	100.27	0.3	03	150.000	153.71	2.5
02	200.000	203.33	1.7								

Chlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.50	-0.6	10	1.000	1.04	3.6	09	2.000	2.12	6.2
08	5.000	5.10	2.0	07	10.000	10.55	5.5	06	20.000	21.02	5.1
05	50.000	51.43	2.9	04	100.000	96.14	-3.9	03	150.000	140.07	-6.6
02	200.000	171.70	-14.2								

Chloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.46	-8.1	10	1.000	1.17	16.9	09	2.000	2.10	5.1
08	5.000	5.21	4.2	07	10.000	10.02	0.2	06	20.000	20.17	0.9
05	50.000	48.01	-4.0	04	100.000	96.98	-3.0	03	150.000	142.53	-5.0
02	200.000	185.39	-7.3								

Chloroform

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.48	-3.2	10	1.000	0.99	-0.9	09	2.000	2.04	1.9
08	5.000	5.17	3.5	07	10.000	10.49	4.9	06	20.000	20.60	3.0
05	50.000	49.45	-1.1	04	100.000	99.60	-0.4	03	150.000	147.67	-1.6
02	200.000	187.79	-6.1								

Chloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.50	-0.3	10	1.000	1.05	4.9	09	2.000	1.96	-2.0
08	5.000	5.36	7.1	07	10.000	10.41	4.1	06	20.000	20.54	2.7
05	50.000	49.10	-1.8	04	100.000	95.85	-4.2	03	150.000	134.11	-10.6

Cyclohexane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.51	2.2	10	1.000	1.04	3.7	09	2.000	2.19	9.3
08	5.000	4.90	-2.0	07	10.000	9.54	-4.6	06	20.000	19.47	-2.6
05	50.000	48.23	-3.5	04	100.000	99.80	-0.2	03	150.000	151.20	0.8
02	200.000	193.91	-3.0								

Initial Calibration - Detailed Report

Calibration ID: RC1400025

Instrument ID: R-MS-06
Signal ID: 1

Analyte

Cyclohexanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	10.000	9.73	-2.7	10	20.000	19.52	-2.4	09	40.000	37.97	-5.1
08	100.000	101.63	1.6	07	200.000	178.11	-10.9	06	400.000	383.70	-4.1
05	1000.000	1,080.36	8.0	04	2000.000	2,091.05	4.6	03	3000.000	3,255.76	8.5
02	4000.000	4,098.98	2.5								

Dibromochloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.44	-12.5	10	1.000	1.02	2.4	09	2.000	1.88	-6.1
08	5.000	4.49	-10.3	07	10.000	9.63	-3.7	06	20.000	19.88	-0.6
05	50.000	52.72	5.4	04	100.000	104.91	4.9	03	150.000	163.75	9.2
02	200.000	222.64	11.3								

Dibromofluoromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
07	50.000	49.57	-0.9	03	50.000	50.55	1.1	09	50.000	50.01	0.0
04	50.000	49.67	-0.7	06	50.000	50.03	0.1	11	50.000	49.46	-1.1
02	50.000	50.21	0.4	08	50.000	49.71	-0.6	05	50.000	50.71	1.4
10	50.000	50.09	0.2								

Dibromomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.48	-3.8	10	1.000	0.84	-16.1	09	2.000	2.13	6.5
08	5.000	5.12	2.3	07	10.000	9.95	-0.5	06	20.000	20.77	3.9
05	50.000	51.48	3.0	04	100.000	100.99	1.0	03	150.000	154.20	2.8
02	200.000	201.91	1.0								

Dichlorodifluoromethane (CFC 12)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.51	1.5	10	1.000	0.97	-2.6	09	2.000	2.03	1.4
08	5.000	5.05	0.9	07	10.000	10.92	9.2	06	20.000	21.63	8.1
05	50.000	50.32	0.6	04	100.000	99.44	-0.6	03	150.000	140.84	-6.1
02	200.000	175.09	-12.5								

Dichlorofluoromethane (CFC 21)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.55	9.9	10	1.000	1.02	1.6	09	2.000	2.33	16.5
08	5.000	5.43	8.6	07	10.000	10.60	6.0	06	20.000	19.77	-1.2
05	50.000	48.03	-3.9	04	100.000	94.97	-5.0	03	150.000	133.64	-10.9
02	200.000	156.80	-21.6								

Dichloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.59	19.0	10	1.000	1.15	15.0	09	2.000	2.03	1.7
08	5.000	5.38	7.7	07	10.000	9.77	-2.3	06	20.000	19.16	-4.2
05	50.000	45.92	-8.2	04	100.000	91.97	-8.0	03	150.000	137.93	-8.0
02	200.000	174.84	-12.6								

Initial Calibration - Detailed Report

Calibration ID: RC1400025

Instrument ID: R-MS-06
Signal ID: 1

Analyte

Diethyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.50	0.9	10	1.000	1.09	9.3	09	2.000	2.18	8.9
08	5.000	4.98	-0.5	07	10.000	9.27	-7.3	06	20.000	19.33	-3.4
05	50.000	49.62	-0.8	04	100.000	97.71	-2.3	03	150.000	150.07	0.0
02	200.000	190.27	-4.9								

Ethyl Methacrylate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.43	-13.3	10	1.000	0.77	-23.2	09	2.000	1.91	-4.3
08	5.000	4.71	-5.9	07	10.000	9.06	-9.4	06	20.000	20.30	1.5
05	50.000	55.27	10.5	04	100.000	110.52	10.5	03	150.000	171.37	14.2
02	200.000	238.69	19.3								

Ethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.49	-2.5	10	1.000	0.93	-7.1	09	2.000	1.98	-1.0
08	5.000	4.82	-3.6	07	10.000	10.25	2.5	06	20.000	20.07	0.3
05	50.000	51.91	3.8	04	100.000	100.24	0.2	03	150.000	156.02	4.0
02	200.000	206.66	3.3								

Hexachlorobutadiene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.59	18.8	10	1.000	0.99	-0.9	09	2.000	1.87	-6.7
08	5.000	4.94	-1.3	07	10.000	9.97	-0.3	06	20.000	20.24	1.2
05	50.000	45.63	-8.7	04	100.000	100.21	0.2	03	150.000	148.97	-0.7
02	200.000	196.63	-1.7								

Iodomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
09	2.000	2.09	4.7 ✓	08	5.000	4.58	-8.4	07	10.000	9.55	-4.5
06	20.000	20.16	0.8	05	50.000	51.94	3.9	04	100.000	106.78	6.8
03	150.000	154.22	2.8	02	200.000	187.67	-6.2				

Isopropylbenzene (Cumene)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.52	4.7	10	1.000	0.99	-1.1	09	2.000	2.13	6.7
08	5.000	4.99	-0.2	07	10.000	10.36	3.6	06	20.000	20.49	2.5
05	50.000	49.83	-0.3	04	100.000	84.14	-15.9				

Methacrylonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	1.000	1.03	3.2	09	2.000	1.79	-10.6	08	5.000	5.18	3.7
07	10.000	9.22	-7.8	06	20.000	19.59	-2.0	05	50.000	51.99	4.0
04	100.000	102.43	2.4	03	150.000	157.15	4.8	02	200.000	204.98	2.5

Initial Calibration - Detailed Report

Calibration ID: RC1400025

Instrument ID: R-MS-06
Signal ID: 1

Analyte

Methyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	1.000	0.80	-20.4	09	2.000	2.02	0.9	08	5.000	4.96	-0.7
07	10.000	9.04	-9.6	06	20.000	20.72	3.6	05	50.000	52.57	5.1
04	100.000	107.88	7.9	03	150.000	163.91	9.3	02	200.000	207.95	4.0

Methyl Methacrylate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	1.000	0.85	-15.0	09	2.000	1.72	-14.2	08	5.000	4.74	-5.1
07	10.000	9.49	-5.1	06	20.000	19.82	-0.9	05	50.000	53.88	7.8
04	100.000	108.08	8.1	03	150.000	170.80	13.9	02	200.000	221.14	10.6

Methyl tert-Butyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.46	-8.4	10	1.000	0.99	-1.1	09	2.000	2.02	0.9
08	5.000	5.33	6.6	07	10.000	10.04	0.4	06	20.000	20.25	1.3
05	50.000	51.57	3.1	04	100.000	102.01	2.0	03	150.000	150.74	0.5
02	200.000	189.39	-5.3								

Methylcyclohexane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.53	6.2	10	1.000	1.13	13.3	09	2.000	2.07	3.7
08	5.000	4.73	-5.3	07	10.000	9.45	-5.5	06	20.000	19.24	-3.8
05	50.000	47.94	-4.1	04	100.000	98.17	-1.8	03	150.000	149.08	-0.6
02	200.000	196.08	-2.0								

Naphthalene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.50	0.7	10	1.000	1.06	6.0	09	2.000	1.89	-5.4
08	5.000	4.97	-0.5	07	10.000	9.61	-3.9	06	20.000	19.72	-1.4
05	50.000	51.66	3.3	04	100.000	105.50	5.5	03	150.000	153.20	2.1
02	200.000	186.95	-6.5								

Nitrobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
07	20.000	15.35	-23.2	06	40.000	31.47	-21.3	05	100.000	94.23	-5.8
04	200.000	223.75	11.9	03	300.000	354.04	18.0	02	400.000	481.71	20.4

Propionitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	5.000	4.78	-4.4	09	10.000	10.50	5.0	08	25.000	24.11	-3.6
07	50.000	47.85	-4.3	06	100.000	98.58	-1.4	05	250.000	253.94	1.6
04	500.000	512.23	2.4	03	750.000	782.00	4.3	02	1000.000	1,004.04	0.4

Styrene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.44	-12.9	10	1.000	1.03	3.5	09	2.000	2.03	1.6
08	5.000	5.02	0.5	07	10.000	10.56	5.6	06	20.000	20.72	3.6
05	50.000	52.93	5.9	04	100.000	98.27	-1.7	03	150.000	141.11	-5.9

Initial Calibration - Detailed Report

Calibration ID:	RC1400025	Instrument ID:	R-MS-06
		Signal ID:	1

Analyte

Tetrachloroethene (PCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.51	2.4	10	1.000	1.00	-0.5	09	2.000	1.99	-0.4
08	5.000	4.71	-5.7	07	10.000	9.49	-5.1	06	20.000	19.75	-1.2
05	50.000	50.10	0.2	04	100.000	99.07	-0.9	03	150.000	154.83	3.2
02	200.000	216.23	8.1								

Tetrahydrofuran (THF)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
09	2.000	2.15	7.4	08	5.000	5.03	0.5	07	10.000	9.79	-2.1
06	20.000	18.30	-8.5	05	50.000	51.13	2.3	04	100.000	102.07	2.1
03	150.000	148.74	-0.8	02	200.000	198.34	-0.8				

Toluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.52	4.8	10	1.000	1.04	3.9	09	2.000	2.12	5.8
08	5.000	5.00	0.0	07	10.000	10.19	1.9	06	20.000	20.28	1.4
05	50.000	47.81	-4.4	04	100.000	86.51	-13.5				

Toluene-d8

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
08	50.000	49.49	-1.0	05	50.000	50.73	1.5	10	50.000	50.04	0.1
07	50.000	50.23	0.5	09	50.000	50.38	0.8	04	50.000	49.60	-0.8
03	50.000	49.04	-1.9	06	50.000	49.66	-0.7	11	50.000	50.96	1.9
02	50.000	49.88	-0.2								

Trichloroethene (TCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.51	2.7	10	1.000	1.03	3.2	09	2.000	1.94	-3.1
08	5.000	4.74	-5.3	07	10.000	10.22	2.2	06	20.000	20.67	3.3
05	50.000	49.93	-0.1	04	100.000	99.82	-0.2	03	150.000	149.73	-0.2
02	200.000	194.84	-2.6								

Trichlorofluoromethane (CFC 11)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.49	-2.7	10	1.000	1.10	9.7	09	2.000	2.05	2.4
08	5.000	5.17	3.3	07	10.000	10.06	0.6	06	20.000	20.66	3.3
05	50.000	48.68	-2.6	04	100.000	98.61	-1.4	03	150.000	145.96	-2.7
02	200.000	180.06	-10.0								

Vinyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.44	-11.2	10	1.000	0.90	-10.5	09	2.000	1.88	-6.1
08	5.000	5.14	2.8	07	10.000	9.69	-3.1	06	20.000	21.15	5.8
05	50.000	53.70	7.4	04	100.000	109.36	9.4	03	150.000	159.49	6.3
02	200.000	198.55	-0.7								

Initial Calibration - Detailed Report

Calibration ID:	RC1400025	Instrument ID:	R-MS-06
		Signal ID:	1

Analyte

Vinyl Chloride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.52	3.8	10	1.000	1.04	3.5	09	2.000	1.95	-2.4
08	5.000	5.20	3.9	07	10.000	10.52	5.2	06	20.000	20.82	4.1
05	50.000	49.44	-1.1	04	100.000	93.34	-6.7	03	150.000	134.33	-10.4

cis-1,2-Dichloroethene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.51	2.0	10	1.000	1.09	8.7	09	2.000	2.06	3.2
08	5.000	4.95	-1.1	07	10.000	9.77	-2.3	06	20.000	20.09	0.4
05	50.000	49.20	-1.6	04	100.000	97.56	-2.4	03	150.000	147.28	-1.8
02	200.000	190.02	-5.0								

cis-1,3-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.47	-6.4	10	1.000	0.98	-2.4	09	2.000	1.94	-2.9
08	5.000	4.91	-1.9	07	10.000	10.30	3.0	06	20.000	20.59	3.0
05	50.000	52.65	5.3	04	100.000	102.58	2.6	03	150.000	152.31	1.5
02	200.000	196.21	-1.9								

m,p-Xylenes

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	1.000	0.90	-9.9	10	2.000	1.98	-0.8	09	4.000	4.14	3.6
08	10.000	10.04	0.4	07	20.000	21.12	5.6	06	40.000	41.87	4.7
05	100.000	104.77	4.8	04	200.000	196.35	-1.8	03	300.000	280.31	-6.6

n-Butyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	1.000	0.82	-17.7	09	2.000	1.80	-9.8	08	5.000	4.86	-2.8
07	10.000	8.63	-13.7	06	20.000	19.52	-2.4	05	50.000	55.71	11.4
04	100.000	110.17	10.2	03	150.000	169.28	12.9	02	200.000	224.03	12.0

n-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.49	-2.4	10	1.000	1.06	5.9	09	2.000	2.05	2.4
08	5.000	5.02	0.3	07	10.000	10.81	8.1	06	20.000	21.72	8.6
05	50.000	50.33	0.7	04	100.000	94.37	-5.6	03	150.000	123.13	-17.9

n-Heptane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.50	-0.5	10	1.000	1.00	-0.2	09	2.000	1.90	-4.9
08	5.000	4.69	-6.2	07	10.000	10.12	1.2	06	20.000	20.79	4.0
05	50.000	49.26	-1.5	04	100.000	102.26	2.3	03	150.000	155.19	3.5
02	200.000	204.91	2.5								

Initial Calibration - Detailed Report

Calibration ID:	RC1400025	Instrument ID:	R-MS-06
		Signal ID:	1

Analyte

n-Propylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.47	-5.8	10	1.000	1.04	4.1	09	2.000	2.20	10.0
08	5.000	5.13	2.7	07	10.000	10.67	6.7	06	20.000	21.32	6.6
05	50.000	47.73	-4.5	04	100.000	80.32	-19.7				

o-Xylene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.46	-7.4	10	1.000	0.93	-6.5	09	2.000	2.09	4.3
08	5.000	5.03	0.5	07	10.000	10.14	1.4	06	20.000	20.45	2.2
05	50.000	51.56	3.1	04	100.000	100.64	0.6	03	150.000	154.10	2.7
02	200.000	197.89	-1.1								

sec-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.49	-2.9	10	1.000	1.03	3.2	09	2.000	2.05	2.7
08	5.000	5.01	0.2	07	10.000	10.64	6.4	06	20.000	21.15	5.7
05	50.000	48.30	-3.4	04	100.000	87.96	-12.0				

tert-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.51	1.3	10	1.000	1.02	2.0	09	2.000	2.13	6.5
08	5.000	5.15	2.9	07	10.000	10.28	2.8	06	20.000	21.13	5.6
05	50.000	49.41	-1.2	04	100.000	94.51	-5.5	03	150.000	128.26	-14.5

trans-1,2-Dichloroethene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.51	2.7	10	1.000	0.95	-5.3	09	2.000	2.11	5.4
08	5.000	5.07	1.3	07	10.000	10.37	3.7	06	20.000	20.42	2.1
05	50.000	49.19	-1.6	04	100.000	99.40	-0.6	03	150.000	147.01	-2.0
02	200.000	188.70	-5.7								

trans-1,3-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	0.500	0.40	-19.2	10	1.000	1.03	3.1	09	2.000	2.06	2.8
08	5.000	4.88	-2.4	07	10.000	9.78	-2.2	06	20.000	20.21	1.1
05	50.000	53.32	6.6	04	100.000	104.02	4.0	03	150.000	157.52	5.0
02	200.000	202.42	1.2								

trans-1,4-Dichloro-2-butene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	1.000	0.91	-9.4	09	2.000	1.69	-15.7	08	5.000	4.59	-8.2
07	10.000	9.35	-6.5	06	20.000	20.07	0.4	05	50.000	59.57	19.1
04	100.000	120.29	20.3								

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3688.D
 Acq On : 19 Mar 2014 12:33 pm
 Sample : STD #1 - 0.5 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:03 2014

Vial: 10
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 13:47:27 2014
 Response via : Initial Calibration
 DataAcq Meth : W031914

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.40	168	580457	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.71	114	856844	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.09	117	800301	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.18	152	401845	50.00	ug/L	0.00

System Monitoring Compounds

40) surr4, Dibrflmethane	3.68	113	286450	49.46	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	98.92%
42) surr1, 1,2-dichloroethane-d	4.28	65	274847	49.48	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	98.96%
62) SURR3, Toluene-d8	7.77	98	1077082	50.96	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	101.92%
82) SURR2, BFB	10.14	95	380212	45.58	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	91.16%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.03	85	4665	0.51	ug/L	94
3) Chloromethane	1.10	50	5613	0.51	ug/L	95
4) Vinyl Chloride	1.17	62	5220	0.53	ug/L	93
5) Bromomethane	1.34	94	4113	0.60	ug/L	99
6) Chloroethane	1.40	64	2543	0.46	ug/L	83
7) Freon 21	1.44	67	8210	0.55	ug/L	97
8) Freon 123	1.61	83	6080	0.52	ug/L	93
9) Freon 123a	1.62	67	5710	0.52	ug/L	91
10) Acrolein	1.68	56	2127m	2.39	ug/L	91
11) Trichlorofluoromethane	1.68	101	5882	0.49	ug/L	92
12) Acetonitrile	1.70	41	1645	2.24	ug/L	88
13) 2-Propanol	1.73	45	2357	10.30	ug/L #	54
15) Diethyl Ether	1.82	59	2629	0.50	ug/L	88
16) 1,1-Dicethene	1.97	96	3524	0.55	ug/L	87
17) Iodomethane	1.99	142	2527	0.79	ug/L	90
18) TBA	2.02	59	2982	8.48	ug/L	89
19) Acrylonitrile	2.04	53	4464m	2.56	ug/L	
20) Methylene Chloride	2.07	84	5187	0.59	ug/L #	70
21) Freon 113	2.11	101	4136	0.57	ug/L	88
22) Methyl Acetate	2.15	43	1678	0.44	ug/L	91
23) Allyl Chloride	2.13	76	1856m	0.50	ug/L	
24) Carbon Disulfide	2.18	76	12265	0.54	ug/L	91
25) trans-1,2-Dichloroethene	2.55	96	4050	0.51	ug/L #	79
26) Methyl-t-Butyl Ether	2.66	73	7163	0.46	ug/L	93
27) 1,1-Dicethane	2.75	63	6733	0.46	ug/L	90
29) Vinyl Acetate	2.97	43	6165m	0.49	ug/L	
30) 2-Chloro-1,3-Butadiene	3.10	53	6382	0.50	ug/L	81
33) cis-1,2-Dichloroethene	3.31	96	4553	0.51	ug/L	92
34) Bromochloromethane	3.47	128	2117	0.54	ug/L #	71
35) Chloroform	3.54	83	7006	0.48	ug/L	90
36) 2,2-Dichloropropane	3.61	77	5358	0.46	ug/L	81
38) 1,1,1-Trichloroethane	4.51	97	6166	0.50	ug/L #	80
43) 1,2-Dichloroethane	4.38	64	1637m	0.54	ug/L	
44) 1,1-Dichloropropene	4.87	75	4964	0.48	ug/L #	57
45) Cyclohexane	4.91	56	6628	0.51	ug/L #	73

DL 3/20/14

(#) = qualifier out of range (m) = manual integration
 L3688.D W031914.M Thu Mar 20 14:12:28 2014

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3688.D
 Acq On : 19 Mar 2014 12:33 pm
 Sample : STD #1 - 0.5 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:03 2014

Vial: 10
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 13:47:27 2014
 Response via : Initial Calibration
 DataAcq Meth : W031914

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
46) Carbontetrachloride	5.09	119	4975m	0.51	ug/L	84
47) Benzene	5.20	78	16203	0.50	ug/L	94
48) Dibromomethane	6.01	93	2059	0.48	ug/L	82
49) 1,2-Dicloropropane	6.09	63	4371m	0.50	ug/L	93
50) n-Heptane	6.18	43	4305	0.50	ug/L	93
51) Trichloroethene	6.16	130	4540	0.51	ug/L	93
52) Bromodichloromethane	6.22	83	4968	0.46	ug/L	95
56) Methylcyclohexane	6.74	55	5002	0.53	ug/L	97
58) cis-1,3-Dichloropropene	7.05	75	5711	0.47	ug/L	83
60) trans-1,3-Dichloropropene	7.55	75	3977	0.40	ug/L	94
61) 1,1,2-Trichloroethane	7.66	97	2918	0.49	ug/L	96
63) Toluene	7.84	91	18520	0.52	ug/L	94
65) 1,3-Dichloropropane	7.91	76	4921	0.48	ug/L	95
66) Ethyl Methacrylate	8.10	69	3289m	0.43	ug/L	93
67) Dibromochloromethane	8.09	129	3557	0.44	ug/L	90
69) 1,2-Dibromoethane	8.31	107	2724	0.44	ug/L	83
71) Tetrachloroethene	8.51	164	3830	0.51	ug/L	81
72) 1,1,1,2-Tetrachloroethane	9.05	131	4266	0.50	ug/L	39
73) Chlorobenzene	9.12	112	11036	0.50	ug/L #	83
74) Ethylbenzene	9.33	106	5983	0.49	ug/L #	87
75) Bromoform	9.50	173	2491	0.49	ug/L #	98
76) (m+p)Xylene	9.51	106	12990	0.90	ug/L #	96
77) o-Xylene	9.83	106	6814	0.46	ug/L #	95
78) Cyclohexanone	9.75	55	6121m	9.78	ug/L	79
79) Styrene	9.77	104	10023	0.44	ug/L	93
81) Isopropylbenzene	10.14	105	19182	0.52	ug/L	96
84) 1,1,1,2,2-Tetrachloroethane	9.82	83	3794	0.53	ug/L	96
85) 1,2,3-Trichloropropane	9.93	75	2056	0.44	ug/L	97
86) Bromobenzene	10.27	156	4971	0.51	ug/L	92
87) n-Propylbenzene	10.50	91	18999	0.47	ug/L	96
88) 2-Chlorotoluene	10.53	91	13036	0.51	ug/L	97
89) 4-Chlorotoluene	10.61	91	13928	0.53	ug/L	96
90) 1,3,5-Trimethylbenzene	10.76	105	13017	0.48	ug/L	97
91) tert-Butylbenzene	10.95	119	11227	0.51	ug/L	91
92) 1,2,4-Trimethylbenzene	11.06	105	14713	0.52	ug/L	92
93) sec-Butylbenzene	11.12	105	15698	0.49	ug/L	92
94) 1,3-Dclbenz	11.15	146	8403	0.48	ug/L	76
95) 1,4-Dclbenz	11.20	146	10230	0.58	ug/L	97
96) p-Isopropyltoluene	11.29	119	13141	0.51	ug/L	99
97) 1,2-Dclbenz	11.47	146	7907	0.50	ug/L	92
98) n-Butylbenzene	11.62	91	11756	0.49	ug/L	75
99) 1,2-Dibromo-3-chloropropan	11.84	75	497	0.53	ug/L #	88
101) 1,2,4-Tcbenzene	12.91	180	4638	0.54	ug/L	96
102) Naphthalen	13.09	128	6651	0.50	ug/L	85
103) Hexachlorobt	13.16	225	2135	0.59	ug/L	96
104) 1,2,3-Tclbenzene	13.24	180	3456	0.53	ug/L	

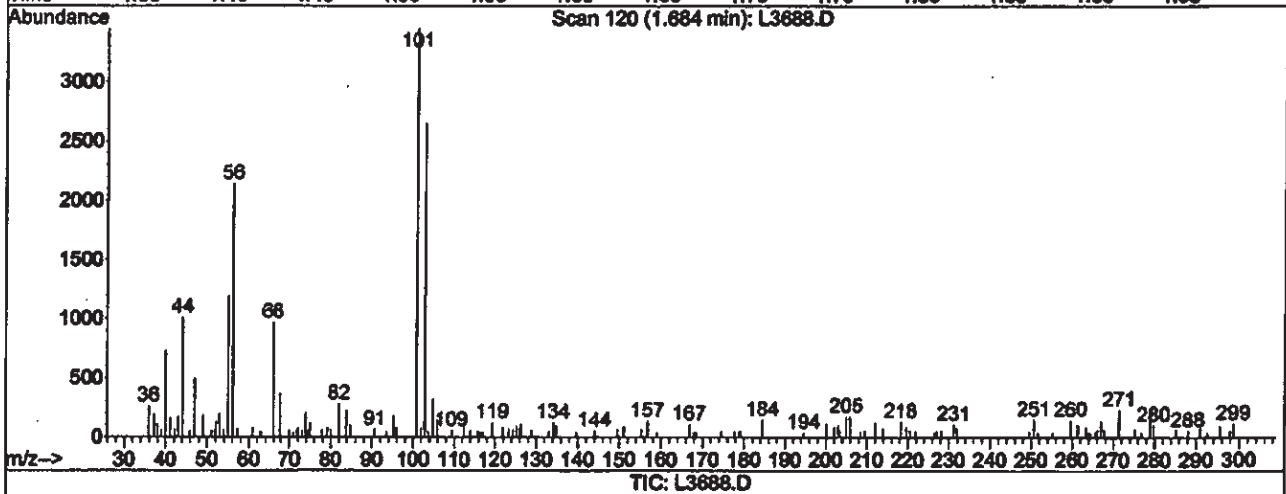
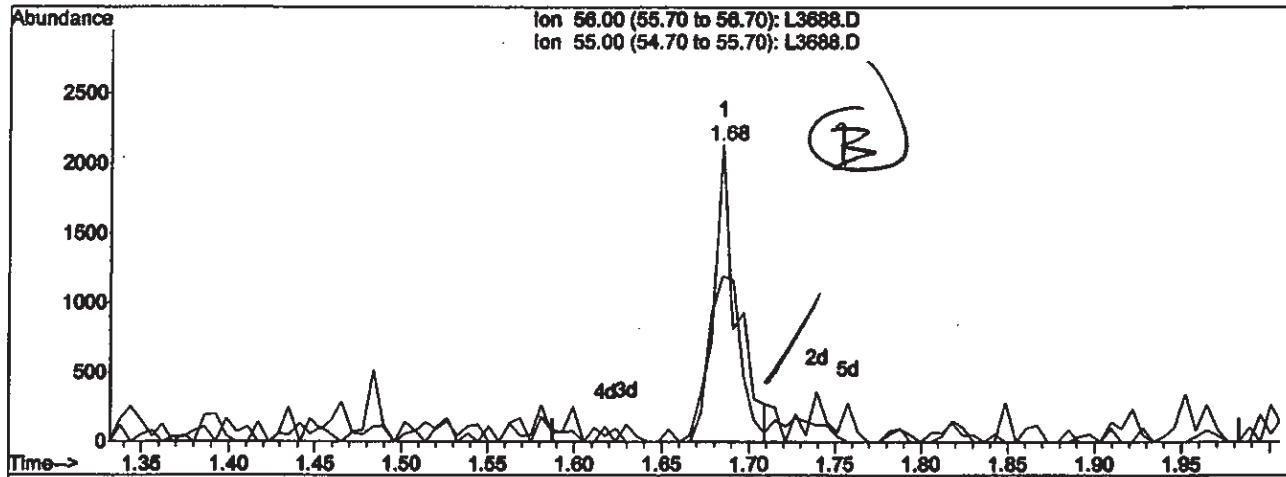
DL 3/24/14

(#) = qualifier out of range (m) = manual integration
 L3688.D W031914.M Thu Mar 20 14:12:29 2014

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3688.D Vial: 10
 Acq On : 19 Mar 2014 12:33 pm Operator: D.Lipani
 Sample : STD #1 - 0.5 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 13:57 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 13:47:27 2014
 Response via : Multiple Level Calibration



(10) Acrolein

1.68min 2.29ug/L

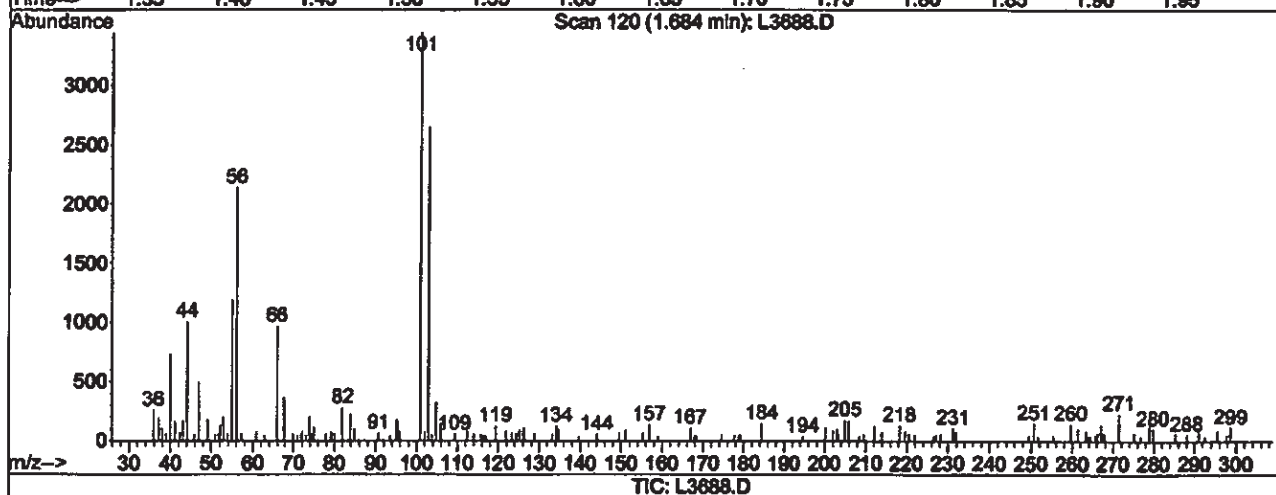
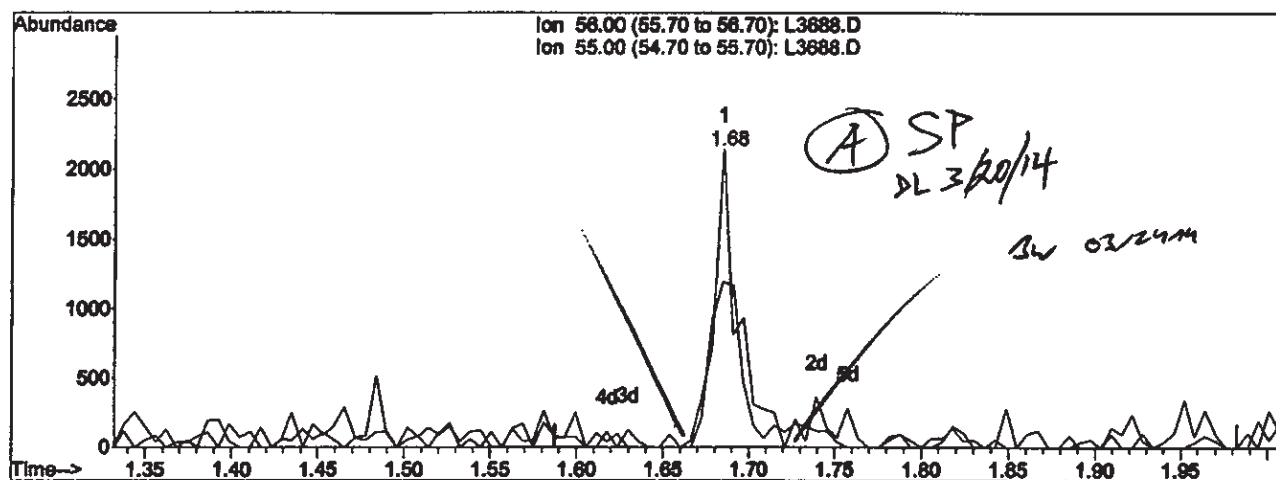
response 2038

Ion	Exp%	Act%
58.00	100	100
55.00	71.50	55.78
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3688.D Vial: 10
 Acq On : 19 Mar 2014 12:33 pm Operator: D.Lipani
 Sample : STD #1 - 0.5 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 13:51 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 13:47:27 2014
 Response via : Multiple Level Calibration



(10) Acrolein

1.68min 2.39ug/L m

response 2127

Ion	Exp%	Act%
56.00	100	100
55.00	71.50	55.78
0.00	0.00	0.00
0.00	0.00	0.00

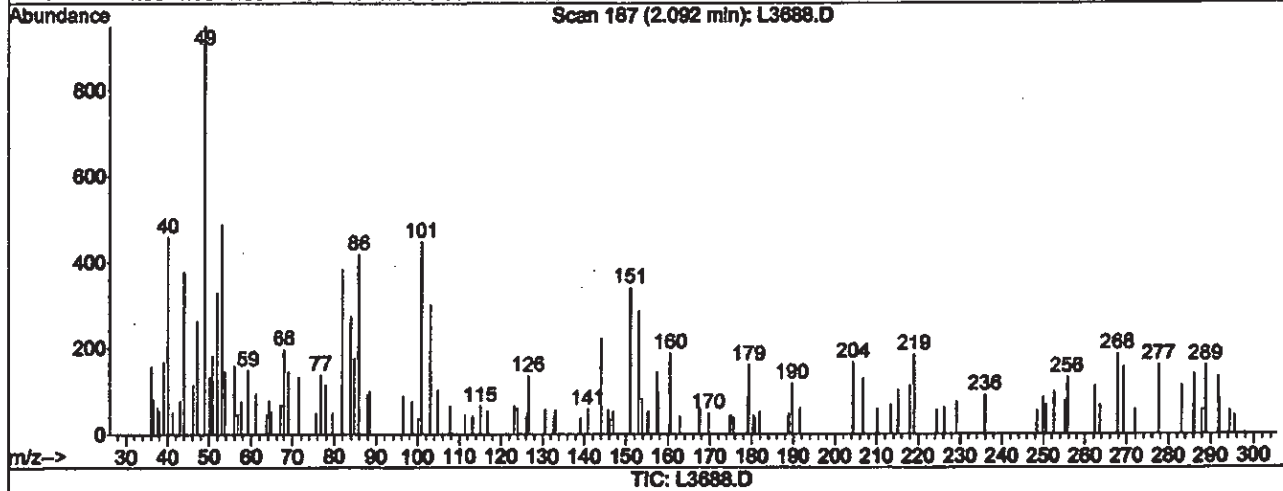
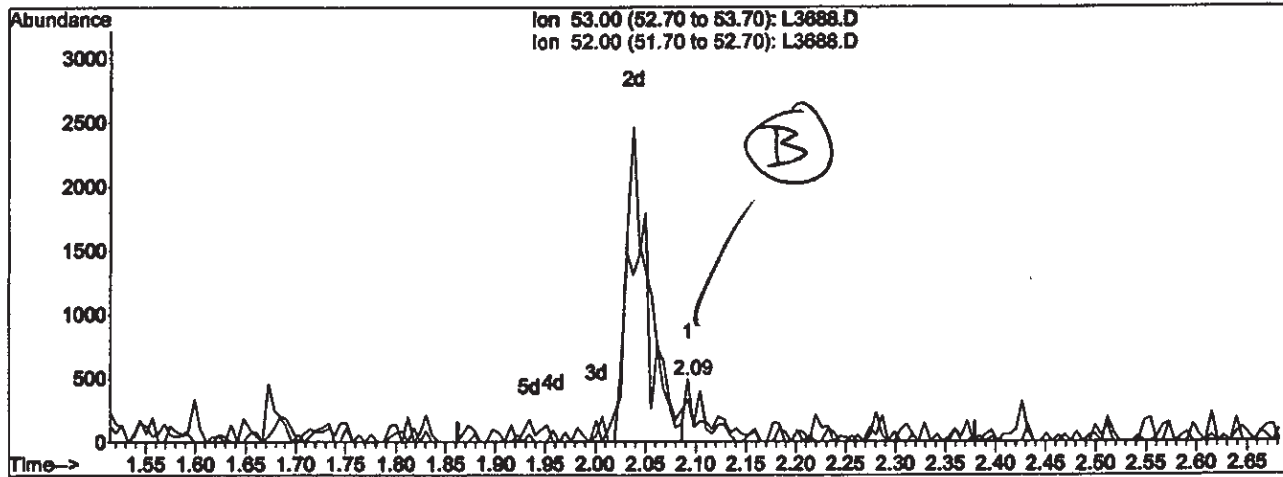
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3688.D
 Acq On : 19 Mar 2014 12:33 pm
 Sample : STD #1 - 0.5 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 13:52 2014

Vial: 10
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 13:47:27 2014
 Response via : Multiple Level Calibration



(18) Acrylonitrile

2.09min 0.38ug/L

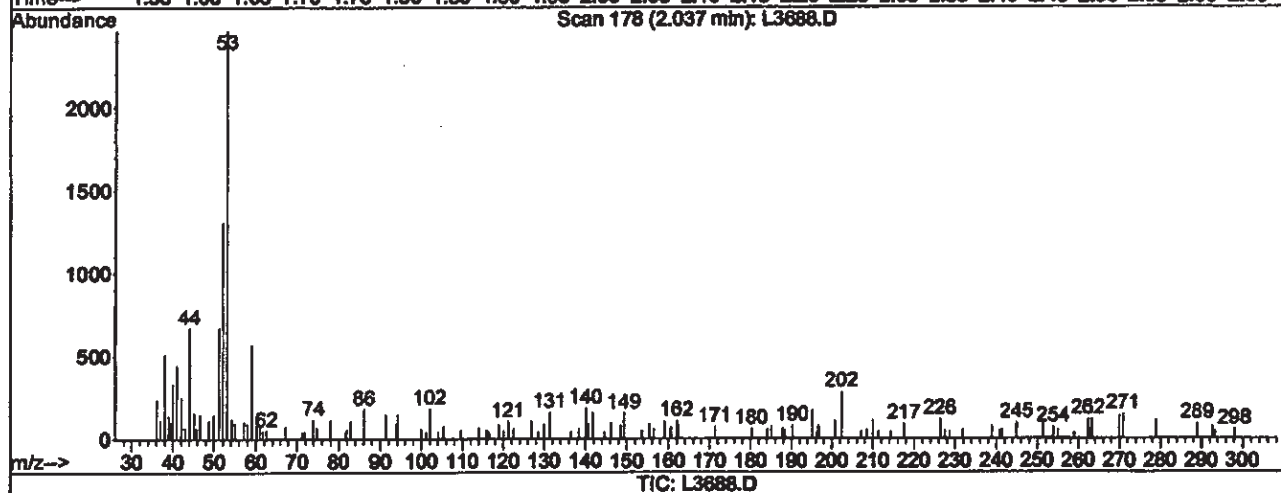
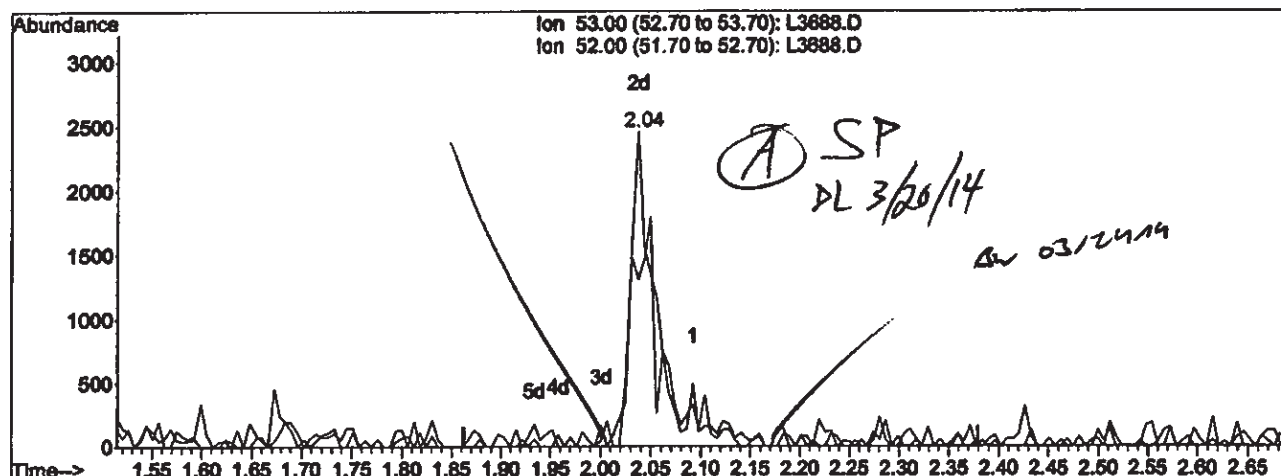
response 632

Ion	Exp%	Act%
53.00	100	100
52.00	84.00	67.62
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3688.D Vial: 10
 Acq On : 19 Mar 2014 12:33 pm Operator: D.Lipani
 Sample : STD #1 - 0.5 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 13:53 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 13:47:27 2014
 Response via : Multiple Level Calibration



(19) Acrylonitrile

2.04min 2.56ug/L m

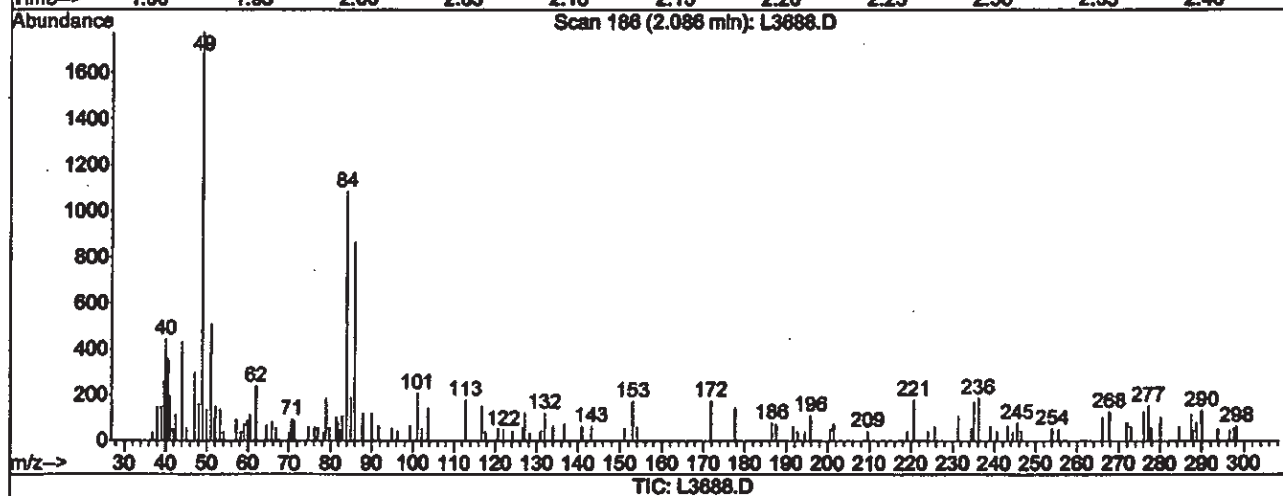
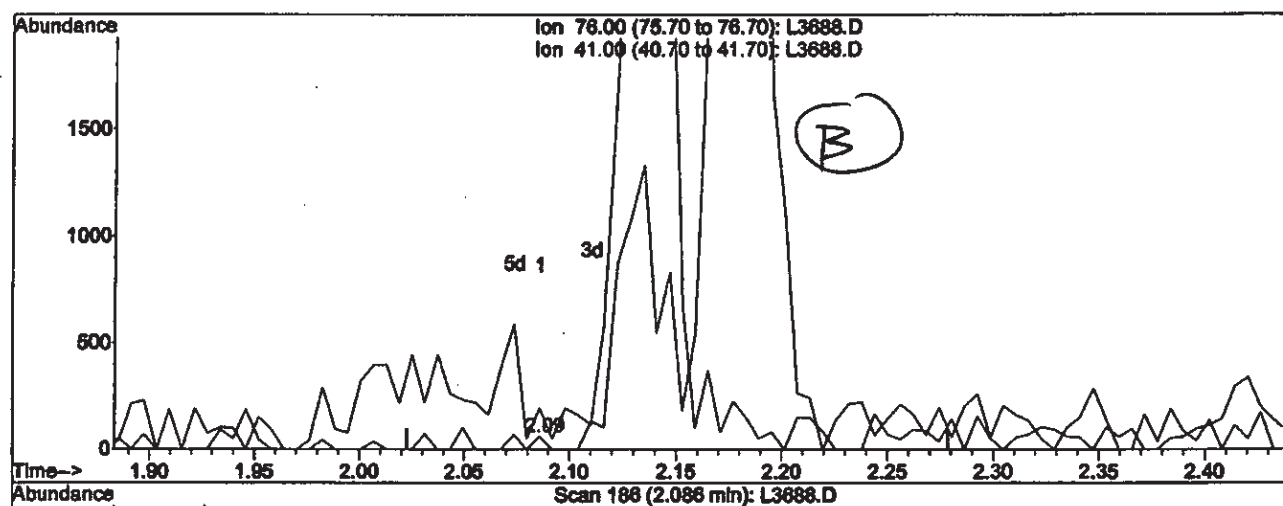
response 4484

Ion	Exp%	Act%
53.00	100	100
52.00	84.00	53.09#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3688.D Vial: 10
 Acq On : 19 Mar 2014 12:33 pm Operator: D.Lipani
 Sample : STD #1 - 0.5 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 13:53 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 13:47:27 2014
 Response via : Multiple Level Calibration



(23) Allyl Chloride

2.09min 0.01ug/L

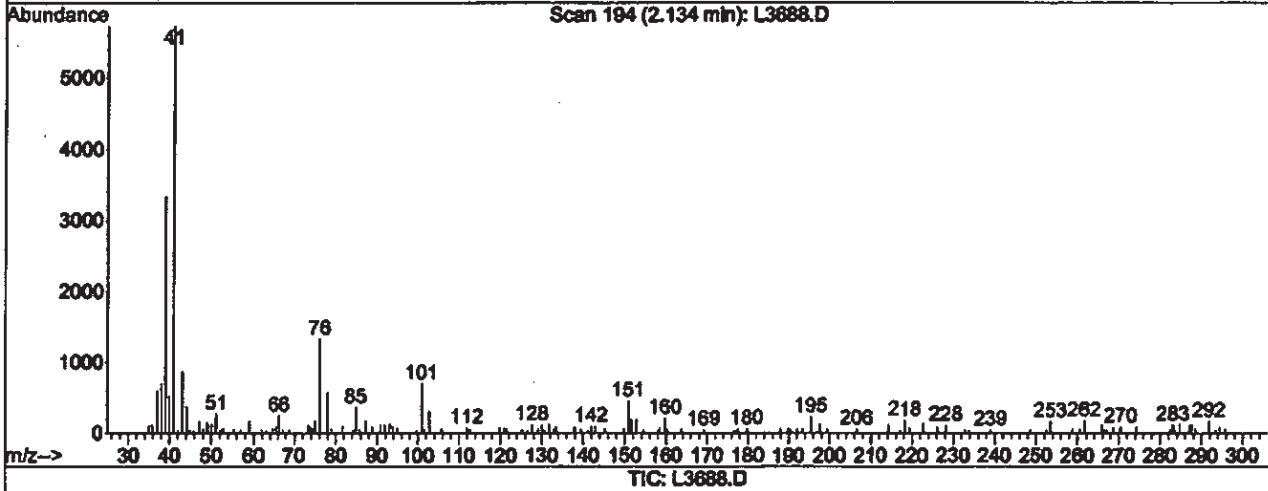
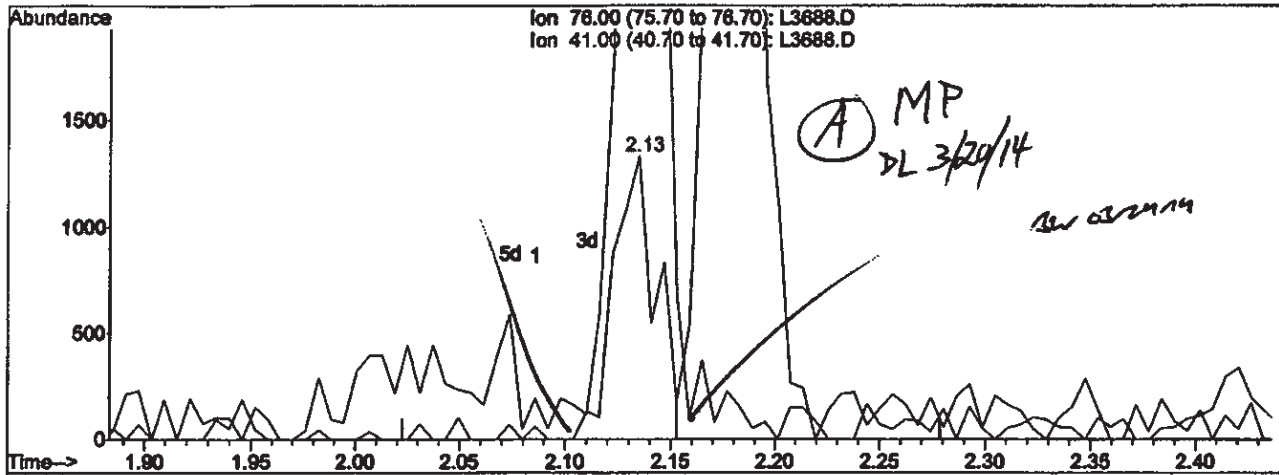
response 22

Ion	Exp%	Act%
78.00	100	100
41.00	338.40	321.87
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3688.D Vial: 10
 Acq On : 19 Mar 2014 12:33 pm Operator: D.Lipani
 Sample : STD #1 - 0.5 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 13:54 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTI Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 13:47:27 2014
 Response via : Multiple Level Calibration



(23) Allyl Chloride

2.13min 0.50ug/L m

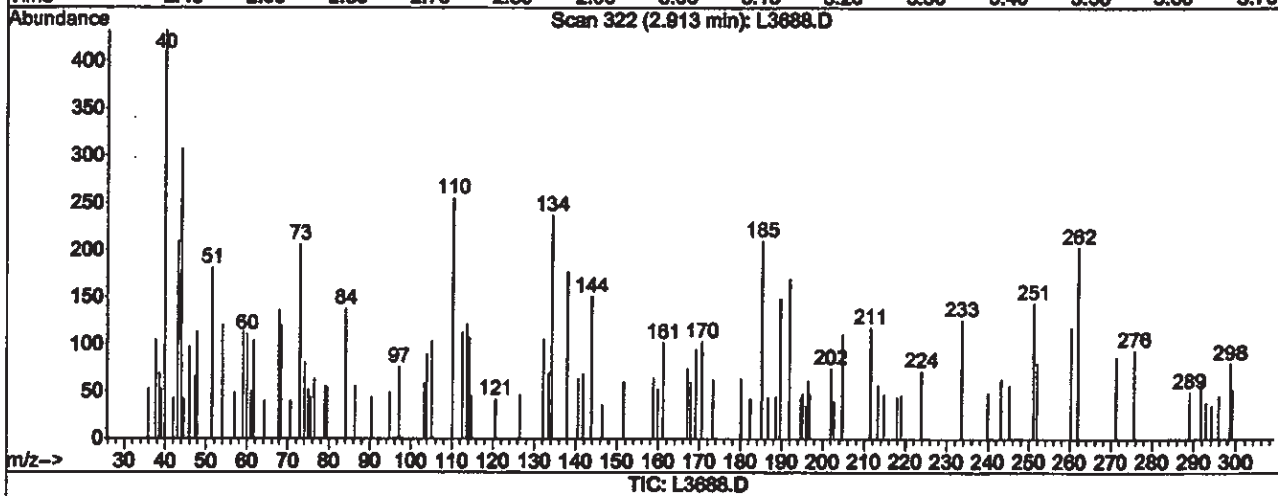
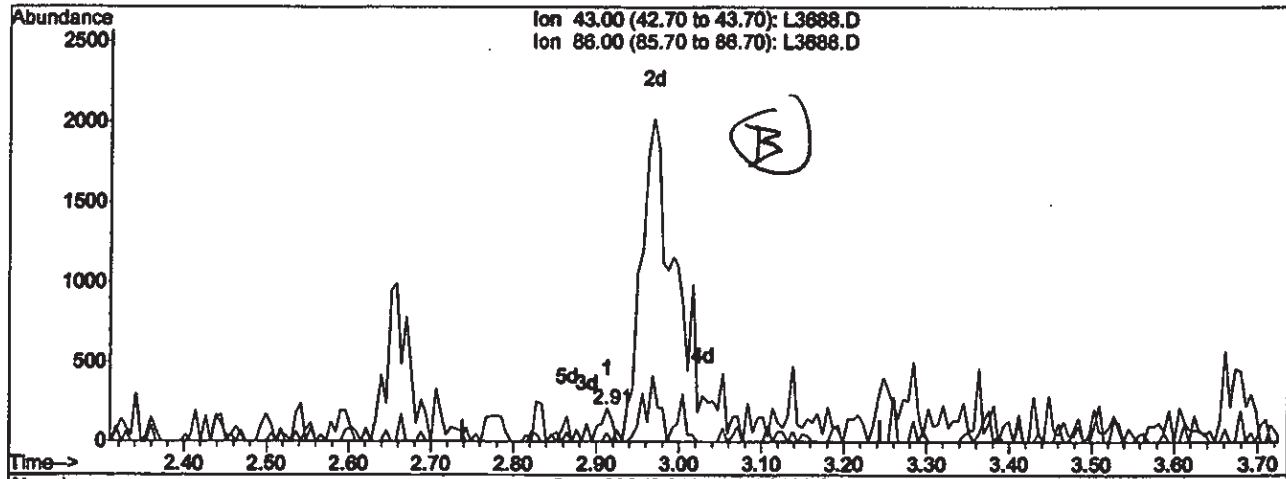
response 1856

Ion	Exp%	Act%
76.00	100	100
41.00	336.40	430.50#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3688.D Vial: 10
 Acq On : 19 Mar 2014 12:33 pm Operator: D.Lipani
 Sample : STD #1 - 0.5 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 13:54 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 13:47:27 2014
 Response via : Multiple Level Calibration



(29) Vinyl Acetate

2.91min 0.02ug/L

response 200

Ion	Exp%	Act%
43.00	100	100
88.00	7.30	26.79
0.00	0.00	0.00
0.00	0.00	0.00

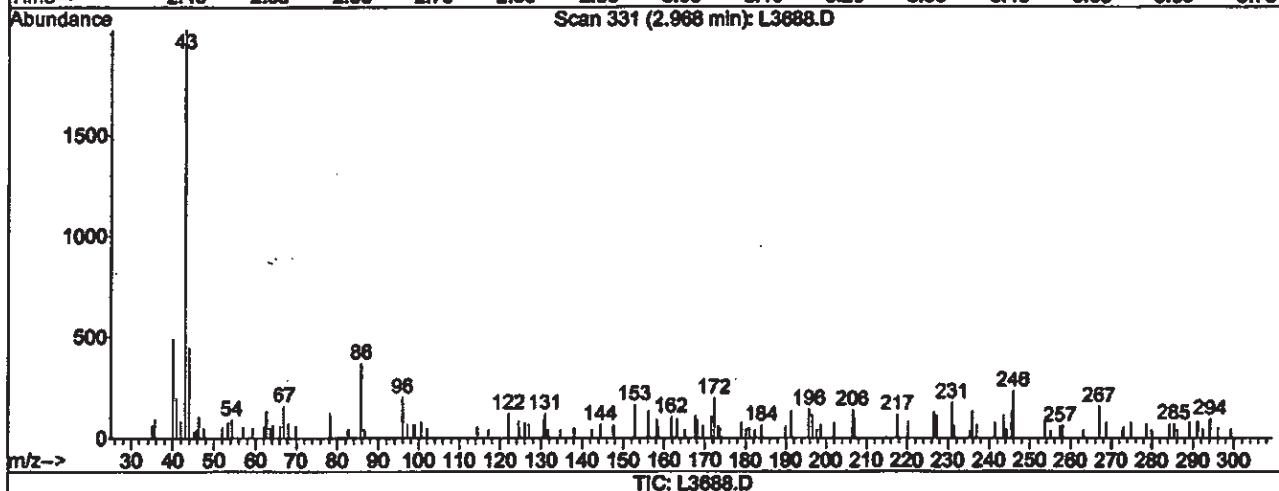
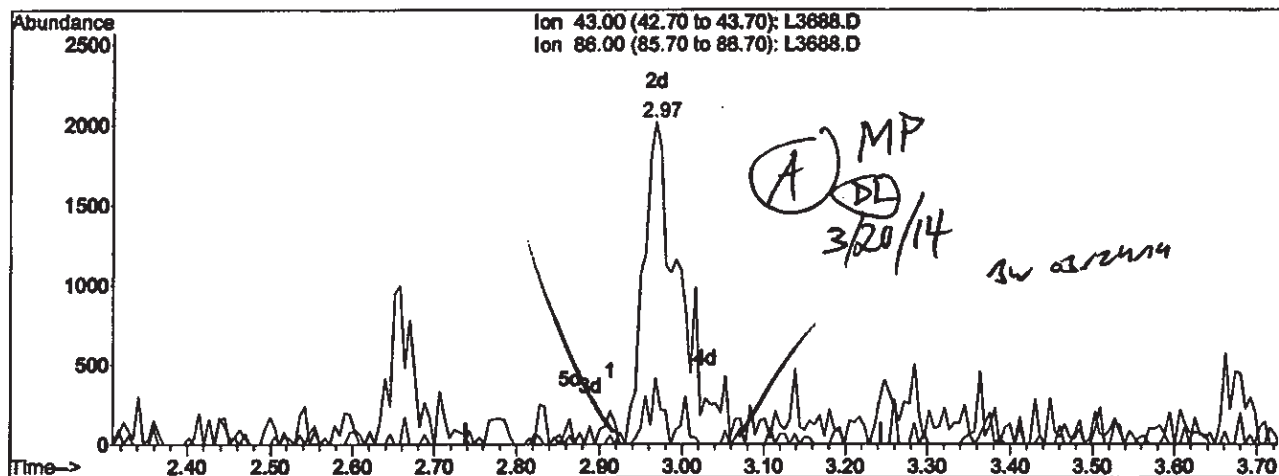
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3688.D
 Acq On : 19 Mar 2014 12:33 pm
 Sample : STD #1 - 0.5 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 13:54 2014

Vial: 10
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 13:47:27 2014
 Response via : Multiple Level Calibration



(29) Vinyl Acetate

2.97min 0.49ug/L m

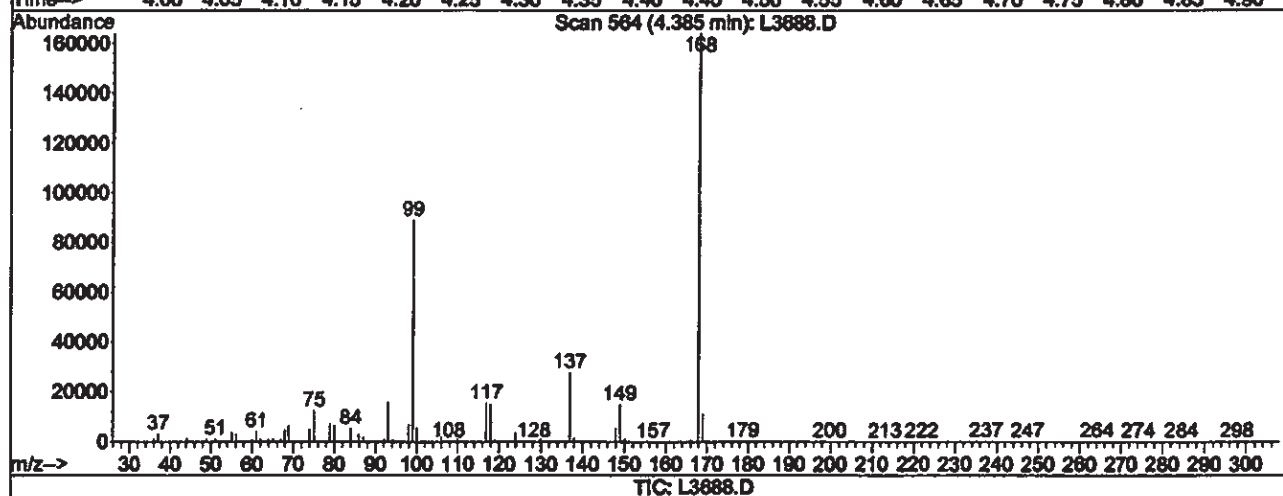
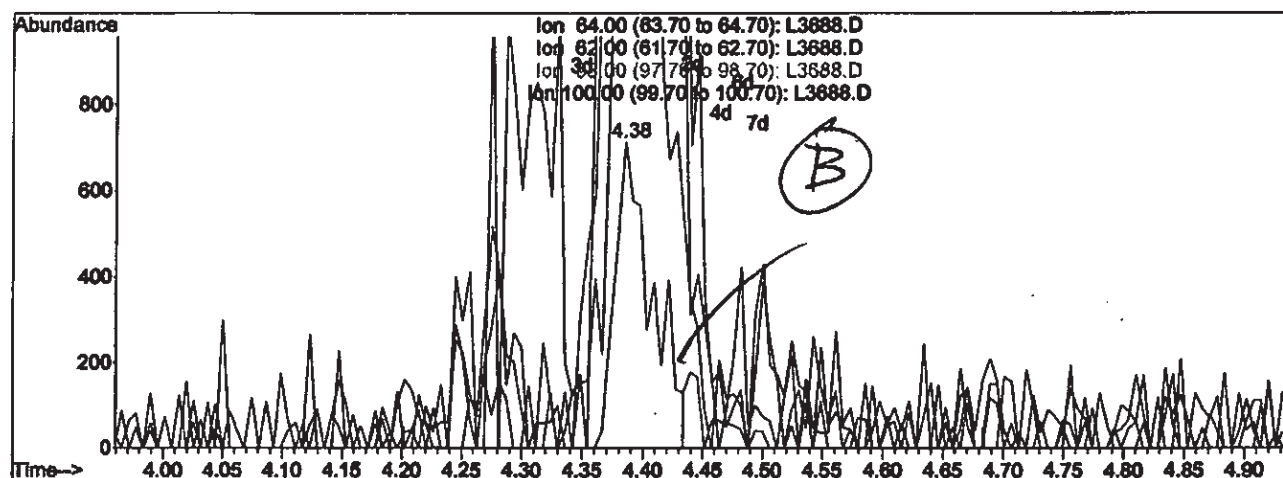
response 6165

Ion	Exp%	Act%
43.00	100	100
88.00	7.30	18.38
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3688.D Vial: 10
 Acq On : 19 Mar 2014 12:33 pm Operator: D.Lipani
 Sample : STD #1 - 0.5 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 13:55 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 13:47:27 2014
 Response via : Multiple Level Calibration



(43) 1,2-Dichloroethane (P)

4.38min 0.50ug/L

response 1512

Ion	Exp%	Act%
64.00	100	100
62.00	299.50	179.38#
98.00	41.10	985.08#
100.00	28.80	791.68#

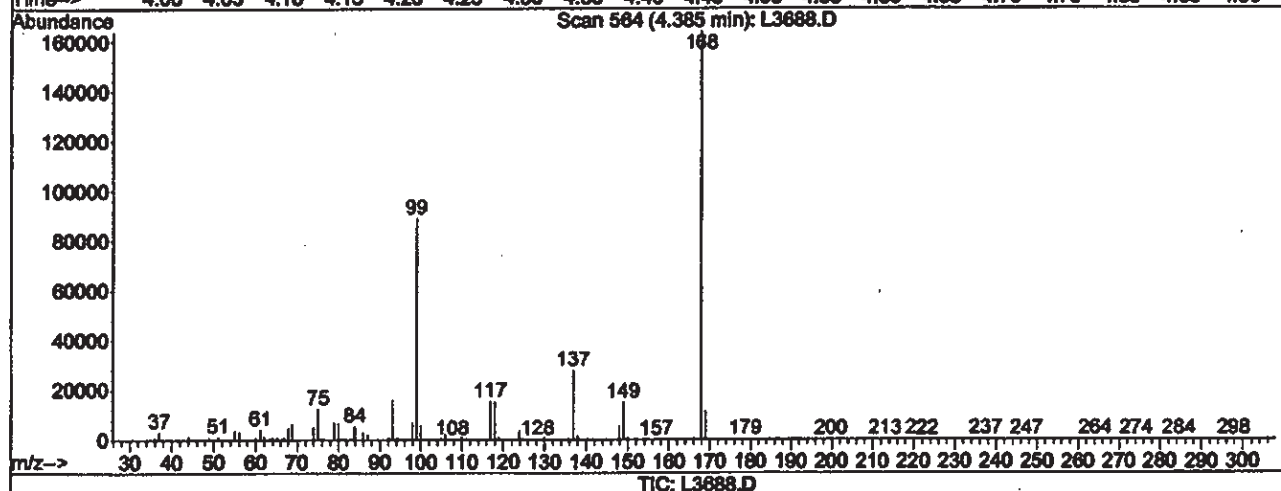
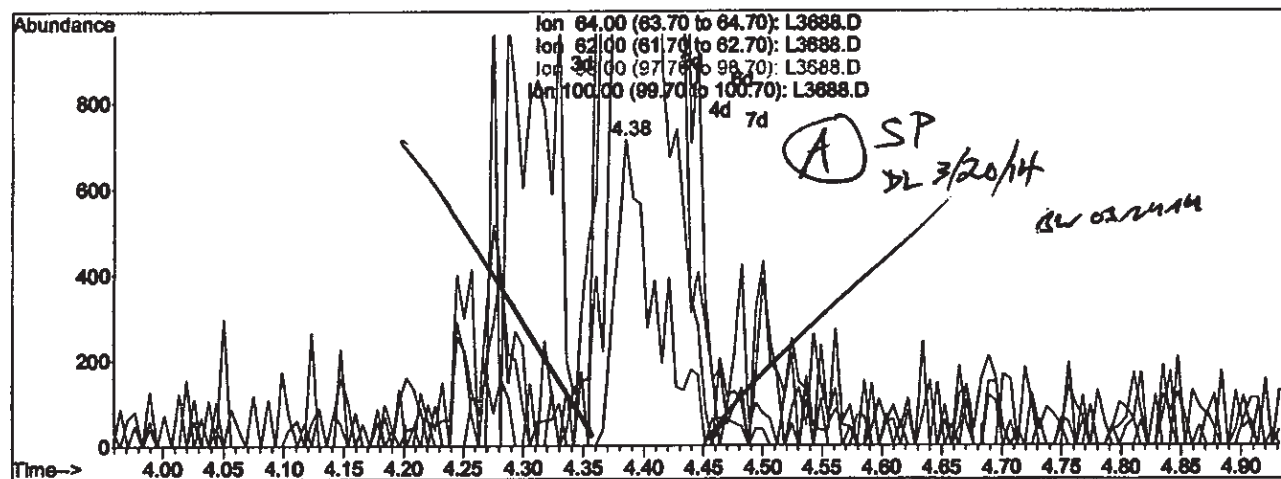
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3688.D
 Acq On : 19 Mar 2014 12:33 pm
 Sample : STD #1 - 0.5 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 13:56 2014

Vial: 10
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTI Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 13:47:27 2014
 Response via : Multiple Level Calibration



(43) 1,2-Dichloroethane (P)

4.38min 0.54ug/L m

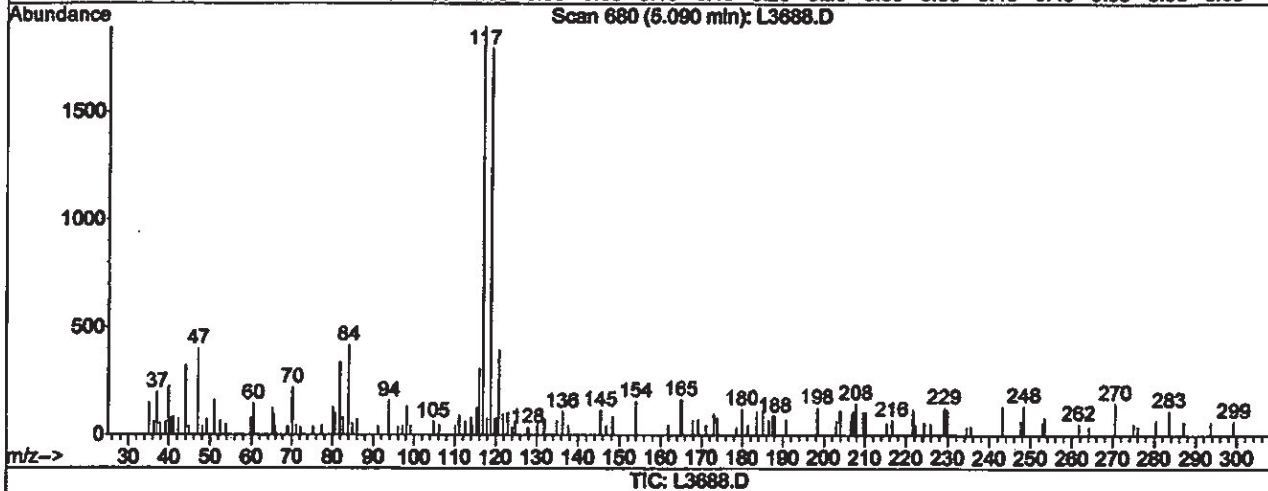
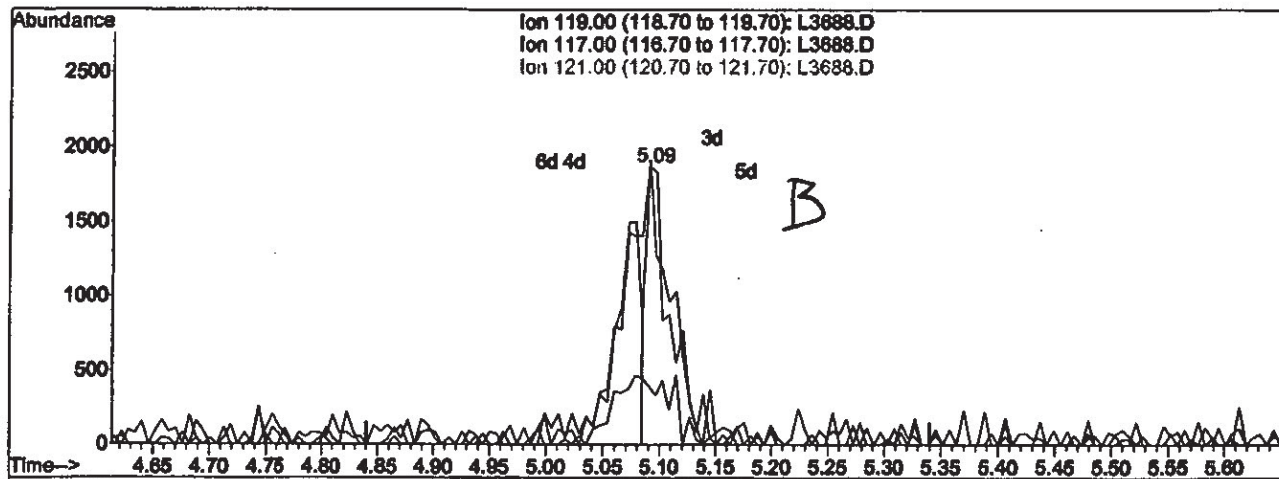
response 1637

Ion	Exp%	Act%
64.00	100	100
62.00	299.50	179.38#
98.00	41.10	965.08#
100.00	28.80	791.58#

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3688.D Vial: 10
 Acq On : 19 Mar 2014 12:33 pm Operator: D.Lipani
 Sample : STD #1 - 0.5 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 13:56 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 13:47:27 2014
 Response via : Multiple Level Calibration



(46) Carbontetrachloride (P)

5.09min 0.26ug/L

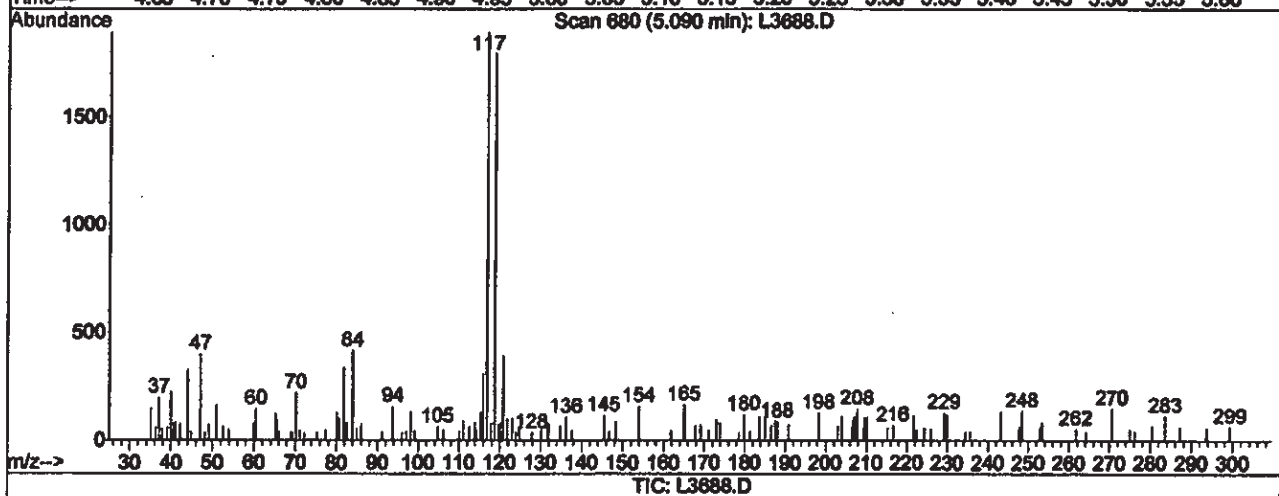
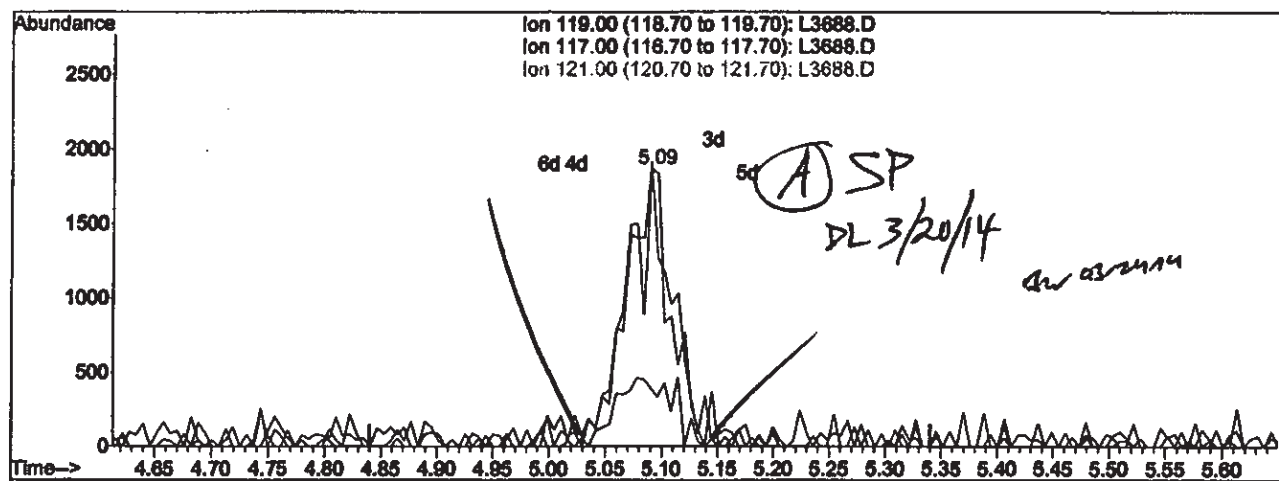
response 2599

Ion	Exp%	Act%
119.00	100	100
117.00	101.20	101.28
121.00	30.90	21.02
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3688.D Vial: 10
 Acq On : 19 Mar 2014 12:33 pm Operator: D.Lipani
 Sample : STD #1 - 0.5 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 13:56 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 13:47:27 2014
 Response via : Multiple Level Calibration



(46) Carbontetrachloride (P)

5.09min 0.51ug/L m

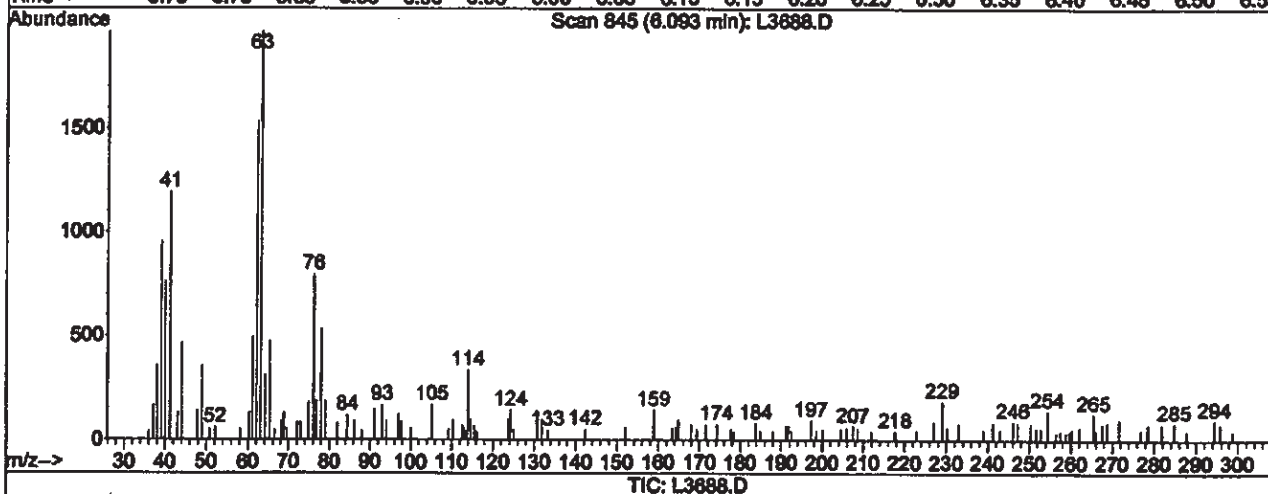
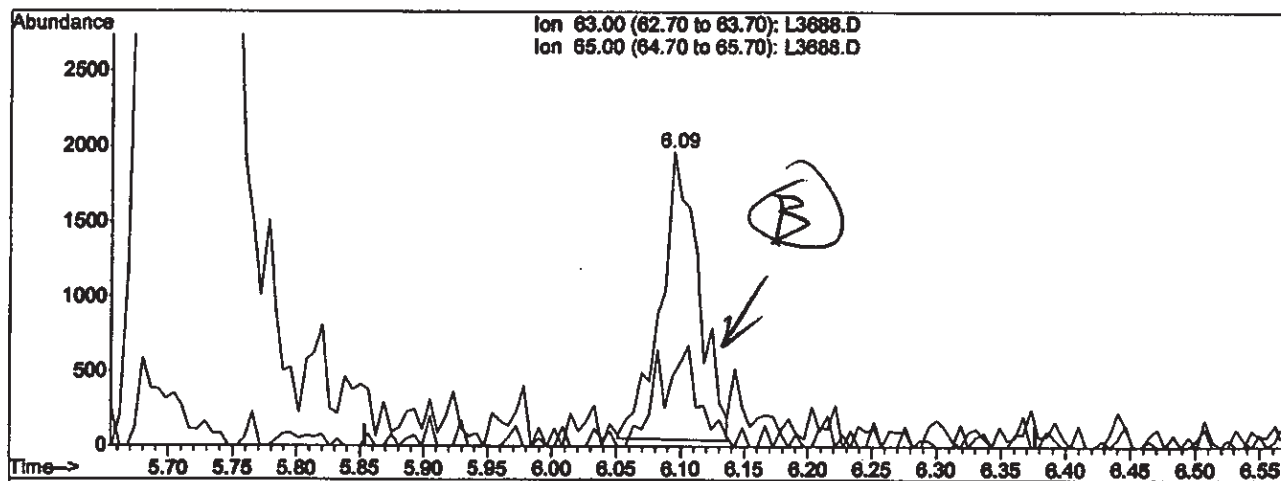
response 4975

Ion	Exp%	Act%
119.00	100	100
117.00	101.20	105.40
121.00	30.90	21.87
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3688.D Vial: 10
 Acq On : 19 Mar 2014 12:33 pm Operator: D.Lipani
 Sample : STD #1 - 0.5 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 13:56 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 13:47:27 2014
 Response via : Multiple Level Calibration



(49) 1,2-Dichloropropane (P)

6.09min 0.46ug/L

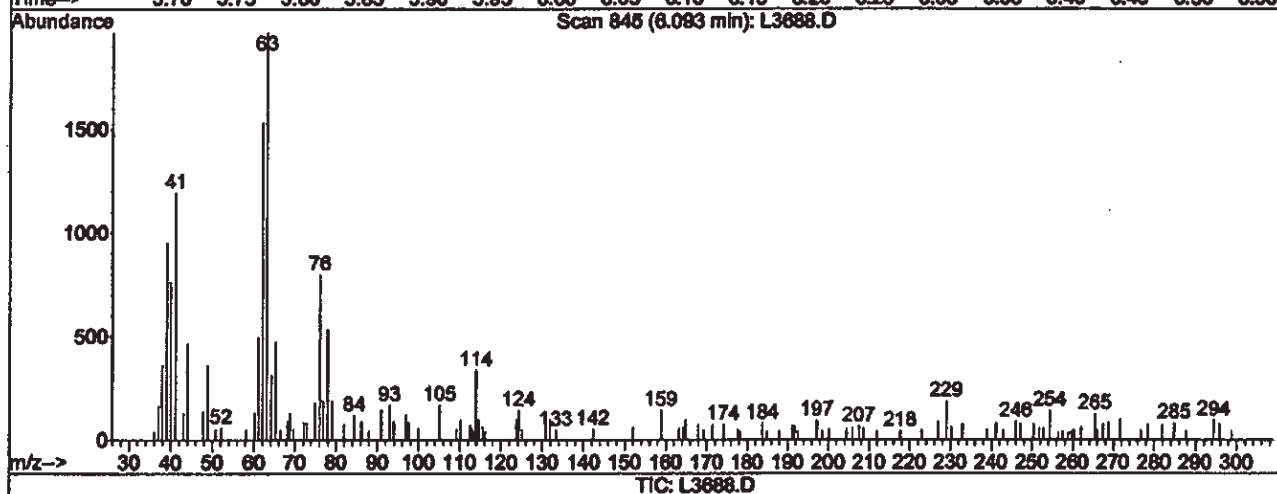
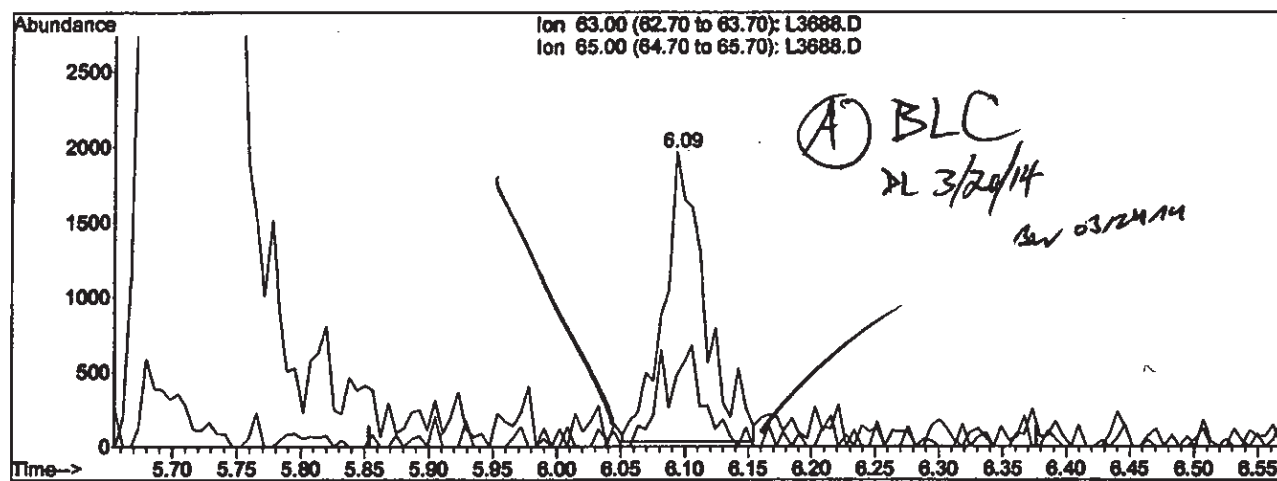
response 3990

Ion	Exp%	Act%
63.00	100	100
65.00	31.00	23.93
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3688.D Vial: 10
 Acq On : 19 Mar 2014 12:33 pm Operator: D.Lipani
 Sample : STD #1 - 0.5 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 13:57 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 13:47:27 2014
 Response via : Multiple Level Calibration



(49) 1,2-Dichloropropane (P)

6.09min 0.50ug/L m

response 4371

Ion	Exp%	Act%
63.00	100	100
65.00	31.00	21.85
0.00	0.00	0.00
0.00	0.00	0.00

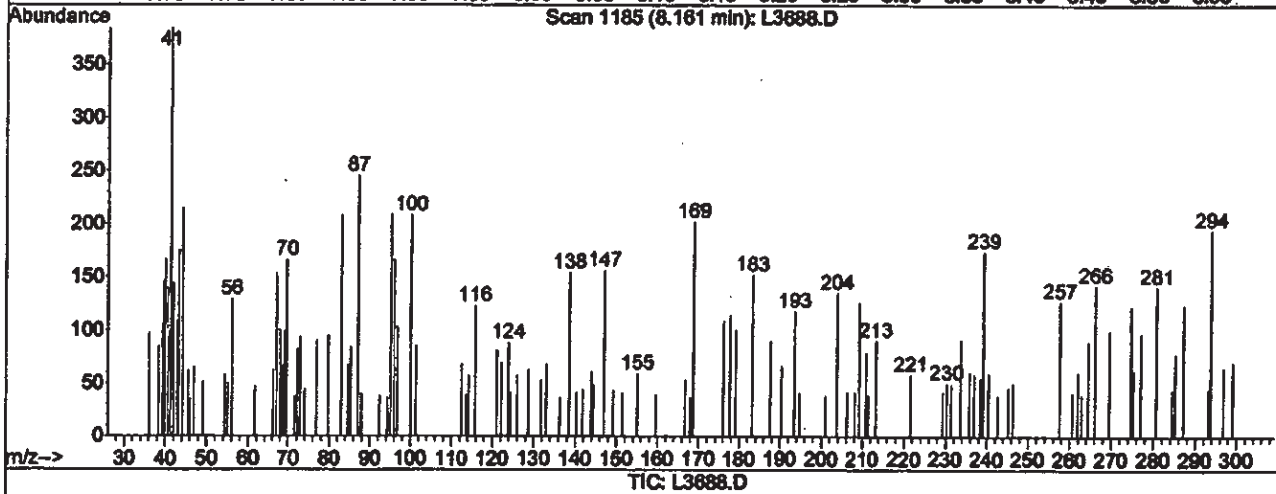
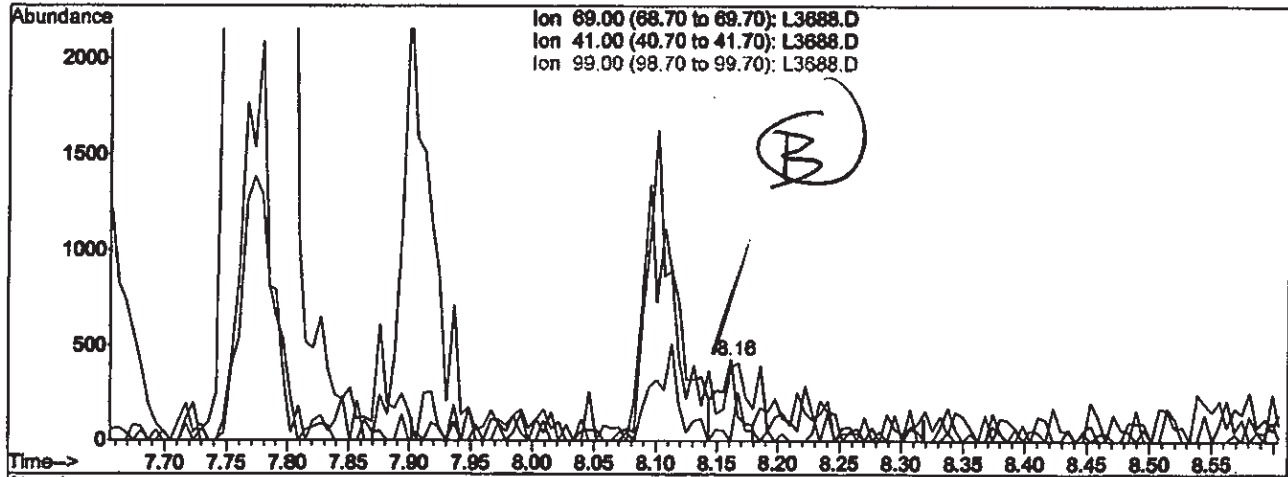
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3688.D
 Acq On : 19 Mar 2014 12:33 pm
 Sample : STD #1 - 0.5 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 13:59 2014

Vial: 10
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 13:47:27 2014
 Response via : Multiple Level Calibration



(66) Ethyl Methacrylate

8.16min 0.06ug/L

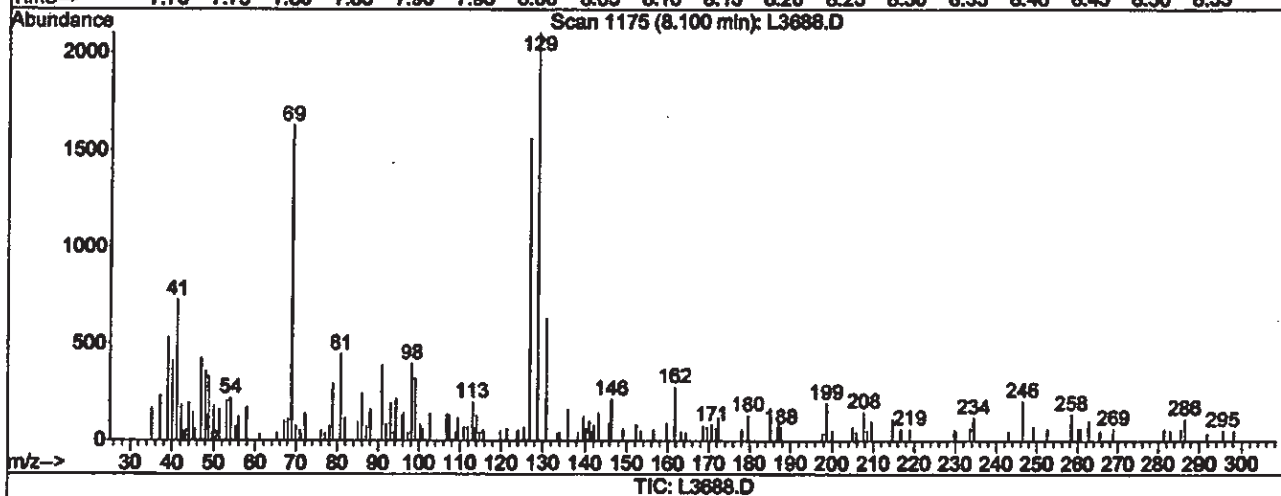
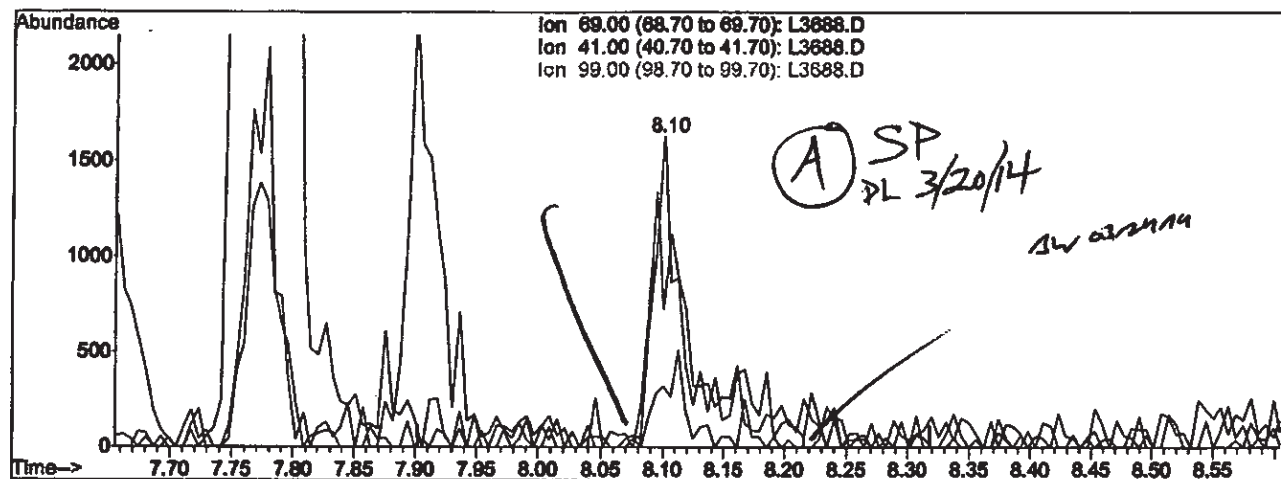
response 457

Ion	Exp%	Act%
69.00	100	100
41.00	78.80	88.51
99.00	17.40	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3688.D Vial: 10
 Acq On : 19 Mar 2014 12:33 pm Operator: D.Lipani
 Sample : STD #1 - 0.5 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:00 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 13:47:27 2014
 Response via : Multiple Level Calibration



(66) Ethyl Methacrylate

8.10min 0.43ug/L m

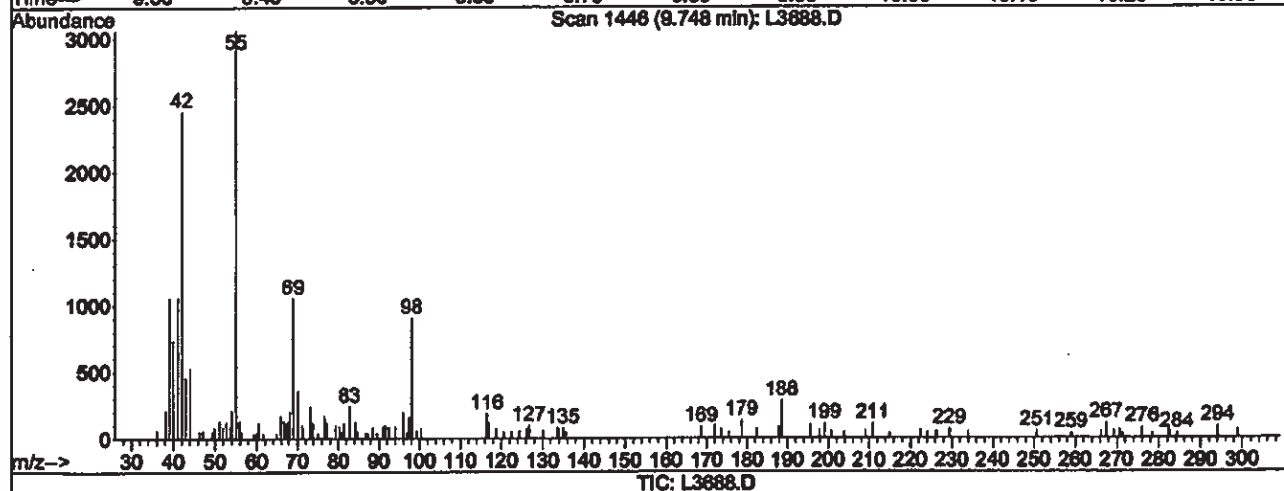
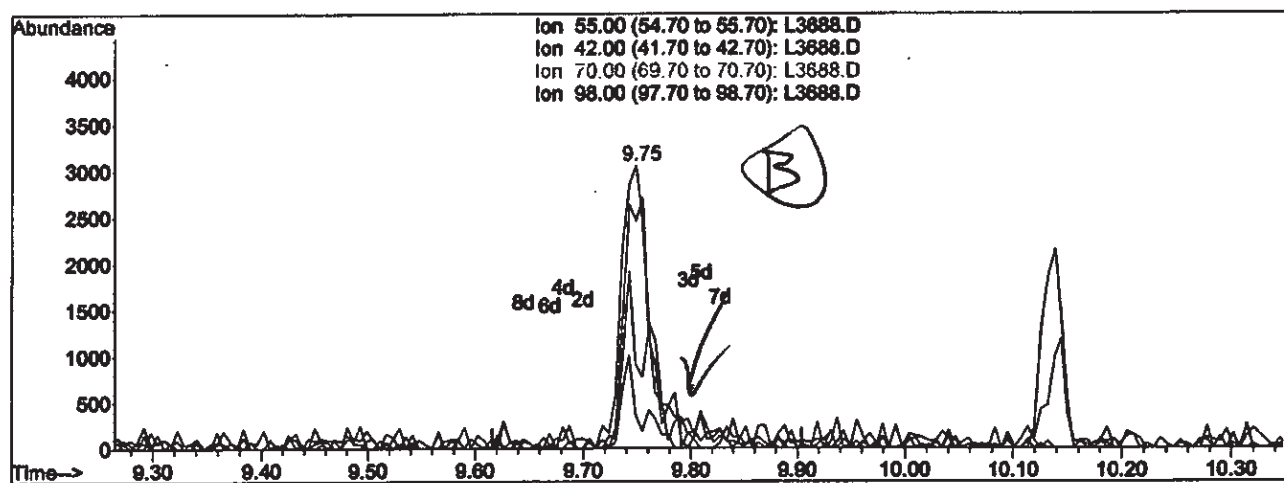
response 3289

Ion	Exp%	Act%
69.00	100	100
41.00	78.80	44.65#
99.00	17.40	19.62
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3688.D Vial: 10
 Acq On : 19 Mar 2014 12:33 pm Operator: D.Lipani
 Sample : STD #1 - 0.5 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:00 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 13:47:27 2014
 Response via : Multiple Level Calibration



(78) Cyclohexanone

9.75min 9.12ug/L

response 5709

Ion	Exp%	Act%
55.00	100	100
42.00	73.80	80.34
70.00	21.10	11.74
98.00	41.40	29.60

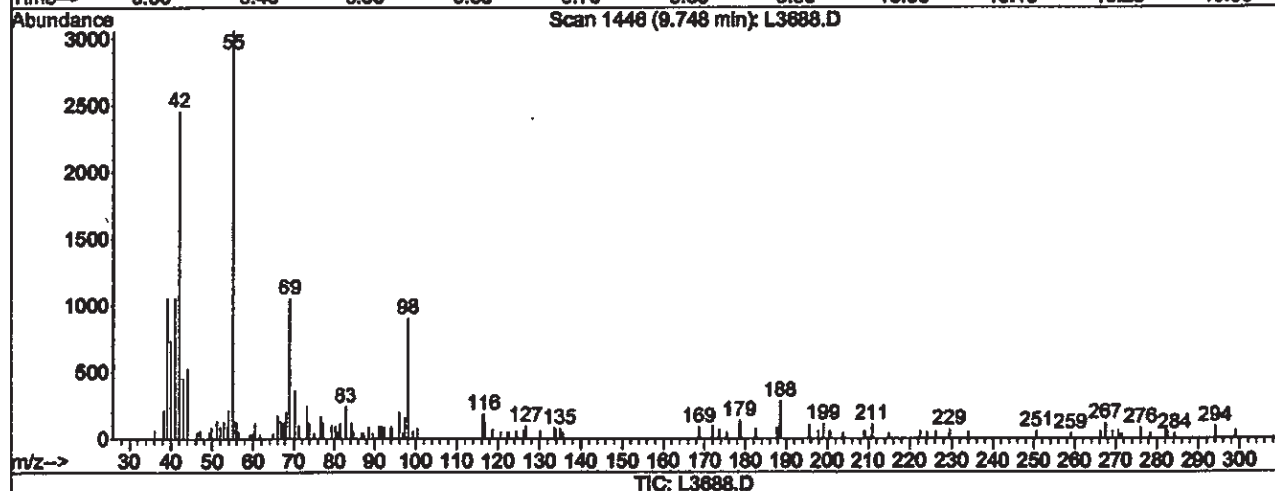
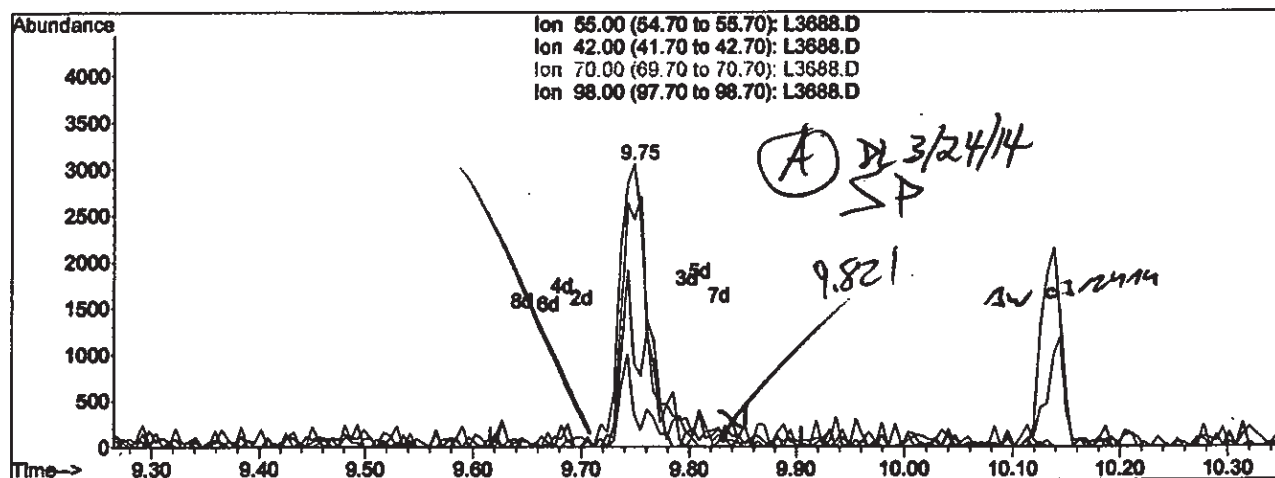
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3688.D
 Acq On : 19 Mar 2014 12:33 pm
 Sample : STD #1 - 0.5 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:01 2014

Vial: 10
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTB Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 13:47:27 2014
 Response via : Multiple Level Calibration



(78) Cyclohexanone

9.75min 9.78ug/L m

response 6121

Ion	Exp%	Act%
55.00	100	100
42.00	73.80	80.34
70.00	21.10	11.74
98.00	41.40	29.60

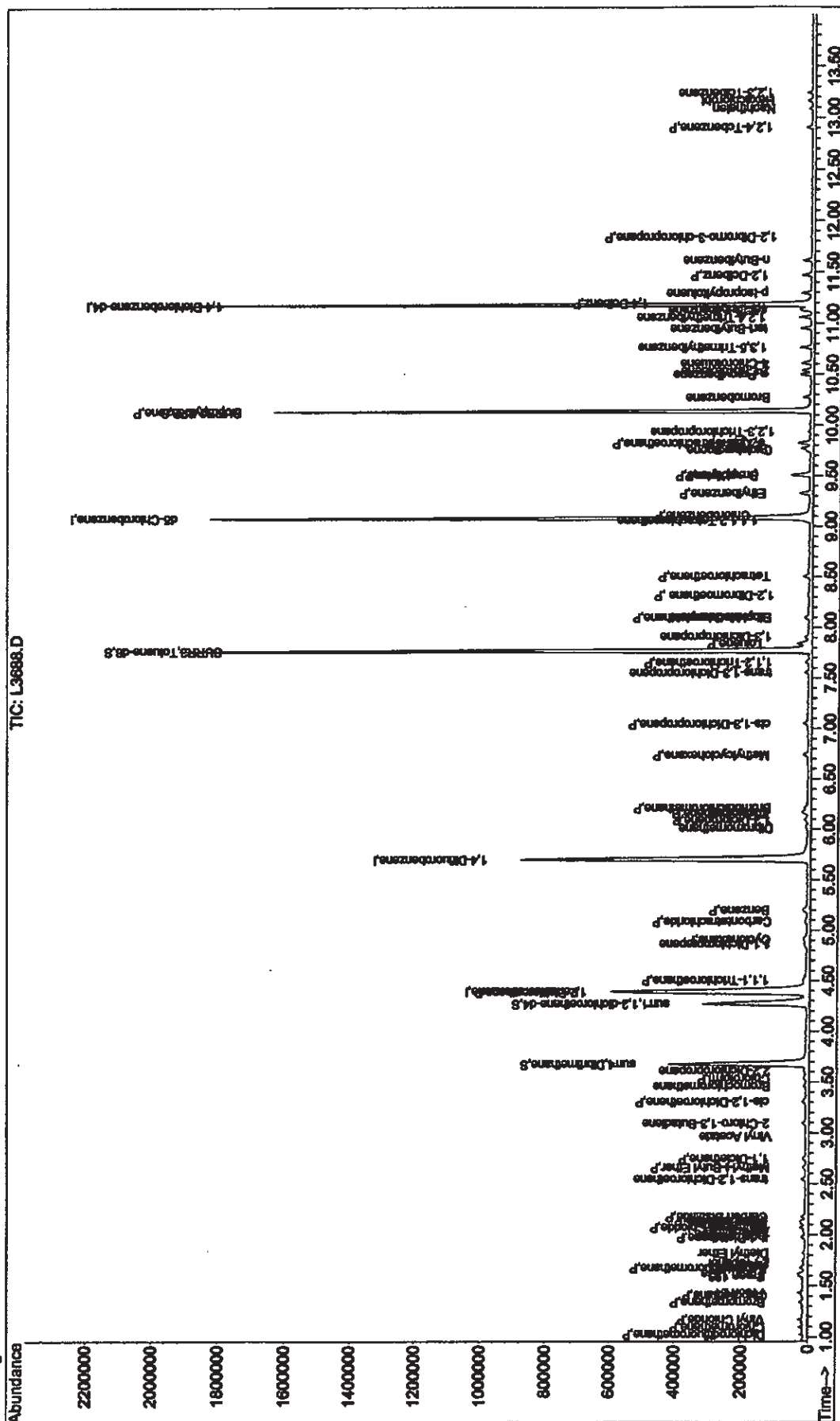
Quantitation Report

Data File : I:\ACQDATA\MSV0A6\DATA\031914\L3688.D
Acq On : 19 Mar 2014 12:33 pm
Sample : STD #1 - 0.5 PPB
Misc : 8260C ICAL GCMS#6
MS Integration Params: CPD4.P
Quant Time: Mar 20 14:03 2014
Vial: 10
Operator: D.Lipani
Inst : MS#6
Multiplr: 1.00
Quant Results File: W031914.RES

```

Method      : I:\ACQUDATA\MSV0A6\METHODS\W031914.M (RTE Integrator)
Title       : 8260C WATERS
Last Update : Thu Mar 20 14:11:49 2014
Response via : Initial Calibration

```



Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3689.D
 Acq On : 19 Mar 2014 1:32 pm
 Sample : STD #2 - 1.0 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:21 2014

Vial: 11
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:12:40 2014
 Response via : Initial Calibration
 DataAcq Meth : W031914

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.40	168	589995	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.70	114	852607	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.08	117	797142	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.18	152	406417	50.00	ug/L	0.00

System Monitoring Compounds

40) surr4, Dibrflmethane	3.68	113	288677	50.09	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	100.18%
42) surr1, 1,2-dichloroethane-d	4.27	65	274387	49.64	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	99.28%
62) SURR3, Toluene-d8	7.77	98	1052381	50.04	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	100.08%
82) SURR2, BFB	10.14	95	382090	45.99	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	91.98%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.03	85	9096	0.97	ug/L	97
3) Chloromethane	1.10	50	11999	1.07	ug/L	97
4) Vinyl Chloride	1.17	62	10583	1.05	ug/L	96
5) Bromomethane	1.34	94	7446	1.08	ug/L	94
6) Chloroethane	1.41	64	6577	1.17	ug/L	89
7) Freon 21	1.43	67	15436	1.02	ug/L	98
8) Freon 123	1.60	83	12977	1.10	ug/L	81
9) Freon 123a	1.62	67	9660	0.87	ug/L	85
10) Acrolein	1.68	56	4493	4.99	ug/L	93
11) Trichlorofluoromethane	1.68	101	13478	1.10	ug/L	82
12) Acetonitrile	1.70	41	4003	5.36	ug/L	93
13) 2-Propanol	1.73	45	4600	19.79	ug/L	86
15) Diethyl Ether	1.82	59	5790	1.09	ug/L	89
16) 1,1-Dicethene	1.98	96	6537	1.00	ug/L	96
17) Iodomethane	1.99	142	5166	1.36	ug/L	96
18) TBA	2.02	59	6707	18.76	ug/L	93
19) Acrylonitrile	2.04	53	8041	4.52	ug/L	94
20) Methylene Chloride	2.07	84	10191	1.15	ug/L #	81
21) Freon 113	2.12	101	8231	1.12	ug/L	90
22) Methyl Acetate	2.13	43	3080	0.79	ug/L	86
23) Allyl Chloride	2.13	76	4058	0.98	ug/L #	88
24) Carbon Disulfide	2.18	76	23267	1.02	ug/L	97
25) trans-1,2-Dichloroethene	2.54	96	7590	0.95	ug/L	85
26) Methyl-t-Butyl Ether	2.66	73	15734	0.99	ug/L	96
27) 1,1-Dicethane	2.75	63	14092	0.95	ug/L	92
28) Propionitrile	2.82	54	3094m	4.74	ug/L	
29) Vinyl Acetate	2.95	43	12637m	0.90	ug/L	
30) 2-Chloro-1,3-Butadiene	3.09	53	12262	0.95	ug/L	76
32) Methacrylonitrile	3.32	41	3630	1.03	ug/L	87
33) cis-1,2-Dichloroethene	3.31	96	9861	1.09	ug/L #	65
34) Bromochloromethane	3.47	128	3638	0.91	ug/L #	81
35) Chloroform	3.54	83	14570	0.99	ug/L	99
36) 2,2-Dichloropropane	3.61	77	11704	0.98	ug/L	92
38) 1,1,1-Trichloroethane	4.51	97	11586	0.93	ug/L	93
43) 1,2-Dichloroethane	4.41	64	3325m	1.09	ug/L	

DL 3/20/14



(#) = qualifier out of range (m) = manual integration
 L3689.D W031914.M Thu Mar 20 14:21:45 2014

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3689.D
 Acq On : 19 Mar 2014 1:32 pm
 Sample : STD #2 - 1.0 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:21 2014

Vial: 11
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:12:40 2014
 Response via : Initial Calibration
 DataAcq Meth : W031914

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
44) 1,1-Dichloropropene	4.86	75	10425	1.02	ug/L	81
45) Cyclohexane	4.92	56	13378	1.04	ug/L	88
46) Carbontetrachloride	5.08	119	10311	1.00	ug/L	89
47) Benzene	5.20	78	35370	1.10	ug/L	91
48) Dibromomethane	6.02	93	3574	0.84	ug/L #	82
49) 1,2-Dichloropropane	6.09	63	7962	0.91	ug/L	89
50) n-Heptane	6.18	43	8586	1.00	ug/L	97
51) Trichloroethene	6.16	130	9087	1.03	ug/L	96
52) Bromodichloromethane	6.22	83	10562	0.98	ug/L	94
53) 2-Nitropropane	6.26	41	2192	1.85	ug/L #	81
55) Methyl Methacrylate	6.64	69	2883m	0.85	ug/L	
56) Methylcyclohexane	6.74	55	10615	1.13	ug/L	88
57) 2-Chloroethylvinyl Ether	6.90	63	3684	0.97	ug/L	82
58) cis-1,3-Dichloropropene	7.05	75	11842	0.98	ug/L	99
59) 4-Methyl-2-pentanone	7.27	43	4131	0.78	ug/L #	75
60) trans-1,3-Dichloropropene	7.55	75	10099	1.03	ug/L	91
61) 1,1,2-Trichloroethane	7.66	97	5427	0.91	ug/L	87
63) Toluene	7.84	91	36548	1.04	ug/L	93
65) 1,3-Dichloropropane	7.90	76	9171	0.91	ug/L	82
66) Ethyl Methacrylate	8.09	69	5804m	0.77	ug/L	
67) Dibromochloromethane	8.09	129	8292	1.02	ug/L	93
69) 1,2-Dibromoethane	8.31	107	5417	0.88	ug/L	91
70) n-Butyl Acetate	8.54	43	7634	0.82	ug/L #	80
71) Tetrachloroethene	8.50	164	7419	1.00	ug/L	98
72) 1,1,1,2-Tetrachloroethane	9.05	131	8257	0.97	ug/L	94
73) Chlorobenzene	9.11	112	22896	1.04	ug/L	94
74) Ethylbenzene	9.32	106	11359	0.93	ug/L #	78
75) Bromoform	9.50	173	4953	0.98	ug/L	85
76) (m+p)Xylene	9.50	106	28472	1.98	ug/L #	82
77) o-Xylene	9.82	106	13700	0.93	ug/L #	87
78) Cyclohexanone	9.74	55	12230	19.49	ug/L	94
79) Styrene	9.77	104	23722	1.03	ug/L	98
80) trans-1,4-Dichloro-2-Buten	10.00	75	1920	0.90	ug/L #	67
81) Isopropylbenzene	10.14	105	36109	0.99	ug/L	95
84) 1,1,2,2-Tetrachloroethane	9.82	83	7362	1.02	ug/L	97
85) 1,2,3-Trichloropropane	9.93	75	5047	1.07	ug/L	94
86) Bromobenzene	10.28	156	11086	1.13	ug/L	88
87) n-Propylbenzene	10.50	91	42444	1.04	ug/L	92
88) 2-Chlorotoluene	10.53	91	25464	0.99	ug/L	96
89) 4-Chlorotoluene	10.61	91	27009	1.01	ug/L	99
90) 1,3,5-Trimethylbenzene	10.76	105	27779	1.01	ug/L	95
91) tert-Butylbenzene	10.95	119	22867	1.02	ug/L	95
92) 1,2,4-Trimethylbenzene	11.05	105	29592	1.03	ug/L	95
93) sec-Butylbenzene	11.12	105	33754	1.03	ug/L	96
94) 1,3-Dichlorobenz	11.15	146	19256	1.10	ug/L	97
95) 1,4-Dichlorobenz	11.20	146	19207	1.08	ug/L #	69
96) p-Isopropyltoluene	11.29	119	27476	1.05	ug/L	98
97) 1,2-Dichlorobenz	11.47	146	17823	1.12	ug/L	90
98) n-Butylbenzene	11.61	91	25794	1.06	ug/L	95
99) 1,2-Dibromo-3-chloropropan	11.84	75	780m	0.83	ug/L	

DL 3/20/14

(#) = qualifier out of range (m) = manual integration
 L3689.D W031914.M Thu Mar 20 14:21:47 2014

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3689.D Vial: 11
 Acq On : 19 Mar 2014 1:32 pm Operator: D.Lipani
 Sample : STD #2 - 1.0 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:21 2014 Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:12:40 2014
 Response via : Initial Calibration
 DataAcq Meth : W031914

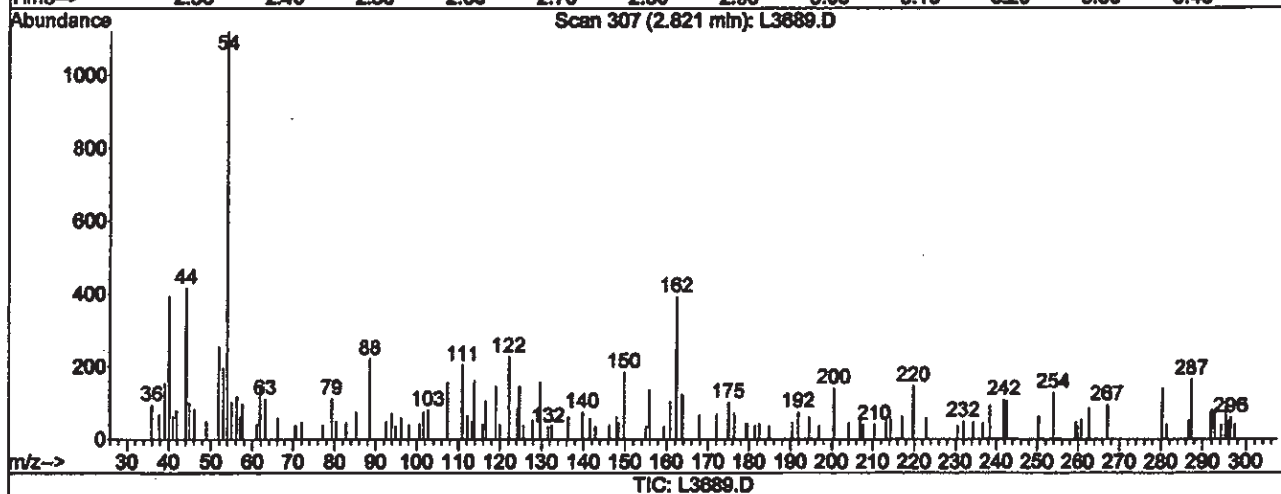
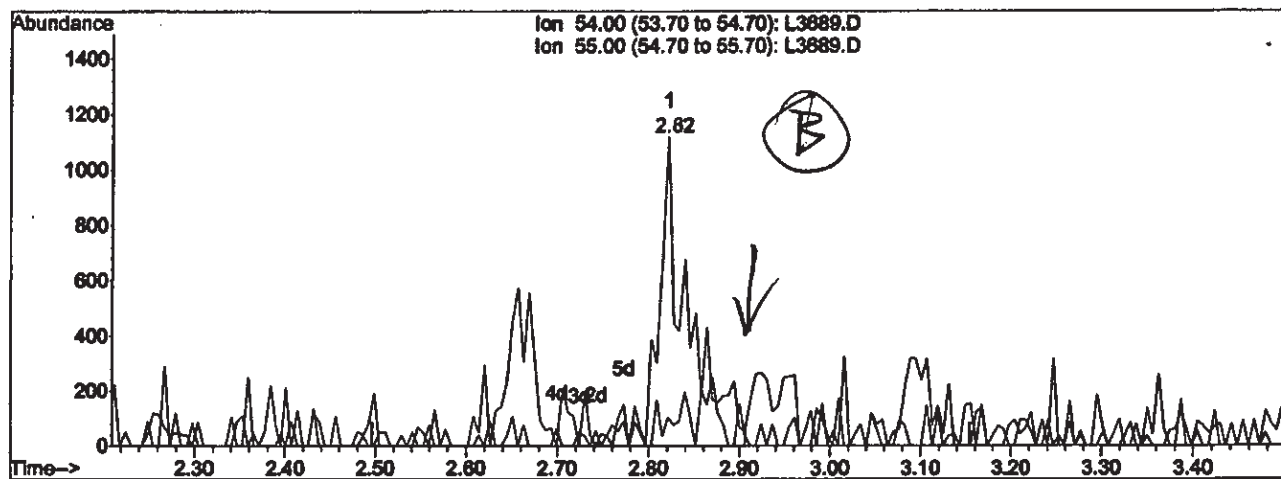
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
101) 1,2,4-Tcbenzene	12.91	180	9269	1.07	ug/L	97
102) Naphthalen	13.09	128	14162	1.06	ug/L	97
103) Hexachlorobt	13.17	225	3603m	0.99	ug/L	97
104) 1,2,3-Tclbenzene	13.24	180	7067	1.07	ug/L	96

DL 3/20/14

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3689.D Vial: 11
 Acq On : 19 Mar 2014 1:32 pm Operator: D.Lipani
 Sample : STD #2 - 1.0 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:13 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTB Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:12:40 2014
 Response via : Multiple Level Calibration



(28) Propionitrile

2.82min 3.65ug/L

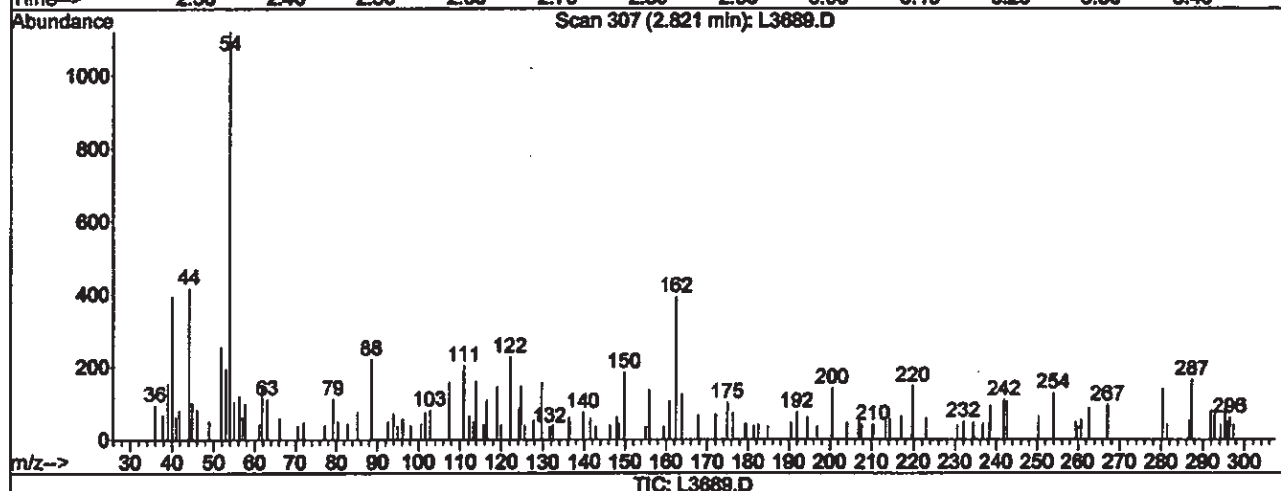
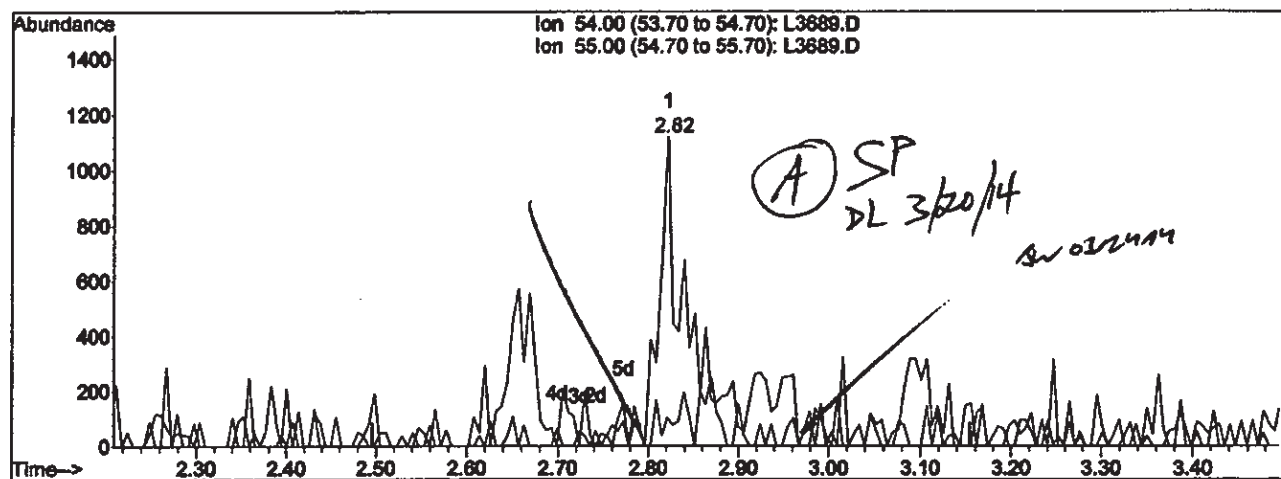
response 2381

Ion	Exp%	Act%
54.00	100	100
55.00	15.30	8.20
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3689.D Vial: 11
 Acq On : 19 Mar 2014 1:32 pm Operator: D.Lipani
 Sample : STD #2 - 1.0 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:14 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:12:40 2014
 Response via : Multiple Level Calibration



(28) Propionitrile

2.82min 4.74ug/L m

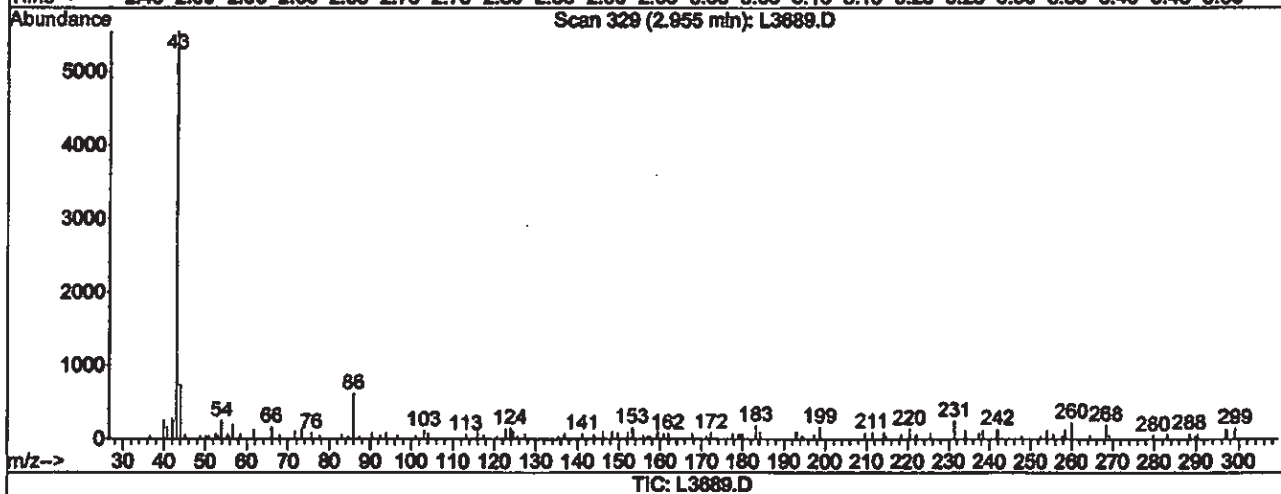
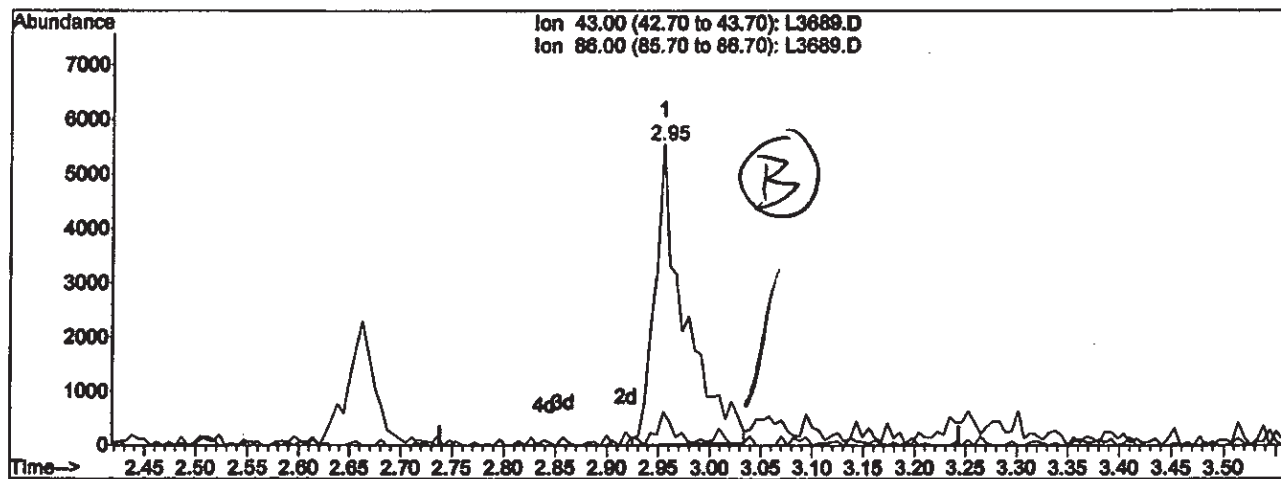
response 3094

Ion	Exp%	Act%
54.00	100	100
55.00	16.30	9.20
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3689.D Vial: 11
 Acq On : 19 Mar 2014 1:32 pm Operator: D.Lipani
 Sample : STD #2 - 1.0 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:14 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:12:40 2014
 Response via : Multiple Level Calibration



(29) Vinyl Acetate

2.95min 0.80ug/L

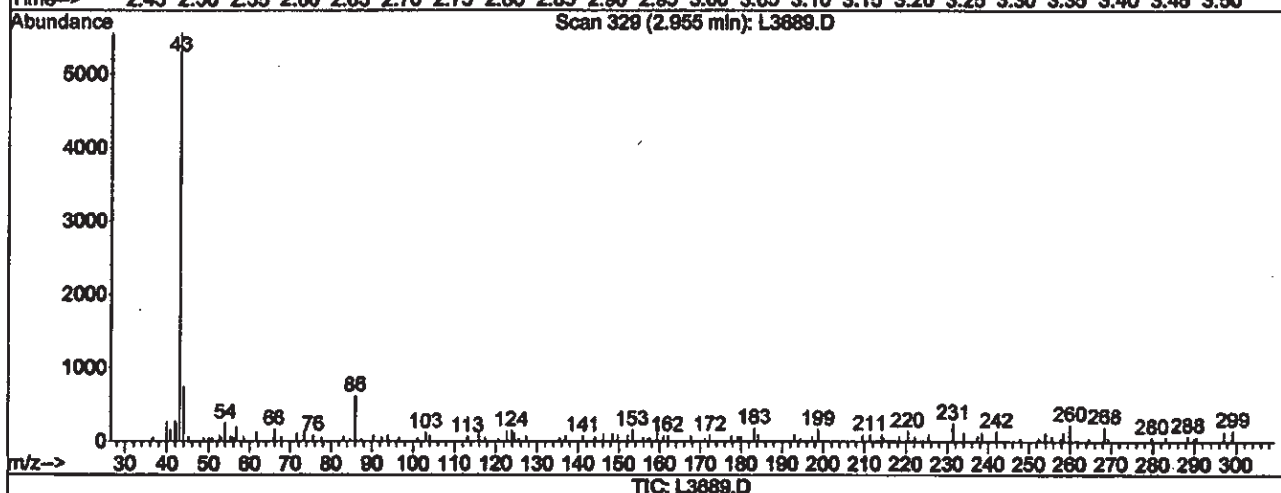
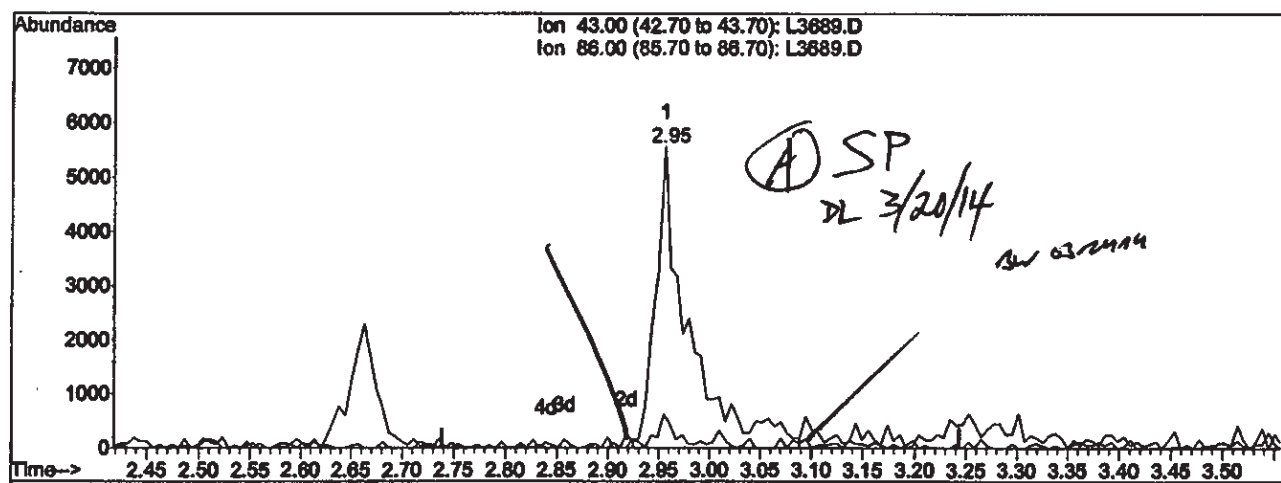
response 11228

Ion	Exp%	Act%
43.00	100	100
88.00	7.30	11.18
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3689.D Vial: 11
 Acq On : 19 Mar 2014 1:32 pm Operator: D.Lipani
 Sample : STD #2 - 1.0 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:15 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:12:40 2014
 Response via : Multiple Level Calibration



(28) Vinyl Acetate

2.95min 0.90ug/L m

response 12637

Ion	Exp%	Act%
43.00	100	100
88.00	7.30	11.19
0.00	0.00	0.00
0.00	0.00	0.00

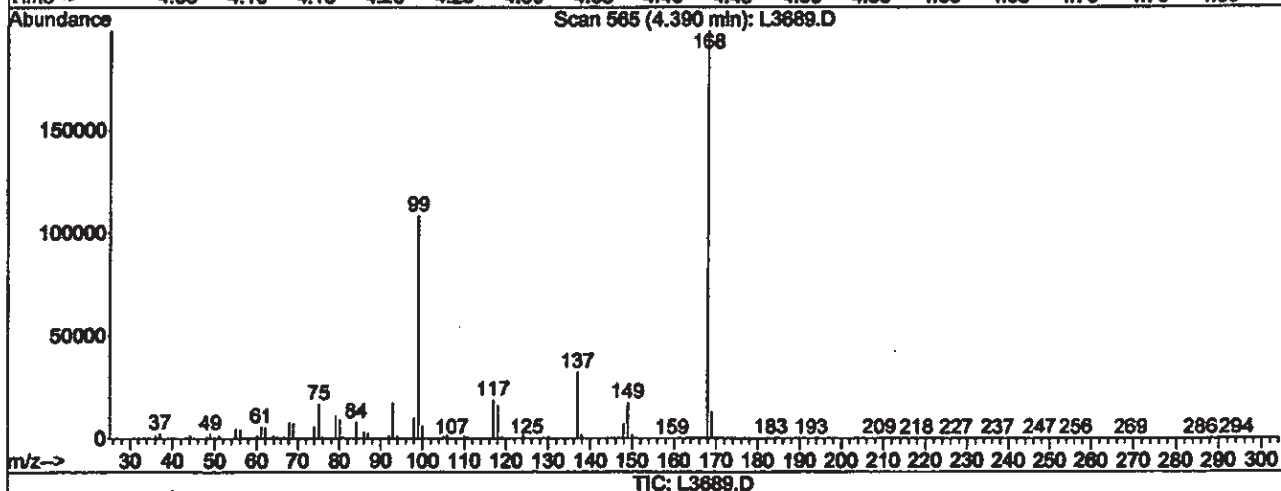
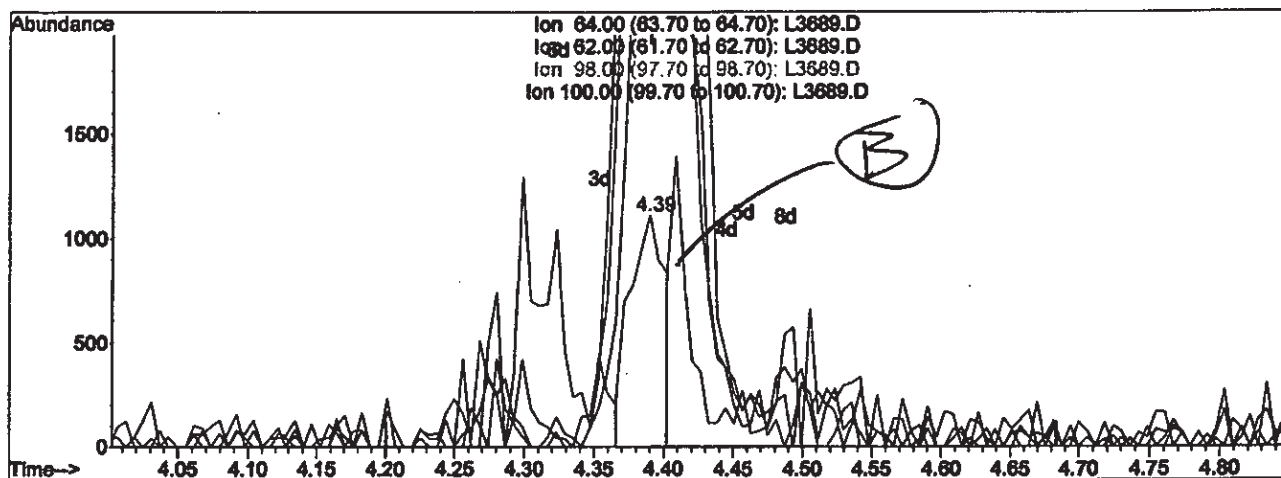
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3689.D
 Acq On : 19 Mar 2014 1:32 pm
 Sample : STD #2 - 1.0 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:16 2014

Vial: 11
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:12:40 2014
 Response via : Multiple Level Calibration



(43) 1,2-Dichloroethane (P)

4.39min 0.63ug/L

response 1920

Ion	Exp%	Act%
64.00	100	100
62.00	299.50	502.52#
98.00	41.10	905.69#
100.00	28.80	563.60#

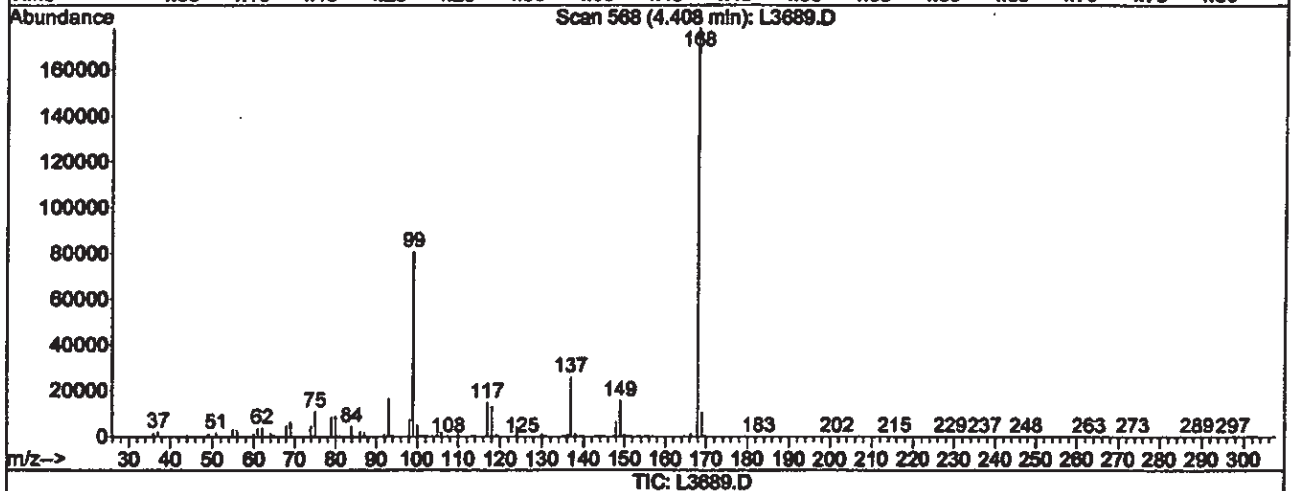
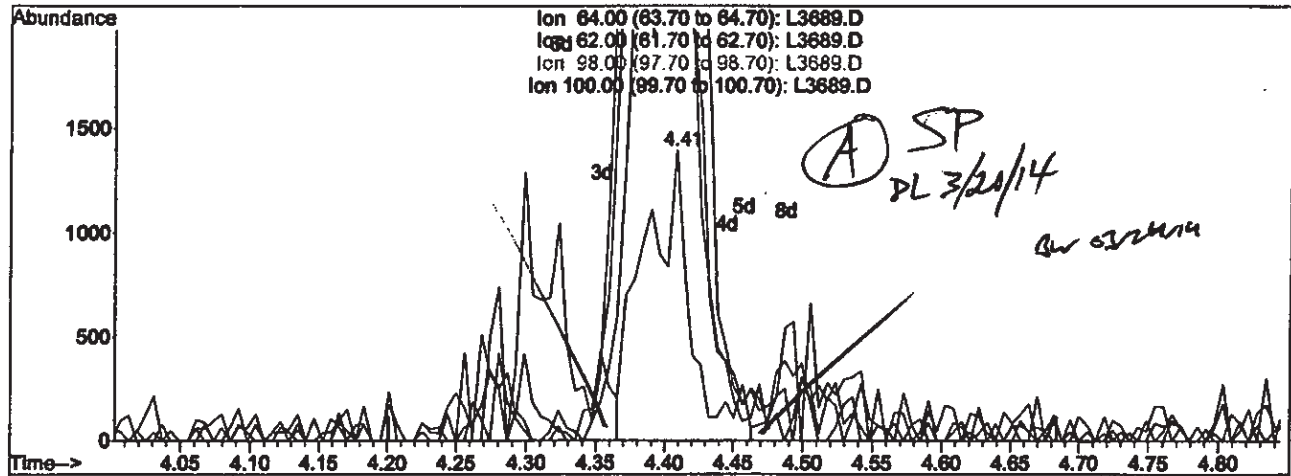
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3689.D
 Acq On : 19 Mar 2014 1:32 pm
 Sample : STD #2 - 1.0 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:16 2014

Vial: 11
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:12:40 2014
 Response via : Multiple Level Calibration



(43) 1,2-Dichloroethane (P)

4.41min 1.09ug/L m

response 3325

Ion	Exp%	Act%
64.00	100	100
62.00	299.50	283.98
98.00	41.10	527.59#
100.00	28.80	367.67#

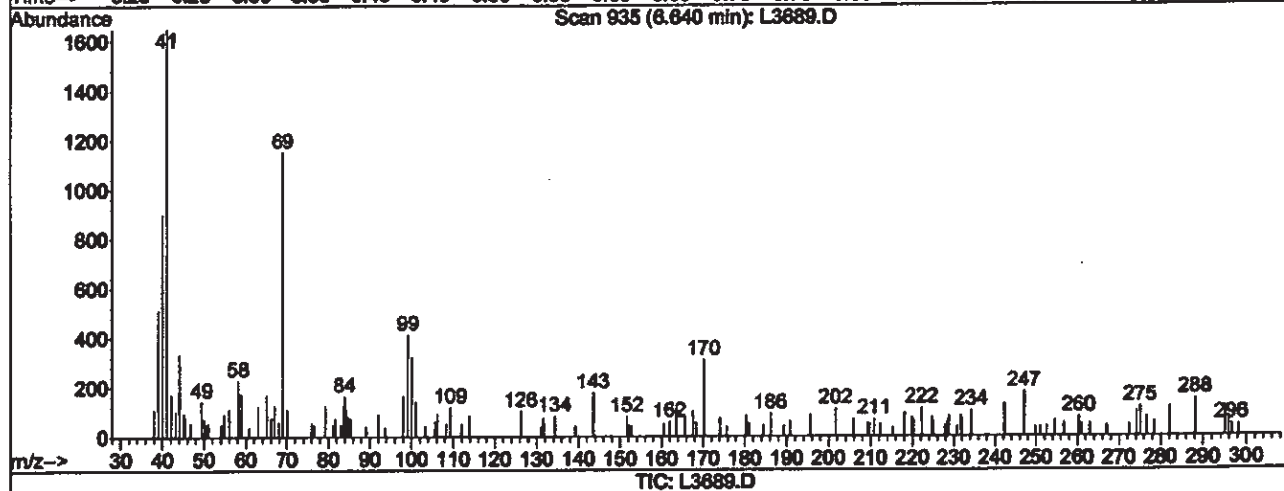
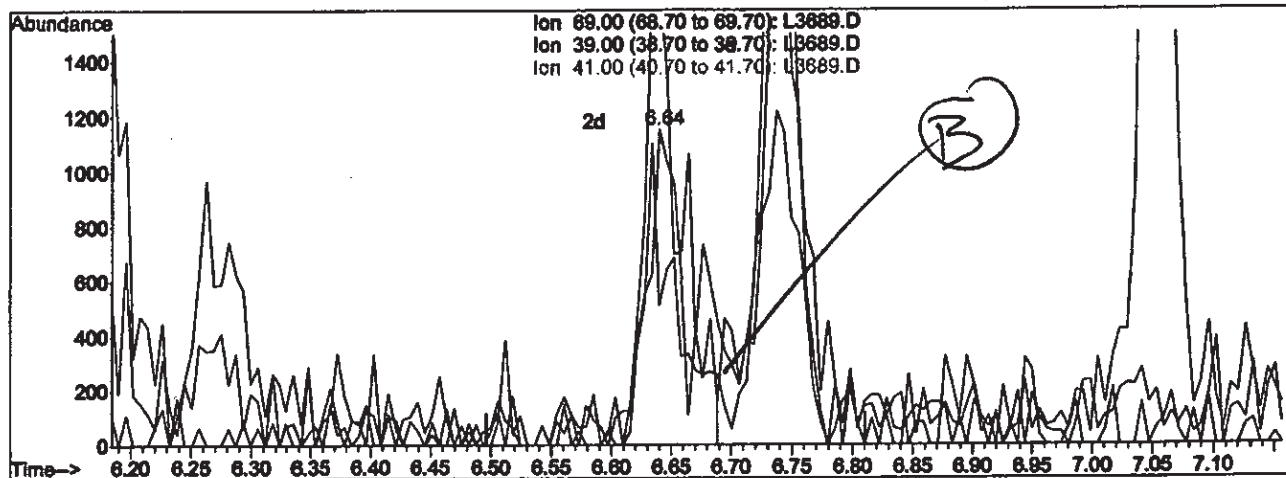
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3689.D
 Acq On : 19 Mar 2014 1:32 pm
 Sample : STD #2 - 1.0 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:17 2014

Vial: 11
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:12:40 2014
 Response via : Multiple Level Calibration



(55) Methyl Methacrylate

6.64min 0.73ug/L

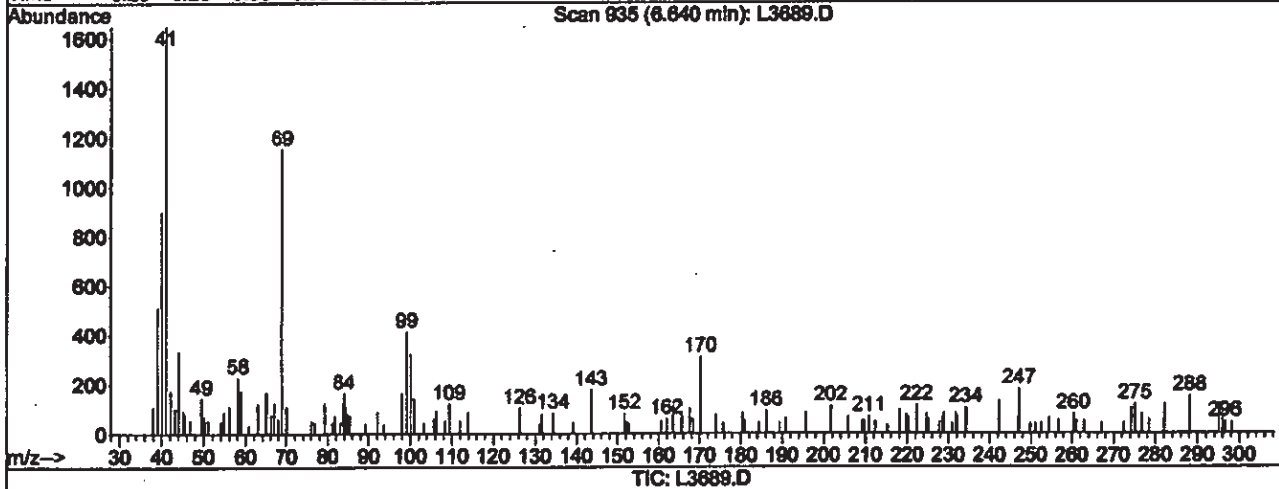
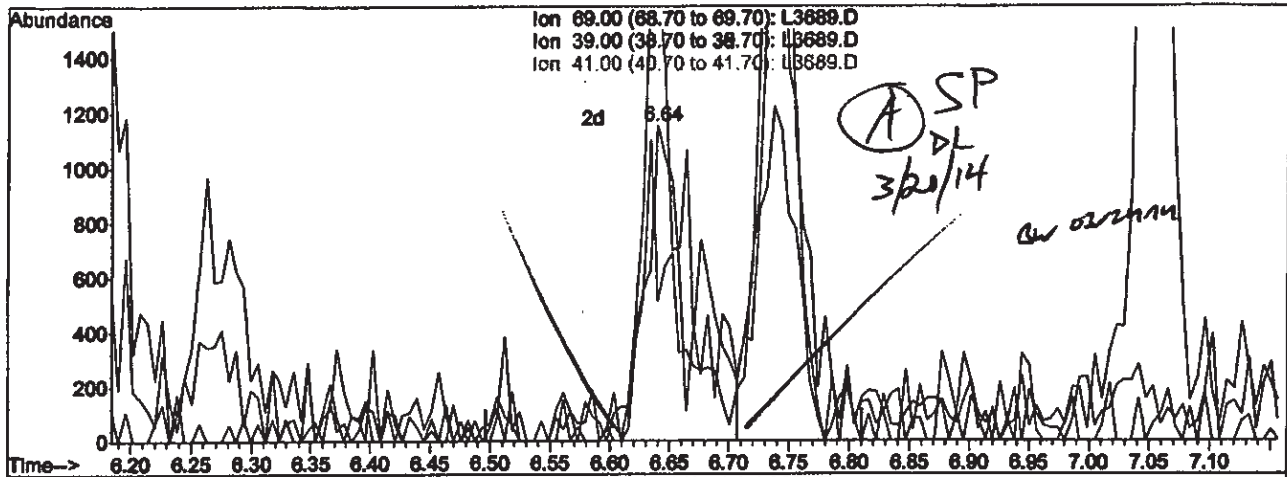
response 2475

Ion	Exp%	Act%
69.00	100	100
39.00	73.10	44.41#
41.00	138.60	143.02
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3689.D Vial: 11
 Acq On : 19 Mar 2014 1:32 pm Operator: D.Lipani
 Sample : STD #2 - 1.0 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:17 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:12:40 2014
 Response via : Multiple Level Calibration



(55) Methyl Methacrylate

6.64min 0.85ug/L m

response 2883

Ion	Exp%	Act%
69.00	100	100
39.00	73.10	44.41#
41.00	138.60	143.02
0.00	0.00	0.00

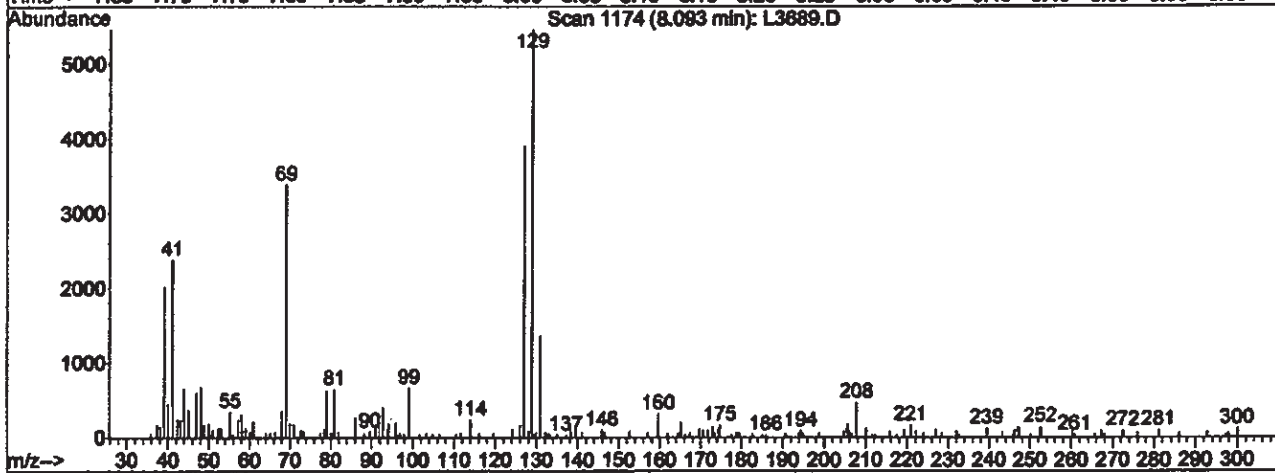
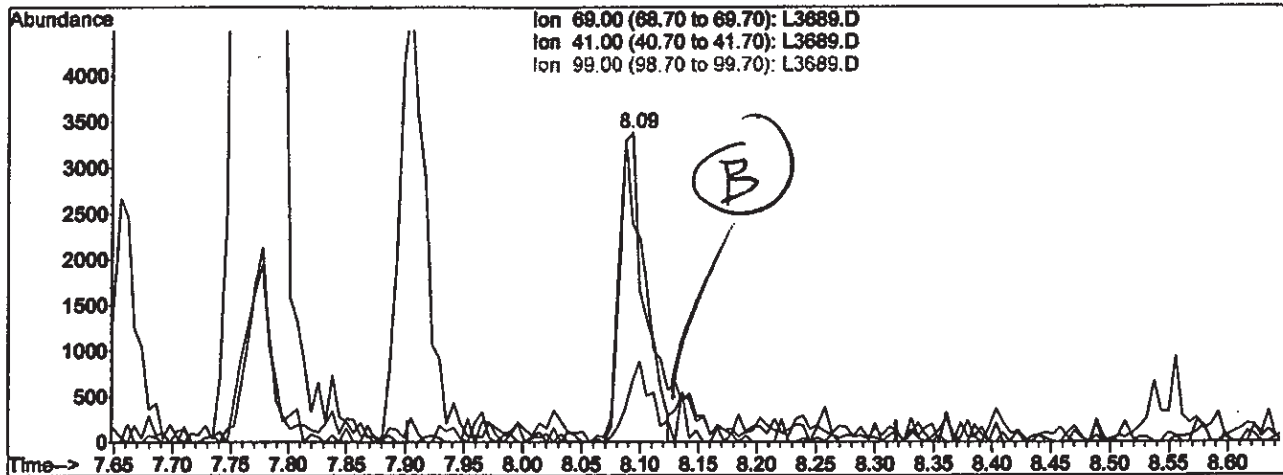
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3689.D
 Acq On : 19 Mar 2014 1:32 pm
 Sample : STD #2 - 1.0 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:17 2014

Vial: 11
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:12:40 2014
 Response via : Multiple Level Calibration



TIC: L3689.D

(66) Ethyl Methacrylate

8.09min 0.65ug/L

response 4919

Ion	Exp%	Act%
69.00	100	100
41.00	78.80	70.39
99.00	17.40	19.66
0.00	0.00	0.00

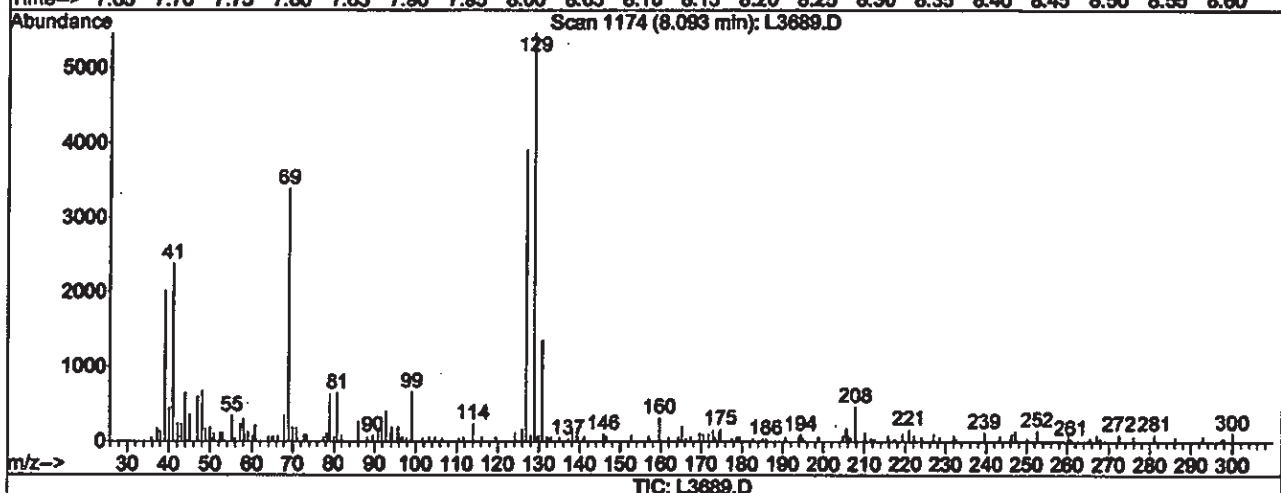
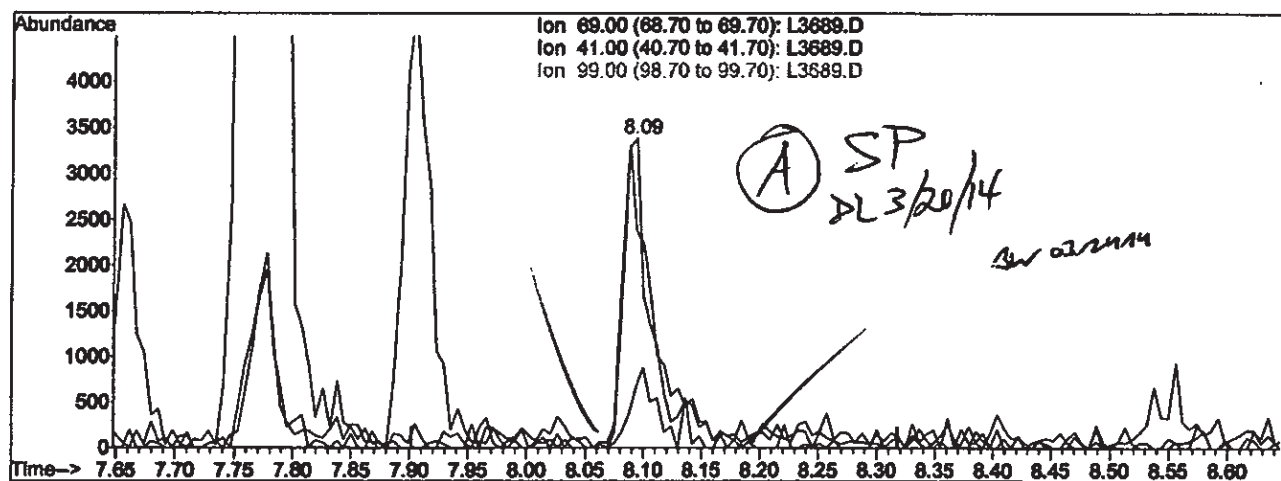
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3689.D
 Acq On : 19 Mar 2014 1:32 pm
 Sample : STD #2 - 1.0 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:19 2014

Vial: 11
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:12:40 2014
 Response via : Multiple Level Calibration



(66) Ethyl Methacrylate

8.09min 0.77ug/L m

response 5804

Ion	Exp%	Act%
69.00	100	100
41.00	78.80	70.39
99.00	17.40	19.66
0.00	0.00	0.00

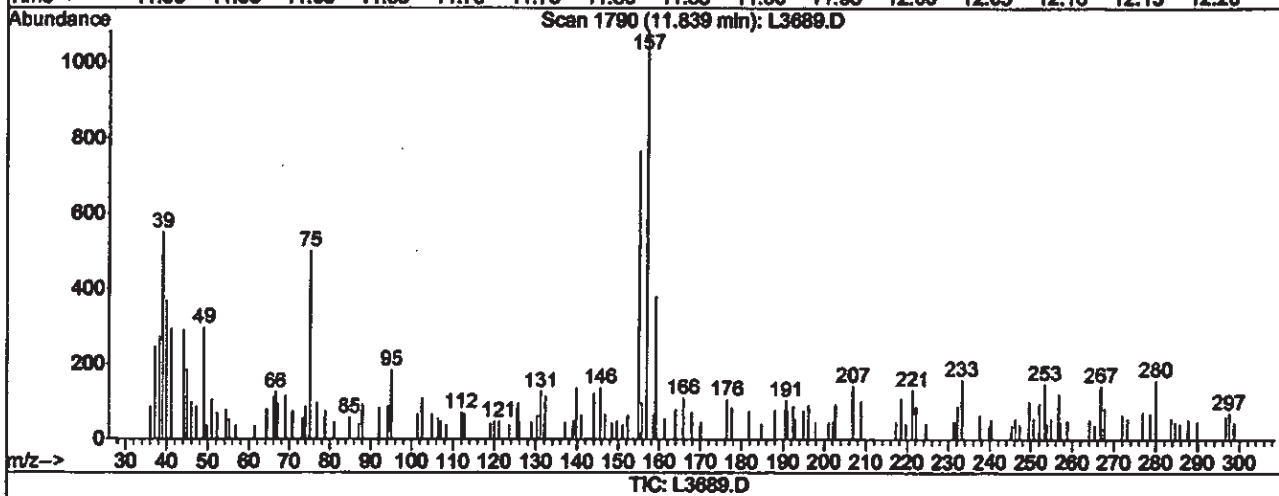
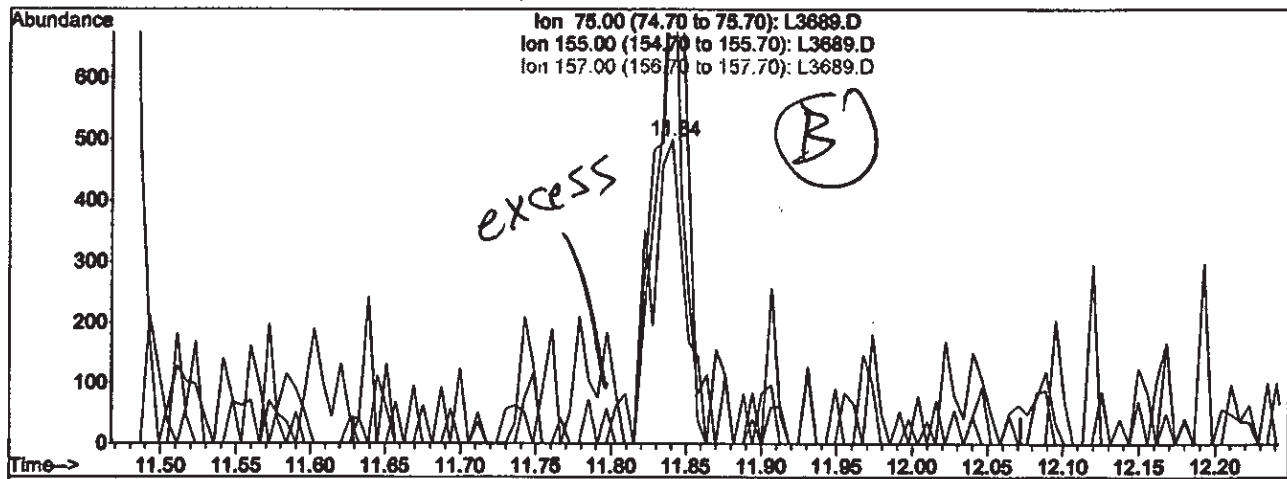
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3689.D
 Acq On : 19 Mar 2014 1:32 pm
 Sample : STD #2 - 1.0 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:19 2014

Vial: 11
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:12:40 2014
 Response via : Multiple Level Calibration



(99) 1,2-Dibromo-3-chloropropane (P)

11.84min 0.88ug/L

response 833

Ion	Exp%	Act%
75.00	100	100
155.00	94.40	134.09#
157.00	125.70	148.34#
0.00	0.00	0.00

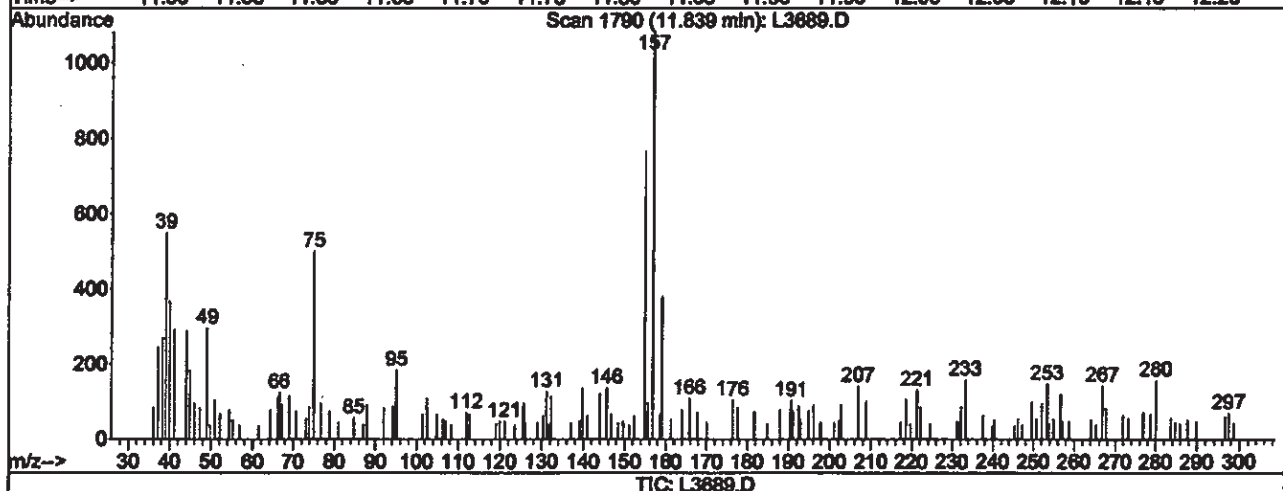
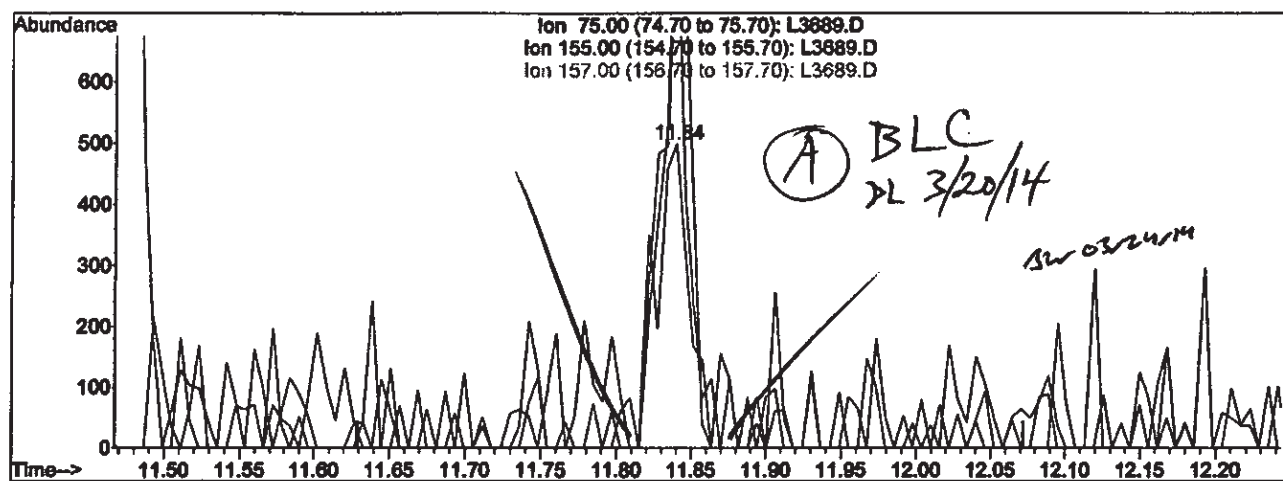
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3689.D
 Acq On : 19 Mar 2014 1:32 pm
 Sample : STD #2 - 1.0 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:21 2014

Vial: 11
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:12:40 2014
 Response via : Multiple Level Calibration



(99) 1,2-Dibromo-3-chloropropane (P)

11.84min 0.83ug/L m

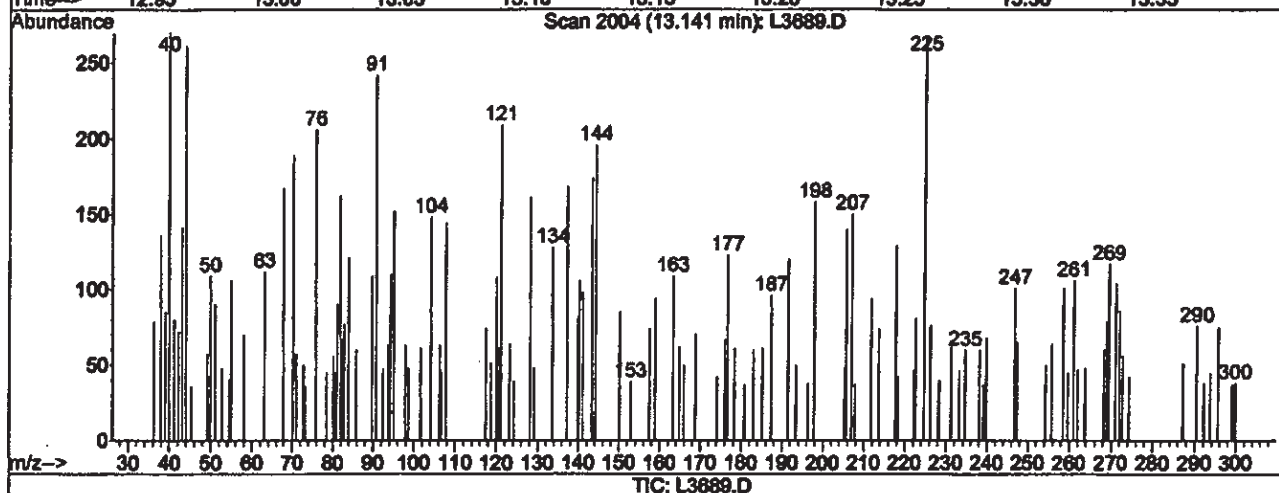
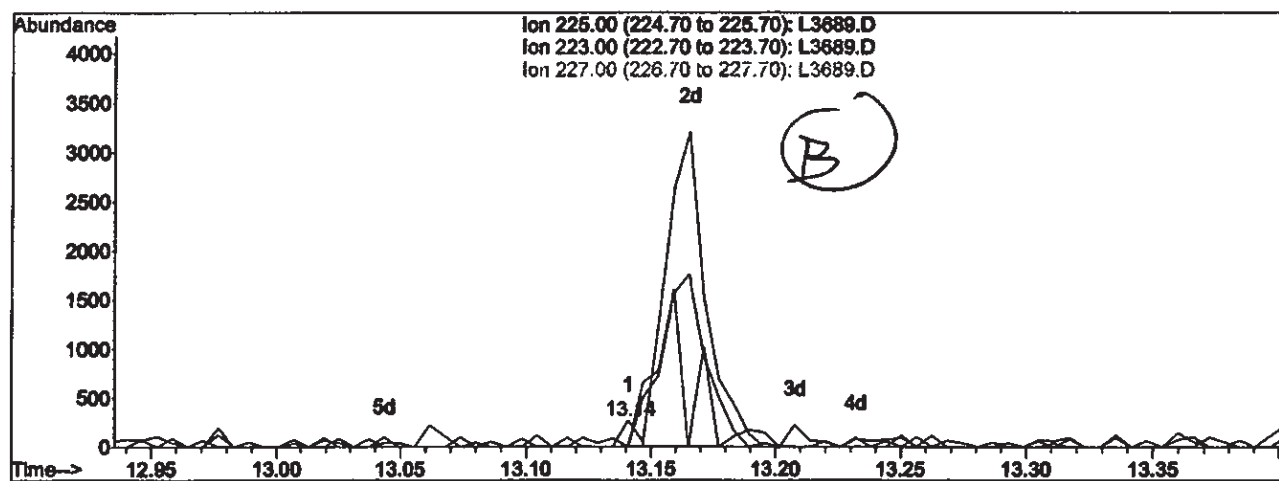
response 780

Ion	Exp%	Act%
75.00	100	100
155.00	94.40	143.21#
157.00	125.70	156.28#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3689.D Vial: 11
 Acq On : 19 Mar 2014 1:32 pm Operator: D.Lipani
 Sample : STD #2 - 1.0 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:21 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:12:40 2014
 Response via : Multiple Level Calibration



(103) Hexachlorobt

13.14min 0.03ug/L

response 115

Ion	Exp%	Act%
225.00	100	100
223.00	63.90	0.00#
227.00	67.00	967.83#
0.00	0.00	0.00

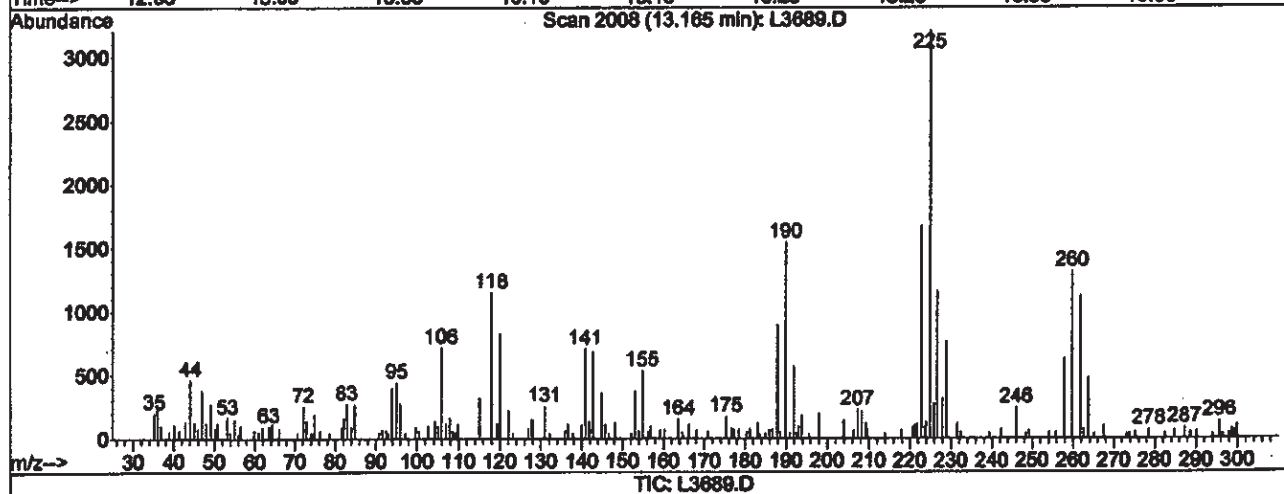
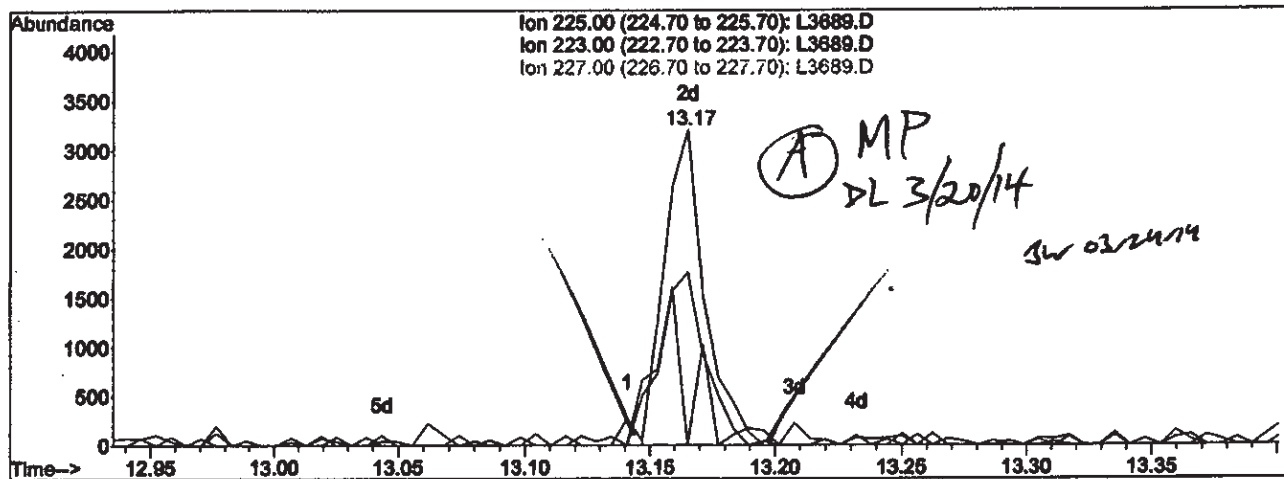
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3689.D
 Acq On : 19 Mar 2014 1:32 pm
 Sample : STD #2 - 1.0 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:21 2014

Vial: 11
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:12:40 2014
 Response via : Multiple Level Calibration



(103) Hexachlorobt

13.17min 0.99ug/L m

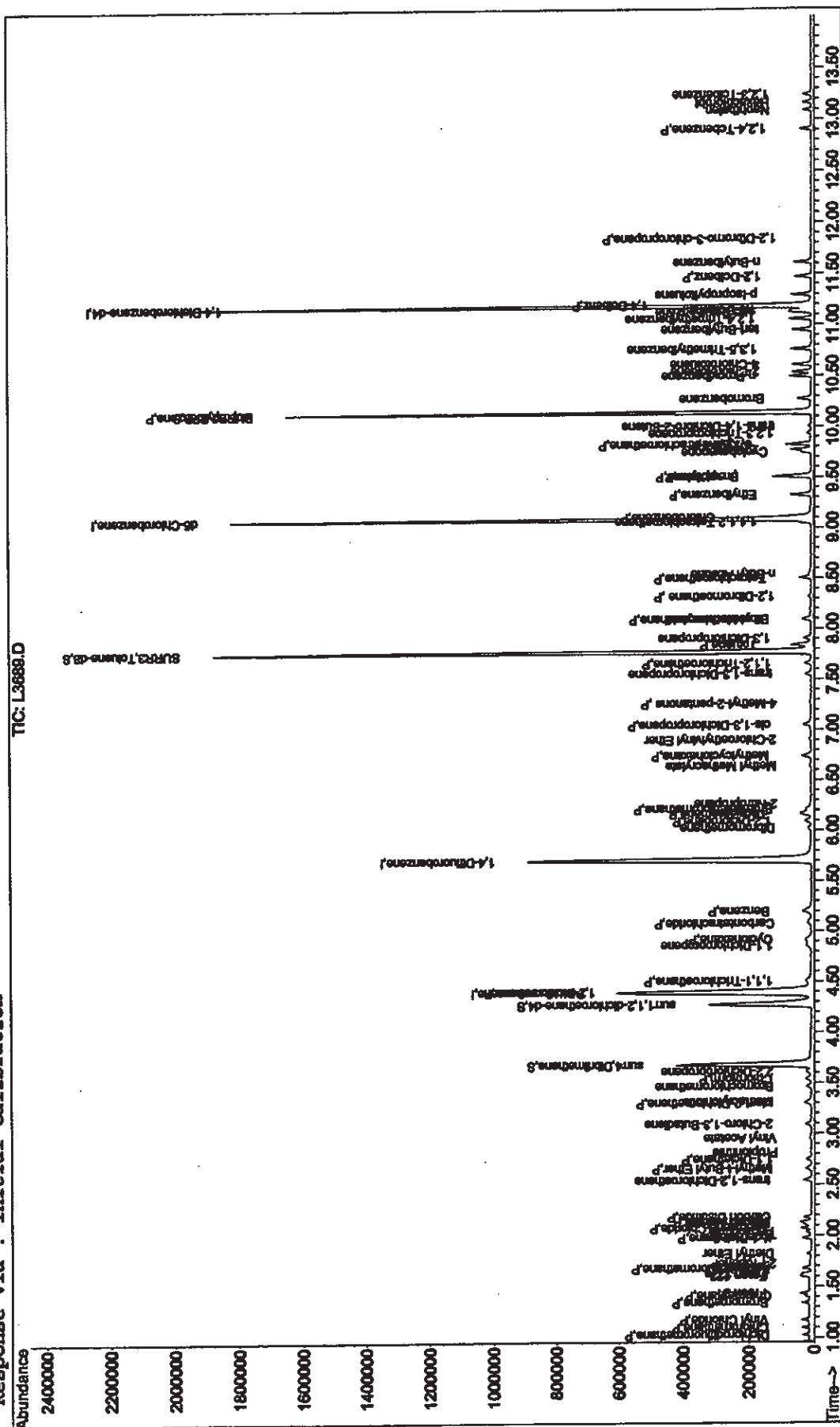
response 3803

Ion	Exp%	Act%
225.00	100	100
223.00	63.90	0.00#
227.00	67.00	30.89#
0.00	0.00	0.00

Quantitation Report

Data File : I:\ACQDATA\MSV0A6\DATA\031914\L3689.D Vial: 11
Acq On : 19 Mar 2014 1:32 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 20 14:21 2014 Quant Results File: W031914.RES

```
Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Thu Mar 20 14:12:40 2014
Response via : Initial Calibration
```



Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3690.D
 Acq On : 19 Mar 2014 2:02 pm
 Sample : STD #3 - 2.0 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:42 2014

Vial: 12
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:27:30 2014
 Response via : Initial Calibration
 DataAcq Meth : W031914

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.40	168	578043	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.71	114	839201	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.08	117	780093	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.18	152	396647	50.00	ug/L	0.00

System Monitoring Compounds

40) surr4, Dibrflmethane	3.68	113	283696	50.01	ug/L	0.00
Spiked Amount	50.000	Range 89 - 119	Recovery	=	100.02%	
42) surr1, 1,2-dichloroethane-d	4.28	65	275142	50.57	ug/L	0.00
Spiked Amount	50.000	Range 65 - 130	Recovery	=	101.14%	
62) SURR3, Toluene-d8	7.77	98	1042943	50.38	ug/L	0.00
Spiked Amount	50.000	Range 87 - 121	Recovery	=	100.76%	
82) SURR2, BFB	10.14	95	382294	47.02	ug/L	0.00
Spiked Amount	50.000	Range 85 - 122	Recovery	=	94.04%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.03	85	18555	2.03	ug/L	95
3) Chloromethane	1.10	50	21974	2.00	ug/L	99
4) Vinyl Chloride	1.17	62	19552	1.99	ug/L	96
5) Bromomethane	1.34	94	15049	2.22	ug/L	97
6) Chloroethane	1.41	64	11587	2.10	ug/L	93
7) Freon 21	1.43	67	34680	2.33	ug/L	94
8) Freon 123	1.60	83	25020	2.17	ug/L	97
9) Freon 123a	1.63	67	21181m	1.98	ug/L	
10) Acrolein	1.68	56	9273m	10.50	ug/L	
11) Trichlorofluoromethane	1.68	101	24647	2.05	ug/L	90
12) Acetonitrile	1.69	41	6924	9.46	ug/L	96
13) 2-Propanol	1.73	45	8553	37.55	ug/L	89
14) Acetone	1.77	43	4614	2.46	ug/L	79
15) Diethyl Ether	1.82	59	11301m	2.17	ug/L	
16) 1,1-Dicethene	1.97	96	13642	2.12	ug/L	95
17) Iodomethane	1.99	142	11017	1.88	ug/L	93
18) TBA	2.02	59	12500	35.70	ug/L	89
19) Acrylonitrile	2.04	53	17137	9.84	ug/L	100
20) Methylene Chloride	2.07	84	17659	2.03	ug/L	94
21) Freon 113	2.11	101	14502	2.01	ug/L	87
22) Methyl Acetate	2.13	43	7642	2.02	ug/L	92
23) Allyl Chloride	2.13	76	8442	2.08	ug/L	99
24) Carbon Disulfide	2.18	76	46939	2.09	ug/L	99
25) trans-1,2-Dichloroethene	2.55	96	16556	2.11	ug/L	98
26) Methyl-t-Butyl Ether	2.66	73	31456	2.02	ug/L	97
27) 1,1-Dicethene	2.75	63	29675	2.05	ug/L	92
28) Propionitrile	2.81	54	6653m	10.40	ug/L	
29) Vinyl Acetate	2.95	43	25968m	1.89	ug/L	
30) 2-Chloro-1,3-Butadiene	3.09	53	25338	2.00	ug/L	91
32) Methacrylonitrile	3.32	41	6160	1.79	ug/L	88
33) cis-1,2-Dichloroethene	3.30	96	18349	2.06	ug/L	91
34) Bromochloromethane	3.47	128	7811	1.98	ug/L #	86
35) Chloroform	3.54	83	29360	2.04	ug/L	95
36) 2,2-Dichloropropane	3.62	77	25136	2.15	ug/L	92
37) Tetrahydrofuran	3.97	42	3304m	2.17	ug/L	

DL 3/20/14

(#) = qualifier out of range (m) = manual integration
 L3690.D W031914.M Thu Mar 20 14:43:16 2014

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3690.D
 Acq On : 19 Mar 2014 2:02 pm
 Sample : STD #3 - 2.0 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:42 2014

Vial: 12
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:27:30 2014
 Response via : Initial Calibration
 DataAcq Meth : W031914

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 1,1,1-Trichloroethane	4.51	97	24389	2.01	ug/L	91
41) Iso-Butyl Alcohol	3.79	43	7002m	39.19	ug/L	
43) 1,2-Dichloroethane	4.40	64	5699	1.90	ug/L #	14
44) 1,1-Dichloropropene	4.86	75	21430	2.13	ug/L	88
45) Cyclohexane	4.92	56	27768	2.19	ug/L	92
46) Carbontetrachloride	5.08	119	19738	1.95	ug/L	87
47) Benzene	5.20	78	67323	2.13	ug/L	99
48) Dibromomethane	6.02	93	8926	2.13	ug/L	93
49) 1,2-Dichloropropane	6.09	63	18054	2.09	ug/L	94
50) n-Heptane	6.18	43	16110	1.90	ug/L	76
51) Trichloroethene	6.16	130	16783	1.94	ug/L	94
52) Bromodichloromethane	6.22	83	20336	1.92	ug/L	98
53) 2-Nitropropane	6.27	41	3767	3.22	ug/L #	58
54) 1,4-Dioxane	6.48	88	1490	43.36	ug/L #	60
55) Methyl Methacrylate	6.63	69	5725	1.72	ug/L #	69
56) Methylcyclohexane	6.74	55	19129	2.07	ug/L	99
57) 2-Chloroethylvinyl Ether	6.90	63	6319	1.70	ug/L	63
58) cis-1,3-Dichloropropene	7.05	75	23207	1.94	ug/L	95
59) 4-Methyl-2-pentanone	7.27	43	9587	1.83	ug/L	83
60) trans-1,3-Dichloropropene	7.55	75	19820	2.06	ug/L	96
61) 1,1,2-Trichloroethane	7.66	97	11563	1.97	ug/L	98
63) Toluene	7.84	91	73220	2.12	ug/L	99
65) 1,3-Dichloropropane	7.90	76	20138	2.03	ug/L	97
66) Ethyl Methacrylate	8.09	69	14151	1.91	ug/L	99
67) Dibromochloromethane	8.10	129	14887	1.88	ug/L	99
68) 2-Hexanone	8.18	43	5673	1.47	ug/L	95
69) 1,2-Dibromoethane	8.32	107	12121	2.01	ug/L	99
70) n-Butyl Acetate	8.54	43	16371	1.80	ug/L	90
71) Tetrachloroethene	8.51	164	14533	1.99	ug/L	98
72) 1,1,1,2-Tetrachloroethane	9.05	131	15469	1.87	ug/L	90
73) Chlorobenzene	9.11	112	45949	2.12	ug/L	98
74) Ethylbenzene	9.33	106	23679	1.98	ug/L #	84
75) Bromoform	9.50	173	8924	1.81	ug/L	86
76) (m+p)Xylene	9.50	106	58200	4.14	ug/L #	87
77) o-Xylene	9.83	106	29907	2.09	ug/L	97
78) Cyclohexanone	9.75	55	23289	37.94	ug/L	90
79) Styrene	9.77	104	45566	2.03	ug/L	98
80) trans-1,4-Dichloro-2-Buten	10.00	75	3499	1.67	ug/L	97
81) Isopropylbenzene	10.14	105	76211	2.13	ug/L	98
84) 1,1,2,2-Tetrachloroethane	9.82	83	14794	2.11	ug/L	96
85) 1,2,3-Trichloropropane	9.94	75	9018	1.96	ug/L	95
86) Bromobenzene	10.28	156	20901	2.17	ug/L	93
87) n-Propylbenzene	10.49	91	87535	2.20	ug/L	95
88) 2-Chlorotoluene	10.54	91	52095	2.07	ug/L	98
89) 4-Chlorotoluene	10.61	91	55648	2.13	ug/L	96
90) 1,3,5-Trimethylbenzene	10.76	105	55795	2.07	ug/L	99
91) tert-Butylbenzene	10.95	119	46570	2.13	ug/L	95
92) 1,2,4-Trimethylbenzene	11.05	105	56294	2.02	ug/L	98
93) sec-Butylbenzene	11.13	105	65544	2.05	ug/L	98
94) 1,3-Dichlorobenz	11.15	146	35977	2.10	ug/L	99

21 3/20/14

(#) = qualifier out of range (m) = manual integration
 L3690.D W031914.M Thu Mar 20 14:43:18 2014

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVQA6\DATA\031914\L3690.D Vial: 12
 Acq On : 19 Mar 2014 2:02 pm Operator: D.Lipani
 Sample : STD #3 - 2.0 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:42 2014 Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:27:30 2014
 Response via : Initial Calibration
 DataAcq Meth : W031914

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
95) 1,4-Dclbenz	11.20	146	34825	2.02 ug/L	90
96) p-Isopropyltoluene	11.29	119	54446	2.13 ug/L	97
97) 1,2-Dclbenz	11.47	146	32999	2.13 ug/L	94
98) n-Butylbenzene	11.61	91	48686	2.05 ug/L	97
99) 1,2-Dibromo-3-chloropropan	11.83	75	1954	2.12 ug/L	93
101) 1,2,4-Tcbenzene	12.91	180	15980	1.88 ug/L	94
102) Naphthalen	13.09	128	24671	1.89 ug/L	99
103) Hexachlorobt	13.16	225	6617	1.87 ug/L	97
104) 1,2,3-Tclbenzene	13.24	180	12734	1.98 ug/L	95

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3690.D

Vial: 12

Acq On : 19 Mar 2014 2:02 pm

Operator: D.Lipani

Sample : STD #3 - 2.0 PPB

Inst : MS#6

Misc : 8260C ICAL GCMS#6

Multiplr: 1.00

MS Integration Params: CPD4.P

Quant Time: Mar 20 14:35 2014

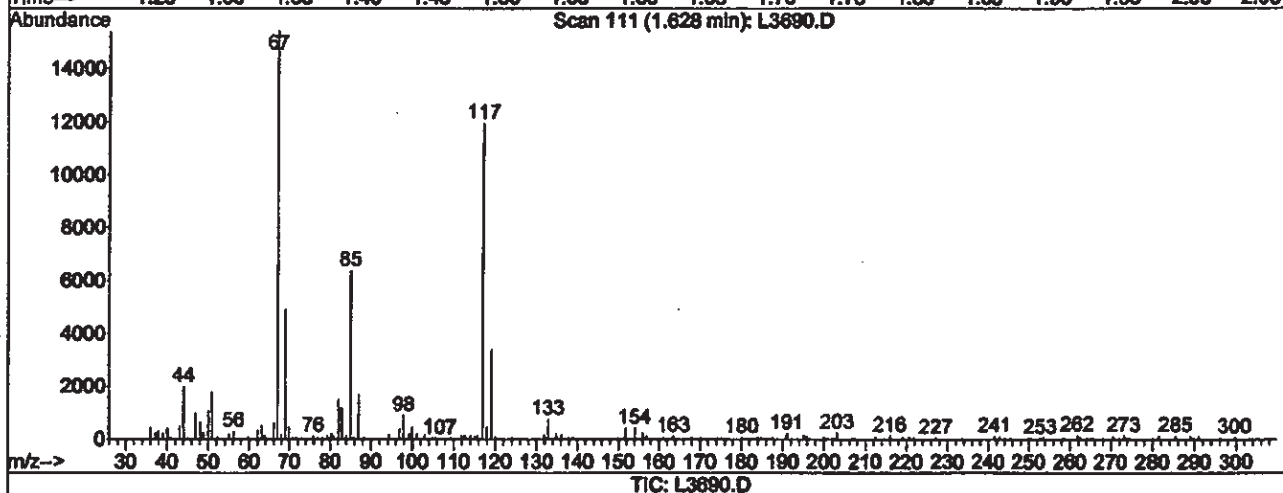
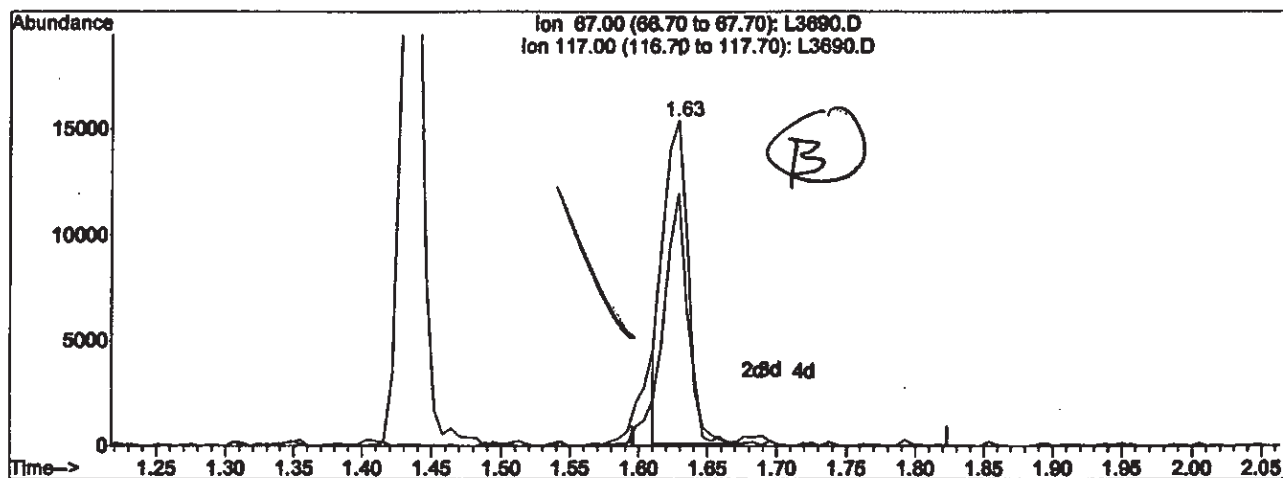
Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)

Title : 8260C WATERS

Last Update : Thu Mar 20 14:27:30 2014

Response via : Multiple Level Calibration



(9) Freon 123a

1.63min 1.78ug/L

response 19101

Ion	Exp%	Act%
67.00	100	100
117.00	64.10	77.59
0.00	0.00	0.00
0.00	0.00	0.00

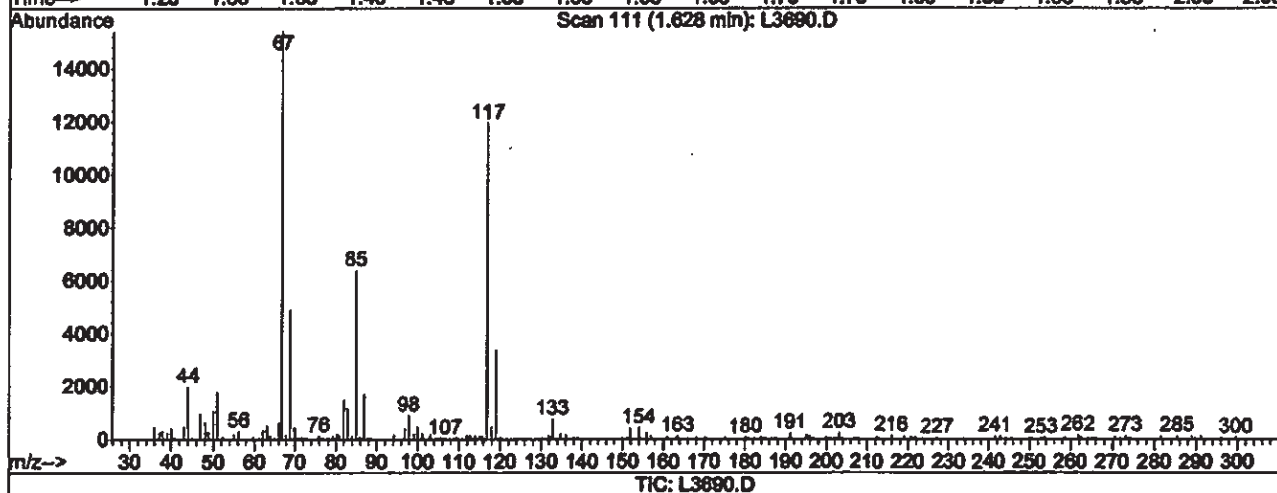
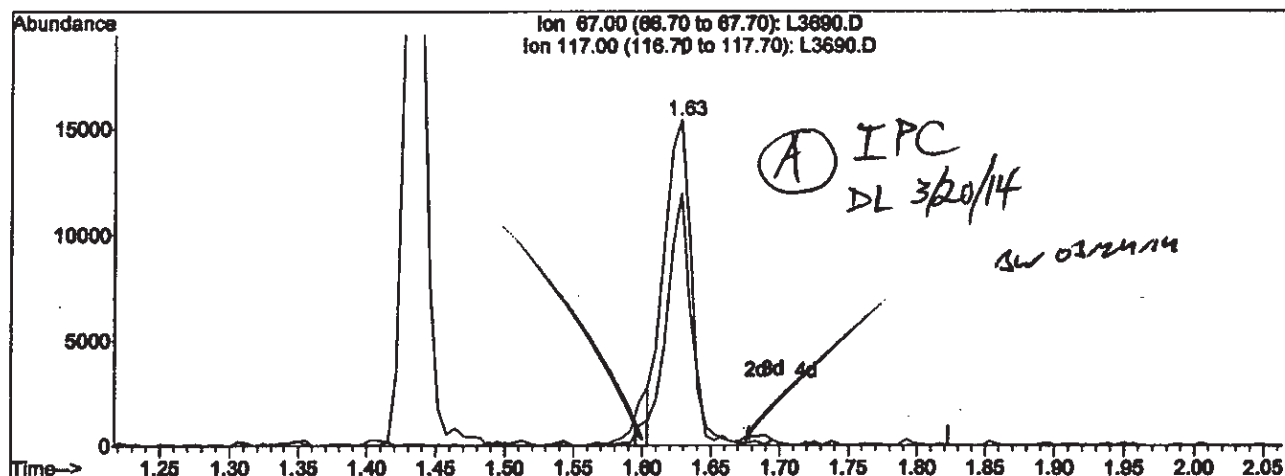
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3690.D
 Acq On : 19 Mar 2014 2:02 pm
 Sample : STD #3 - 2.0 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:29 2014

Vial: 12
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:27:30 2014
 Response via : Multiple Level Calibration



(8) Freon 123a

1.63min 1.98ug/L m

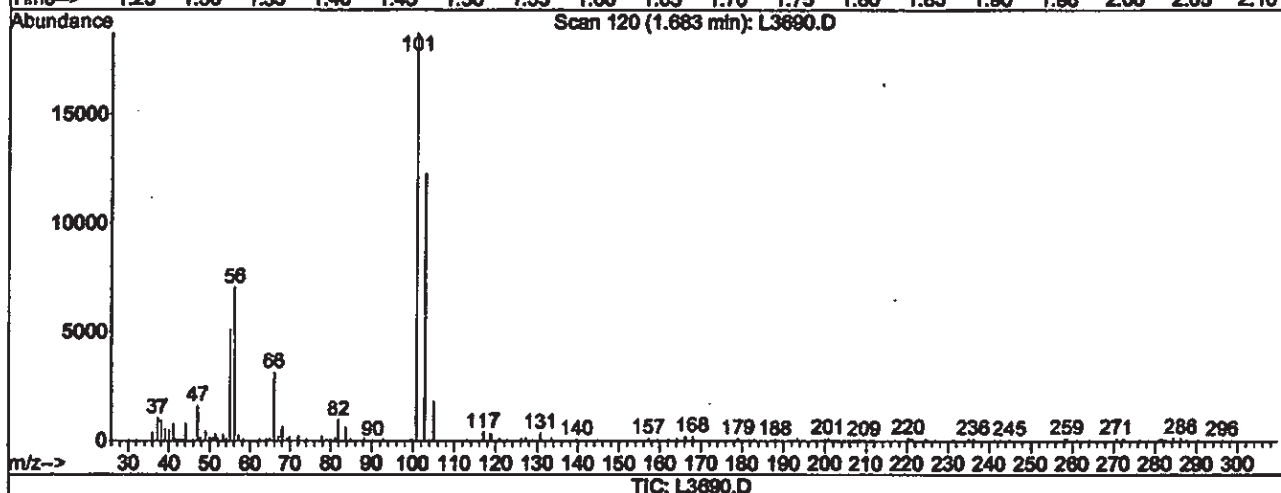
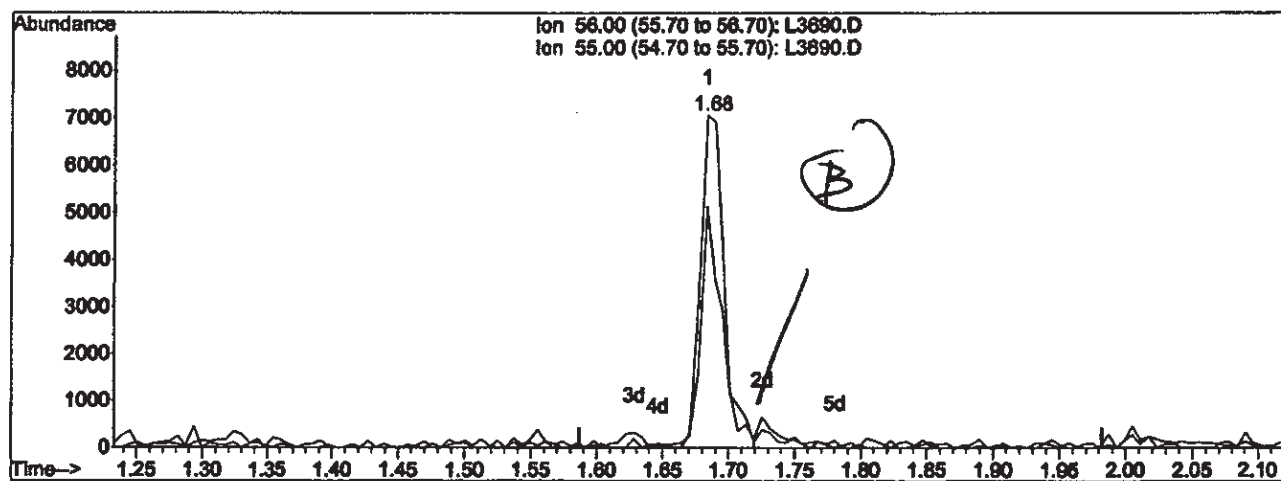
response 21181

Ion	Exp%	Act%
67.00	100	100
117.00	84.10	77.59
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3690.D Vial: 12
 Acq On : 19 Mar 2014 2:02 pm Operator: D.Lipani
 Sample : STD #3 - 2.0 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:29 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:27:30 2014
 Response via : Multiple Level Calibration



(10) Acrolein

1.68min 9.77ug/L

response 8626

Ion	Exp%	Act%
56.00	100	100
55.00	71.50	72.68
0.00	0.00	0.00
0.00	0.00	0.00

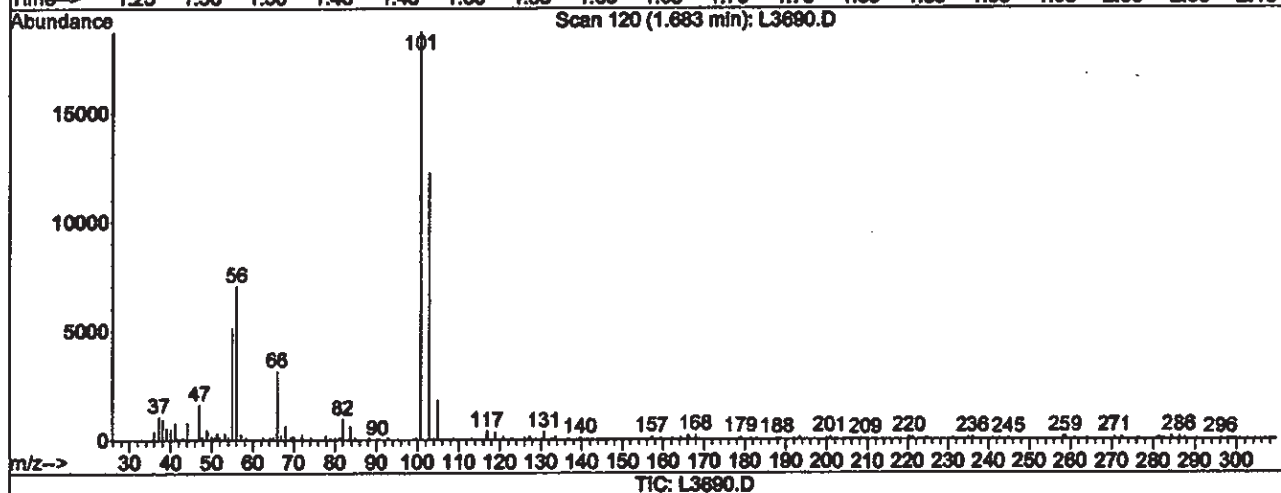
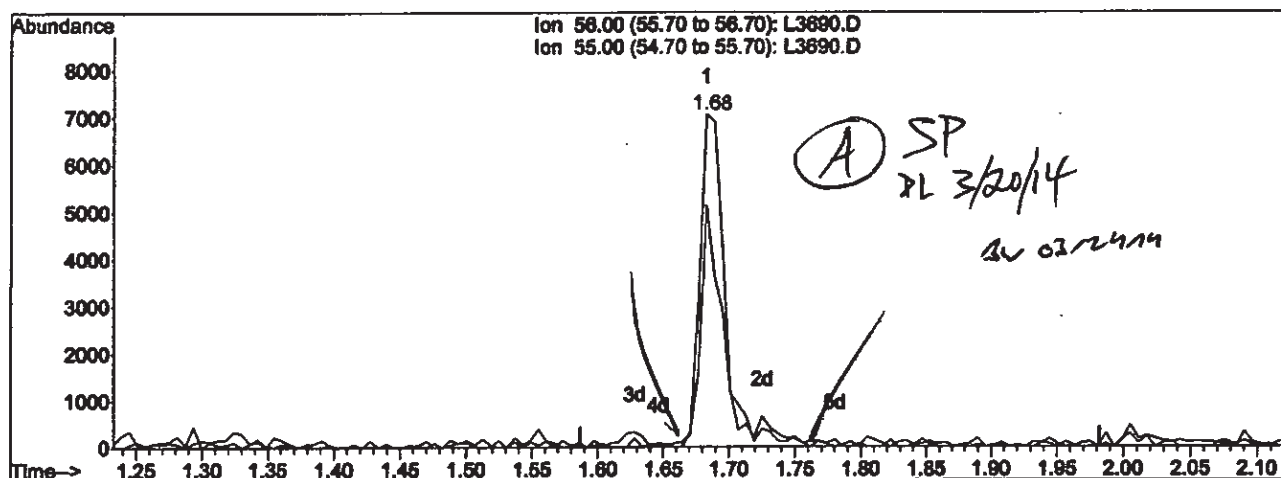
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3690.D
 Acq On : 19 Mar 2014 2:02 pm
 Sample : STD #3 - 2.0 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:30 2014

Vial: 12
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:27:30 2014
 Response via : Multiple Level Calibration



(10) Acrolein

1.68min 10.50ug/L m

response 9273

Ion	Exp%	Act%
58.00	100	100
55.00	71.50	72.68
0.00	0.00	0.00
0.00	0.00	0.00

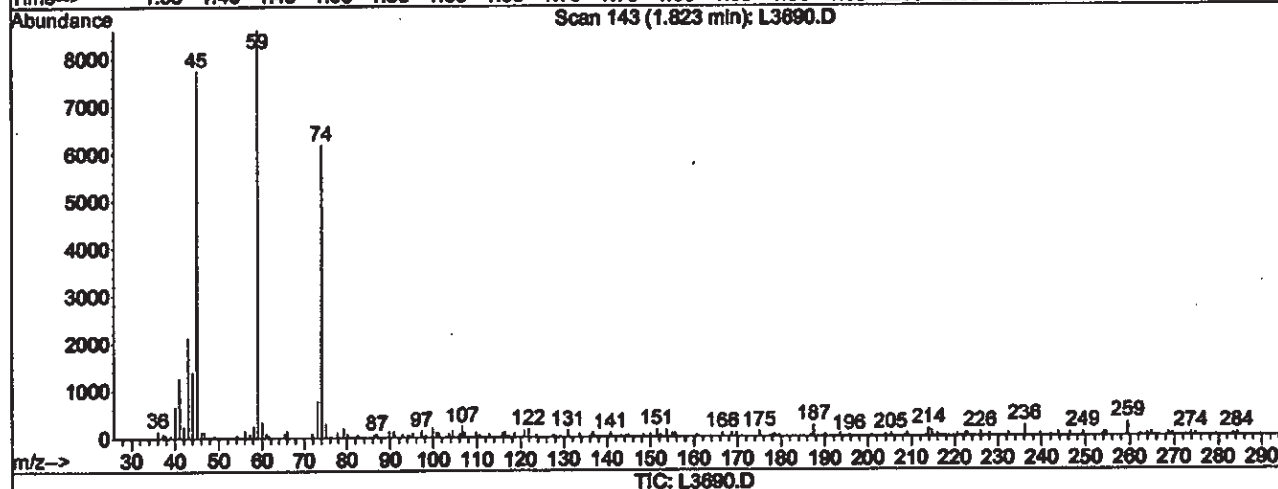
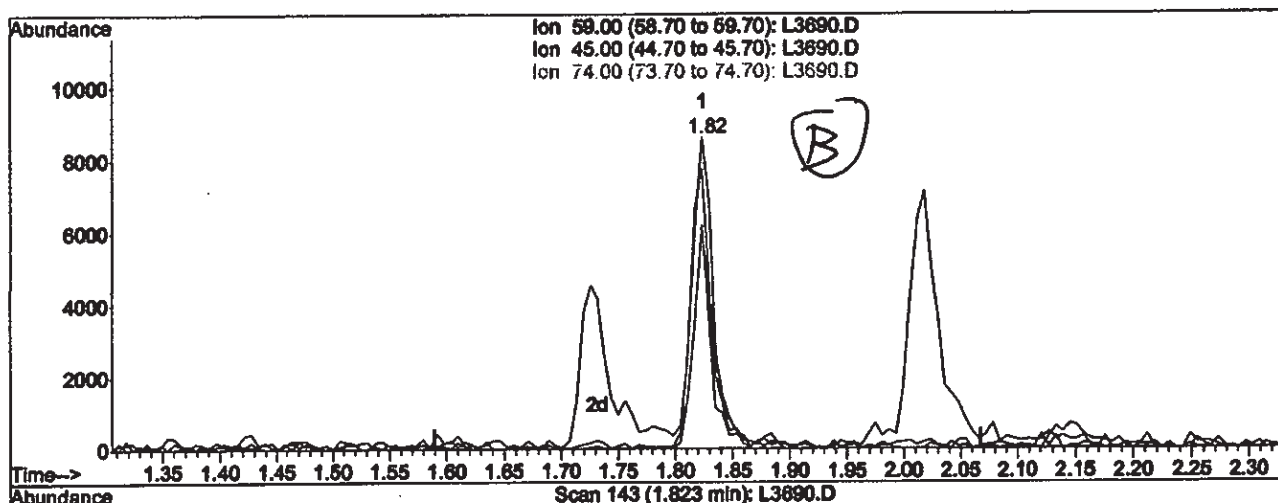
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3690.D
 Acq On : 19 Mar 2014 2:02 pm
 Sample : STD #3 - 2.0 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:30 2014

Vial: 12
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:27:30 2014
 Response via : Multiple Level Calibration



(15) Diethyl Ether

1.82min 2.22ug/L

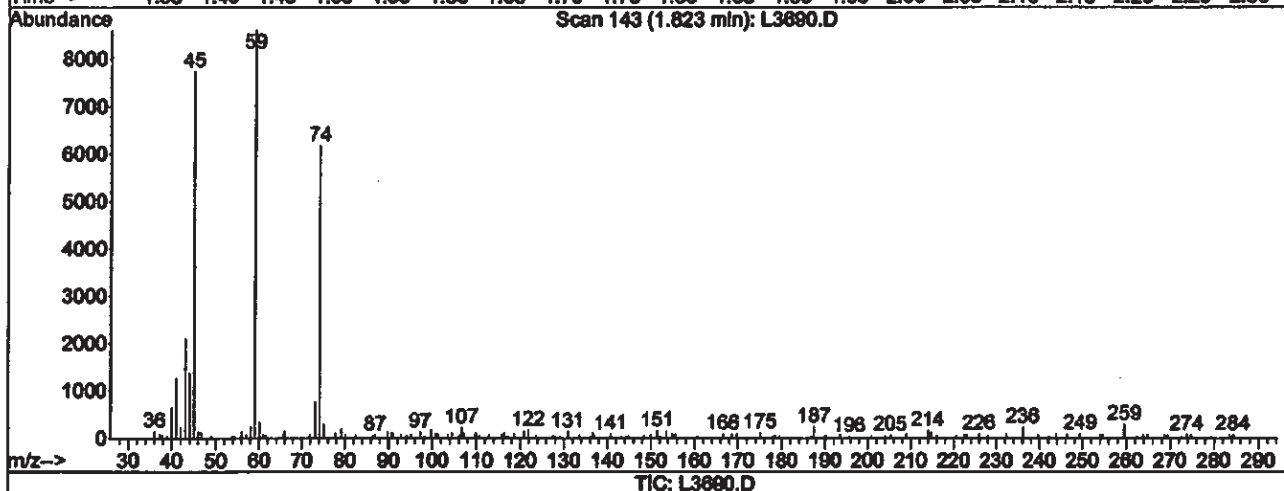
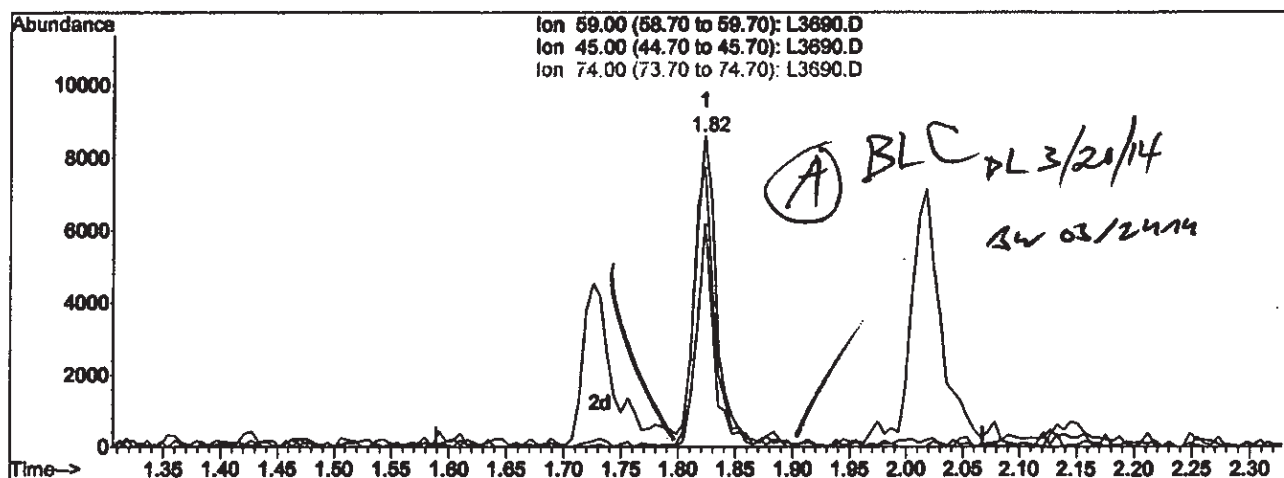
response 11538

Ion	Exp%	Act%
59.00	100	100
45.00	88.80	90.01
74.00	71.80	71.88
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3690.D Vial: 12
 Acq On : 19 Mar 2014 2:02 pm Operator: D.Lipani
 Sample : STD #3 - 2.0 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:31 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:27:30 2014
 Response via : Multiple Level Calibration



(15) Diethyl Ether

1.82min 2.17ug/L m

response 11301

Ion	Exp%	Act%
59.00	100	100
45.00	88.80	90.01
74.00	71.80	71.88
0.00	0.00	0.00

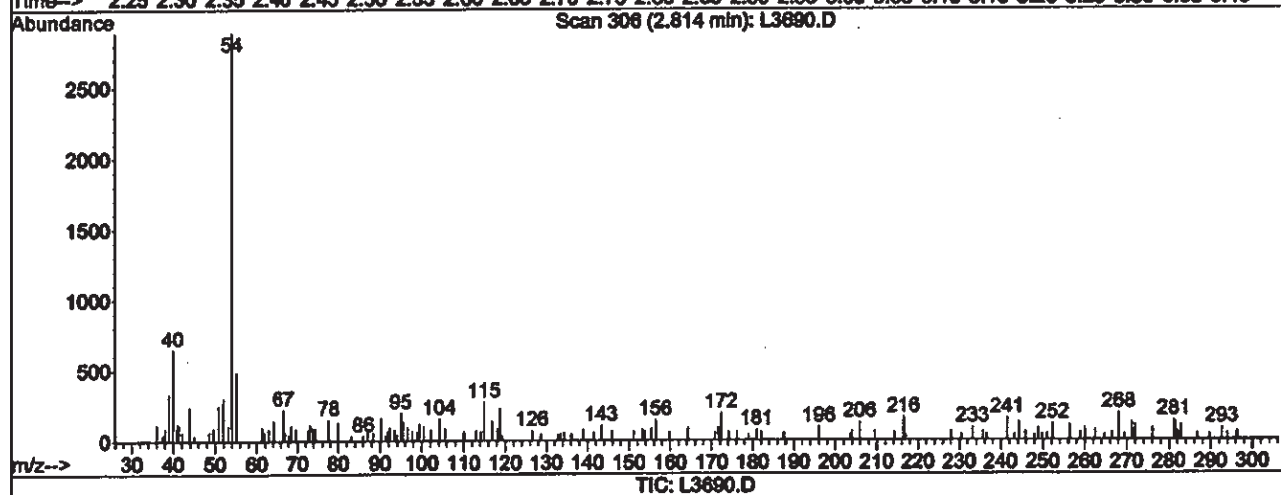
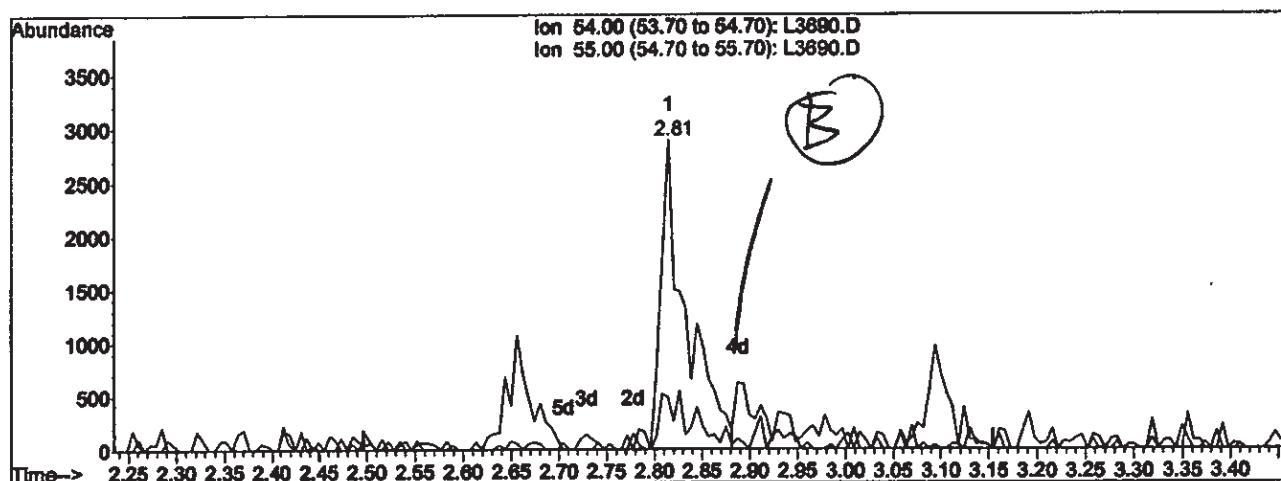
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3690.D
 Acq On : 19 Mar 2014 2:02 pm
 Sample : STD #3 - 2.0 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:31 2014

Vial: 12
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:27:30 2014
 Response via : Multiple Level Calibration



(28) Propionitrile

2.81min 8.33ug/L

response 5325

Ion	Exp%	Act%
54.00	100	100
55.00	15.30	16.88
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQDATA\MSVOA6\DATA\031914\L3690.D

Vial: 12

Acq On : 19 Mar 2014 2:02 pm

Operator: D.Lipani

Sample : STD #3 - 2.0 PPB

Inst : MS#6

Misc : 8260C ICAL GCMS#6

Multiplr: 1.00

MS Integration Params: CPD4.P

Quant Time: Mar 20 14:31 2014

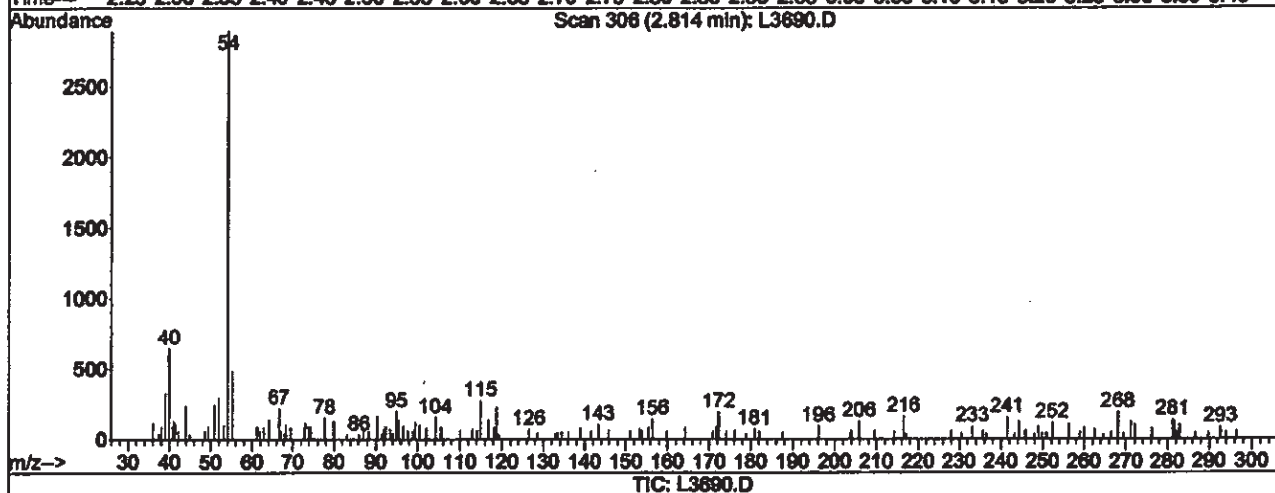
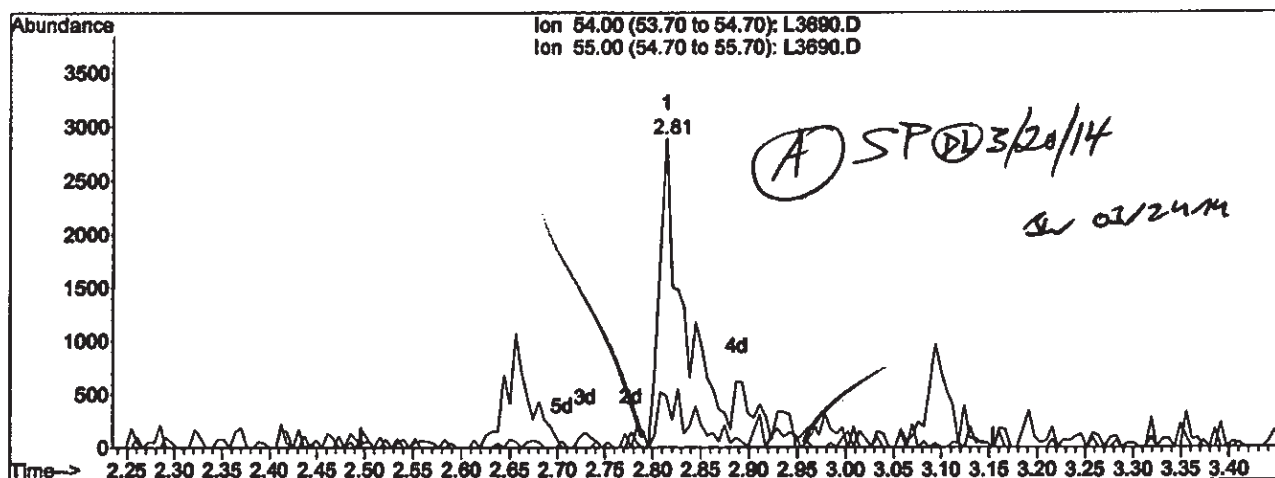
Quant Results File: temp.res

Method : I:\ACQDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)

Title : 8260C WATERS

Last Update : Thu Mar 20 14:27:30 2014

Response via : Multiple Level Calibration



(28) Propionitrile

2.81min 10.40ug/L m

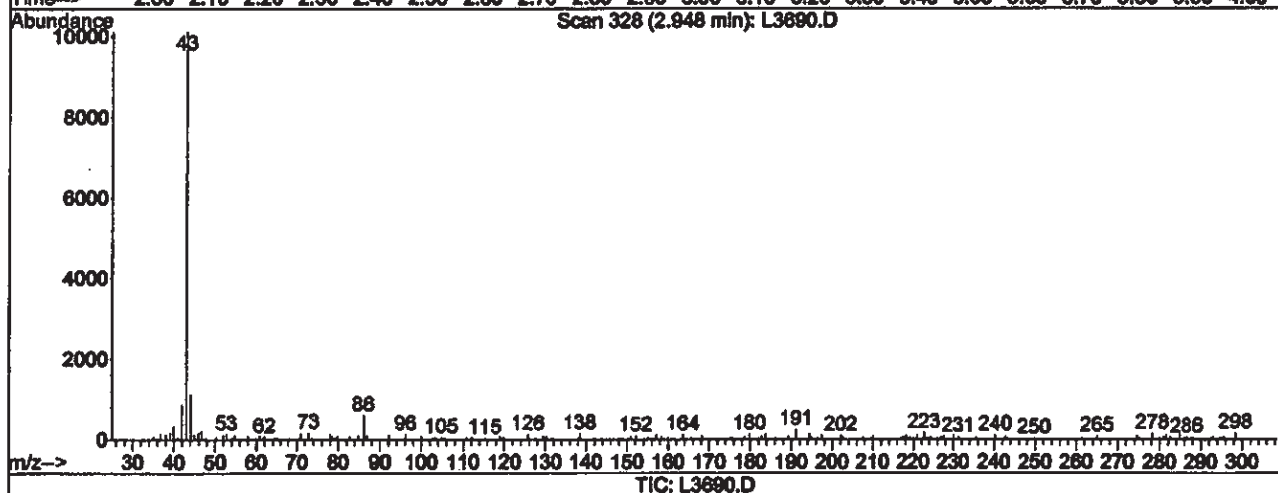
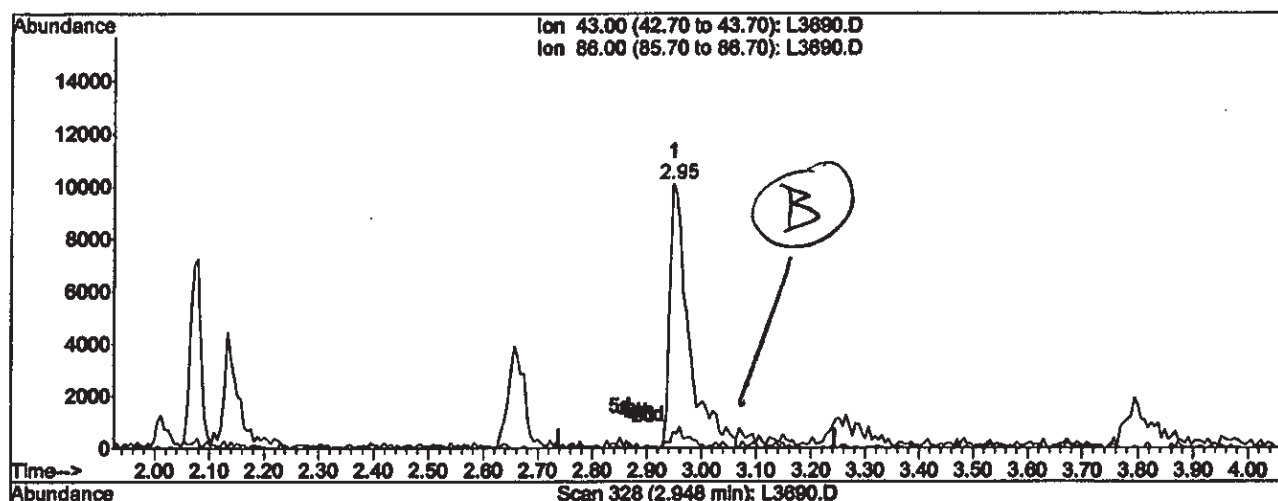
response 6653

Ion	Exp%	Act%
54.00	100	100
55.00	15.30	16.86
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3690.D Vial: 12
 Acq On : 19 Mar 2014 2:02 pm Operator: D.Lipani
 Sample : STD #3 - 2.0 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:31 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:27:30 2014
 Response via : Multiple Level Calibration



(29) Vinyl Acetate

2.95min 1.79ug/L

response 24631

Ion	Exp%	Act%
43.00	100	100
88.00	7.30	5.97
0.00	0.00	0.00
0.00	0.00	0.00

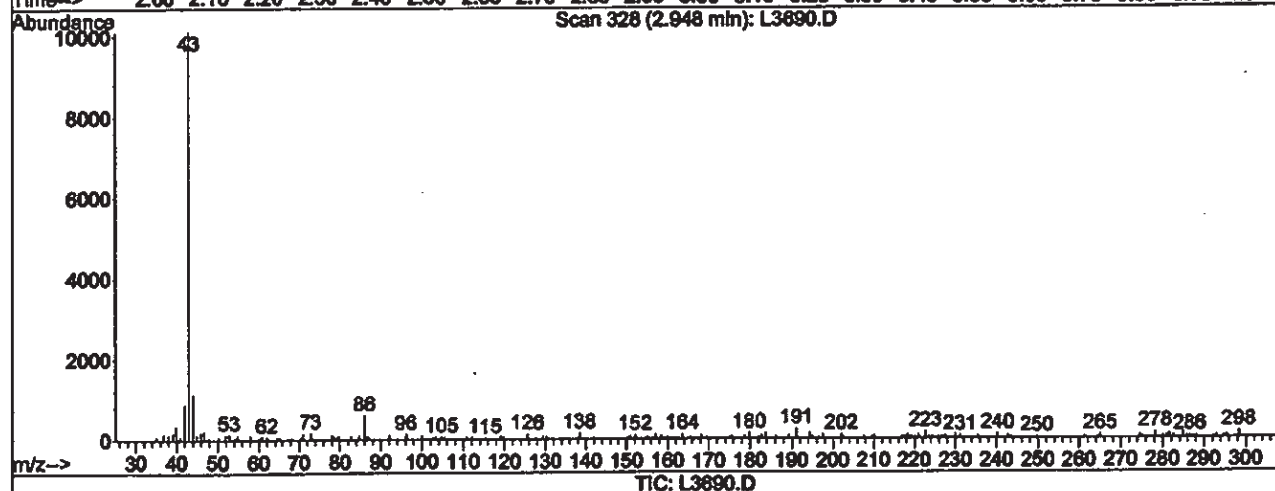
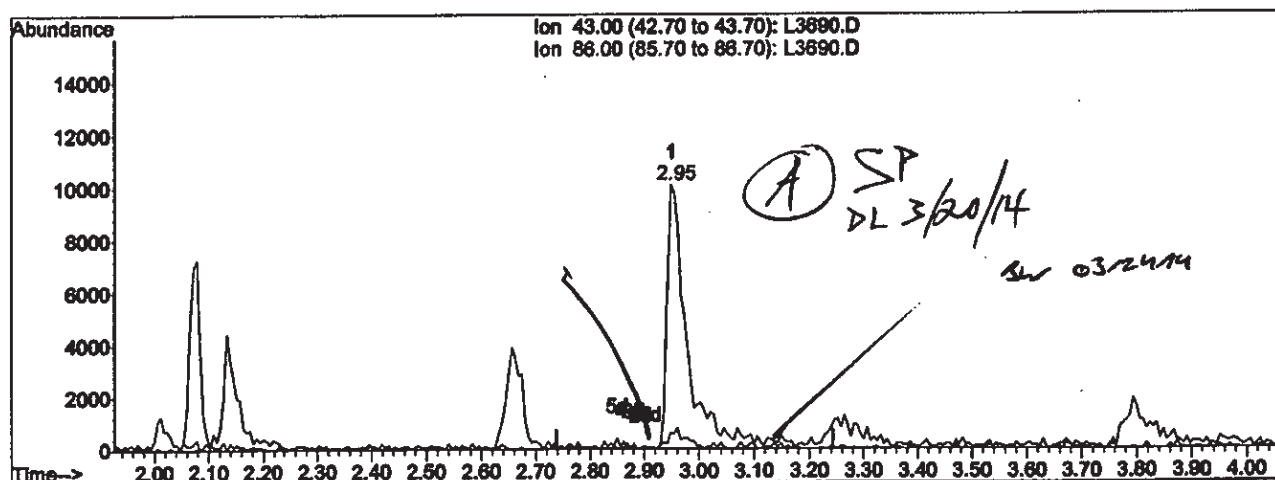
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3690.D
 Acq On : 19 Mar 2014 2:02 pm
 Sample : STD #3 - 2.0 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:38 2014

Vial: 12
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:27:30 2014
 Response via : Multiple Level Calibration



(29) Vinyl Acetate

2.95min 1.89ug/L m

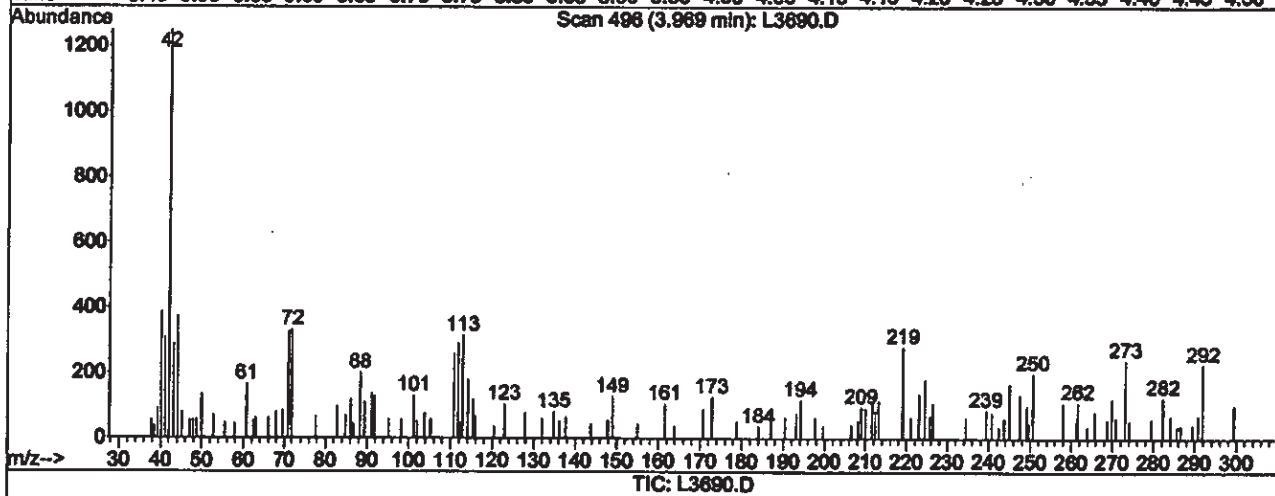
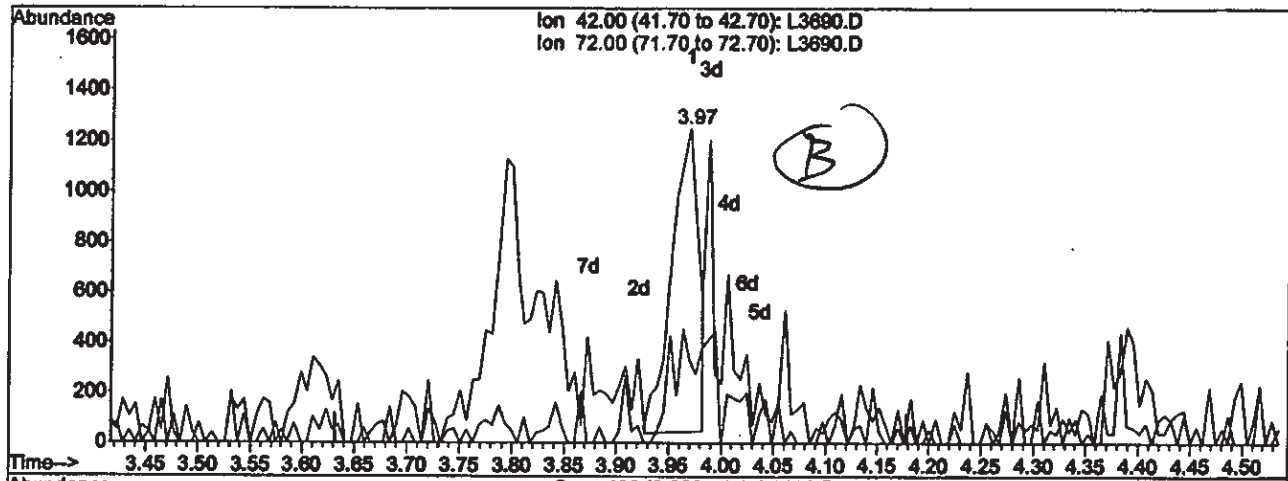
response 25968

Ion	Exp%	Act%
43.00	100	100
88.00	7.30	5.97
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3690.D Vial: 12
 Acq On : 19 Mar 2014 2:02 pm Operator: D.Lipani
 Sample : STD #3 - 2.0 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:38 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:27:30 2014
 Response via : Multiple Level Calibration



(37) Tetrahydrofuran

3.97min 1.41ug/L

response 2143

Ion	Exp%	Act%
42.00	100	100
72.00	34.60	26.64
0.00	0.00	0.00
0.00	0.00	0.00

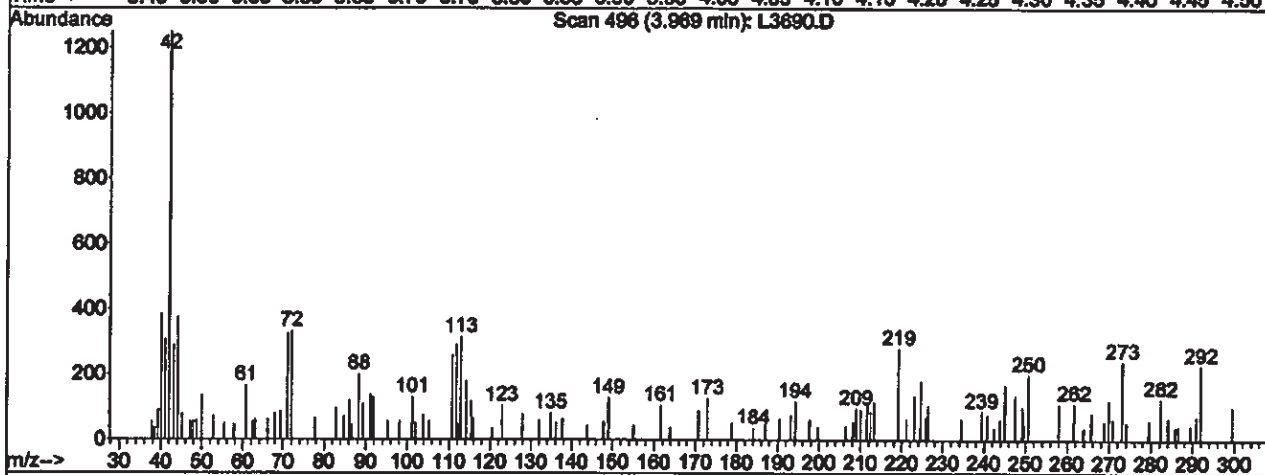
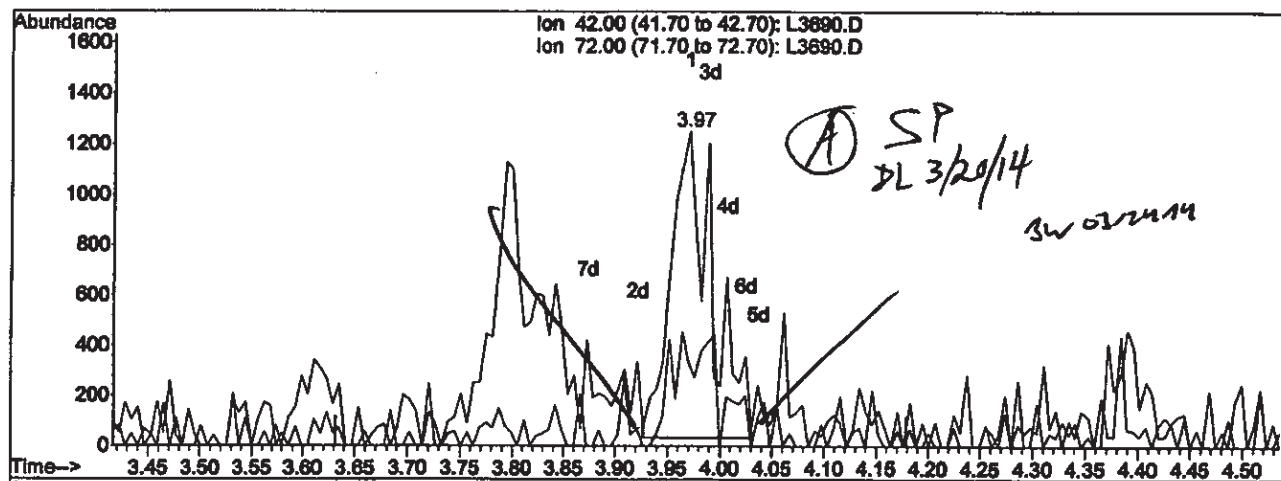
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3690.D
 Acq On : 19 Mar 2014 2:02 pm
 Sample : STD #3 - 2.0 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:39 2014

Vial: 12
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:27:30 2014
 Response via : Multiple Level Calibration



(37) Tetrahydrofuran

3.97min 2.17ug/L m

response 3304

Ion	Exp%	Act%
42.00	100	100
72.00	34.60	26.84
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3690.D

Vial: 12

Acq On : 19 Mar 2014 2:02 pm

Operator: D.Lipani

Sample : STD #3 - 2.0 PPB

Inst : MS#6

Misc : 8260C ICAL GCMS#6

Multiplr: 1.00

MS Integration Params: CPD4.P

Quant Time: Mar 20 14:39 2014

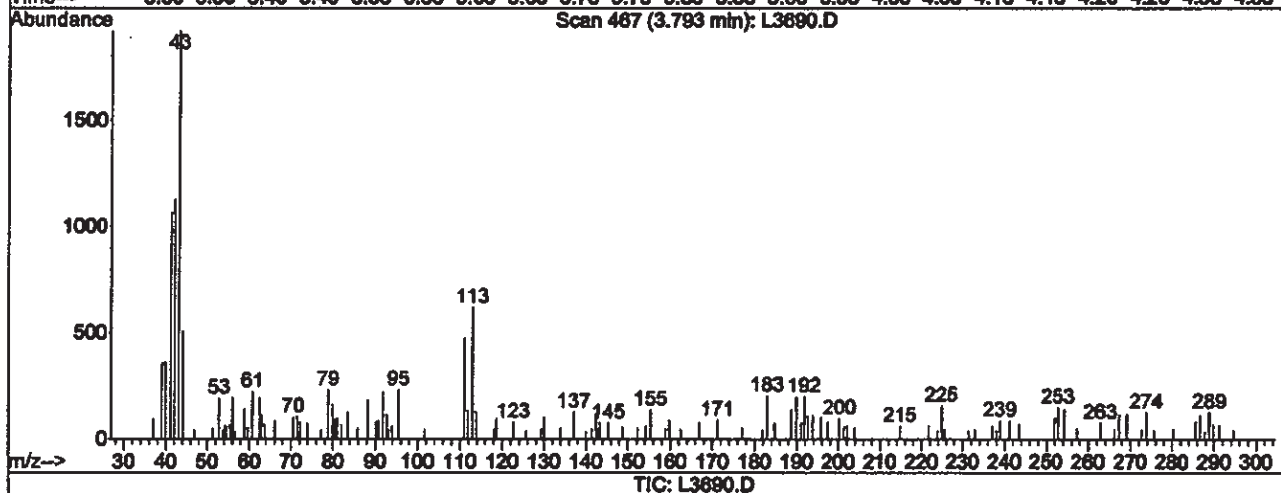
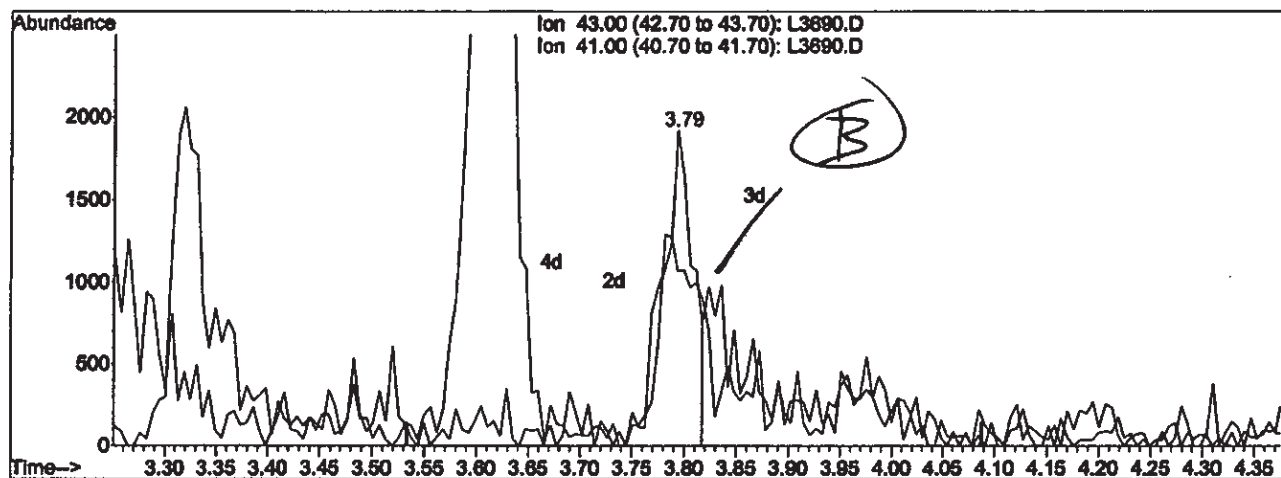
Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)

Title : 8260C WATERS

Last Update : Thu Mar 20 14:27:30 2014

Response via : Multiple Level Calibration



(41) Iso-Butyl Alcohol

3.79min 22.43ug/L

response 4008

Ion	Exp%	Act%
43.00	100	100
41.00	75.50	55.66
0.00	0.00	0.00
0.00	0.00	0.00

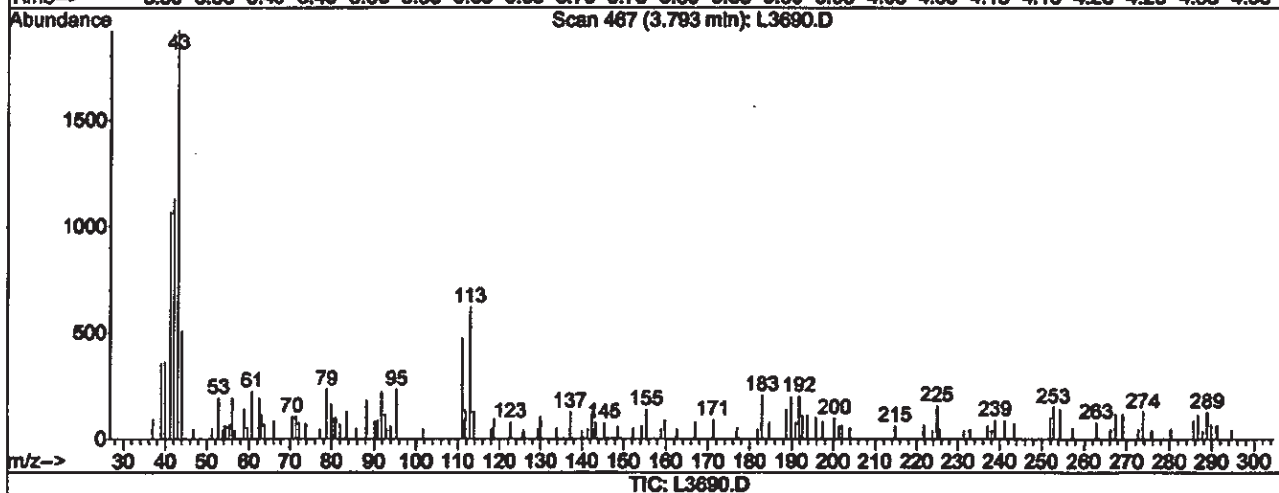
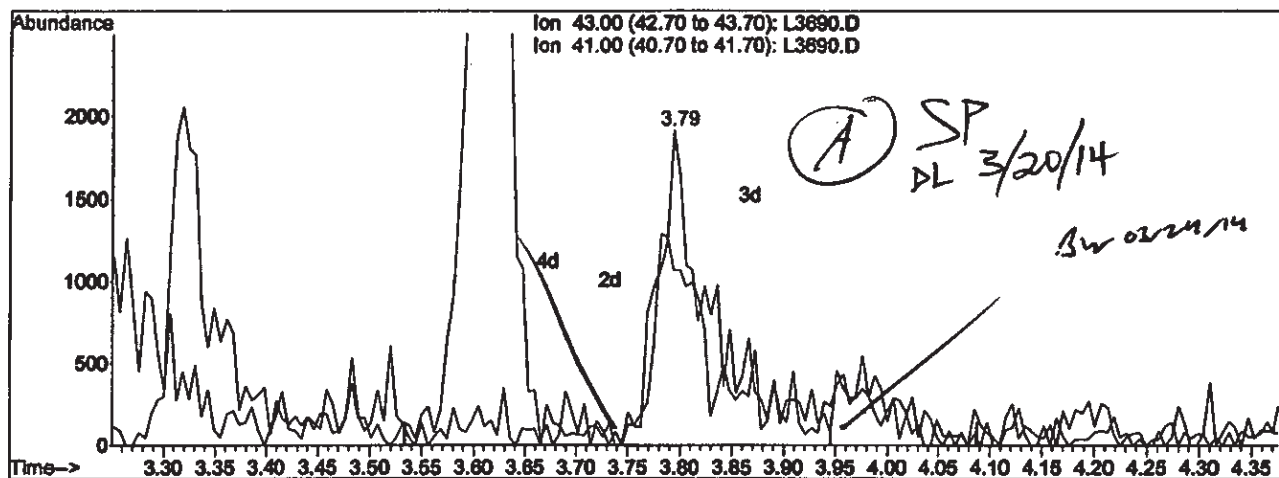
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3690.D
 Acq On : 19 Mar 2014 2:02 pm
 Sample : STD #3 - 2.0 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:40 2014

Vial: 12
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:27:30 2014
 Response via : Multiple Level Calibration



(41) Iso-Butyl Alcohol

3.79min 39.19ug/L m

response 7002

Ion	Exp%	Act%
43.00	100	100
41.00	75.50	55.66
0.00	0.00	0.00
0.00	0.00	0.00

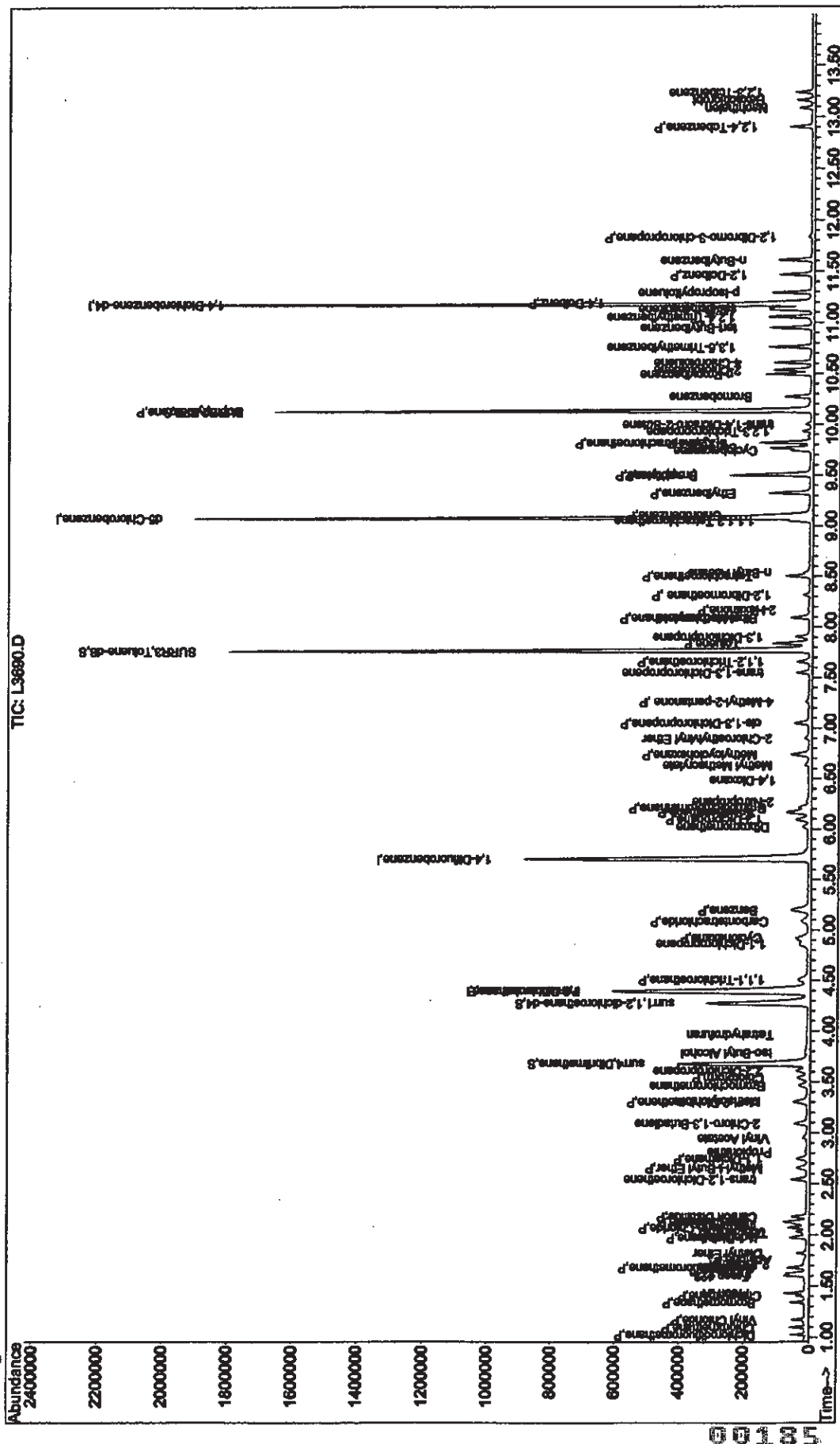
Data File : I:\ACQDATA\MSV0A6\DATA\031914\L3690.D

Acq On	: 19 Mar 2014	2:02 pm	Vial: 12
Sample	: STD #3 - 2.0 PPB		Operator: D.Lipani
Misc	: 8260C ICAL GCMS#6		Inst : MS#6
MS Integration Params: CPD4.P			Multiplr: 1.00
Quant Time: Mar 20 14:42 2014			Quant Results File: W031914.RES

```

Method      : I:\ACQUADATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
Title       : 8260C WATERS
Last Update : Thu Mar 20 14:27:30 2014
Response via : Initial Calibration

```



Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3691.D
 Acq On : 19 Mar 2014 2:36 pm
 Sample : STD #4 - 5.0 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:53 2014

Vial: 13
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:43:55 2014
 Response via : Initial Calibration
 DataAcq Meth : W031914

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.40	168	577373	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.71	114	871187	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.08	117	812984	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.18	152	418348	50.00	ug/L	0.00

System Monitoring Compounds

40) surr4,Dibrfilmethane	3.68	113	292752	49.71	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	99.42%
42) surr1,1,2-dichloroethane-d	4.28	65	285178	50.49	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	100.98%
62) SURR3,Toluene-d8	7.77	98	1063550	49.49	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	98.98%
82) SURR2,BFB	10.14	95	389128	45.93	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	91.86%

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	1.03	85	46141	5.05 ug/L	98
3) Chloromethane	1.10	50	59965	5.47 ug/L	98
4) Vinyl Chloride	1.18	62	51995	5.30 ug/L	99
5) Bromomethane	1.35	94	35019	5.17 ug/L	95
6) Chloroethane	1.41	64	28684	5.21 ug/L	89
7) Freon 21	1.44	67	80682	5.43 ug/L	99
8) Freon 123	1.60	83	58694	5.09 ug/L	94
9) Freon 123a	1.63	67	49011	4.62 ug/L	89
10) Acrolein	1.69	56	22064m	24.84 ug/L	97
11) Trichlorofluoromethane	1.68	101	62105	5.17 ug/L	94
12) Acetonitrile	1.70	41	19343	26.45 ug/L	98
13) 2-Propanol	1.73	45	25662	112.79 ug/L	87
14) Acetone	1.76	43	10372	5.54 ug/L	82
15) Diethyl Ether	1.82	59	25806	4.98 ug/L	91
16) 1,1-Dicethene	1.98	96	31594	4.92 ug/L	100
17) Iodomethane	1.99	142	37645	4.19 ug/L	98
18) TBA	2.01	59	36954	105.70 ug/L	85
19) Acrylonitrile	2.03	53	48079	27.63 ug/L	92
20) Methylene Chloride	2.08	84	46698	4.98 ug/L	99
21) Freon 113	2.11	101	35846	4.96 ug/L	92
22) Methyl Acetate	2.13	43	18786	5.04 ug/L	96
23) Allyl Chloride	2.14	76	20394	4.97 ug/L	98
24) Carbon Disulfide	2.18	76	111380	5.07 ug/L #	88
25) trans-1,2-Dichloroethene	2.54	96	39743	5.33 ug/L	98
26) Methyl-t-Butyl Ether	2.66	73	82929	5.48 ug/L	100
27) 1,1-Dicethane	2.75	63	79216	24.11 ug/L	89
28) Propionitrile	2.81	54	15263	5.14 ug/L	97
29) Vinyl Acetate	2.94	43	70985	4.84 ug/L	96
30) 2-Chloro-1,3-Butadiene	3.09	53	61118	4.43 ug/L	79
31) 2-Butanone	3.22	43	10255	5.18 ug/L	89
32) Methacrylonitrile	3.31	41	17847	4.95 ug/L	93
33) cis-1,2-Dichloroethene	3.30	96	43921	5.44 ug/L	93
34) Bromochloromethane	3.46	128	21402	5.17 ug/L	96
35) Chloroform	3.53	83	74452	4.93 ug/L	99
36) 2,2-Dichloropropane	3.61	77	57414		

DL
3/20/14

(#) = qualifier out of range (m) = manual integration
 L3691.D W031914.M Thu Mar 20 14:53:29 2014

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3691.D
 Acq On : 19 Mar 2014 2:36 pm
 Sample : STD #4 - 5.0 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:53 2014

Vial: 13
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:43:55 2014
 Response via : Initial Calibration
 DataAcq Meth : W031914

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37) Tetrahydrofuran	3.96	42	7720	5.06	ug/L	79
38) 1,1,1-Trichloroethane	4.51	97	60999	5.04	ug/L	94
41) Iso-Butyl Alcohol	3.79	43	18946m	101.86	ug/L	
43) 1,2-Dichloroethane	4.39	64	14559	4.69	ug/L	# 44
44) 1,1-Dichloropropene	4.85	75	50672	4.86	ug/L	91
45) Cyclohexane	4.92	56	64591	4.90	ug/L	99
46) Carbontetrachloride	5.09	119	52573	5.01	ug/L	91
47) Benzene	5.20	78	165164	5.05	ug/L	97
48) Dibromomethane	6.02	93	22256	5.12	ug/L	99
49) 1,2-Dicloropropane	6.10	63	44965	5.01	ug/L	98
50) n-Heptane	6.17	43	41237	4.69	ug/L	99
51) Trichloroethene	6.16	130	42592	4.74	ug/L	98
52) Bromodichloromethane	6.22	83	55917	5.08	ug/L	98
53) 2-Nitropropane	6.27	41	12256m	10.10	ug/L	
54) 1,4-Dioxane	6.46	88	4358m	122.16	ug/L	
55) Methyl Methacrylate	6.62	69	16438	4.74	ug/L	# 84
56) Methylcyclohexane	6.74	55	45340	4.73	ug/L	98
57) 2-Chloroethylvinyl Ether	6.90	63	17333	4.50	ug/L	89
58) cis-1,3-Dichloropropene	7.05	75	60856	4.91	ug/L	98
59) 4-Methyl-2-pentanone	7.26	43	27437m	5.05	ug/L	
60) trans-1,3-Dichloropropene	7.55	75	48827	4.88	ug/L	99
61) 1,1,2-Trichloroethane	7.66	97	32705	5.36	ug/L	96
63) Toluene	7.84	91	179610	5.00	ug/L	95
65) 1,3-Dichloropropane	7.91	76	50895	4.93	ug/L	97
66) Ethyl Methacrylate	8.08	69	36268	4.70	ug/L	92
67) Dibromochloromethane	8.10	129	37076	4.49	ug/L	97
68) 2-Hexanone	8.16	43	17609m	4.37	ug/L	
69) 1,2-Dibromoethane	8.31	107	32296	5.13	ug/L	95
70) n-Butyl Acetate	8.53	43	45955	4.86	ug/L	94
71) Tetrachloroethene	8.50	164	35842	4.71	ug/L	96
72) 1,1,1,2-Tetrachloroethane	9.05	131	41850	4.84	ug/L	95
73) Chlorobenzene	9.11	112	115018	5.10	ug/L	95
74) Ethylbenzene	9.32	106	60064	4.82	ug/L	# 89
75) Bromoform	9.51	173	23451	4.57	ug/L	98
76) (m+p)Xylene	9.51	106	147040	10.04	ug/L	90
77) o-Xylene	9.82	106	75106	5.03	ug/L	95
78) Cyclohexanone	9.74	55	64955	101.62	ug/L	91
79) Styrene	9.77	104	117430	5.02	ug/L	100
80) trans-1,4-Dichloro-2-Buten	10.00	75	9926	4.55	ug/L	95
81) Isopropylbenzene	10.13	105	185665	4.99	ug/L	98
84) 1,1,2,2-Tetrachloroethane	9.82	83	36081	4.87	ug/L	99
85) 1,2,3-Trichloropropane	9.93	75	25027	5.15	ug/L	97
86) Bromobenzene	10.27	156	49642	4.90	ug/L	98
87) n-Propylbenzene	10.49	91	215486	5.13	ug/L	96
88) 2-Chlorotoluene	10.53	91	138630	5.21	ug/L	97
89) 4-Chlorotoluene	10.61	91	140653	5.10	ug/L	99
90) 1,3,5-Trimethylbenzene	10.76	105	142250	5.01	ug/L	98
91) tert-Butylbenzene	10.95	119	118732	5.15	ug/L	99
92) 1,2,4-Trimethylbenzene	11.06	105	146794	4.98	ug/L	99
93) sec-Butylbenzene	11.12	105	168676	5.01	ug/L	98

(#) = qualifier out of range (m) = manual integration
 L3691.D W031914.M Thu Mar 20 14:53:31 2014

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3691.D Vial: 13
 Acq On : 19 Mar 2014 2:36 pm Operator: D.Lipani
 Sample : STD #4 - 5.0 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:53 2014 Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:43:55 2014
 Response via : Initial Calibration
 DataAcq Meth : W031914

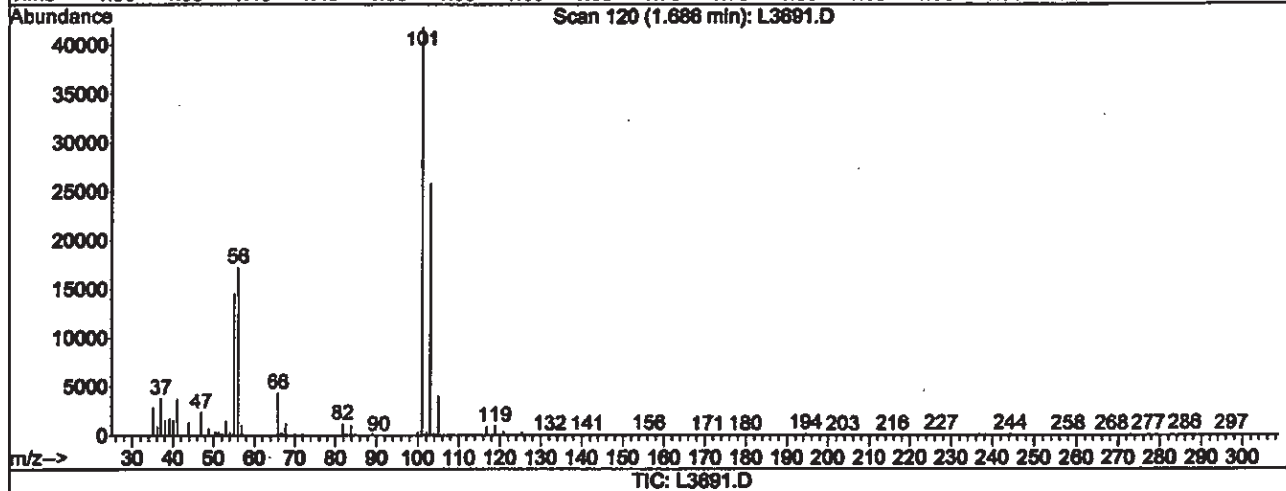
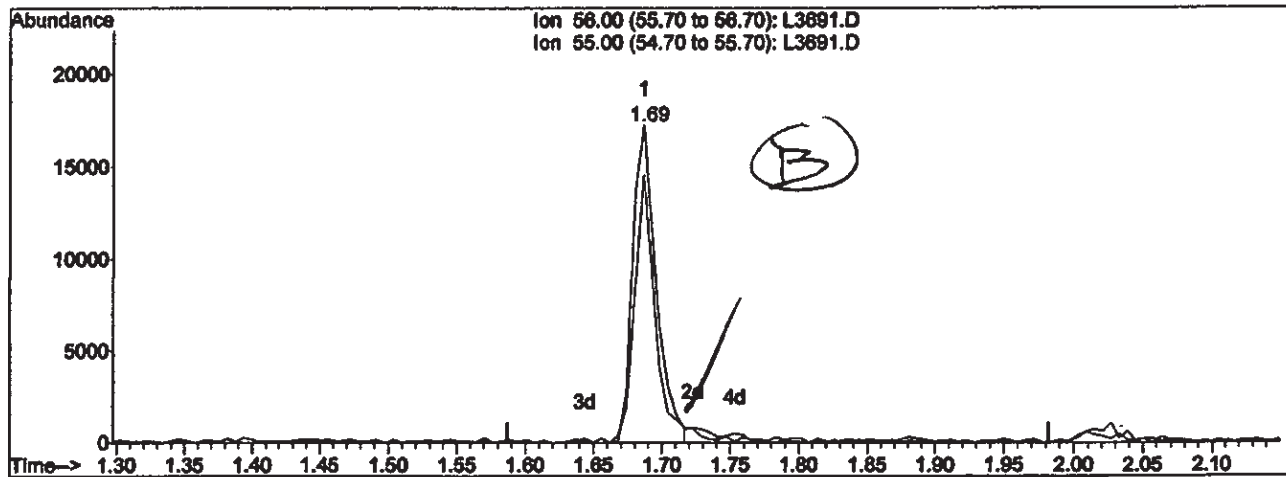
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
94) 1,3-Dclbenz	11.14	146	92965	5.14	ug/L	96
95) 1,4-Dclbenz	11.20	146	88428	4.85	ug/L	91
96) p-Isopropyltoluene	11.29	119	138974	5.14	ug/L	98
97) 1,2-Dclbenz	11.47	146	82210	5.03	ug/L	96
98) n-Butylbenzene	11.61	91	125817	5.02	ug/L	98
99) 1,2-Dibromo-3-chloropropan	11.84	75	4945	5.08	ug/L	92
100) Nitrobenzene	12.02	77	2336m	10.04	ug/L	99
101) 1,2,4-Tcbenzene	12.91	180	43851	4.90	ug/L	99
102) Naphthalen	13.08	128	68394	4.97	ug/L	99
103) Hexachlorobt	13.16	225	18462	4.94	ug/L	93
104) 1,2,3-Tclbenzene	13.24	180	33486	4.95	ug/L	95

DL
3/20/14

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3691.D Vial: 13
 Acq On : 19 Mar 2014 2:36 pm Operator: D.Lipani
 Sample : STD #4 - 5.0 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:54 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:43:55 2014
 Response via : Multiple Level Calibration



(10) Acrolein

1.69min 23.29ug/L

response 20685

Ion	Exp%	Act%
56.00	100	100
55.00	71.50	84.45
0.00	0.00	0.00
0.00	0.00	0.00

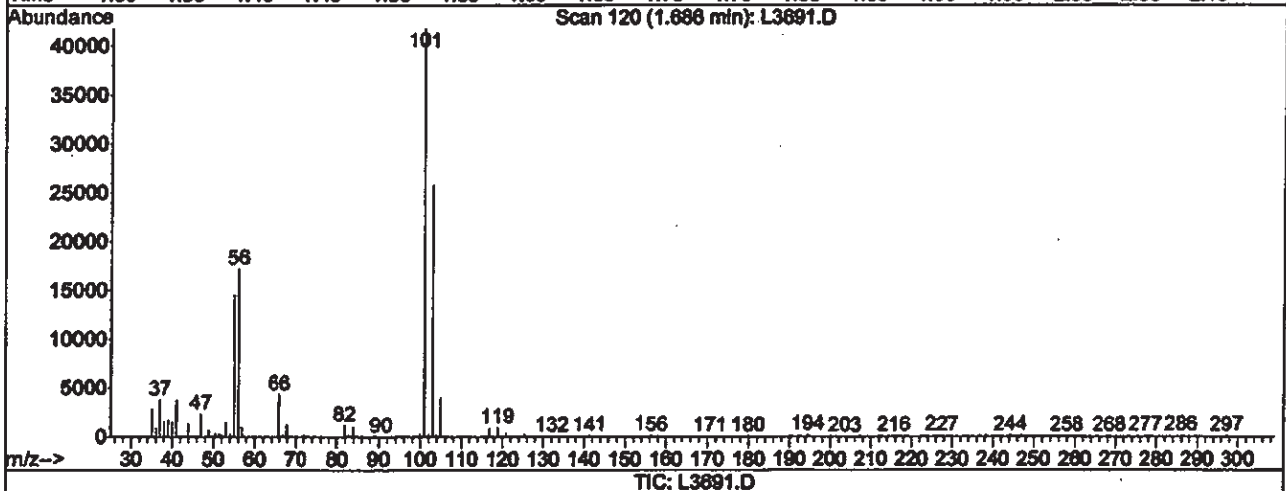
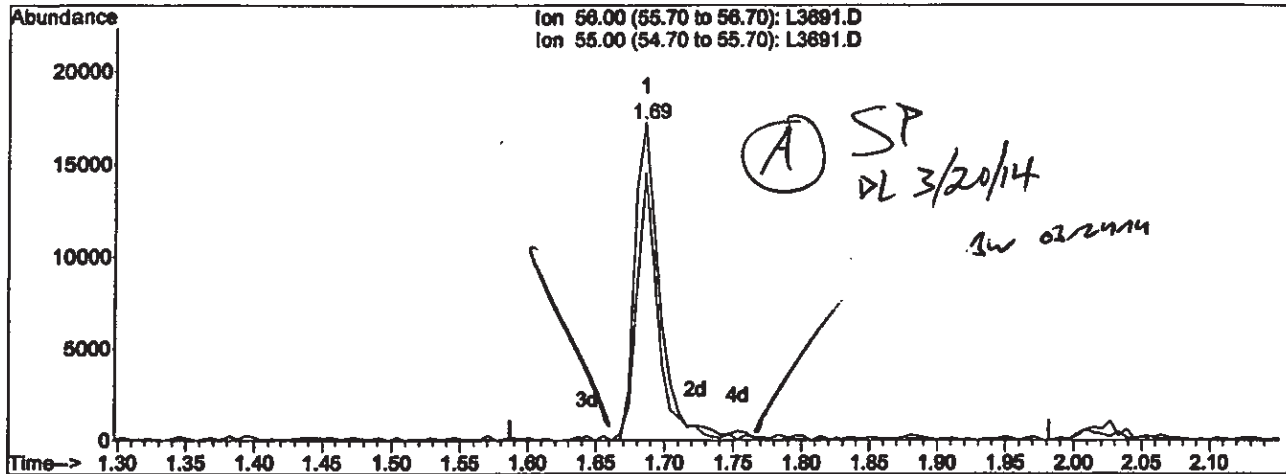
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3691.D
 Acq On : 19 Mar 2014 2:36 pm
 Sample : STD #4 - 5.0 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:47 2014

Vial: 13
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:43:55 2014
 Response via : Multiple Level Calibration



(10) Acrolein

1.69min 24.84ug/L m

response 22084

Ion	Exp%	Act%
56.00	100	100
55.00	71.50	84.45
0.00	0.00	0.00
0.00	0.00	0.00

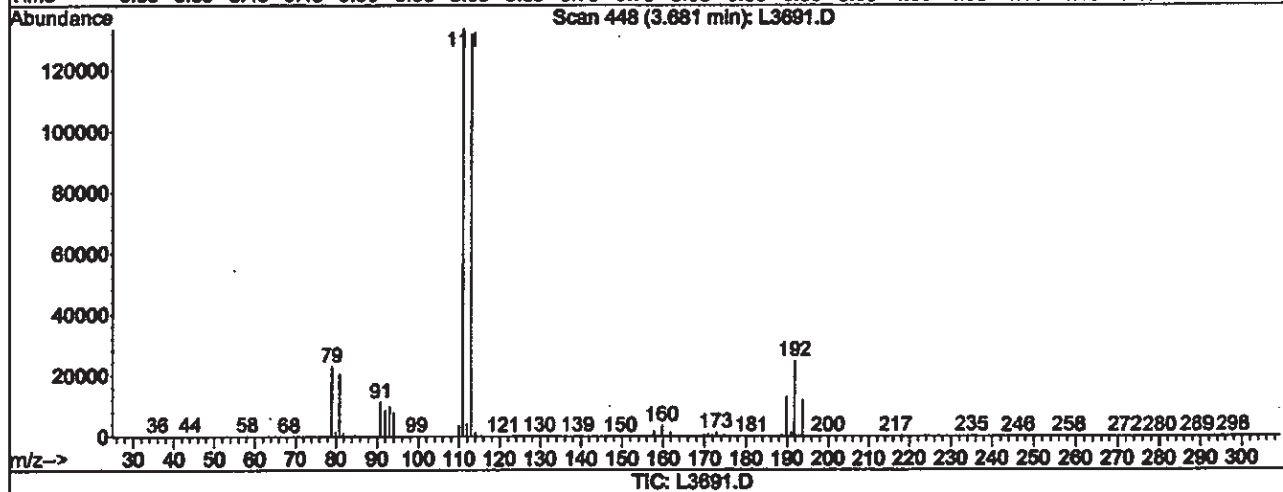
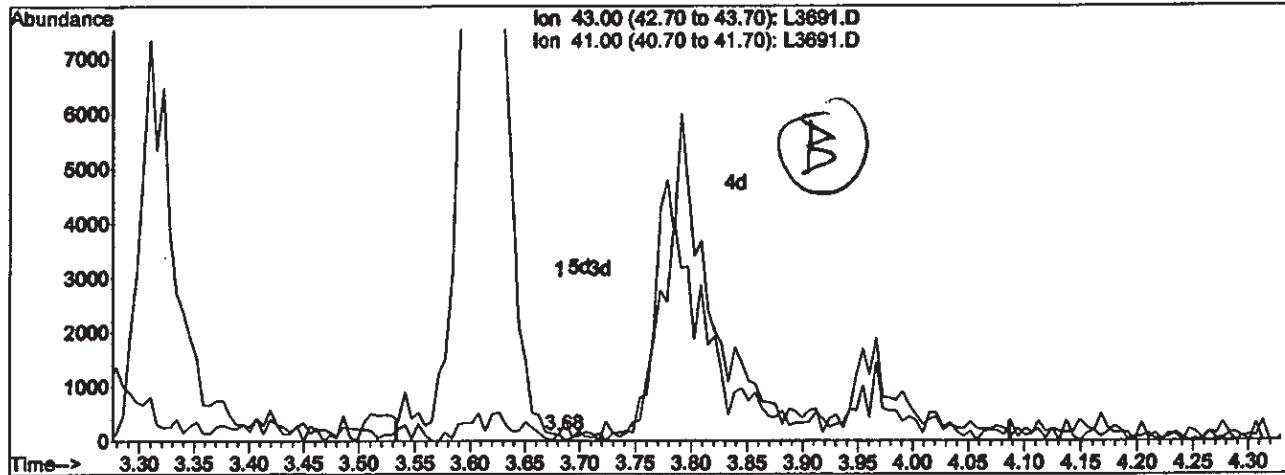
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3691.D
 Acq On : 19 Mar 2014 2:36 pm
 Sample : STD #4 - 5.0 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:47 2014

Vial: 13
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:43:55 2014
 Response via : Multiple Level Calibration



(41) Iso-Butyl Alcohol

3.68min 0.24ug/L

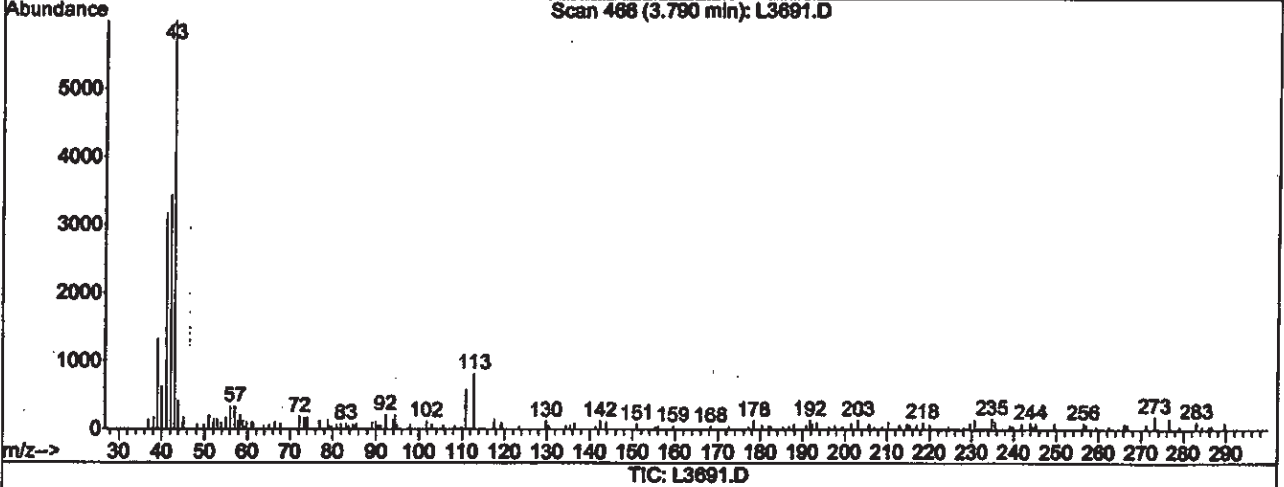
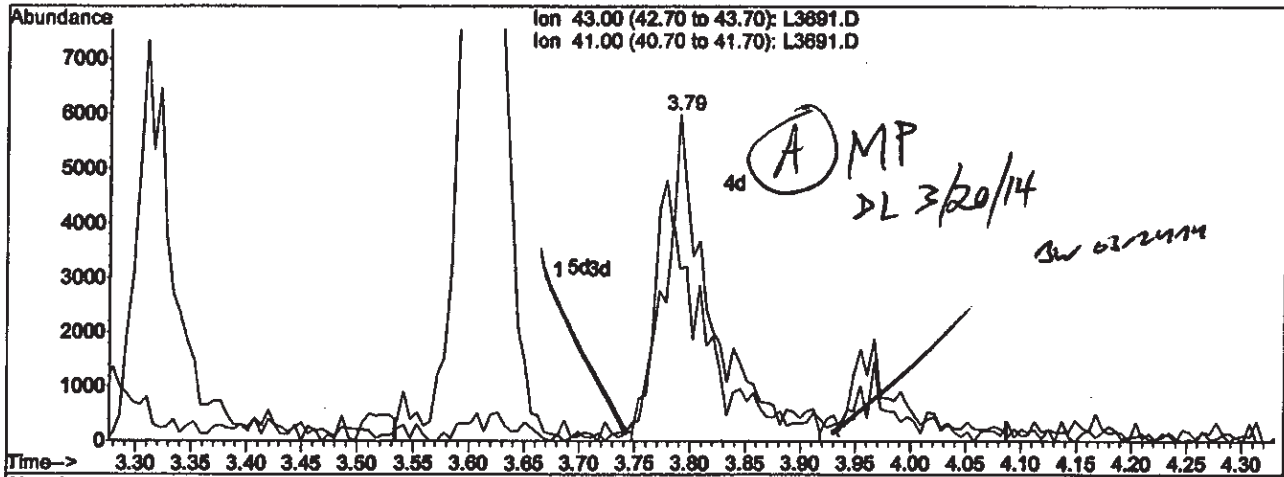
response 44

Ion	Exp%	Act%
43.00	100	100
41.00	75.50	81.87
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3691.D Vial: 13
 Acq On : 19 Mar 2014 2:36 pm Operator: D.Lipani
 Sample : STD #4 - 5.0 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:48 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:43:55 2014
 Response via : Multiple Level Calibration



(41) Iso-Butyl Alcohol

3.79min 101.88ug/L m

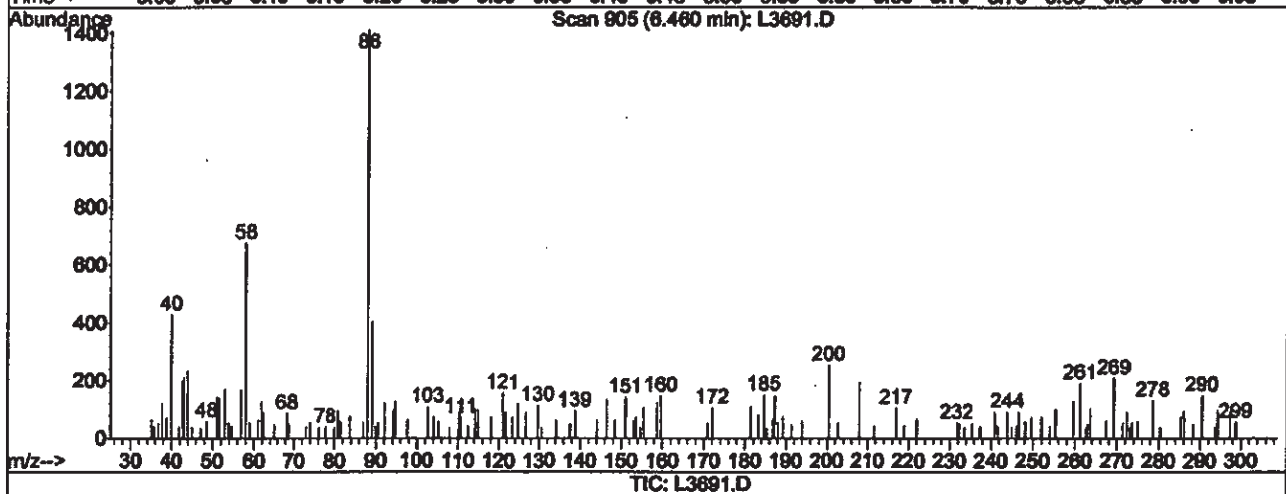
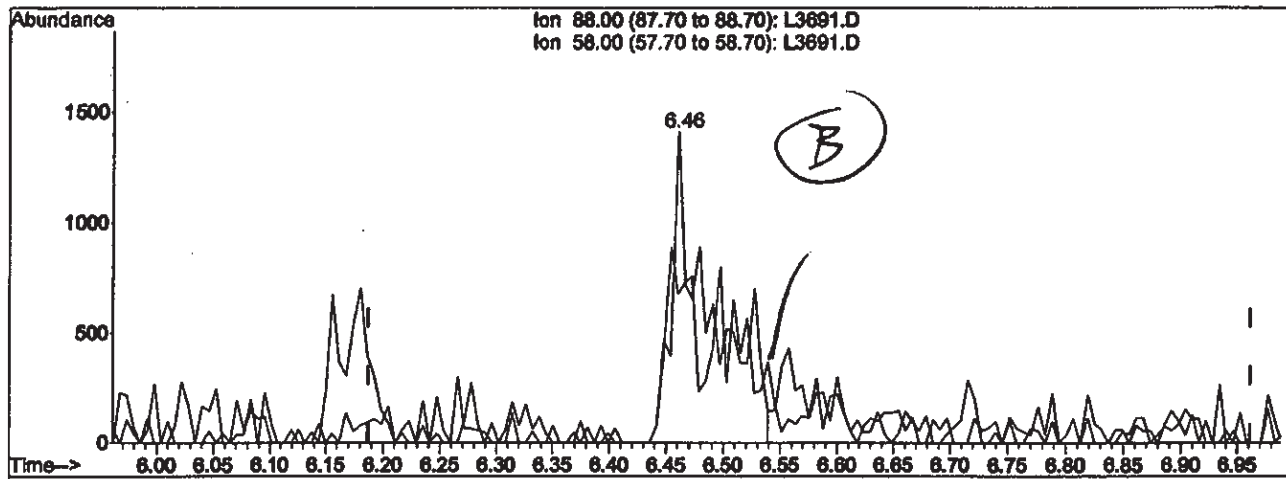
response 18948

Ion	Exp%	Act%
43.00	100	100
41.00	75.50	52.91#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3691.D Vial: 13
 Acq On : 19 Mar 2014 2:36 pm Operator: D.Lipani
 Sample : STD #4 - 5.0 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:48 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:43:55 2014
 Response via : Multiple Level Calibration



(54) 1,4-Dioxane

6.46min 92.48ug/L

response 3299

Ion	Exp%	Act%
88.00	100	100
58.00	78.00	47.94#
0.00	0.00	0.00
0.00	0.00	0.00

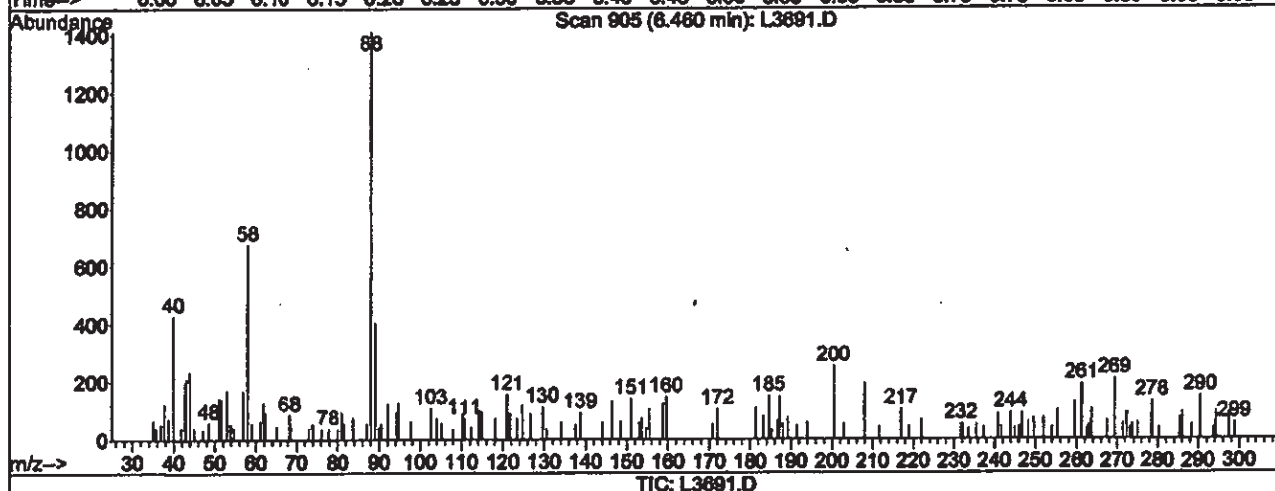
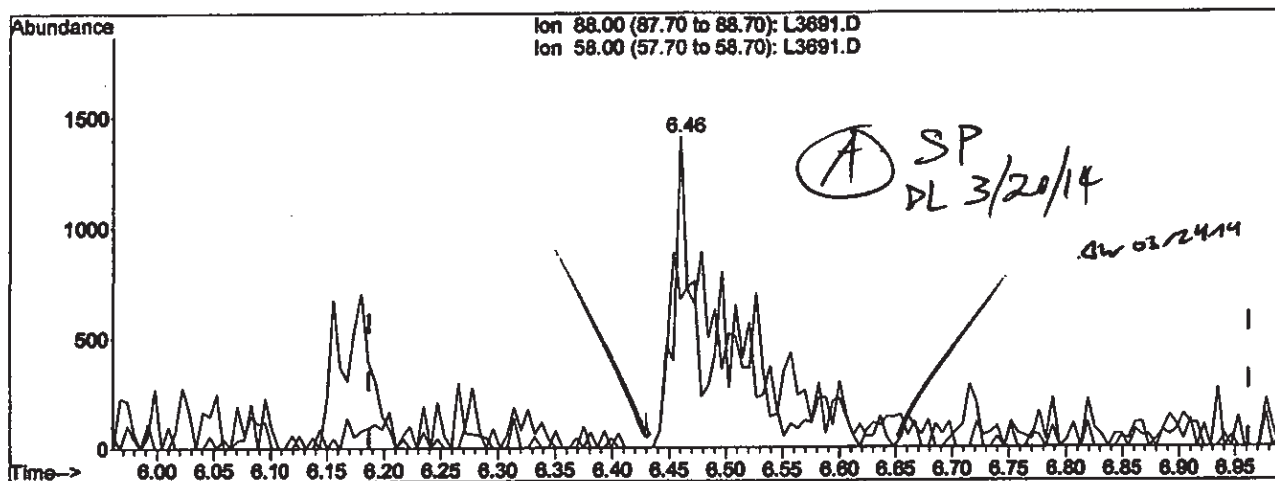
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3691.D
 Acq On : 19 Mar 2014 2:36 pm
 Sample : STD #4 - 5.0 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:49 2014

Vial: 13
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:43:55 2014
 Response via : Multiple Level Calibration



(54) 1,4-Dioxane

6.46min 122.16ug/L m

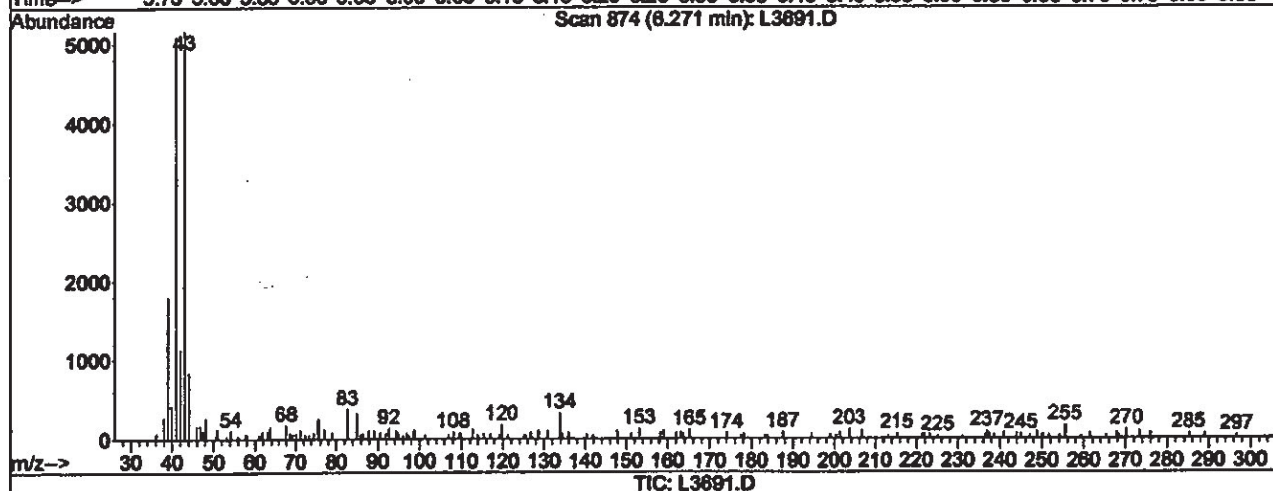
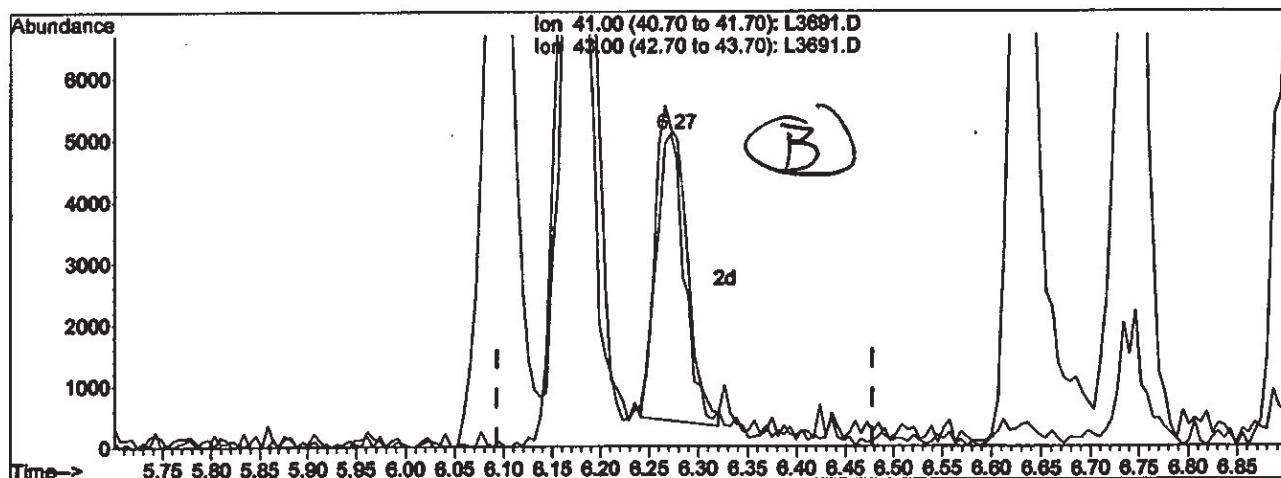
response 4358

Ion	Exp%	Act%
88.00	100	100
58.00	76.00	47.94#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3691.D Vial: 13
 Acq On : 19 Mar 2014 2:36 pm Operator: D.Lipani
 Sample : STD #4 - 5.0 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:49 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:43:55 2014
 Response via : Multiple Level Calibration



(53) 2-Nitropropane

6.27min 7.79ug/L

response 9445

Ion	Exp%	Act%
41.00	100	100
43.00	110.80	101.34
0.00	0.00	0.00
0.00	0.00	0.00

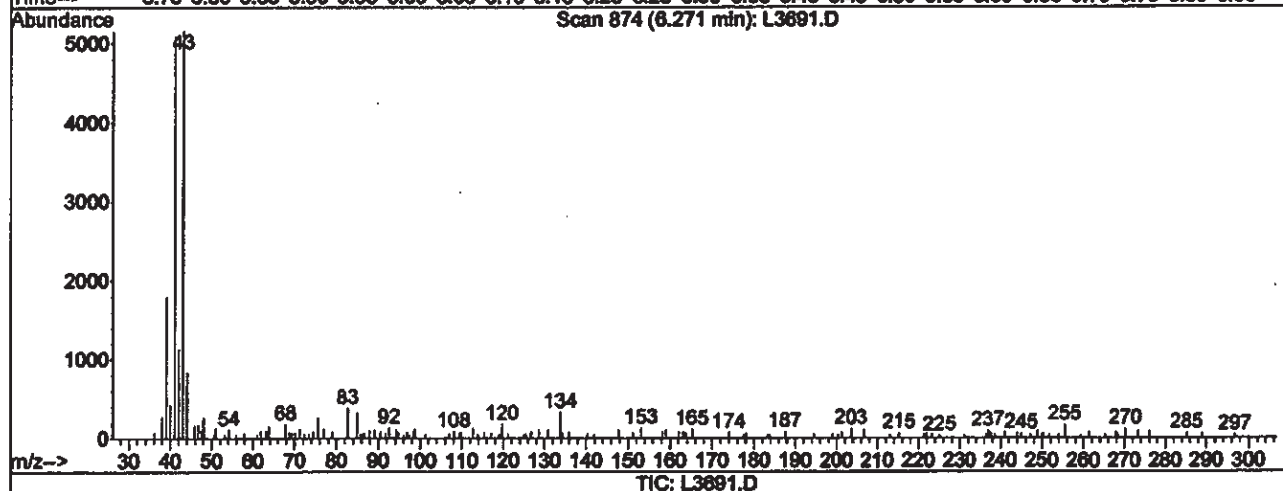
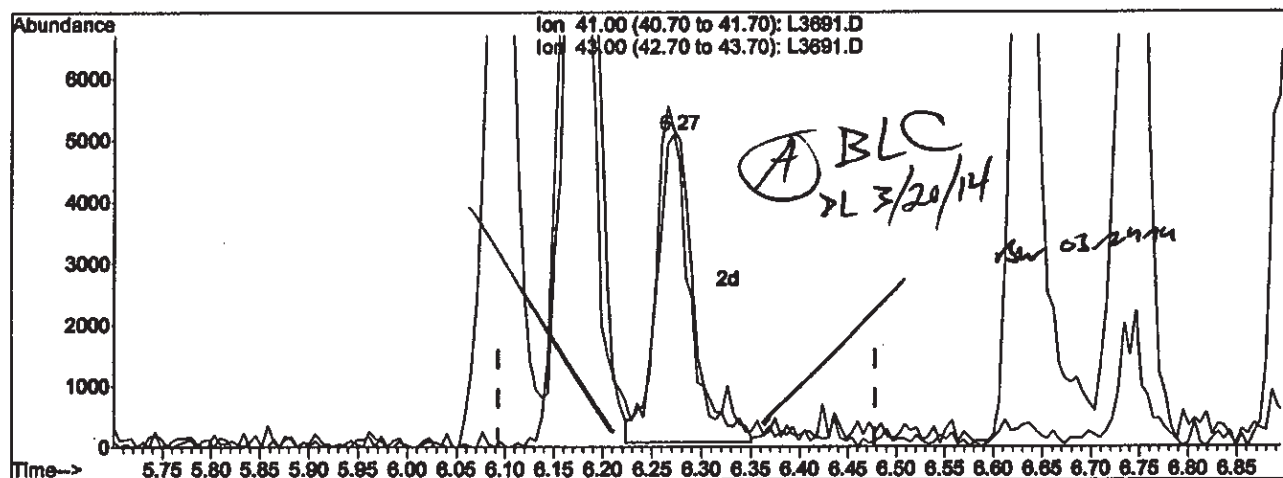
Quantitation Report (Qedit)

Data File : I:\ACQDATA\MSVOA6\DATA\031914\L3691.D
 Acq On : 19 Mar 2014 2:36 pm
 Sample : STD #4 - 5.0 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:49 2014

Vial: 13
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: temp.res

Method : I:\ACQDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:43:55 2014
 Response via : Multiple Level Calibration



(53) 2-Nitropropane

6.27min 10.10ug/L m

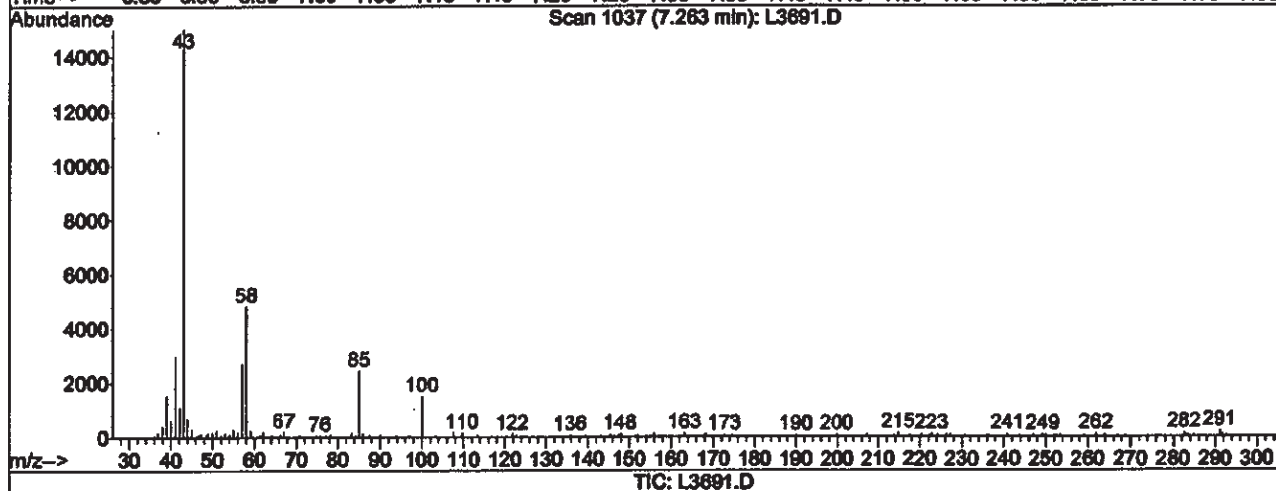
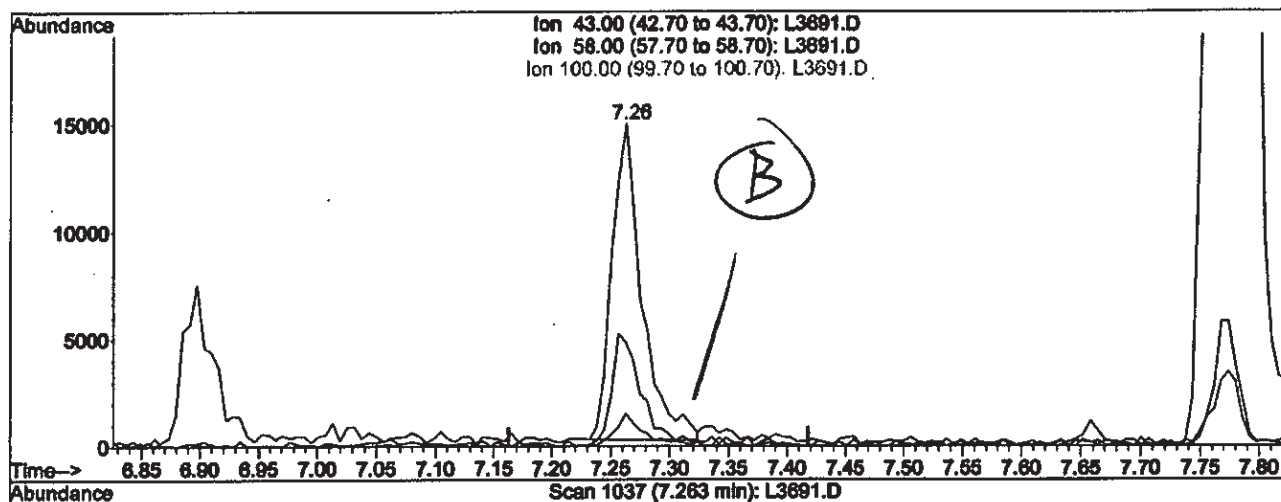
response 12256

Ion	Exp%	Act%
41.00	100	100
43.00	110.80	101.34
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3691.D Vial: 13
 Acq On : 19 Mar 2014 2:36 pm Operator: D.Lipani
 Sample : STD #4 - 5.0 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:49 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:43:55 2014
 Response via : Single Level Calibration



(59) 4-Methyl-2-pentanone (P)

7.26min 4.77ug/L

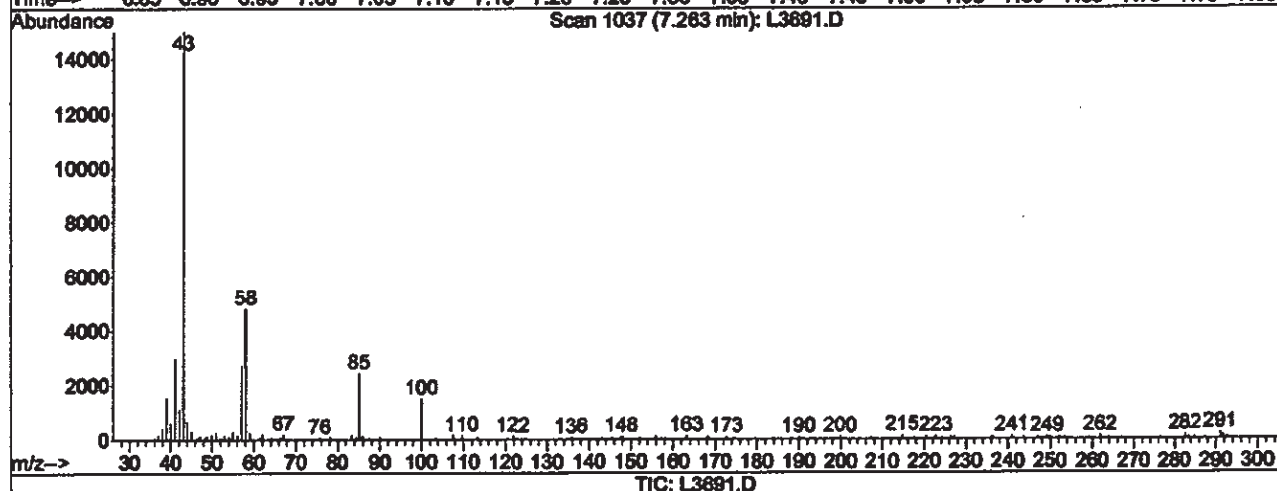
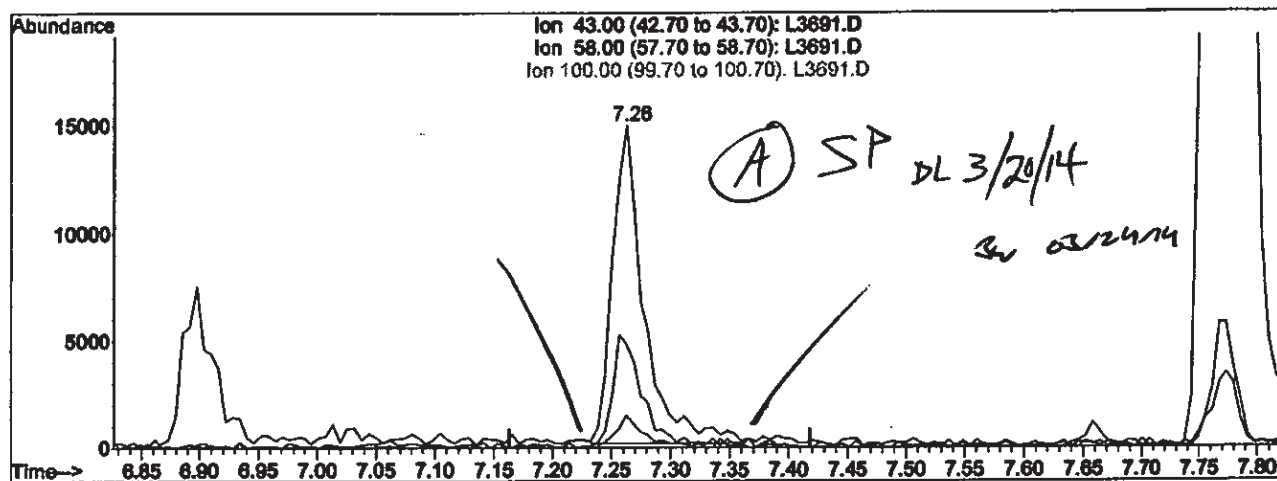
response 25891

Ion	Exp%	Act%
43.00	100	100
58.00	35.80	36.11
100.00	11.40	9.89
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3691.D Vial: 13
 Acq On : 19 Mar 2014 2:36 pm Operator: D.Lipani
 Sample : STD #4 - 5.0 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:51 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTB Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:43:55 2014
 Response via : Single Level Calibration



(58) 4-Methyl-2-pentanone (P)

7.28min 5.05ug/L m

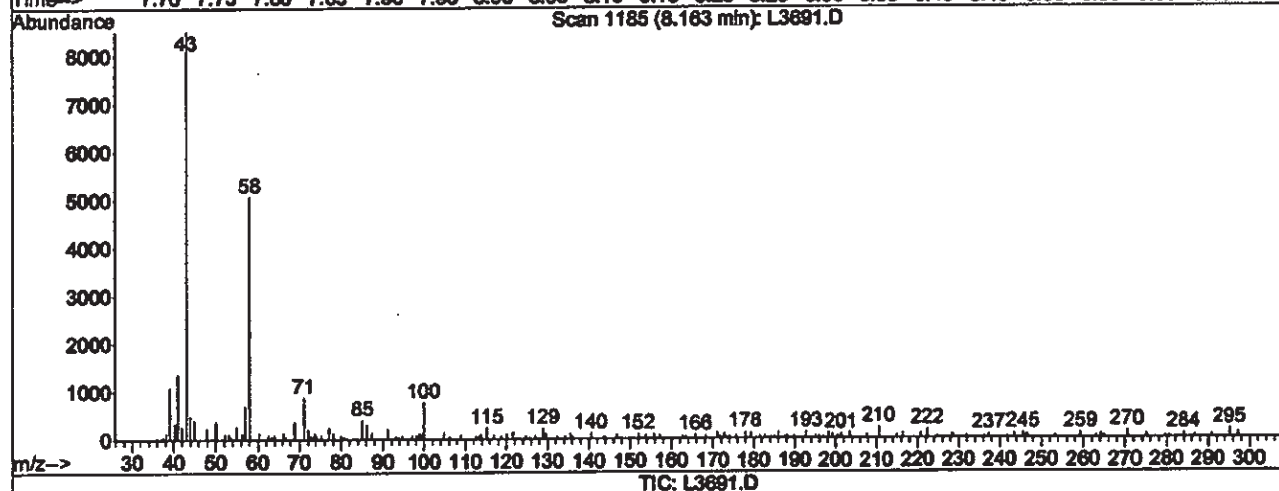
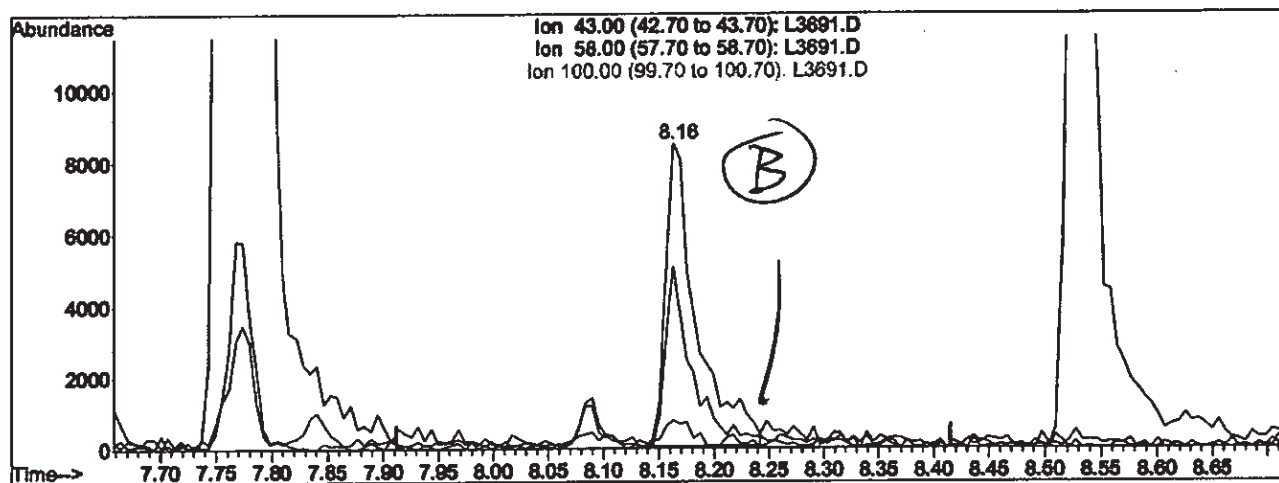
response 27437

Ion	Exp%	Act%
43.00	100	100
58.00	35.80	34.07
100.00	11.40	9.33
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3691.D Vial: 13
 Acq On : 19 Mar 2014 2:36 pm Operator: D.Lipani
 Sample : STD #4 - 5.0 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:51 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:43:55 2014
 Response via : Single Level Calibration



(88) 2-Hexanone (P)

8.16min 4.07ug/L

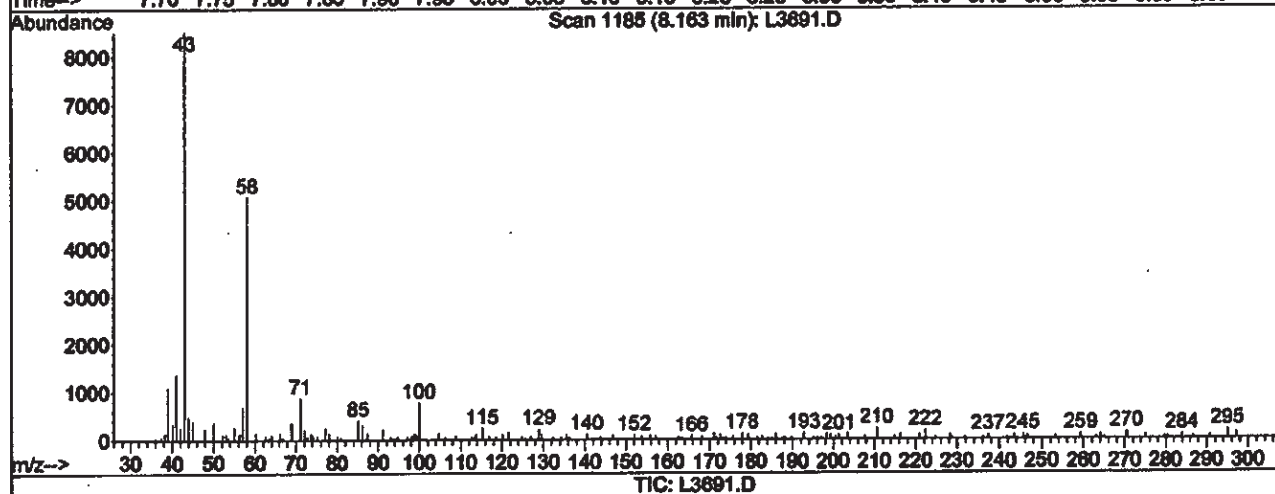
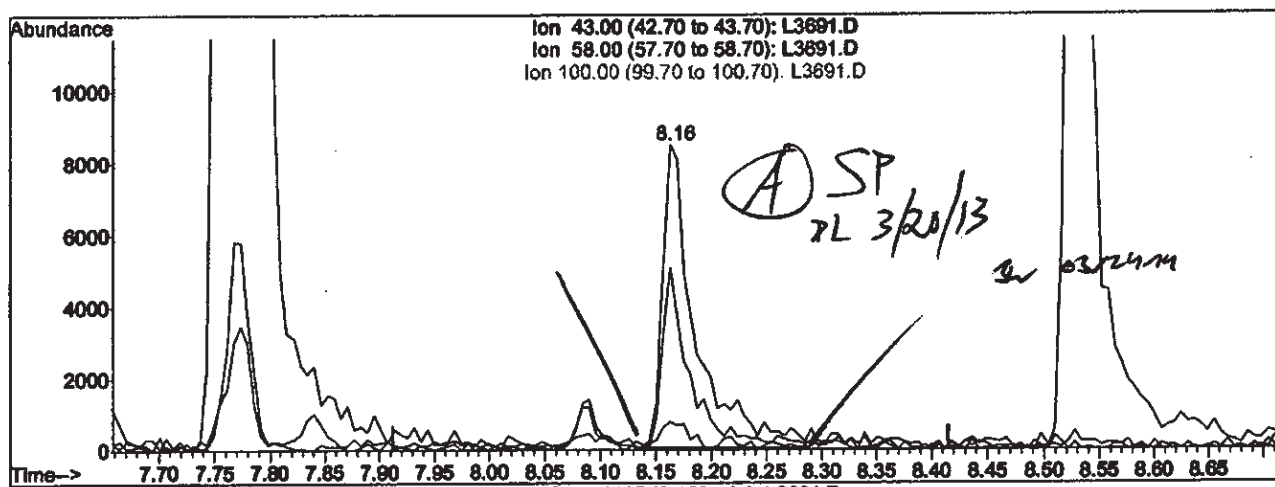
response 16393

Ion	Exp%	Act%
43.00	100	100
58.00	49.90	49.77
100.00	7.90	8.93
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3691.D Vial: 13
 Acq On : 19 Mar 2014 2:36 pm Operator: D.Lipani
 Sample : STD #4 - 5.0 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:51 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:43:55 2014
 Response via : Single Level Calibration



(68) 2-Hexanone (P)

8.16min 4.37ug/L m

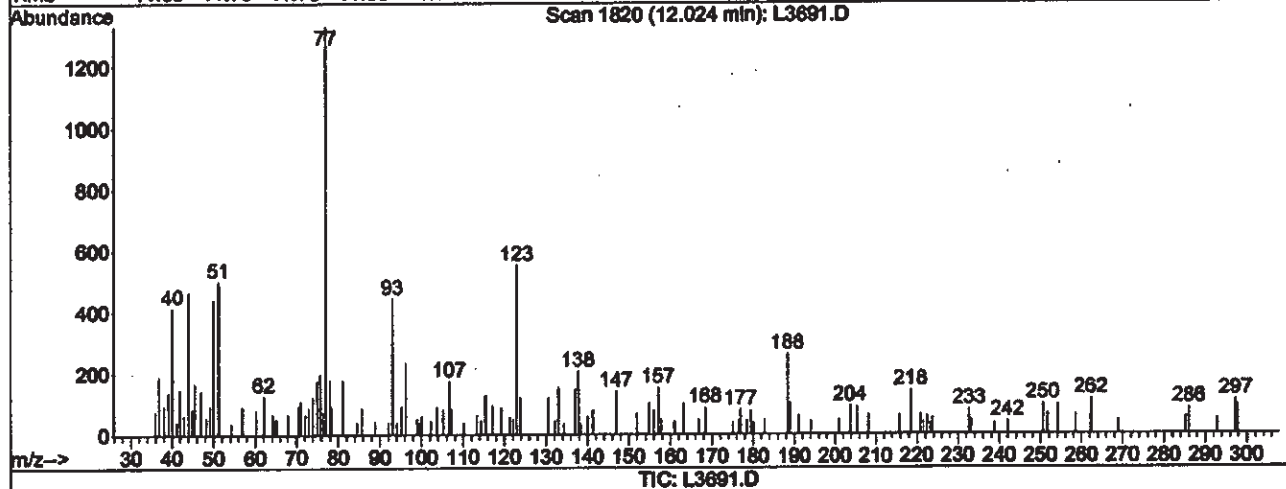
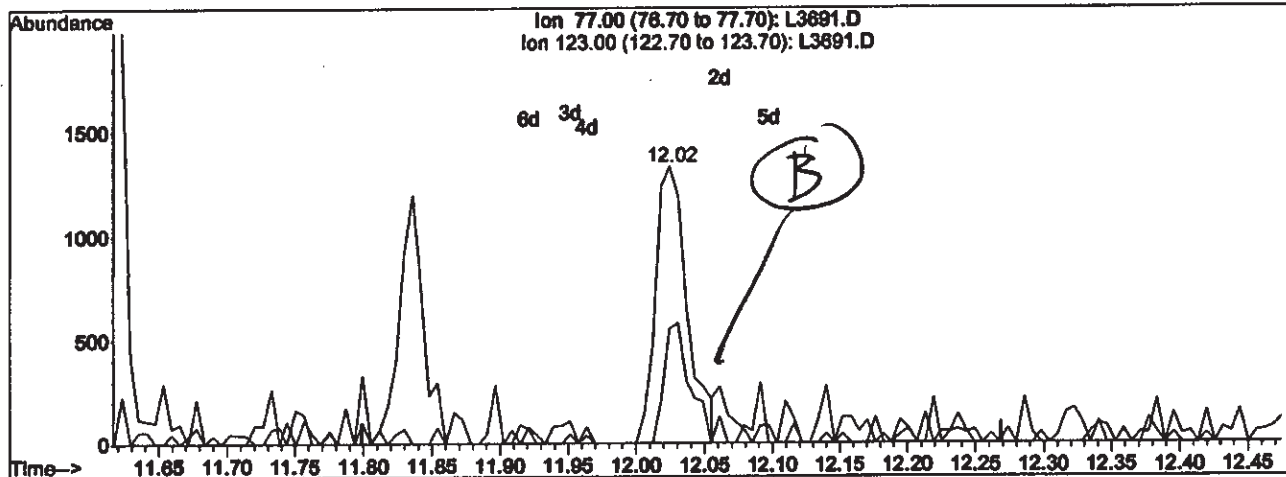
response 17809

Ion	Exp%	Act%
43.00	100	100
58.00	49.90	48.33
100.00	7.90	8.31
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3691.D Vial: 13
 Acq On : 19 Mar 2014 2:36 pm Operator: D.Lipani
 Sample : STD #4 - 5.0 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:51 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:43:55 2014
 Response via : Single Level Calibration



(100) Nitrobenzene

12.02min 9.15ug/L

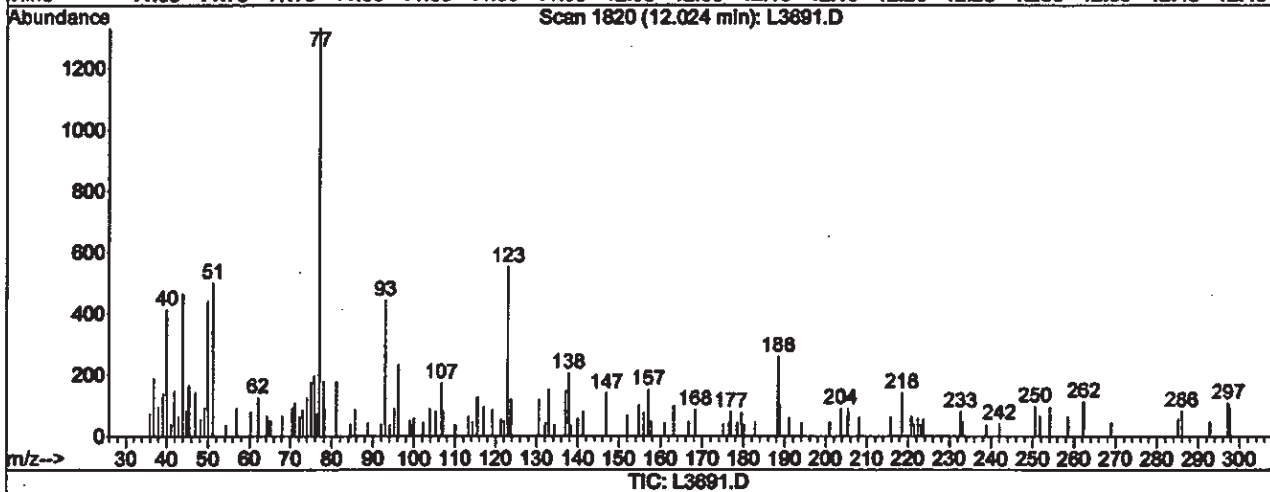
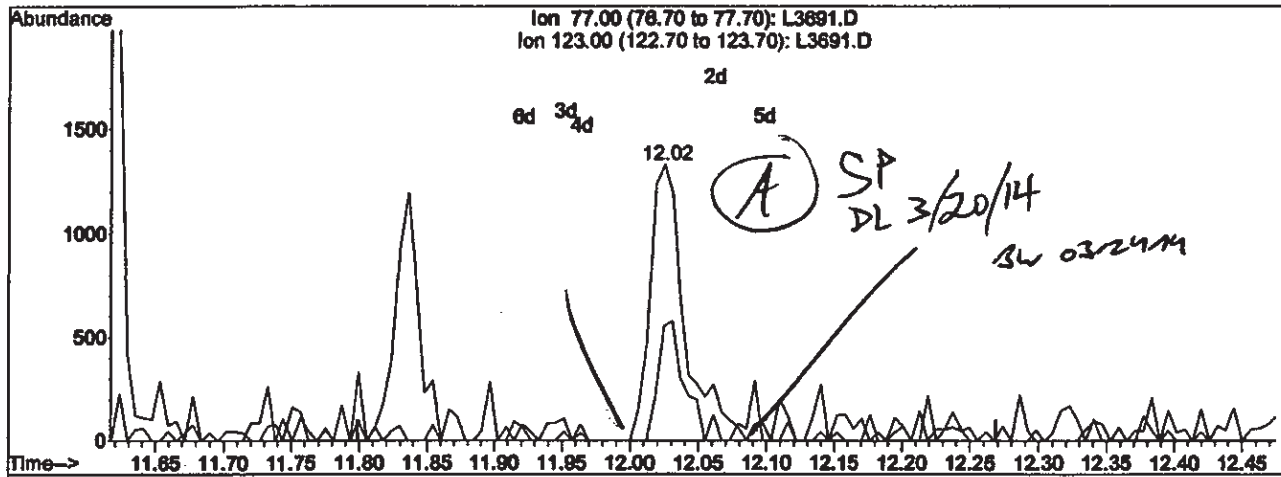
response 2129

Ion	Exp%	Act%
77.00	100	100
123.00	43.40	41.58
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3691.D Vial: 13
 Acq On : 19 Mar 2014 2:36 pm Operator: D.Lipani
 Sample : STD #4 - 5.0 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:53 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:43:55 2014
 Response via : Single Level Calibration



(100) Nitrobenzene

12.02min 10.04ug/L m

response 2336

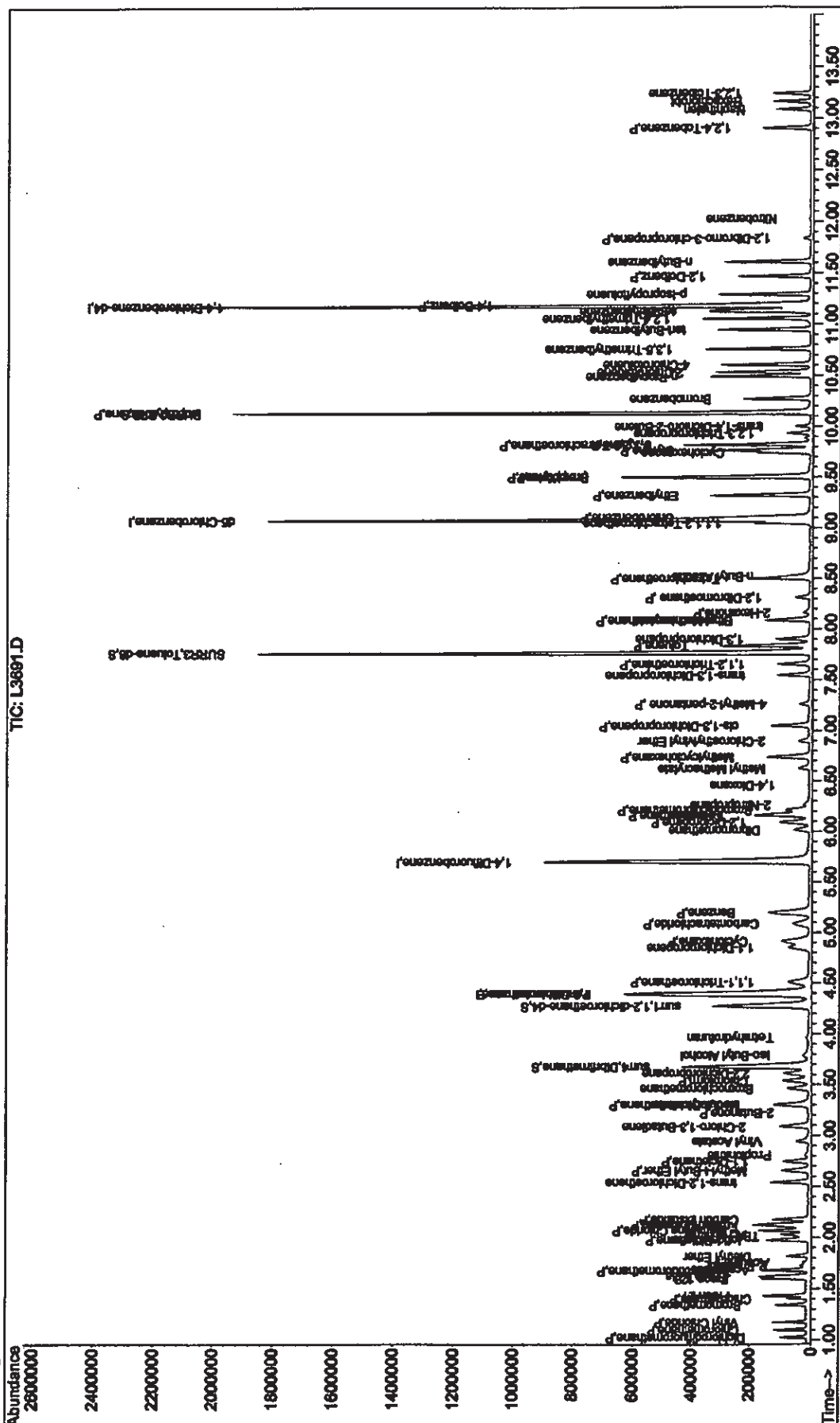
Ion	Exp%	Act%
77.00	100	100
123.00	43.40	41.58
0.00	0.00	0.00
0.00	0.00	0.00

Data File : I:\ACQDATA\MSVOA6\DATA\031914\L3691.D
 Acq On : 19 Mar 2014 2:36 pm
 Sample : STD #4 - 5.0 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:53 2014
 Vial: 13
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00
 Quant Results File: W031914.RES

```

Method      : I:\ACQDATA\MSVQA6\METHODS\W031914.M (RTS Integrator)
Title       : 8260C WATERS
Last Update : Thu Mar 20 14:43:55 2014
Response via : Initial Calibration

```



Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3692.D
 Acq On : 19 Mar 2014 3:12 pm
 Sample : STD #5 - 10 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:56 2014

Vial: 14
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:53:43 2014
 Response via : Initial Calibration
 DataAcq Meth : W031914

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.40	168	587001	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.70	114	872460	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.09	117	800917	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.18	152	419152	50.00	ug/L	0.00

System Monitoring Compounds

40) surr4, Dibrflmethane	3.68	113	292331	49.57	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	99.14%
42) surr1, 1,2-dichloroethane-d	4.28	65	281896	49.84	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	99.68%
62) SURR3, Toluene-d8	7.77	98	1081128	50.23	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	100.46%
82) SURR2, BFB	10.14	95	401852	48.14	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	96.28%

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	1.02	85	101497	10.92 ug/L	96
3) Chloromethane	1.10	50	118517	10.63 ug/L	98
4) Vinyl Chloride	1.17	62	107024	10.72 ug/L	97
5) Bromomethane	1.34	94	70407	10.22 ug/L	98
6) Chloroethane	1.41	64	56044	10.01 ug/L	92
7) Freon 21	1.43	67	160157	10.60 ug/L	92
8) Freon 123	1.60	83	116104	9.91 ug/L	95
9) Freon 123a	1.62	67	95999	9.05 ug/L	88
10) Acrolein	1.69	56	41428	45.87 ug/L	93
11) Trichlorofluoromethane	1.68	101	123013	10.06 ug/L	97
12) Acetonitrile	1.69	41	37388	50.28 ug/L	96
13) 2-Propanol	1.72	45	42468	183.60 ug/L	99
14) Acetone	1.76	43	18485	9.70 ug/L	97
15) Diethyl Ether	1.82	59	48837	9.27 ug/L	97
16) 1,1-Dicethene	1.97	96	66015	10.10 ug/L	97
17) Iodomethane	1.98	142	92424	8.83 ug/L	96
18) TBA	2.01	59	69817	196.43 ug/L	93
19) Acrylonitrile	2.03	53	85911	48.57 ug/L	96
20) Methylene Chloride	2.07	84	86194	9.77 ug/L	99
21) Freon 113	2.11	101	73083	9.99 ug/L	97
22) Methyl Acetate	2.13	43	34772	9.03 ug/L	98
23) Allyl Chloride	2.13	76	45113	10.96 ug/L	94
24) Carbon Disulfide	2.18	76	234901	10.31 ug/L	99
25) trans-1,2-Dichloroethene	2.54	96	82708	10.37 ug/L	94
26) Methyl-t-Butyl Ether	2.66	73	158912	10.04 ug/L	97
27) 1,1-Dicethane	2.74	63	158338	10.77 ug/L	96
28) Propionitrile	2.80	54	30797	47.85 ug/L	88
29) Vinyl Acetate	2.94	43	136082	9.69 ug/L	100
30) 2-Chloro-1,3-Butadiene	3.09	53	133553	10.41 ug/L	99
31) 2-Butanone	3.22	43	20450	8.69 ug/L	96
32) Methacrylonitrile	3.31	41	32274	9.22 ug/L	95
33) cis-1,2-Dichloroethene	3.30	96	88213	9.77 ug/L	99
34) Bromochloromethane	3.47	128	41258	10.32 ug/L	93
35) Chloroform	3.53	83	153435	10.49 ug/L	97
36) 2,2-Dichloropropane	3.61	77	120166	10.14 ug/L	98

PD
3/20/14

(#) = qualifier out of range (m) = manual integration
 L3692.D W031914.M Thu Mar 20 14:57:10 2014

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3692.D
 Acq On : 19 Mar 2014 3:12 pm
 Sample : STD #5 - 10 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:56 2014

Vial: 14
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:53:43 2014
 Response via : Initial Calibration
 DataAcq Meth : W031914

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37) Tetrahydrofuran	3.95	42	15281	9.86	ug/L	97
38) 1,1,1-Trichloroethane	4.51	97	128394	10.43	ug/L	98
41) Iso-Butyl Alcohol	3.77	43	32611m	174.26	ug/L	
43) 1,2-Dichloroethane	4.40	64	31696	10.19	ug/L	# 87
44) 1,1-Dichloropropene	4.85	75	106102	10.16	ug/L	96
45) Cyclohexane	4.92	56	125987	9.54	ug/L	98
46) Carbontetrachloride	5.08	119	104306	9.93	ug/L	95
47) Benzene	5.20	78	342605	10.45	ug/L	100
48) Dibromomethane	6.02	93	43349	9.95	ug/L	98
49) 1,2-Diclp propane	6.09	63	93333	10.39	ug/L	98
50) n-Heptane	6.17	43	89118	10.12	ug/L	95
51) Trichloroethene	6.16	130	92082	10.22	ug/L	96
52) Bromodichloromethane	6.22	83	109321	9.92	ug/L	98
53) 2-Nitropropane	6.26	41	20899	16.72	ug/L	98
54) 1,4-Dioxane	6.45	88	7983	215.45	ug/L	# 56
55) Methyl Methacrylate	6.62	69	32948	9.50	ug/L	98
56) Methylcyclohexane	6.74	55	90614	9.45	ug/L	98
57) 2-Chloroethylvinyl Ether	6.89	63	35367	9.16	ug/L	88
58) cis-1,3-Dichloropropene	7.05	75	127959	10.30	ug/L	98
59) 4-Methyl-2-pentanone	7.26	43	47198	8.61	ug/L	99
60) trans-1,3-Dichloropropene	7.55	75	98040	9.78	ug/L	97
61) 1,1,2-Trichloroethane	7.66	97	60190	9.86	ug/L	97
63) Toluene	7.84	91	366814	10.20	ug/L	96
65) 1,3-Dichloropropane	7.90	76	99259	9.77	ug/L	98
66) Ethyl Methacrylate	8.08	69	68811	9.06	ug/L	90
67) Dibromochloromethane	8.09	129	78397	9.63	ug/L	99
68) 2-Hexanone	8.16	43	33704m	8.42	ug/L	
69) 1,2-Dibromoethane	8.31	107	60151	9.70	ug/L	99
70) n-Butyl Acetate	8.53	43	80442	8.63	ug/L	94
71) Tetrachloroethene	8.50	164	71056	9.49	ug/L	97
72) 1,1,1,2-Tetrachloroethane	9.05	131	81818	9.61	ug/L	97
73) Chlorobenzene	9.11	112	234368	10.55	ug/L	99
74) Ethylbenzene	9.32	106	125933	10.25	ug/L	93
75) Bromoform	9.50	173	45166	8.93	ug/L	94
76) (m+p)Xylene	9.51	106	304526	21.12	ug/L	91
77) o-Xylene	9.82	106	149327	10.14	ug/L	95
78) Cyclohexanone	9.74	55	112146	178.10	ug/L	100
79) Styrene	9.77	104	243180	10.56	ug/L	99
80) trans-1,4-Dichloro-2-Buten	10.00	75	19921	9.35	ug/L	96
81) Isopropylbenzene	10.13	105	379977	10.36	ug/L	98
84) 1,1,2,2-Tetrachloroethane	9.82	83	67372	9.08	ug/L	97
85) 1,2,3-Trichloropropane	9.93	75	46949	9.63	ug/L	96
86) Bromobenzene	10.27	156	99754	9.82	ug/L	99
87) n-Propylbenzene	10.50	91	448686	10.67	ug/L	96
88) 2-Chlorotoluene	10.53	91	276668	10.38	ug/L	97
89) 4-Chlorotoluene	10.61	91	280127	10.13	ug/L	98
90) 1,3,5-Trimethylbenzene	10.76	105	302066	10.62	ug/L	97
91) tert-Butylbenzene	10.95	119	237588	10.28	ug/L	98
92) 1,2,4-Trimethylbenzene	11.06	105	304595	10.32	ug/L	98
93) sec-Butylbenzene	11.12	105	358871	10.64	ug/L	97

DL 3/20/14



(#) = qualifier out of range (m) = manual integration
 L3692.D W031914.M Thu Mar 20 14:57:11 2014

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3692.D Vial: 14
 Acq On : 19 Mar 2014 3:12 pm Operator: D.Lipani
 Sample : STD #5 - 10 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:56 2014 Quant Results File: W031914.RES

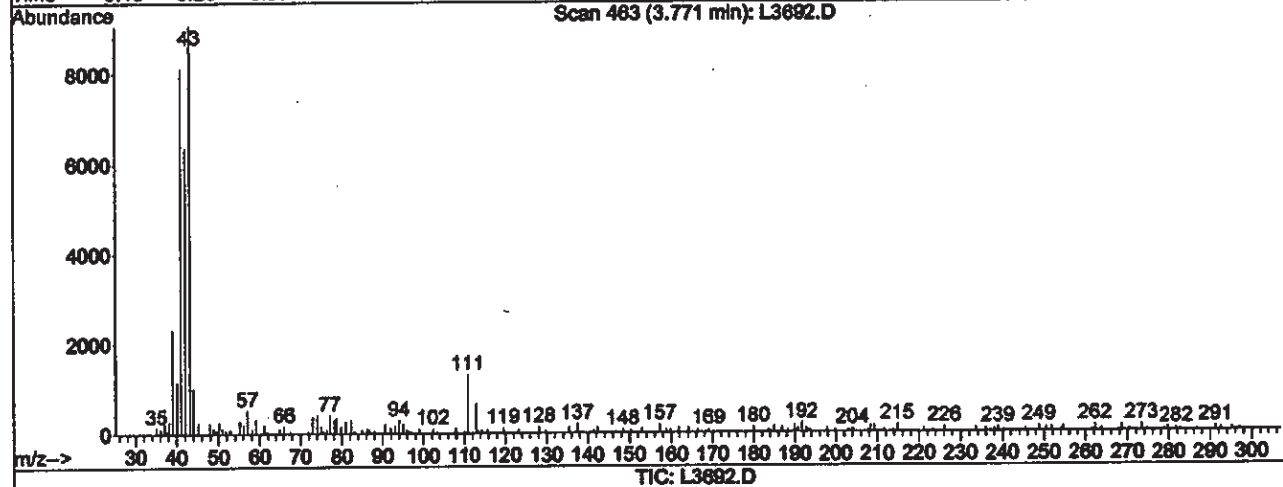
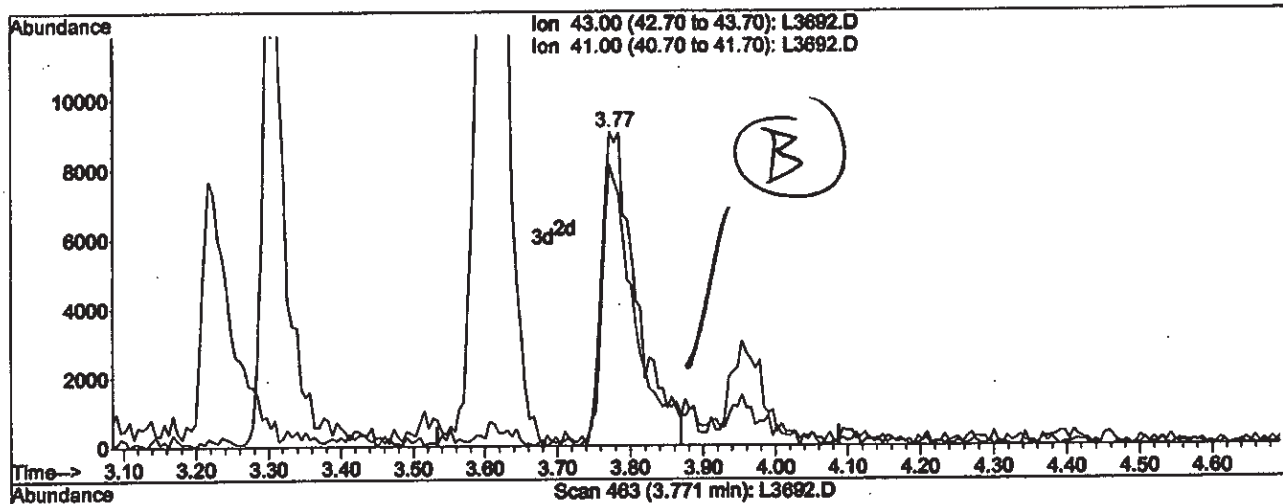
Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:53:43 2014
 Response via : Initial Calibration
 DataAcq Meth : W031914

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
94) 1,3-Dclbenz	11.14	146	188254	10.38	ug/L	97
95) 1,4-Dclbenz	11.20	146	178906	9.80	ug/L	99
96) p-Isopropyltoluene	11.29	119	281790	10.41	ug/L	97
97) 1,2-Dclbenz	11.47	146	161390	9.86	ug/L	99
98) n-Butylbenzene	11.61	91	271559	10.81	ug/L	97
99) 1,2-Dibromo-3-chloropropan	11.83	75	9570	9.82	ug/L	96
100) Nitrobenzene	12.02	77	3581	15.35	ug/L	84
101) 1,2,4-Tcbenzene	12.91	180	86861	9.68	ug/L	96
102) Naphthalen	13.09	128	132309	9.61	ug/L	100
103) Hexachlorobt	13.16	225	37379	9.97	ug/L	97
104) 1,2,3-Tclbenzene	13.24	180	64064	9.44	ug/L	95

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3692.D Vial: 14
 Acq On : 19 Mar 2014 3:12 pm Operator: D.Lipani
 Sample : STD #5 - 10 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 15:01 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:53:43 2014
 Response via : Multiple Level Calibration



(41) Iso-Butyl Alcohol

3.77min 160.18ug/L

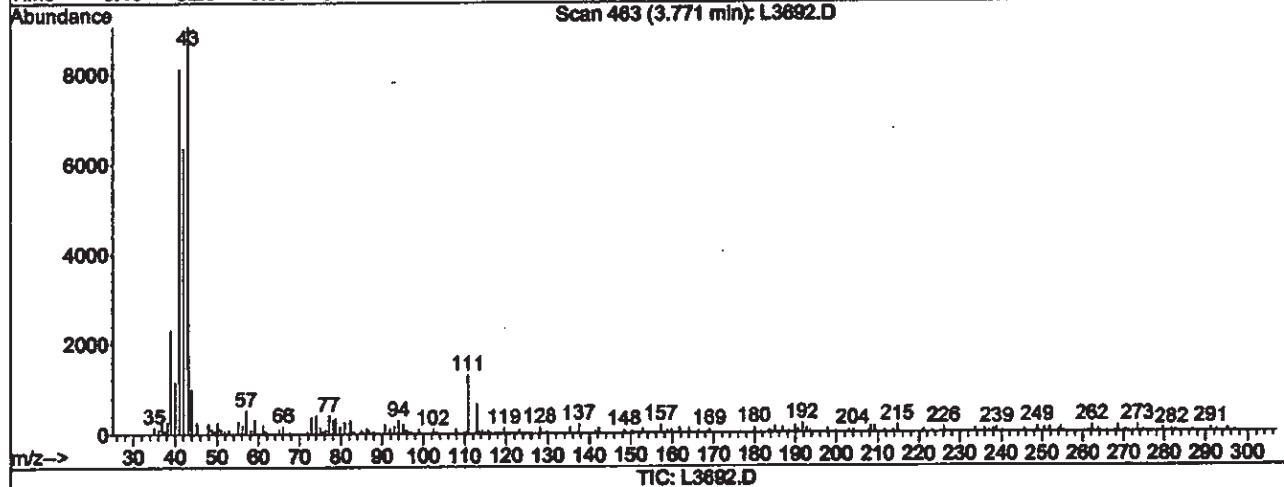
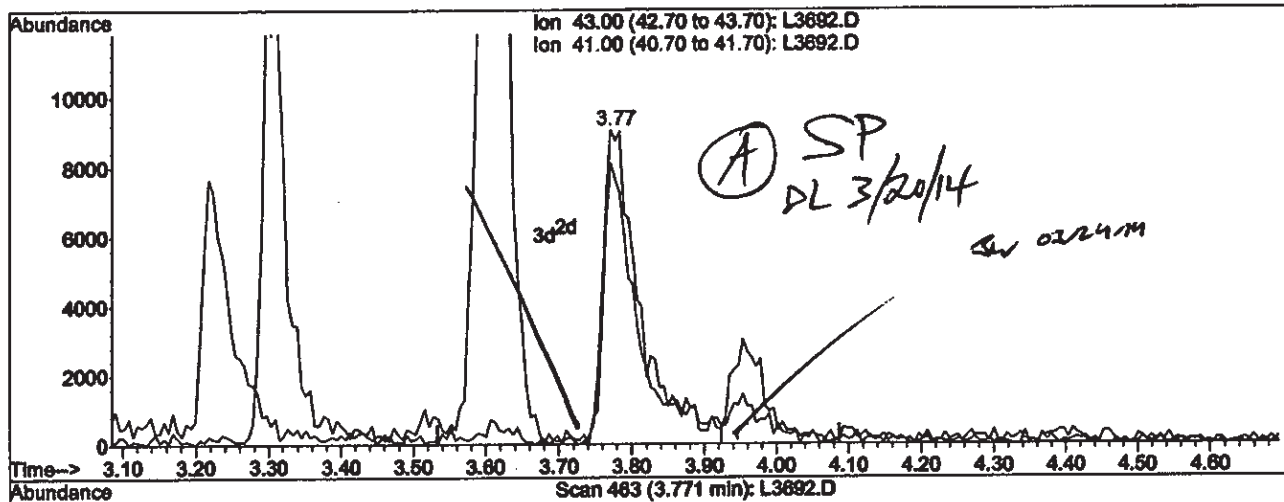
response 28978

Ion	Exp%	Act%
43.00	100	100
41.00	75.50	89.56
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3692.D Vial: 14
 Acq On : 19 Mar 2014 3:12 pm Operator: D.Lipani
 Sample : STD #5 - 10 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:55 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:53:43 2014
 Response via : Multiple Level Calibration



(41) Iso-Butyl Alcohol

3.77min 174.28ug/L m

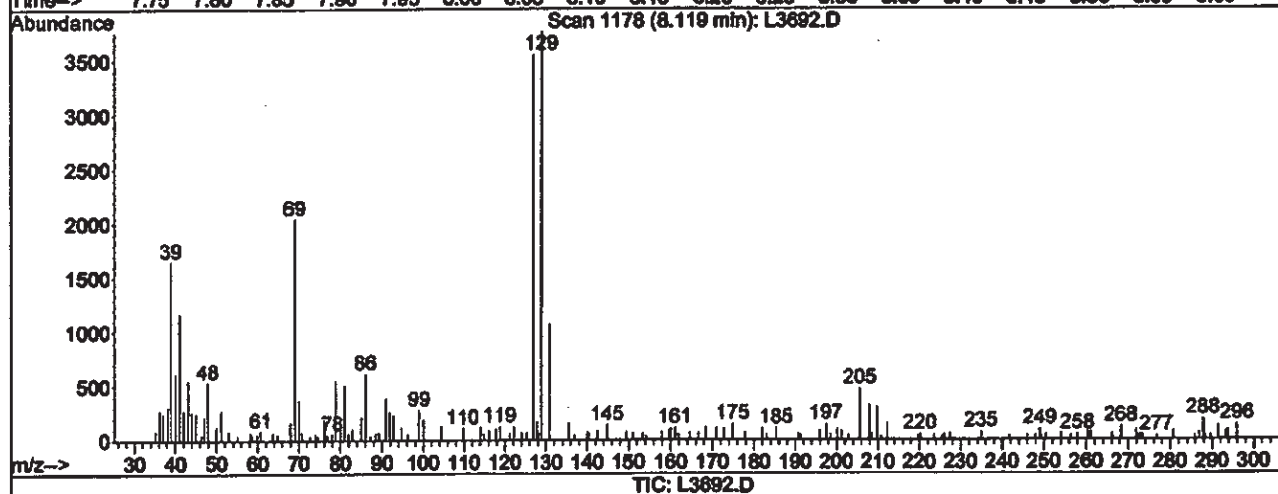
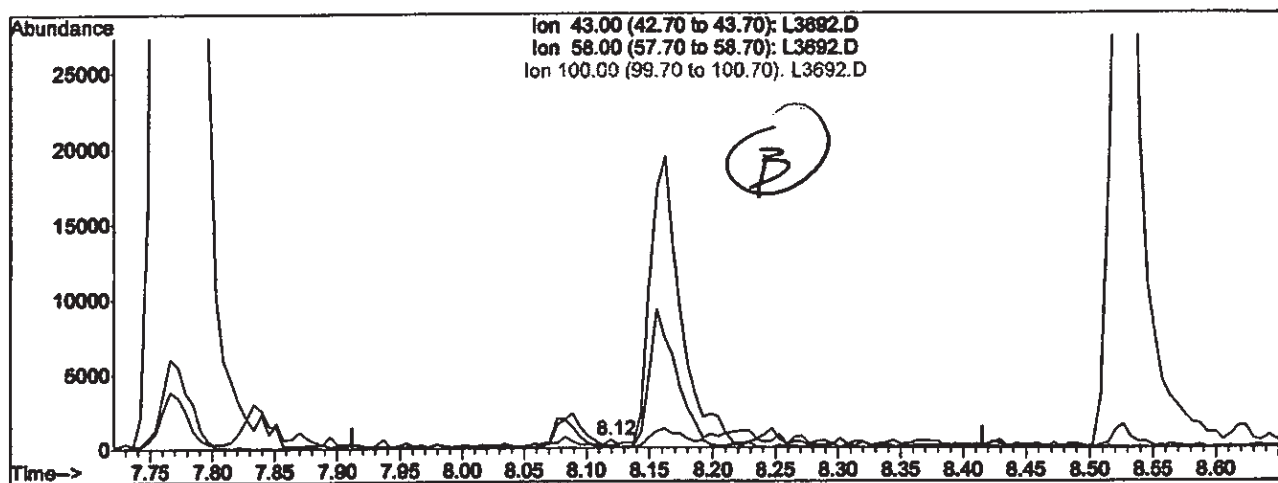
response 32811

Ion	Exp%	Act%
43.00	100	100
41.00	75.50	89.56
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3692.D Vial: 14
 Acq On : 19 Mar 2014 3:12 pm Operator: D.Lipani
 Sample : STD #5 - 10 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:55 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:53:43 2014
 Response via : Single Level Calibration



(68) 2-Hexanone (P)

8.12min 0.04ug/L

response 181

Ion	Exp%	Act%
43.00	100	100
58.00	49.90	9308.07#
100.00	7.90	1484.60#
0.00	0.00	0.00

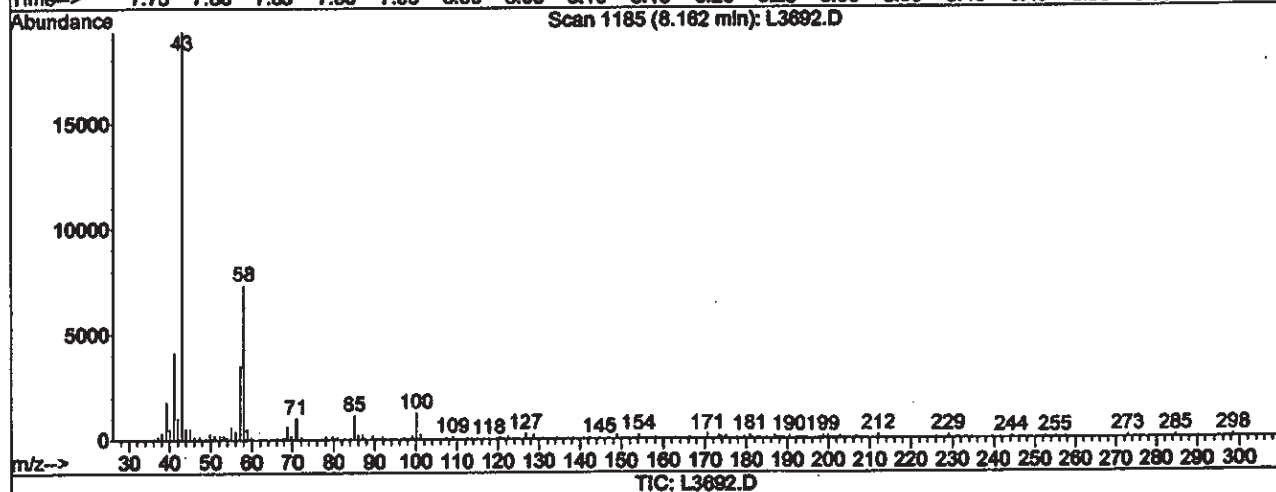
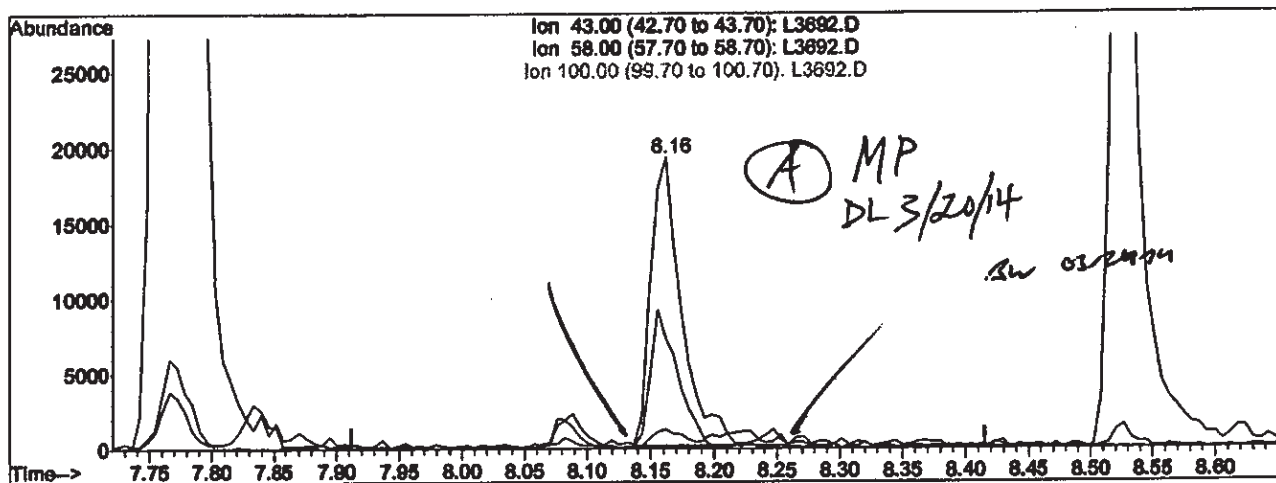
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3692.D
 Acq On : 19 Mar 2014 3:12 pm
 Sample : STD #5 - 10 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:56 2014

Vial: 14
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:53:43 2014
 Response via : Single Level Calibration



(68) 2-Hexanone (P)

8.16min 8.42ug/L m

response 33704

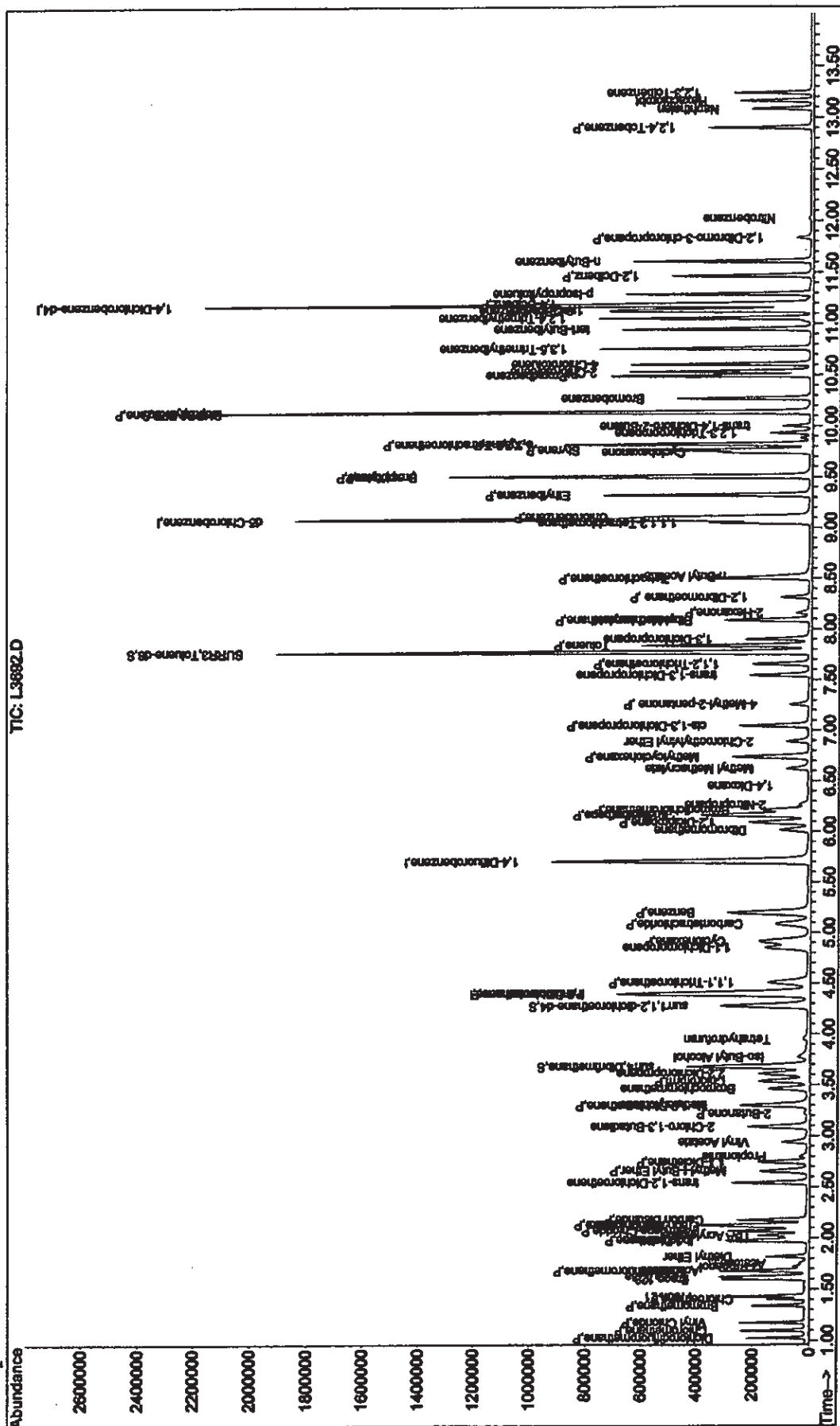
Ion	Exp%	Act%
43.00	100	100
58.00	49.90	44.46
100.00	7.90	7.00
0.00	0.00	0.00

Data File : I:\ACQDATA\MSV0A6\DATA\031914\L3692.D
 Vial: 14
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00
 Acq On : 19 Mar 2014 3:12 pm
 Sample : STD #5 - 10 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 14:56 2014
 Quant Results File: W031914.RES

```

Method      : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
Title       : 8260C WATERS
Last Update : Thu Mar 20 14:53:43 2014
Response via : Initial Calibration

```



Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3693.D Vial: 15
 Acq On : 19 Mar 2014 3:44 pm Operator: D.Lipani
 Sample : STD #6 - 20 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 15:01 2014 Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:58:00 2014
 Response via : Initial Calibration
 DataAcq Meth : W031914

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.40	168	597174	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.71	114	875855	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.09	117	812459	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.18	152	419046	50.00	ug/L	0.00

System Monitoring Compounds						
40) surr4, Dibrflmethane	3.68	113	296183	50.03	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	100.06%
42) surr1, 1,2-dichloroethane-d	4.28	65	278658	49.07	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	98.14%
62) SURR3, Toluene-d8	7.77	98	1072935	49.66	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	99.32%
82) SURR2, BFB	10.14	95	419297	49.52	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	99.04%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.03	85	204536	21.63	ug/L	99
3) Chloromethane	1.10	50	237810	20.97	ug/L	99
4) Vinyl Chloride	1.17	62	215463	21.22	ug/L	99
5) Bromomethane	1.34	94	128269	18.31	ug/L	95
6) Chloroethane	1.41	64	114821	20.16	ug/L	99
7) Freon 21	1.44	67	303878	19.77	ug/L	96
8) Freon 123	1.60	83	233776	19.61	ug/L	99
9) Freon 123a	1.62	67	194732	18.35	ug/L	93
10) Acrolein	1.69	56	89682	97.62	ug/L	98
11) Trichlorofluoromethane	1.68	101	256845	20.66	ug/L	99
12) Acetonitrile	1.70	41	73392	97.02	ug/L	99
13) 2-Propanol	1.72	45	85508	363.37	ug/L	95
14) Acetone	1.76	43	37645	19.48	ug/L	93
15) Diethyl Ether	1.82	59	103651	19.33	ug/L	96
16) 1,1-Dicethene	1.98	96	133285	20.05	ug/L	96
17) Iodomethane	1.99	142	211566	18.79	ug/L	99
18) TBA	2.01	59	139298	384.95	ug/L	96
19) Acrylonitrile	2.03	53	180832	100.48	ug/L	97
20) Methylene Chloride	2.07	84	171905	19.16	ug/L	97
21) Freon 113	2.11	101	146030	19.62	ug/L	95
22) Methyl Acetate	2.13	43	81093	20.72	ug/L	98
23) Allyl Chloride	2.14	76	86143	20.57	ug/L	96
24) Carbon Disulfide	2.18	76	467489	20.16	ug/L	98
25) trans-1,2-Dichloroethene	2.54	96	165698	20.42	ug/L	95
26) Methyl-t-Butyl Ether	2.66	73	326049	20.25	ug/L	98
27) 1,1-Dicethane	2.75	63	310922	20.80	ug/L	99
28) Propionitrile	2.80	54	64554	98.58	ug/L	99
29) Vinyl Acetate	2.94	43	302165	21.15	ug/L	98
30) 2-Chloro-1,3-Butadiene	3.09	53	254748	19.51	ug/L	95
31) 2-Butanone	3.22	43	46565	19.44	ug/L	99
32) Methacrylonitrile	3.31	41	69770	19.59	ug/L	99
33) cis-1,2-Dichloroethene	3.30	96	184509	20.09	ug/L	98
34) Bromochloromethane	3.46	128	81057	19.92	ug/L	95
35) Chloroform	3.54	83	306642	20.60	ug/L	98
36) 2,2-Dichloropropane	3.61	77	245934	20.41	ug/L	97

DL
3/20/14

(#) = qualifier out of range (m) = manual integration
 L3693.D W031914.M Thu Mar 20 15:02:46 2014

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3693.D
 Acq On : 19 Mar 2014 3:44 pm
 Sample : STD #6 - 20 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 15:01 2014

Vial: 15
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:58:00 2014
 Response via : Initial Calibration
 DataAcq Meth : W031914

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37) Tetrahydrofuran	3.95	42	29066	18.36	ug/L	98
38) 1,1,1-Trichloroethane	4.51	97	257073	20.52	ug/L	98
41) Iso-Butyl Alcohol	3.78	43	72386m	381.93	ug/L	94
43) 1,2-Dichloroethane	4.39	64	62176	19.90	ug/L	94
44) 1,1-Dichloropropene	4.85	75	211984	20.22	ug/L	94
45) Cyclohexane	4.91	56	258096	19.47	ug/L	93
46) Carbontetrachloride	5.08	119	212673	20.17	ug/L	98
47) Benzene	5.19	78	680886	20.69	ug/L	97
48) Dibromomethane	6.02	93	90878	20.77	ug/L	95
49) 1,2-Dicloropropane	6.09	63	179126	19.86	ug/L	100
50) n-Heptane	6.17	43	183832	20.79	ug/L	96
51) Trichloroethene	6.16	130	186863	20.67	ug/L	99
52) Bromodichloromethane	6.22	83	226360	20.46	ug/L	100
53) 2-Nitropropane	6.27	41	50495	40.24	ug/L	95
54) 1,4-Dioxane	6.47	88	13132m	354.87	ug/L	99
55) Methyl Methacrylate	6.62	69	69054	19.82	ug/L	96
56) Methylcyclohexane	6.75	55	185231	19.24	ug/L	98
57) 2-Chloroethylvinyl Ether	6.89	63	77195	19.92	ug/L	98
58) cis-1,3-Dichloropropene	7.05	75	256773	20.59	ug/L	98
59) 4-Methyl-2-pentanone	7.26	43	105072	19.08	ug/L	100
60) trans-1,3-Dichloropropene	7.55	75	203377	20.21	ug/L	99
61) 1,1,2-Trichloroethane	7.66	97	121400	19.80	ug/L	98
63) Toluene	7.84	91	732524	20.29	ug/L	98
65) 1,3-Dichloropropane	7.91	76	202250	19.62	ug/L	99
66) Ethyl Methacrylate	8.08	69	156337	20.29	ug/L	99
67) Dibromochloromethane	8.10	129	164138	19.88	ug/L	100
68) 2-Hexanone	8.16	43	75707	18.67	ug/L	96
69) 1,2-Dibromoethane	8.31	107	119730	19.04	ug/L	97
70) n-Butyl Acetate	8.52	43	184490	19.51	ug/L	96
71) Tetrachloroethene	8.50	164	150055	19.75	ug/L	97
72) 1,1,1,2-Tetrachloroethane	9.05	131	170634	19.76	ug/L	99
73) Chlorobenzene	9.11	112	473580	21.01	ug/L	99
74) Ethylbenzene	9.32	106	250042	20.07	ug/L #	89
75) Bromoform	9.51	173	98230	19.14	ug/L	95
76) (m+p)Xylene	9.51	106	612458	41.86	ug/L	92
77) o-Xylene	9.82	106	305365	20.44	ug/L	97
78) Cyclohexanone	9.74	55	245080	383.68	ug/L	97
79) Styrene	9.77	104	484000	20.72	ug/L	100
80) trans-1,4-Dichloro-2-Buten	10.00	75	43370	20.07	ug/L	97
81) Isopropylbenzene	10.13	105	762146	20.49	ug/L	98
84) 1,1,2,2-Tetrachloroethane	9.82	83	143947	19.41	ug/L	100
85) 1,2,3-Trichloropropane	9.93	75	98832	20.29	ug/L	98
86) Bromobenzene	10.27	156	204930	20.18	ug/L	99
87) n-Propylbenzene	10.49	91	896253	21.32	ug/L	97
88) 2-Chlorotoluene	10.53	91	549199	20.60	ug/L	99
89) 4-Chlorotoluene	10.61	91	563789	20.39	ug/L	98
90) 1,3,5-Trimethylbenzene	10.76	105	598580	21.04	ug/L	98
91) tert-Butylbenzene	10.95	119	488180	21.13	ug/L	99
92) 1,2,4-Trimethylbenzene	11.06	105	613062	20.77	ug/L	99
93) sec-Butylbenzene	11.12	105	712978	21.15	ug/L	97

DL 3/20/14

(#) = qualifier out of range (m) = manual integration
 L3693.D W031914.M Thu Mar 20 15:02:47 2014

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3693.D Vial: 15
 Acq On : 19 Mar 2014 3:44 pm Operator: D.Lipani
 Sample : STD #6 - 20 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 15:01 2014 Quant Results File: W031914.RES

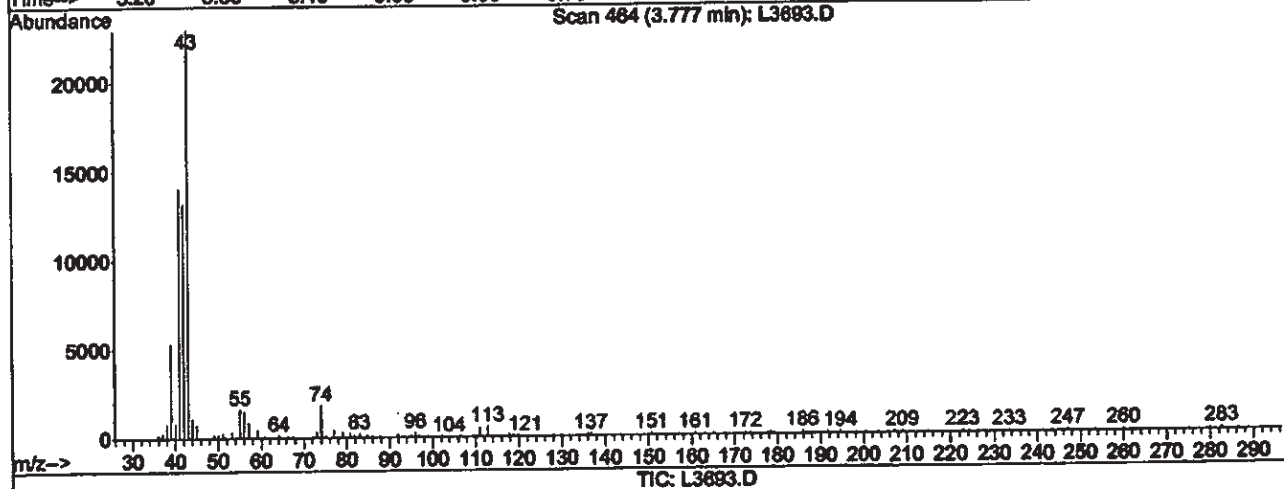
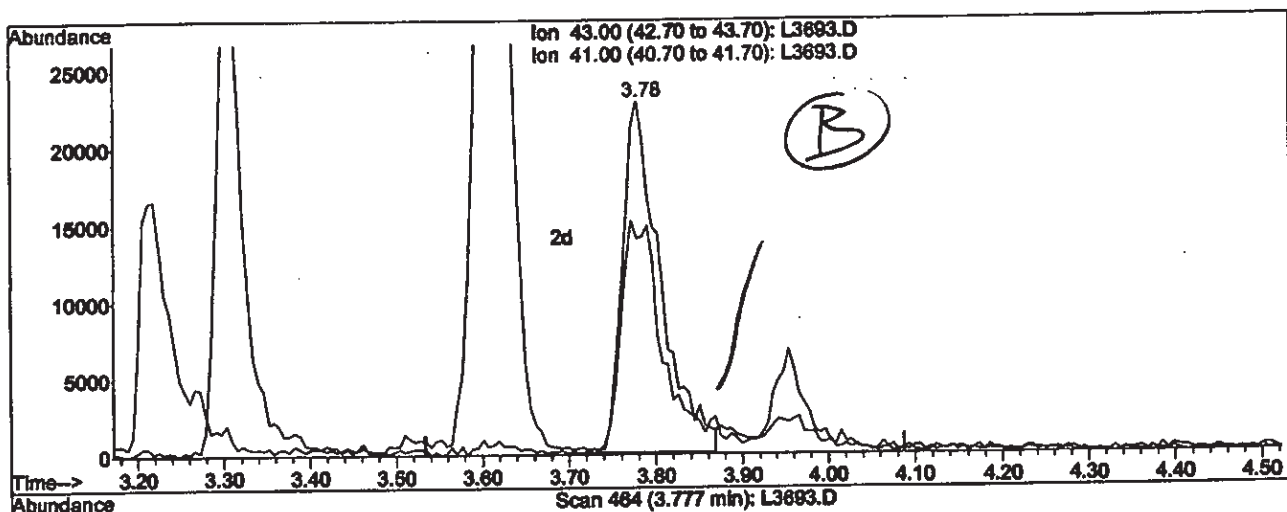
Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:58:00 2014
 Response via : Initial Calibration
 DataAcq Meth : W031914

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
94) 1,3-Dclbenz	11.14	146	364644	20.12	ug/L	100
95) 1,4-Dclbenz	11.20	146	372094	20.39	ug/L	98
96) p-Isopropyltoluene	11.29	119	587010	21.69	ug/L	97
97) 1,2-Dclbenz	11.47	146	327879	20.05	ug/L	98
98) n-Butylbenzene	11.61	91	545581	21.72	ug/L	97
99) 1,2-Dibromo-3-chloropropan	11.84	75	19045	19.54	ug/L	97
100) Nitrobenzene	12.02	77	7339	31.47	ug/L	94
101) 1,2,4-Tcbenzene	12.91	180	177717	19.81	ug/L	98
102) Naphthalen	13.09	128	271607	19.72	ug/L	99
103) Hexachlorobt	13.17	225	75833	20.24	ug/L	97
104) 1,2,3-Tclbenzene	13.24	180	130413	19.23	ug/L	97

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3693.D Vial: 15
 Acq On : 19 Mar 2014 3:44 pm Operator: D.Lipani
 Sample : STD #6 - 20 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 15:07 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:58:00 2014
 Response via : Multiple Level Calibration



(41) Iso-Butyl Alcohol

3.78min 364.59ug/L

response 69100

Ion	Exp%	Act%
43.00	100	100
41.00	75.50	61.33
0.00	0.00	0.00
0.00	0.00	0.00

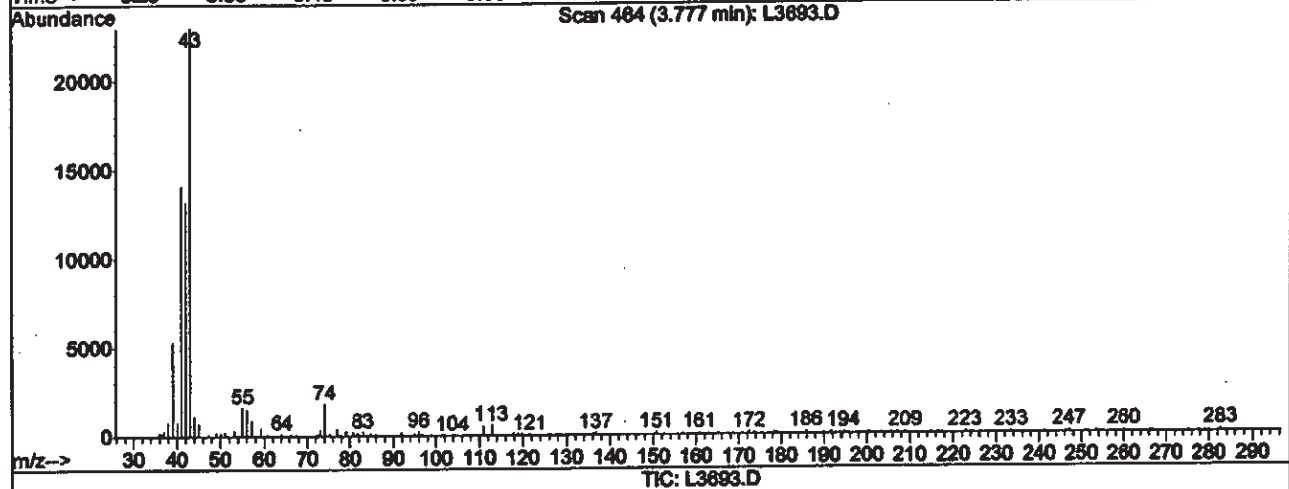
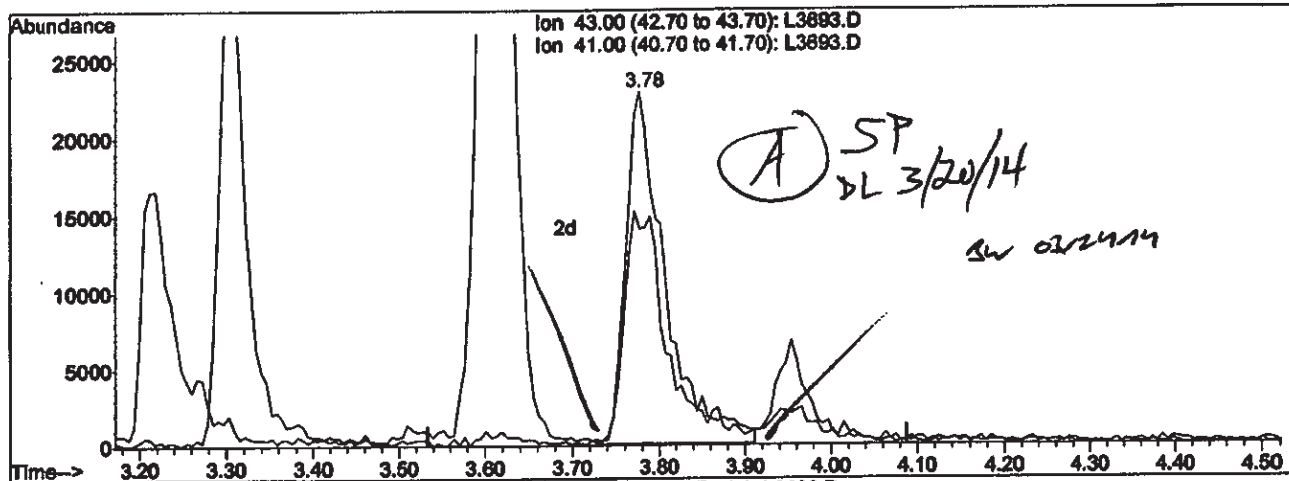
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3693.D
 Acq On : 19 Mar 2014 3:44 pm
 Sample : STD #6 - 20 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 15:00 2014

Vial: 15
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:58:00 2014
 Response via : Multiple Level Calibration



(41) Iso-Butyl Alcohol

3.78min 381.83ug/L.m

response 72386

Ion	Exp%	Act%
43.00	100	100
41.00	75.50	61.33
0.00	0.00	0.00
0.00	0.00	0.00

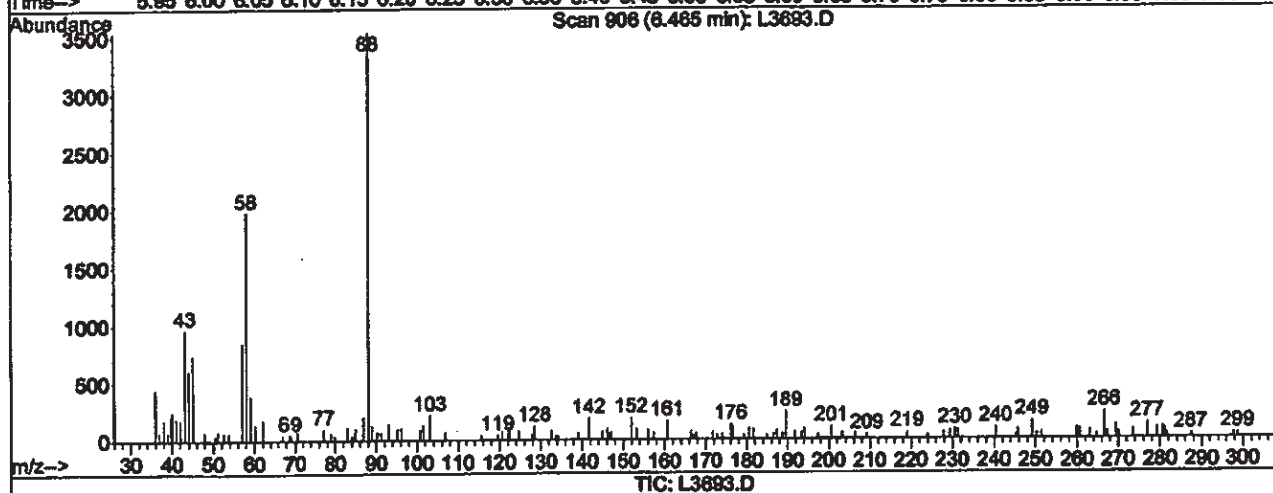
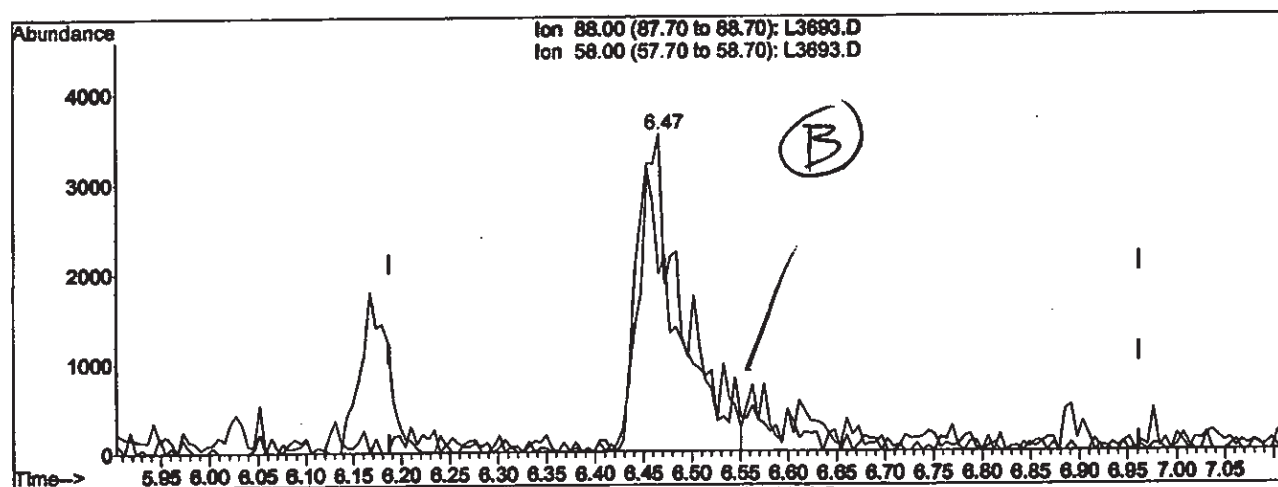
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3693.D
 Acq On : 19 Mar 2014 3:44 pm
 Sample : STD #6 - 20 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 15:00 2014

Vial: 15
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:58:00 2014
 Response via : Multiple Level Calibration



(54) 1,4-Dioxane

6.47min 311.01ug/L

response 11509

Ion	Exp%	Act%
88.00	100	100
58.00	78.00	55.98#
0.00	0.00	0.00
0.00	0.00	0.00

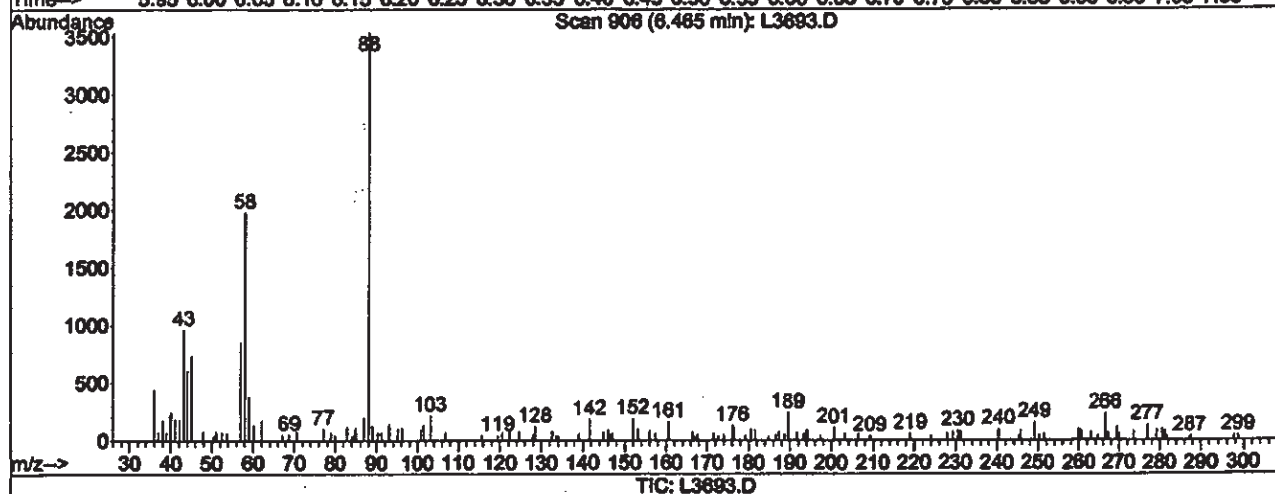
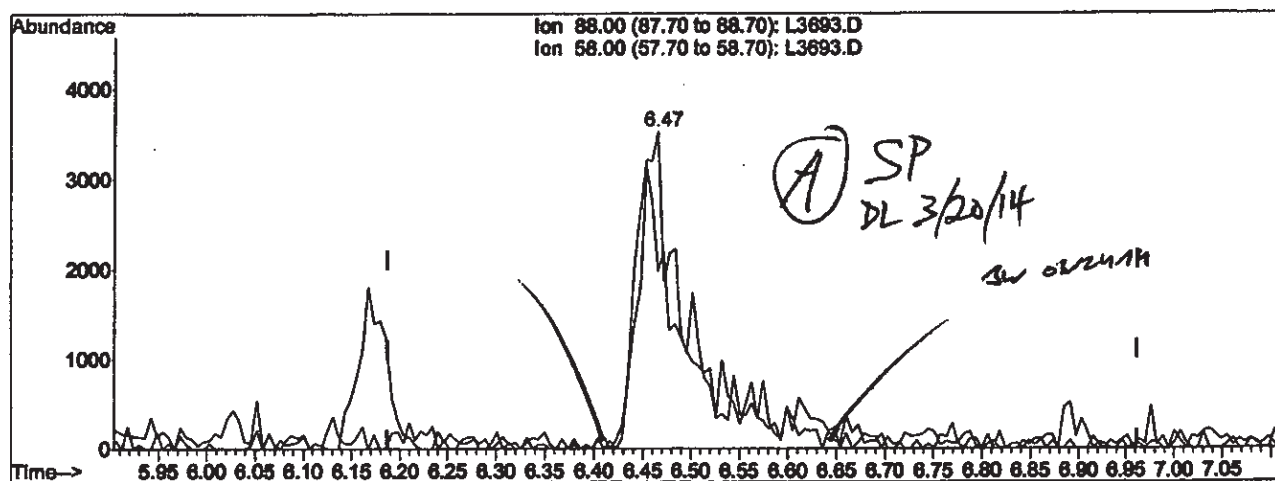
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3693.D
 Acq On : 19 Mar 2014 3:44 pm
 Sample : STD #6 - 20 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 15:01 2014

Vial: 15
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 14:58:00 2014
 Response via : Multiple Level Calibration



(54) 1,4-Dioxane

6.47min 354.87ug/L m

response 13132

Ion	Exp%	Act%
88.00	100	100
58.00	76.00	55.98#
0.00	0.00	0.00
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSV0A6\DATA\031914\L3693.D

Acq On	: 19 Mar 2014	3:44 pm
Sample	: STD #6	- 20 PPB
Misc	: 8260C ICAL GCMS#6	
MS Integration Params: CPD4.P		
Quant Time:	Mar 20 15:01 2014	

Vial: 15

Operator: D.Lipani

Inst : MS#6

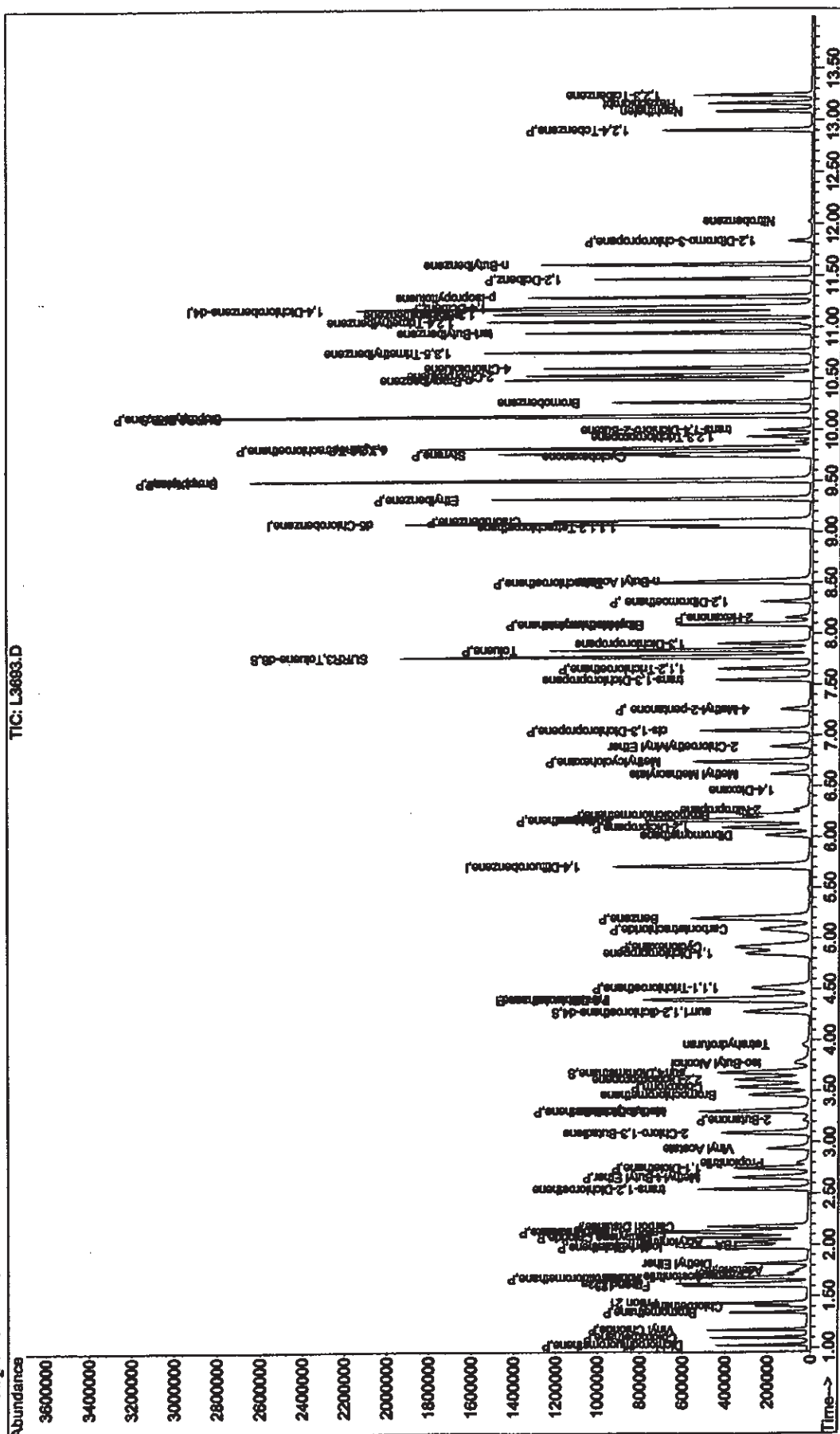
Multiplr: 1.00

Quant Results File: W031914.RES

```

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
Title   : 8260C WATERS
Last Update : Thu Mar 20 14:58:00 2014
Response via : Initial Calibration

```



Quantitation Report (Not Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3694.D
 Acq On : 19 Mar 2014 4:16 pm
 Sample : STD #7 - 50 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 13:54 2014

Vial: 16
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 13:45:49 2014
 Response via : Initial Calibration
 DataAcq Meth : W031914

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.40	168	613124	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.71	114	885735	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.09	117	798889	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.18	152	438312	50.00	ug/L	0.00

System Monitoring Compounds

40) surr4, Dibrflmethane	3.69	113	303636	50.71	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	101.42%
42) surr1, 1,2-dichloroethane-d	4.28	65	290133	50.52	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	101.04%
62) SURR3, Toluene-d8	7.77	98	1108365	50.73	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	101.46%
82) SURR2, BFB	10.14	95	426522	51.23	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	102.46%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.03	85	488553	50.32	ug/L	100
3) Chloromethane	1.10	50	583797	50.13	ug/L	100
4) Vinyl Chloride	1.17	62	525279	50.38	ug/L	100
5) Bromomethane	1.34	94	321460	44.67	ug/L	100
6) Chloroethane	1.41	64	280582	47.99	ug/L	100
7) Freon 21	1.44	67	758021	48.03	ug/L	100
8) Freon 123	1.61	83	585319	47.82	ug/L	100
9) Freon 123a	1.62	67	496792	42.43	ug/L	100
10) Acrolein	1.68	56	236144	251.05	ug/L	100
11) Trichlorofluoromethane	1.68	101	621531	48.68	ug/L	100
12) Acetonitrile	1.70	41	191461	246.51	ug/L	100
13) 2-Propanol	1.72	45	250792	1038.02	ug/L	100
14) Acetone	1.76	43	95716	48.11	ug/L	100
15) Diethyl Ether	1.82	59	273189	49.52	ug/L	100
16) 1,1-Dicethene	1.98	96	325033	47.63	ug/L	100
17) Iodomethane	1.99	142	578772	49.80	ug/L	100
18) TBA	2.01	59	387464	1043.14	ug/L	100
19) Acrylonitrile	2.03	53	468013	253.89	ug/L	100
20) Methylene Chloride	2.07	84	423004	45.92	ug/L	100
21) Freon 113	2.12	101	359589	47.05	ug/L	100
22) Methyl Acetate	2.13	43	211247	52.45	ug/L	100
23) Allyl Chloride	2.13	76	209098	53.43	ug/L	100
24) Carbon Disulfide	2.18	76	1169706	49.19	ug/L	100
25) trans-1,2-Dichloroethene	2.54	96	409846	49.19	ug/L	100
26) Methyl-t-Butyl Ether	2.66	73	852405	51.57	ug/L	100
27) 1,1-Dicethene	2.75	63	762911	49.70	ug/L	100
28) Propionitrile	2.80	54	170730	251.67	ug/L	100
29) Vinyl Acetate	2.94	43	787707	58.84	ug/L	100
30) 2-Chloro-1,3-Butadiene	3.09	53	673601	50.25	ug/L	100
31) 2-Butanone	3.21	43	129552	52.68	ug/L	100
32) Methacrylonitrile	3.30	41	190080	51.99	ug/L	100
33) cis-1,2-Dichloroethene	3.30	96	464007	49.20	ug/L	100
34) Bromochloromethane	3.47	128	209011	50.04	ug/L	100
35) Chloroform	3.54	83	755721	49.45	ug/L	100
36) 2,2-Dichloropropane	3.62	77	611526	49.43	ug/L	100

DL
 3/20/14

(#) = qualifier out of range (m) = manual integration
 L3694.D W031914.M Thu Mar 20 13:46:04 2014

Quantitation Report (Not Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3694.D
 Acq On : 19 Mar 2014 4:16 pm
 Sample : STD #7 - 50 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 13:54 2014

Vial: 16
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 13:45:49 2014
 Response via : Initial Calibration
 DataAcq Meth : W031914

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37) Tetrahydrofuran	3.95	42	83392	51.72	ug/L	100
38) 1,1,1-Trichloroethane	4.51	97	637362	49.30	ug/L	100
41) Iso-Butyl Alcohol	3.77	43	202447	1073.44	ug/L	100
43) 1,2-Dichloroethane	4.40	64	155681	49.68	ug/L	100
44) 1,1-Dichloropropene	4.85	75	528529	49.86	ug/L	100
45) Cyclohexane	4.91	56	646461	48.23	ug/L	100
46) Carbontetrachloride	5.09	119	535562	52.66	ug/L	100
47) Benzene	5.20	78	1648332	49.53	ug/L	100
48) Dibromomethane	6.01	93	227737	51.48	ug/L	100
49) 1,2-Dicloropropane	6.09	63	462201	51.03	ug/L	100
50) n-Heptane	6.17	43	440445	49.26	ug/L	100
51) Trichloroethene	6.16	130	456480	49.93	ug/L	100
52) Bromodichloromethane	6.22	83	575446	51.44	ug/L	100
53) 2-Nitropropane	6.26	41	137738	111.72	ug/L	100
54) 1,4-Dioxane	6.45	88	37839	1043.25	ug/L	100
55) Methyl Methacrylate	6.62	69	189826	53.88	ug/L	100
56) Methylcyclohexane	6.74	55	466787	47.94	ug/L	100
57) 2-Chloroethylvinyl Ether	6.89	63	211956	53.92	ug/L	100
58) cis-1,3-Dichloropropene	7.05	75	663916	52.65	ug/L	100
59) 4-Methyl-2-pentanone	7.26	43	290330	52.56	ug/L	100
60) trans-1,3-Dichloropropene	7.55	75	542551	53.36	ug/L	100
61) 1,1,2-Trichloroethane	7.66	97	325043	52.43	ug/L	100
63) Toluene	7.84	91	1746630	47.81	ug/L	100
65) 1,3-Dichloropropane	7.91	76	530912	52.38	ug/L	100
66) Ethyl Methacrylate	8.08	69	418633	54.46	ug/L	100
67) Dibromochloromethane	8.09	129	428078	52.72	ug/L	100
68) 2-Hexanone	8.16	43	202510	51.18	ug/L	100
69) 1,2-Dibromoethane	8.31	107	325570	52.56	ug/L	100
70) n-Butyl Acetate	8.52	43	517860	55.70	ug/L	100
71) Tetrachloroethene	8.50	164	374291	50.09	ug/L	100
72) 1,1,1,2-Tetrachloroethane	9.06	131	428583	50.46	ug/L	100
73) Chlorobenzene	9.11	112	1139659	51.43	ug/L	100
74) Ethylbenzene	9.32	106	635948	51.90	ug/L	100
75) Bromoform	9.51	173	270981	53.70	ug/L	100
76) (m+p)Xylene	9.51	106	1507040	104.76	ug/L	100
77) o-Xylene	9.82	106	757173	51.55	ug/L	100
78) Cyclohexanone	9.74	55	678525	1086.29	ug/L	100
79) Styrene	9.77	104	1215898	52.92	ug/L	100
80) trans-1,4-Dichloro-2-Buten	10.00	75	126583	59.06	ug/L	100
81) Isopropylbenzene	10.14	105	1822646	49.83	ug/L	100
84) 1,1,2,2-Tetrachloroethane	9.82	83	384469	49.57	ug/L	100
85) 1,2,3-Trichloropropane	9.93	75	262258	51.46	ug/L	100
86) Bromobenzene	10.27	156	515470	48.53	ug/L	100
87) n-Propylbenzene	10.50	91	2099386	47.73	ug/L	100
88) 2-Chlorotoluene	10.53	91	1329355	47.88	ug/L	100
89) 4-Chlorotoluene	10.61	91	1371048	47.41	ug/L	100
90) 1,3,5-Trimethylbenzene	10.76	105	1458020	49.01	ug/L	100
91) tert-Butylbenzene	10.95	119	1194155	49.41	ug/L	100
92) 1,2,4-Trimethylbenzene	11.06	105	1485330	48.13	ug/L	100
93) sec-Butylbenzene	11.13	105	1703066	48.30	ug/L	100

(#) = qualifier out of range (m) = manual integration
 L3694.D W031914.M Thu Mar 20 13:46:05 2014

Quantitation Report (Not Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3694.D Vial: 16
 Acq On : 19 Mar 2014 4:16 pm Operator: D.Lipani
 Sample : STD #7 - 50 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 13:54 2014 Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 13:45:49 2014
 Response via : Initial Calibration
 DataAcq Meth : W031914

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
94) 1,3-Dclbenz	11.14	146	918244	48.43 ug/L	100
95) 1,4-Dclbenz	11.20	146	911590	47.58 ug/L	100
96) p-Isopropyltoluene	11.29	119	1400694	49.49 ug/L	100
97) 1,2-Dclbenz	11.47	146	820017	47.93 ug/L	100
98) n-Butylbenzene	11.61	91	1322542	50.18 ug/L	100
99) 1,2-Dibromo-3-chloropropan	11.83	75	50556	49.60 ug/L	100
100) Nitrobenzene	12.02	77	22981	94.23 ug/L	100
101) 1,2,4-Tcbenzene	12.90	180	460774	49.11 ug/L	100
102) Naphthalen	13.09	128	744038	51.66 ug/L	100
103) Hexachlorobt	13.16	225	178845	45.63 ug/L	100
104) 1,2,3-Tclbenzene	13.24	180	344315	48.54 ug/L	100

 (#) = qualifier out of range (m) = manual integration
 L3694.D W031914.M Thu Mar 20 13:46:06 2014

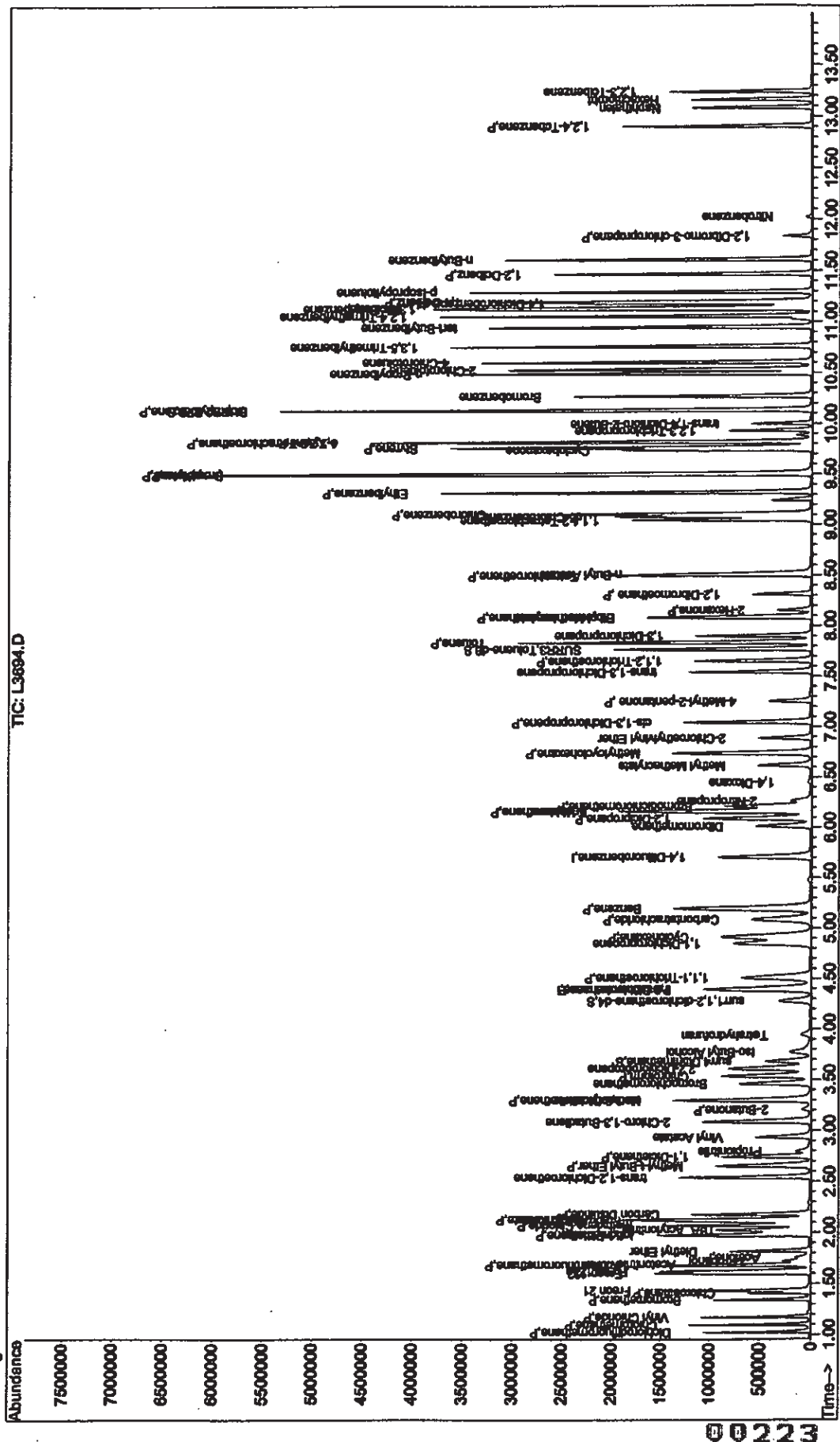
Data File : I:\ACQDATA\MSVOAG\DATA\031914\L3694.D

Acq On	: 19 Mar 2014	4:16 pm	Vial: 16
Sample	: STD #7 - 50 PPB		Operator: D.Lipani
Misc	: 8260C ICAL GCMS#6		Inst : MS#6
MS Integration Params: CPD4.P			Multiplr: 1.00
Quant Time: Mar 20 13:54 2014			
Quant Results File: W031914.RES			

Method : I:\ACQDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)

Title : 8260C WATERS

Last Update : Thu Mar 20 13:45:49
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3695.D
 Acq On : 19 Mar 2014 4:53 pm
 Sample : STD #8 - 100 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 15:11 2014

Vial: 17
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 15:03:10 2014
 Response via : Initial Calibration
 DataAcq Meth : W031914

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.40	168	614749	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.71	114	904135	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.09	117	810042	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.19	152	430736	50.00	ug/L	0.00

System Monitoring Compounds

40) surr4, Dibromomethane	3.69	113	303589	49.67	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	99.34%
42) surr1, 1,2-dichloroethane-d	4.28	65	287295	49.01	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	98.02%
62) SURR3, Toluene-d8	7.77	98	1106319	49.60	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	99.20%
82) SURR2, BFB	10.14	95	436757	51.74	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	103.48%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.03	85	968021	99.44	ug/L	97
3) Chloromethane	1.10	50	1142591	97.86	ug/L	96
4) Vinyl Chloride	1.18	62	994293	95.13	ug/L	95
5) Bromomethane	1.35	94	659258	91.41	ug/L	97
6) Chloroethane	1.41	64	568308	96.98	ug/L	99
7) Freon 21	1.44	67	1502837	94.97	ug/L	95
8) Freon 123	1.61	83	1191510	97.09	ug/L	96
9) Freon 123a	1.63	67	1008238	93.56	ug/L	92
10) Acrolein	1.69	56	496629	525.14	ug/L	100
11) Trichlorofluoromethane	1.68	101	1262272	98.61	ug/L	97
12) Acetonitrile	1.70	41	383730	492.75	ug/L	96
13) 2-Propanol	1.72	45	506216	2089.67	ug/L	99
14) Acetone	1.75	43	199149	100.12	ug/L	97
15) Diethyl Ether	1.82	59	539371	97.71	ug/L	98
16) 1,1-Dichloroethane	1.98	96	665127	97.21	ug/L	95
17) Iodomethane	1.99	142	1205932	104.59	ug/L	99
18) TBA	2.01	59	770925	2069.55	ug/L	97
19) Acrylonitrile	2.03	53	944408	509.78	ug/L	100
20) Methylene Chloride	2.08	84	849406	91.97	ug/L	97
21) Freon 113	2.11	101	725063	94.61	ug/L	97
22) Methyl Acetate	2.13	43	434678	107.88	ug/L	96
23) Allyl Chloride	2.14	76	434615	100.79	ug/L	# 86
24) Carbon Disulfide	2.18	76	2302656	96.43	ug/L	97
25) trans-1,2-Dichloroethene	2.54	96	830348	99.40	ug/L	97
26) Methyl-t-Butyl Ether	2.66	73	1690511	102.01	ug/L	96
27) 1,1-Dichloroethane	2.75	63	1513494	98.33	ug/L	96
28) Propionitrile	2.79	54	345298	512.23	ug/L	97
29) Vinyl Acetate	2.94	43	1608353	109.36	ug/L	99
30) 2-Chloro-1,3-Butadiene	3.09	53	1435264	106.79	ug/L	99
31) 2-Butanone	3.21	43	267141	108.34	ug/L	97
32) Methacrylonitrile	3.30	41	375494	102.43	ug/L	98
33) cis-1,2-Dichloroethene	3.30	96	922510	97.56	ug/L	99
34) Bromochloromethane	3.47	128	413951	98.79	ug/L	98
35) Chloroform	3.54	83	1526062	99.60	ug/L	98
36) 2,2-Dichloropropane	3.61	77	1253320	101.03	ug/L	98

(#) = qualifier out of range (m) = manual integration
 L3695.D W031914.M Thu Mar 20 15:05:57 2014

DL
 3/20/14

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3695.D
 Acq On : 19 Mar 2014 4:53 pm
 Sample : STD #8 - 100 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 15:11 2014

Vial: 17
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 15:03:10 2014
 Response via : Initial Calibration
 DataAcq Meth : W031914

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37) Tetrahydrofuran	3.94	42	166913	102.07	ug/L	92
38) 1,1,1-Trichloroethane	4.51	97	1308634	101.44	ug/L	98
41) Iso-Butyl Alcohol	3.77	43	411042	2089.62	ug/L	97
43) 1,2-Dichloroethane	4.40	64	311973	96.75	ug/L	97
44) 1,1-Dichloropropene	4.85	75	1067127	98.62	ug/L	96
45) Cyclohexane	4.92	56	1365500	99.80	ug/L	97
46) Carbontetrachloride	5.09	119	1091148	100.27	ug/L	98
47) Benzene	5.20	78	3230508	95.09	ug/L	94
48) Dibromomethane	6.02	93	456031	100.99	ug/L	99
49) 1,2-Dicloropropane	6.10	63	932085	100.14	ug/L	100
50) n-Heptane	6.17	43	933368	102.26	ug/L	99
51) Trichloroethene	6.16	130	931581	99.82	ug/L	99
52) Bromodichloromethane	6.22	83	1180700	103.40	ug/L	99
53) 2-Nitropropane	6.27	41	282298	217.78	ug/L	97
54) 1,4-Dioxane	6.44	88	75303	1945.51	ug/L	83
55) Methyl Methacrylate	6.62	69	388660	108.08	ug/L	98
56) Methylcyclohexane	6.74	55	975722	98.17	ug/L	98
57) 2-Chloroethylvinyl Ether	6.89	63	441978	110.47	ug/L	98
58) cis-1,3-Dichloropropene	7.05	75	1320250	102.58	ug/L	98
59) 4-Methyl-2-pentanone	7.26	43	602759	106.04	ug/L	99
60) trans-1,3-Dichloropropene	7.55	75	1080523	104.02	ug/L	100
61) 1,1,2-Trichloroethane	7.66	97	635750	100.45	ug/L	99
63) Toluene	7.84	91	3225870	86.55	ug/L	95
65) 1,3-Dichloropropane	7.90	76	1028156	100.05	ug/L	99
66) Ethyl Methacrylate	8.08	69	848840	110.52	ug/L	98
67) Dibromochloromethane	8.10	129	863665	104.91	ug/L	99
68) 2-Hexanone	8.15	43	435418	107.70	ug/L	96
69) 1,2-Dibromoethane	8.32	107	648246	103.42	ug/L	100
70) n-Butyl Acetate	8.52	43	1038446	110.17	ug/L	98
71) Tetrachloroethene	8.50	164	750480	99.07	ug/L	99
72) 1,1,1,2-Tetrachloroethane	9.05	131	874280	101.53	ug/L	97
73) Chlorobenzene	9.11	112	2160093	96.14	ug/L	97
74) Ethylbenzene	9.32	106	1245294	100.24	ug/L #	84
75) Bromoform	9.50	173	560402	109.53	ug/L	98
76) (m+p)Xylene	9.51	106	2863761	196.35	ug/L #	83
77) o-Xylene	9.82	106	1498550	100.64	ug/L	90
78) Cyclohexanone	9.74	55	1331629	2091.05	ug/L	98
79) Styrene	9.77	104	2289085	98.27	ug/L	96
80) trans-1,4-Dichloro-2-Buten	10.00	75	259168	120.29	ug/L	98
81) Isopropylbenzene	10.14	105	3120234	84.14	ug/L	93
84) 1,1,2,2-Tetrachloroethane	9.82	83	775134	101.70	ug/L	99
85) 1,2,3-Trichloropropane	9.93	75	513101	102.46	ug/L	99
86) Bromobenzene	10.27	156	1017016	97.44	ug/L	99
87) n-Propylbenzene	10.50	91	3471307	80.32	ug/L	91
88) 2-Chlorotoluene	10.53	91	2464262	89.94	ug/L	96
89) 4-Chlorotoluene	10.61	91	2497914	87.90	ug/L	95
90) 1,3,5-Trimethylbenzene	10.76	105	2650207	90.64	ug/L	95
91) tert-Butylbenzene	10.95	119	2244813	94.51	ug/L	97
92) 1,2,4-Trimethylbenzene	11.06	105	2702104	89.06	ug/L	94
93) sec-Butylbenzene	11.13	105	3048254	87.96	ug/L	95

(#) = qualifier out of range (m) = manual integration
 L3695.D W031914.M Thu Mar 20 15:05:59 2014

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3695.D Vial: 17
 Acq On : 19 Mar 2014 4:53 pm Operator: D.Lipani
 Sample : STD #8 - 100 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 15:11 2014 Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 15:03:10 2014
 Response via : Initial Calibration
 DataAcq Meth : W031914

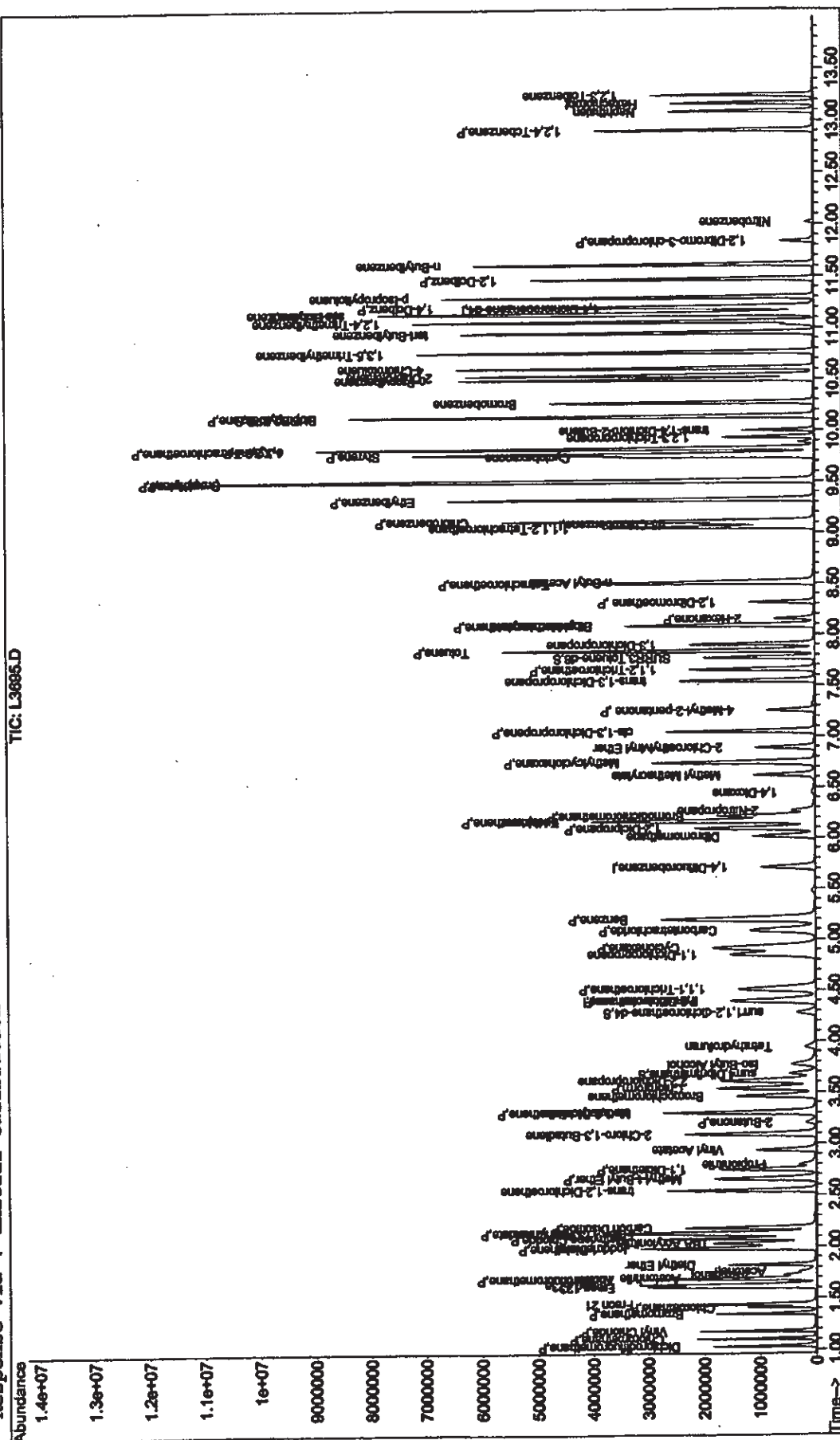
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
94) 1,3-Dclbenz	11.14	146	1784745	95.79	ug/L	97
95) 1,4-Dclbenz	11.20	146	1765708	94.11	ug/L	99
96) p-Isopropyltoluene	11.29	119	2599751	93.46	ug/L	95
97) 1,2-Dclbenz	11.47	146	1603439	95.37	ug/L	98
98) n-Butylbenzene	11.61	91	2436756	94.37	ug/L	94
99) 1,2-Dibromo-3-chloropropan	11.84	75	104921	104.74	ug/L	98
100) Nitrobenzene	12.02	77	53629	223.75	ug/L	97
101) 1,2,4-Tcbenzene	12.91	180	950678	103.10	ug/L	98
102) Naphthalen	13.08	128	1493286	105.50	ug/L	98
103) Hexachlorobt	13.16	225	385958	100.21	ug/L	98
104) 1,2,3-Tclbenzene	13.24	180	715029	102.57	ug/L	99

Data File : I:\ACQDATA\MSVOA6\DATA\031914\L3695.D
Acq On : 19 Mar 2014 4:53 pm
Sample : STD #8 - 100 ppb
Misc : 8260C ICAL GCMS#6
MMS Integration Params: CPD4.P
Quant Time: Mar 20 15:11 2014
Vial: 17
Operator: D.Lipani
Inst : MS#6
Multiplr: 1.00
Quant Results File: W031914.RES

```

Method      : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
Title       : 8260C WATERS
Last Update : Thu Mar 20 15:03:10 2014
Response via : Initial Calibration

```



Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3696.D
 Acq On : 19 Mar 2014 5:28 pm
 Sample : STD #9 - 150 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 15:07 2014

Vial: 18
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 15:06:16 2014
 Response via : Initial Calibration
 DataAcq Meth : W031914

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.40	168	618995	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.71	114	905388	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.08	117	782985	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.19	152	449927	50.00	ug/L	0.00

System Monitoring Compounds						
40) surr4, Dibrflmethane	3.68	113	309404	50.55	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	101.10%
42) surr1, 1,2-dichloroethane-d	4.28	65	297333	50.65	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	101.30%
62) SURR3, Toluene-d8	7.77	98	1095370	49.04	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	98.08%
82) SURR2, BFB	10.14	95	457647	56.09	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	112.18%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.03	85	1380470	140.84	ug/L	92
3) Chloromethane	1.10	50	1609712	136.92	ug/L	89
4) Vinyl Chloride	1.17	62	1440745	136.90	ug/L	89
5) Bromomethane	1.34	94	1010923	139.21	ug/L	96
6) Chloroethane	1.41	64	840965	142.53	ug/L	99
7) Freon 21	1.43	67	2129399	133.64	ug/L	86
8) Freon 123	1.60	83	1763979	142.75	ug/L	95
9) Freon 123a	1.62	67	1562557m	145.86	ug/L	100
10) Acrolein	1.68	56	771471	810.17	ug/L	95
11) Trichlorofluoromethane	1.68	101	1881286	145.96	ug/L	95
12) Acetonitrile	1.70	41	605503	772.20	ug/L	98
13) 2-Propanol	1.72	45	769181	3153.41	ug/L	96
14) Acetone	1.76	43	298324	148.95	ug/L	99
15) Diethyl Ether	1.82	59	834141	150.07	ug/L	97
16) 1,1-Dichloroethane	1.98	96	1024411	148.70	ug/L	94
17) Iodomethane	1.99	142	1759223	155.52	ug/L	95
18) TBA	2.01	59	1205649	3214.37	ug/L	99
19) Acrylonitrile	2.03	53	1413620	757.83	ug/L	98
20) Methylene Chloride	2.07	84	1282739	137.93	ug/L	96
21) Freon 113	2.12	101	1098266	142.33	ug/L	99
22) Methyl Acetate	2.13	43	665004	163.91	ug/L	96
23) Allyl Chloride	2.13	76	642337	147.94	ug/L #	76
24) Carbon Disulfide	2.18	76	3150708	131.04	ug/L	93
25) trans-1,2-Dichloroethene	2.54	96	1236555	147.01	ug/L	96
26) Methyl-t-Butyl Ether	2.66	73	2515430	150.74	ug/L	95
27) 1,1-Dichloroethane	2.75	63	2263145	146.03	ug/L	92
28) Propionitrile	2.80	54	530792	782.00	ug/L	99
29) Vinyl Acetate	2.94	43	2361821	159.49	ug/L	97
30) 2-Chloro-1,3-Butadiene	3.09	53	2079138	153.63	ug/L	100
31) 2-Butanone	3.20	43	400620	161.36	ug/L	97
32) Methacrylonitrile	3.31	41	580077	157.15	ug/L	100
33) cis-1,2-Dichloroethene	3.30	96	1402360	147.28	ug/L	100
34) Bromochloromethane	3.47	128	626996	148.60	ug/L	99
35) Chloroform	3.54	83	2278284	147.67	ug/L	95
36) 2,2-Dichloropropane	3.62	77	1913850	153.22	ug/L	98

(#) = qualifier out of range (m) = manual integration
 L3696.D W031914.M Thu Mar 20 15:09:10 2014

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3696.D
 Acq On : 19 Mar 2014 5:28 pm
 Sample : STD #9 - 150 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 15:07 2014

Vial: 18
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 15:06:16 2014
 Response via : Initial Calibration
 DataAcq Meth : W031914

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37) Tetrahydrofuran	3.94	42	244908	148.74	ug/L	97
38) 1,1,1-Trichloroethane	4.51	97	1937313	149.14	ug/L	97
41) Iso-Butyl Alcohol	3.78	43	637146	3234.58	ug/L	100
43) 1,2-Dichloroethane	4.40	64	483372	149.70	ug/L	95
44) 1,1-Dichloropropene	4.85	75	1601498	147.79	ug/L	97
45) Cyclohexane	4.92	56	2071680	151.20	ug/L	97
46) Carbontetrachloride	5.09	119	1675022	153.71	ug/L	97
47) Benzene	5.20	78	4748749	139.58	ug/L	91
48) Dibromomethane	6.02	93	697282	154.20	ug/L	98
49) 1,2-Dicloropropane	6.10	63	1418608	152.20	ug/L	96
50) n-Heptane	6.17	43	1418370	155.19	ug/L	99
51) Trichloroethene	6.17	130	1399309	149.73	ug/L	98
52) Bromodichloromethane	6.22	83	1776846	155.40	ug/L	100
53) 2-Nitropropane	6.27	41	437173	336.80	ug/L	90
54) 1,4-Dioxane	6.44	88	113385	2925.33	ug/L	98
55) Methyl Methacrylate	6.62	69	615040	170.80	ug/L	98
56) Methylcyclohexane	6.74	55	1483733	149.08	ug/L	99
57) 2-Chloroethylvinyl Ether	6.89	63	655106	163.52	ug/L	96
58) cis-1,3-Dichloropropene	7.05	75	1963077	152.31	ug/L	97
59) 4-Methyl-2-pentanone	7.25	43	902326	158.53	ug/L	99
60) trans-1,3-Dichloropropene	7.55	75	1638506	157.52	ug/L	99
61) 1,1,2-Trichloroethane	7.66	97	978936	154.46	ug/L	100
63) Toluene	7.84	91	4271941	114.41	ug/L	88
65) 1,3-Dichloropropane	7.90	76	1576005	158.66	ug/L	98
66) Ethyl Methacrylate	8.09	69	1272186	171.37	ug/L	99
67) Dibromochloromethane	8.09	129	1303053	163.75	ug/L	98
68) 2-Hexanone	8.15	43	659223	168.70	ug/L	100
69) 1,2-Dibromoethane	8.31	107	989549	163.31	ug/L	100
70) n-Butyl Acetate	8.52	43	1542212	169.28	ug/L	96
71) Tetrachloroethene	8.51	164	1133671	154.83	ug/L	100
72) 1,1,1,2-Tetrachloroethane	9.05	131	1323430	159.00	ug/L	96
73) Chlorobenzene	9.11	112	3041898	140.07	ug/L	91
74) Ethylbenzene	9.33	106	1873435	156.02	ug/L #	66
75) Bromoform	9.50	173	884446	178.84	ug/L	98
76) (m+p)Xylene	9.51	106	3951838	280.31	ug/L #	71
77) o-Xylene	9.83	106	2217993	154.10	ug/L #	80
78) Cyclohexanone	9.75	55	2004089	3255.76	ug/L	97
79) Styrene	9.77	104	3177199	141.11	ug/L	89
80) trans-1,4-Dichloro-2-Buten	10.00	75	424342	203.77	ug/L	96
81) Isopropylbenzene	10.14	105	4061262	113.30	ug/L	83
84) 1,1,2,2-Tetrachloroethane	9.82	83	1198978	150.61	ug/L	98
85) 1,2,3-Trichloropropane	9.94	75	788098	150.66	ug/L	99
86) Bromobenzene	10.28	156	1525162	139.90	ug/L	97
87) n-Propylbenzene	10.50	91	4375723	96.92	ug/L	81
88) 2-Chlorotoluene	10.54	91	3314497	115.81	ug/L	87
89) 4-Chlorotoluene	10.61	91	3392768	114.29	ug/L	87
90) 1,3,5-Trimethylbenzene	10.76	105	3570697	116.92	ug/L	87
91) tert-Butylbenzene	10.95	119	3182321	128.26	ug/L	93
92) 1,2,4-Trimethylbenzene	11.06	105	3647651	115.10	ug/L	84
93) sec-Butylbenzene	11.13	105	3937036	108.77	ug/L	86

(#) = qualifier out of range (m) = manual integration
 L3696.D W031914.M Thu Mar 20 15:09:11 2014

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3696.D Vial: 18
 Acq On : 19 Mar 2014 5:28 pm Operator: D.Lipani
 Sample : STD #9 - 150 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 15:07 2014 Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 15:06:16 2014
 Response via : Initial Calibration
 DataAcq Meth : W031914

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
94) 1,3-Dclbenz	11.15	146	2600823	133.64	ug/L	93
95) 1,4-Dclbenz	11.21	146	2564259	130.85	ug/L	95
96) p-Isopropyltoluene	11.30	119	3480146	119.78	ug/L	87
97) 1,2-Dclbenz	11.47	146	2356765	134.20	ug/L	95
98) n-Butylbenzene	11.61	91	3321034	123.13	ug/L	87
99) 1,2-Dibromo-3-chloropropan	11.83	75	166881	159.49	ug/L	97
100) Nitrobenzene	12.02	77	88637	354.04	ug/L	89
101) 1,2,4-Tcbenzene	12.90	180	1451920	150.74	ug/L	98
102) Naphthalen	13.09	128	2265093	153.20	ug/L	96
103) Hexachlorobt	13.16	225	599332	148.97	ug/L	98
104) 1,2,3-Tclbenzene	13.24	180	1119863	153.79	ug/L	99

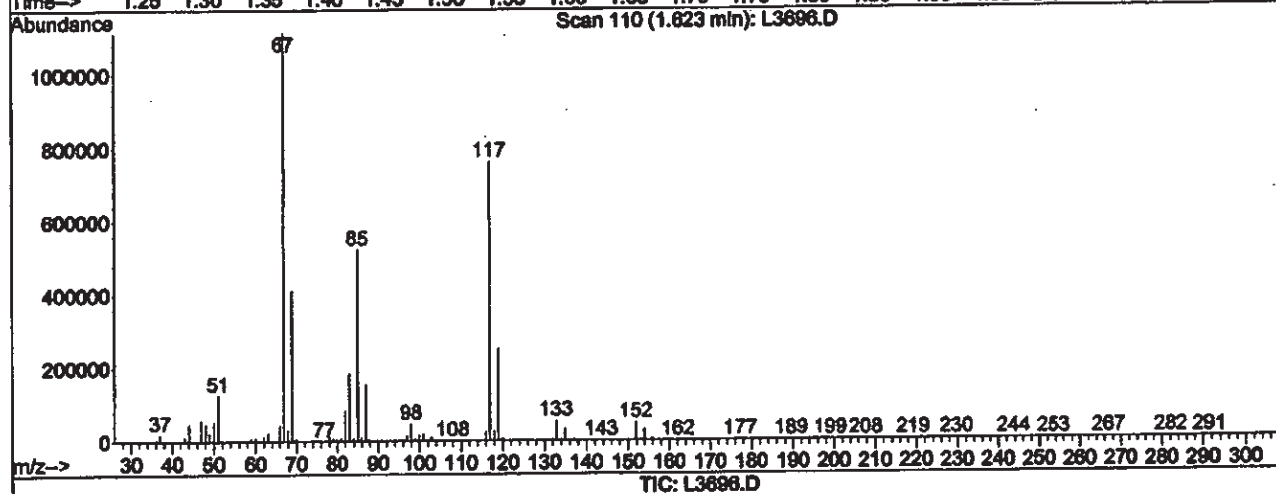
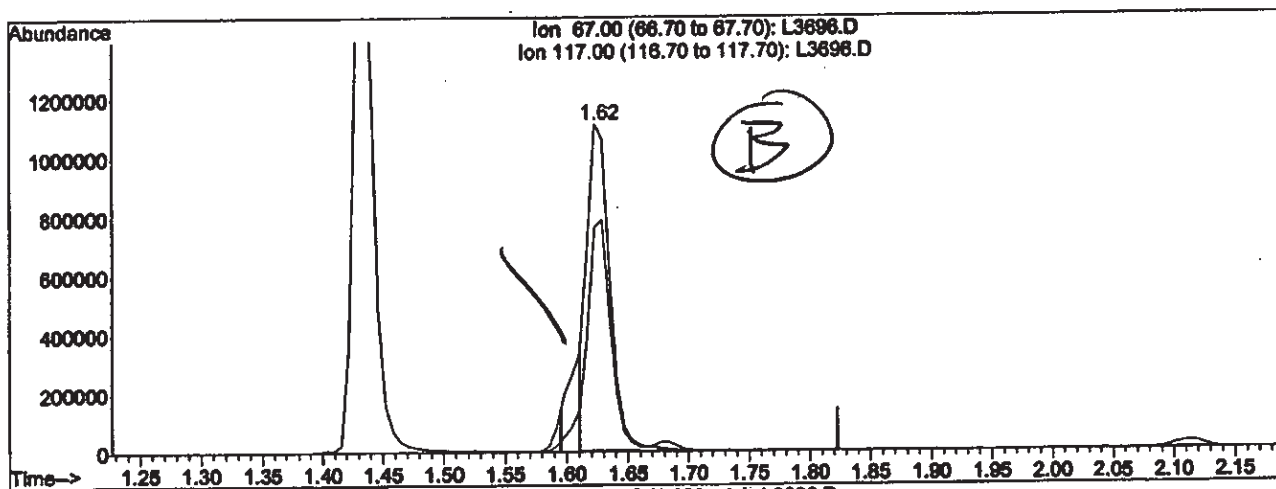
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3696.D
 Acq On : 19 Mar 2014 5:28 pm
 Sample : STD #9 - 150 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 15:14 2014

Vial: 18
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 15:06:16 2014
 Response via : Multiple Level Calibration



(8) Freon 123a

1.62min 133.10ug/L

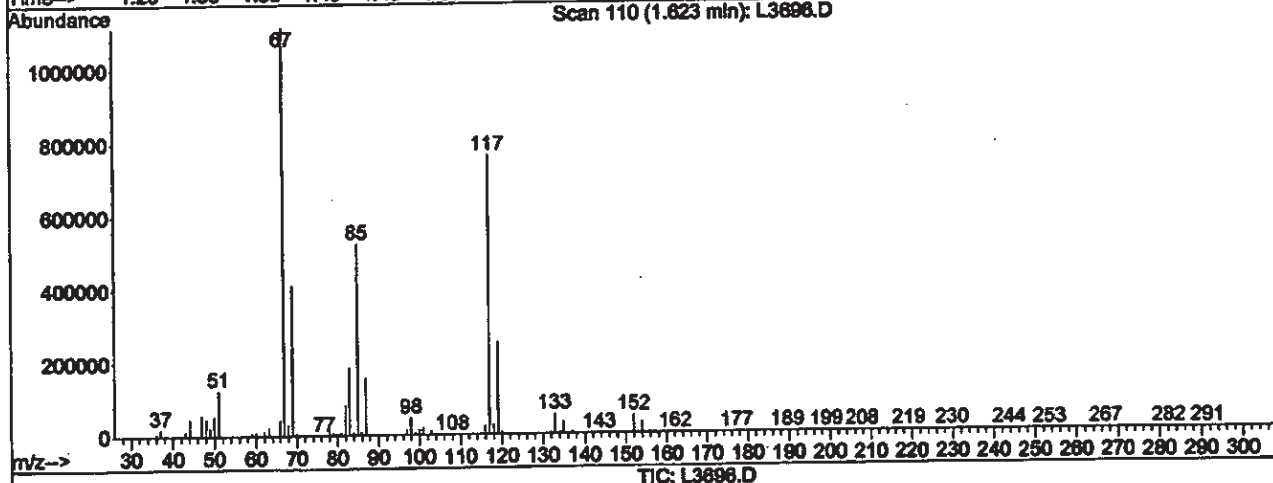
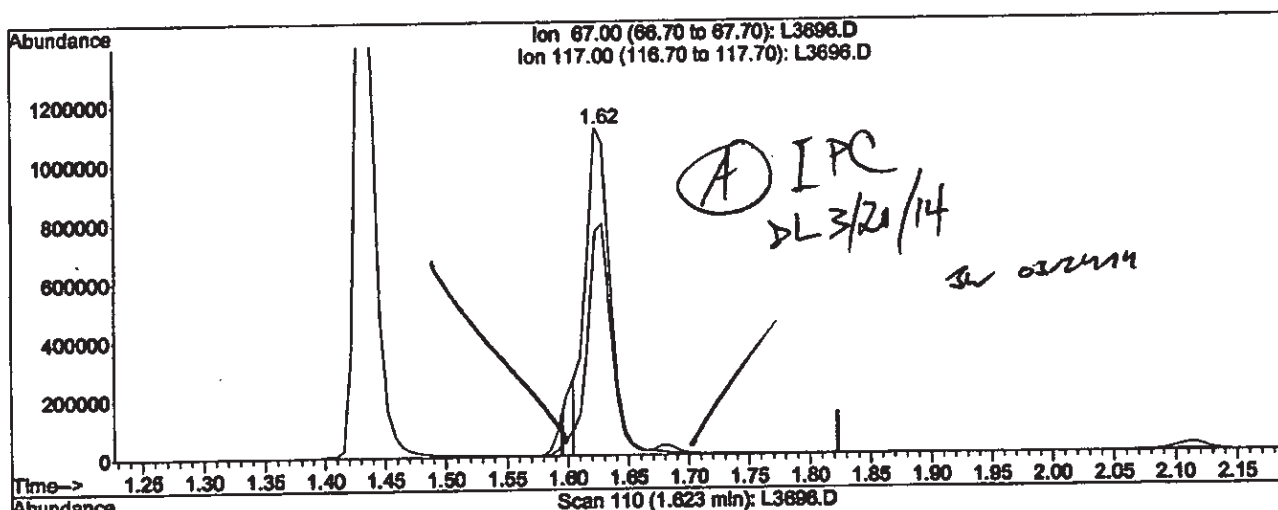
response 1425808

Ion	Exp%	Act%
67.00	100	100
117.00	64.10	68.49
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3696.D Vial: 18
 Acq On : 19 Mar 2014 5:28 pm Operator: D.Lipani
 Sample : STD #9 - 150 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 15:07 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 15:06:16 2014
 Response via : Multiple Level Calibration



(9) Freon 123a

1.62min 145.86ug/L m

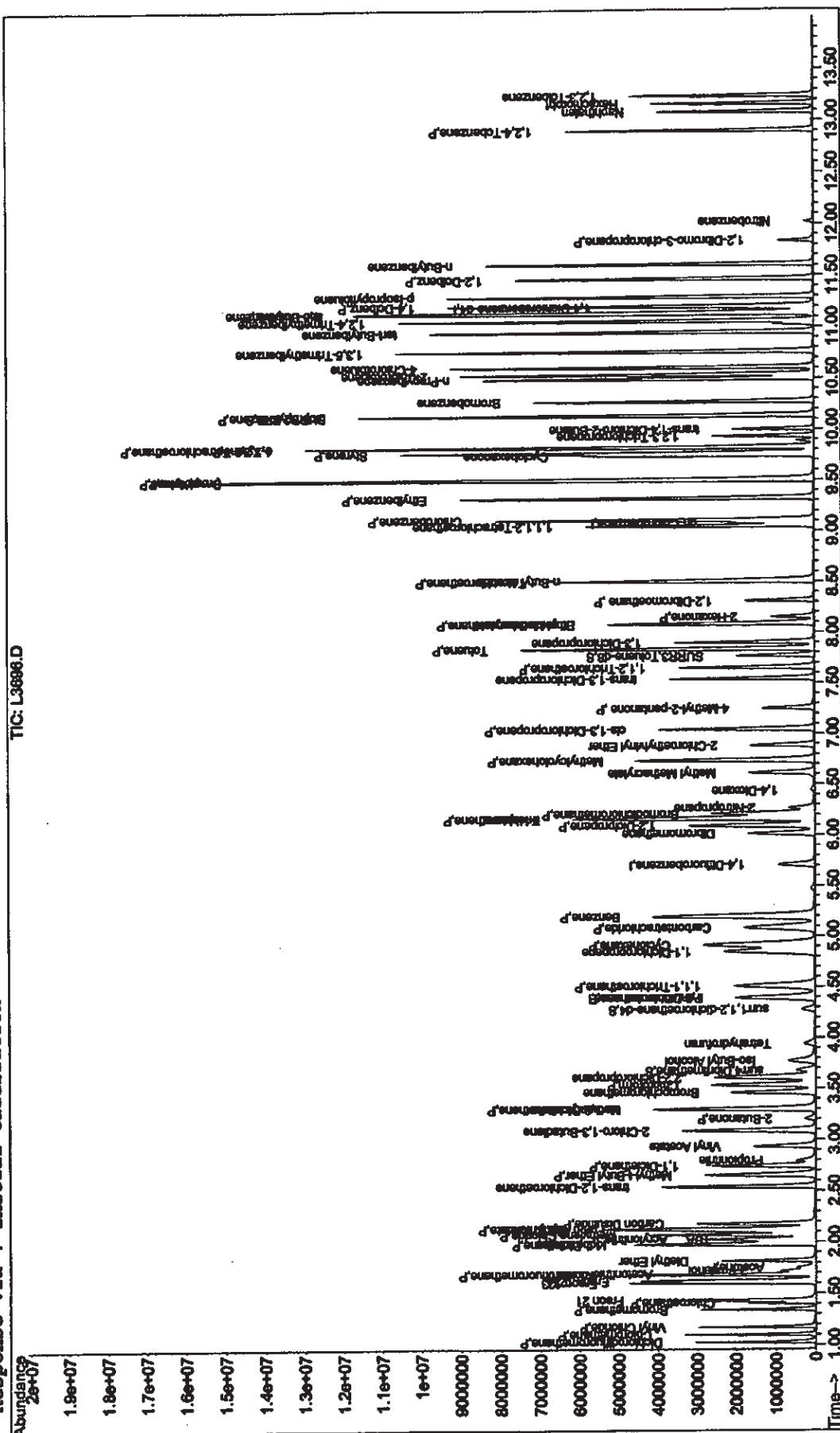
response 1562557

Ion	Exp%	Act%
67.00	100	100
117.00	64.10	68.49
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report

Data File : I:\ACQDATA\MSV0A6\DATA\031914\L3696.D
Acq On : 19 Mar 2014 5:28 pm
Sample : STD #9 - 150 PPB
Misc : 8260C ICAL GCMS#6
MS Integration Params: CPD4.P
Quant Time: Mar 20 15:07 2014
Vial: 18
Operator: D.Lipani
Inst : MS#6
Multiplr: 1.00
Quant Results File: W031914.RES

```
Method : I:\ACQUDATA\MSVQA6\METHODS\W031914.M (RTE Integrator)
Title   : 8260C WATERS
Last Update : Thu Mar 20 15:06:16 2014
Response via : Initial Calibration
```



Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3697.D
 Acq On : 19 Mar 2014 5:59 pm
 Sample : STD #10 - 200 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 15:17 2014

Vial: 19
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 15:09:24 2014
 Response via : Initial Calibration
 DataAcq Meth : W031914

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.40	168	653744	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.71	114	940996	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.09	117	777981	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.19	152	454859	50.00	ug/L	0.00

System Monitoring Compounds						
40) surr4, Dibrflmethane	3.68	113	319357	50.21	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	= 100.42%	
42) surr1, 1,2-dichloroethane-d	4.28	65	309479	50.73	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	= 101.46%	
62) SURR3, Toluene-d8	7.77	98	1157748	49.88	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	= 99.76%	
82) SURR2, BFB	10.14	95	476108	58.73	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	= 117.46%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.02	85	1812574	175.09	ug/L	89
3) Chloromethane	1.10	50	2015147	162.29	ug/L	82
4) Vinyl Chloride	1.18	62	1840620	165.60	ug/L	86
5) Bromomethane	1.34	94	1379289	179.83	ug/L	97
6) Chloroethane	1.41	64	1155265	185.39	ug/L	95
7) Freon 21	1.43	67	2638699	156.80	ug/L	78
8) Freon 123	1.60	83	2341705	179.41	ug/L	94
9) Freon 123a	1.63	67	1970236	176.25	ug/L	87
10) Acrolein	1.69	56	1000610	994.95	ug/L	98
11) Trichlorofluoromethane	1.68	101	2450985	180.06	ug/L	91
12) Acetonitrile	1.69	41	785488	948.49	ug/L	98
13) 2-Propanol	1.72	45	1013662	3934.82	ug/L	96
14) Acetone	1.75	43	415839	196.59	ug/L	96
15) Diethyl Ether	1.82	59	1116968	190.27	ug/L	100
16) 1,1-Dicethene	1.97	96	1369160	188.17	ug/L	96
17) Iodomethane	1.98	142	2263797	193.49	ug/L	92
18) TBA	2.01	59	1617211	4082.45	ug/L	98
19) Acrylonitrile	2.03	53	1903523	966.22	ug/L	99
20) Methylene Chloride	2.08	84	1717258	174.84	ug/L	92
21) Freon 113	2.11	101	1499667	184.01	ug/L	97
22) Methyl Acetate	2.12	43	891067	207.95	ug/L	97
23) Allyl Chloride	2.14	76	888804	193.82	ug/L #	70
24) Carbon Disulfide	2.18	76	3849578	151.60	ug/L	87
25) trans-1,2-Dichloroethene	2.54	96	1676260	188.70	ug/L	95
26) Methyl-t-Butyl Ether	2.66	73	3337742	189.39	ug/L	93
27) 1,1-Dicethene	2.75	63	3045155	186.05	ug/L	91
28) Propionitrile	2.80	54	719762	1004.04	ug/L	100
29) Vinyl Acetate	2.94	43	3105311	198.55	ug/L	96
30) 2-Chloro-1,3-Butadiene	3.09	53	2743009	191.91	ug/L	94
31) 2-Butanone	3.20	43	556527	212.23	ug/L	98
32) Methacrylonitrile	3.31	41	799128	204.98	ug/L	98
33) cis-1,2-Dichloroethene	3.30	96	1910862	190.02	ug/L	96
34) Bromochloromethane	3.47	128	838627	188.19	ug/L	99
35) Chloroform	3.54	83	3059927	187.79	ug/L	94
36) 2,2-Dichloropropane	3.61	77	2595157	196.73	ug/L	96

3/20/14

(#) = qualifier out of range (m) = manual integration
 L3697.D W031914.M Thu Mar 20 15:12:32 2014

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3697.D
 Acq On : 19 Mar 2014 5:59 pm
 Sample : STD #10 - 200 PPB
 Misc : 8260C ICAL GCMS#6
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 15:17 2014

Vial: 19
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 15:09:24 2014
 Response via : Initial Calibration
 DataAcq Meth : W031914

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37) Tetrahydrofuran	3.94	42	344910	198.34	ug/L	98
38) 1,1,1-Trichloroethane	4.51	97	2667626	194.45	ug/L	98
41) Iso-Butyl Alcohol	3.78	43	867543	4237.57	ug/L	95
43) 1,2-Dichloroethane	4.40	64	658295	196.16	ug/L	93
44) 1,1-Dichloropropene	4.85	75	2197607	195.13	ug/L	97
45) Cyclohexane	4.92	56	2761395	193.91	ug/L	96
46) Carbontetrachloride	5.09	119	2302953	203.33	ug/L	99
47) Benzene	5.21	78	6091826	172.29	ug/L	86
48) Dibromomethane	6.02	93	948937	201.91	ug/L	99
49) 1,2-Diclp propane	6.10	63	1921643	198.37	ug/L	95
50) n-Heptane	6.18	43	1946438	204.91	ug/L	97
51) Trichloroethene	6.16	130	1892551	194.84	ug/L	98
52) Bromodichloromethane	6.22	83	2402056	202.13	ug/L	99
53) 2-Nitropropane	6.27	41	593078	439.61	ug/L	93
54) 1,4-Dioxane	6.45	88	145771	3618.57	ug/L	88
55) Methyl Methacrylate	6.62	69	827635	221.14	ug/L	98
56) Methylcyclohexane	6.75	55	2028202	196.08	ug/L	98
57) 2-Chloroethylvinyl Ether	6.89	63	903604	217.01	ug/L	95
58) cis-1,3-Dichloropropene	7.05	75	2628354	196.21	ug/L	96
59) 4-Methyl-2-pentanone	7.26	43	1210913	204.69	ug/L	98
60) trans-1,3-Dichloropropene	7.55	75	2188349	202.42	ug/L	97
61) 1,1,2-Trichloroethane	7.66	97	1320760	200.51	ug/L	98
63) Toluene	7.84	91	5078371	130.86	ug/L	82
65) 1,3-Dichloropropane	7.91	76	2083852	211.13	ug/L	97
66) Ethyl Methacrylate	8.08	69	1760666	238.69	ug/L	96
67) Dibromochloromethane	8.10	129	1760333	222.64	ug/L	98
68) 2-Hexanone	8.16	43	883550	227.56	ug/L	100
69) 1,2-Dibromoethane	8.32	107	1337297	222.14	ug/L	100
70) n-Butyl Acetate	8.52	43	2028027	224.03	ug/L	94
71) Tetrachloroethene	8.51	164	1573105	216.23	ug/L	99
72) 1,1,1,2-Tetrachloroethane	9.06	131	1800184	217.66	ug/L	95
73) Chlorobenzene	9.11	112	3704949	171.70	ug/L	85
74) Ethylbenzene	9.33	106	2465649	206.66	ug/L #	53
75) Bromoform	9.51	173	1199705	244.15	ug/L	98
76) (m+p)Xylene	9.51	106	4759921	339.80	ug/L #	66
77) o-Xylene	9.83	106	2830047	197.89	ug/L #	71
78) Cyclohexanone	9.75	55	2507005	4098.98	ug/L	94
79) Styrene	9.77	104	3845365	171.89	ug/L	84
80) trans-1,4-Dichloro-2-Buten	10.01	75	567810	274.41	ug/L	96
81) Isopropylbenzene	10.14	105	4762006	133.70	ug/L	75
84) 1,1,2,2-Tetrachloroethane	9.82	83	1591357	197.72	ug/L	98
85) 1,2,3-Trichloropropane	9.94	75	1066882	201.75	ug/L	99
86) Bromobenzene	10.28	156	2022295	183.48	ug/L	95
87) n-Propylbenzene	10.50	91	5147006	112.77	ug/L	73
88) 2-Chlorotoluene	10.54	91	3816266	131.90	ug/L	78
89) 4-Chlorotoluene	10.61	91	4021559	134.00	ug/L	81
90) 1,3,5-Trimethylbenzene	10.77	105	4174861	135.22	ug/L	80
91) tert-Butylbenzene	10.95	119	3810847	151.93	ug/L	87
92) 1,2,4-Trimethylbenzene	11.06	105	4257659	132.89	ug/L	78
93) sec-Butylbenzene	11.13	105	4598403	125.66	ug/L	78

(#) = qualifier out of range (m) = manual integration
 L3697.D W031914.M Thu Mar 20 15:12:33 2014

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3697.D Vial: 19
 Acq On : 19 Mar 2014 5:59 pm Operator: D.Lipani
 Sample : STD #10 - 200 PPB Inst : MS#6
 Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 15:17 2014 Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 15:09:24 2014
 Response via : Initial Calibration
 DataAcq Meth : W031914

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
94) 1,3-Dclbenz	11.15	146	3287623	167.10	ug/L	90
95) 1,4-Dclbenz	11.21	146	3105077	156.72	ug/L	89
96) p-Isopropyltoluene	11.30	119	4069944	138.56	ug/L	79
97) 1,2-Dclbenz	11.47	146	2944521	165.85	ug/L	91
98) n-Butylbenzene	11.61	91	3953279	144.98	ug/L	80
99) 1,2-Dibromo-3-chloropropan	11.84	75	219536	207.53	ug/L	98
100) Nitrobenzene	12.02	77	121920	481.71	ug/L	97
101) 1,2,4-Tcbenzene	12.91	180	1868731	191.91	ug/L	97
102) Naphthalen	13.09	128	2794374	186.95	ug/L	95
103) Hexachlorobt	13.17	225	799757	196.63	ug/L	99
104) 1,2,3-Tclbenzene	13.24	180	1405060	190.86	ug/L	99

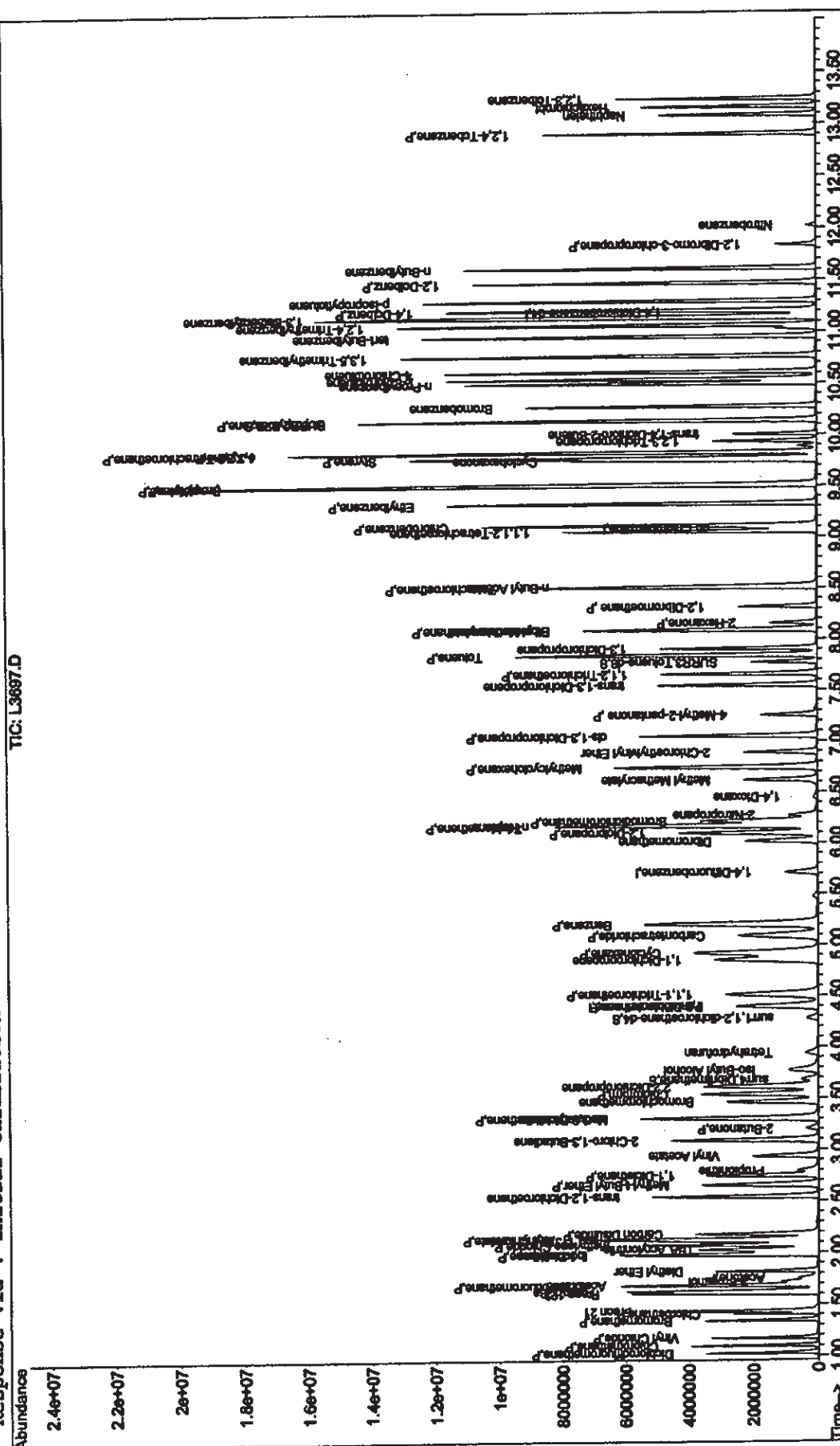
 (#) = qualifier out of range (m) = manual integration
 L3697.D W031914.M Thu Mar 20 15:12:34 2014

Data File : I:\ACQDATA\MSV0A6\DATA\031914\L3697.D
 Vial: 19
 Operator: D.Lipani
 Acq On : 19 Mar 2014 5:59 pm
 Inst : MS#6
 Sample : STD #10 - 200 PPB
 Multiplr: 1.00
 Misc : 8260C ICAL GCMS#6
 Quant Results File: W031914.RES
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 15:17 2014

```

Method      : I:\ACQUDATA\MSV0A6\METHODS\W031914.M (RTE Integrator)
Title       : 8260C WATERS
Last Update : Thu Mar 20 15:09:24 2014
Response via : Initial Calibration

```



00237

Initial Calibration Verification Summary Report

PL 3/20/14

Calibration ID: RC1400025

Instrument ID: R-MS-06
Column Name: 1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
1,1,1,2-Tetrachloroethane	RC1400025-12	T	Average RF	50	48.82	ppm	-2.4	≤30
1,1,1-Trichloroethane (TCA)	RC1400025-12	T	Average RF	50	48.75	ppm	-2.5	≤30
1,1,2,2-Tetrachloroethane	RC1400025-12	T	Average RF	50	50.78	ppm	1.6	≤30
1,1,2-Trichloroethane	RC1400025-12	T	Average RF	50	51.79	ppm	3.6	≤30
1,1,2-Trichlorotrifluoroethane	RC1400025-12	T	Average RF	50	48.21	ppm	-3.6	≤30
1,1-Dichloroethane (1,1-DCA)	RC1400025-12	T	Average RF	50	50.87	ppm	1.7	≤30
1,1-Dichloroethane (1,1-DCE)	RC1400025-12	T	Average RF	50	53.71	ppm	7.4	≤30
1,1-Dichloropropene	RC1400025-12	T	Average RF	50	55.34	ppm	10.7	≤30
1,2,3-Trichlorobenzene	RC1400025-12	T	Average RF	50	50.30	ppm	0.6	≤30
1,2,3-Trichloropropane	RC1400025-12	T	Average RF	50	53.10	ppm	6.2	≤30
1,2,4-Trichlorobenzene	RC1400025-12	T	Average RF	50	49.67	ppm	-0.7	≤30
1,2,4-Trimethylbenzene	RC1400025-12	T	Average RF	50	47.24	ppm	-5.5	≤30
1,2-Dibromo-3-chloropropane (DBCP)	RC1400025-12	T	Average RF	50	52.85	ppm	5.7	≤30
1,2-Dibromoethane	RC1400025-12	T	Average RF	50	51.93	ppm	3.9	≤30
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123)	RC1400025-12	T	Average RF	50	51.76	ppm	3.5	≤30
1,2-Dichlorobenzene	RC1400025-12	T	Average RF	50	48.05	ppm	-3.9	≤30
1,2-Dichloroethane	RC1400025-12	T	Average RF	50	50.65	ppm	1.3	≤30
1,2-Dichloropropane	RC1400025-12	T	Average RF	50	51.41	ppm	2.8	≤30
1,3,5-Trimethylbenzene	RC1400025-12	T	Average RF	50	48.86	ppm	-2.3	≤30
1,3-Dichlorobenzene	RC1400025-12	T	Average RF	50	47.49	ppm	-5.0	≤30
1,3-Dichloropropane	RC1400025-12	T	Average RF	50	51.66	ppm	3.3	≤30
1,4-Dichlorobenzene	RC1400025-12	T	Average RF	50	47.03	ppm	-5.9	≤30
1,4-Dioxane	RC1400025-12	T	Average RF	1000	971.5	ppm	-2.8	≤30
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	RC1400025-12	T	Average RF	50	52.40	ppm	4.8	≤30
2,2-Dichloropropane	RC1400025-12	T	Average RF	50	49.52	ppm	-1.0	≤30
2-Butanone (MEK)	RC1400025-12	T	Average RF	50	57.72	ppm	15.4	≤30
2-Chloro-1,3-butadiene	RC1400025-12	T	Average RF	50	52.13	ppm	4.3	≤30
2-Chloroethyl Vinyl Ether	RC1400025-12	T	Average RF	50	58.79	ppm	17.6	≤30
2-Chlorotoluene	RC1400025-12	T	Average RF	50	45.05	ppm	-9.9	≤30
2-Hexanone	RC1400025-12	T	Average RF	50	55.11	ppm	10.2	≤30
2-Methyl-1-propanol	RC1400025-12	T	Average RF	1000	1111	ppm	11.1	≤30
2-Methyl-2-propanol	RC1400025-12	T	Average RF	1000	1090	ppm	9.0	≤30
2-Nitropropane	RC1400025-12	T	Average RF	100	107.3	ppm	7.3	≤30
2-Propanol	RC1400025-12	T	Average RF	1000	1083	ppm	8.3	≤30
3-Chloro-1-propene	RC1400025-12	T	Average RF	50	52.84	ppm	5.7	≤30
4-Chlorotoluene	RC1400025-12	T	Average RF	50	47.13	ppm	-5.7	≤30
4-Isopropyltoluene	RC1400025-12	T	Average RF	50	49.12	ppm	-1.8	≤30
4-Methyl-2-pentanone	RC1400025-12	T	Average RF	50	56.71	ppm	13.4	≤30
Acetone	RC1400025-12	T	Average RF	50	52.90	ppm	5.8	≤30
Acetonitrile	RC1400025-12	T	Average RF	250	247.1	ppm	-1.2	≤30
Acrolein	RC1400025-12	T	Average RF	100	84.00	ppm	-16.0	≤30
Acrylonitrile	RC1400025-12	T	Average RF	250	278.2	ppm	11.3	≤30
Benzene	RC1400025-12	T	Average RF	50	50.13	ppm	0.3	≤30
Bromobenzene	RC1400025-12	T	Average RF	50	47.91	ppm	-4.2	≤30
Bromochloromethane	RC1400025-12	T	Average RF	50	50.24	ppm	0.5	≤30
Bromodichloromethane	RC1400025-12	T	Average RF	50	53.68	ppm	7.4	≤30
Bromoform	RC1400025-12	T	Average RF	50	51.01	ppm	2.0	≤30
Bromomethane	RC1400025-12	T	Average RF	50	46.54	ppm	-6.9	≤30
Carbon Disulfide	RC1400025-12	T	Average RF	50	47.08	ppm	-5.8	≤30
Carbon Tetrachloride	RC1400025-12	T	Average RF	50	50.21	ppm	0.4	≤30
Chlorobenzene	RC1400025-12	T	Average RF	50	50.13	ppm	0.3	≤30

Initial Calibration Verification Summary Report

Calibration ID: RC1400025

Instrument ID: R-MS-06
Column Name: 1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Chloroethane	RC1400025-12	T	Average RF	50	48.12	ppm	-3.8	≤30
Chloroform	RC1400025-12	T	Average RF	50	50.62	ppm	1.2	≤30
Chloromethane	RC1400025-12	T	Average RF	50	51.09	ppm	2.2	≤30
Cyclohexane	RC1400025-12	T	Average RF	50	47.41	ppm	-5.2	≤30
Cyclohexanone	RC1400025-12	T	Average RF	1000	1023	ppm	2.3	≤30
Dibromochloromethane	RC1400025-12	T	Average RF	50	50.54	ppm	1.1	≤30
Dibromomethane	RC1400025-12	T	Average RF	50	52.87	ppm	5.7	≤30
Dichlorodifluoromethane (CFC 12)	RC1400025-12	T	Average RF	50	50.86	ppm	1.7	≤30
Dichlorofluoromethane (CFC 21)	RC1400025-12	T	Average RF	50	50.01	ppm	0.0	≤30
Dichloromethane	RC1400025-12	T	Average RF	50	48.35	ppm	-3.3	≤30
Diethyl Ether	RC1400025-12	T	Average RF	50	55.41	ppm	10.8	≤30
Ethyl Methacrylate	RC1400025-12	T	Average RF	50	55.19	ppm	10.4	≤30
Ethylbenzene	RC1400025-12	T	Average RF	50	49.40	ppm	-1.2	≤30
Hexachlorobutadiene	RC1400025-12	T	Average RF	50	46.47	ppm	-7.1	≤30
Iodomethane	RC1400025-12	T	Linear	50	45.05	ppm	-9.9	≤30
Isopropylbenzene (Cumene)	RC1400025-12	T	Average RF	50	47.68	ppm	-4.6	≤30
Methacrylonitrile	RC1400025-12	T	Average RF	50	54.05	ppm	8.1	≤30
Methyl Acetate	RC1400025-12	T	Average RF	50	58.25	ppm	16.5	≤30
Methyl Methacrylate	RC1400025-12	T	Average RF	50	56.32	ppm	12.6	≤30
Methyl tert-Butyl Ether	RC1400025-12	T	Average RF	50	56.45	ppm	12.9	≤30
Methylcyclohexane	RC1400025-12	T	Average RF	50	47.43	ppm	-5.1	≤30
Naphthalene	RC1400025-12	T	Average RF	50	54.23	ppm	8.5	≤30
Nitrobenzene	RC1400025-12	T	Average RF	100	96.13	ppm	-3.9	≤30
Propionitrile	RC1400025-12	T	Average RF	250	269.1	ppm	7.6	≤30
Styrene	RC1400025-12	T	Average RF	50	50.74	ppm	1.5	≤30
Tetrachloroethene (PCE)	RC1400025-12	T	Average RF	50	48.40	ppm	-3.2	≤30
Tetrahydrofuran (THF)	RC1400025-12	T	Average RF	50	53.51	ppm	7.0	≤30
Toluene	RC1400025-12	T	Average RF	50	47.50	ppm	-5.0	≤30
Trichloroethene (TCE)	RC1400025-12	T	Average RF	50	50.15	ppm	0.3	≤30
Trichlorofluoromethane (CFC 11)	RC1400025-12	T	Average RF	50	47.73	ppm	-4.5	≤30
Vinyl Acetate	RC1400025-12	T	Average RF	50	49.14	ppm	-1.7	≤30
Vinyl Chloride	RC1400025-12	T	Average RF	50	48.87	ppm	-2.3	≤30
cis-1,2-Dichloroethene	RC1400025-12	T	Average RF	50	49.22	ppm	-1.6	≤30
cis-1,3-Dichloropropene	RC1400025-12	T	Average RF	50	51.26	ppm	2.5	≤30
m,p-Xylenes	RC1400025-12	T	Average RF	100	101.7	ppm	1.7	≤30
n-Butyl Acetate	RC1400025-12	T	Average RF	50	58.75	ppm	17.5	≤30
n-Butylbenzene	RC1400025-12	T	Average RF	50	49.94	ppm	-0.1	≤30
n-Heptane	RC1400025-12	T	Average RF	50	48.27	ppm	-3.5	≤30
n-Propylbenzene	RC1400025-12	T	Average RF	50	47.59	ppm	-4.8	≤30
o-Xylene	RC1400025-12	T	Average RF	50	49.06	ppm	-1.9	≤30
sec-Butylbenzene	RC1400025-12	T	Average RF	50	47.80	ppm	-4.4	≤30
tert-Butylbenzene	RC1400025-12	T	Average RF	50	48.23	ppm	-3.5	≤30
trans-1,2-Dichloroethene	RC1400025-12	T	Average RF	50	50.07	ppm	0.1	≤30
trans-1,3-Dichloropropene	RC1400025-12	T	Average RF	50	53.60	ppm	7.2	≤30
trans-1,4-Dichloro-2-butene	RC1400025-12	T	Average RF	50	55.47	ppm	10.9	≤30
1,2-Dichloroethane-d4	RC1400025-12	S	Average RF	50	51.68	ppm	3.4	≤30
4-Bromofluorobenzene	RC1400025-12	S	Average RF	50	49.94	ppm	-0.1	≤30
Dibromofluoromethane	RC1400025-12	S	Average RF	50	50.73	ppm	1.5	≤30
Toluene-d8	RC1400025-12	S	Average RF	50	50.72	ppm	1.4	≤30

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3700.D
 Acq On : 19 Mar 2014 7:33 pm
 Sample : ICV/LCS
 Misc : 8260C
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 15:49 2014

Vial: 21
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 15:48:07 2014
 Response via : Initial Calibration
 DataAcq Meth : W031914

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.40	168	642590	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.71	114	923337	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.08	117	863169	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.18	152	463279	50.00	ug/L	0.00

System Monitoring Compounds

40) surr4,Dibrfilmethane	3.68	113	316611	50.73	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	101.46%
42) surr1,1,2-dichloroethane-d	4.28	65	309360	51.68	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	103.36%
62) SURR3,Toluene-d8	7.77	98	1155369	50.72	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	101.44%
82) SURR2,BFB	10.14	95	449175	49.94	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	99.88%

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	1.03	85	517507	50.86	ug/L 98
3) Chloromethane	1.10	50	636621	51.09	ug/L 99
4) Vinyl Chloride	1.18	62	544116	48.87	ug/L 98
5) Bromomethane	1.34	94	350853	46.54	ug/L 99
6) Chloroethane	1.41	64	294769	48.12	ug/L 100
7) Freon 21	1.43	67	827207	50.01	ug/L 99
8) Freon 123	1.60	83	672216	52.40	ug/L 100
9) Freon 123a	1.63	67	560512	51.76	ug/L 93
10) Acrolein	1.69	56	83038	84.00	ug/L 95
11) Trichlorofluoromethane	1.68	101	638651	47.73	ug/L 97
12) Acetonitrile	1.70	41	201131	247.08	ug/L 100
13) 2-Propanol	1.73	45	274253	1083.07	ug/L 98
14) Acetone	1.76	43	109980	52.90	ug/L 99
15) Diethyl Ether	1.82	59	319755	55.41	ug/L 98
16) 1,1-Dicethene	1.98	96	384139	53.71	ug/L 99
17) Iodomethane	1.99	142	524509	45.05	ug/L 98
18) TBA	2.01	59	424448m	1090.07	ug/L 98
19) Acrylonitrile	2.03	53	538689	278.18	ug/L 98
20) Methylene Chloride	2.07	84	466790	48.35	ug/L 98
21) Freon 113	2.12	101	386190	48.21	ug/L 95
22) Methyl Acetate	2.13	43	245337	58.25	ug/L 100
23) Allyl Chloride	2.13	76	238166	52.84	ug/L # 90
24) Carbon Disulfide	2.18	76	1175230	47.08	ug/L 100
25) trans-1,2-Dichloroethene	2.55	96	437196	50.07	ug/L 98
26) Methyl-t-Butyl Ether	2.66	73	977826	56.45	ug/L 98
27) 1,1-Dicethane	2.75	63	818425	50.87	ug/L 97
28) Propionitrile	2.80	54	189603	269.08	ug/L 95
29) Vinyl Acetate	2.94	43	755467	49.14	ug/L 100
30) 2-Chloro-1,3-Butadiene	3.09	53	732393	52.13	ug/L 98
31) 2-Butanone	3.21	43	148783	57.72	ug/L 97
32) Methacrylonitrile	3.31	41	207116	54.05	ug/L 95
33) cis-1,2-Dichloroethene	3.30	96	486484	49.22	ug/L 98
34) Bromochloromethane	3.47	128	220060	50.24	ug/L 97
35) Chloroform	3.54	83	810709	50.62	ug/L 97
36) 2,2-Dichloropropane	3.62	77	642156	49.52	ug/L 98

DL 3/20/14

(#) = qualifier out of range (m) = manual integration
 L3700.D W031914.M Thu Mar 20 15:50:36 2014

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3700.D
 Acq On : 19 Mar 2014 7:33 pm
 Sample : ICV/LCS
 Misc : 8260C
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 15:49 2014

Vial: 21
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 15:48:07 2014
 Response via : Initial Calibration
 DataAcq Meth : W031914

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37) Tetrahydrofuran	3.95	42	91457	53.51	ug/L	94
38) 1,1,1-Trichloroethane	4.51	97	657327	48.75	ug/L	98
41) Iso-Butyl Alcohol	3.78	43	223197	1111.07	ug/L	94
43) 1,2-Dichloroethane	4.40	64	166785	50.65	ug/L	97
44) 1,1-Dichloropropene	4.85	75	611506	55.34	ug/L	97
45) Cyclohexane	4.92	56	662456	47.41	ug/L	97
46) Carbontetrachloride	5.09	119	558006	50.21	ug/L	97
47) Benzene	5.20	78	1739345	50.13	ug/L	95
48) Dibromomethane	6.02	93	243836	52.87	ug/L	100
49) 1,2-Dicloropropane	6.10	63	488687	51.41	ug/L	96
50) n-Heptane	6.17	43	449962	48.27	ug/L	98
51) Trichloroethene	6.17	130	477976	50.15	ug/L	99
52) Bromodichloromethane	6.21	83	625897	53.68	ug/L	99
53) 2-Nitropropane	6.27	41	142007	107.27	ug/L	91
54) 1,4-Dioxane	6.46	88	38403	971.53	ug/L	83
55) Methyl Methacrylate	6.62	69	206817	56.32	ug/L	96
56) Methylcyclohexane	6.74	55	481454	47.43	ug/L	99
57) 2-Chloroethylvinyl Ether	6.89	63	240184	58.79	ug/L	100
58) cis-1,3-Dichloropropene	7.05	75	673794	51.26	ug/L	99
59) 4-Methyl-2-pentanone	7.25	43	329166	56.71	ug/L	99
60) trans-1,3-Dichloropropene	7.55	75	568639	53.60	ug/L	99
61) 1,1,2-Trichloroethane	7.66	97	334712	51.79	ug/L	99
63) Toluene	7.84	91	1808785	47.50	ug/L	100
65) 1,3-Dichloropropane	7.90	76	565711	51.66	ug/L	99
66) Ethyl Methacrylate	8.09	69	451668	55.19	ug/L	99
67) Dibromochloromethane	8.09	129	443362	50.54	ug/L	98
68) 2-Hexanone	8.15	43	237420	55.11	ug/L	99
69) 1,2-Dibromoethane	8.31	107	346787	51.93	ug/L	99
70) n-Butyl Acetate	8.52	43	590068	58.75	ug/L	98
71) Tetrachloroethene	8.51	164	390716	48.40	ug/L	99
72) 1,1,1,2-Tetrachloroethane	9.05	131	447943	48.82	ug/L	99
73) Chlorobenzene	9.11	112	1200074	50.13	ug/L	99
74) Ethylbenzene	9.33	106	653916	49.40	ug/L	99
75) Bromoform	9.50	173	278101	51.01	ug/L	97
76) (m+p)Xylene	9.50	106	1580796	101.71	ug/L	98
77) o-Xylene	9.83	106	778407	49.06	ug/L	99
78) Cyclohexanone	9.74	55	694448	1023.37	ug/L	99
79) Styrene	9.77	104	1259512	50.74	ug/L	99
80) trans-1,4-Dichloro-2-Buten	10.00	75	127343	55.47	ug/L	98
81) Isopropylbenzene	10.14	105	1884277	47.68	ug/L	99
84) 1,1,2,2-Tetrachloroethane	9.82	83	416224	50.78	ug/L	99
85) 1,2,3-Trichloropropane	9.94	75	285997	53.10	ug/L	99
86) Bromobenzene	10.28	156	537799	47.91	ug/L	99
87) n-Propylbenzene	10.50	91	2212058	47.59	ug/L	99
88) 2-Chlorotoluene	10.54	91	1327494	45.05	ug/L	98
89) 4-Chlorotoluene	10.60	91	1440639	47.13	ug/L	99
90) 1,3,5-Trimethylbenzene	10.76	105	1536372	48.86	ug/L	99
91) tert-Butylbenzene	10.95	119	1232127	48.23	ug/L	99
92) 1,2,4-Trimethylbenzene	11.06	105	1541480	47.24	ug/L	99
93) sec-Butylbenzene	11.13	105	1781523	47.80	ug/L	99

(#) = qualifier out of range (m) = manual integration
 L3700.D W031914.M Thu Mar 20 15:50:37 2014

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3700.D Vial: 21
 Acq On : 19 Mar 2014 7:33 pm Operator: D.Lipani
 Sample : ICV/LCS Inst : MS#6
 Misc : 8260C Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 15:49 2014 Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 15:48:07 2014
 Response via : Initial Calibration
 DataAcq Meth : W031914

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
94) 1,3-Dclbenz	11.15	146	951688	47.49 ug/L	99
95) 1,4-Dclbenz	11.20	146	949102	47.03 ug/L	99
96) p-Isopropyltoluene	11.29	119	1469460	49.12 ug/L	99
97) 1,2-Dclbenz	11.47	146	868895	48.05 ug/L	99
98) n-Butylbenzene	11.61	91	1386776	49.94 ug/L	100
99) 1,2-Dibromo-3-chloropropan	11.84	75	56938	52.85 ug/L	98
100) Nitrobenzene	12.02	77	24782	96.13 ug/L	99
101) 1,2,4-Tcbenzene	12.90	180	492574	49.67 ug/L	97
102) Naphthalen	13.09	128	825626	54.23 ug/L	100
103) Hexachlorobt	13.16	225	192519	46.47 ug/L	97
104) 1,2,3-Tclbenzene	13.24	180	377155	50.30 ug/L	99

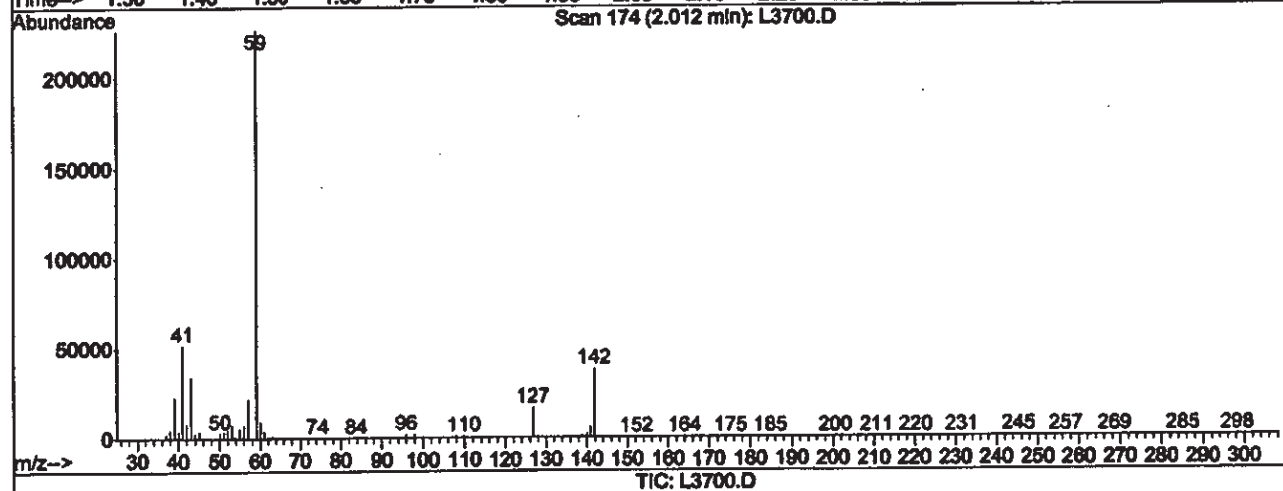
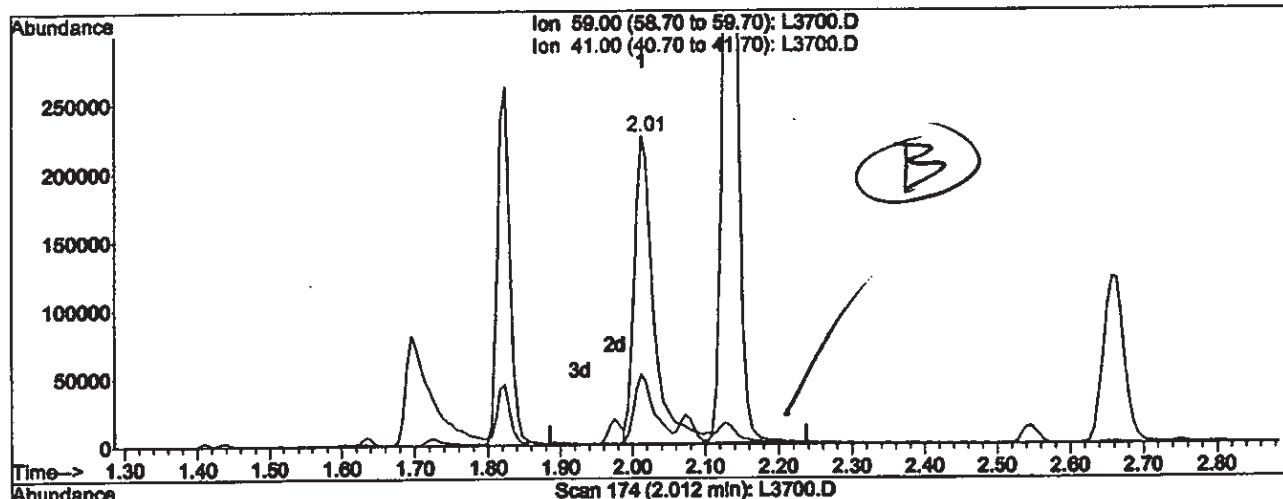
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3700.D
 Acq On : 19 Mar 2014 7:33 pm
 Sample : ICV/LCS
 Misc : 8260C
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 15:56 2014

Vial: 21
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 15:48:07 2014
 Response via : Multiple Level Calibration



(18) TBA

2.01min 1158.98ug/L

response 450502

Ion	Exp%	Act%
59.00	100	100
41.00	24.80	22.92
0.00	0.00	0.00
0.00	0.00	0.00

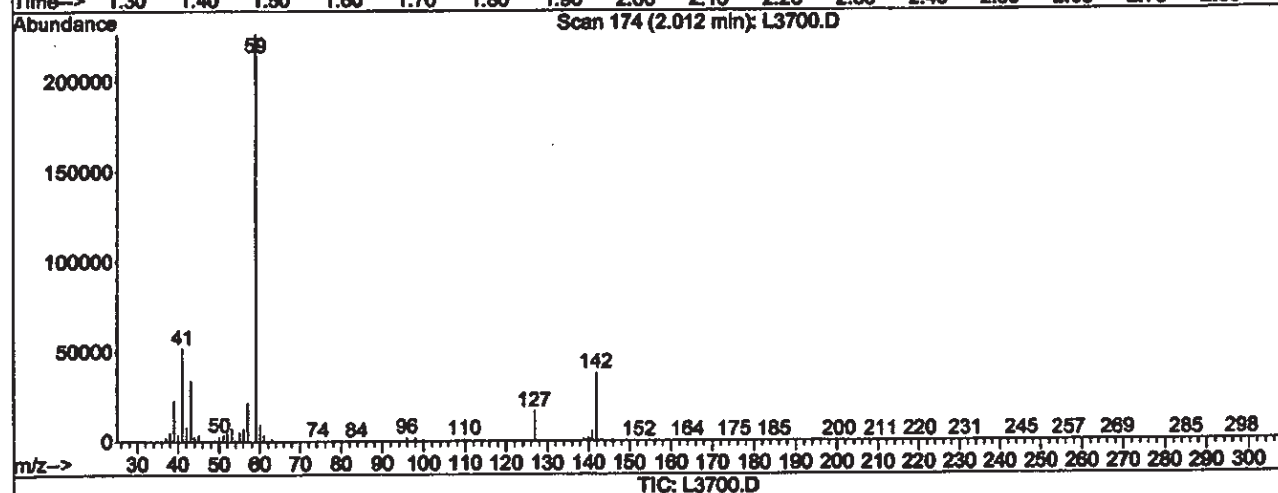
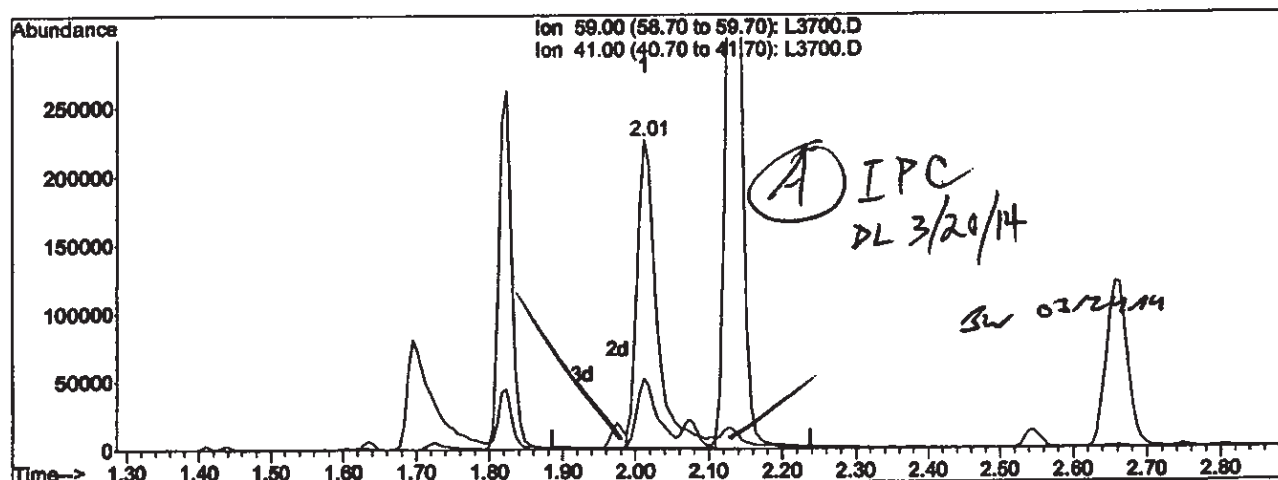
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3700.D
 Acq On : 19 Mar 2014 7:33 pm
 Sample : ICV/LCS
 Misc : 8260C
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 15:49 2014

Vial: 21
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 15:48:07 2014
 Response via : Multiple Level Calibration



(18) TBA

2.01min 1090.07ug/L m

response 424448

Ion	Exp%	Act%
59.00	100	100
41.00	24.80	22.92
0.00	0.00	0.00
0.00	0.00	0.00

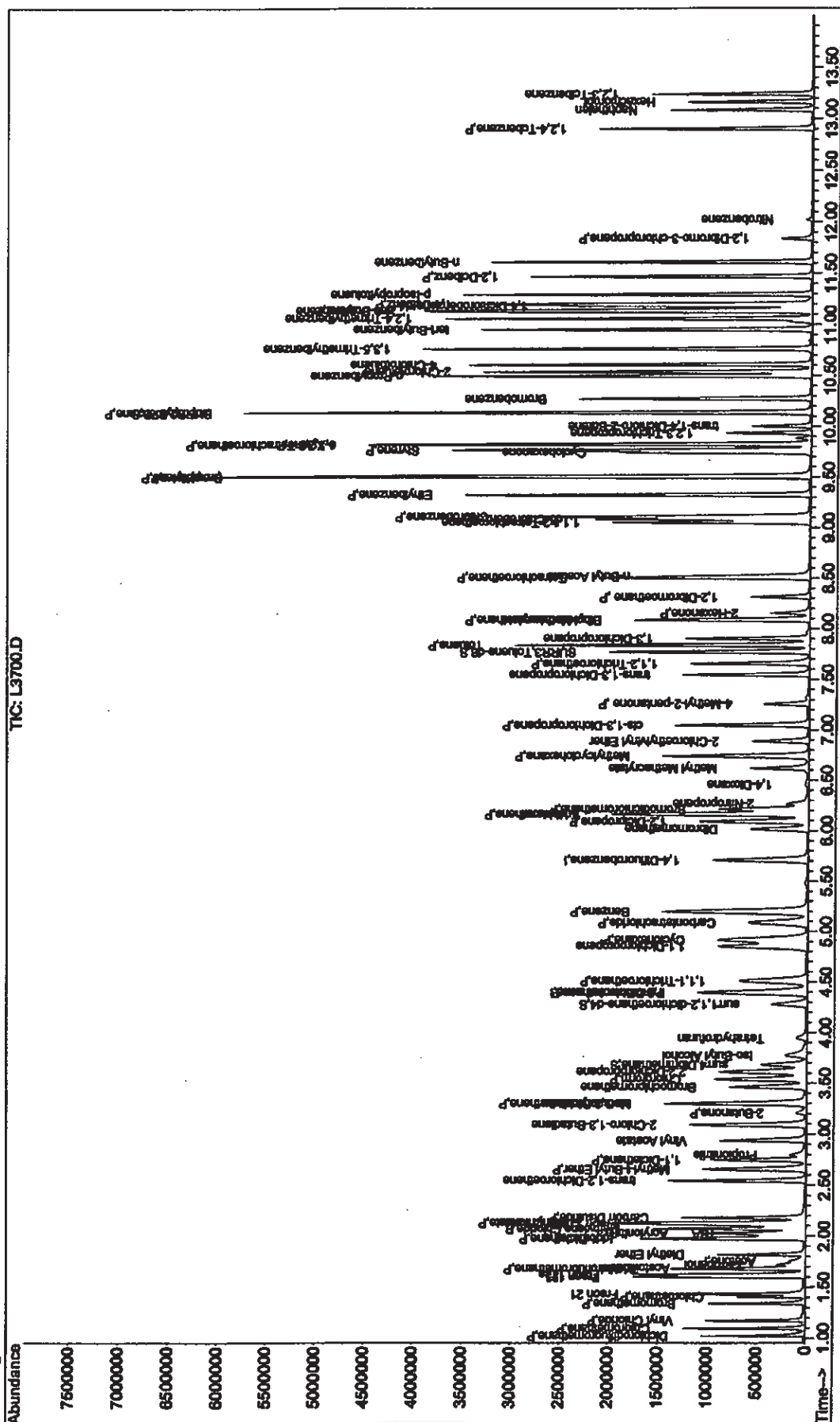
Quantitation Report

Data File : I:\ACQDATA\MSV0A6\DATA\031914\L3700.D
Acq On : 19 Mar 2014 7:33 pm
Sample : ICV/LCS
Misc : 8260C
MS Integration Params: CPD4.P
Quant Time: Mar 20 15:49 2014
Vial: 21
Operator: D.Lipani
Inst : MS#6
Multiplr: 1.00
Quant Results File: W031914.RES

```

Method      : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
Title       : 8260C WATERS
Last Update : Thu Mar 20 15:48:07 2014
Response via : Initial Calibration

```



ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003

Service Request: R1401882
Date Analyzed: 3/20/14

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Calibration Date: 3/19/14
Calibration ID: RC1400025
Analysis Lot: 384553
Units: µg/L

File ID: I:\ACQUDATA\MSVOA6\DATA\032014\L3723.D\

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,1,1-Trichloroethane (TCA)	50.0	52.1	1.049	1.094	4.3	NA	± 20 %	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	51.6	1.252	1.292	3.2	NA	± 20 %	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	49.2	0.5565	0.5473	-1.7	NA	± 20 %	Average RF
Tetrachloroethene (PCE)	50.0	49.6	0.4676	0.4636	-0.9	NA	± 20 %	Average RF
Trichloroethene (TCE)	50.0	52.2	0.5161	0.5387	4.4	NA	± 20 %	Average RF
Vinyl Chloride	50.0	49.8	0.8664	0.8628	-0.4	NA	± 20 %	Average RF
cis-1,2-Dichloroethene	50.0	50.4	0.7691	0.7744	0.7	NA	± 20 %	Average RF
trans-1,2-Dichloroethene	50.0	51.4	0.6794	0.6981	2.7	NA	± 20 %	Average RF
4-Bromofluorobenzene	50.0	47.9	0.5210	0.4987	-4.3	NA	± 20 %	Average RF
Dibromofluoromethane	50.0	50.3	0.3380	0.3401	0.6	NA	± 20 %	Average RF
Toluene-d8	50.0	50.2	1.233	1.239	0.5	NA	± 20 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003

Service Request: R1401882
Date Analyzed: 3/20/14

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C

Calibration Date: 3/19/14
Calibration ID: RC1400025
Analysis Lot: 384553
Units: µg/L

File ID: I:\ACQUDATA\MSVOA6\DATA\032014\L3723.D\

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,1,1-Trichloroethane (TCA)	50.0	52.1	1.049	1.094	4.3	NA	± 20 %	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	51.6	1.252	1.292	3.2	NA	± 20 %	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	49.2	0.5565	0.5473	-1.7	NA	± 20 %	Average RF
Tetrachloroethene (PCE)	50.0	49.6	0.4676	0.4636	-0.9	NA	± 20 %	Average RF
Trichloroethene (TCE)	50.0	52.2	0.5161	0.5387	4.4	NA	± 20 %	Average RF
Vinyl Chloride	50.0	49.8	0.8664	0.8628	-0.4	NA	± 20 %	Average RF
cis-1,2-Dichloroethene	50.0	50.4	0.7691	0.7744	0.7	NA	± 20 %	Average RF
trans-1,2-Dichloroethene	50.0	51.4	0.6794	0.6981	2.7	NA	± 20 %	Average RF
4-Bromofluorobenzene	50.0	47.9	0.5210	0.4987	-4.3	NA	± 20 %	Average RF
Dibromofluoromethane	50.0	50.3	0.3380	0.3401	0.6	NA	± 20 %	Average RF
Toluene-d8	50.0	50.2	1.233	1.239	0.5	NA	± 20 %	Average RF

Evaluate Continuing Calibration Report

Data File : I:\ACQUDATA\MSVOA6\DATA\032014\L3723.D
 Acq On : 20 Mar 2014 9:10 am
 Sample : CCV
 Misc : 8260C
 MS Integration Params: CPD4.P

Vial: 5
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 15:48:07 2014
 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%

DL 3/28/14

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Pentafluorobenzene	1.0000	1.0000	0.0	98	0.00
2 P	Dichlorodifluoromethane	0.7918	0.8059	-1.8	99	0.00
3 P	Chloromethane	0.9696	0.9833	-1.4	101	0.00
4 P	Vinyl Chloride	0.8664	0.8628	0.4	98	0.00
5 P	Bromomethane	0.5866	0.5472	6.7	102	0.00
6 P	Chloroethane	0.4766	0.4739	0.6	101	0.00
7	Freon 21	1.2871	1.2874	-0.0	102	0.00
8	Freon 123	0.9983	0.9880	1.0	101	0.00
9	Freon 123a	0.8425	0.8121	3.6	98	0.00
10	Acrolein	0.0769	0.0769	0.0	98	0.00
11 P	Trichlorofluoromethane	1.0411	1.0504	-0.9	101	0.00
12	Acetonitrile	0.0633	0.0604	4.6	95	0.00
13	2-Propanol	0.0197	0.0177	10.2	85	0.00
14 P	Acetone	0.1618	0.1517	6.2	95	0.00
15	Diethyl Ether	0.4490	0.4443	1.0	98	0.00
16 P	1,1-Dicethene	0.5565	0.5473	1.7	101	0.00
17	Iodomethane	0.8174	0.9134	-11.7	95	0.00
18	TBA	0.0303	0.0290	4.3	90	0.00
19	Acrylonitrile	0.1507	0.1496	0.7	96	0.00
20 P	Methylene Chloride	0.7512	0.7242	3.6	103	0.00
21 P	Freon 113	0.6233	0.5918	5.1	99	0.00
22 P	Methyl Acetate	0.3277	0.3351	-2.3	95	0.00
23	Allyl Chloride	0.3507	0.3755	-7.1	108	0.00
24 P	Carbon Disulfide	1.9421	1.9750	-1.7	101	0.00
25	trans-1,2-Dichloroethene	0.6794	0.6981	-2.8	102	0.00
26 P	Methyl-t-Butyl Ether	1.3479	1.3716	-1.8	96	0.00
27 P	1,1-Dicethane	1.2518	1.2918	-3.2	102	0.00
28	Propionitrile	0.0548	0.0548	0.0	96	0.00
29	Vinyl Acetate	1.1962	1.2775	-6.8	97	0.00
30	2-Chloro-1,3-Butadiene	1.0932	1.1771	-7.7	105	0.00
31 P	2-Butanone	0.2006	0.1941	3.2	90	0.00
32	Methacrylonitrile	0.2982	0.2962	0.7	93	0.00
33 P	cis-1,2-Dichloroethene	0.7691	0.7744	-0.7	100	0.00
34	Bromochloromethane	0.3408	0.3503	-2.8	101	0.00
35 P	Chloroform	1.2463	1.2892	-3.4	102	0.00
36	2,2-Dichloropropane	1.0089	1.0452	-3.6	102	0.00
37	Tetrahydrofuran	0.1330	0.1206	9.3	87	0.00
38 P	1,1,1-Trichloroethane	1.0493	1.0941	-4.3	103	0.00
39 I	1,4-Difluorobenzene	1.0000	1.0000	0.0	98	0.00
40 S	surr4,Dibrflmethane	0.3380	0.3401	-0.6	97	0.00
41	Iso-Butyl Alcohol	0.0109	0.0105	3.7	89	0.00
42 S	surr1,1,2-dichloroethane-d4	0.3242	0.3216	0.8	96	0.00
43 P	1,2-Dichloroethane	0.1783	0.1778	0.3	99	0.00
44	1,1-Dichloropropene	0.5984	0.6244	-4.3	102	0.00
45 P	Cyclohexane	0.7567	0.7690	-1.6	103	0.00
46 P	Carbontetrachloride	0.6018	0.6225	-3.4	100	0.00
47 P	Benzene	1.8788	1.9535	-4.0	102	0.00
48	Dibromomethane	0.2497	0.2565	-2.7	97	0.00
49 P	1,2-Diclp propane	0.5147	0.5389	-4.7	101	0.00

(#) = Out of Range

L3723.D W031914.M Thu Mar 20 16:17:15 2014

Page 1

00248

Evaluate Continuing Calibration Report

Data File : I:\ACQUDATA\MSVOA6\DATA\032014\L3723.D
 Acq On : 20 Mar 2014 9:10 am
 Sample : CCV
 Misc : 8260C
 MS Integration Params: CPD4.P

Vial: 5
 Operator: D.Lipani
 Inst : MS#6
 Multiplr: 1.00

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 15:48:07 2014
 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)
50	n-Heptane	0.5047	0.5390	-6.8	106	0.00
51 P	Trichloroethene	0.5161	0.5387	-4.4	102	0.00
52 P	Bromodichloromethane	0.6314	0.6787	-7.5	102	0.00
53	2-Nitropropane	0.0717	0.0750	-4.6	94	0.00
54	1,4-Dioxane	0.0021	0.0019	9.5	87	0.00
55	Methyl Methacrylate	0.1989	0.2100	-5.6	96	0.00
56 P	Methylcyclohexane	0.5496	0.5464	0.6	101	0.00
57	2-Chloroethylvinyl Ether	0.2212	0.2326	-5.2	95	0.00
58 P	cis-1,3-Dichloropropene	0.7118	0.7644	-7.4	100	0.00
59 P	4-Methyl-2-pentanone	0.3143	0.3164	-0.7	94	0.00
60	trans-1,3-Dichloropropene	0.5744	0.6161	-7.3	98	0.00
61 P	1,1,2-Trichloroethane	0.3500	0.3565	-1.9	95	0.00
62 S	SURR3,Toluene-d8	1.2334	1.2391	-0.5	97	0.00
63 P	Toluene	2.0621	2.0651	-0.1	102	0.00
64 I	d5-Chlorobenzene	1.0000	1.0000	0.0	103	0.00
65	1,3-Dichloropropane	0.6343	0.6326	0.3	98	0.00
66	Ethyl Methacrylate	0.4741	0.4917	-3.7	96	0.00
67 P	Dibromochloromethane	0.5082	0.5108	-0.5	98	0.00
68 P	2-Hexanone	0.2495	0.2360	5.4	95	0.00
69 P	1,2-Dibromoethane	0.3868	0.3821	1.2	96	0.00
70	n-Butyl Acetate	0.5818	0.5858	-0.7	93	0.00
71 P	Tetrachloroethene	0.4676	0.4636	0.9	101	0.00
72	1,1,1,2-Tetrachloroethane	0.5315	0.5334	-0.4	102	0.00
73 P	Chlorobenzene	1.3868	1.4246	-2.7	102	0.00
74 P	Ethylbenzene	0.7668	0.7817	-1.9	101	0.00
75 P	Bromoform	0.3158	0.3166	-0.3	96	0.00
76 P	(m+p)Xylene	0.9003	0.9245	-2.7	101	0.00
77 P	o-Xylene	0.9191	0.9325	-1.5	101	0.00
78	Cyclohexanone	0.0393	0.0365	7.1	88	0.00
79 P	Styrene	1.4378	1.4749	-2.6	99	0.00
80	trans-1,4-Dichloro-2-Butene	0.1330	0.1429	-7.4	92	0.00
81 P	Isopropylbenzene	2.2891	2.2052	3.7	99	0.00
82 S	SURR2,BFB	0.5210	0.4987	4.3	96	0.00
83 I	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	97	0.00
84 P	1,1,2,2-Tetrachloroethane	0.8847	0.8484	4.1	94	0.00
85	1,2,3-Trichloropropane	0.5813	0.5968	-2.7	97	0.00
86	Bromobenzene	1.2115	1.2070	0.4	100	0.00
87	n-Propylbenzene	5.0170	5.0400	-0.5	102	0.00
88	2-Chlorotoluene	3.1805	3.1409	1.2	101	0.00
89	4-Chlorotoluene	3.2989	3.2936	0.2	102	0.00
90	1,3,5-Trimethylbenzene	3.3939	3.5341	-4.1	103	0.00
91	tert-Butylbenzene	2.7572	2.8474	-3.3	102	0.00
92	1,2,4-Trimethylbenzene	3.5219	3.5629	-1.2	102	0.00
93	sec-Butylbenzene	4.0226	4.0851	-1.6	102	0.00
94 P	1,3-Dclbenz	2.1627	2.1798	-0.8	101	0.00
95 P	1,4-Dclbenz	2.1778	2.1887	-0.5	102	0.00
96	p-Isopropyltoluene	3.2288	3.3627	-4.1	102	0.00
97 P	1,2-Dclbenz	1.9516	1.9503	0.1	101	0.00

(#) = Out of Range

L3723.D W031914.M

Thu Mar 20 16:17:19 2014

Page 2

00249

Evaluate Continuing Calibration Report

Data File : I:\ACQUDATA\MSVOA6\DATA\032014\L3723.D Vial: 5
 Acq On : 20 Mar 2014 9:10 am Operator: D.Lipani
 Sample : CCV Inst : MS#6
 Misc : 8260C Multiplr: 1.00
 MS Integration Params: CPD4.P

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
 Title : 8260C WATERS
 Last Update : Thu Mar 20 15:48:07 2014
 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)
98	n-Butylbenzene	2.9973	3.2007	-6.8	103	0.00
99 P	1,2-Dibromo-3-chloropropane	0.1163	0.1173	-0.9	99	0.00
100	Nitrobenzene	0.0278	0.0240	13.7	89	0.00
101 P	1,2,4-Tcbenzene	1.0704	1.0533	1.6	97	0.00
102	Naphthalen	1.6431	1.5983	2.7	92	0.00
103	Hexachlorobt	0.4471	0.4449	0.5	106	0.00
104	1,2,3-Tclbenzene	0.8092	0.7970	1.5	99	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\032014\L3723.D

Vial: 5

Acq On : 20 Mar 2014 9:10 am

Operator: D.Lipani

Sample : CCV

Inst : MS#6

Misc : 8260C

Multiplr: 1.00

MS Integration Params: CPD4.P

Quant Time: Mar 20 16:19 2014

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)

Title : 8260C WATERS

Last Update : Thu Mar 20 15:48:07 2014

Response via : Initial Calibration

DataAcq Meth : W031914

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.40	168	599642	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.71	114	864375	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.08	117	819291	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.18	152	426089	50.00	ug/L	0.00

System Monitoring Compounds

40) surr4,Dibrflmethane	3.68	113	293964	50.31	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	100.62%
42) surr1,1,2-dichloroethane-d	4.28	65	278019	49.61	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	99.22%
62) SURR3,Toluene-d8	7.77	98	1071081	50.23	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	100.46%
82) SURR2,BFB	10.14	95	408586	47.86	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	95.72%

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	1.02	85	483260	50.89	ug/L 98
3) Chloromethane	1.10	50	589657	50.71	ug/L 98
4) Vinyl Chloride	1.18	62	517389	49.80	ug/L 97
5) Bromomethane	1.35	94	328105	46.64	ug/L 98
6) Chloroethane	1.41	64	284169	49.72	ug/L 100
7) Freon 21	1.43	67	771962	50.01	ug/L 100
8) Freon 123	1.60	83	592442	49.49	ug/L 99
9) Freon 123a	1.63	67	486999	48.20	ug/L 94
10) Acrolein	1.68	56	230532	249.91	ug/L 98
11) Trichlorofluoromethane	1.68	101	629893	50.45	ug/L 99
12) Acetonitrile	1.69	41	180991	238.27	ug/L 98
13) 2-Propanol	1.72	45	212584	899.66	ug/L 97
14) Acetone	1.75	43	90939	46.87	ug/L 90
15) Diethyl Ether	1.82	59	266398	49.47	ug/L 95
16) 1,1-Dicethene	1.97	96	328167	49.17	ug/L 95
17) Iodomethane	1.98	142	547721	50.29	ug/L 98
18) TBA	2.01	59	348338	958.67	ug/L 100
19) Acrylonitrile	2.03	53	448467	248.18	ug/L 99
20) Methylene Chloride	2.08	84	434238	48.20	ug/L 95
21) Freon 113	2.11	101	354841	47.47	ug/L 96
22) Methyl Acetate	2.12	43	200923	51.12	ug/L 99
23) Allyl Chloride	2.13	76	225143	53.53	ug/L 99
24) Carbon Disulfide	2.18	76	1184275	50.85	ug/L 99
25) trans-1,2-Dichloroethene	2.54	96	418593	51.37	ug/L 99
26) Methyl-t-Butyl Ether	2.66	73	822458	50.88	ug/L 99
27) 1,1-Dicethane	2.74	63	774616	51.60	ug/L 97
28) Propionitrile	2.79	54	164383	250.00	ug/L 100
29) Vinyl Acetate	2.93	43	766018	53.40	ug/L 99
30) 2-Chloro-1,3-Butadiene	3.09	53	705820	53.84	ug/L 98
31) 2-Butanone	3.21	43	116369	48.38	ug/L 99
32) Methacrylonitrile	3.30	41	177641	49.68	ug/L 98
33) cis-1,2-Dichloroethene	3.30	96	464379	50.35	ug/L 97
34) Bromochloromethane	3.46	128	210065	51.39	ug/L 97
35) Chloroform	3.54	83	773086	51.72	ug/L 99
36) 2,2-Dichloropropane	3.61	77	626771	51.80	ug/L 99

(#)= qualifier out of range (m)= manual integration

L3723.D W031914.M Thu Mar 20 16:11:33 2014

Page 1

00251

Data File : I:\ACQUDATA\MSVOA6\DATA\032014\L3723.D

Vial: 5

Acq On : 20 Mar 2014 9:10 am

Operator: D.Lipani

Sample : CCV

Inst : MS#6

Misc : 8260C

Multiplr: 1.00

MS Integration Params: CPD4.P

Quant Time: Mar 20 16:19 2014

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)

Title : 8260C WATERS

Last Update : Thu Mar 20 15:48:07 2014

Response via : Initial Calibration

DataAcq Meth : W031914

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37) Tetrahydrofuran	3.95	42	72307	45.33	ug/L	100
38) 1,1,1-Trichloroethane	4.51	97	656082	52.14	ug/L	98
41) Iso-Butyl Alcohol	3.77	43	181128	963.16	ug/L	100
43) 1,2-Dichloroethane	4.39	64	153647	49.84	ug/L	97
44) 1,1-Dichloropropene	4.85	75	539750	52.17	ug/L	97
45) Cyclohexane	4.92	56	664735	50.82	ug/L	96
46) Carbontetrachloride	5.09	119	538054	51.72	ug/L	98
47) Benzene	5.20	78	1688525	51.99	ug/L	98
48) Dibromomethane	6.02	93	221699	51.35	ug/L	99
49) 1,2-Dichloropropane	6.09	63	465817	52.35	ug/L	96
50) n-Heptane	6.17	43	465881	53.39	ug/L	97
51) Trichloroethene	6.16	130	465603	52.18	ug/L	99
52) Bromodichloromethane	6.21	83	586623	53.74	ug/L	99
53) 2-Nitropropane	6.27	41	129601	104.58	ug/L	93
54) 1,4-Dioxane	6.45	88	32851	887.77	ug/L	79
55) Methyl Methacrylate	6.62	69	181487	52.79	ug/L	93
56) Methylcyclohexane	6.74	55	472312	49.71	ug/L	99
57) 2-Chloroethylvinyl Ether	6.89	63	201067	52.57	ug/L	98
58) cis-1,3-Dichloropropene	7.05	75	660745	53.70	ug/L	99
59) 4-Methyl-2-pentanone	7.26	43	273525	50.33	ug/L	97
60) trans-1,3-Dichloropropene	7.54	75	532584	53.63	ug/L	100
61) 1,1,2-Trichloroethane	7.66	97	308138	50.93	ug/L	98
63) Toluene	7.84	91	1784990	50.07	ug/L	100
65) 1,3-Dichloropropene	7.90	76	518276	49.86	ug/L	99
66) Ethyl Methacrylate	8.08	69	402847	51.86	ug/L	98
67) Dibromochloromethane	8.10	129	418514	50.26	ug/L	100
68) 2-Hexanone	8.15	43	193318	47.28	ug/L	97
69) 1,2-Dibromoethane	8.31	107	313084	49.39	ug/L	98
70) n-Butyl Acetate	8.52	43	479950	50.35	ug/L	99
71) Tetrachloroethene	8.50	164	379812	49.57	ug/L	99
72) 1,1,1,2-Tetrachloroethane	9.05	131	437040	50.18	ug/L	98
73) Chlorobenzene	9.11	112	1167139	51.36	ug/L	100
74) Ethylbenzene	9.32	106	640440	50.97	ug/L	100
75) Bromoform	9.50	173	259424	50.13	ug/L	99
76) (m+p)Xylene	9.51	106	1514831	102.69	ug/L	100
77) o-Xylene	9.82	106	763993	50.73	ug/L	99
78) Cyclohexanone	9.74	55	598158	928.68	ug/L	98
79) Styrene	9.77	104	1208403	51.29	ug/L	99
80) trans-1,4-Dichloro-2-Butene	10.00	75	117048	53.71	ug/L	93
81) Isopropylbenzene	10.13	105	1806676	48.17	ug/L	99
84) 1,1,2,2-Tetrachloroethane	9.82	83	361498	47.95	ug/L	98
85) 1,2,3-Trichloropropane	9.93	75	254286	51.33	ug/L	99
86) Bromobenzene	10.27	156	514294	49.81	ug/L	100
87) n-Propylbenzene	10.49	91	2147502	50.23	ug/L	100
88) 2-Chlorotoluene	10.53	91	1338293	49.38	ug/L	99
89) 4-Chlorotoluene	10.61	91	1403387	49.92	ug/L	99
90) 1,3,5-Trimethylbenzene	10.76	105	1505831	52.07	ug/L	99
91) tert-Butylbenzene	10.95	119	1213267	51.64	ug/L	100
92) 1,2,4-Trimethylbenzene	11.06	105	1518096	50.58	ug/L	98
93) sec-Butylbenzene	11.12	105	1740619	50.78	ug/L	100

(#)=qualifier out of range (m)=manual integration

L3723.D W031914.M Thu Mar 20 16:11:35 2014

Data File : I:\ACQUDATA\MSVOA6\DATA\032014\L3723.D

Vial: 5

Acq On : 20 Mar 2014 9:10 am

Operator: D.Lipani

Sample : CCV

Inst : MS#6

Misc : 8260C

Multiplr: 1.00

MS Integration Params: CPD4.P

Quant Time: Mar 20 16:19 2014

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)

Title : 8260C WATERS

Last Update : Thu Mar 20 15:48:07 2014

Response via : Initial Calibration

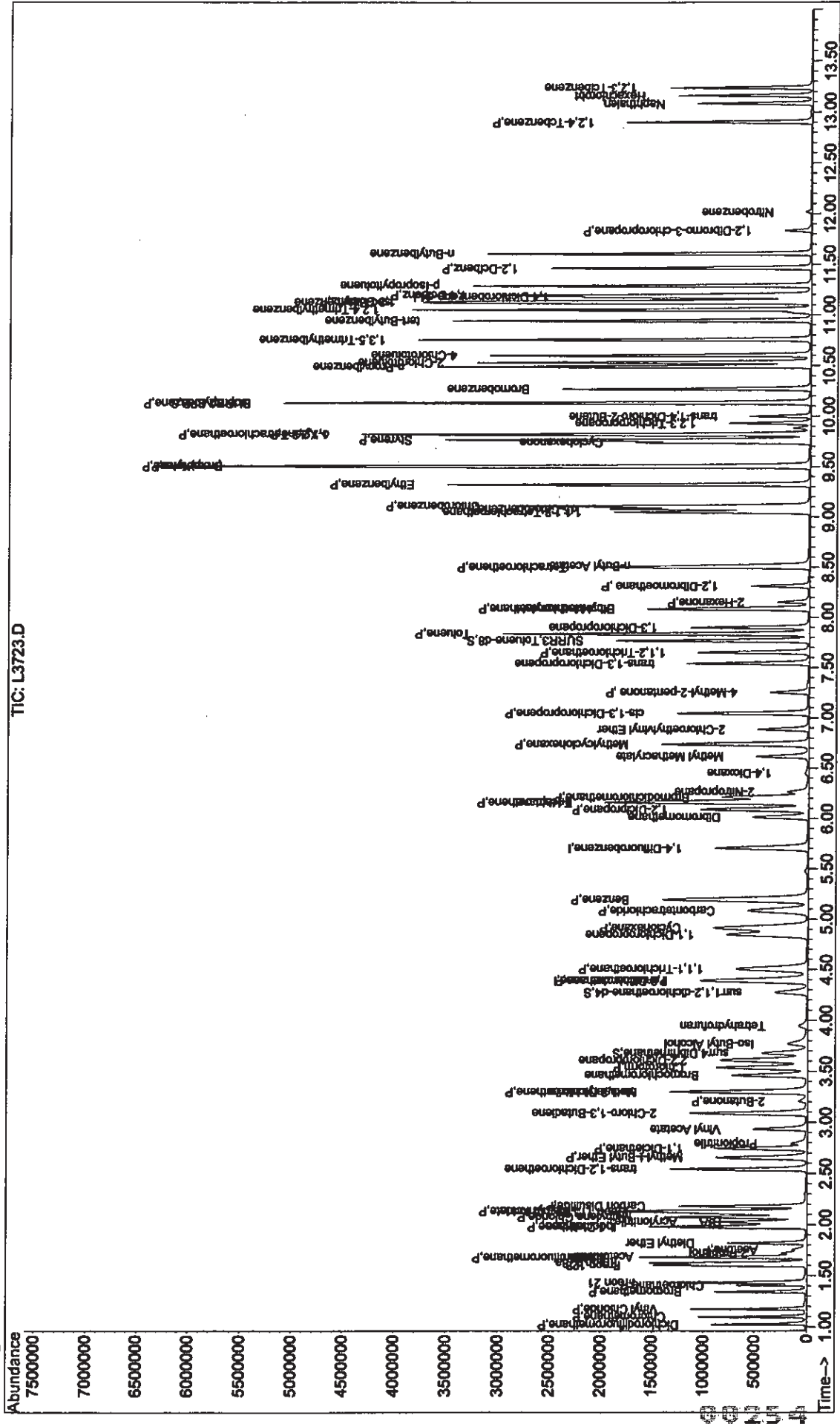
DataAcq Meth : W031914

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
94) 1,3-Dclbenz	11.14	146	928771	50.39	ug/L	99
95) 1,4-Dclbenz	11.20	146	932572	50.25	ug/L	99
96) p-Isopropyltoluene	11.29	119	1432800	52.07	ug/L	100
97) 1,2-Dclbenz	11.47	146	831003	49.97	ug/L	99
98) n-Butylbenzene	11.61	91	1363796	53.39	ug/L	100
99) 1,2-Dibromo-3-chloropropan	11.83	75	49962	50.42	ug/L	94
100) Nitrobenzene	12.02	77	20424	86.14	ug/L	86
101) 1,2,4-Tcbenzene	12.91	180	448797	49.20	ug/L	99
102) Naphthalen	13.08	128	681025	48.64	ug/L	99
103) Hexachlorobt	13.16	225	189565	49.75	ug/L	97
104) 1,2,3-Tclbenzene	13.24	180	339595	49.25	ug/L	99

Quantitation Report

Data File : I:\ACQUADATA\MSVOA6\DATA\032014\L3723.D
Acq On : 20 Mar 2014 9:10 am
Sample : CCV
Misc : 8260C
MS Integration Params: CPD4.P
Quant Time: Mar 20 16:19 2014
Vial: 5
Operator: D.Lipani
Inst : MS#6
Multiplr: 1.00
Quant Results File: W031914.RES

```
Method      : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
Title       : 8260C WATERS
Last Update : Thu Mar 20 15:48:07 2014
Response via : Initial Calibration
```





VOLATILE ORGANICS RAW QC DATA

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

BFB

Data File : I:\ACQUDATA\MSVOA6\DATA\031914\L3686.D

Vial: 8

Acq On : 19 Mar 2014 11:21 am

Operator: D.Lipani

Sample : TUNE CHECK

Inst : MS#6

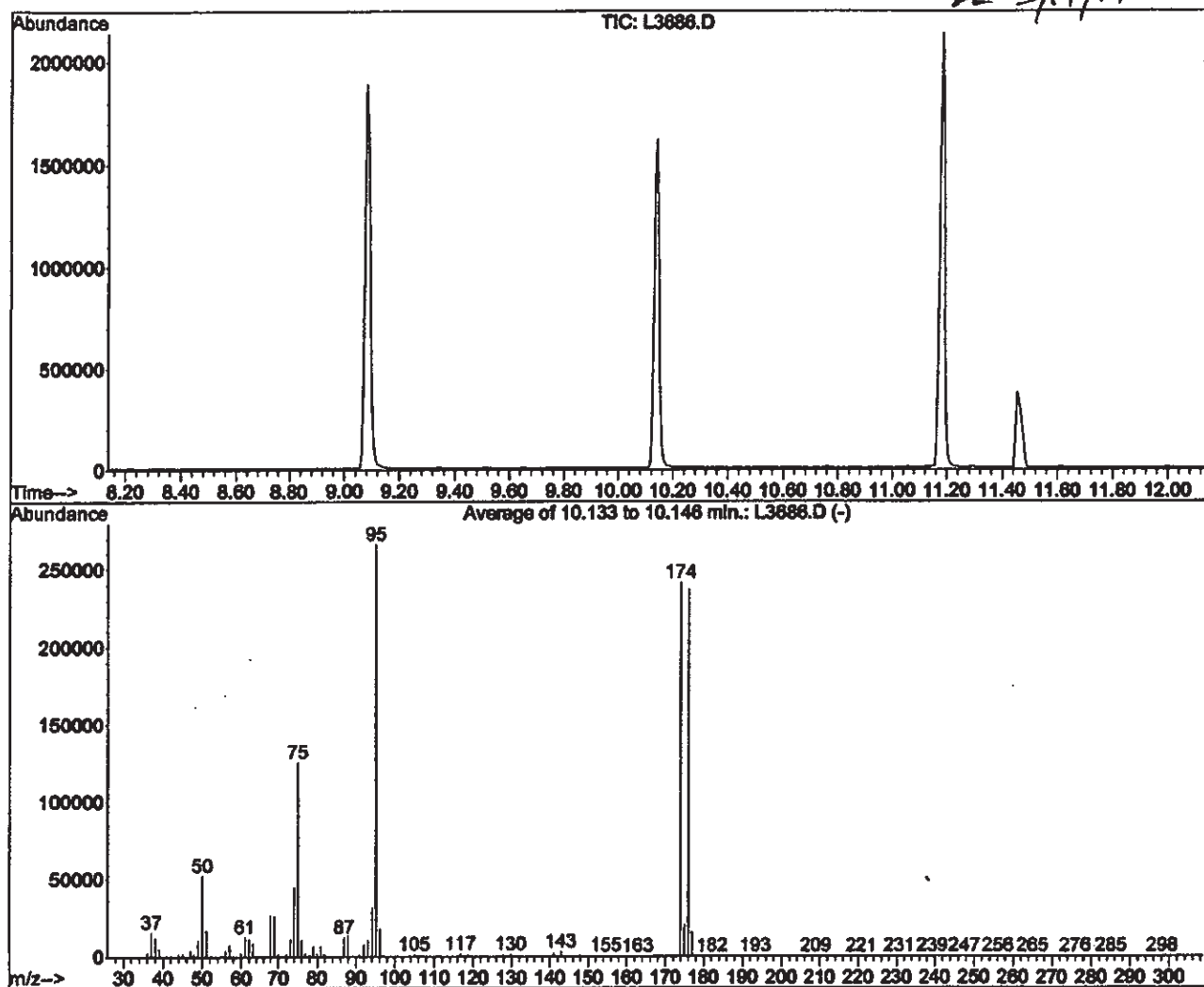
Misc : 8260C

Multiplr: 1.00

MS Integration Params: CPD4.P

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)

Title : 8260C WATERS



AutoFind: Scans 1509, 1510, 1511; Background Corrected with Scan 1501

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.6	52136	PASS
75	95	30	60	47.1	125477	PASS
95	95	100	100	100.0	266368	PASS
96	95	5	9	6.7	17809	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	90.6	241323	PASS
175	174	5	9	8.3	19968	PASS
176	174	95	101	98.2	236992	PASS
177	176	5	9	6.7	15875	PASS

BFB

Data File : I:\ACQUDATA\MSVOA6\DATA\032014\L3722.D

Vial: 4

Acq On : 20 Mar 2014 8:29 am

Operator: D.Lipani

Sample : TUNE CHECK

Inst : MS#6

Misc : 8260C

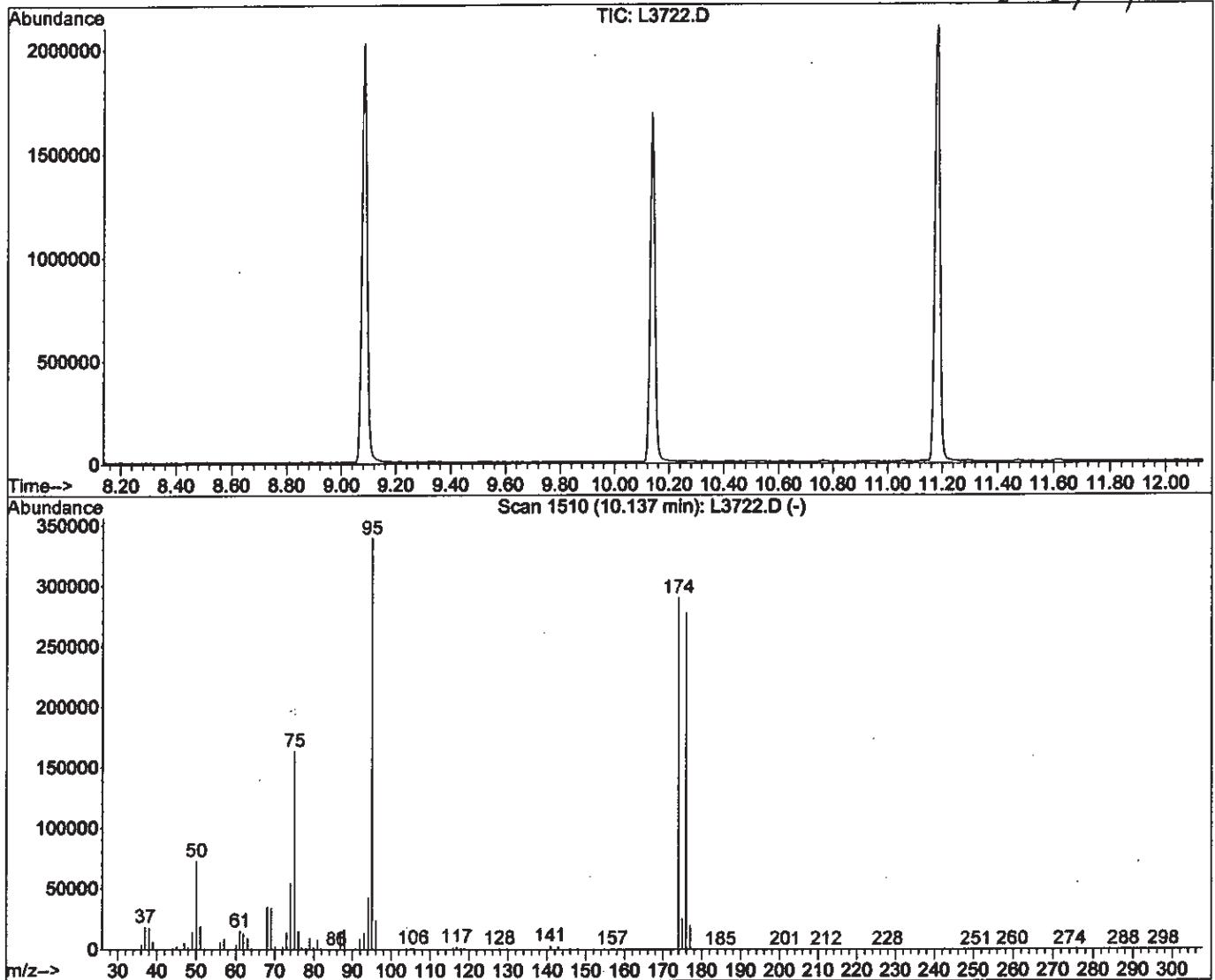
Multiplr: 1.00

MS Integration Params: CPD4.P

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)

Title : 8260C WATERS

DL 3/20/14



Spectrum Information: Scan 1510

Sub Scan = 1505

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.5	73032	PASS
75	95	30	60	48.3	163780	PASS
95	95	100	100	100.0	339319	PASS
96	95	5	9	7.0	23720	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	85.4	289935	PASS
175	174	5	9	8.7	25336	PASS
176	174	95	101	95.6	277184	PASS
177	176	5	9	7.0	19472	PASS

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1401882
Date Collected: NA
Date Received: NA
Date Analyzed: 3/20/14 10:56

Sample Name: Method Blank
Lab Code: RQ1402642-04

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA6\DATA\032014\L3726.D\

Analysis Lot: 384553
Instrument Name: R-MS-06
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0 U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	5.0 U	5.0	0.22	
75-01-4	Vinyl Chloride	5.0 U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	5.0 U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0 U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	85-122	3/20/14 10:56	
Dibromofluoromethane	97	89-119	3/20/14 10:56	
Toluene-d8	98	87-121	3/20/14 10:56	

Data File : I:\ACQUDATA\MSVOA6\DATA\032014\L3726.D

Vial: 8

Acq On : 20 Mar 2014 10:56 am

Operator: D.Lipani

Sample : MET BLK

Inst : MS#6

Misc : 8260C

Multiplr: 1.00

MS Integration Params: CPD4.P

Quant Time: Mar 20 19:22 2014

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)

Title : 8260C WATERS

Last Update : Thu Mar 20 15:48:07 2014

Response via : Initial Calibration

DataAcq Meth : W031914

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.40	168	609656	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.71	114	901307	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.08	117	828472	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.18	152	434582	50.00	ug/L	0.00

System Monitoring Compounds

40) surr4,Dibrflmethane	3.68	113	295541	48.51	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	97.02%
42) surr1,1,2-dichloroethane-d	4.28	65	299241	51.21	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	102.42%
62) SURR3,Toluene-d8	7.77	98	1083907	48.75	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	97.50%
82) SURR2,BFB	10.14	95	402216	46.59	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	93.18%

Target Compounds

					Qvalue
12) Acetonitrile	1.70	41	211	0.27 ug/L #	4
13) 2-Propanol	1.73	45	249	1.04 ug/L	97
14) Acetone	1.76	43	617	0.31 ug/L #	1
17) Iodomethane	2.01	142	287	1.09 ug/L	73
41) Iso-Butyl Alcohol	3.79	43	188	0.96 ug/L	85
78) Cyclohexanone	9.75	55	892	1.37 ug/L	91
99) 1,2-Dibromo-3-chloropropan	11.83	75	222	0.22 ug/L #	87
100) Nitrobenzene	12.03	77	155	0.64 ug/L #	32
101) 1,2,4-Tcbenzene	12.90	180	3568	0.38 ug/L	89
102) Naphthalen	13.09	128	8377	0.59 ug/L	94
103) Hexachlorobt	13.16	225	1661	0.43 ug/L	96
104) 1,2,3-Tclbenzene	13.24	180	3613	0.51 ug/L	87

DL
3/20/14-----
(#) = qualifier out of range (m) = manual integration

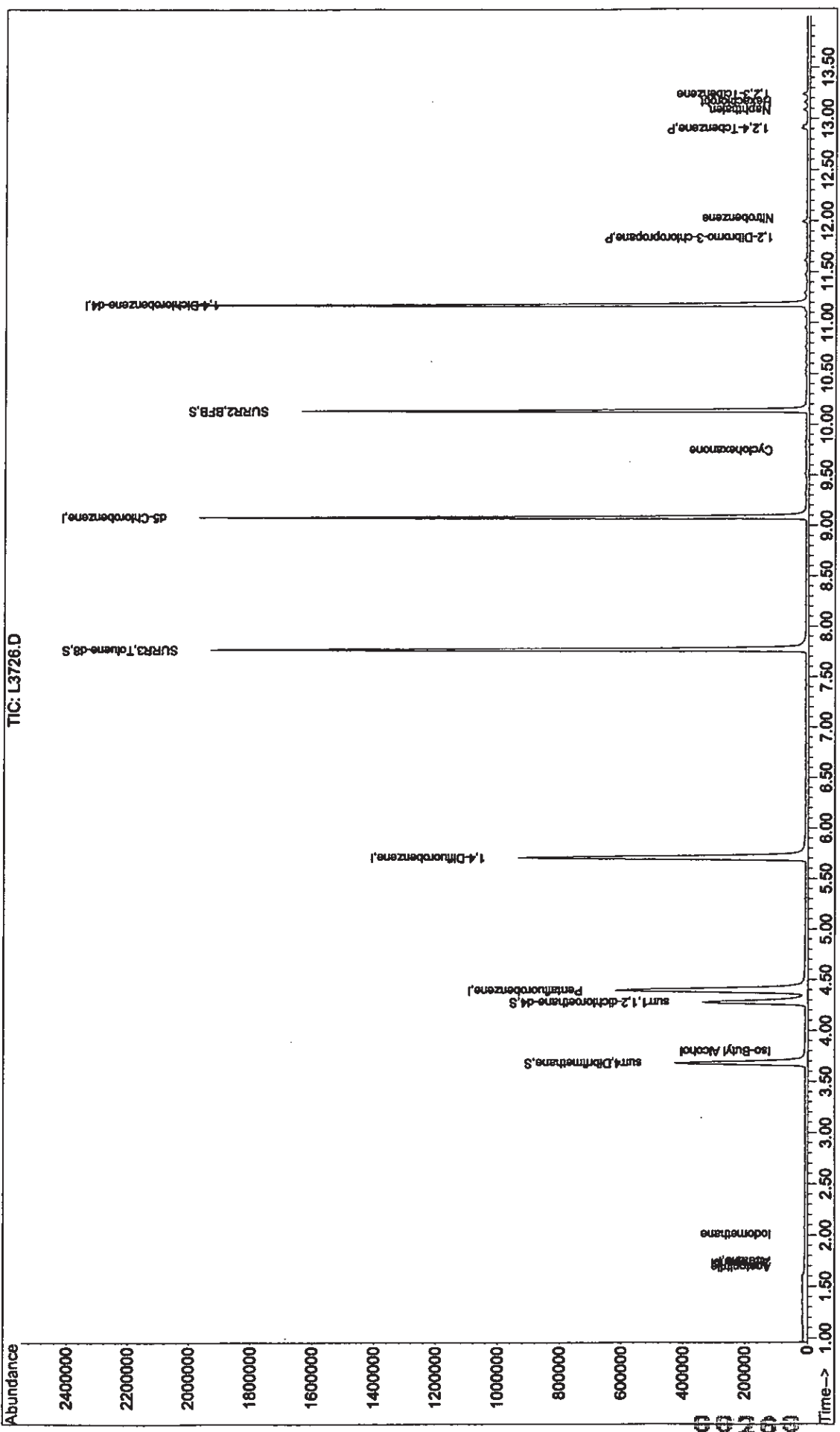
L3726.D W031914.M

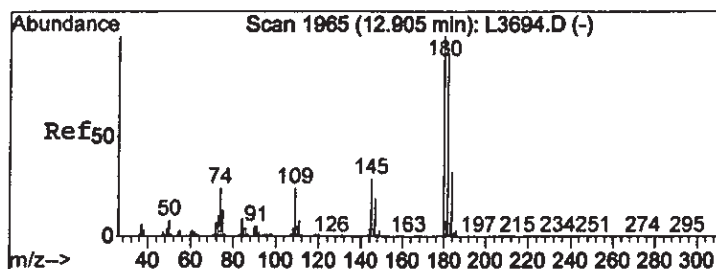
Thu Mar 20 19:14:30 2014

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\032014\L3726.D Vial: 8
Acq On : 20 Mar 2014 10:56 am Operator: D.Lipani
Sample : MET BLK Inst : MS#6
Misc : 8260C Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 20 19:22 2014 Quant Results File: W031914.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTS Integrator)
Title : 8260C WATERS
Last Update : Thu Mar 20 15:48:07 2014
Response via : Initial Calibration





#101

1,2,4-Tcbenzene

Concen: 0.38 ug/L

RT: 12.90 min Scan# 1965

Delta R.T. -0.00 min

Lab File: L3726.D

Acq: 20 Mar 2014 10:56 am

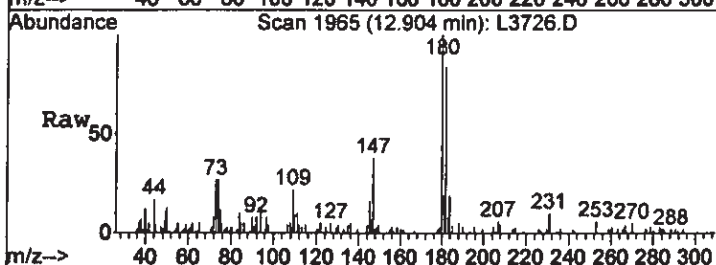
Tgt Ion:180 Resp: 3568

Ion Ratio Lower Upper

180 100

182 105.3 74.0 114.0

145 32.8 9.2 49.2

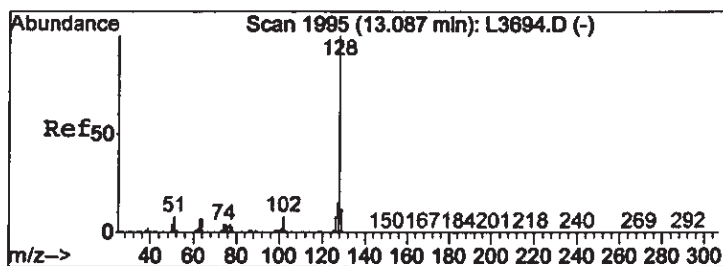
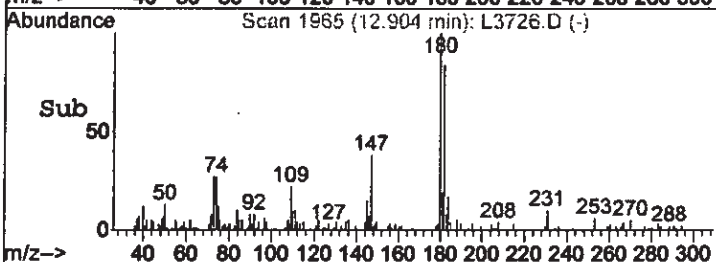
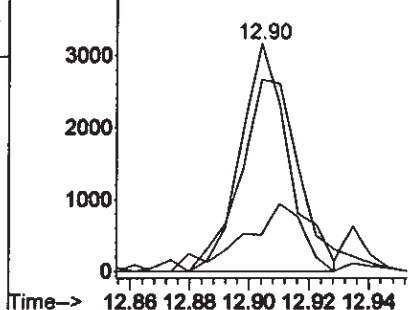


Abundance

Ion 180.00 (179.70 to 180.70):

Ion 182.00 (181.70 to 182.70):

Ion 145.00 (144.70 to 145.70):



#102

Naphthalen

Concen: 0.59 ug/L

RT: 13.09 min Scan# 1995

Delta R.T. -0.00 min

Lab File: L3726.D

Acq: 20 Mar 2014 10:56 am

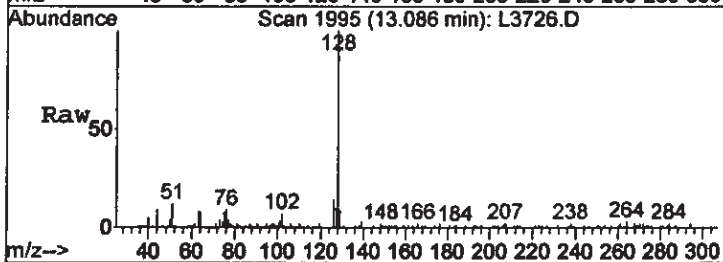
Tgt Ion:128 Resp: 8377

Ion Ratio Lower Upper

128 100

127 10.7 0.0 33.7

102 9.5 0.0 27.9

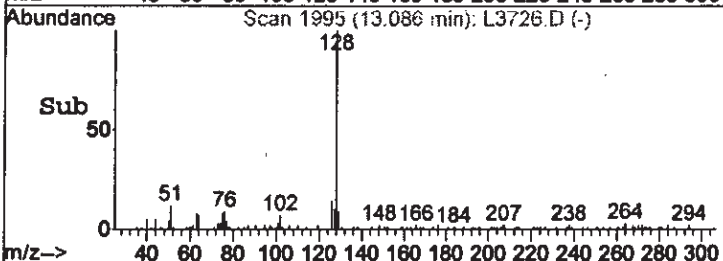
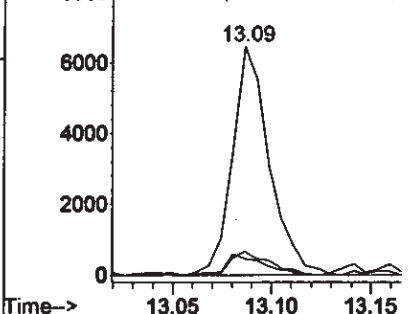


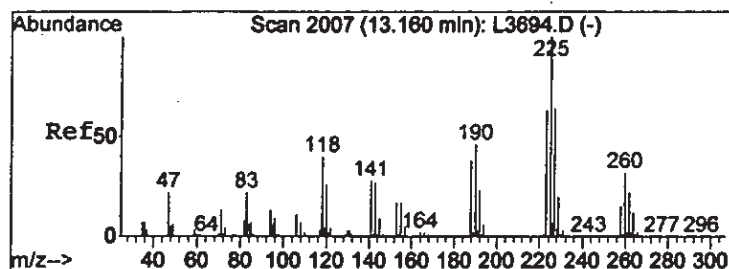
Abundance

Ion 128.00 (127.70 to 128.70):

Ion 127.00 (126.70 to 127.70):

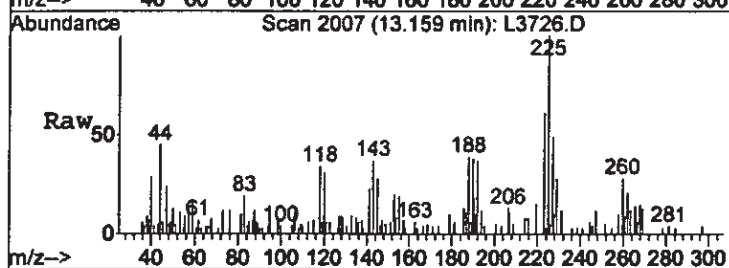
Ion 102.00 (101.70 to 102.70):





#103
Hexachlorobt
Concen: 0.43 ug/L
RT: 13.16 min Scan# 2007
Delta R.T. -0.00 min
Lab File: L3726.D
Acq: 20 Mar 2014 10:56 am

Tgt Ion	Ratio	Lower	Upper
225	100		
223	58.8	43.9	83.9
227	68.4	47.0	87.0

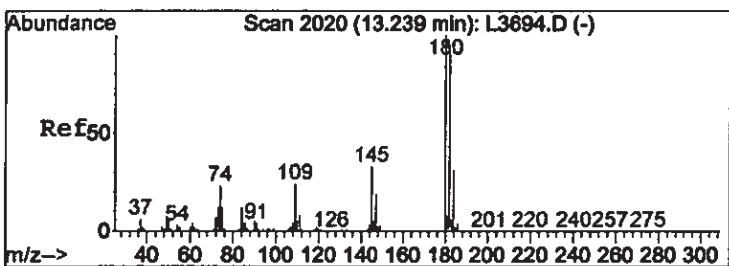
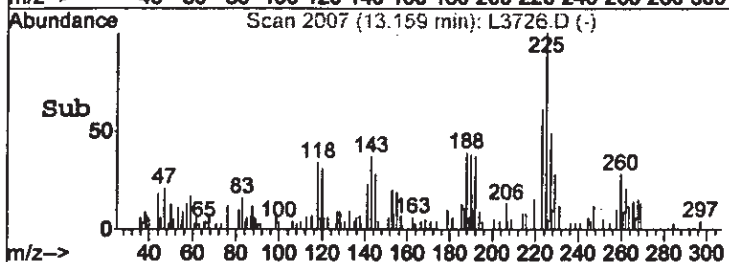
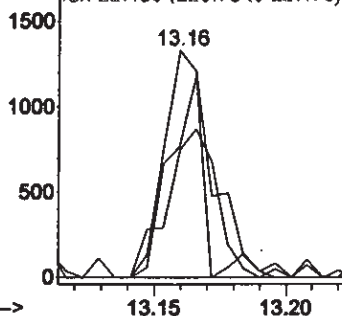


Abundance

Ion 225.00 (224.70 to 225.70):

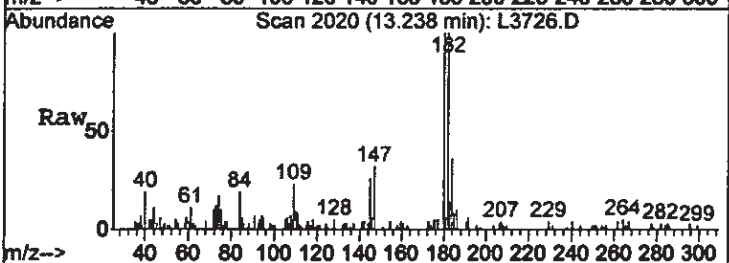
Ion 223.00 (222.70 to 223.70):

Ion 227.00 (226.70 to 227.70):



#104
1,2,3-Tclbenzene
Concen: 0.51 ug/L
RT: 13.24 min Scan# 2020
Delta R.T. -0.00 min
Lab File: L3726.D
Acq: 20 Mar 2014 10:56 am

Tgt Ion	Ratio	Lower	Upper
180	100		
182	109.7	76.2	116.2
145	36.3	11.5	51.5

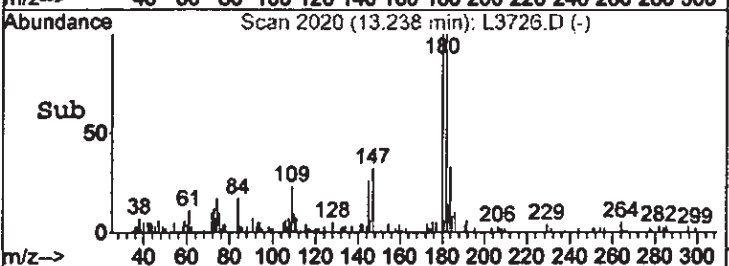
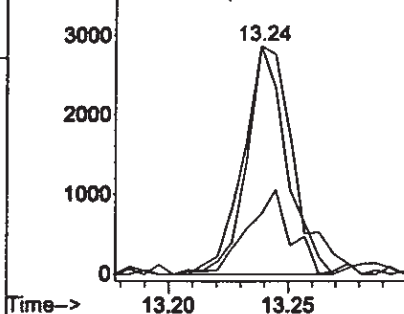


Abundance

Ion 180.00 (179.70 to 180.70):

Ion 182.00 (181.70 to 182.70):

Ion 145.00 (144.70 to 145.70):



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1401882
Date Collected: NA
Date Received: NA
Date Analyzed: 3/20/14 09:48

Sample Name: Lab Control Sample
Lab Code: RQ1402642-03

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA6\DATA\032014\L3724.D\

Analysis Lot: 384553
Instrument Name: R-MS-06
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	20.7	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	21.0	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	22.7	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	20.6	5.0	0.30	
79-01-6	Trichloroethene (TCE)	20.3	5.0	0.22	
75-01-4	Vinyl Chloride	20.9	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	20.0	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	20.5	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85-122	3/20/14 09:48	
Dibromofluoromethane	100	89-119	3/20/14 09:48	
Toluene-d8	98	87-121	3/20/14 09:48	

Data File : I:\ACQUDATA\MSVOA6\DATA\032014\L3724.D

Vial: 6

Acq On : 20 Mar 2014 9:48 am

Operator: D.Lipani

Sample : LCS

Inst : MS#6

Misc : 8260C

Multiplr: 1.00

MS Integration Params: CPD4.P

Quant Results File: W031914.RES

Quant Time: Mar 20 16:54 2014

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)

Title : 8260C WATERS

Last Update : Thu Mar 20 15:48:07 2014

Response via : Initial Calibration

DataAcq Meth : W031914

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.40	168	633361	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.71	114	924977	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.08	117	838657	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.18	152	446360	50.00	ug/L	0.00

System Monitoring Compounds

40) surr4,Dibrflmethane	3.68	113	313543	50.15	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	100.30%
42) surr1,1,2-dichloroethane-d	4.28	65	298216	49.73	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	99.46%
62) SURR3,Toluene-d8	7.77	98	1123017	49.22	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	98.44%
82) SURR2,BFB	10.14	95	418718	47.91	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	95.82%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.03	85	224708	22.40	ug/L	98
3) Chloromethane	1.10	50	259586	21.14	ug/L	98
4) Vinyl Chloride	1.18	62	229643	20.93	ug/L	100
5) Bromomethane	1.35	94	148541	19.99	ug/L	98
6) Chloroethane	1.41	64	121531	20.13	ug/L	98
7) Freon 21	1.44	67	319524	19.60	ug/L	99
8) Freon 123	1.60	83	258746	20.46	ug/L	98
9) Freon 123a	1.63	67	224715	21.06	ug/L	96
10) Acrolein	1.69	56	31285	32.11	ug/L	91
11) Trichlorofluoromethane	1.68	101	268757	20.38	ug/L	100
12) Acetonitrile	1.70	41	84875	105.79	ug/L	91
13) 2-Propanol	1.72	45	102570	410.97	ug/L	98
14) Acetone	1.76	43	46961	22.92	ug/L	94
15) Diethyl Ether	1.82	59	126847	22.30	ug/L	99
16) 1,1-Dicethene	1.97	96	160118	22.71	ug/L	95
17) Iodomethane	1.99	142	199034	18.00	ug/L	100
18) TBA	2.01	59	171788	447.61	ug/L	99
19) Acrylonitrile	2.03	53	209078	109.54	ug/L	99
20) Methylene Chloride	2.08	84	193556	20.34	ug/L	93
21) Freon 113	2.11	101	167217	21.18	ug/L	94
22) Methyl Acetate	2.13	43	89130	21.47	ug/L	97
23) Allyl Chloride	2.14	76	92302	20.78	ug/L #	90
24) Carbon Disulfide	2.18	76	463279	18.83	ug/L	96
25) trans-1,2-Dichloroethene	2.54	96	176452	20.50	ug/L	95
26) Methyl-t-Butyl Ether	2.66	73	399304	23.39	ug/L	100
27) 1,1-Dicethane	2.74	63	333054	21.00	ug/L	99
28) Propionitrile	2.80	54	76035	109.48	ug/L	98
29) Vinyl Acetate	2.94	43	316063	20.86	ug/L	99
30) 2-Chloro-1,3-Butadiene	3.09	53	281055	20.30	ug/L	96
31) 2-Butanone	3.21	43	54104	21.30	ug/L	98
32) Methacrylonitrile	3.30	41	82908	21.95	ug/L	91
33) cis-1,2-Dichloroethene	3.30	96	194385	19.95	ug/L	94
34) Bromochloromethane	3.46	128	90848	21.04	ug/L	92
35) Chloroform	3.53	83	329720	20.89	ug/L	97
36) 2,2-Dichloropropane	3.61	77	266443	20.85	ug/L	100

(#)= qualifier out of range (m) = manual integration

L3724.D W031914.M Thu Mar 20 16:46:59 2014

Data File : I:\ACQUDATA\MSVOA6\DATA\032014\L3724.D

Vial: 6

Acq On : 20 Mar 2014 9:48 am

Operator: D.Lipani

Sample : LCS

Inst : MS#6

Misc : 8260C

Multiplr: 1.00

MS Integration Params: CPD4.P

Quant Time: Mar 20 16:54 2014

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)

Title : 8260C WATERS

Last Update : Thu Mar 20 15:48:07 2014

Response via : Initial Calibration

DataAcq Meth : W031914

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37) Tetrahydrofuran	3.95	42	36794	21.84	ug/L	86
38) 1,1,1-Trichloroethane	4.51	97	275079	20.70	ug/L	96
41) Iso-Butyl Alcohol	3.78	43	86368	429.18	ug/L	97
43) 1,2-Dichloroethane	4.40	64	66108	20.04	ug/L #	92
44) 1,1-Dichloropropene	4.85	75	256272	23.15	ug/L	96
45) Cyclohexane	4.92	56	263795	18.84	ug/L	93
46) Carbontetrachloride	5.09	119	226183	20.32	ug/L	98
47) Benzene	5.20	78	716691	20.62	ug/L	99
48) Dibromomethane	6.02	93	96793	20.95	ug/L	97
49) 1,2-Dicloropropane	6.10	63	196940	20.68	ug/L	100
50) n-Heptane	6.17	43	191509	20.51	ug/L	97
51) Trichloroethene	6.16	130	193595	20.28	ug/L	99
52) Bromodichloromethane	6.21	83	249155	21.33	ug/L	99
53) 2-Nitropropane	6.27	41	54652	41.21	ug/L	93
54) 1,4-Dioxane	6.47	88	18309	462.37	ug/L	80
55) Methyl Methacrylate	6.62	69	83020	22.57	ug/L	96
56) Methylcyclohexane	6.74	55	190000	18.69	ug/L	97
57) 2-Chloroethylvinyl Ether	6.89	63	91301	22.31	ug/L	97
58) cis-1,3-Dichloropropene	7.05	75	266137	20.21	ug/L	99
59) 4-Methyl-2-pentanone	7.26	43	125832	21.64	ug/L	96
60) trans-1,3-Dichloropropene	7.55	75	226095	21.28	ug/L	98
61) 1,1,2-Trichloroethane	7.65	97	133846	20.67	ug/L	100
63) Toluene	7.84	91	769181	20.16	ug/L	98
65) 1,3-Dichloropropene	7.90	76	230634	21.68	ug/L	99
66) Ethyl Methacrylate	8.08	69	178641	22.47	ug/L	93
67) Dibromochloromethane	8.10	129	182109	21.37	ug/L	98
68) 2-Hexanone	8.16	43	87575	20.92	ug/L	95
69) 1,2-Dibromoethane	8.31	107	141466	21.80	ug/L	100
70) n-Butyl Acetate	8.52	43	213947	21.92	ug/L	98
71) Tetrachloroethene	8.50	164	161575	20.60	ug/L	99
72) 1,1,1,2-Tetrachloroethane	9.05	131	185954	20.86	ug/L	99
73) Chlorobenzene	9.11	112	504986	21.71	ug/L	99
74) Ethylbenzene	9.32	106	266554	20.72	ug/L #	90
75) Bromoform	9.50	173	107606	20.31	ug/L	98
76) (m+p)Xylene	9.51	106	653594	43.28	ug/L	93
77) o-Xylene	9.82	106	318939	20.69	ug/L	95
78) Cyclohexanone	9.74	55	283629	430.19	ug/L	99
79) Styrene	9.77	104	524181	21.74	ug/L	100
80) trans-1,4-Dichloro-2-Buten	10.00	75	48718	21.84	ug/L	97
81) Isopropylbenzene	10.13	105	803312	20.92	ug/L	98
84) 1,1,2,2-Tetrachloroethane	9.82	83	165341	20.93	ug/L	99
85) 1,2,3-Trichloropropene	9.93	75	117063	22.56	ug/L	99
86) Bromobenzene	10.27	156	222311	20.55	ug/L	99
87) n-Propylbenzene	10.49	91	967876	21.61	ug/L	97
88) 2-Chlorotoluene	10.53	91	566637	19.96	ug/L	100
89) 4-Chlorotoluene	10.61	91	614928	20.88	ug/L	99
90) 1,3,5-Trimethylbenzene	10.76	105	648435	21.40	ug/L	97
91) tert-Butylbenzene	10.95	119	524042	21.29	ug/L	98
92) 1,2,4-Trimethylbenzene	11.06	105	664976	21.15	ug/L	99
93) sec-Butylbenzene	11.12	105	772975	21.53	ug/L	97

(#) = qualifier out of range (m) = manual integration

L3724.D W031914.M Thu Mar 20 16:47:00 2014

Data File : I:\ACQUDATA\MSVOA6\DATA\032014\L3724.D

Vial: 6

Acq On : 20 Mar 2014 9:48 am

Operator: D.Lipani

Sample : LCS

Inst : MS#6

Misc : 8260C

Multiplr: 1.00

MS Integration Params: CPD4.P

Quant Time: Mar 20 16:54 2014

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)

Title : 8260C WATERS

Last Update : Thu Mar 20 15:48:07 2014

Response via : Initial Calibration

DataAcq Meth : W031914

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
94) 1,3-Dclbenz	11.14	146	407795	21.12	ug/L	98
95) 1,4-Dclbenz	11.20	146	403354	20.75	ug/L	98
96) p-Isopropyltoluene	11.29	119	640036	22.20	ug/L	99
97) 1,2-Dclbenz	11.47	146	369207	21.19	ug/L	97
98) n-Butylbenzene	11.61	91	594213	22.21	ug/L	99
99) 1,2-Dibromo-3-chloropropan	11.84	75	22811	21.97	ug/L	99
100) Nitrobenzene	12.02	77	10211	41.11	ug/L	98
101) 1,2,4-Tcbenzene	12.91	180	213787	22.37	ug/L	98
102) Naphthalen	13.09	128	354988	24.20	ug/L	99
103) Hexachlorobt	13.16	225	85609	21.45	ug/L	97
104) 1,2,3-Tclbenzene	13.24	180	163744	22.67	ug/L	98

(#) = qualifier out of range (m) = manual integration

L3724.D W031914.M

Thu Mar 20 16:47:01 2014

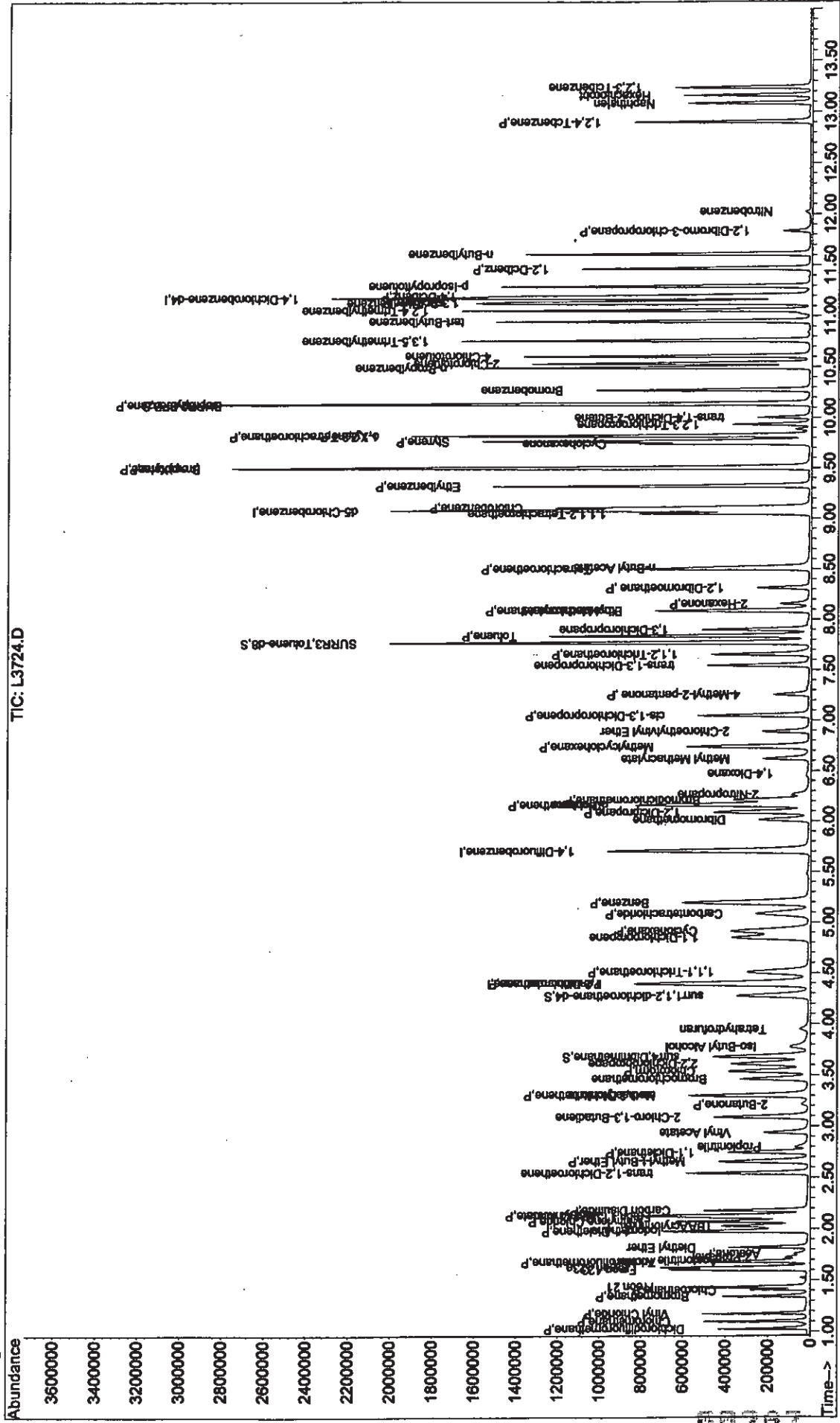
Quantitation Report

Data File : I:\ACQDATA\MSVOA6\DATA\032014\L3724.D
Acq On : 20 Mar 2014 9:48 am
Sample : LCS
Misc : 8260C
MS Integration Params: CPD4.P
Quant Time: Mar 20 16:54 2014
Vial: 6
Operator: D.Lipani
Inst : MS#6
Multiplr: 1.00
Quant Results File: W031914.RES

```

Method      : I:\ACQUDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
Title       : 8260C WATERS
Last Update : Thu Mar 20 15:48:07 2014
Response via : Initial Calibration

```



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1401882
Date Collected: 3/17/14 1335
Date Received: 3/19/14
Date Analyzed: 3/20/14 19:13

Sample Name: MW-17
Lab Code: RQ1402642-05
Run Type: Matrix Spike

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA6\DATA\032014\L3742.D\

Analysis Lot: 384553
Instrument Name: R-MS-06
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	55.7		5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	63.7		5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	59.2		5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	53.9		5.0	0.30	
79-01-6	Trichloroethene (TCE)	56.3		5.0	0.22	
75-01-4	Vinyl Chloride	54.2		5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	71.7		5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	55.7		5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85-122	3/20/14 19:13	
Dibromofluoromethane	98	89-119	3/20/14 19:13	
Toluene-d8	100	87-121	3/20/14 19:13	

Data File : I:\ACQUDATA\MSVOA6\DATA\032014\L3742.D Vial: 24
 Acq On : 20 Mar 2014 7:13 pm Operator: D.Lipani
 Sample : R1401882-002MS|1.0 *RQ1402642-05* Inst : MS#6
 Misc : Verina 8260C 6646 T2 Multiplr: 1.00
 MS Integration Params: CPD4.P
 Quant Time: Mar 20 19:38 2014 Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)

Title : 8260C WATERS
 Last Update : Thu Mar 20 15:48:07 2014
 Response via : Initial Calibration
 DataAcq Meth : W031914

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.40	168	607864	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.71	114	913968	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.09	117	820990	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.18	152	448925	50.00	ug/L	0.00

System Monitoring Compounds

40) surr4,Dibrfilmethane	3.69	113	301309	48.77	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	97.54%
42) surr1,1,2-dichloroethane-d	4.28	65	296704	50.07	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	100.14%
62) SURR3,Toluene-d8	7.77	98	1129863	50.11	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	100.22%
82) SURR2,BFB	10.14	95	428326	50.06	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	100.12%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.03	85	557093	57.88	ug/L	100
3) Chloromethane	1.10	50	595676	50.53	ug/L	98
4) Vinyl Chloride	1.17	62	571229	54.23	ug/L	98
5) Bromomethane	1.34	94	41655	5.84	ug/L	96
6) Chloroethane	1.41	64	625571	107.97	ug/L	99
7) Freon 21	1.44	67	845590	54.04	ug/L	100
8) Freon 123	1.61	83	700337	57.71	ug/L	99
9) Freon 123a	1.62	67	579548	56.58	ug/L	96
10) Acrolein	1.68	56	44964	48.08	ug/L	92
11) Trichlorofluoromethane	1.68	101	682559	53.93	ug/L	99
12) Acetonitrile	1.70	41	205754	267.20	ug/L	95
13) 2-Propanol	1.73	45	281349	1174.57	ug/L	94
14) Acetone	1.76	43	134309	68.29	ug/L	98
15) Diethyl Ether	1.82	59	319195	58.48	ug/L	95
16) 1,1-Dicethene	1.98	96	400334	59.17	ug/L	98
17) Iodomethane	1.99	142	32640	3.96	ug/L	100
18) TBA	2.01	59	450222	1222.31	ug/L	97
19) Acrylonitrile	2.03	53	522368	285.16	ug/L	98
20) Methylene Chloride	2.07	84	478912	52.44	ug/L	99
21) Freon 113	2.12	101	419901	55.41	ug/L	99
22) Methyl Acetate	2.13	43	224543	56.36	ug/L	99
23) Allyl Chloride	2.13	76	168079	39.42	ug/L	95
24) Carbon Disulfide	2.18	76	1159407	49.10	ug/L	99
25) trans-1,2-Dichloroethene	2.55	96	460050	55.70	ug/L	97
26) Methyl-t-Butyl Ether	2.66	73	964320	58.85	ug/L	100
27) 1,1-Dicethane	2.75	63	968787	63.66	ug/L	97
28) Propionitrile	2.80	54	187719	281.62	ug/L	96
29) Vinyl Acetate	2.94	43	754032	51.85	ug/L	98
30) 2-Chloro-1,3-Butadiene	3.10	53	697934	52.52	ug/L	100
31) 2-Butanone	3.21	43	147085	60.33	ug/L	99
32) Methacrylonitrile	3.31	41	205039	56.56	ug/L	98
33) cis-1,2-Dichloroethene	3.30	96	670446	71.70	ug/L	99
34) Bromochloromethane	3.47	128	230715	55.68	ug/L	95
35) Chloroform	3.54	83	829248	54.73	ug/L	98
36) 2,2-Dichloropropane	3.61	77	656728	53.54	ug/L	99

(#) = qualifier out of range (m) = manual integration

L3742.D W031914.M Thu Mar 20 19:30:04 2014

Data File : I:\ACQUDATA\MSVOA6\DATA\032014\L3742.D

Vial: 24

Acq On : 20 Mar 2014 7:13 pm

Operator: D.Lipani

Sample : R1401882-002MS|1.0

Inst : MS#6

Misc : Verina 8260C 6646 T2

Multiplr: 1.00

MS Integration Params: CPD4.P

Quant Time: Mar 20 19:38 2014

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)

Title : 8260C WATERS

Last Update : Thu Mar 20 15:48:07 2014

Response via : Initial Calibration

DataAcq Meth : W031914

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37) Tetrahydrofuran	3.95	42	88029	54.44	ug/L	94
38) 1,1,1-Trichloroethane	4.51	97	710090	55.67	ug/L	99
41) Iso-Butyl Alcohol	3.78	43	233198	1172.76	ug/L	96
43) 1,2-Dichloroethane	4.40	64	167581	51.41	ug/L	96
44) 1,1-Dichloropropene	4.85	75	641546	58.65	ug/L	96
45) Cyclohexane	4.92	56	724999	52.42	ug/L	98
46) Carbontetrachloride	5.09	119	579838	52.71	ug/L	97
47) Benzene	5.20	78	1806651	52.61	ug/L	96
48) Dibromomethane	6.01	93	242070	53.03	ug/L	98
49) 1,2-Dichloropropane	6.09	63	500072	53.15	ug/L	95
50) n-Heptane	6.17	43	489631	53.07	ug/L	98
51) Trichloroethene	6.16	130	530899	56.27	ug/L	99
52) Bromodichloromethane	6.21	83	646288	55.99	ug/L	99
53) 2-Nitropropane	6.27	41	138690	105.84	ug/L	90
54) 1,4-Dioxane	6.45	88	46880	1198.15	ug/L	81
55) Methyl Methacrylate	6.62	69	215423	59.26	ug/L	96
56) Methylcyclohexane	6.74	55	518154	51.57	ug/L	98
57) 2-Chloroethylvinyl Ether	6.89	63	221194	54.69	ug/L	99
58) cis-1,3-Dichloropropene	7.05	75	129895	9.98	ug/L	99
59) 4-Methyl-2-pentanone	7.25	43	328636	57.19	ug/L	97
60) trans-1,3-Dichloropropene	7.55	75	318467	30.33	ug/L	99
61) 1,1,2-Trichloroethane	7.66	97	338953	52.98	ug/L	99
63) Toluene	7.84	91	1888537	50.10	ug/L	99
65) 1,3-Dichloropropene	7.91	76	567781	54.51	ug/L	99
66) Ethyl Methacrylate	8.09	69	483755	62.15	ug/L	100
67) Dibromochloromethane	8.09	129	455326	54.57	ug/L	99
68) 2-Hexanone	8.15	43	245032	59.80	ug/L	97
69) 1,2-Dibromoethane	8.31	107	348621	54.88	ug/L	99
70) n-Butyl Acetate	8.52	43	608799	63.73	ug/L	98
71) Tetrachloroethene	8.51	164	414095	53.94	ug/L	99
72) 1,1,1,2-Tetrachloroethane	9.05	131	465109	53.29	ug/L	99
73) Chlorobenzene	9.11	112	1233824	54.18	ug/L	100
74) Ethylbenzene	9.32	106	691588	54.93	ug/L	99
75) Bromoform	9.50	173	285742	55.10	ug/L	99
76) (m+p) Xylene	9.50	106	1635409	110.63	ug/L	98
77) o-Xylene	9.83	106	821536	54.44	ug/L	99
78) Cyclohexanone	9.74	55	683129	1058.41	ug/L	99
79) Styrene	9.77	104	1310600	55.51	ug/L	99
80) trans-1,4-Dichloro-2-Buten	10.00	75	39078	17.90	ug/L	95
81) Isopropylbenzene	10.14	105	1929110	51.32	ug/L	99
84) 1,1,2,2-Tetrachloroethane	9.82	83	430551	54.20	ug/L	100
85) 1,2,3-Trichloropropane	9.93	75	287267	55.04	ug/L	99
86) Bromobenzene	10.28	156	557998	51.30	ug/L	99
87) n-Propylbenzene	10.50	91	2222955	49.35	ug/L	99
88) 2-Chlorotoluene	10.54	91	1420424	49.74	ug/L	100
89) 4-Chlorotoluene	10.61	91	1463752	49.42	ug/L	99
90) 1,3,5-Trimethylbenzene	10.76	105	1563161	51.30	ug/L	99
91) tert-Butylbenzene	10.95	119	1293037	52.23	ug/L	99
92) 1,2,4-Trimethylbenzene	11.06	105	1582982	50.06	ug/L	98
93) sec-Butylbenzene	11.13	105	1831843	50.72	ug/L	99

(#)=qualifier out of range (m)=manual integration

L3742.D W031914.M

Thu Mar 20 19:30:05 2014

Data File : I:\ACQUDATA\MSVOA6\DATA\032014\L3742.D

Vial: 24

Acq On : 20 Mar 2014 7:13 pm

Operator: D.Lipani

Sample : R1401882-002MS|1.0

Inst : MS#6

Misc : Verina 8260C 6646 T2

Multiplr: 1.00

MS Integration Params: CPD4.P

Quant Time: Mar 20 19:38 2014

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)

Title : 8260C WATERS

Last Update : Thu Mar 20 15:48:07 2014

Response via : Initial Calibration

DataAcq Meth : W031914

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
94) 1,3-Dclbenz	11.14	146	984214	50.69	ug/L	99
95) 1,4-Dclbenz	11.20	146	1003519	51.32	ug/L	99
96) p-Isopropyltoluene	11.29	119	1517132	52.33	ug/L	99
97) 1,2-Dclbenz	11.47	146	901858	51.47	ug/L	100
98) n-Butylbenzene	11.61	91	1421714	52.83	ug/L	99
99) 1,2-Dibromo-3-chloropropan	11.83	75	60770	58.21	ug/L	96
100) Nitrobenzene	12.02	77	24314	97.33	ug/L	100
101) 1,2,4-Tcbenzene	12.90	180	526334	54.77	ug/L	99
102) Naphthalen	13.09	128	878337	59.54	ug/L	99
103) Hexachlorobt	13.17	225	194989	48.58	ug/L	99
104) 1,2,3-Tclbenzene	13.24	180	407753	56.12	ug/L	99

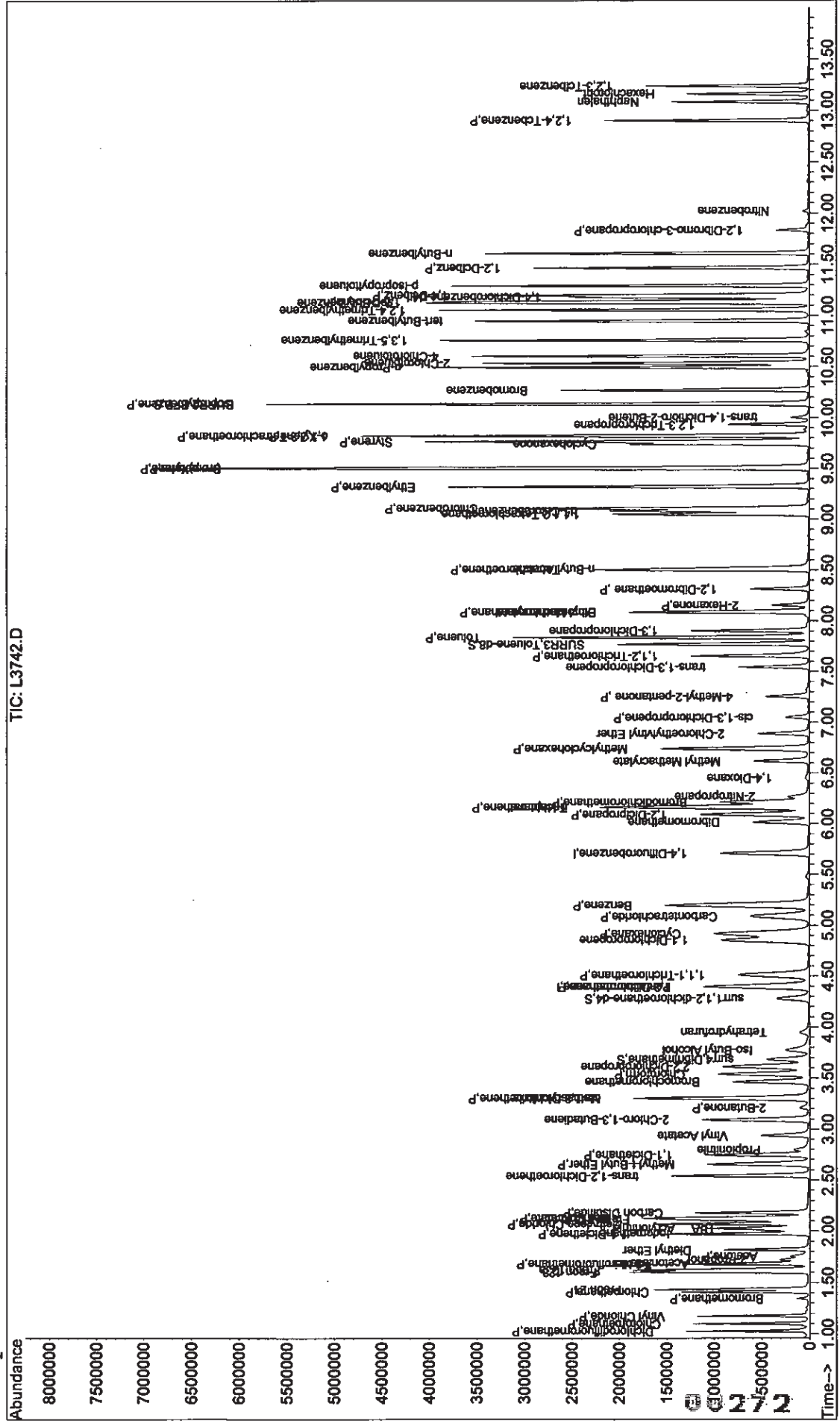
Quantitation Report

Data File : I:\ACQDATA\MSVOA6\DATA\032014\L3742.D Vial: 24
Acq On : 20 Mar 2014 7:13 pm Operator: D.Lipani
Sample : R1401882-002MS|1.0 Inst : MS#6
Misc : Verina 8260C 6646 T2 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 20 19:38 2014 Quant Results File: W031914.RES

```

Method      : I:\ACQDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
Title       : 8260C WATERS
Last Update : Thu Mar 20 15:48:07 2014
Response via : Initial Calibration

```



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Dover Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1401882
Date Collected: 3/17/14 1335
Date Received: 3/19/14
Date Analyzed: 3/20/14 19:56

Sample Name: MW-17
Lab Code: RQ1402642-06
Run Type: Duplicate Matrix Spike

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA6\DATA\032014\L3743.D\

Analysis Lot: 384553
Instrument Name: R-MS-06
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	53.2	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	60.2	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	56.7	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	49.4	5.0	0.30	
79-01-6	Trichloroethene (TCE)	56.1	5.0	0.22	
75-01-4	Vinyl Chloride	50.2	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	70.0	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	53.2	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85-122	3/20/14 19:56	
Dibromofluoromethane	100	89-119	3/20/14 19:56	
Toluene-d8	100	87-121	3/20/14 19:56	

Data File : I:\ACQUDATA\MSVOA6\DATA\032014\L3743.D

Vial: 25

Acq On : 20 Mar 2014 7:56 pm

Operator: D.Lipani

Sample : R1401882-002MSD|1.0

Inst : MS#6

Misc : Verina 8260C 6646 T2

R21402642-06

Multiplr: 1.00

MS Integration Params: CPD4.P

Quant Time: Mar 20 20:21 2014

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)

Title : 8260C WATERS

Last Update : Thu Mar 20 15:48:07 2014

Response via : Initial Calibration

DataAcq Meth : W031914

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.40	168	638971	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.71	114	929628	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.09	117	872862	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.18	152	470532	50.00	ug/L	0.00

System Monitoring Compounds

40) surr4,Dibrfmethane	3.68	113	313319	49.86	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	99.72%
42) surr1,1,2-dichloroethane-d	4.28	65	308306	51.15	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	102.30%
62) SURR3,Toluene-d8	7.77	98	1143543	49.87	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	99.74%
82) SURR2,BFB	10.14	95	446476	49.08	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	98.16%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.03	85	567525	56.09	ug/L	98
3) Chloromethane	1.10	50	548448	44.26	ug/L	100
4) Vinyl Chloride	1.17	62	556187	50.24	ug/L	97
5) Bromomethane	1.35	94	12154	1.62	ug/L	96
6) Chloroethane	1.41	64	624479	102.53	ug/L	97
7) Freon 21	1.44	67	852751	51.85	ug/L	99
8) Freon 123	1.60	83	699683	54.85	ug/L	99
9) Freon 123a	1.62	67	601345	55.85	ug/L	95
10) Acrolein	1.69	56	27694	28.17	ug/L	94
11) Trichlorofluoromethane	1.68	101	675370	50.76	ug/L	99
12) Acetonitrile	1.69	41	215679	266.46	ug/L	94
13) 2-Propanol	1.72	45	305649	1213.90	ug/L	96
14) Acetone	1.75	43	155204	75.07	ug/L	95
15) Diethyl Ether	1.82	59	326004	56.82	ug/L	98
16) 1,1-Dicethene	1.97	96	403268	56.71	ug/L	93
17) Iodomethane	1.99	142	5631	1.54	ug/L	94
18) TBA	2.01	59	468844	1210.90	ug/L	99
19) Acrylonitrile	2.03	53	517260	268.63	ug/L	99
20) Methylene Chloride	2.07	84	475175	49.50	ug/L	97
21) Freon 113	2.11	101	423387	53.15	ug/L	98
22) Methyl Acetate	2.13	43	232476	55.51	ug/L	94
23) Allyl Chloride	2.13	76	105409	23.52	ug/L	95
24) Carbon Disulfide	2.18	76	1164953	46.94	ug/L	100
25) trans-1,2-Dichloroethene	2.54	96	462049	53.22	ug/L	96
26) Methyl-t-Butyl Ether	2.66	73	998711	57.98	ug/L	97
27) 1,1-Dicethane	2.75	63	962824	60.18	ug/L	98
28) Propionitrile	2.79	54	188540	269.09	ug/L	97
29) Vinyl Acetate	2.94	43	775978	50.76	ug/L	100
30) 2-Chloro-1,3-Butadiene	3.09	53	703658	50.37	ug/L	96
31) 2-Butanone	3.21	43	155542	60.69	ug/L	95
32) Methacrylonitrile	3.30	41	208375	54.69	ug/L	99
33) cis-1,2-Dichloroethene	3.30	96	687514	69.95	ug/L	99
34) Bromochloromethane	3.46	128	230035	52.81	ug/L	99
35) Chloroform	3.54	83	831594	52.21	ug/L	98
36) 2,2-Dichloropropane	3.61	77	645325	50.05	ug/L	98

DL
3/31/14

(#)=qualifier out of range (m)=manual integration

L3743.D W031914.M

Thu Mar 20 20:13:43 2014

Data File : I:\ACQUDATA\MSVOA6\DATA\032014\L3743.D

Vial: 25

Acq On : 20 Mar 2014 7:56 pm

Operator: D.Lipani

Sample : R1401882-002MSD|1.0

Inst : MS#6

Misc : Verina 8260C 6646 T2

Multiplr: 1.00

MS Integration Params: CPD4.P

Quant Time: Mar 20 20:21 2014

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)

Title : 8260C WATERS

Last Update : Thu Mar 20 15:48:07 2014

Response via : Initial Calibration

DataAcq Meth : W031914

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37) Tetrahydrofuran	3.95	42	86900	51.13	ug/L	99
38) 1,1,1-Trichloroethane	4.51	97	713293	53.20	ug/L	99
41) Iso-Butyl Alcohol	3.77	43	247639	1224.40	ug/L	98
43) 1,2-Dichloroethane	4.39	64	169031	50.98	ug/L	92
44) 1,1-Dichloropropene	4.85	75	640730	57.59	ug/L	95
45) Cyclohexane	4.91	56	720278	51.20	ug/L	98
46) Carbontetrachloride	5.09	119	580656	51.89	ug/L	96
47) Benzene	5.20	78	1805554	51.69	ug/L	98
48) Dibromomethane	6.02	93	248440	53.51	ug/L	99
49) 1,2-Dichloropropane	6.09	63	499935	52.24	ug/L	99
50) n-Heptane	6.17	43	488386	52.04	ug/L	96
51) Trichloroethene	6.16	130	537856	56.05	ug/L	99
52) Bromodichloromethane	6.22	83	641362	54.63	ug/L	99
53) 2-Nitropropane	6.26	41	145269	109.00	ug/L	97
54) 1,4-Dioxane	6.45	88	52690	1323.95	ug/L	86
55) Methyl Methacrylate	6.62	69	219406	59.34	ug/L	97
56) Methylcyclohexane	6.74	55	520470	50.93	ug/L	96
57) 2-Chloroethylvinyl Ether	6.89	63	231322	56.23	ug/L	100
58) cis-1,3-Dichloropropene	7.06	75	12632	0.95	ug/L	98
59) 4-Methyl-2-pentanone	7.26	43	345488	59.11	ug/L	99
60) trans-1,3-Dichloropropene	7.55	75	153960	14.42	ug/L	99
61) 1,1,2-Trichloroethane	7.66	97	339688	52.20	ug/L	99
63) Toluene	7.84	91	1871384	48.81	ug/L	99
65) 1,3-Dichloropropane	7.90	76	565877	51.10	ug/L	99
66) Ethyl Methacrylate	8.08	69	484722	58.57	ug/L	96
67) Dibromochloromethane	8.10	129	458022	51.63	ug/L	100
68) 2-Hexanone	8.15	43	264712	60.77	ug/L	98
69) 1,2-Dibromoethane	8.31	107	343617	50.88	ug/L	100
70) n-Butyl Acetate	8.52	43	634020	62.43	ug/L	98
71) Tetrachloroethene	8.50	164	403187	49.39	ug/L	99
72) 1,1,1,2-Tetrachloroethane	9.05	131	455466	49.09	ug/L	98
73) Chlorobenzene	9.11	112	1231459	50.87	ug/L	99
74) Ethylbenzene	9.32	106	675087	50.43	ug/L	100
75) Bromoform	9.50	173	283642	51.45	ug/L	99
76) (m+p)Xylene	9.51	106	1607642	102.29	ug/L	99
77) o-Xylene	9.82	106	792706	49.40	ug/L	99
78) Cyclohexanone	9.74	55	788646	1149.28	ug/L	99
79) Styrene	9.77	104	1292029	51.48	ug/L	99
80) trans-1,4-Dichloro-2-Butene	10.01	75	9297	4.00	ug/L	92
81) Isopropylbenzene	10.13	105	1915914	47.94	ug/L	99
84) 1,1,2,2-Tetrachloroethane	9.82	83	421320	50.60	ug/L	100
85) 1,2,3-Trichloropropane	9.93	75	294227	53.78	ug/L	98
86) Bromobenzene	10.27	156	548497	48.11	ug/L	100
87) n-Propylbenzene	10.50	91	2209102	46.79	ug/L	99
88) 2-Chlorotoluene	10.53	91	1389190	46.41	ug/L	100
89) 4-Chlorotoluene	10.61	91	1465389	47.20	ug/L	99
90) 1,3,5-Trimethylbenzene	10.76	105	1549178	48.50	ug/L	99
91) tert-Butylbenzene	10.95	119	1280261	49.34	ug/L	99
92) 1,2,4-Trimethylbenzene	11.06	105	1560745	47.09	ug/L	99
93) sec-Butylbenzene	11.12	105	1836859	48.52	ug/L	100

(#)=qualifier out of range (m)=manual integration

L3743.D W031914.M Thu Mar 20 20:13:45 2014

Data File : I:\ACQUDATA\MSVOA6\DATA\032014\L3743.D

Vial: 25

Acq On : 20 Mar 2014 7:56 pm

Operator: D.Lipani

Sample : R1401882-002MSD|1.0

Inst : MS#6

Misc : Verina 8260C 6646 T2

Multiplr: 1.00

MS Integration Params: CPD4.P

Quant Time: Mar 20 20:21 2014

Quant Results File: W031914.RES

Quant Method : I:\ACQUDATA\M...\W031914.M (RTE Integrator)

Title : 8260C WATERS

Last Update : Thu Mar 20 15:48:07 2014

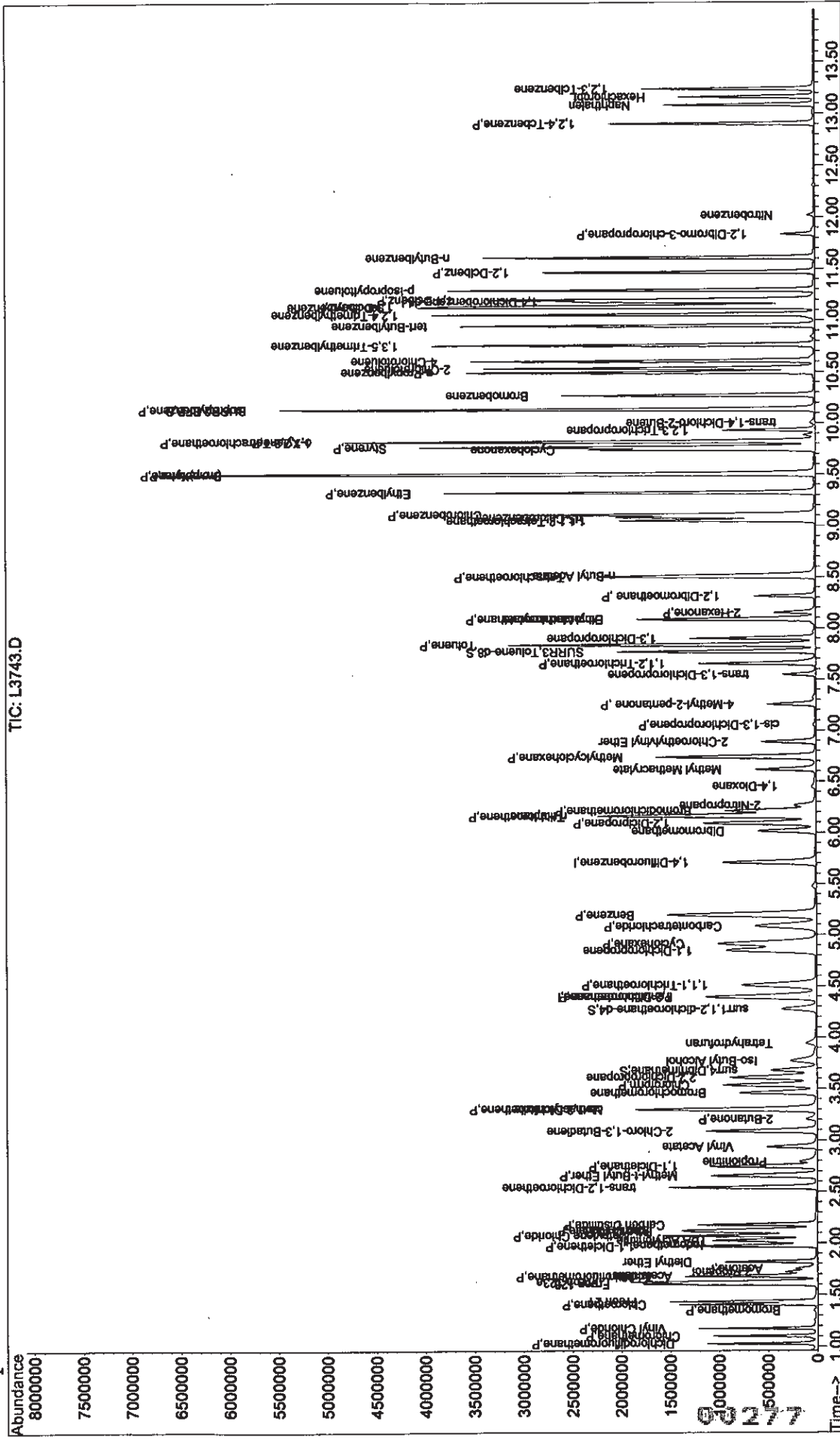
Response via : Initial Calibration

DataAcq Meth : W031914

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
94) 1,3-Dclbenz	11.14	146	988079	48.55	ug/L	99
95) 1,4-Dclbenz	11.20	146	1013151	49.43	ug/L	100
96) p-Isopropyltoluene	11.29	119	1528698	50.31	ug/L	100
97) 1,2-Dclbenz	11.47	146	898883	48.94	ug/L	99
98) n-Butylbenzene	11.61	91	1414756	50.16	ug/L	100
99) 1,2-Dibromo-3-chloropropan	11.84	75	61655	56.34	ug/L	97
100) Nitrobenzene	12.02	77	26647	101.78	ug/L	94
101) 1,2,4-Tcbenzene	12.91	180	529075	52.52	ug/L	99
102) Naphthalen	13.09	128	923250	59.71	ug/L	100
103) Hexachlorobt	13.16	225	207640	49.35	ug/L	97
104) 1,2,3-Tclbenzene	13.24	180	418951	55.01	ug/L	98

Data File : I:\ACQDATA\MSVOA6\DATA\032014\L3743.D
Acq On : 20 Mar 2014 7:56 pm
Sample : R1401882-002MSD|1.0
Misc : Verina 8260C 6646 T2
MS Integration Params: CPD4.P
Quant Time: Mar 20 20:21:2014
Vial: 25
Operator: D.Lipani
Inst : MS#6
Multiplr: 1.00
Quant Results File: W031914.RES

```
Method      : I:\ACQDATA\MSVOA6\METHODS\W031914.M (RTE Integrator)
Title       : 8260C WATERS
Last Update : Thu Mar 20 15:48:07 2014
Response via : Initial Calibration
```



Analysis: 8260C
 Date: 03/19/14
 Instr: GCM5#6

Analyst: R. Lagan
 Data Path: j:\acqdata\msvoo6\DATA\031914\...

Tune Method: W111113.M → W031914.M
 Run Method: W111113.M → W031914.M
 LIMS Run#: (ICAL)

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	BLK								13681	N	
2	BLK								13682	Y	
3	Tune Check								13683	Y	
4	CCV								13684	N	many compounds not
5	BLK								13685	Y	
6	Tune Check								13686	Y	
7	Inat. BLK								13687	Y	
8	STD #1-0.5PPB		10 Targ	10 Targ	10 Targ	10 Targ	10 Targ		13688	Y	
9	#2-1.0PPB		5.0ul	5.0ul	5.0ul	5.0ul	5.0ul		13689	Y	
10	#3-2.0PPB		10.0ul	10.0ul	10.0ul	10.0ul	10.0ul		13690	Y	
11	#4-5.0PPB		-	-	-	-	-		13691	Y	
12	#5-10.0PPB		-	-	-	-	-		13692	Y	
13	#6-20.0PPB		-	-	-	-	-		13693	Y	
14	#7-50.0PPB		-	-	-	-	-		13694	Y	
15	#8-100.0PPB		-	-	-	-	-		13695	Y	
16	#9-150.0PPB		-	-	-	-	-		13696	Y	
17	#10-200.0PPB		-	-	-	-	-		13697	Y	
18	BLK								13698	N	
19	BLK								13699	O.K	
20	ICV								13700	Y	
21-35	BLKS								13701	O.R.	(then file 13720)

All samples = 10 mL + 1.0 uL combined IS/Surr. 10 mL purged

Primary TG: 68233 10ul / 1.0mL MeOH
 Primary HSL: 68234 1.0mL MeOH
 Primary Fr+: 67761 1.0mL MeOH
 Primary: 67761 1.0mL MeOH
 Primary: 67761 1.0mL MeOH

Secondary TG: 68499 5.0ul / 50mL DI
 Secondary HSL: 67666 5.0ul / 50mL DI
 Secondary Fr+: 67576 12.5ul / 50mL DI
 Secondary: 67576 12.5ul / 50mL DI
 Secondary: 67576 12.5ul / 50mL DI

Combined IS/Surr 500: 68549
 Surrogate: 68549
 Internal Std: 68549

Analysis: 8260C Analyst: P. L. L. L. Tune Method: W0321914.M
 Date: 03/20/14 Data Path: j:\acqdata\msvoa6\DATA\032014\... Run Method: W031914.M
 Instr: GCMS#6 LIMS Run#: 384553

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	Blk								13721	OK	
2	Tune Check		(run as BLK)						22	Y	
3	CCV								23	Y	
4	LCS								24	Y	
5	Met Blk								25	N	
6	Met Blk								26	Y	
7	R1401882-001	1.0			6646	IV	-1	≤ 2	27	Y	
8		-006					-1	≤ 2	28	Y	
9		-009					-1	≤ 2	29	Y	
10		-002					-1	≤ 2	30	Y	
11		-003					-1	≤ 2	31	Y	
12		-004					-1	≤ 2	32	Y	
13		-005					-1	≤ 2	33	Y	
14		-007					-1	≤ 2	34	Y	
15		-008					-1	≤ 2	35	Y	
16	R1401848-001	1.0			9443	II	-1	≤ 2	36	Y	Vial says NaHSO4, PL 362/14
17	R1401882-010	1.0			7979	IV	-1	≤ 2	37	Y	
18	R1401848-002	1.0			9443	II	-1	≤ 2	38	Y	
19		-003					-1	≤ 2	39	Y	
20		-004					-1	≤ 2	40	Y	
21		-005					-1	≤ 2	41	Y	
22	R1401882-002MS	1.0			6646	IV	-2	≤ 6	42	Y	4.25 each 68499 + 67666
23		-002MSD					-3	≤ 6	43	Y	plus 19.625 ml 67576 into full vial 5 samp/
24	High Gases/kets								44	Y	
25	" "				"	"	"	"	45	Y	
26	40 Blks								46	Y	
27	EOD PL 3/20/14										

All samples = 10 mL + 1.0 uL combined IS/Surr. 10 mL purged

Primary TG: 68233 5.0 µL / 50 mL DI = CCV.
 Primary HSL: 68234
 Primary Fr+: 67761
 Primary:
 Primary:
 Secondary TG: 68499 2.0 µL / 50 mL DI
 Secondary HSL: 67666 2.0 µL / 50 mL DI
 Secondary Fr+: 67576 5.0 µL / 50 mL DI = LCS
 Secondary:
 Secondary:
 Combined IS/Surr: 500 : 68549
 Surrogate:
 Internal Std:



October 13, 2014

Service Request No: R1407422

Ms. Tammy Yuan
Verina Consulting Group, LLC
220 Davidson Avenue, Suite 105
Somerset, NJ 08873

Laboratory Results for: Binghamton/5101.0003

Dear Ms. Yuan:

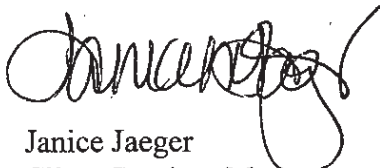
Enclosed are the results of the sample(s) submitted to our laboratory on September 23, 2014. For your reference, these analyses have been assigned our service request number **R1407422**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental


Janice Jaeger
Client Services Manager

Page 1 of 28



CASE NARRATIVE

Client: Verina Consulting
Project: Binghamton
Sample Matrix: Water

Service Request: R1407422
Project Number: 5101.003
Date Received: 09/23/14

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV deliverables. When appropriate to the method, method blank and LCS results have been reported with each analytical test.

Sample Receipt

Samples were collected on 09/20-21/14 and received at ALS Rochester on 09/23/14 at a cooler temperature of 3.8 °C in good condition except as noted on the cooler receipt and preservation check form. The client was notified of the out of temperature cooler and the samples analyzed.

Volatile Organics

Water samples were analyzed for a site list of Volatile Organics by Method 8260C from SW-846.

All Tuning criteria for BFB were within QC limits.

All the initial and continuing calibration criteria were met for all analytes.

All Internal Standard Areas were within QC limits.

The Laboratory Control Sample (LCS) recoveries were all acceptable.

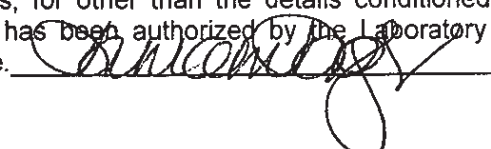
All surrogate standard recoveries were within acceptable limits.

Site specific QC was performed on MW-10 as requested. All Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries and RPD's were acceptable.

The Method Blanks associated with these samples were free of contamination.

All samples were analyzed within recommended holding times.

No other analytical or QC problems were encountered.

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

ALS ASP/CLP Batching Form/Login Sheet

Client Proj #: 5101.0003	Batch Complete: Yes	Date Revised:
Submission: R1407422	Diskette Requested: No	Date Due: 10/14/14
Client: Verina Consulting Group, LLC	Date: 9/23/14	Protocol: SW846
Client Rep: JJAEGGER	Custody Seal: Present/Absent:	Shipping No.:
Project: Binghamton	Chain of Custody: Present/Absent:	SDG #: MW-13

CAS Job #	Client/EPA ID	Matrix	Requested Parameters	Date Sampled	Date Received	pH (Solids)	% Solids	Remarks
R1407422-001	MW-13	Water	8260C	9/20/14	9/23/14			
R1407422-002	TRIP BLANK	Water	8260C	9/20/14	9/23/14			
R1407422-003	TMP-A	Water	8260C	9/20/14	9/23/14			
R1407422-004	MW-8	Water	8260C	9/20/14	9/23/14			
R1407422-005	DMW-3	Water	8260C	9/20/14	9/23/14			
R1407422-006	MW-14	Water	8260C	9/20/14	9/23/14			
R1407422-007	FB-092014	Water	8260C	9/20/14	9/23/14			
R1407422-008	MW-11	Water	8260C	9/20/14	9/23/14			
R1407422-009	DUP-092014	Water	8260C	9/20/14	9/23/14			
R1407422-010	MW-17	Water	8260C	9/21/14	9/23/14			
R1407422-011	MW-16	Water	8260C	9/21/14	9/23/14			
R1407422-012	MW-9	Water	8260C	9/21/14	9/23/14			
R1407422-013QC	MW-10	Water	8260C	9/21/14	9/23/14			
R1407422-014	FB-092114	Water	8260C	9/21/14	9/23/14			



Folder Comments:

Printed 9/23/14 11:16

CLP Batching Form

REPORT QUALIFIERS AND DEFINITIONS

U	Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.	+	Correlation coefficient for MSA is <0.995.
J	Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Aroclors).	N	Inorganics- Matrix spike recovery was outside laboratory limits.
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.	N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.	S	Concentration has been determined using Method of Standard Additions (MSA).
E	Organics- Concentration has exceeded the calibration range for that specific analysis.	W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
D	Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.	P	Concentration >40% (25% for CLP) difference between the two GC columns.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.	C	Confirmed by GC/MS
H	Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.	Q	DoD reports: indicates a pesticide/Aroclor is not confirmed ($\geq 100\%$ Difference between two GC columns).
#	Spike was diluted out.	X	See Case Narrative for discussion.
		MRL	Method Reporting Limit. Also known as:
		LOQ	Limit of Quantitation (LOQ) The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
		MDL	Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
		LOD	Limit of Detection. A value at or above the MDL which has been verified to be detectable.
		ND	Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.



Rochester Lab ID # for State Certifications¹

NELAP Accredited	Maine ID #NY0032	New Hampshire ID #
Connecticut ID # PH0556	Nebraska Accredited	294100 A/B
Delaware Accredited	Nevada ID # NY-00032	North Carolina #676
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047		Virginia #460167

¹ Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to <http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads>



18379

PAGE 1 OF 1

Distribution: White - Lab Copy; Yellow - Return to Originator

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

0831

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE

PAGE

15

[illegible]

Distribution: White - Lab Copy; Yellow - Return to Originator



Cooler Receipt and Preservation Check Form

Project/Client Veritas Folder Number PM-7422

Cooler received on 9/23 by: JLS COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were Custody seals on outside of cooler?	☒ Y ☐ N
2	Custody papers properly completed (ink, signed)?	☒ Y ☐ N
3	Did all bottles arrive in good condition (unbroken)?	☒ Y ☐ N
4	Circle: <u>Wet Ice</u> Dry Ice Gel packs present?	☒ Y ☐ N

5a	Perchlorate samples have required headspace?	Y ☐ N ☒ NA
5b	Did VOA vials, Alk, or Sulfide have sig* bubbles?	Y ☐ N ☒ NA
6	Where did the bottles originate?	<u>ALS/ROC</u> CLIENT
7	Soil VOA received as: Bulk Encore 5035set	☒ NA

8. Temperature Readings Date: 9/23 Time: 5:03 ID: IR#3 IR#4 From: Temp Blank Sample Bottle

Observed Temp (°C)	<u>3.8</u>						
Correction Factor (°C)							
Corrected Temp (°C)							
Within 0-6°C?	Y ☐ N ☐	Y ☐ N ☐	Y ☐ N ☐	Y ☐ N ☐	Y ☐ N ☐	Y ☐ N ☐	Y ☐ N ☐

If out of Temperature, note packing/ice condition: _____ Ice melted _____ Poorly Packed _____ Same Day Rule _____

& Client Approval to Run Samples: _____ Standing Approval _____ Client aware at drop-off _____ Client notified by: _____

All samples held in storage location: 102 by JLS on 9/23 at 0803
5035 samples placed in storage location: _____ by _____ on _____ at _____

PC Secondary Review: JMS 9/23/14

Cooler Breakdown: Date: 9/23/14 Time: 13:15 by: JLS

- Were all bottle labels complete (i.e. analysis, preservation, etc.)? YES NO
- Did all bottle labels and tags agree with custody papers? YES NO
- Were correct containers used for the tests indicated? YES NO
- Air Samples: Cassettes / Tubes Intact _____ Canisters Pressurized _____ Tedlar® Bags Inflated N/A

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH	
≥12	NaOH									Yes=All samples OK
≤2	HNO ₃									
≤2	H ₂ SO ₄									
<4	NaHSO ₄									
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add Na ₂ S ₂ O ₃ (CN), ascorbic (phenol).						No=Samples were preserved at The lab as listed
	Na ₂ S ₂ O ₃	-	-							
	ZnAcetate	-	-							
	HCl	**	**	<u>4113070</u>	<u>8/15</u>					

**Not to be tested before analysis – pH tested and recorded by VOAs on a separate worksheet

PM OK to Adjust: _____

Bottle lot numbers: 060914-3AXW, 4-162-002

Other Comments:

PC Secondary Review: JMS 9/25/14 *significant air bubbles: VOA > 5-6 mm : WC > 1 in. diameter

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: 9/20/14 1214
Date Received: 9/23/14
Date Analyzed: 9/29/14 19:03

Sample Name: MW-13
Lab Code: R1407422-001

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\092914\A2434.D\

Analysis Lot: 413648
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	5.0	U	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	5.0	U	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0	U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	5.0	U	5.0	0.22	
75-01-4	Vinyl Chloride	5.0	U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	85-122	9/29/14 19:03	
Dibromofluoromethane	109	89-119	9/29/14 19:03	
Toluene-d8	112	87-121	9/29/14 19:03	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: 9/20/14 1100
Date Received: 9/23/14
Date Analyzed: 9/29/14 17:34

Sample Name: TRIP BLANK
Lab Code: R1407422-002

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvov10\data\092914\A2431.D\

Analysis Lot: 413648
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	5.0	U	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	5.0	U	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0	U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	5.0	U	5.0	0.22	
75-01-4	Vinyl Chloride	5.0	U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85-122	9/29/14 17:34	
Dibromofluoromethane	103	89-119	9/29/14 17:34	
Toluene-d8	95	87-121	9/29/14 17:34	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: 9/20/14 1230
Date Received: 9/23/14
Date Analyzed: 9/29/14 19:33

Sample Name: TMP-A
Lab Code: R1407422-003

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\092914\A2435.D\

Analysis Lot: 413648
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	5.0	U	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	0.52	J	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0	U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	5.0	U	5.0	0.22	
75-01-4	Vinyl Chloride	5.0	U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	85-122	9/29/14 19:33	
Dibromofluoromethane	99	89-119	9/29/14 19:33	
Toluene-d8	97	87-121	9/29/14 19:33	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: 9/20/14 1321
Date Received: 9/23/14
Date Analyzed: 9/25/14 04:15

Sample Name: MW-8
Lab Code: R1407422-004

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\092414\A2337.D\

Analysis Lot: 412875
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	4.7 J	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	3.9 J	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0 U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	3.9 J	5.0	0.22	
75-01-4	Vinyl Chloride	5.0 U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	0.67 J	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0 U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85-122	9/25/14 04:15	
Dibromofluoromethane	100	89-119	9/25/14 04:15	
Toluene-d8	98	87-121	9/25/14 04:15	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: 9/20/14 1335
Date Received: 9/23/14
Date Analyzed: 9/30/14 18:43

Sample Name: DMW-3
Lab Code: R1407422-005

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\093014\A2479.D\

Analysis Lot: 413884
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0 U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	5.0 U	5.0	0.22	
75-01-4	Vinyl Chloride	5.0 U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	5.0 U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0 U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85-122	9/30/14 18:43	
Dibromofluoromethane	105	89-119	9/30/14 18:43	
Toluene-d8	96	87-121	9/30/14 18:43	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: 9/20/14 1437
Date Received: 9/23/14
Date Analyzed: 9/29/14 20:32

Sample Name: MW-14
Lab Code: R1407422-006

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\092914\A2437.D\

Analysis Lot: 413648
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	5.0	U	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	5.0	U	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0	U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	5.0	U	5.0	0.22	
75-01-4	Vinyl Chloride	5.0	U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85-122	9/29/14 20:32	
Dibromofluoromethane	116	89-119	9/29/14 20:32	
Toluene-d8	115	87-121	9/29/14 20:32	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: 9/20/14 1450
Date Received: 9/23/14
Date Analyzed: 9/29/14 18:04

Sample Name: FB-092014
Lab Code: R1407422-007

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUADATA\msvov10\data\092914\A2432.D\

Analysis Lot: 413648
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	5.0	U	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	5.0	U	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0	U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	5.0	U	5.0	0.22	
75-01-4	Vinyl Chloride	5.0	U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	85-122	9/29/14 18:04	
Dibromofluoromethane	110	89-119	9/29/14 18:04	
Toluene-d8	101	87-121	9/29/14 18:04	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: 9/20/14 1500
Date Received: 9/23/14
Date Analyzed: 9/25/14 04:45

Sample Name: MW-11
Lab Code: R1407422-008

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msv0a10\data\092414\A2338.D\

Analysis Lot: 412875
Instrument Name: R-MS-10
Dilution Factor: 5

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	6.0 J	25	1.8	
75-34-3	1,1-Dichloroethane (1,1-DCA)	1.8 J	25	1.0	
75-35-4	1,1-Dichloroethene (1,1-DCE)	25 U	25	2.9	
127-18-4	Tetrachloroethene (PCE)	25 U	25	1.5	
79-01-6	Trichloroethene (TCE)	25 U	25	1.1	
75-01-4	Vinyl Chloride	25 U	25	1.6	
156-59-2	cis-1,2-Dichloroethene	25 U	25	1.5	
156-60-5	trans-1,2-Dichloroethene	25 U	25	1.7	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	85-122	9/25/14 04:45	
Dibromofluoromethane	101	89-119	9/25/14 04:45	
Toluene-d8	102	87-121	9/25/14 04:45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: 9/20/14
Date Received: 9/23/14
Date Analyzed: 9/25/14 05:15

Sample Name: DUP-092014
Lab Code: R1407422-009

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvov10\data\092414\A2339.D\

Analysis Lot: 412875
Instrument Name: R-MS-10
Dilution Factor: 5

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	6.1 J	25	1.8	
75-34-3	1,1-Dichloroethane (1,1-DCA)	1.7 J	25	1.0	
75-35-4	1,1-Dichloroethene (1,1-DCE)	25 U	25	2.9	
127-18-4	Tetrachloroethene (PCE)	25 U	25	1.5	
79-01-6	Trichloroethene (TCE)	25 U	25	1.1	
75-01-4	Vinyl Chloride	25 U	25	1.6	
156-59-2	cis-1,2-Dichloroethene	25 U	25	1.5	
156-60-5	trans-1,2-Dichloroethene	25 U	25	1.7	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85-122	9/25/14 05:15	
Dibromofluoromethane	99	89-119	9/25/14 05:15	
Toluene-d8	97	87-121	9/25/14 05:15	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: 9/21/14 0905
Date Received: 9/23/14
Date Analyzed: 9/25/14 05:45

Sample Name: MW-17
Lab Code: R1407422-010

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvov10\data\092414\A2340.D\

Analysis Lot: 412875
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	2.6 J	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	17	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0 U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	4.3 J	5.0	0.22	
75-01-4	Vinyl Chloride	5.0 U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	10	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0 U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed Q
4-Bromofluorobenzene	100	85-122	9/25/14 05:45
Dibromofluoromethane	102	89-119	9/25/14 05:45
Toluene-d8	97	87-121	9/25/14 05:45

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: 9/21/14 0916
Date Received: 9/23/14
Date Analyzed: 9/25/14 06:14

Sample Name: MW-16
Lab Code: R1407422-011

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\092414\A2341.D\

Analysis Lot: 412875
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	6.0		5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	41		5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	0.43	J	5.0	0.30	
79-01-6	Trichloroethene (TCE)	8.6		5.0	0.22	
75-01-4	Vinyl Chloride	5.0	U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	17		5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85-122	9/25/14 06:14	
Dibromofluoromethane	100	89-119	9/25/14 06:14	
Toluene-d8	97	87-121	9/25/14 06:14	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: 9/21/14 1035
Date Received: 9/23/14
Date Analyzed: 9/25/14 06:44

Sample Name: MW-9
Lab Code: R1407422-012

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvov10\data\092414\A2342.D\

Analysis Lot: 412875
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	0.56	J	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	5.0	U	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0	U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	22		5.0	0.22	
75-01-4	Vinyl Chloride	5.0	U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85-122	9/25/14 06:44	
Dibromofluoromethane	101	89-119	9/25/14 06:44	
Toluene-d8	97	87-121	9/25/14 06:44	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: 9/21/14 1045
Date Received: 9/23/14
Date Analyzed: 9/29/14 21:02

Sample Name: MW-10
Lab Code: R1407422-013

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msv0a10\data\092914\A2438.D\

Analysis Lot: 413648
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	3.7 J	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	1.1 J	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	1.4 J	5.0	0.30	
79-01-6	Trichloroethene (TCE)	29	5.0	0.22	
75-01-4	Vinyl Chloride	0.69 J	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	8.9	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0 U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85-122	9/29/14 21:02	
Dibromofluoromethane	92	89-119	9/29/14 21:02	
Toluene-d8	88	87-121	9/29/14 21:02	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: 9/21/14 1055
Date Received: 9/23/14
Date Analyzed: 9/29/14 18:34

Sample Name: FB-092114
Lab Code: R1407422-014

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\092914\A2433.D\

Analysis Lot: 413648
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0 U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	5.0 U	5.0	0.22	
75-01-4	Vinyl Chloride	5.0 U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	5.0 U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0 U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85-122	9/29/14 18:34	
Dibromofluoromethane	107	89-119	9/29/14 18:34	
Toluene-d8	106	87-121	9/29/14 18:34	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: NA
Date Received: NA
Date Analyzed: 9/25/14 00:47

Sample Name: Method Blank
Lab Code: RQ1411595-01

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\092414\A2330.D\

Analysis Lot: 412875
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	5.0	U	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	5.0	U	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0	U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	5.0	U	5.0	0.22	
75-01-4	Vinyl Chloride	5.0	U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	106	85-122	9/25/14 00:47	
Dibromofluoromethane	98	89-119	9/25/14 00:47	
Toluene-d8	100	87-121	9/25/14 00:47	

Analytical Report

Service Request: R1407422
Date Collected: NA
Date Received: NA
Date Analyzed: 9/29/14 13:36

Units: $\mu\text{g/L}$
Basis: NA

Analysis Lot: 413648
Instrument Name: R-MS-10
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	85-122	9/29/14 13:36	
Dibromofluoromethane	108	89-119	9/29/14 13:36	
Toluene-d8	97	87-121	9/29/14 13:36	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: NA
Date Received: NA
Date Analyzed: 9/30/14 17:14

Sample Name: Method Blank
Lab Code: RQ1412027-01

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoo10\data\093014\A2476.D\

Analysis Lot: 413884
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0 U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	5.0 U	5.0	0.22	
75-01-4	Vinyl Chloride	5.0 U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	5.0 U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0 U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	85-122	9/30/14 17:14	
Dibromofluoromethane	106	89-119	9/30/14 17:14	
Toluene-d8	100	87-121	9/30/14 17:14	

Client: Verina Consulting Group, LLC
 Project: Binghamton/5101.0003
 Sample Matrix: Water

Service Request: R1407422
 Date Collected: 9/21/14
 Date Received: 9/23/14
 Date Analyzed: 9/29/14

Matrix Spike Summary
 Volatile Organic Compounds by GC/MS

Sample Name: MW-10
 Lab Code: R1407422-013

Units: µg/L
 Basis: NA

Analytical Method: 8260C

Analyte Name	Sample Result	MW-10MS Matrix Spike RQ1411994-05			MW-10DMS Duplicate Matrix Spike RQ1411994-06			% Rec Limits	RPD	RPD Limit
		Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
1,1,1-Trichloroethane (TCA)	3.7	61.5	50.0	116	58.1	50.0	109	74 - 127	6	30
1,1-Dichloroethane (1,1-DCA)	1.1	59.0	50.0	116	61.8	50.0	121	74 - 132	5	30
1,1-Dichloroethene (1,1-DCE)	ND	55.4	50.0	111	60.8	50.0	122	72 - 125	9	30
Tetrachloroethene (PCE)	1.4	60.3	50.0	118	58.9	50.0	115	67 - 137	2	30
Trichloroethene (TCE)	29	85.2	50.0	113	85.1	50.0	113	62 - 142	<1	30
Vinyl Chloride	0.69	63.8	50.0	126	67.2	50.0	133	60 - 157	5	30
cis-1,2-Dichloroethene	8.9	65.0	50.0	112	64.6	50.0	112	72 - 133	<1	30
trans-1,2-Dichloroethene	ND	58.9	50.0	118	60.1	50.0	120	77 - 125	2	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Verina Consulting Group, LLC
 Project: Binghamton/5101.0003
 Sample Matrix: Water

Service Request: R1407422
 Date Analyzed: 9/24/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C

Units: µg/L
 Basis: NA

Analysis Lot: 412875

Analyte Name	Lab Control Sample RQ1411595-02			Duplicate Lab Control Sample RQ1411595-03			% Rec Limits	RPD	RPD Limit
	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
1,1,1-Trichloroethane (TCA)	18.2	20.0	91	19.3	20.0	96	71 - 123	6	30
1,1-Dichloroethane (1,1-DCA)	16.9	20.0	84	17.8	20.0	89	76 - 128	5	30
1,1-Dichloroethene (1,1-DCE)	22.4	20.0	112	22.9	20.0	114	74 - 135	2	30
Tetrachloroethene (PCE)	21.1	20.0	106	20.7	20.0	103	69 - 124	2	30
Trichloroethene (TCE)	22.5	20.0	113	24.2	20.0	121	76 - 123	7	30
Vinyl Chloride	19.1	20.0	95	20.0	20.0	100	69 - 136	5	30
cis-1,2-Dichloroethene	18.6	20.0	93	20.0	20.0	100	80 - 121	7	30
trans-1,2-Dichloroethene	19.1	20.0	95	20.1	20.0	100	78 - 124	5	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Analyzed: 9/29/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L

Basis: NA

Analysis Lot: 413648

Lab Control Sample
RQ1411994-02

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	19.9	20.0	100	71 - 123
1,1-Dichloroethane (1,1-DCA)	20.2	20.0	101	76 - 128
1,1-Dichloroethene (1,1-DCE)	20.5	20.0	103	74 - 135
Tetrachloroethene (PCE)	21.4	20.0	107	69 - 124
Trichloroethene (TCE)	20.0	20.0	100	76 - 123
Vinyl Chloride	24.3	20.0	122	69 - 136
cis-1,2-Dichloroethene	19.4	20.0	97	80 - 121
trans-1,2-Dichloroethene	19.9	20.0	99	78 - 124

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Analyzed: 9/30/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 413884

Lab Control Sample
RQ1412027-02

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	19.6	20.0	98	71 - 123
1,1-Dichloroethane (1,1-DCA)	20.2	20.0	101	76 - 128
1,1-Dichloroethene (1,1-DCE)	18.6	20.0	93	74 - 135
Tetrachloroethene (PCE)	23.7	20.0	118	69 - 124
Trichloroethene (TCE)	19.8	20.0	99	76 - 123
Vinyl Chloride	22.3	20.0	112	69 - 136
cis-1,2-Dichloroethene	20.9	20.0	104	80 - 121
trans-1,2-Dichloroethene	20.3	20.0	102	78 - 124

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.



October 13, 2014

Service Request No: R1407422

Ms. Tammy Yuan
Verina Consulting Group, LLC
220 Davidson Avenue, Suite 105
Somerset, NJ 08873

Laboratory Results for: Binghamton/5101.0003

Dear Ms. Yuan:

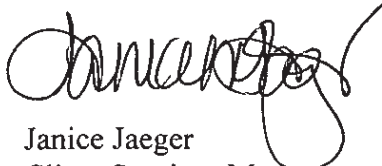
Enclosed are the results of the sample(s) submitted to our laboratory on September 23, 2014. For your reference, these analyses have been assigned our service request number **R1407422**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental


Janice Jaeger
Client Services Manager

Page 1 of 425

ADDRESS 1565 Jefferson Rd, Building 300, Suite 360, Rochester, NY 14623 PHONE 585-288-5380 | FAX 585-288-8475
ALS GROUP USA, CORP. Part of the ALS Group An ALS Limited Company

Environmental

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

000001



SDG NARRATIVE

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

CASE NARRATIVE

Client: Verina Consulting
Project: Binghamton
Sample Matrix: Water

Service Request: R1407422
Project Number: 5101.003
Date Received: 09/23/14

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV deliverables. When appropriate to the method, method blank and LCS results have been reported with each analytical test.

Sample Receipt

Samples were collected on 09/20-21/14 and received at ALS Rochester on 09/23/14 at a cooler temperature of 3.8 °C in good condition except as noted on the cooler receipt and preservation check form. The client was notified of the out of temperature cooler and the samples analyzed.

Volatile Organics

Water samples were analyzed for a site list of Volatile Organics by Method 8260C from SW-846.

All Tuning criteria for BFB were within QC limits.

All the initial and continuing calibration criteria were met for all analytes.

All Internal Standard Areas were within QC limits.

The Laboratory Control Sample (LCS) recoveries were all acceptable.

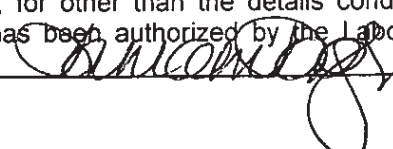
All surrogate standard recoveries were within acceptable limits.

Site specific QC was performed on MW-10 as requested. All Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries and RPD's were acceptable.

The Method Blanks associated with these samples were free of contamination.

All samples were analyzed within recommended holding times.

No other analytical or QC problems were encountered.

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

ALS ASP/CLP Batching Form/Login Sheet

Client Proj #: 5101.0003	Batch Complete: Yes	Date Revised:
Submission: R1407422	Diskette Requested: No	Date Due: 10/14/14
Client: Verina Consulting Group, LLC	Date: 9/23/14	Protocol: SW846
Client Rep: JJAEGER	Custody Seal: Present/Absent:	Shipping No.:
Project: Binghamton	Chain of Custody: Present/Absent:	SDG #: MW-13

CAS Job #	Client/EPA ID	Matrix	Requested Parameters	Date Sampled	Date Received	pH (Solids)	% Solids	Remarks Sample Condition
R1407422-001	MW-13	Water	8260C	9/20/14	9/23/14			
R1407422-002	TRIP BLANK	Water	8260C	9/20/14	9/23/14			
R1407422-003	TMP-A	Water	8260C	9/20/14	9/23/14			
R1407422-004	MW-8	Water	8260C	9/20/14	9/23/14			
R1407422-005	DMW-3	Water	8260C	9/20/14	9/23/14			
R1407422-006	MW-14	Water	8260C	9/20/14	9/23/14			
R1407422-007	FB-092014	Water	8260C	9/20/14	9/23/14			
R1407422-008	MW-11	Water	8260C	9/20/14	9/23/14			
R1407422-009	DUP-092014	Water	8260C	9/20/14	9/23/14			
R1407422-010	MW-17	Water	8260C	9/21/14	9/23/14			
R1407422-011	MW-16	Water	8260C	9/21/14	9/23/14			
R1407422-012	MW-9	Water	8260C	9/21/14	9/23/14			
R1407422-013QC	MW-10	Water	8260C	9/21/14	9/23/14			
R1407422-014	FB-092114	Water	8260C	9/21/14	9/23/14			

000004

Folder Comments:

Printed 9/23/14 11:16

CLP Batching Form

Page 1

REPORT QUALIFIERS AND DEFINITIONS

- | | |
|---|--|
| <p>U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.</p> <p>J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Aroclors).</p> <p>B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.</p> <p>E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.</p> <p>E Organics- Concentration has exceeded the calibration range for that specific analysis.</p> <p>D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.</p> <p>* Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.</p> <p>H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.</p> <p># Spike was diluted out.</p> | <p>+ Correlation coefficient for MSA is <0.995.</p> <p>N Inorganics- Matrix spike recovery was outside laboratory limits.</p> <p>N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.</p> <p>S Concentration has been determined using Method of Standard Additions (MSA).</p> <p>W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.</p> <p>P Concentration >40% (25% for CLP) difference between the two GC columns.</p> <p>C Confirmed by GC/MS</p> <p>Q DoD reports: indicates a pesticide/Aroclor is not confirmed ($\geq 100\%$ Difference between two GC columns).</p> <p>X See Case Narrative for discussion.</p> <p>MRL Method Reporting Limit. Also known as:</p> <p>LOQ Limit of Quantitation (LOQ)
The lowest concentration at which the method analyte may be reliably quantified under the method conditions.</p> <p>MDL Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).</p> <p>LOD Limit of Detection. A value at or above the MDL which has been verified to be detectable.</p> <p>ND Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.</p> |
|---|--|



Rochester Lab ID # for State Certifications¹

NELAP Accredited	Maine ID #NY0032	New Hampshire ID #
Connecticut ID # PH0556	Nebraska Accredited	294100 A/B
Delaware Accredited	Nevada ID # NY-00032	North Carolina #676
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047		Virginia #460167

¹ Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to <http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads>



CHAINS OF CUSTODY

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com



CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

18379

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE 1 OF 2

Project Name Dave - Binghamton		Project Number 5101.0003	
Project Manager Jessy Yager		Report CC Sarah Tufano	
Company/Address Vering Consulting Group, LLC			
220 Davidson Ave, Suite 105			
Somerset, NY 08873			
Phone #	732-412-7576	Email	stufano@vcg-llc.com
Sampler's Signature <i>[Signature]</i>		Sampler's Printed Name Sarah Tufano	
CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	DATE	SAMPLING TIME
MW-13		9/20/14	12:14
Tripe Blank		9/20/14	14:00
TMP-A		9/20/14	12:30
MW-8	V	9/20/14	13:21
DMW-3		9/20/14	13:35
MW-14		9/20/14	14:37
FB-092014		9/20/14	14:50
MW-11	V	9/20/14	15:00
DUP-092014	V	9/20/14	—
MW-17	V	9/21/14	09:05
MW-16	V	9/21/14	09:16
SPECIAL INSTRUCTIONS/COMMENTS SSPL VOCs = PCE, TCE, 1,1,1-TCA; 1,1-DCA; 1,1-DCE; 1,2-DCE; trans-1,2-DCE; VC			
ANALYSIS REQUESTED (Include Method Number and Container Preservative)			
PRESERVATIVE		NUMBER OF CONTAINERS	
GCMS VOCs • 8260 • 824 • CLP		GCMS VOCs • 8270 • 825	
PESTICIDES • 8021 • 801/802		PCBs • 8082 • 808	
METALS TOTAL (List in comments below)		METALS DISSOLVED (List in comments below)	
SSPL VOCs		SSPL VOCs	
148			
Preservative Key 0. NONE 1. HCl 2. HNO ₃ 3. H ₂ SO ₄ 4. NaOH 5. Zn Acetate 6. MeOH 7. NaHSO ₄ 8. Other <i>Sodium</i> REMARKS/ ALTERNATE DESCRIPTION <i>this is a duplicate</i> <i>field blank</i> <i>blind duplicate</i>			
INVOICE INFORMATION			
PO # 5101.0003			
BILL TO: VERINA			
REPORT REQUIREMENTS I. Results Only II. Results + OC Summaries (LCS, DUP, MS/MSD as required) III. Results + OC and Calibration Summaries IV. Data Validation Report with Raw Data			
Edits Yes No			
RELINQUISHED BY			
RECEIVED BY			
Signature			
Printed Name			
Firm			
Date/Time			
R1407422 Verina Consulting Group, LLC Binghamton			
5			

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

18380

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE

PAGE 6 OF 6

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

[illegible]



Cooler Receipt and Preservation Check Form

Project/Client Veneta Folder Number PM-7422

Cooler received on 9/23 by: JLS

COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were Custody seals on outside of cooler?	☒ Y ☐ N
2	Custody papers properly completed (ink, signed)?	☒ Y ☐ N
3	Did all bottles arrive in good condition (unbroken)?	☒ Y ☐ N
4	Circle: <u>Wet Ice</u> Dry Ice Gel packs present?	☒ Y ☐ N

5a	Perchlorate samples have required headspace?	Y ☐ N ☒ NA
5b	Did VOA vials, Alk, or Sulfide have sig* bubbles?	Y ☒ NA
6	Where did the bottles originate?	<u>ALS/ROC</u> CLIENT
7	Soil VOA received as:	Bulk Encore 5035set ☒ NA

8. Temperature Readings Date: 9/23 Time: 0803 ID: IR#3 IR#4 From: Temp Blank Sample Bottle

Observed Temp (°C)	<u>3.8</u>						
Correction Factor (°C)							
Corrected Temp (°C)							
Within 0-6°C?	Y ☐ N ☐	Y ☐ N ☐	Y ☐ N ☐	Y ☐ N ☐	Y ☐ N ☐	Y ☐ N ☐	Y ☐ N ☐

If out of Temperature, note packing/ice condition: _____ Ice melted _____ Poorly Packed _____ Same Day Rule _____

& Client Approval to Run Samples: _____ Standing Approval _____ Client aware at drop-off _____ Client notified by: _____

All samples held in storage location: 1052 by JLS on 9/23 at 0803
5035 samples placed in storage location: _____ by _____ on _____ at _____

PC Secondary Review: JMS 9/23/14

Cooler Breakdown: Date: 9/23/14 Time: 1315 by: JLS

- Were all bottle labels complete (i.e. analysis, preservation, etc.)? YES NO
- Did all bottle labels and tags agree with custody papers? YES NO
- Were correct containers used for the tests indicated? YES NO
- Air Samples: Cassettes / Tubes Intact _____ Canisters Pressurized _____ Tedlar® Bags Inflated NA

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO ₃								
≤2	H ₂ SO ₄								
<4	NaHSO ₄								
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add Na ₂ S ₂ O ₃ (CN), ascorbic (phenol).					
	Na ₂ S ₂ O ₃	-	-						
	ZnAcetate	-	-						
	HCl	**	**	<u>4113570</u>	<u>8/15</u>				

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: _____

**Not to be tested before analysis – pH tested and recorded by VOAs on a separate worksheet

Bottle lot numbers: 060914-3AXW, 4-162-002
Other Comments:

PC Secondary Review: JMS 9/25/14 *significant air bubbles: VOA > 5-6 mm : WC > 1 in. diameter

ALS ENVIRONMENTAL
Chain of Custody Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003

Service Request: R1407422

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1407422-001.01	8260C	9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
		9/24/14	1230	R-001-S10 / JCUSHMAN	
		9/29/14	1531	In Lab / FNAEGLER	
		9/29/14	1535	R-001-S10 / BWOJTASIEWICZ	
R1407422-001.02		9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
R1407422-001.03		9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
R1407422-002.01	8260C	9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
		9/24/14	1230	R-001-S10 / JCUSHMAN	
		9/29/14	1531	In Lab / FNAEGLER	
		9/29/14	1535	R-001-S10 / BWOJTASIEWICZ	
R1407422-002.02		9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
R1407422-002.03		9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
R1407422-003.01	8260C	9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
		9/24/14	1231	R-001-S10 / JCUSHMAN	
		9/29/14	1531	In Lab / FNAEGLER	
		9/29/14	1535	R-001-S10 / BWOJTASIEWICZ	
R1407422-003.02		9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
R1407422-003.03		9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
R1407422-004.01	8260C				

ALS ENVIRONMENTAL

Chain of Custody Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003

Service Request: R1407422

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1407422-004.02		9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
		9/24/14	1232	In Lab / FNAEGLER	
		9/24/14	1425	R-001-S10 / FNAEGLER	
R1407422-004.03		9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
R1407422-005.01	8260C	9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
		9/24/14	1231	R-001-S10 / JCUSHMAN	
		9/29/14	1531	In Lab / FNAEGLER	
		9/29/14	1535	R-001-S10 / BWOJTASIEWICZ	
		9/30/14	1409	In Lab / FNAEGLER	
R1407422-005.02		9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
		9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
R1407422-006.01	8260C	9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
		9/24/14	1231	R-001-S10 / JCUSHMAN	
		9/29/14	1531	In Lab / FNAEGLER	
R1407422-006.02		9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
		9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
R1407422-007.01	8260C	9/23/14	1317	SMO / JSEWARD	

ALS ENVIRONMENTAL

Chain of Custody Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003

Service Request: R1407422

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1407422-007.02		9/23/14	1317	R-001 / JSEWARD	
		9/24/14	1231	R-001-S10 / JCUSHMAN	
		9/29/14	1531	In Lab / FNAEGLER	
		9/29/14	1535	R-001-S10 / BWOJTASIEWICZ	
R1407422-007.03		9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
R1407422-008.01	8260C	9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
		9/24/14	1232	In Lab / FNAEGLER	
		9/24/14	1425	R-001-S10 / FNAEGLER	
R1407422-008.02		9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
R1407422-008.03		9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
R1407422-009.01	8260C	9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
		9/24/14	1232	In Lab / FNAEGLER	
		9/24/14	1425	R-001-S10 / FNAEGLER	
R1407422-009.02		9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
R1407422-009.03		9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
R1407422-010.01	8260C	9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
		9/24/14	1232	In Lab / FNAEGLER	
R1407422-010.02		9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	

ALS ENVIRONMENTAL

Chain of Custody Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003

Service Request: R1407422

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1407422-010.03		9/23/14	1317	R-001 / JSEWARD	
		9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
R1407422-011.01	8260C	9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
		9/24/14	1232	In Lab / FNAEGLER	
		9/24/14	1425	R-001-S10 / FNAEGLER	
R1407422-011.02		9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
R1407422-011.03		9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
R1407422-012.01	8260C	9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
		9/24/14	1232	In Lab / FNAEGLER	
		9/24/14	1425	R-001-S10 / FNAEGLER	
R1407422-012.02		9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
R1407422-012.03		9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
R1407422-013.01	8260C	9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
		9/24/14	1231	R-001-S10 / JCUSHMAN	
		9/29/14	1531	In Lab / FNAEGLER	
		9/29/14	1535	R-001-S10 / BWOJTASIEWICZ	
R1407422-013.02		9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
R1407422-013.03		9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	

ALS ENVIRONMENTAL

Chain of Custody Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003

Service Request: R1407422

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1407422-013.04		9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
R1407422-013.05		9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
R1407422-013.06		9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
R1407422-013.07		9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
R1407422-013.08		9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
R1407422-013.09		9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
R1407422-014.01	8260C	9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
		9/24/14	1231	R-001-S10 / JCUSHMAN	
		9/29/14	1531	In Lab / FNAEGLER	
		9/29/14	1535	R-001-S10 / BWOJTASIEWICZ	
R1407422-014.02		9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	
R1407422-014.03		9/23/14	1317	SMO / JSEWARD	
		9/23/14	1317	R-001 / JSEWARD	



VOLATILE ORGANICS QC SUMMARY

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: 9/21/14
Date Received: 9/23/14
Date Analyzed: 9/29/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: MW-10
Lab Code: R1407422-013
Analytical Method: 8260C

Units: µg/L
Basis: NA

Analyte Name	Sample Result	MW-10MS Matrix Spike RQ1411994-05			MW-10DMS Duplicate Matrix Spike RQ1411994-06			% Rec Limits	RPD	RPD Limit
		Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
1,1,1-Trichloroethane (TCA)	3.7	61.5	50.0	116	58.1	50.0	109	74 - 127	6	30
1,1-Dichloroethane (1,1-DCA)	1.1	59.0	50.0	116	61.8	50.0	121	74 - 132	5	30
1,1-Dichloroethene (1,1-DCE)	ND	55.4	50.0	111	60.8	50.0	122	72 - 125	9	30
Tetrachloroethene (PCE)	1.4	60.3	50.0	118	58.9	50.0	115	67 - 137	2	30
Trichloroethene (TCE)	29	85.2	50.0	113	85.1	50.0	113	62 - 142	<1	30
Vinyl Chloride	0.69	63.8	50.0	126	67.2	50.0	133	60 - 157	5	30
cis-1,2-Dichloroethene	8.9	65.0	50.0	112	64.6	50.0	112	72 - 133	<1	30
trans-1,2-Dichloroethene	ND	58.9	50.0	118	60.1	50.0	120	77 - 125	2	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Analyzed: 9/24/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 412875

Analyte Name	Lab Control Sample RQ1411595-02			Duplicate Lab Control Sample RQ1411595-03			% Rec Limits	RPD	RPD Limit
	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
1,1,1-Trichloroethane (TCA)	18.2	20.0	91	19.3	20.0	96	71 - 123	6	30
1,1-Dichloroethane (1,1-DCA)	16.9	20.0	84	17.8	20.0	89	76 - 128	5	30
1,1-Dichloroethene (1,1-DCE)	22.4	20.0	112	22.9	20.0	114	74 - 135	2	30
Tetrachloroethene (PCE)	21.1	20.0	106	20.7	20.0	103	69 - 124	2	30
Trichloroethene (TCE)	22.5	20.0	113	24.2	20.0	121	76 - 123	7	30
Vinyl Chloride	19.1	20.0	95	20.0	20.0	100	69 - 136	5	30
cis-1,2-Dichloroethene	18.6	20.0	93	20.0	20.0	100	80 - 121	7	30
trans-1,2-Dichloroethene	19.1	20.0	95	20.1	20.0	100	78 - 124	5	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Analyzed: 9/29/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 413648

Lab Control Sample
RQ1411994-02

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	19.9	20.0	100	71 - 123
1,1-Dichloroethane (1,1-DCA)	20.2	20.0	101	76 - 128
1,1-Dichloroethene (1,1-DCE)	20.5	20.0	103	74 - 135
Tetrachloroethene (PCE)	21.4	20.0	107	69 - 124
Trichloroethene (TCE)	20.0	20.0	100	76 - 123
Vinyl Chloride	24.3	20.0	122	69 - 136
cis-1,2-Dichloroethene	19.4	20.0	97	80 - 121
trans-1,2-Dichloroethene	19.9	20.0	99	78 - 124

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Analyzed: 9/30/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 413884

Lab Control Sample
RQ1412027-02

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	19.6	20.0	98	71 - 123
1,1-Dichloroethane (1,1-DCA)	20.2	20.0	101	76 - 128
1,1-Dichloroethene (1,1-DCE)	18.6	20.0	93	74 - 135
Tetrachloroethene (PCE)	23.7	20.0	118	69 - 124
Trichloroethene (TCE)	19.8	20.0	99	76 - 123
Vinyl Chloride	22.3	20.0	112	69 - 136
cis-1,2-Dichloroethene	20.9	20.0	104	80 - 121
trans-1,2-Dichloroethene	20.3	20.0	102	78 - 124

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Analyzed: 9/25/14 00:47

Method Blank Summary
Volatile Organic Compounds by GC/MS, Unpreserved

Sample Name: Method Blank **Instrument ID:** R-MS-10
Lab Code: RQ1411595-01 **File ID:** I:\ACQUADATA\msvoa10\data\092414\A2330.D\
Analytical Method: 8260C

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1411595-02	I:\ACQUADATA\msvoa10\data\092414\A2327.D\	9/24/14 23:17
Duplicate Lab Control Sample	RQ1411595-03	I:\ACQUADATA\msvoa10\data\092414\A2328.D\	9/24/14 23:47
MW-8	R1407422-004	I:\ACQUADATA\msvoa10\data\092414\A2337.D\	9/25/14 04:15
MW-11	R1407422-008	I:\ACQUADATA\msvoa10\data\092414\A2338.D\	9/25/14 04:45
DUP-092014	R1407422-009	I:\ACQUADATA\msvoa10\data\092414\A2339.D\	9/25/14 05:15
MW-17	R1407422-010	I:\ACQUADATA\msvoa10\data\092414\A2340.D\	9/25/14 05:45
MW-16	R1407422-011	I:\ACQUADATA\msvoa10\data\092414\A2341.D\	9/25/14 06:14
MW-9	R1407422-012	I:\ACQUADATA\msvoa10\data\092414\A2342.D\	9/25/14 06:44

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
 Project: Binghamton/5101.0003
 Sample Matrix: Water

Service Request: R1407422
 Date Analyzed: 9/29/14 13:36

Method Blank Summary Volatile Organic Compounds by GC/MS

Sample Name: Method Blank Instrument ID: R-MS-10
 Lab Code: RQ1411994-01 File ID: I:\ACQUDATA\msvoa10\data\092914\A2423.D\
 Analytical Method: 8260C

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1411994-02	I:\ACQUDATA\msvoa10\data\092914\A2421.D\	9/29/14 12:34
TRIP BLANK	R1407422-002	I:\ACQUDATA\msvoa10\data\092914\A2431.D\	9/29/14 17:34
FB-092014	R1407422-007	I:\ACQUDATA\msvoa10\data\092914\A2432.D\	9/29/14 18:04
FB-092114	R1407422-014	I:\ACQUDATA\msvoa10\data\092914\A2433.D\	9/29/14 18:34
MW-13	R1407422-001	I:\ACQUDATA\msvoa10\data\092914\A2434.D\	9/29/14 19:03
TMP-A	R1407422-003	I:\ACQUDATA\msvoa10\data\092914\A2435.D\	9/29/14 19:33
MW-14	R1407422-006	I:\ACQUDATA\msvoa10\data\092914\A2437.D\	9/29/14 20:32
MW-10	R1407422-013	I:\ACQUDATA\msvoa10\data\092914\A2438.D\	9/29/14 21:02
MW-10MS	RQ1411994-05	I:\ACQUDATA\msvoa10\data\092914\A2439.D\	9/29/14 21:32
MW-10DMS	RQ1411994-06	I:\ACQUDATA\msvoa10\data\092914\A2440.D\	9/29/14 22:01

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Analyzed: 9/30/14 17:14

**Method Blank Summary
 Volatile Organic Compounds by GC/MS**

Sample Name: Method Blank **Instrument ID:** R-MS-10
Lab Code: RQ1412027-01 **File ID:** I:\ACQUADATA\msvoa10\data\093014\A2476.D\
Analytical Method: 8260C

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1412027-02	I:\ACQUADATA\msvoa10\data\093014\A2474.D\	9/30/14 16:14
DMW-3	R1407422-005	I:\ACQUADATA\msvoa10\data\093014\A2479.D\	9/30/14 18:43

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003

Service Request: R1407422
Date Analyzed: 7/21/14 10:55

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa10\data\072114\A0508.D\
Instrument ID: R-MS-10

Analytical Method: 8260C
Analysis Lot: 215799

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	23.99	112021	Pass
75	95	30	60	47.10	219883	Pass
95	95	100	100	100.00	466859	Pass
96	95	5	9	6.38	29771	Pass
173	174	0	2	1.00	3689	Pass
174	95	50	120	79.24	369941	Pass
175	174	5	9	7.65	28299	Pass
176	174	95	101	96.83	358208	Pass
177	176	5	9	6.43	23022	Pass

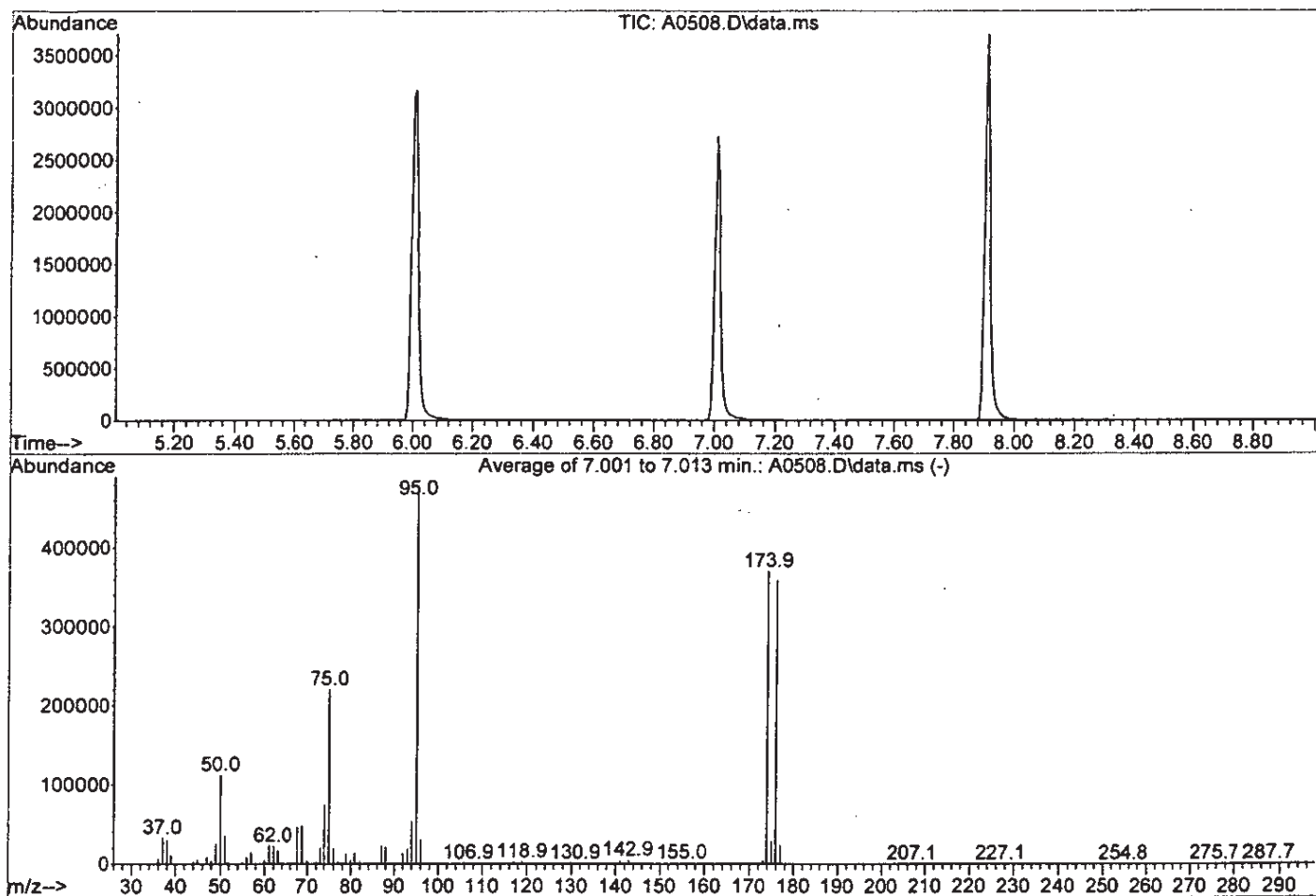
Sample Name	Lab Code	File ID	Date Analyzed	Q
Initial CalibrationICAL	0.5 ppb	I:\ACQUDATA\msvoa10\data\072114\A0510.D\	7/21/14 11:52	
Initial CalibrationICAL	1.0 ppb	I:\ACQUDATA\msvoa10\data\072114\A0511.D\	7/21/14 12:22	
Initial CalibrationICAL	2.0 ppb	I:\ACQUDATA\msvoa10\data\072114\A0512.D\	7/21/14 12:52	
Initial CalibrationICAL	5.0 ppb	I:\ACQUDATA\msvoa10\data\072114\A0513.D\	7/21/14 13:23	
Initial CalibrationICAL	10 ppb	I:\ACQUDATA\msvoa10\data\072114\A0514.D\	7/21/14 13:53	
Initial CalibrationICAL	50 ppb	I:\ACQUDATA\msvoa10\data\072114\A0515.D\	7/21/14 14:23	
Initial CalibrationICAL	100 ppb	I:\ACQUDATA\msvoa10\data\072114\A0516.D\	7/21/14 14:54	
Initial CalibrationICAL	150 ppb	I:\ACQUDATA\msvoa10\data\072114\A0517.D\	7/21/14 15:24	
Initial CalibrationICAL	200 ppb	I:\ACQUDATA\msvoa10\data\072114\A0518.D\	7/21/14 15:55	

Data Path : I:\ACQUDATA\msvoa10\data\072114\
 Data File : A0508.D
 Acq On : 21 Jul 2014 10:55 am
 Operator : F.NAEGLER
 Sample : TUNE
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

FN
7/22/14

Integration File: CPD4.P

Method : I:\ACQUDATA\MSVOA10\METHODS\T072114.M
 Title : 8260B WATERS
 Last Update : Wed Sep 27 14:33:13 2006



AutoFind: Scans 314, 315, 316; Background Corrected with Scan 309

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	24.0	112021	PASS
75	95	30	60	47.1	219883	PASS
95	95	100	100	100.0	466859	PASS
96	95	5	9	6.4	29771	PASS
173	174	0.00	2	1.0	3689	PASS
174	95	50	120	79.2	369941	PASS
175	174	5	9	7.6	28299	PASS
176	174	95	101	96.8	358208	PASS
177	176	5	9	6.4	23022	PASS

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003

Service Request: R1407422
Date Analyzed: 9/24/14 22:22

Tune Summary
Volatile Organic Compounds by GC/MS, Unpreserved

File ID: I:\ACQUDATA\msvoo10\data\092414\A2325.D\
Instrument ID: R-MS-10

Analytical Method: 8260C
Analysis Lot: 412875

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	21.51	97960	Pass
75	95	30	60	44.96	204779	Pass
95	95	100	100	100.00	455424	Pass
96	95	5	9	6.81	31024	Pass
173	174	0	2	0.97	4026	Pass
174	95	50	120	90.78	413440	Pass
175	174	5	9	7.69	31792	Pass
176	174	95	101	97.41	402752	Pass
177	176	5	9	6.53	26317	Pass

Sample Name	Lab Code	File ID	Date Analyzed	Q
Continuing Calibration Verification	RQ1411595-05	I:\ACQUDATA\msvoo10\data\092414\A2326.D\	9/24/14 22:47	
Lab Control Sample	RQ1411595-02	I:\ACQUDATA\msvoo10\data\092414\A2327.D\	9/24/14 23:17	
Duplicate Lab Control Sample	RQ1411595-03	I:\ACQUDATA\msvoo10\data\092414\A2328.D\	9/24/14 23:47	
Method Blank	RQ1411595-01	I:\ACQUDATA\msvoo10\data\092414\A2330.D\	9/25/14 00:47	
MW-8	R1407422-004	I:\ACQUDATA\msvoo10\data\092414\A2337.D\	9/25/14 04:15	
MW-11	R1407422-008	I:\ACQUDATA\msvoo10\data\092414\A2338.D\	9/25/14 04:45	
DUP-092014	R1407422-009	I:\ACQUDATA\msvoo10\data\092414\A2339.D\	9/25/14 05:15	
MW-17	R1407422-010	I:\ACQUDATA\msvoo10\data\092414\A2340.D\	9/25/14 05:45	
MW-16	R1407422-011	I:\ACQUDATA\msvoo10\data\092414\A2341.D\	9/25/14 06:14	
MW-9	R1407422-012	I:\ACQUDATA\msvoo10\data\092414\A2342.D\	9/25/14 06:44	

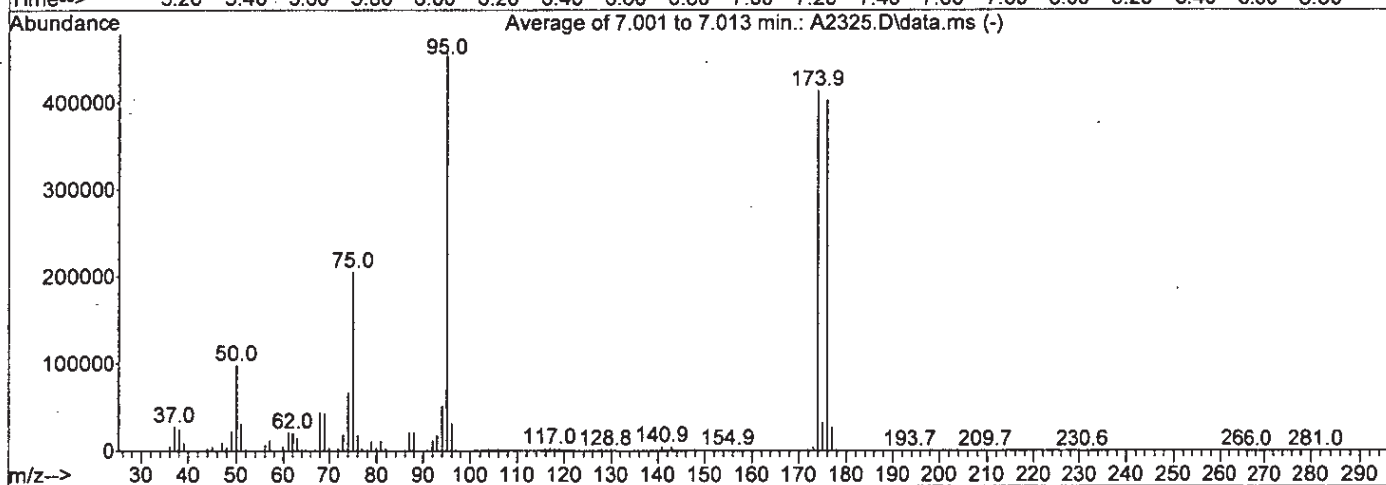
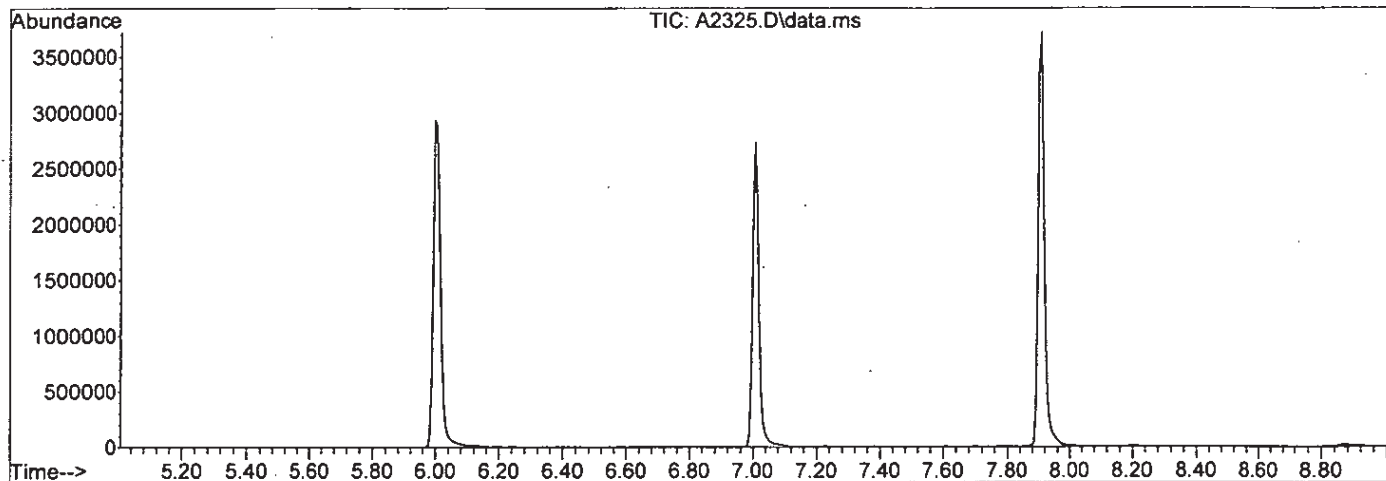
Data Path : I:\ACQUDATA\msvoa10\data\092414\
 Data File : A2325.D
 Acq On : 24 Sep 2014 10:22 pm
 Operator : F.NAEGLER
 Sample : TUNE
 Misc :
 ALS Vial : 26 Sample Multiplier: 1

Integration File: CPD4.P

Method : I:\ACQUDATA\msvoa10\Methods\T072114.M
 Title : 8260B WATERS
 Last Update : Wed Sep 27 14:33:13 2006

R21411515 -01
 25 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300

F2
 9/28/14



AutoFind: Scans 314, 315, 316; Background Corrected with Scan 309

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.5	97960	PASS
75	95	30	60	45.0	204779	PASS
95	95	100	100	100.0	455424	PASS
96	95	5	9	6.8	31024	PASS
173	174	0.00	2	1.0	4026	PASS
174	95	50	120	90.8	413440	PASS
175	174	5	9	7.7	31792	PASS
176	174	95	101	97.4	402752	PASS
177	176	5	9	6.5	26317	PASS

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003

Service Request: R1407422
Date Analyzed: 9/29/14 11:16

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa10\data\092914\A2419.D\
Instrument ID: R-MS-10

Analytical Method: 8260C
Analysis Lot: 413648

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	25.16	104069	Pass
75	95	30	60	49.25	203691	Pass
95	95	100	100	100.00	413583	Pass
96	95	5	9	6.70	27715	Pass
173	174	0	2	1.20	4323	Pass
174	95	50	120	86.93	359530	Pass
175	174	5	9	7.45	26775	Pass
176	174	95	101	95.47	343230	Pass
177	176	5	9	6.58	22585	Pass

Sample Name	Lab Code	File ID	Date Analyzed	Q
Continuing Calibration Verification	RQ1411994-04	I:\ACQUDATA\msvoa10\data\092914\A2420.D\	9/29/14 11:50	
Lab Control Sample	RQ1411994-02	I:\ACQUDATA\msvoa10\data\092914\A2421.D\	9/29/14 12:34	
Method Blank	RQ1411994-01	I:\ACQUDATA\msvoa10\data\092914\A2423.D\	9/29/14 13:36	
TRIP BLANK	R1407422-002	I:\ACQUDATA\msvoa10\data\092914\A2431.D\	9/29/14 17:34	
FB-092014	R1407422-007	I:\ACQUDATA\msvoa10\data\092914\A2432.D\	9/29/14 18:04	
FB-092114	R1407422-014	I:\ACQUDATA\msvoa10\data\092914\A2433.D\	9/29/14 18:34	
MW-13	R1407422-001	I:\ACQUDATA\msvoa10\data\092914\A2434.D\	9/29/14 19:03	
TMP-A	R1407422-003	I:\ACQUDATA\msvoa10\data\092914\A2435.D\	9/29/14 19:33	
MW-14	R1407422-006	I:\ACQUDATA\msvoa10\data\092914\A2437.D\	9/29/14 20:32	
MW-10	R1407422-013	I:\ACQUDATA\msvoa10\data\092914\A2438.D\	9/29/14 21:02	
MW-10MS	RQ1411994-05	I:\ACQUDATA\msvoa10\data\092914\A2439.D\	9/29/14 21:32	
MW-10DMS	RQ1411994-06	I:\ACQUDATA\msvoa10\data\092914\A2440.D\	9/29/14 22:01	

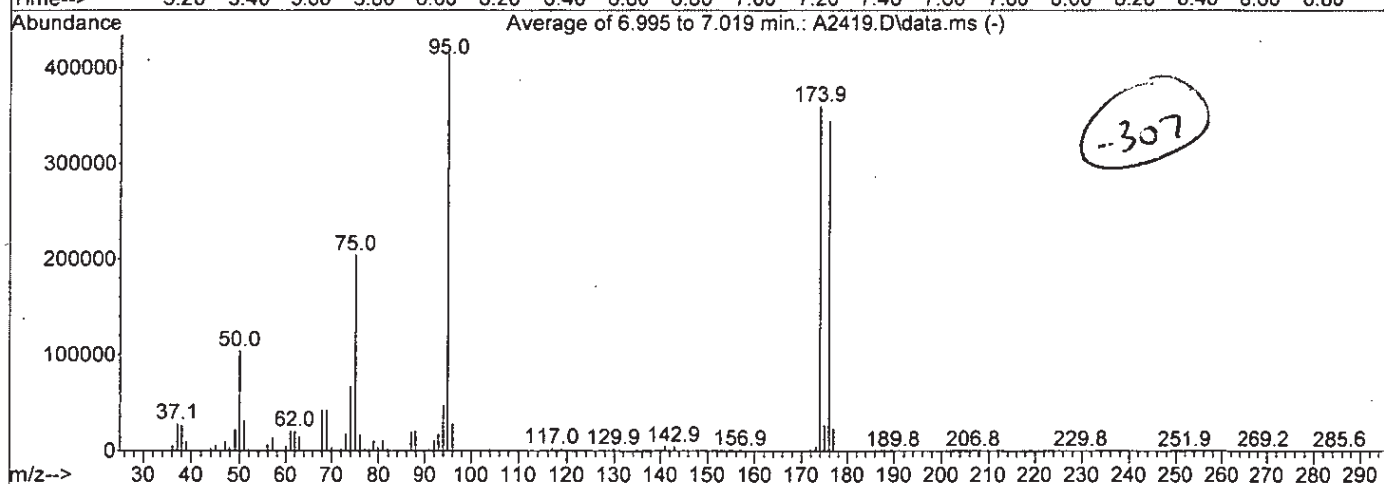
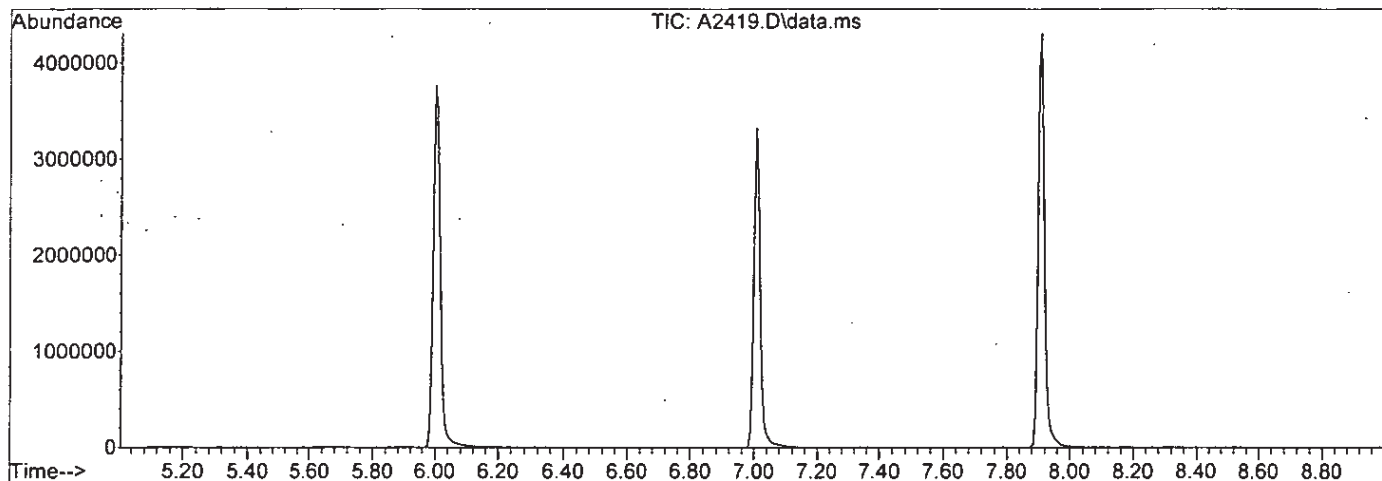
Data Path : I:\ACQUDATA\msvoa10\data\092914\
 Data File : A2419.D
 Acq On : 29 Sep 2014 11:16 am
 Operator : F.NAEGLER
 Sample : TUNE
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

R21411999-03

*FJ
9/29/14*

Integration File: CPD4.P

Method : I:\ACQUDATA\MSVOA10\METHODS\T072114.M
 Title : 8260B WATERS
 Last Update : Wed Sep 27 14:33:13 2006



Spectrum Information: Average of 6.995 to 7.019 min.

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
Mass	Mass	Limit%	Limit%	Abn%	Abn	Pass/Fail
50	95	15	40	25.2	104069	PASS
75	95	30	60	49.3	203691	PASS
95	95	100	100	100.0	413583	PASS
96	95	5	9	6.7	27715	PASS
173	174	0.00	2	1.2	4323	PASS
174	95	50	120	86.9	359530	PASS
175	174	5	9	7.4	26775	PASS
176	174	95	101	95.5	343230	PASS
177	176	5	9	6.6	22585	PASS

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003

Service Request: R1407422
Date Analyzed: 9/30/14 15:18

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa10\data\093014\A2472.D\
Instrument ID: R-MS-10

Analytical Method: 8260C
Analysis Lot: 413884

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	24.22	97243	Pass
75	95	30	60	48.13	193216	Pass
95	95	100	100	100.00	401451	Pass
96	95	5	9	6.54	26251	Pass
173	174	0	2	1.34	4801	Pass
174	95	50	120	88.96	357141	Pass
175	174	5	9	7.50	26768	Pass
176	174	95	101	96.04	342987	Pass
177	176	5	9	6.53	22392	Pass

Sample Name	Lab Code	File ID	Date Analyzed	Q
Continuing Calibration Verification	RQ1412027-04	I:\ACQUDATA\msvoa10\data\093014\A2473.D\	9/30/14 15:44	
Lab Control Sample	RQ1412027-02	I:\ACQUDATA\msvoa10\data\093014\A2474.D\	9/30/14 16:14	
Method Blank	RQ1412027-01	I:\ACQUDATA\msvoa10\data\093014\A2476.D\	9/30/14 17:14	
DMW-3	R1407422-005	I:\ACQUDATA\msvoa10\data\093014\A2479.D\	9/30/14 18:43	

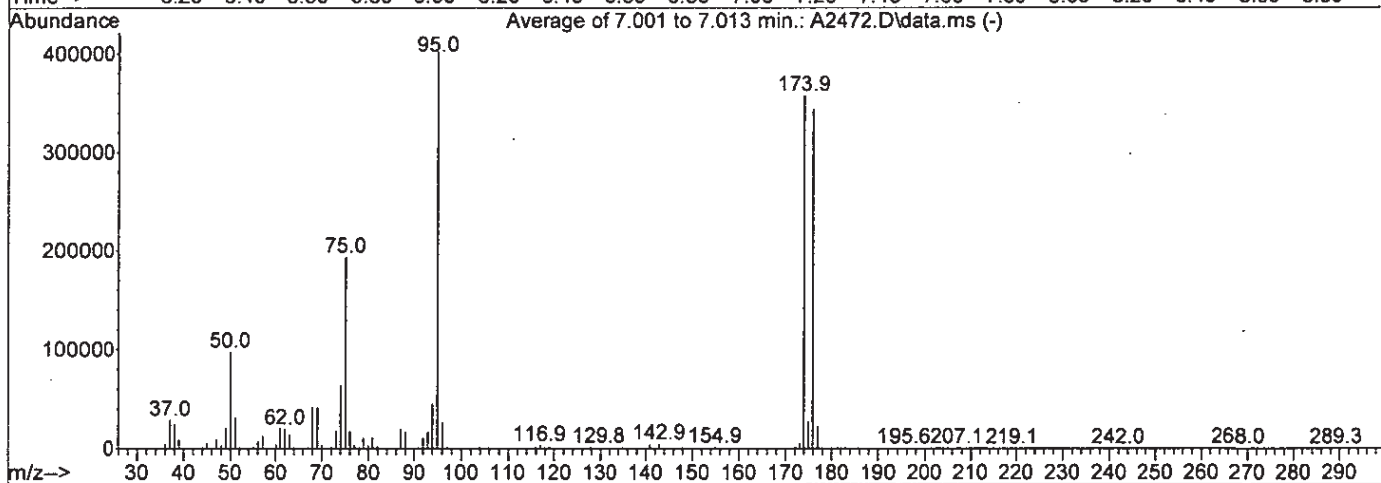
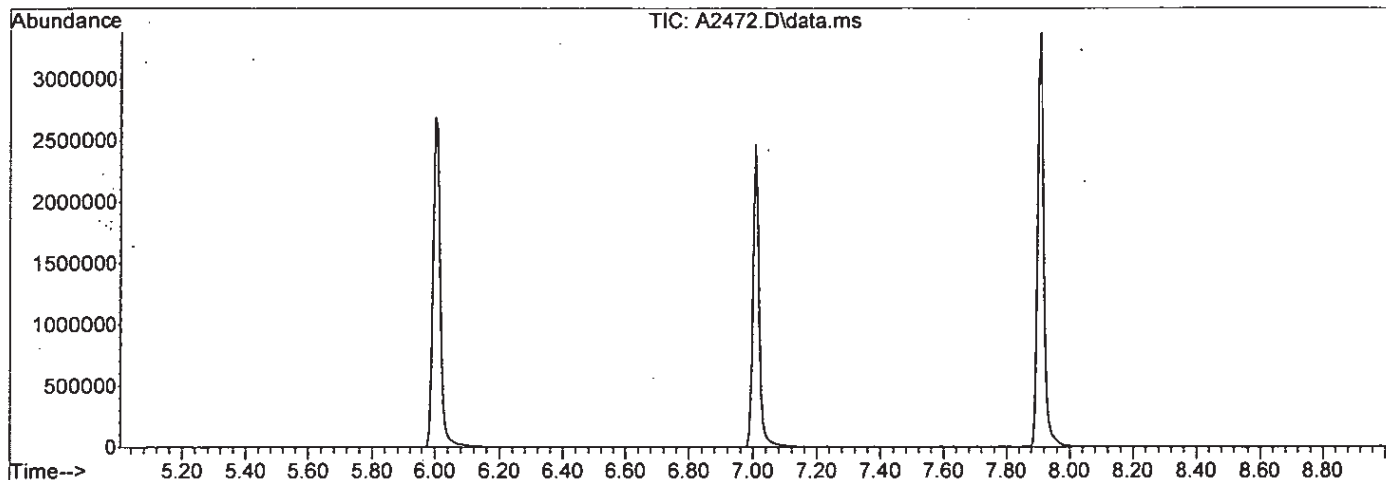
Data Path : I:\ACQUDATA\msvoa10\data\093014\
 Data File : A2472.D
 Acq On : 30 Sep 2014 3:18 pm
 Operator : F.NAEGLER
 Sample : TUNE
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

RQ112027-03

Integration File: CPD4.P

Method : I:\ACQUDATA\MSVOA10\METHODS\T072114.M
 Title : 8260B WATERS
 Last Update : Wed Sep 27 14:33:13 2006

FW 10/6/14



AutoFind: Scans 314, 315, 316; Background Corrected with Scan 309

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	24.2	97243	PASS
75	95	30	60	48.1	193216	PASS
95	95	100	100	100.0	401451	PASS
96	95	5	9	6.5	26251	PASS
173	174	0.00	2	1.3	4801	PASS
174	95	50	120	89.0	357141	PASS
175	174	5	9	7.5	26768	PASS
176	174	95	101	96.0	342987	PASS
177	176	5	9	6.5	22392	PASS

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003

Service Request: R1407422
Date Analyzed: 9/29/14 11:50

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa10\data\092914\A2420.D\
Instrument ID: R-MS-10
Analytical Method: 8260C

Lab Code: RQ1411994-04
Analysis Lot: 413648
Signal ID:

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	RT	Area	RT	Area	RT
Results ==>		894,324	10.84	1,817,382	5.61	1,577,455	8.84
Upper Limit ==>		1,788,648	11.34	3,634,764	6.11	3,154,910	9.34
Lower Limit ==>		447,162	10.34	908,691	5.11	788,728	8.34
ICAL Result ==>		701,453	10.83	1,398,556	5.61	1,270,603	8.84
Associated Analyses							
Lab Control Sample	RQ1411994-02	776,547	10.83	1,521,254	5.61	1,424,323	8.84
Method Blank	RQ1411994-01	703,025	10.83	1,458,461	5.61	1,317,507	8.84
TRIP BLANK	R1407422-002	670,789	10.83	1,433,355	5.61	1,288,894	8.84
FB-092014	R1407422-007	694,968	10.84	1,385,066	5.61	1,219,494	8.84
FB-092114	R1407422-014	669,090	10.83	1,416,350	5.61	1,296,995	8.84
MW-13	R1407422-001	723,548	10.84	1,420,679	5.61	1,333,195	8.84
TMP-A	R1407422-003	798,676	10.84	1,628,863	5.61	1,345,405	8.84
MW-14	R1407422-006	650,745	10.84	1,517,705	5.61	1,598,368	8.84
MW-10	R1407422-013	802,009	10.83	1,713,629	5.61	1,371,775	8.84
MW-10MS	RQ1411994-05	767,356	10.83	1,812,551	5.61	1,623,283	8.84
MW-10DMS	RQ1411994-06	767,139	10.83	1,668,971	5.61	1,407,968	8.84

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003

Service Request: R1407422
Date Analyzed: 9/29/14 11:50

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUADATA\msvoa10\data\092914\A2420.D\
Instrument ID: R-MS-10
Analytical Method: 8260C

Lab Code: RQ1411994-04
Analysis Lot: 413648
Signal ID:

		Pentafluorobenzene	
		Area	RT
Results ==>		1,224,634	4.40
Upper Limit ==>		2,449,268	4.90
Lower Limit ==>		612,317	3.90
ICAL Result ==>		949,160	4.41
Associated Analyses			
Lab Control Sample	RQ1411994-02	1,148,465	4.41
Method Blank	RQ1411994-01	1,091,801	4.41
TRIP BLANK	R1407422-002	995,461	4.41
FB-092014	R1407422-007	981,984	4.41
FB-092114	R1407422-014	1,002,929	4.41
MW-13	R1407422-001	1,135,972	4.40
TMP-A	R1407422-003	1,087,052	4.41
MW-14	R1407422-006	1,149,893	4.41
MW-10	R1407422-013	982,352	4.41
MW-10MS	RQ1411994-05	1,223,912	4.41
MW-10DMS	RQ1411994-06	1,126,824	4.40

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003

Service Request: R1407422
Date Analyzed: 9/30/14 15:44

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa10\data\093014\A2473.D\
Instrument ID: R-MS-10
Analytical Method: 8260C

Lab Code: RQ1412027-04
Analysis Lot: 413884
Signal ID:

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	RT	Area	RT	Area	RT
Results ==>		675,675	10.83	1,412,648	5.61	1,216,339	8.84
Upper Limit ==>		1,351,350	11.33	2,825,296	6.11	2,432,678	9.34
Lower Limit ==>		337,838	10.33	706,324	5.11	608,170	8.34
ICAL Result ==>		701,453	10.83	1,398,556	5.61	1,270,603	8.84
<i>Associated Analyses</i>							
Lab Control Sample	RQ1412027-02	675,896	10.83	1,349,355	5.61	1,044,288	8.84
Method Blank	RQ1412027-01	638,785	10.84	1,338,420	5.61	1,151,923	8.84
DMW-3	R1407422-005	559,209	10.83	1,270,990	5.61	1,152,056	8.84

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003

Service Request: R1407422
Date Analyzed: 9/30/14 15:44

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa10\data\093014\A2473.D\
Instrument ID: R-MS-10
Analytical Method: 8260C

Lab Code: RQ1412027-04
Analysis Lot: 413884
Signal ID:

		Pentafluorobenzene	
		<u>Area</u>	<u>RT</u>
Results ==>		960,198	4.41
Upper Limit ==>		1,920,396	4.91
Lower Limit ==>		480,099	3.91
ICAL Result ==>		949,160	4.41
<i>Associated Analyses</i>			
Lab Control Sample	RQ1412027-02	936,842	4.40
Method Blank	RQ1412027-01	887,209	4.41
DMW-3	R1407422-005	849,251	4.41

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003

Service Request: R1407422
Date Analyzed: 9/24/14 22:47

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS, Unpreserved

File ID: I:\ACQUDATA\msvoa10\data\092414\A2326.D\
Instrument ID: R-MS-10
Analytical Method: 8260C

Lab Code: RQ1411595-05
Analysis Lot: 412875
Signal ID:

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		<u>Area</u>	<u>RT</u>	<u>Area</u>	<u>RT</u>	<u>Area</u>	<u>RT</u>
Results ==>		702,471	10.83	1,310,463	5.61	1,194,458	8.84
Upper Limit ==>		1,404,942	11.33	2,620,926	6.11	2,388,916	9.34
Lower Limit ==>		351,236	10.33	655,232	5.11	597,229	8.34
ICAL Result ==>		701,453	10.83	1,398,556	5.61	1,270,603	8.84
Associated Analyses							
Lab Control Sample	RQ1411595-02	720,253	10.84	1,343,605	5.61	1,238,523	8.84
Duplicate Lab Control Sample	RQ1411595-03	764,156	10.84	1,457,217	5.61	1,347,115	8.84
Method Blank	RQ1411595-01	708,951	10.83	1,366,072	5.61	1,314,341	8.84
MW-8	R1407422-004	653,508	10.83	1,254,831	5.61	1,177,622	8.84
MW-11	R1407422-008	699,949	10.83	1,396,298	5.61	1,321,019	8.84
DUP-092014	R1407422-009	633,021	10.84	1,206,747	5.61	1,115,658	8.84
MW-17	R1407422-010	634,200	10.83	1,190,708	5.61	1,122,868	8.84
MW-16	R1407422-011	633,329	10.83	1,237,221	5.61	1,144,345	8.84
MW-9	R1407422-012	637,791	10.83	1,242,380	5.61	1,168,097	8.84

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003

Service Request: R1407422
Date Analyzed: 9/24/14 22:47

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS, Unpreserved

File ID: I:\ACQUDATA\msvoa10\data\092414\A2326.D\
Instrument ID: R-MS-10
Analytical Method: 8260C

Lab Code: RQ1411595-05
Analysis Lot: 412875
Signal ID:

		Pentafluorobenzene	
		Area	RT
Results ==>		936,004	4.41
Upper Limit ==>		1,872,008	4.91
Lower Limit ==>		468,002	3.91
ICAL Result ==>		949,160	4.41

Associated Analyses

Lab Control Sample	RQ1411595-02	929,850	4.41
Duplicate Lab Control Sample	RQ1411595-03	990,069	4.41
Method Blank	RQ1411595-01	925,308	4.41
MW-8	R1407422-004	879,006	4.41
MW-11	R1407422-008	918,757	4.41
DUP-092014	R1407422-009	839,257	4.41
MW-17	R1407422-010	844,224	4.41
MW-16	R1407422-011	871,767	4.41
MW-9	R1407422-012	866,035	4.41

Results flagged with an asterisk (*) indicate values outside control criteria.



VOLATILE ORGANICS SAMPLE DATA

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: 9/20/14 12:14
Date Received: 9/23/14
Date Analyzed: 9/29/14 19:03

Sample Name: MW-13
Lab Code: R1407422-001

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msv0a10\data\092914\A2434.D\

Analysis Lot: 413648
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	5.0	U	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	5.0	U	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0	U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	5.0	U	5.0	0.22	
75-01-4	Vinyl Chloride	5.0	U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	85-122	9/29/14 19:03	
Dibromofluoromethane	109	89-119	9/29/14 19:03	
Toluene-d8	112	87-121	9/29/14 19:03	

Sample : R1407422-001|1.0
 Data File : I:\ACQUDATA\MSVOA10\DATA\092914\A2434.D Vial: 16
 Acq On : 29 Sep 2014 7:03 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 6646 T4

Quant Time: Sep 29 19:16:47 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.403	168	1135972	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1420679	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.842	117	1333195	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	723548	50.00	ug/L	0.00

System Monitoring Compounds						
45) surr4,Dibrflmethane	4.318	113	495750	54.73	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	109.46%
48) surr1,1,2-dichloroetha...	4.854	65	509443	53.29	ug/L	0.00
Spiked Amount	50.000	Range	78 - 122	Recovery	=	106.58%
65) SURR3,Toluene-d8	7.427	98	1779546	55.78	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	111.56%
70) SURR2,BFB	9.878	95	644738	51.35	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	102.70%

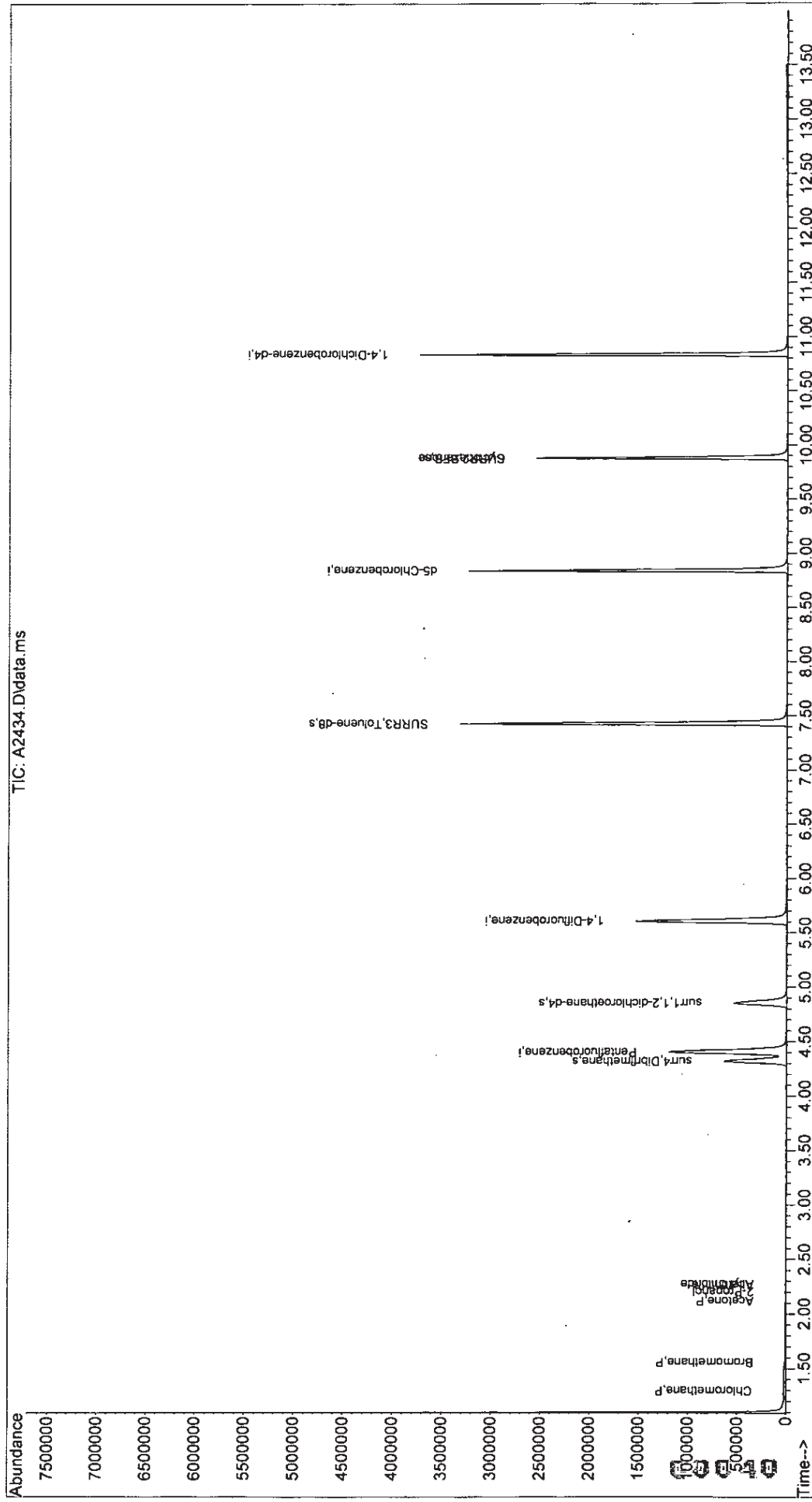
Target Compounds						Qvalue
3) Chloromethane	1.294	50	3307	0.20	ug/L	92
5) Bromomethane	1.556	94	814	0.32	ug/L	91
15) Acetone	2.117	43	1159	0.34	ug/L #	55
16) 2-Propanol	2.203	45	3233	6.61	ug/L	89
19) Acetonitrile	2.264	40	1137	3.07	ug/L #	1
20) Allyl Chloride	2.270	76	1905	0.38	ug/L #	1
89) Cyclohexanone	9.878	55	2056	1.68	ug/L #	13

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

Fu
10/6/14

Sample : R1407422-00111.0
 Data File : I:\ACQDATA\MSVOA10\DATA\092914\A2434.D Vial: 16
 Acq On : 29 Sep 2014 7:03 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 6646 T4

Quant Time: Sep 29 19:16:47 2014
 Quant Method : I:\ACQDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 Qlast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: 9/20/14 1100
Date Received: 9/23/14
Date Analyzed: 9/29/14 17:34

Sample Name: TRIP BLANK
Lab Code: R1407422-002

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\092914\A2431.D\

Analysis Lot: 413648
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	5.0	U	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	5.0	U	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0	U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	5.0	U	5.0	0.22	
75-01-4	Vinyl Chloride	5.0	U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85-122	9/29/14 17:34	
Dibromofluoromethane	103	89-119	9/29/14 17:34	
Toluene-d8	95	87-121	9/29/14 17:34	

Sample : R1407422-002|1.0
 Data File : I:\ACQUDATA\MSVOA10\DATA\092914\A2431.D Vial: 13
 Acq On : 29 Sep 2014 5:34 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 6646 T4

Quant Time: Sep 29 17:47:47 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

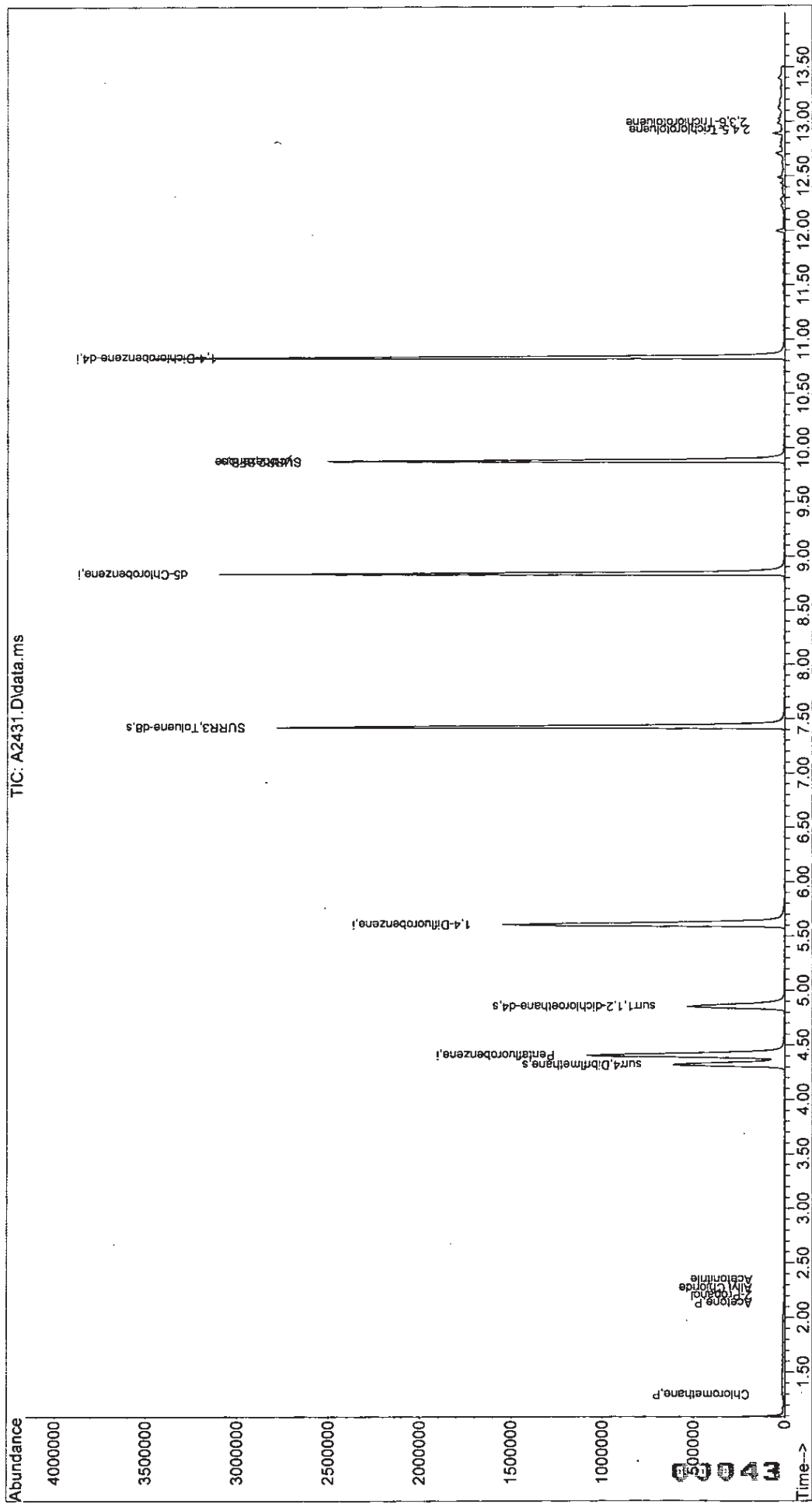
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	995461	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1433355	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1288894	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	670789	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.318	113	471762	51.62	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	103.24%
48) surr1,1,2-dichloroetha...	4.854	65	495228	51.34	ug/L	0.00
Spiked Amount	50.000	Range	78 - 122	Recovery	=	102.68%
65) SURR3,Toluene-d8	7.427	98	1536195	47.72	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	95.44%
70) SURR2,BFB	9.878	95	634342	50.08	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	100.16%
Target Compounds						
						Qvalue
3) Chloromethane	1.294	50	3830	0.27	ug/L	93
15) Acetone	2.135	43	1198	0.40	ug/L #	56
16) 2-Propanol	2.202	45	329	0.77	ug/L	75
19) Acetonitrile	2.349	40	891	2.74	ug/L #	1
20) Allyl Chloride	2.269	76	2273	0.52	ug/L #	1
89) Cyclohexanone	9.878	55	2127	1.79	ug/L #	15
119) 2,4,5-Trichlorotoluene	12.926	159	1563	0.33	ug/L #	32
120) 2,3,6-Trichlorotoluene	12.993	159	1049	0.22	ug/L #	66

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

FW
10/6/14

Sample : R1407422-002|1.0
 Data File : I:\ACQUDATA\MSVOA10\DATA\092914\A2431.D Vial: 13
 Acq On : 29 Sep 2014 5:34 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 6646 T4

Quant Time: Sep 29 17:47:47 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 Qlast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: 9/20/14 1230
Date Received: 9/23/14
Date Analyzed: 9/29/14 19:33

Sample Name: TMP-A
Lab Code: R1407422-003

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msv0a10\data\092914\A2435.D\

Analysis Lot: 413648
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	5.0	U	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	0.52	J	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0	U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	5.0	U	5.0	0.22	
75-01-4	Vinyl Chloride	5.0	U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	85-122	9/29/14 19:33	
Dibromofluoromethane	99	89-119	9/29/14 19:33	
Toluene-d8	97	87-121	9/29/14 19:33	

Sample : R1407422-003|1.0
 Data File : I:\ACQUDATA\MSVOA10\DATA\092914\A2435.D Vial: 17
 Acq On : 29 Sep 2014 7:33 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 6646 T4

Quant Time: Sep 29 19:46:29 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

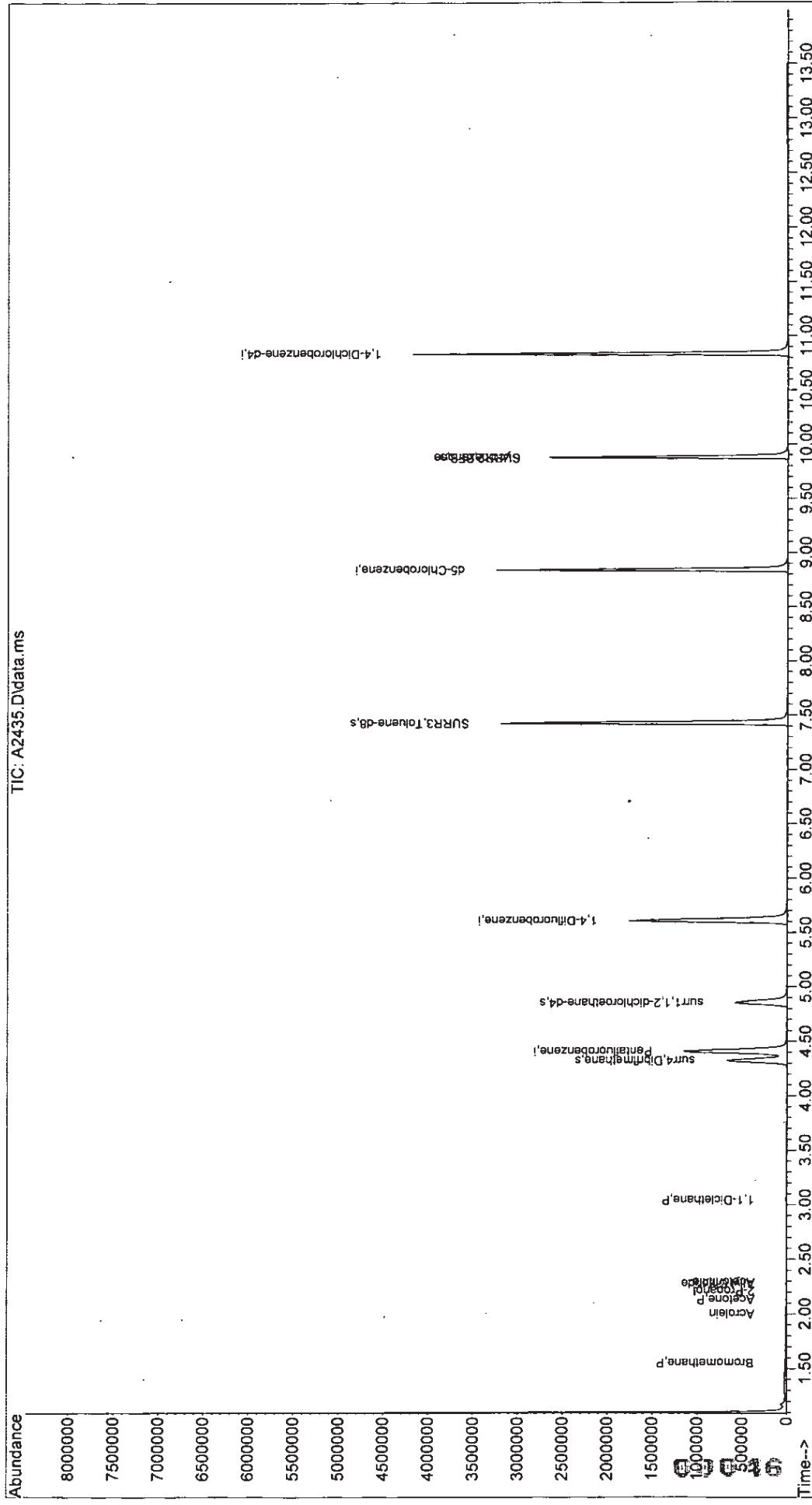
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	1087052	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1628863	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1345405	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	798676	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.324	113	512278	49.32	ug/L	0.00
Spiked Amount	50.000	Range 89 - 119	Recovery	=	98.64%	
48) surr1,1,2-dichloroetha...	4.854	65	554885	50.62	ug/L	0.00
Spiked Amount	50.000	Range 78 - 122	Recovery	=	101.24%	
65) SURR3,Toluene-d8	7.427	98	1772102	48.44	ug/L	0.00
Spiked Amount	50.000	Range 87 - 121	Recovery	=	96.88%	
70) SURR2,BFB	9.878	95	665973	46.26	ug/L	0.00
Spiked Amount	50.000	Range 85 - 122	Recovery	=	92.52%	
Target Compounds						
					Qvalue	
5) Bromomethane	1.550	94	739	0.31	ug/L #	31
12) Acrolein	2.001	56	282	0.21	ug/L #	35
15) Acetone	2.129	43	2709	0.82	ug/L	86
16) 2-Propanol	2.209	45	348	0.74	ug/L #	40
19) Acetonitrile	2.288	40	2054	5.79	ug/L #	1
20) Allyl Chloride	2.276	76	2260	0.47	ug/L #	1
28) 1,1-Dicethane	3.044	63	10772	0.52	ug/L	88
89) Cyclohexanone	9.878	55	2036	1.64	ug/L #	13

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

FJ
10/6/14

Sample : R1407422-00311.0
 Data File : I:\ACQDATA\MSVOA10\DATA\092914\A2435.D Vial: 17
 Acq On : 29 Sep 2014 7:33 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 6646 T4

Quant Time: Sep 29 19:46:29 2014
 Quant Method : I:\ACQDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: 9/20/14 1321
Date Received: 9/23/14
Date Analyzed: 9/25/14 04:15

Sample Name: MW-8
Lab Code: R1407422-004

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msv0a10\data\092414\A2337.D\

Analysis Lot: 412875
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	4.7	J	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	3.9	J	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0	U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	3.9	J	5.0	0.22	
75-01-4	Vinyl Chloride	5.0	U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	0.67	J	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85-122	9/25/14 04:15	
Dibromofluoromethane	100	89-119	9/25/14 04:15	
Toluene-d8	98	87-121	9/25/14 04:15	

Sample : R1407422-004|1.0
 Data File : I:\ACQUDATA\msvoa10\data\092414\A2337.D Vial: 38
 Acq On : 25 Sep 2014 4:15 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 7979 T4

Quant Time: Sep 25 08:32:43 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	879006	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1254831	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1177622	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	653508	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.318	113	398845	49.85	ug/L	0.00
Spiked Amount	50.000	Range 89 - 119	Recovery	=	99.70%	
48) surr1,1,2-dichloroetha...	4.854	65	389794	46.16	ug/L	0.00
Spiked Amount	50.000	Range 78 - 122	Recovery	=	92.32%	
65) SURR3,Toluene-d8	7.427	98	1386243	49.19	ug/L	0.00
Spiked Amount	50.000	Range 87 - 121	Recovery	=	98.38%	
70) SURR2,BFB	9.878	95	556974	50.23	ug/L	0.00
Spiked Amount	50.000	Range 85 - 122	Recovery	=	100.46%	
Target Compounds						
					Qvalue	
5) Bromomethane	1.556	94	614	0.32	ug/L	83
10) Freon 123a	1.928	67	75120	7.36	ug/L	96
11) Freon 123	1.928	83	5275	0.49	ug/L #	1
12) Acrolein	1.934	56	233	0.22	ug/L #	15
14) Freon 113	2.093	101	40314	5.21	ug/L	94
15) Acetone	2.123	43	32115	12.00	ug/L	99
19) Acetonitrile	2.318	40	526	1.83	ug/L #	1
20) Allyl Chloride	2.270	76	3618	0.94	ug/L #	1
28) 1,1-Dicethane	OK 3.050	63	65075	3.90	ug/L	98
34) cis-1,2-Dichloroethene	3.690	96	5777 5224	0.67 0.60	ug/L	99 FU 9/28/14
35) 2-Butanone	3.775	43	1088	0.31	ug/L	72
40) Chloroform	4.098	83	8910	0.61	ug/L	85
41) 1,1,1-Trichloroethane	4.361	97	56385	4.68	ug/L	98
49) Benzene	4.964	78	7676650	0.25 0.22	ug/L	78 FU 9/28/14
54) Trichloroethene	5.970	130	33205	3.88	ug/L	95
89) Cyclohexanone	9.878	55	1356	1.25	ug/L #	21

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

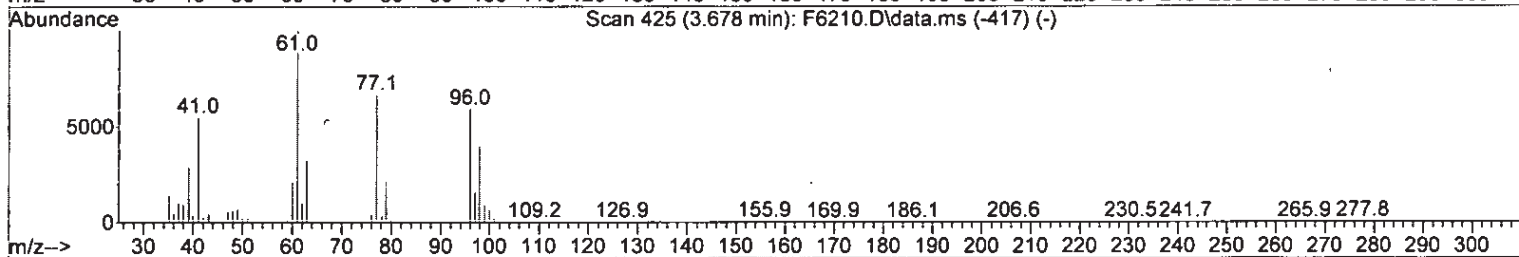
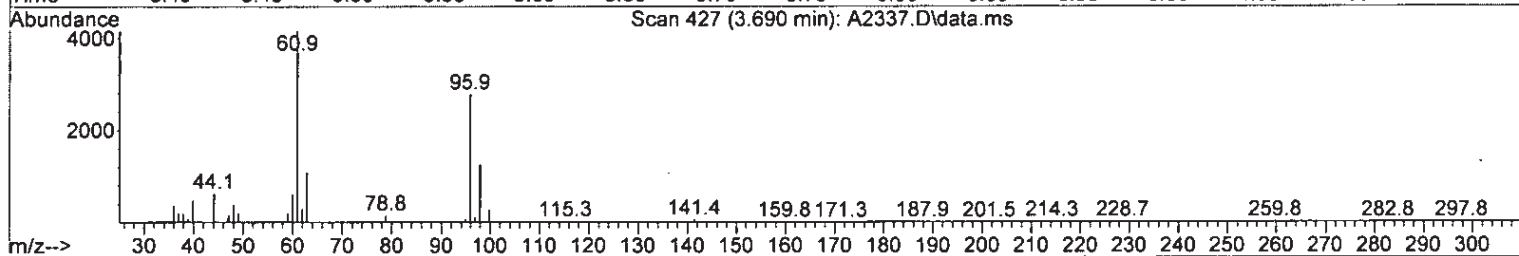
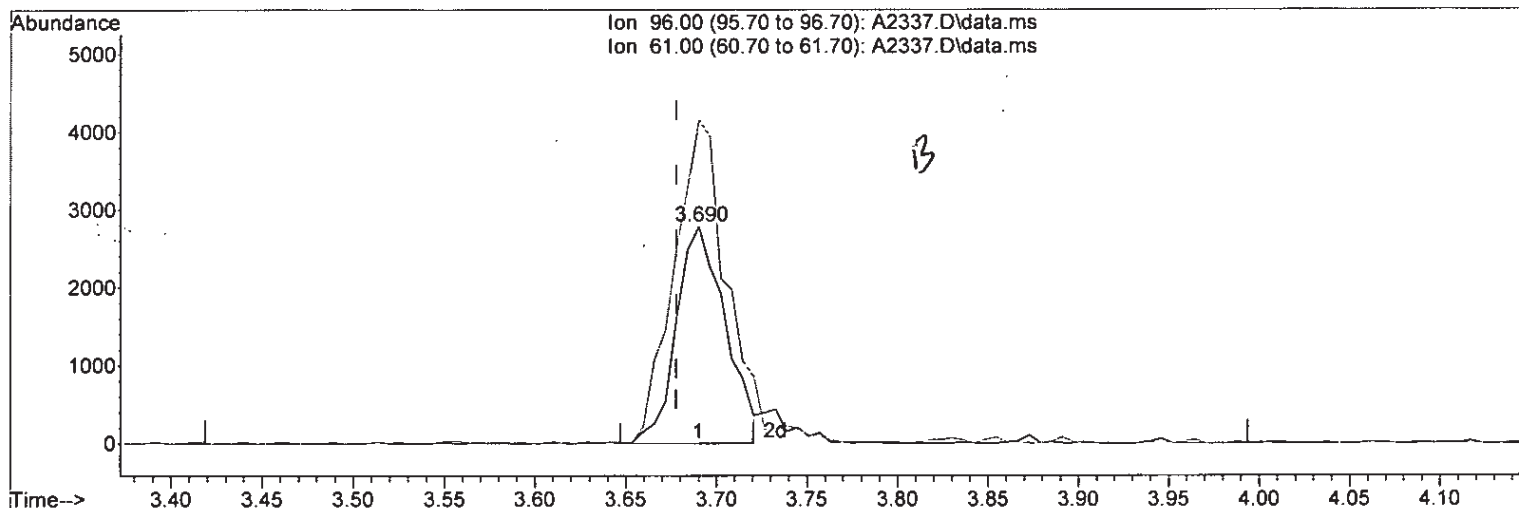
FU 9/28/14

YK 9/29/14

Quantitation Report (Qedit)

Sample : R1407422-004|1.0
 Data File : I:\ACQUDATA\msvoa10\data\092414\A2337.D Vial: 38
 Acq On : 25 Sep 2014 4:15 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 7979 T4

Quant Time: Sep 25 08:32:43 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration



TIC: A2337.D\data.ms

(34) cis-1,2-Dichloroethene (P)

3.690min (+0.012) 0.60 ug/L

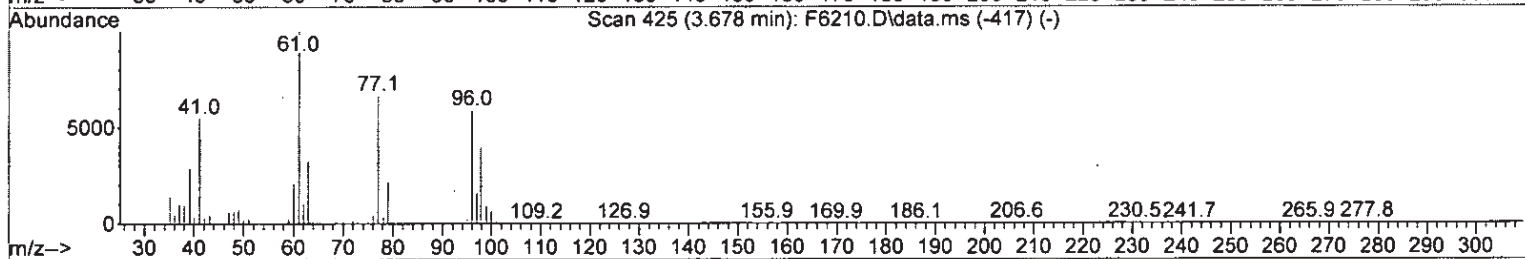
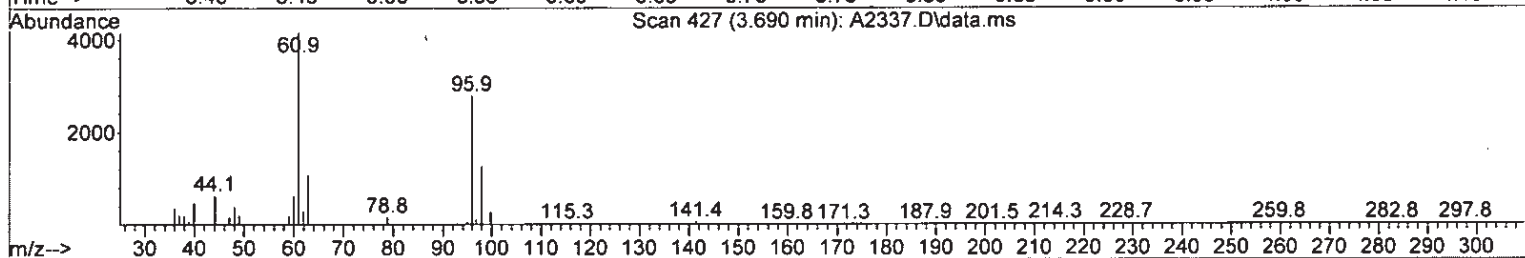
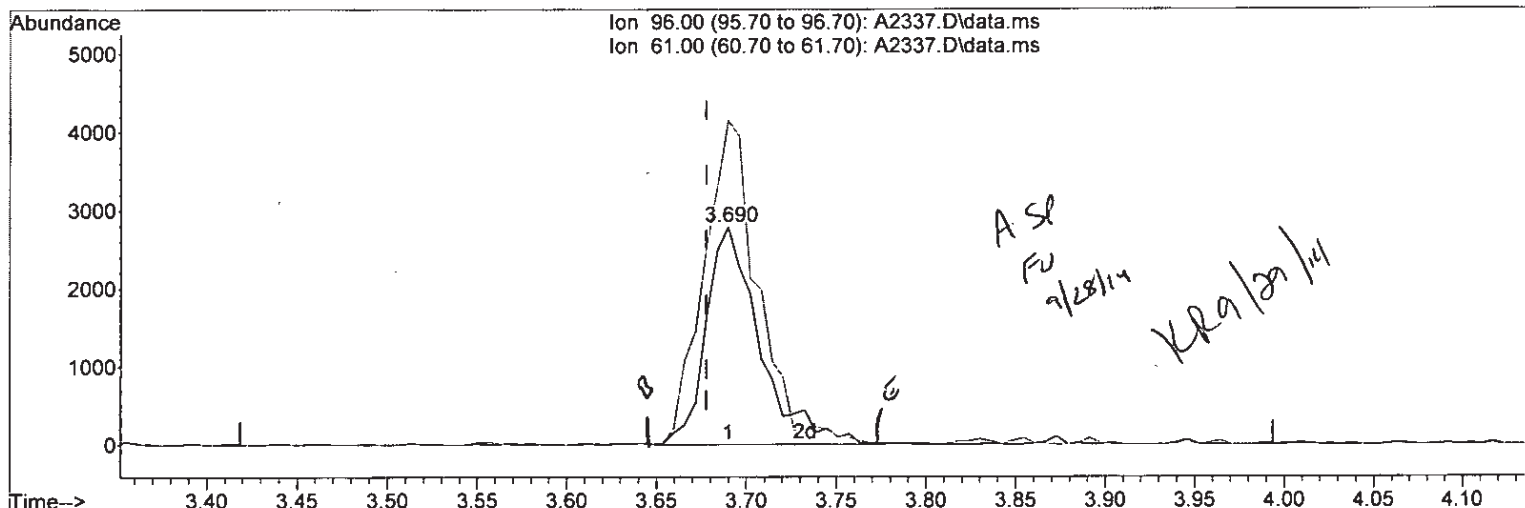
response 5224

Ion	Exp%	Act%
96.00	100	100
61.00	148.30	149.03
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : R1407422-004|1.0
 Data File : I:\ACQUDATA\msvoa10\data\092414\A2337.D Vial: 38
 Acq On : 25 Sep 2014 4:15 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 7979 T4

Quant Time: Sep 25 08:32:43 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration



TIC: A2337.D\data.ms

(34) cis-1,2-Dichloroethene (P)

3.690min (+0.012) 0.67 ug/L m

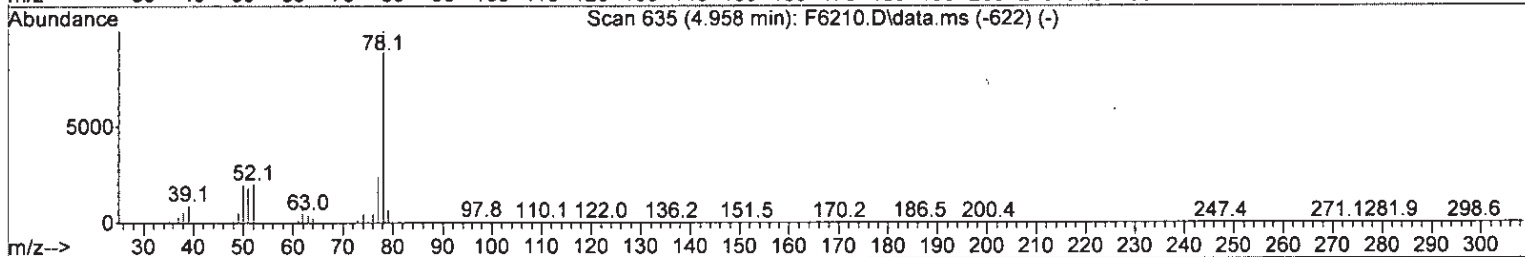
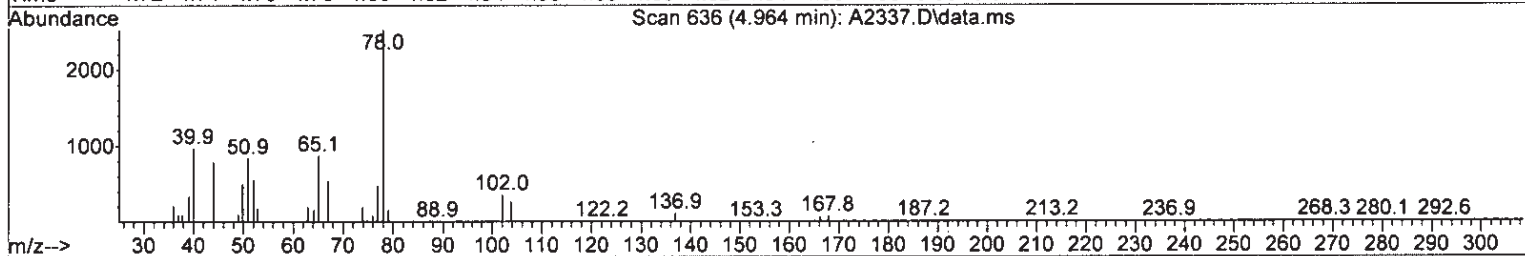
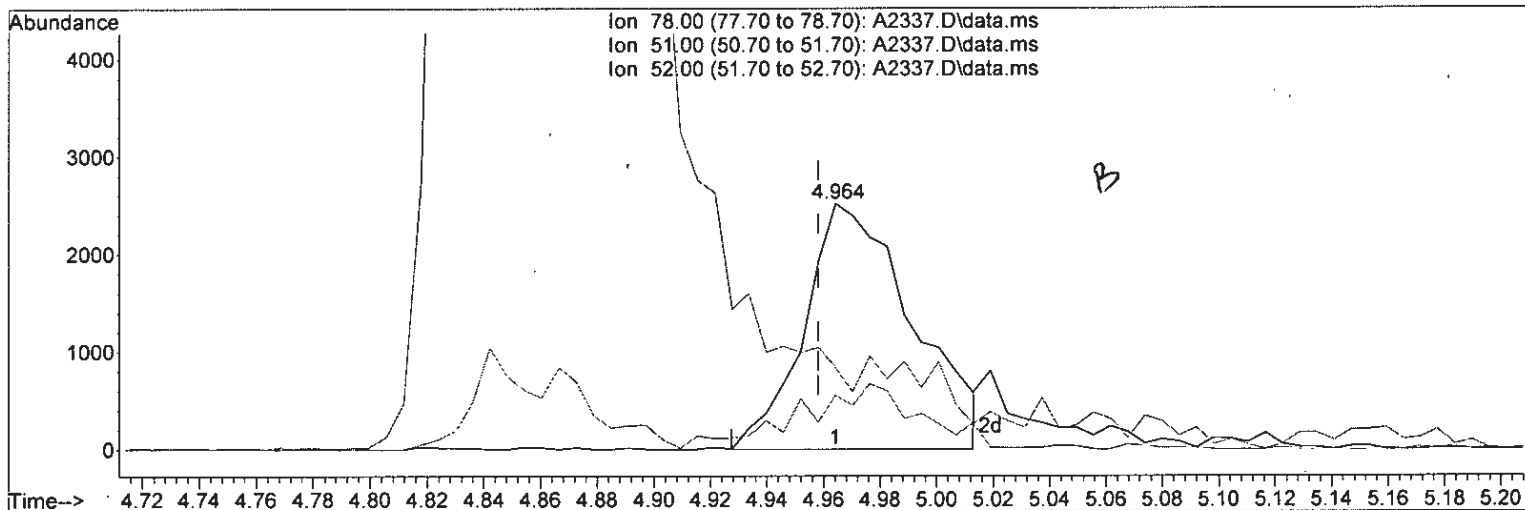
response 5749

Ion	Exp%	Act%
96.00	100	100
61.00	148.30	149.03
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : R1407422-004|1.0
 Data File : I:\ACQUDATA\msvoa10\data\092414\A2337.D Vial: 38
 Acq On : 25 Sep 2014 4:15 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 7979 T4

Quant Time: Sep 25 08:32:43 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration



TIC: A2337.D\data.ms

(49) Benzene (P)

4.964min (+0.006) 0.22 ug/L

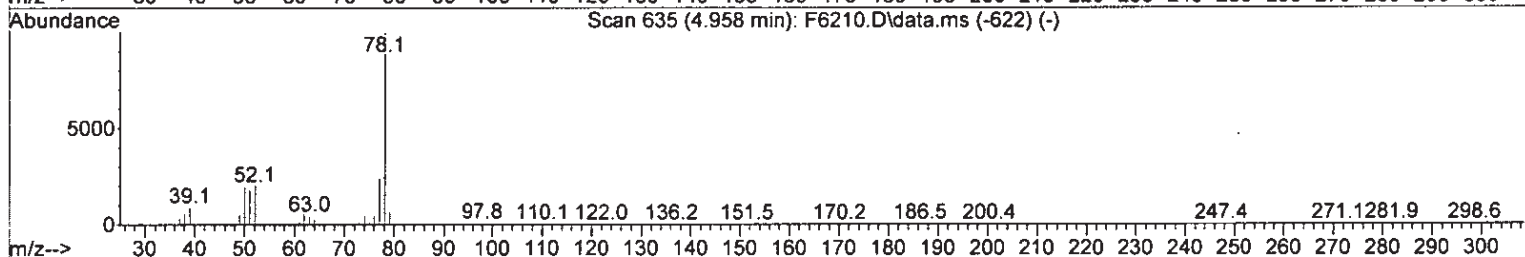
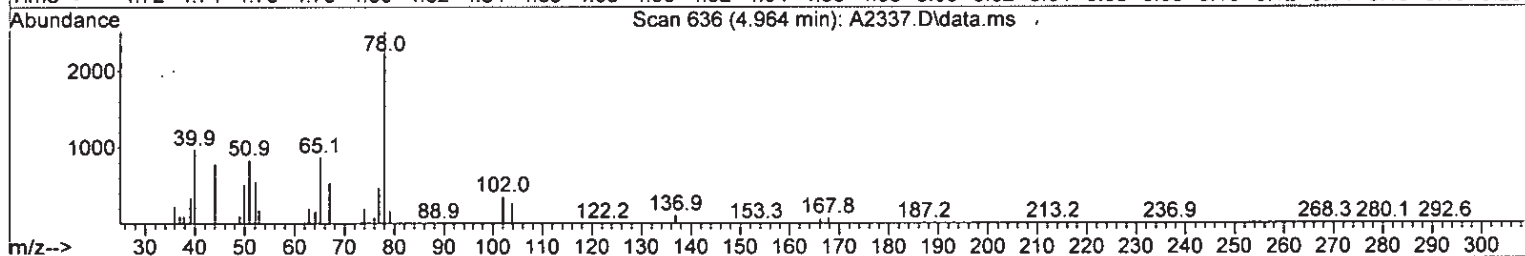
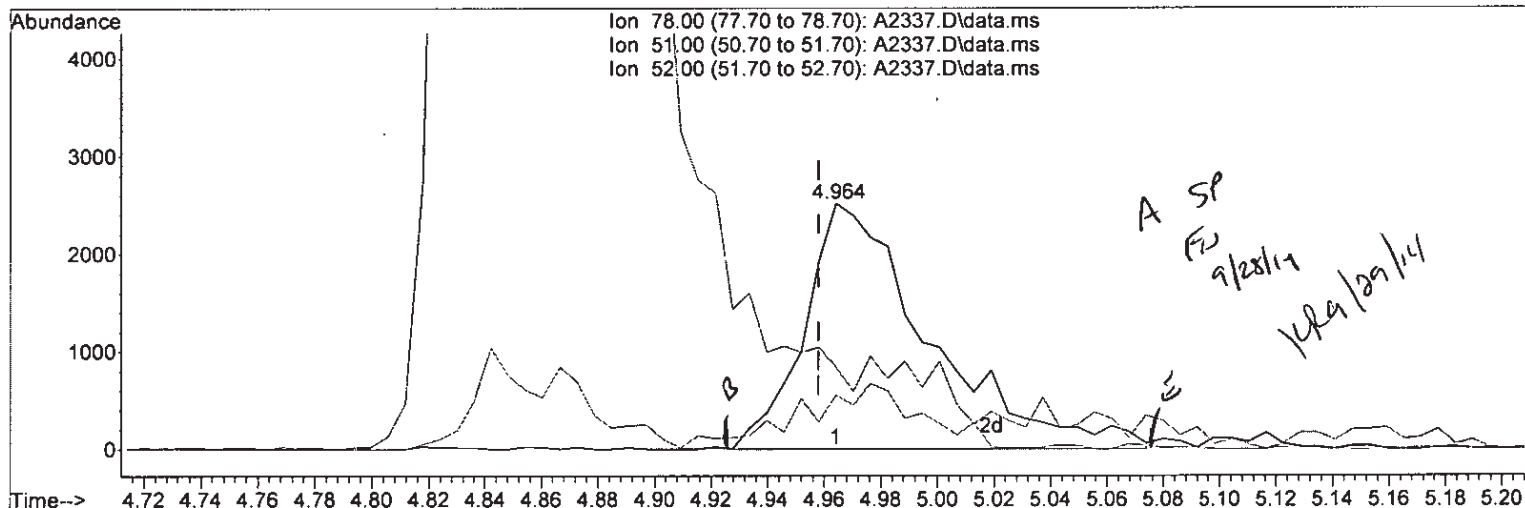
response 6650

Ion	Exp%	Act%
78.00	100	100
51.00	19.40	33.16
52.00	16.90	21.99
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : R1407422-004|1.0
 Data File : I:\ACQUDATA\msvoa10\data\092414\A2337.D Vial: 38
 Acq On : 25 Sep 2014 4:15 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 7979 T4

Quant Time: Sep 25 08:32:43 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration



TIC: A2337.D\data.ms

(49) Benzene (P)

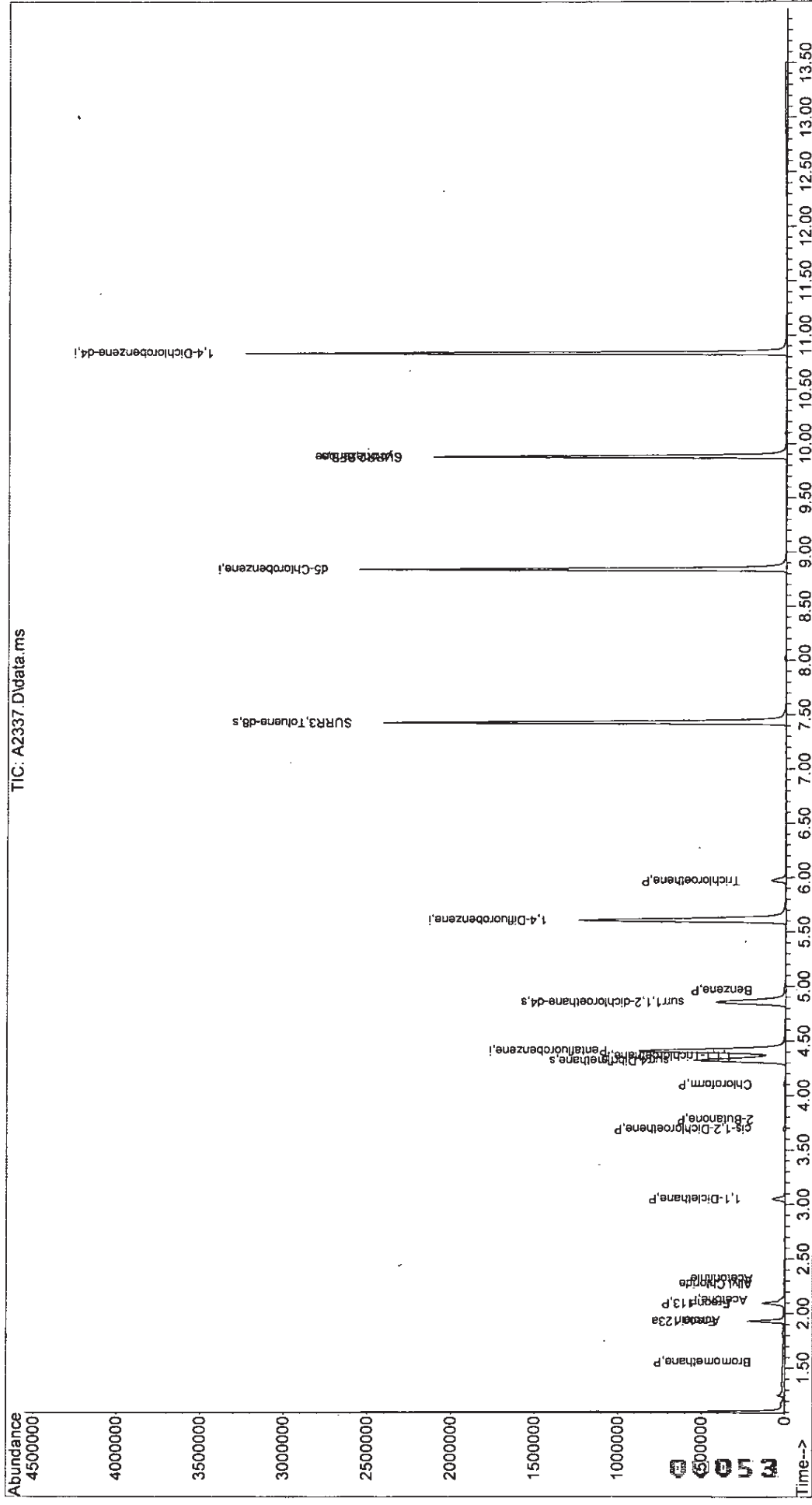
4.964min (+0.006) 0.25 ug/L m

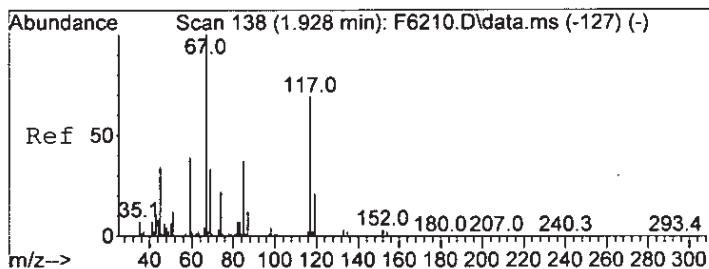
response 7667

Ion	Exp%	Act%
78.00	100	100
51.00	19.40	33.16
52.00	16.90	21.99
0.00	0.00	0.00

Sample : R1407422-00411.0
Data File : I:\ACQDATA\msvoa10\data\092414\A2337.D Vial: 38
Acq On : 25 Sep 2014 4:15 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc : VERINA 7979 T4

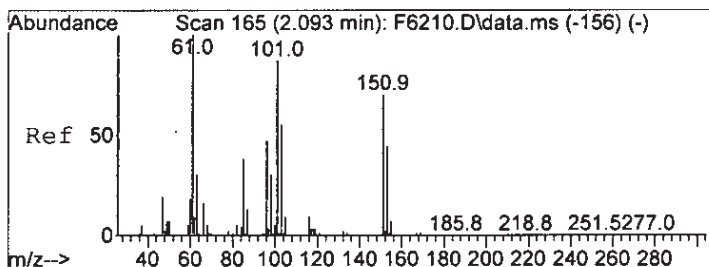
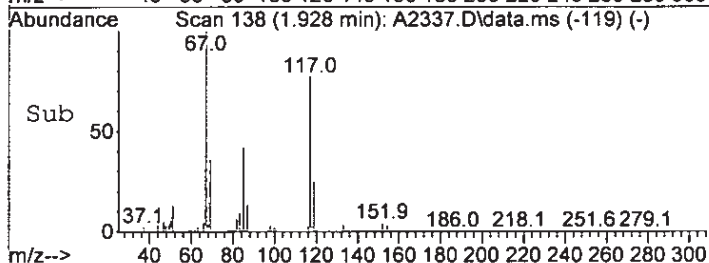
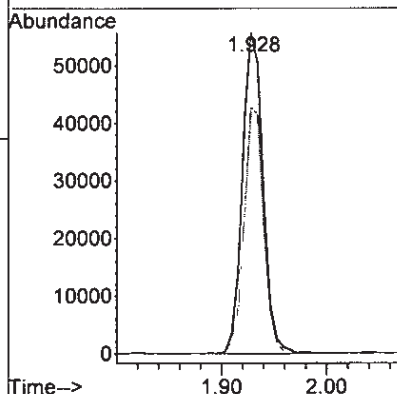
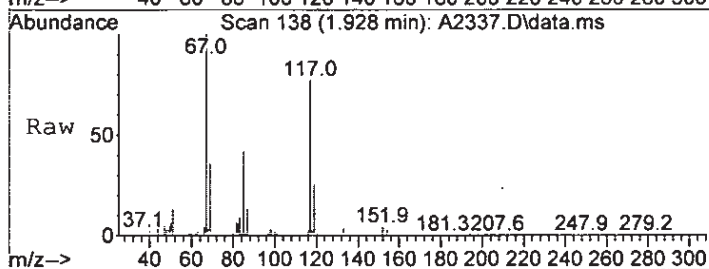
Quant Time: Sep 25 08:32:43 2014
Quant Method : I:\ACQDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration





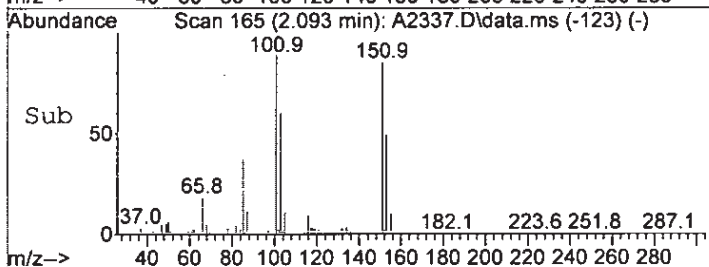
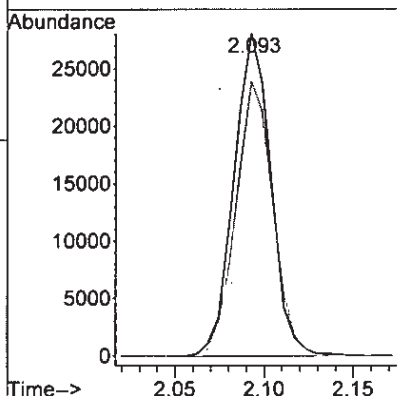
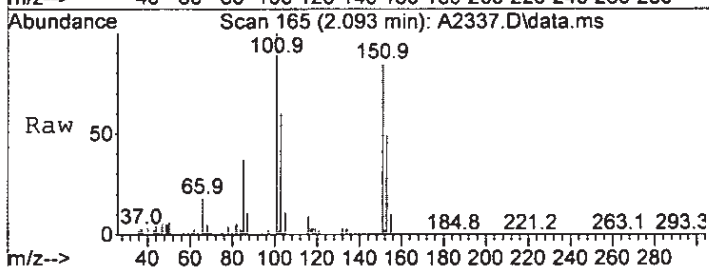
#10
 Freon 123a
 Concen: 7.36 ug/L
 RT: 1.928 min Scan# 138
 Delta R.T. -0.000 min
 Lab File: A2337.D
 Acq: 25 Sep 2014 4:15 am

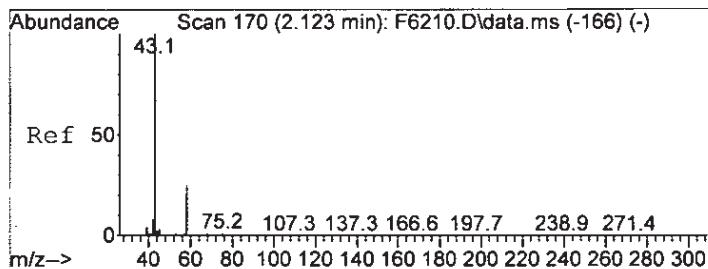
Tgt Ion: 67 Resp: 75120
 Ion Ratio Lower Upper
 67 100
 117 76.7 53.0 93.0



#14
 Freon 113
 Concen: 5.21 ug/L
 RT: 2.093 min Scan# 165
 Delta R.T. -0.000 min
 Lab File: A2337.D
 Acq: 25 Sep 2014 4:15 am

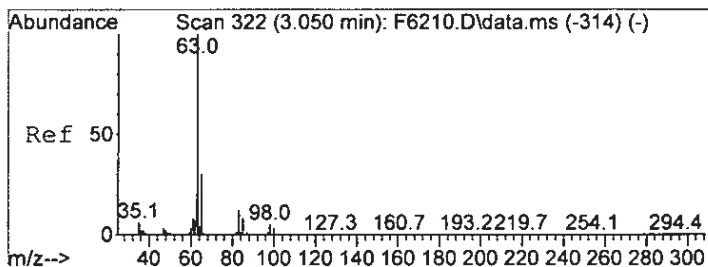
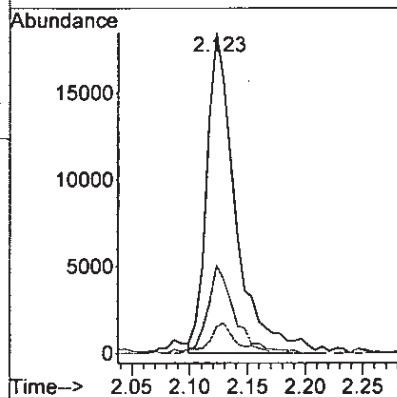
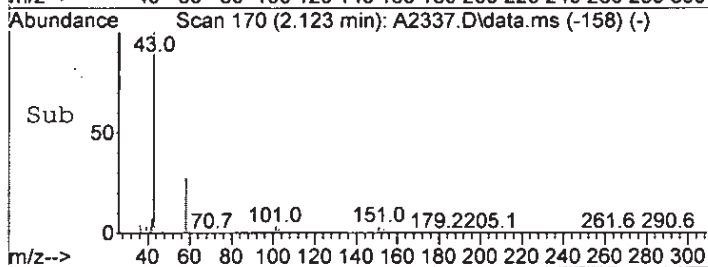
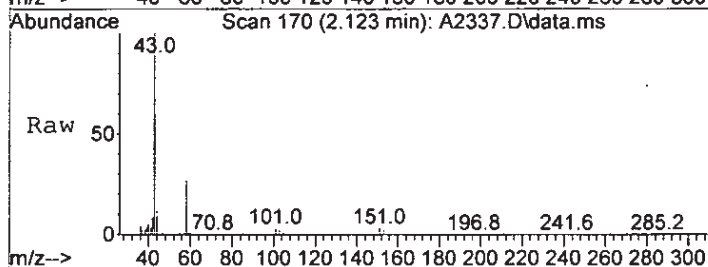
Tgt Ion: 101 Resp: 40314
 Ion Ratio Lower Upper
 101 100
 151 85.2 60.3 100.3





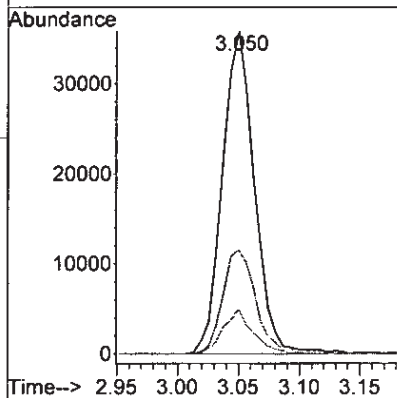
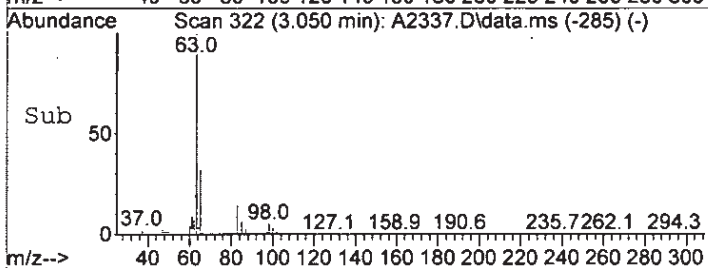
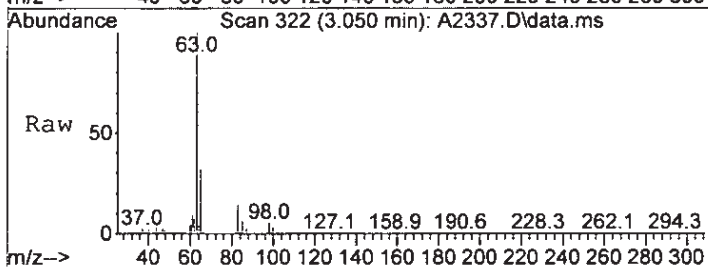
#15
Acetone
Concen: 12.00 ug/L
RT: 2.123 min Scan# 170
Delta R.T. 0.000 min
Lab File: A2337.D
Acq: 25 Sep 2014 4:15 am

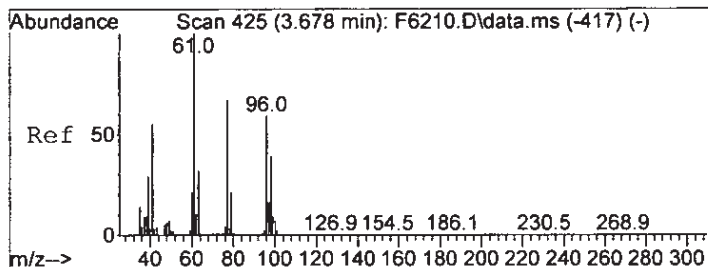
Tgt Ion: 43 Resp: 32115
Ion Ratio Lower Upper
43 100
58 27.5 7.2 47.2
42 8.2 0.0 27.0



#28
1,1-Dicethane
Concen: 3.90 ug/L
RT: 3.050 min Scan# 322
Delta R.T. -0.000 min
Lab File: A2337.D
Acq: 25 Sep 2014 4:15 am

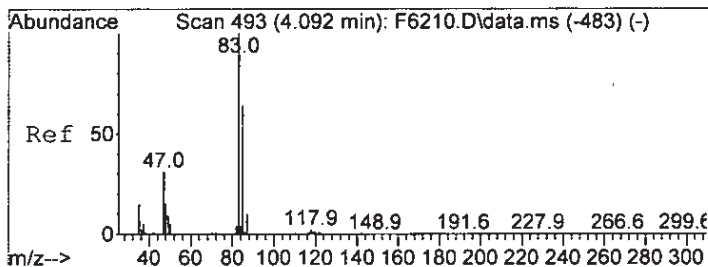
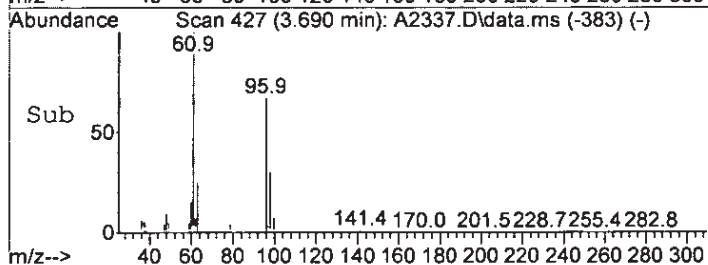
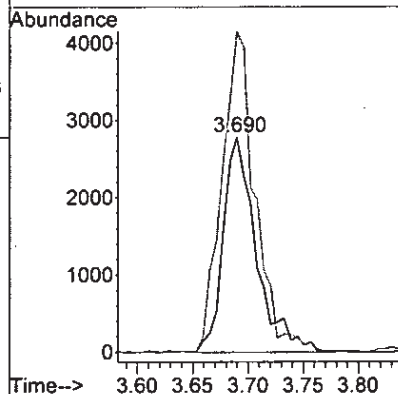
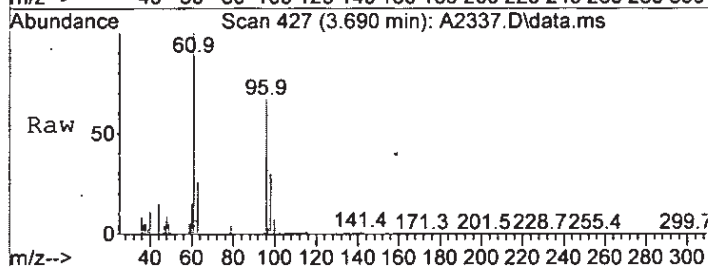
Tgt Ion: 63 Resp: 65075
Ion Ratio Lower Upper
63 100
65 32.1 11.1 51.1
83 13.8 0.0 33.1





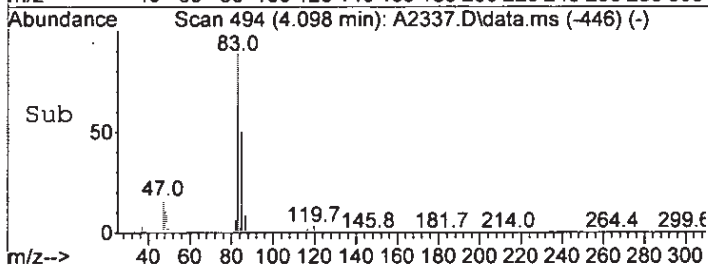
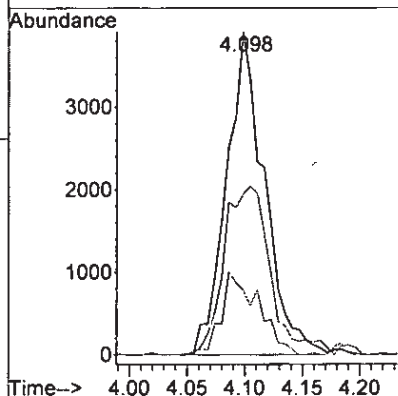
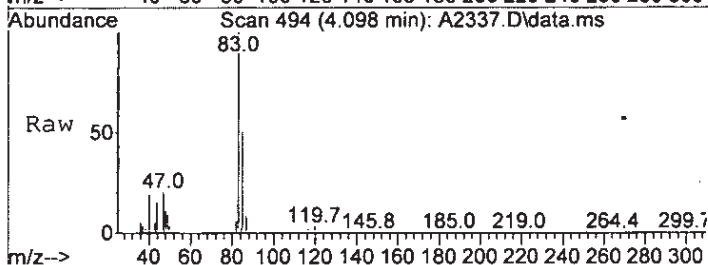
#34
 cis-1,2-Dichloroethene
 Concen: 0.67 ug/L m
 RT: 3.690 min Scan# 427
 Delta R.T. 0.012 min
 Lab File: A2337.D
 Acq: 25 Sep 2014 4:15 am

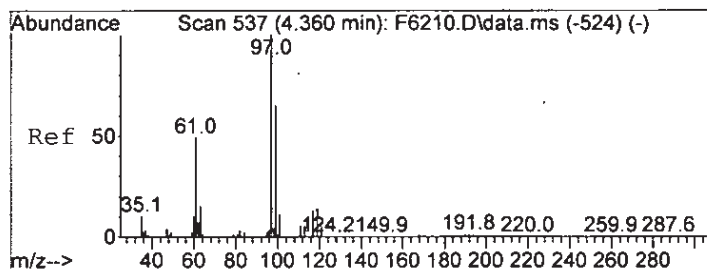
Tgt Ion: 96 Resp: 5749
 Ion Ratio Lower Upper
 96 100
 61 149.0 128.3 168.3



#40
 Chloroform
 Concen: 0.61 ug/L
 RT: 4.098 min Scan# 494
 Delta R.T. 0.006 min
 Lab File: A2337.D
 Acq: 25 Sep 2014 4:15 am

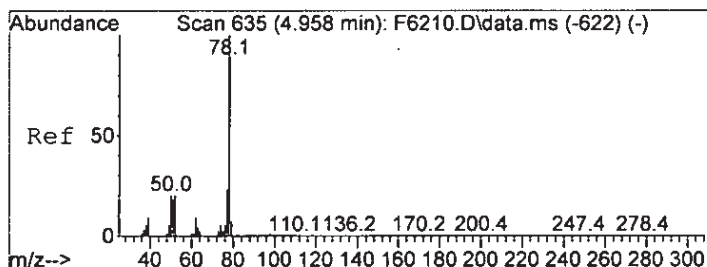
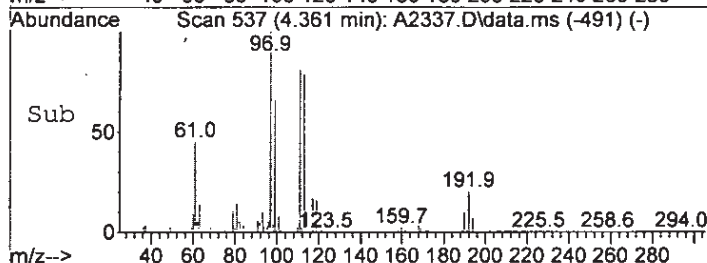
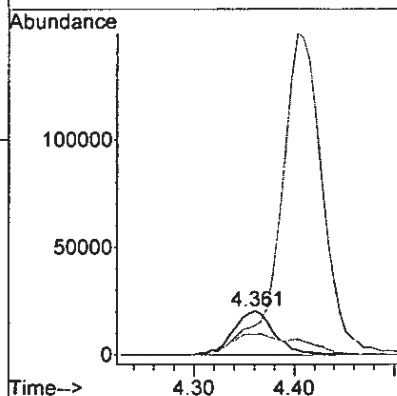
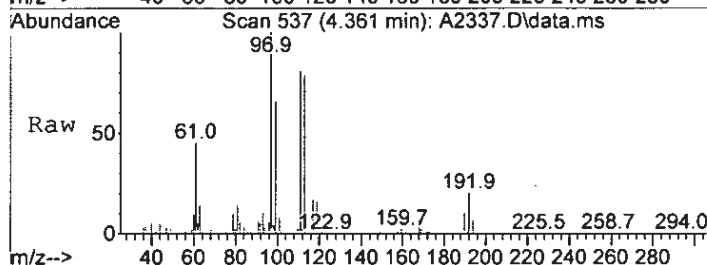
Tgt Ion: 83 Resp: 8910
 Ion Ratio Lower Upper
 83 100
 85 49.6 42.7 82.7
 47 19.9 5.9 45.9





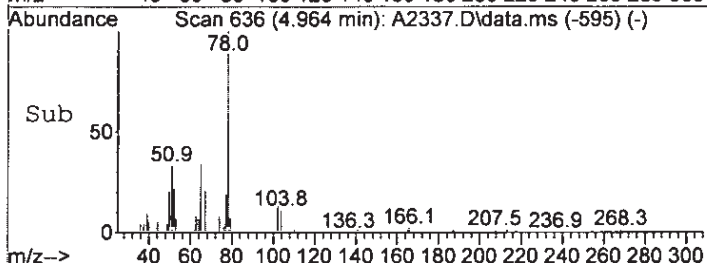
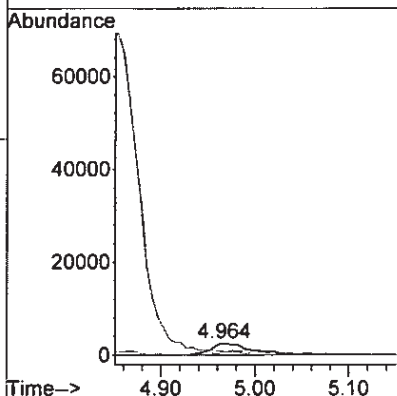
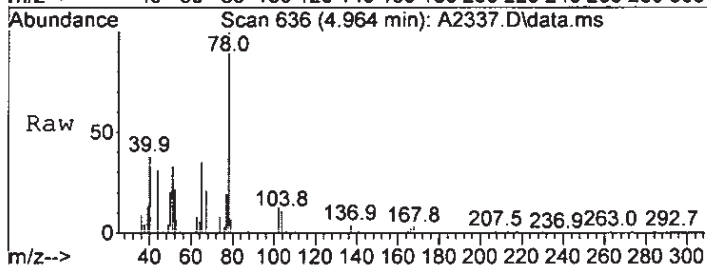
#41
 1,1,1-Trichloroethane
 Concen: 4.68 ug/L
 RT: 4.361 min Scan# 537
 Delta R.T. -0.000 min
 Lab File: A2337.D
 Acq: 25 Sep 2014 4:15 am

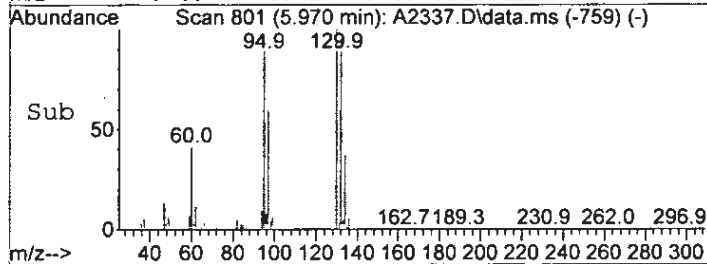
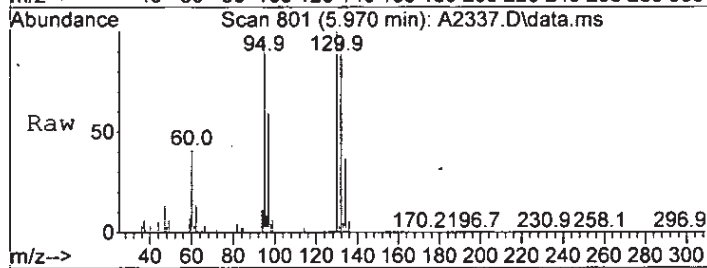
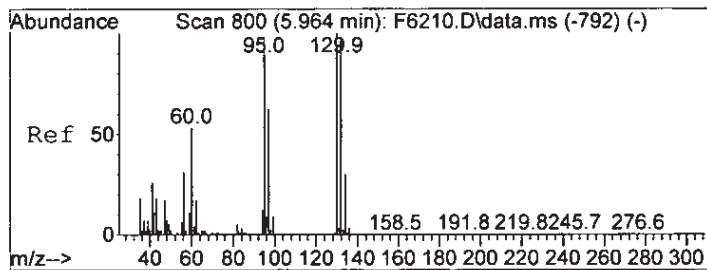
Tgt Ion: 97 Resp: 56385
 Ion Ratio Lower Upper
 97 100
 99 66.4 47.6 87.6
 61 45.4 27.6 67.6



#49
 Benzene
 Concen: 0.25 ug/L m
 RT: 4.964 min Scan# 636
 Delta R.T. 0.006 min
 Lab File: A2337.D
 Acq: 25 Sep 2014 4:15 am

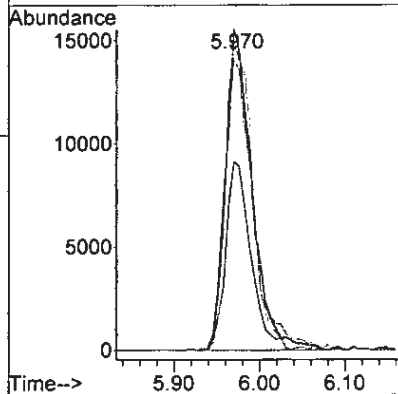
Tgt Ion: 78 Resp: 7667
 Ion Ratio Lower Upper
 78 100
 51 33.2 0.0 39.4
 52 22.0 0.0 36.9





#54
 Trichloroethene
 Concen: 3.88 ug/L
 RT: 5.970 min Scan# 801
 Delta R.T. 0.006 min
 Lab File: A2337.D
 Acq: 25 Sep 2014 4:15 am

Tgt Ion:130 Resp: 33205
 Ion Ratio Lower Upper
 130 100
 132 96.0 74.1 114.1
 95 90.7 76.9 116.9
 97 58.9 43.7 83.7



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: 9/20/14 1335
Date Received: 9/23/14
Date Analyzed: 9/30/14 18:43

Sample Name: DMW-3
Lab Code: R1407422-005

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\093014\A2479.D\

Analysis Lot: 413884
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	5.0	U	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	5.0	U	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0	U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	5.0	U	5.0	0.22	
75-01-4	Vinyl Chloride	5.0	U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85-122	9/30/14 18:43	
Dibromofluoromethane	105	89-119	9/30/14 18:43	
Toluene-d8	96	87-121	9/30/14 18:43	

Sample : R1407422-005|1.0
 Data File : I:\ACQUDATA\MSVOA10\DATA\093014\A2479.D Vial: 8
 Acq On : 30 Sep 2014 6:43 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 6646 T4

Quant Time: Sep 30 18:56:22 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	849251	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1270990	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1152056	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	559209	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.324	113	425983	52.56	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 105.12%			
48) surr1,1,2-dichloroetha...	4.854	65	486775	56.91	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 113.82%			
65) SURR3,Toluene-d8	7.427	98	1364531	47.80	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 95.60%			
70) SURR2,BFB	9.878	95	557964	49.67	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.34%			
Target Compounds						
					Qvalue	
5) Bromomethane	1.556	94	697	0.35	ug/L #	69
12) Acrolein	1.928	56	243	0.23	ug/L #	15
15) Acetone	2.123	43	3462	1.34	ug/L	93
16) 2-Propanol	2.190	45	449	1.23	ug/L	91
17) Iodomethane	2.215	142	319	4.96	ug/L	92
19) Acetonitrile	2.324	40	844	3.04	ug/L #	1
20) Allyl Chloride	2.263	76	2166	0.58	ug/L #	1
89) Cyclohexanone	9.884	55	1846	1.74	ug/L #	19

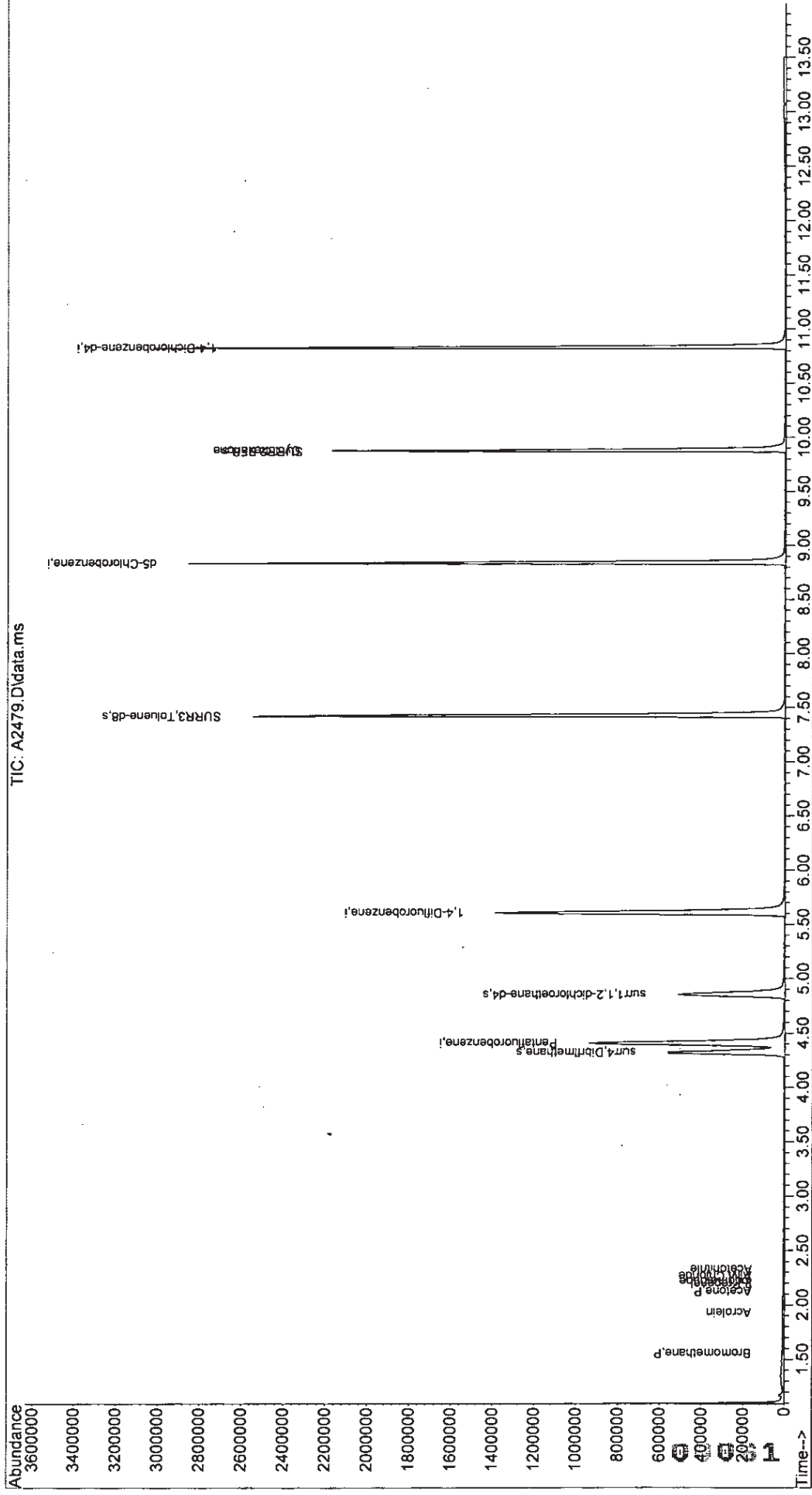
(#) = qualifier out of range (m) = manual integration (+) = signals summed

FW
10/6/14

Quantitation Report (Not Reviewed)

Sample : R1407422-00511.0
 Data File : I:\ACQUDATA\MSVOA10\DATA\093014\A2479.D Vial: 8
 Acq On : 30 Sep 2014 6:43 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 6646 T4

Quant Time: Sep 30 18:56:22 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: 9/20/14 1437
Date Received: 9/23/14
Date Analyzed: 9/29/14 20:32

Sample Name: MW-14
Lab Code: R1407422-006

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvov10\data\092914\A2437.D\

Analysis Lot: 413648
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0 U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	5.0 U	5.0	0.22	
75-01-4	Vinyl Chloride	5.0 U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	5.0 U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0 U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85-122	9/29/14 20:32	
Dibromofluoromethane	116	89-119	9/29/14 20:32	
Toluene-d8	115	87-121	9/29/14 20:32	

Sample : R1407422-006|1.0
 Data File : I:\ACQUDATA\MSVOA10\DATA\092914\A2437.D Vial: 19
 Acq On : 29 Sep 2014 8:32 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 6646 T4

Quant Time: Sep 29 20:45:59 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

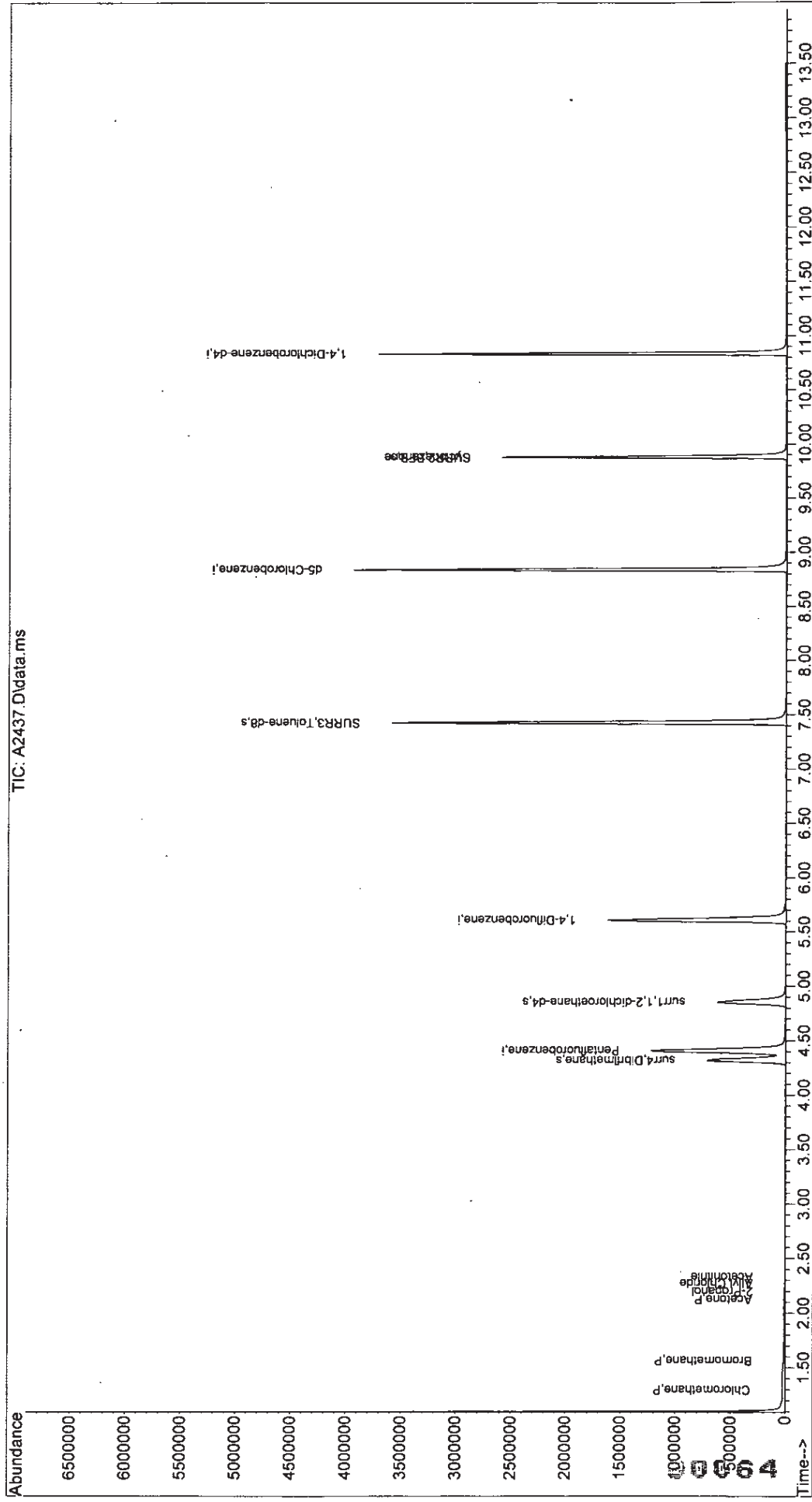
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	1149893	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1517705	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1598368	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	650745	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.318	113	559821	57.85	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	115.70%
48) surr1,1,2-dichloroetha...	4.854	65	586279	57.40	ug/L	0.00
Spiked Amount	50.000	Range	78 - 122	Recovery	=	114.80%
65) SURR3,Toluene-d8	7.427	98	1953286	57.31	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	114.62%
70) SURR2,BFB	9.878	95	643217	47.96	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	95.92%
Target Compounds						
					Qvalue	
3) Chloromethane	1.294	50	3340	0.20	ug/L	92
5) Bromomethane	1.562	94	1186	0.42	ug/L #	17
15) Acetone	2.123	43	2345	0.67	ug/L #	42
16) 2-Propanol	2.196	45	636	1.28	ug/L	83
19) Acetonitrile	2.331	40	962	2.56	ug/L #	1
20) Allyl Chloride	2.270	76	1620	0.32	ug/L #	1
89) Cyclohexanone	9.878	55	2465	1.68	ug/L #	14

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

FJ
10/6/14

Sample : R1407422-006|1.0
 Data File : I:\ACQDATA\MSVOA10\DATA\092914\A2437.D Vial: 19
 Acq On : 29 Sep 2014 8:32 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 6646 T4

Quant Time: Sep 29 20:45:59 2014
 Quant Method : I:\ACQDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: 9/20/14 1450
Date Received: 9/23/14
Date Analyzed: 9/29/14 18:04

Sample Name: FB-092014
Lab Code: R1407422-007

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\092914\A2432.D\

Analysis Lot: 413648
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	5.0	U	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	5.0	U	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0	U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	5.0	U	5.0	0.22	
75-01-4	Vinyl Chloride	5.0	U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	85-122	9/29/14 18:04	
Dibromofluoromethane	110	89-119	9/29/14 18:04	
Toluene-d8	101	87-121	9/29/14 18:04	

Sample : R1407422-007|1.0
 Data File : I:\ACQUDATA\MSVOA10\DATA\092914\A2432.D Vial: 14
 Acq On : 29 Sep 2014 6:04 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 6646 T4

Quant Time: Sep 29 18:17:35 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	981984	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1385066	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1219494	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	694968	50.00	ug/L	0.00

System Monitoring Compounds

45) surr4,Dibrflmethane	4.318	113	486405	55.07	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	110.14%
48) surr1,1,2-dichloroetha...	4.854	65	506887	54.38	ug/L	0.00
Spiked Amount	50.000	Range	78 - 122	Recovery	=	108.76%
65) SURR3,Toluene-d8	7.427	98	1570302	50.48	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	100.96%
70) SURR2,BFB	9.878	95	630432	51.50	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	103.00%

Target Compounds

					Qvalue
5) Bromomethane	1.562	94	529	0.27 ug/L #	32
15) Acetone	2.129	43	2739	0.92 ug/L	77
16) 2-Propanol	2.178	45	508	1.20 ug/L	98
19) Acetonitrile	2.343	40	1026	3.20 ug/L #	1
20) Allyl Chloride	2.270	76	1802	0.42 ug/L #	1
22) Methylene Chloride	2.434	84	6832	0.76 ug/L #	80
39) Tetrahydrofuran	4.092	42	1661	0.76 ug/L	96
40) Chloroform	4.092	83	331281	20.37 ug/L	92
89) Cyclohexanone	9.884	55	2156	1.92 ug/L #	14

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

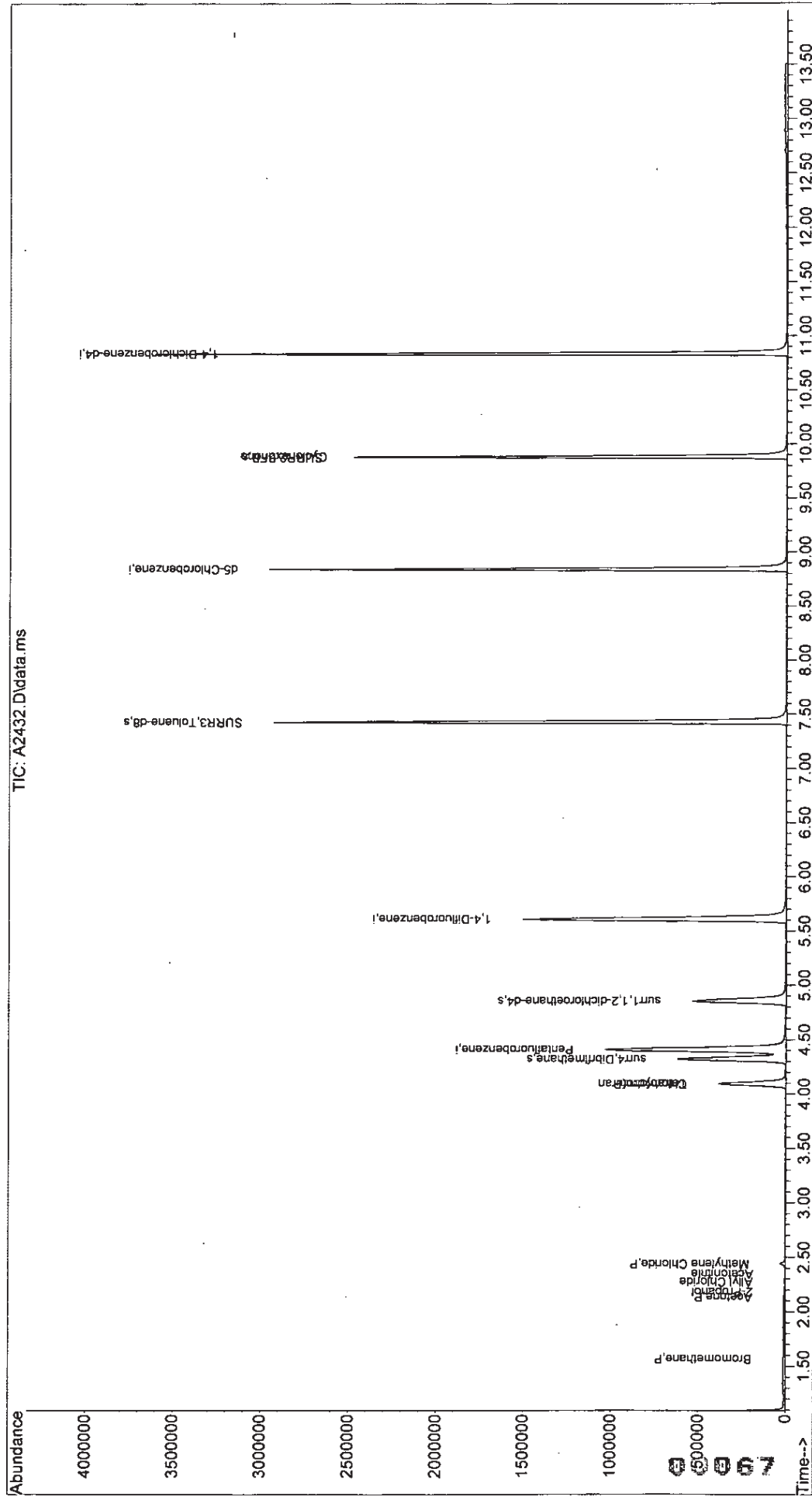
FJ
10/6/14

```

Sample       : R1407422-007|1.0
Data File   : I:\ACQU\DATA\MSVOA10\DATA\092914\A2432.D
Acq On      : 29 Sep 2014   6:04 pm
Operator     : F.NAEGLER
InstName    : MSVOA10
Misc        : VERINA 6646 T4
Vial: 14

```

Quant Time: Sep 29 18:17:35 2014
Quant Method : I:\ACQDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
Qlast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: 9/20/14 1500
Date Received: 9/23/14
Date Analyzed: 9/25/14 04:45

Sample Name: MW-11
Lab Code: R1407422-008

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\092414\A2338.D\

Analysis Lot: 412875
Instrument Name: R-MS-10
Dilution Factor: 5

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	6.0 J	25	1.8	
75-34-3	1,1-Dichloroethane (1,1-DCA)	1.8 J	25	1.0	
75-35-4	1,1-Dichloroethene (1,1-DCE)	25 U	25	2.9	
127-18-4	Tetrachloroethene (PCE)	25 U	25	1.5	
79-01-6	Trichloroethene (TCE)	25 U	25	1.1	
75-01-4	Vinyl Chloride	25 U	25	1.6	
156-59-2	cis-1,2-Dichloroethene	25 U	25	1.5	
156-60-5	trans-1,2-Dichloroethene	25 U	25	1.7	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	85-122	9/25/14 04:45	
Dibromofluoromethane	101	89-119	9/25/14 04:45	
Toluene-d8	102	87-121	9/25/14 04:45	

Sample : R1407422-00815.0
 Data File : I:\ACQUDATA\msvoa10\data\092414\A2338.D Vial: 39
 Acq On : 25 Sep 2014 4:45 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 7979 T4

Quant Time: Sep 25 08:32:51 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

*dil ok due to
dark color of
sample*

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	918757	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1396298	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1321019	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	699949	50.00	ug/L	0.00

System Monitoring Compounds

45) surr4, Dibrflmethane	4.324	113	450536	50.60	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	101.20%
48) surr1, 1,2-dichloroetha...	4.854	65	442189	47.06	ug/L	0.00
Spiked Amount	50.000	Range	78 - 122	Recovery	=	94.12%
65) SURR3, Toluene-d8	7.427	98	1596444	50.91	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	101.82%
70) SURR2, BFB	9.878	95	628734	50.95	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	101.90%

Target Compounds

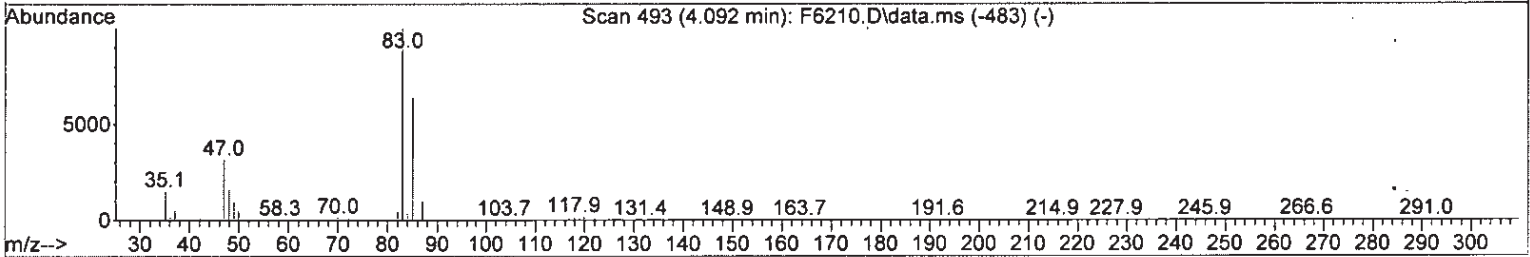
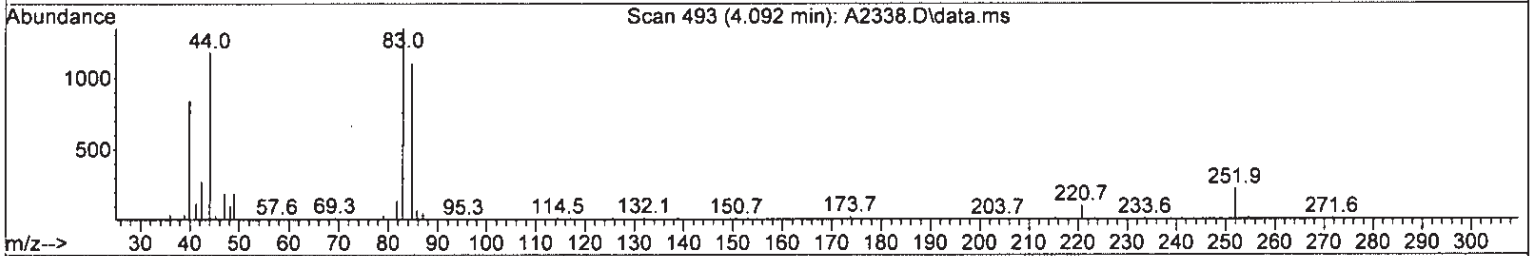
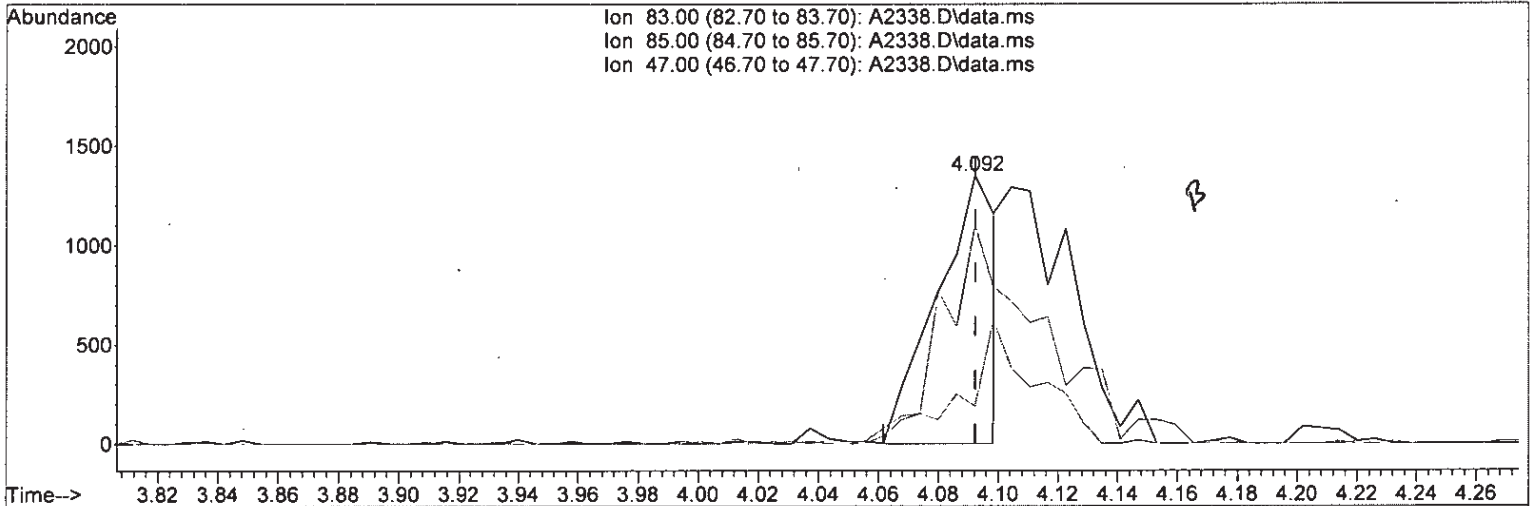
					Qvalue
5) Bromomethane	1.562	94	882	0.40 ug/L	# 60
15) Acetone	2.129	43	41692	14.90 ug/L	97
18) Carbon Disulfide	2.275	76	6435	0.24 ug/L	98
20) Allyl Chloride	2.275	76	6109	1.52 ug/L	# 1
22) Methylene Chloride	2.440	84	2664	0.32 ug/L	# 83
28) 1,1-Dicethane	3.050	63	6182	0.35 ug/L	81
35) 2-Butanone	3.793	43	860	0.23 ug/L	65
41) 1,1,1-Trichloroethane	4.360	97	15032	1.19 ug/L	85
64) 4-Methyl-2-pentanone	7.360	43	1508	0.20 ug/L	70
89) Cyclohexanone	9.878	55	1937	1.59 ug/L	# 23

42) chloroform 4.092 3898 0.26 ug/L Fu 9/28/14
 (#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Sample : R1407422-008|5.0
 Data File : I:\ACQUDATA\msvoa10\data\092414\A2338.D Vial: 39
 Acq On : 25 Sep 2014 4:45 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 7979 T4

Quant Time: Sep 25 08:32:51 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration



TIC: A2338.D\data.ms

(40) Chloroform (P)

4.092min (-0.000) 0.12 ug/L

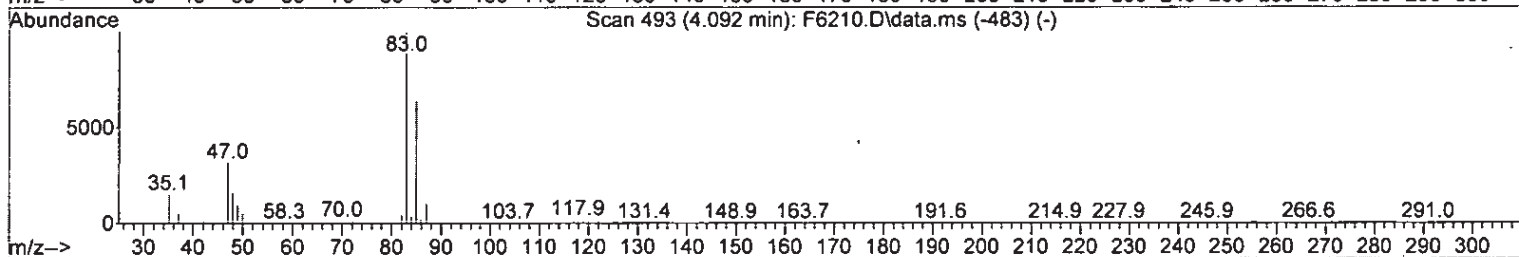
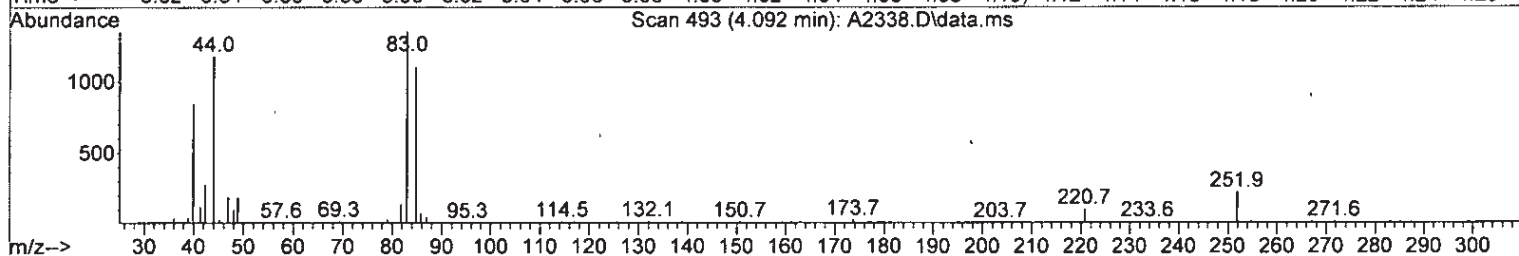
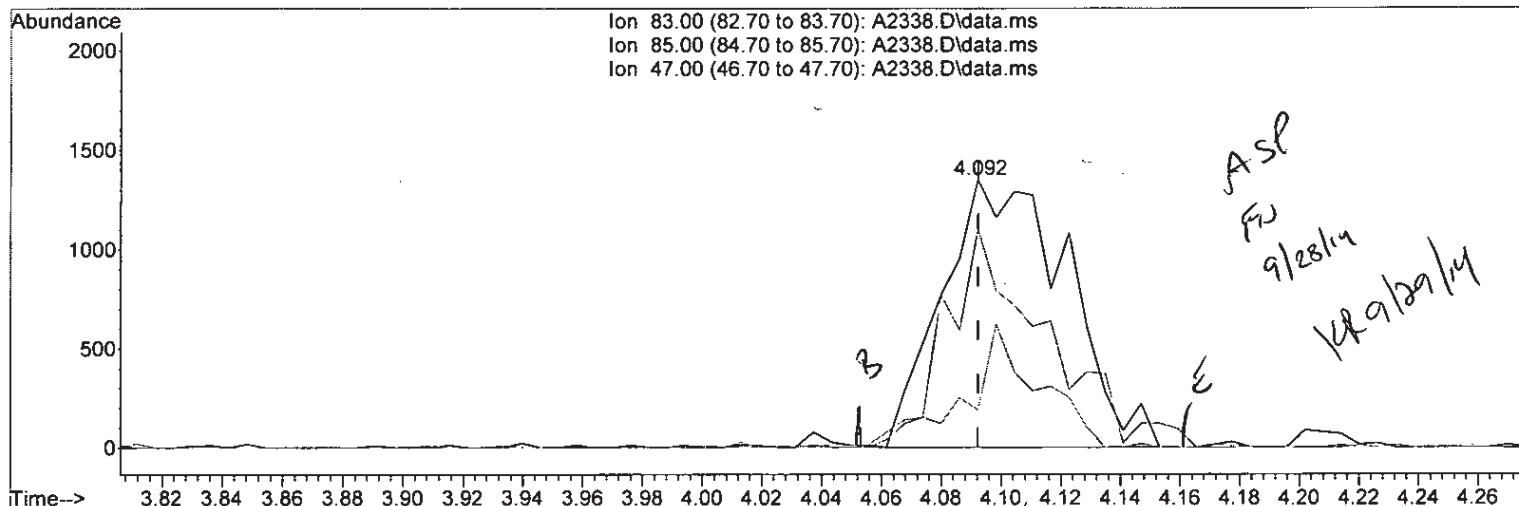
response 1841

Ion	Exp%	Act%
83.00	100	100
85.00	62.70	81.60
47.00	25.90	14.02
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : R1407422-008|5.0
Data File : I:\ACQUDATA\msvoa10\data\092414\A2338.D Vial: 39
Acq On : 25 Sep 2014 4:45 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc : VERINA 7979 T4

Quant Time: Sep 25 08:32:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



TIC: A2338.D\data.ms

(40) Chloroform (P)

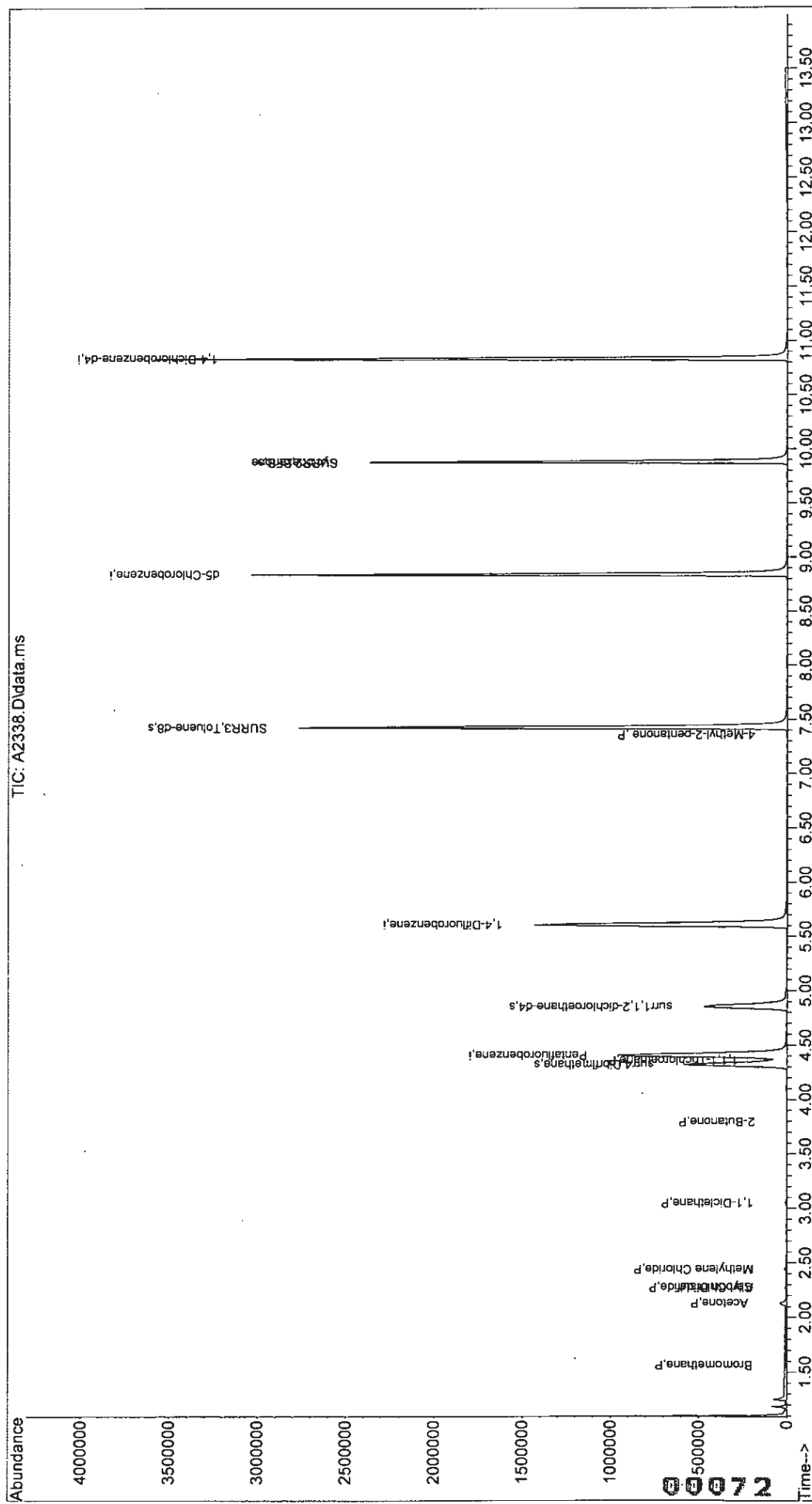
4.092min (-0.000) 0.26 ug/L m

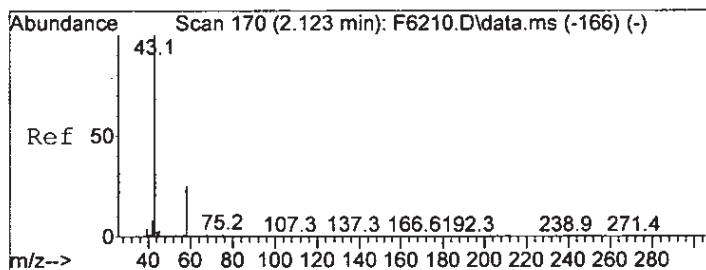
response 3898

Ion	Exp%	Act%
83.00	100	100
85.00	62.70	81.60
47.00	25.90	14.02
0.00	0.00	0.00

Sample : R1407422-008|5.0
 Data File : I:\ACQUDATA\msvoa10\data\092414\A2338.D Vial: 39
 Acq On : 25 Sep 2014 4:45 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 7979 T4

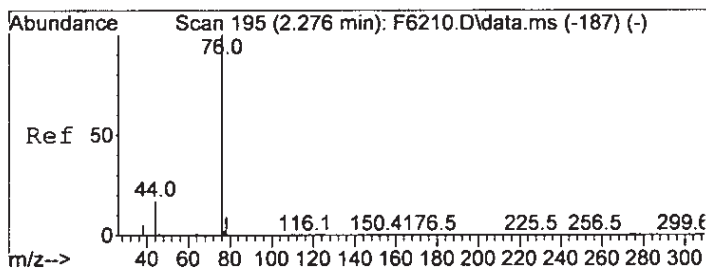
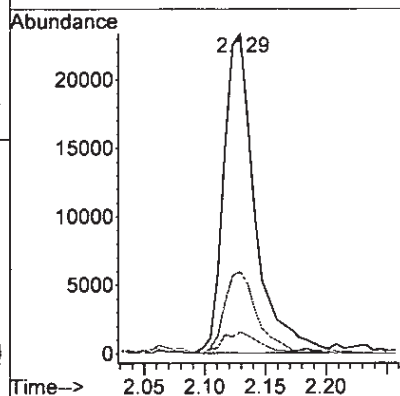
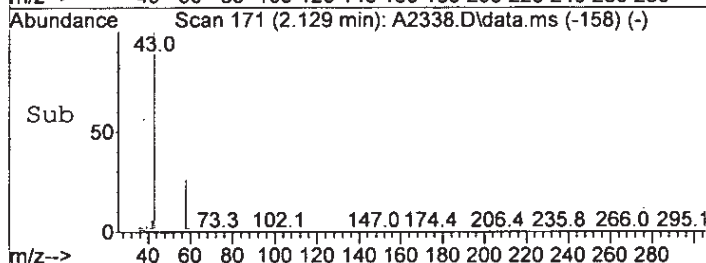
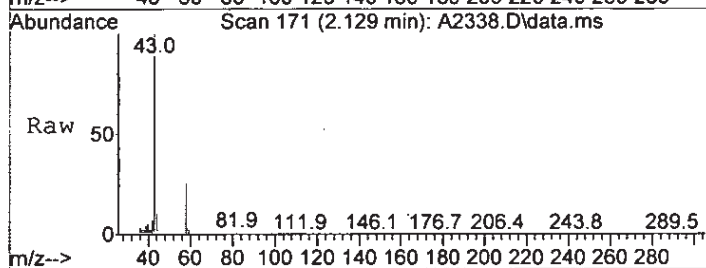
Quant Time: Sep 25 08:32:51 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration





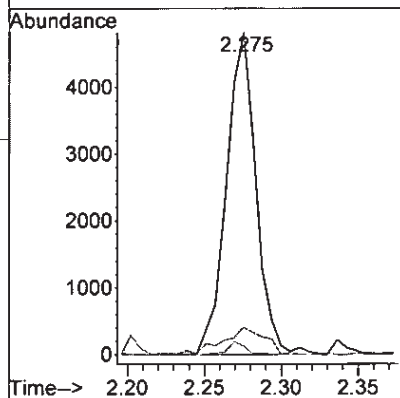
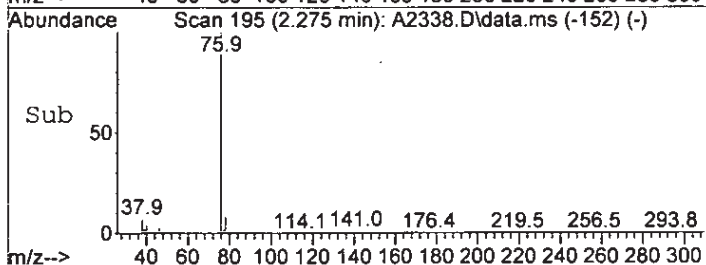
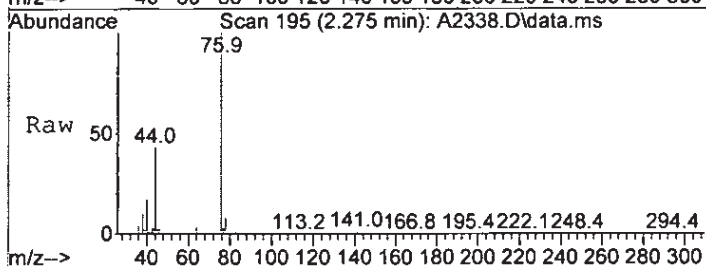
#15
Acetone
Concen: 14.90 ug/L
RT: 2.129 min Scan# 171
Delta R.T. 0.006 min
Lab File: A2338.D
Acq: 25 Sep 2014 4:45 am

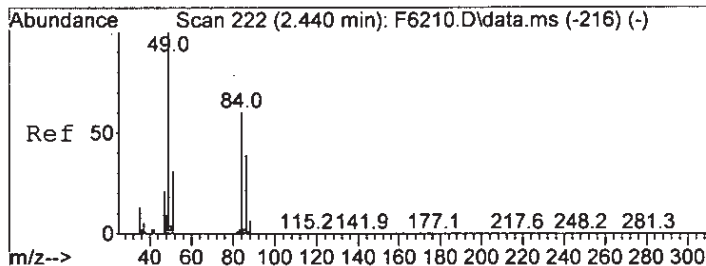
Tgt Ion: 43 Resp: 41692
Ion Ratio Lower Upper
43 100
58 25.4 7.2 47.2
42 6.7 0.0 27.0



#18
Carbon Disulfide
Concen: 0.24 ug/L
RT: 2.275 min Scan# 195
Delta R.T. 0.006 min
Lab File: A2338.D
Acq: 25 Sep 2014 4:45 am

Tgt Ion: 76 Resp: 6435
Ion Ratio Lower Upper
76 100
78 8.4 0.0 29.4
77 2.6 0.0 22.7

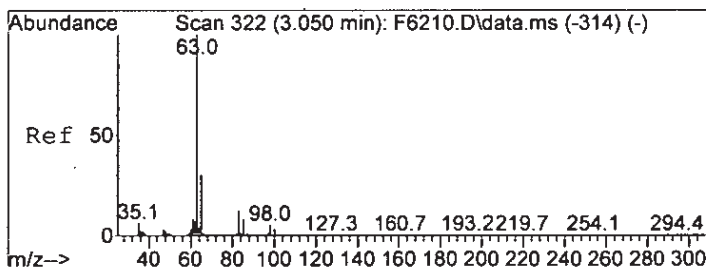
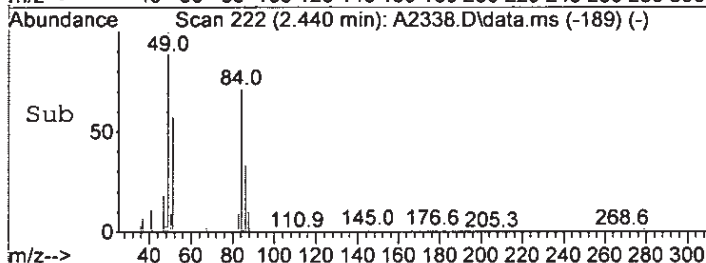
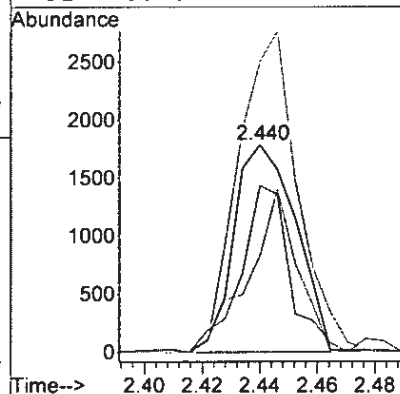
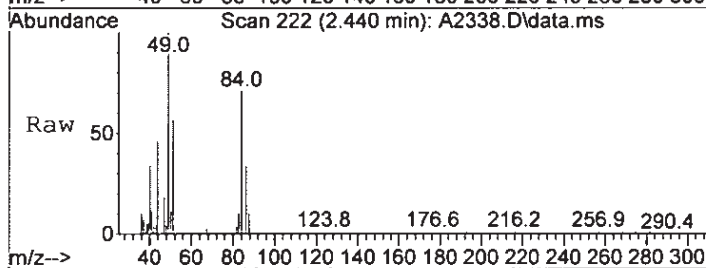




#22
Methylene Chloride
Concen: 0.32 ug/L
RT: 2.440 min Scan# 222
Delta R.T. -0.000 min
Lab File: A2338.D
Acq: 25 Sep 2014 4:45 am

Tgt Ion: 84 Resp: 2664

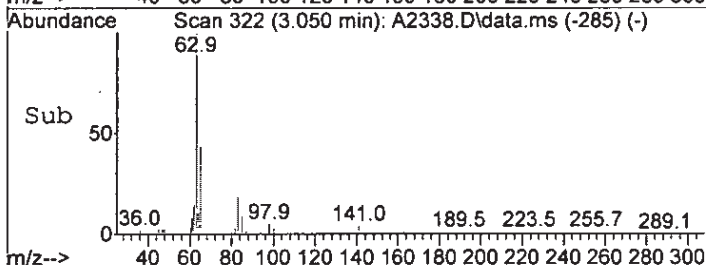
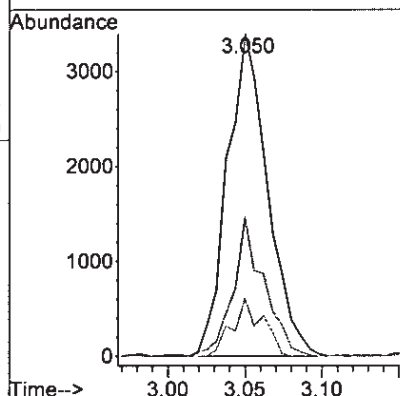
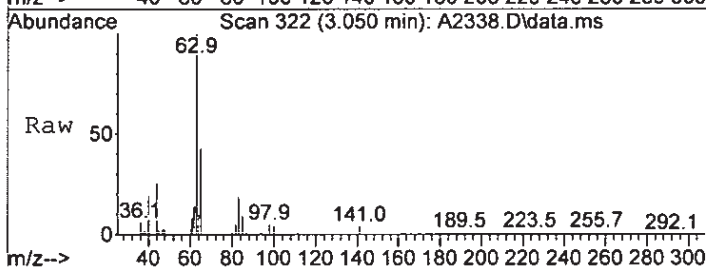
Ion	Ratio	Lower	Upper
84	100		
86	46.6	44.5	84.5
49	140.3	123.0	163.0
51	80.3	22.1	62.1

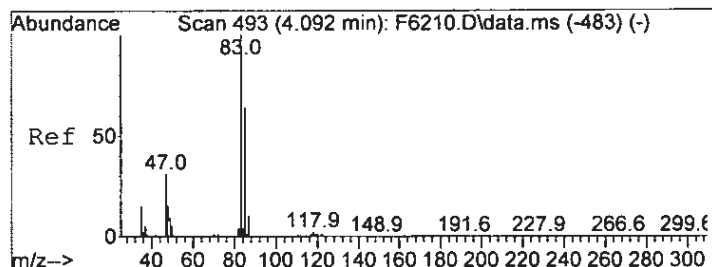


#28
1,1-Dicloroethane
Concen: 0.35 ug/L
RT: 3.050 min Scan# 322
Delta R.T. -0.000 min
Lab File: A2338.D
Acq: 25 Sep 2014 4:45 am

Tgt Ion: 63 Resp: 6182

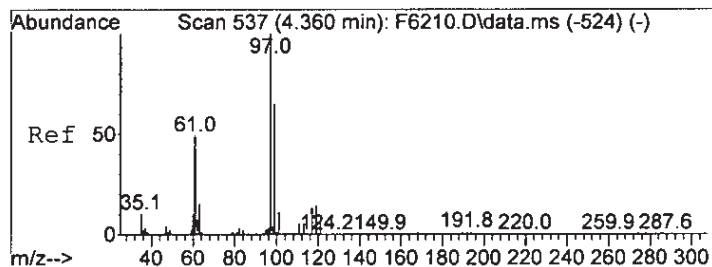
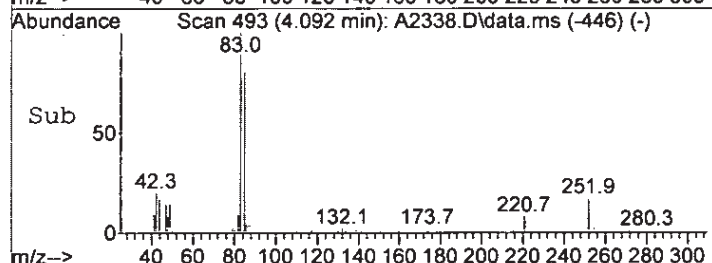
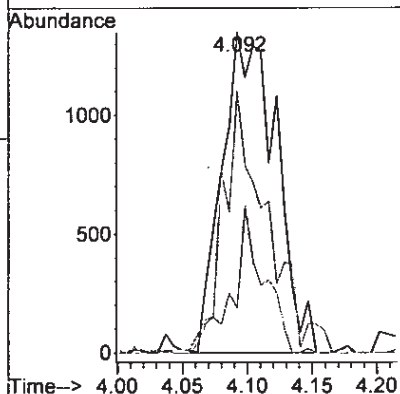
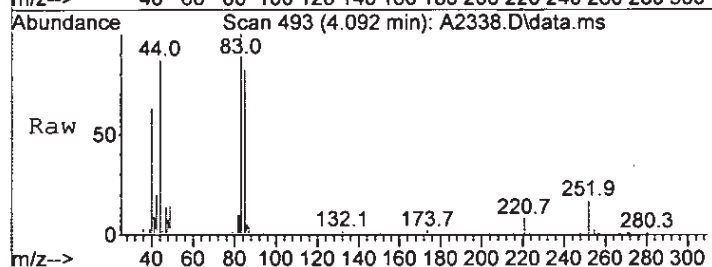
Ion	Ratio	Lower	Upper
63	100		
65	43.1	11.1	51.1
83	17.9	0.0	33.1





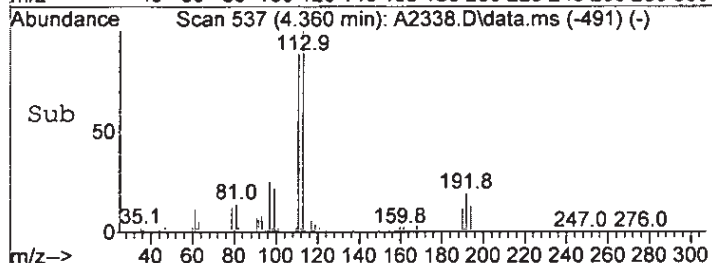
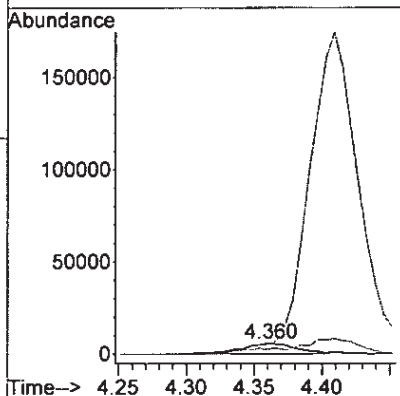
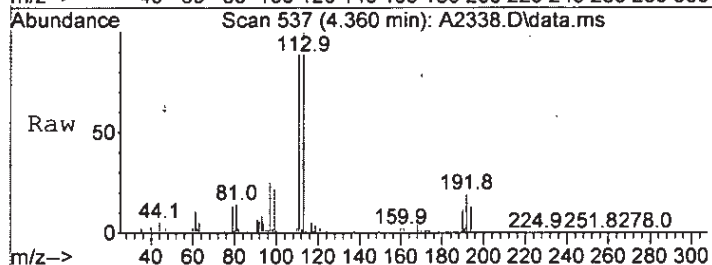
#40
 Chloroform
 Concen: 0.26 ug/L m
 RT: 4.092 min Scan# 493
 Delta R.T. -0.000 min
 Lab File: A2338.D
 Acq: 25 Sep 2014 4:45 am

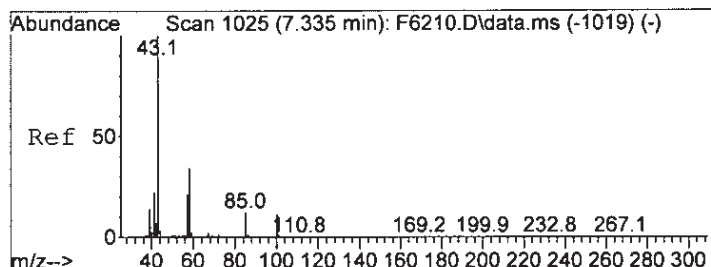
Tgt Ion: 83 Resp: 3898
 Ion Ratio Lower Upper
 83 100
 85 81.6 42.7 82.7
 47 14.0 5.9 45.9



#41
 1,1,1-Trichloroethane
 Concen: 1.19 ug/L
 RT: 4.360 min Scan# 537
 Delta R.T. -0.000 min
 Lab File: A2338.D
 Acq: 25 Sep 2014 4:45 am

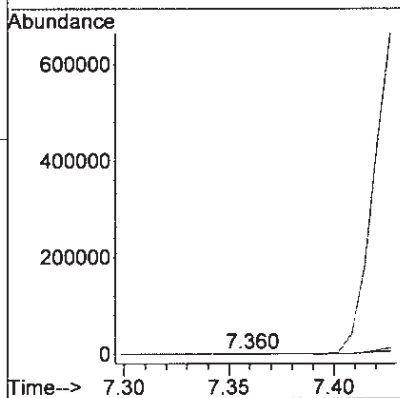
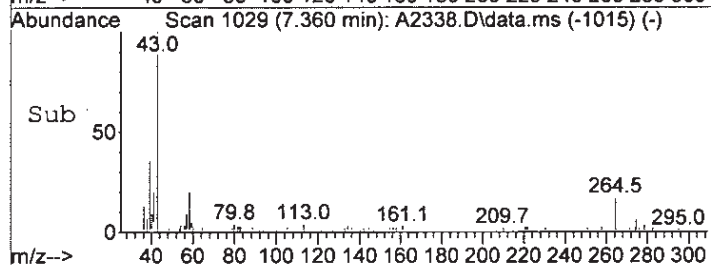
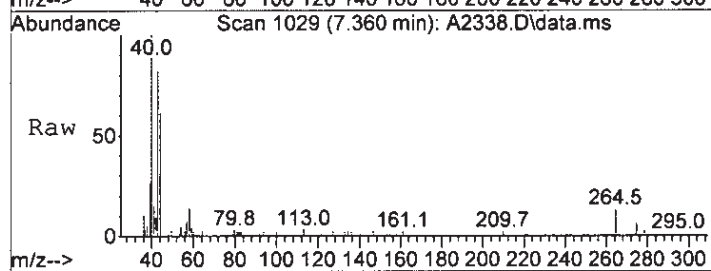
Tgt Ion: 97 Resp: 15032
 Ion Ratio Lower Upper
 97 100
 99 86.9 47.6 87.6
 61 45.6 27.6 67.6





#64
 4-Methyl-2-pentanone
 Concen: 0.20 ug/L
 RT: 7.360 min Scan# 1029
 Delta R.T. 0.024 min
 Lab File: A2338.D
 Acq: 25 Sep 2014 4:45 am

Tgt Ion: 43 Resp: 1508
 Ion Ratio Lower Upper
 43 100
 58 17.7 16.3 56.3
 100 2.0 0.0 32.6



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: 9/20/14
Date Received: 9/23/14
Date Analyzed: 9/25/14 05:15

Sample Name: DUP-092014
Lab Code: R1407422-009

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvov10\data\092414\A2339.D\

Analysis Lot: 412875
Instrument Name: R-MS-10
Dilution Factor: 5

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	6.1 J	25	1.8	
75-34-3	1,1-Dichloroethane (1,1-DCA)	1.7 J	25	1.0	
75-35-4	1,1-Dichloroethene (1,1-DCE)	25 U	25	2.9	
127-18-4	Tetrachloroethene (PCE)	25 U	25	1.5	
79-01-6	Trichloroethene (TCE)	25 U	25	1.1	
75-01-4	Vinyl Chloride	25 U	25	1.6	
156-59-2	cis-1,2-Dichloroethene	25 U	25	1.5	
156-60-5	trans-1,2-Dichloroethene	25 U	25	1.7	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85-122	9/25/14 05:15	
Dibromofluoromethane	99	89-119	9/25/14 05:15	
Toluene-d8	97	87-121	9/25/14 05:15	

Sample : R1407422-00915.0
 Data File : I:\ACQUDATA\msvoa10\data\092414\A2339.D Vial: 40
 Acq On : 25 Sep 2014 5:15 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 7979 T4

*Dil ok due to
dark color of
sample*

Quant Time: Sep 25 08:32:59 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	839257	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1206747	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.842	117	1115658	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	633021	50.00	ug/L	0.00

*FU
9/28/14*

System Monitoring Compounds						
45) surr4, Dibrflmethane	4.324	113	381943	49.64	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	99.28%
48) surr1, 1,2-dichloroetha...	4.855	65	365485	45.01	ug/L	0.00
Spiked Amount	50.000	Range	78 - 122	Recovery	=	90.02%
65) SURR3, Toluene-d8	7.427	98	1307822	48.26	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	96.52%
70) SURR2, BFB	9.878	95	520179	48.78	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	97.56%

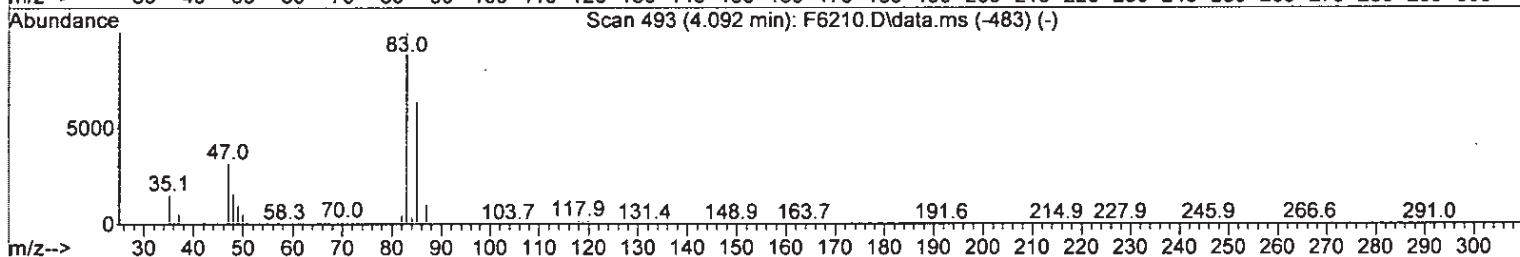
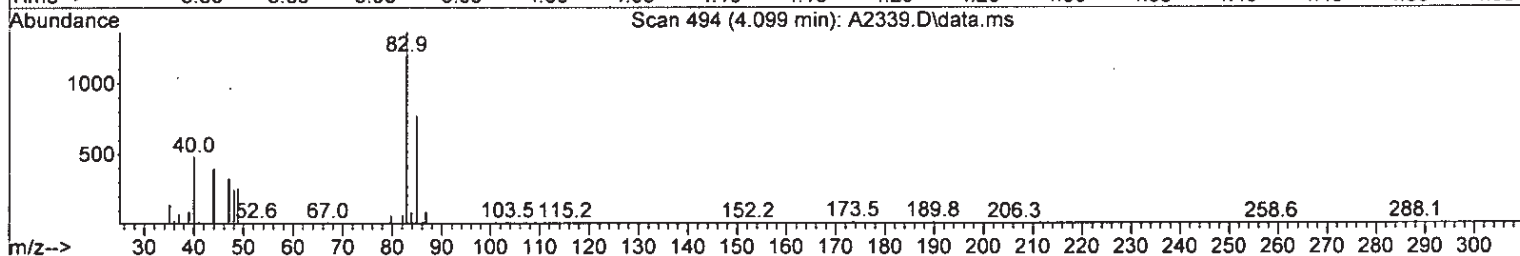
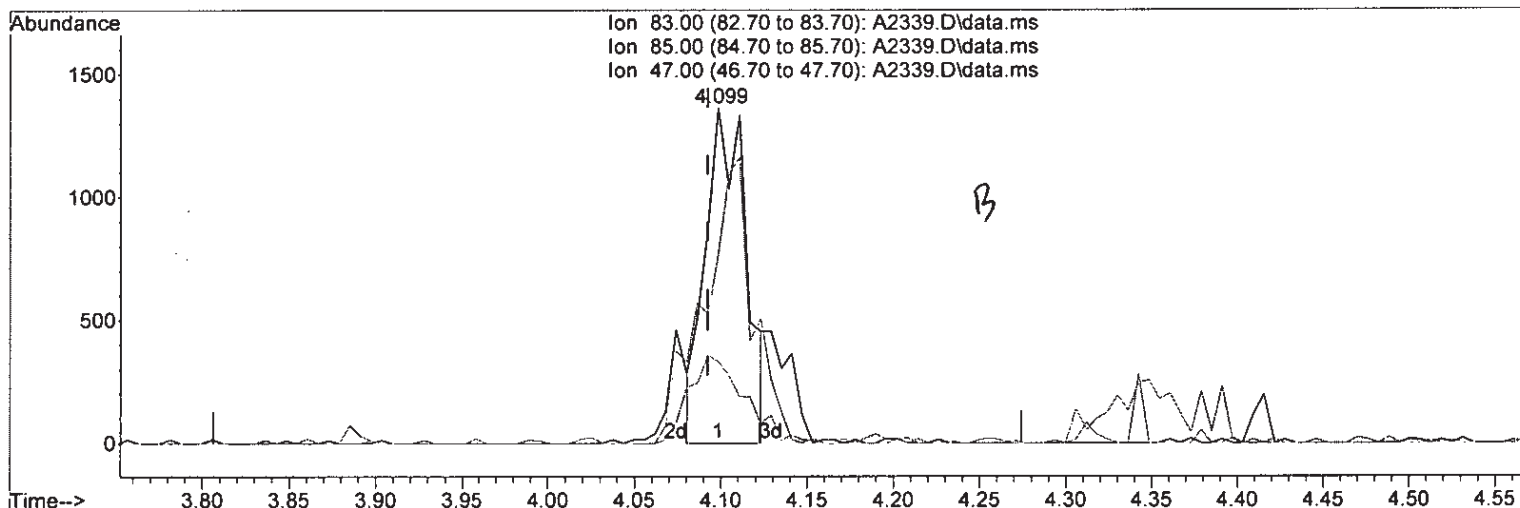
Target Compounds						Qvalue
5) Bromomethane	1.569	94	599	0.32	ug/L #	76
15) Acetone	2.129	43	36428	14.25	ug/L	97
19) Acetonitrile	2.337	40	587	2.14	ug/L #	1
20) Allyl Chloride	2.270	76	1853	0.50	ug/L #	1
22) Methylene Chloride	2.446	84	2144	0.28	ug/L #	92
28) 1,1-Dichloroethane	3.050	63	5434	0.34	ug/L	87
41) 1,1,1-Trichloroethane	4.367	97	13902	1.21	ug/L #	41
89) Cyclohexanone	9.884	55	1779	1.73	ug/L #	13

40) Chloroform 4.099 3010 0.22 ug/L FU 9/28/14
 (#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Sample : R1407422-009|5.0
 Data File : I:\ACQUDATA\msvoa10\data\092414\A2339.D Vial: 40
 Acq On : 25 Sep 2014 5:15 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 7979 T4

Quant Time: Sep 25 08:32:59 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration



TIC: A2339.D\data.ms

(40) Chloroform (P)

4.099min (+0.006) 0.16 ug/L

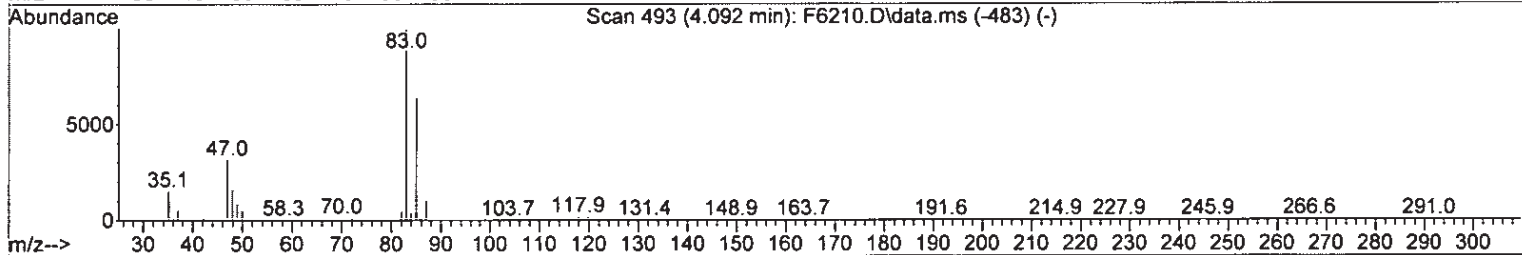
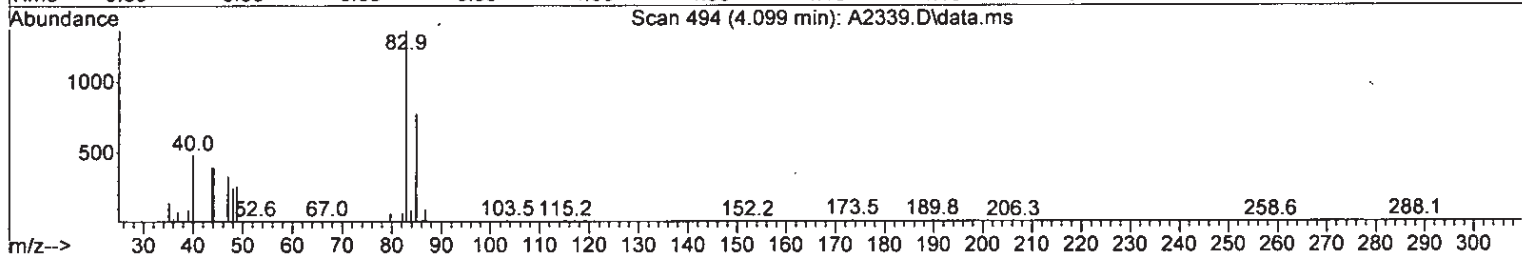
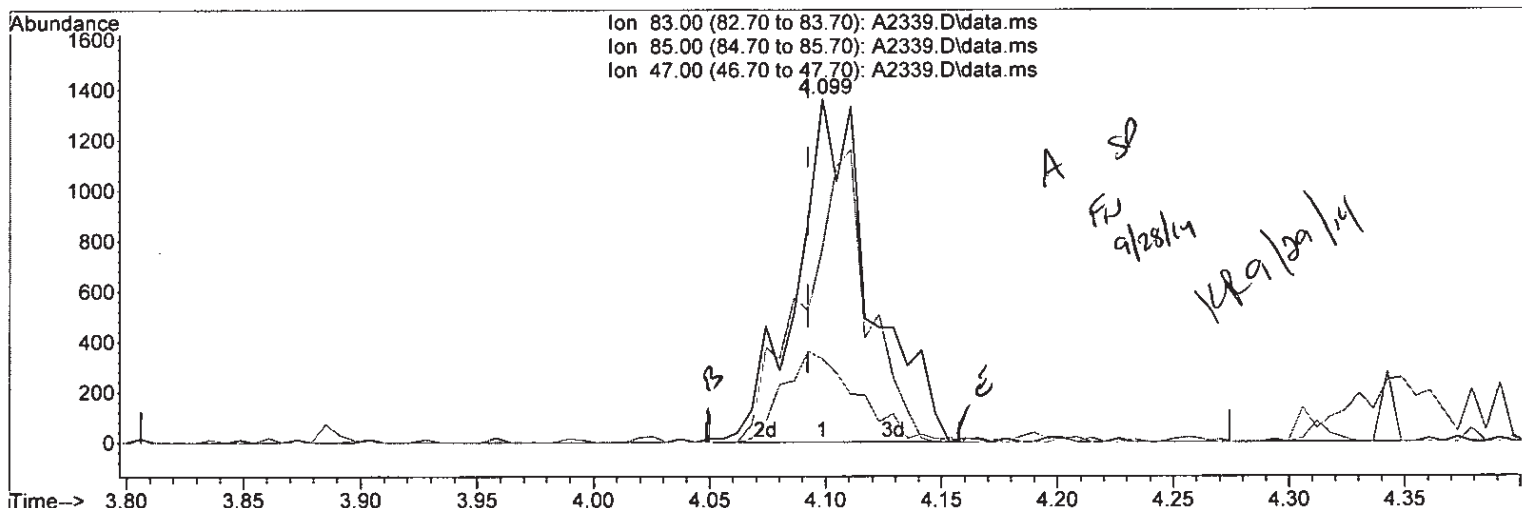
response 2217

Ion	Exp%	Act%
83.00	100	100
85.00	62.70	56.49
47.00	25.90	24.21
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : R1407422-00915.0
 Data File : I:\ACQUDATA\msvoa10\data\092414\A2339.D Vial: 40
 Acq On : 25 Sep 2014 5:15 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 7979 T4

Quant Time: Sep 25 08:32:59 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration



TIC: A2339.D\data.ms

(40) Chloroform (P)

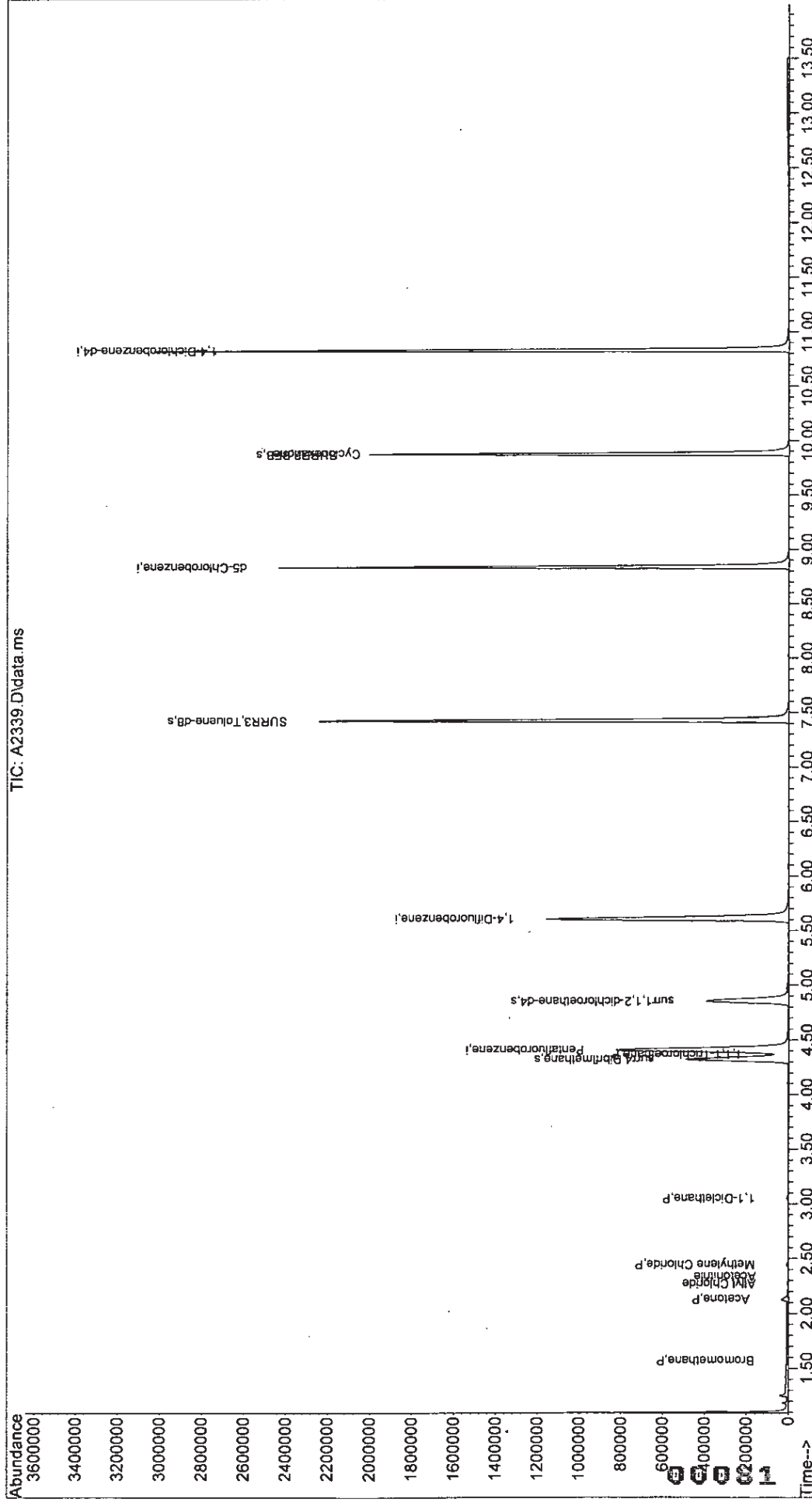
4.099min (+0.006) 0.22 ug/L m

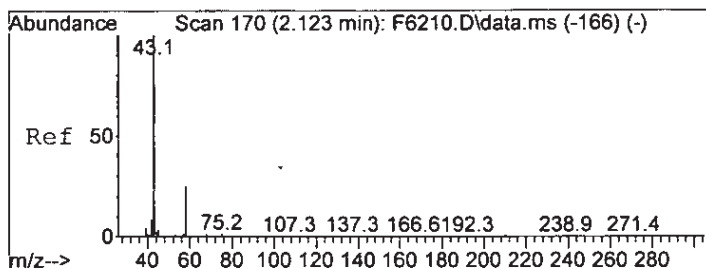
response 3010

Ion	Exp%	Act%
83.00	100	100
85.00	62.70	56.49
47.00	25.90	24.21
0.00	0.00	0.00

Sample : R1407422-00915.0
 Data File : I:\ACQUDATA\msvoa10\data\0924114\A2339.D Vial: 40
 Acq On : 25 Sep 2014 5:15 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 7979 T4

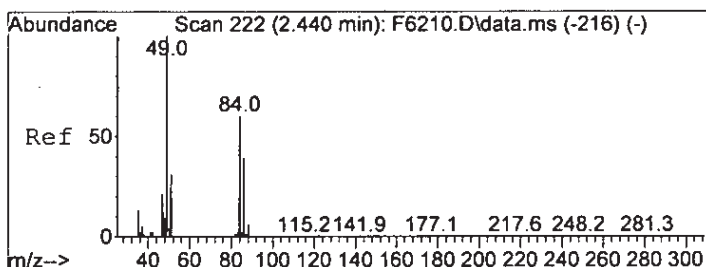
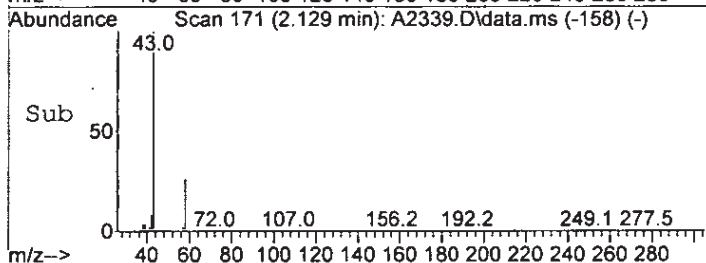
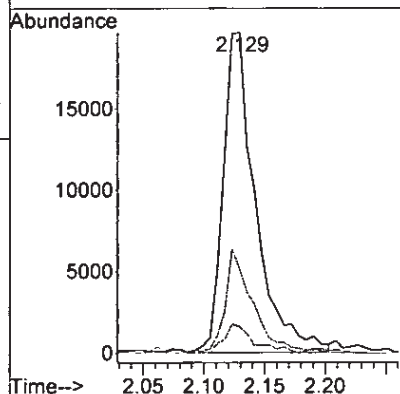
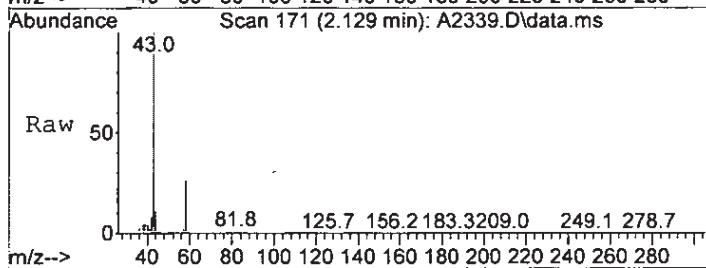
Quant Time: Sep 25 08:32:59 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 Qlast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration





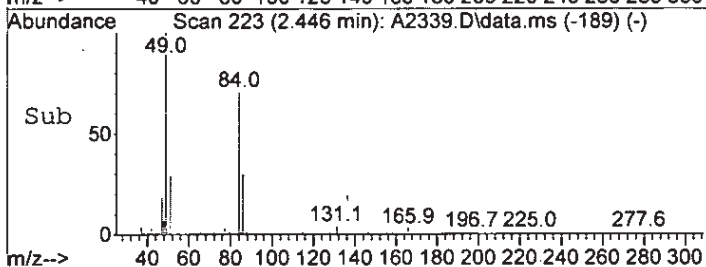
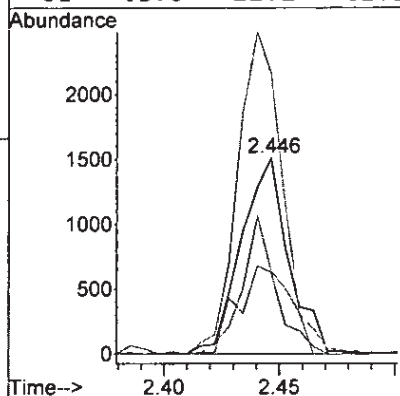
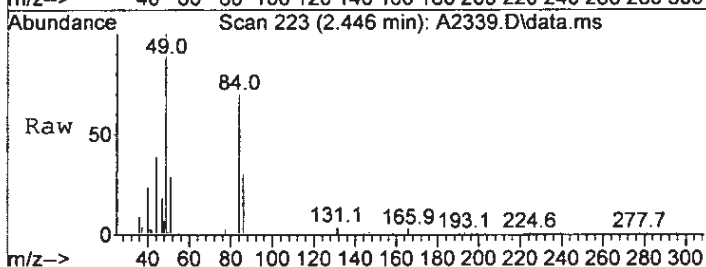
#15
Acetone
Concen: 14.25 ug/L
RT: 2.129 min Scan# 171
Delta R.T. 0.006 min
Lab File: A2339.D
Acq: 25 Sep 2014 5:15 am

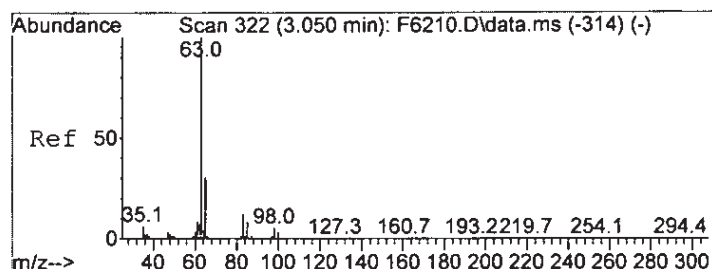
Tgt Ion: 43 Resp: 36428
Ion Ratio Lower Upper
43 100
58 26.0 7.2 47.2
42 8.2 0.0 27.0



#22
Methylene Chloride
Concen: 0.28 ug/L
RT: 2.446 min Scan# 223
Delta R.T. 0.006 min
Lab File: A2339.D
Acq: 25 Sep 2014 5:15 am

Tgt Ion: 84 Resp: 2144
Ion Ratio Lower Upper
84 100
86 42.2 44.5 84.5#
49 142.8 123.0 163.0
51 41.5 22.1 62.1

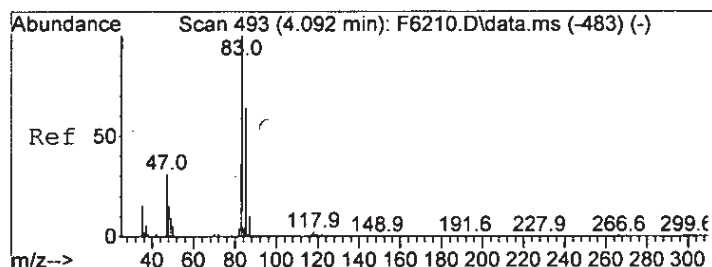
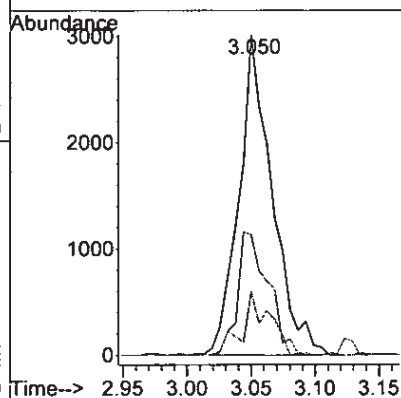
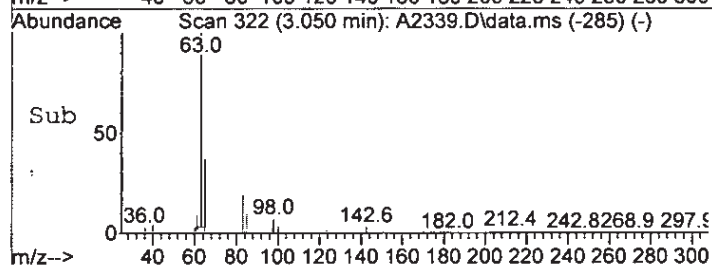
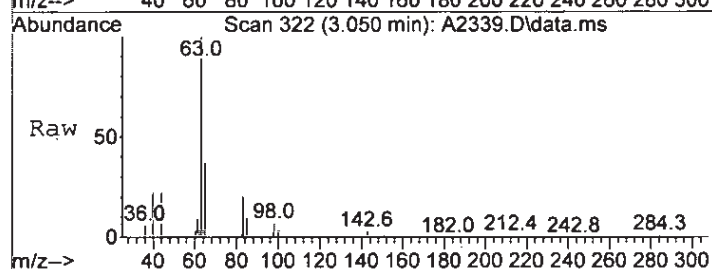




#28
1,1-Dicethane
Concen: 0.34 ug/L
RT: 3.050 min Scan# 322
Delta R.T. 0.000 min
Lab File: A2339.D
Acq: 25 Sep 2014 5:15 am

Tgt Ion: 63 Resp: 5434

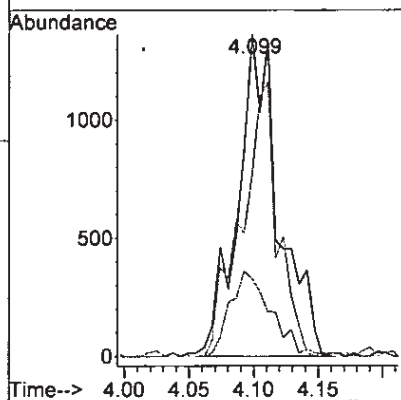
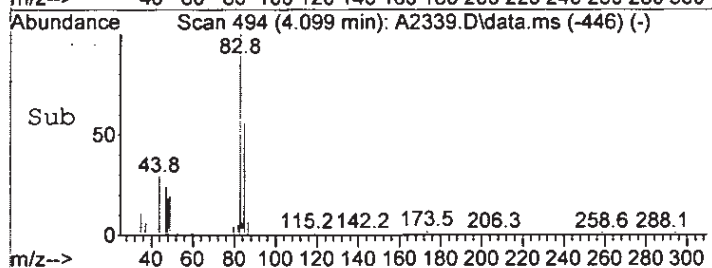
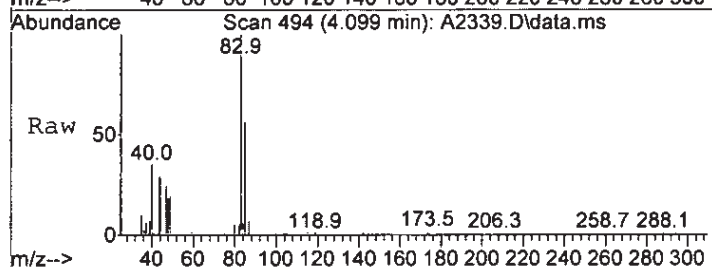
Ion	Ratio	Lower	Upper
63	100		
65	37.4	11.1	51.1
83	19.7	0.0	33.1

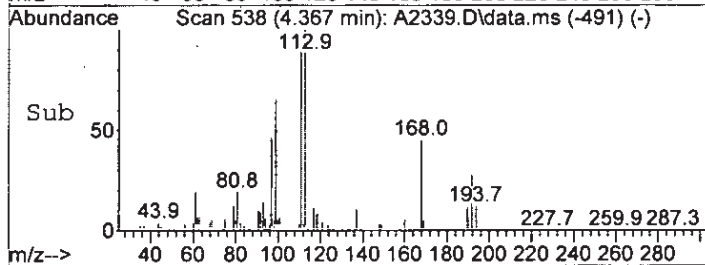
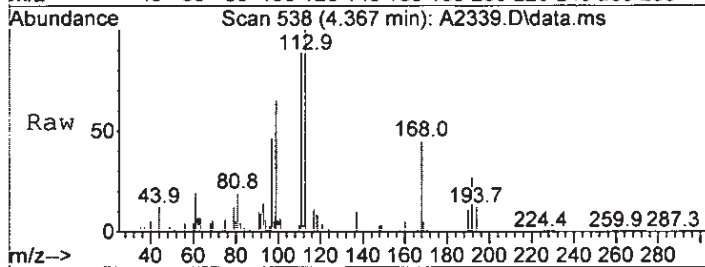
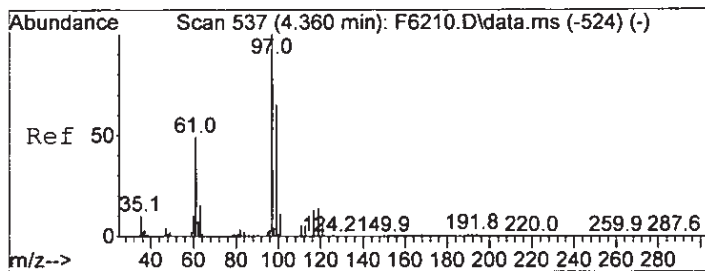


#40
Chloroform
Concen: 0.22 ug/L m
RT: 4.099 min Scan# 494
Delta R.T. 0.006 min
Lab File: A2339.D
Acq: 25 Sep 2014 5:15 am

Tgt Ion: 83 Resp: 3010

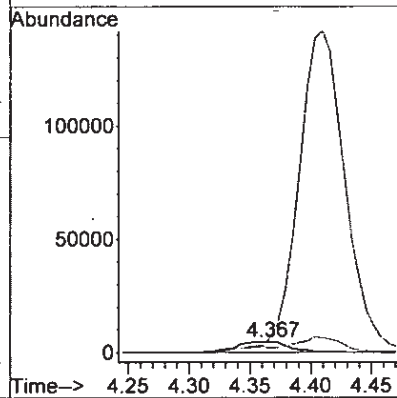
Ion	Ratio	Lower	Upper
83	100		
85	56.5	42.7	82.7
47	24.2	5.9	45.9





#41
 1,1,1-Trichloroethane
 Concen: 1.21 ug/L
 RT: 4.367 min Scan# 538
 Delta R.T. 0.006 min
 Lab File: A2339.D
 Acq: 25 Sep 2014 5:15 am

Tgt Ion: 97 Resp: 13902
 Ion Ratio Lower Upper
 97 100
 99 143.2 47.6 87.6#
 61 41.1 27.6 67.6



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: 9/21/14 0905
Date Received: 9/23/14
Date Analyzed: 9/25/14 05:45

Sample Name: MW-17
Lab Code: R1407422-010

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\092414\A2340.D\

Analysis Lot: 412875
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	2.6 J	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	17	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0 U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	4.3 J	5.0	0.22	
75-01-4	Vinyl Chloride	5.0 U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	10	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0 U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85-122	9/25/14 05:45	
Dibromofluoromethane	102	89-119	9/25/14 05:45	
Toluene-d8	97	87-121	9/25/14 05:45	

Sample : R1407422-010|1.0
 Data File : I:\ACQUDATA\msvoa10\data\092414\A2340.D Vial: 41
 Acq On : 25 Sep 2014 5:45 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 7979 T4

Quant Time: Sep 25 08:33:07 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

FW
9/28/14

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	844224	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1190708	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1122868	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	634200	50.00	ug/L	0.00

System Monitoring Compounds						
45) surr4,Dibrfmethane	4.324	113	388590	51.18	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	102.36%
48) surr1,1,2-dichloroetha...	4.854	65	374138	46.69	ug/L	0.00
Spiked Amount	50.000	Range	78 - 122	Recovery	=	93.38%
65) SURR3,Toluene-d8	7.427	98	1296281	48.48	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	96.96%
70) SURR2,BFB	9.878	95	524223	49.82	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	99.64%

Target Compounds						Qvalue
5) Bromomethane	1.568	94	797	0.39	ug/L #	29
6) Chloroethane	1.617	64	804029	143.41	ug/L	96
10) Freon 123a	1.928	67	28549	2.91	ug/L	87
14) Freon 113	2.093	101	2472	0.33	ug/L #	64
15) Acetone	2.123	43	78438	30.51	ug/L	100
16) 2-Propanol	2.209	45	753	2.07	ug/L #	1
20) Allyl Chloride	2.270	76	3719	1.01	ug/L #	1
23) TBA	2.507	59	1797	4.11	ug/L #	54
26) trans-1,2-Dichloroethene	2.666	96	2193	0.29	ug/L #	74
28) 1,1-Dicethane	3.050	63	275535	17.18	ug/L	98
34) cis-1,2-Dichloroethene	3.684	96	83453	10.06	ug/L	94
35) 2-Butanone	3.739	43	12304	3.63	ug/L	95
41) 1,1,1-Trichloroethane	4.354	97	30106	2.60	ug/L	92
49) Benzene	4.964	78	11562 8571	0.38 0.29	ug/L	85 FW 9/28/14
54) Trichloroethene	5.976	130	34987	4.31	ug/L	91
73) 2-Hexanone	8.238	43	2806	0.59	ug/L	97 NT(SP)
89) Cyclohexanone	9.878	55	1384	1.34	ug/L #	18

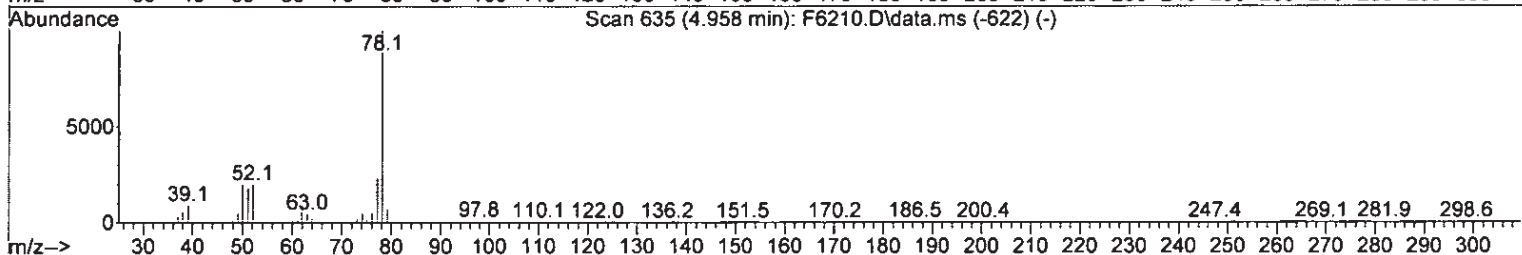
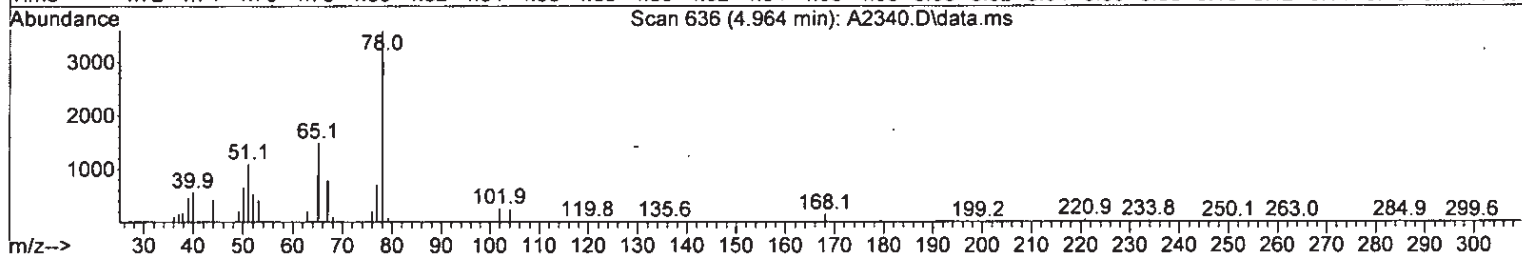
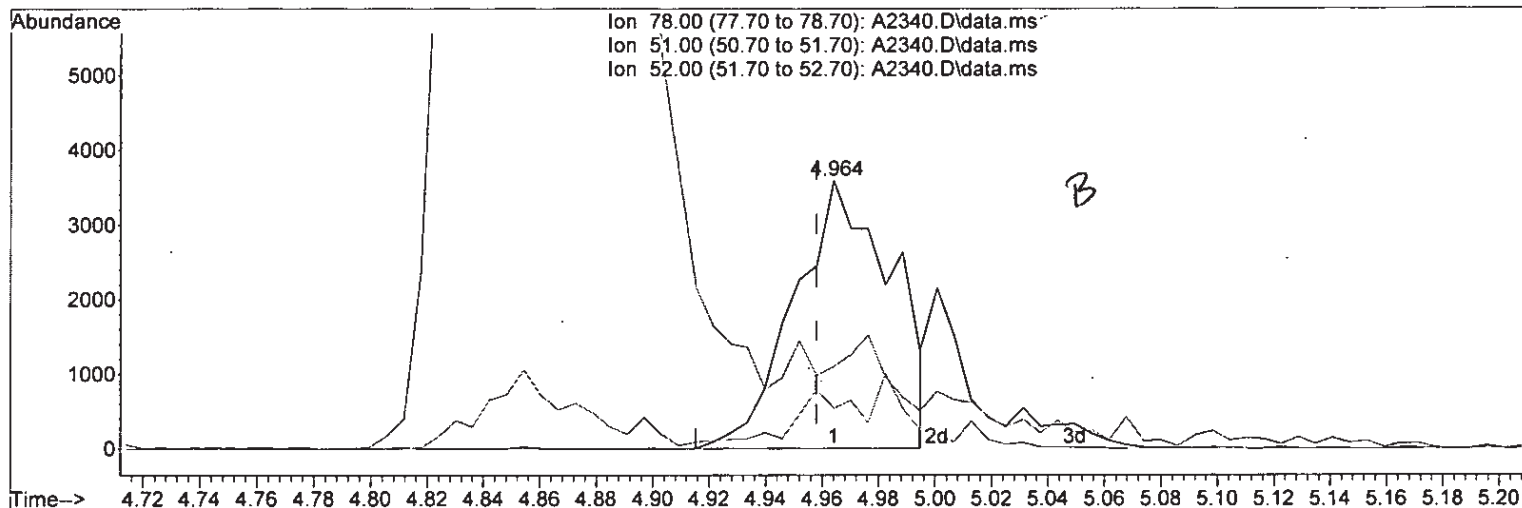
64) mibk - NT(SP)

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

Quantitation Report (Qedit)

Sample : R1407422-010|1.0
 Data File : I:\ACQUDATA\msvoa10\data\092414\A2340.D Vial: 41
 Acq On : 25 Sep 2014 5:45 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 7979 T4

Quant Time: Sep 25 08:33:07 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration



TIC: A2340.D\data.ms

(49) Benzene (P)

4.964min (+0.006) 0.29 ug/L

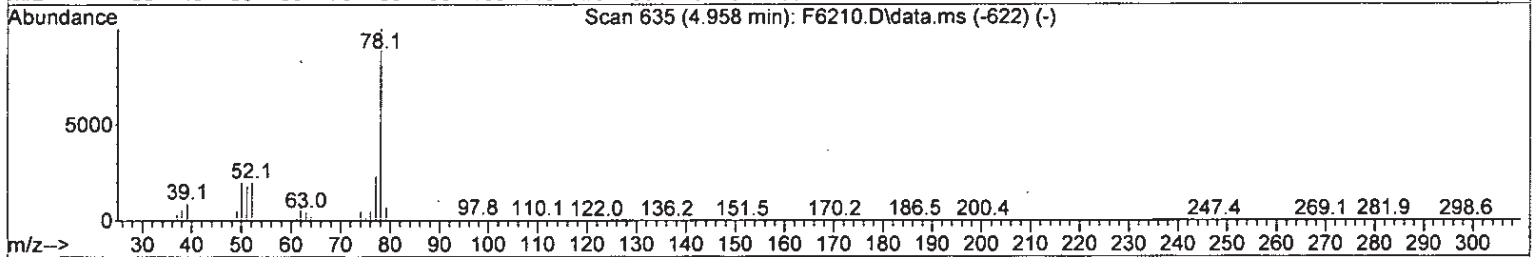
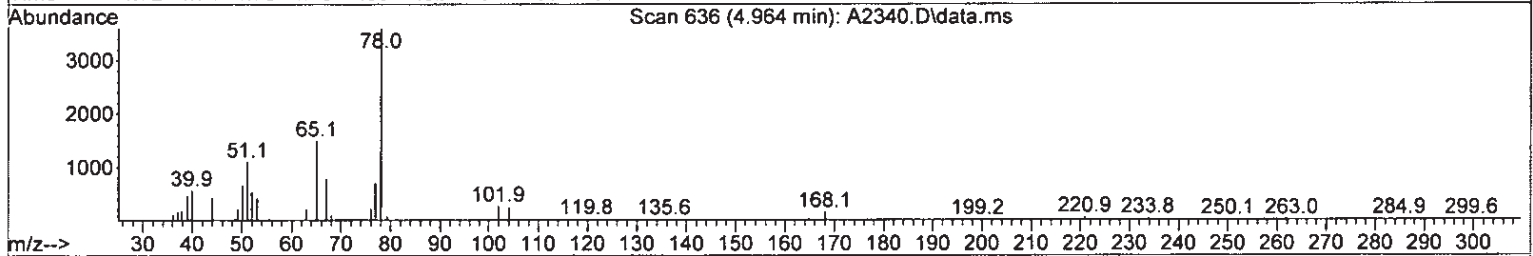
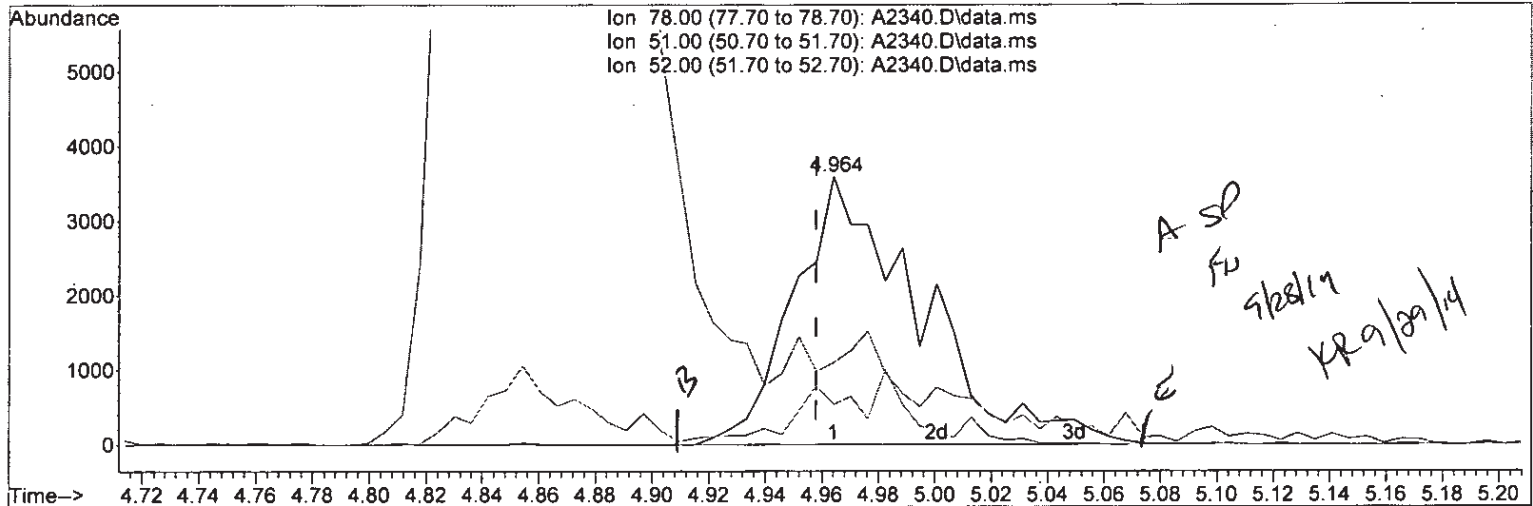
response 8571

Ion	Exp%	Act%
78.00	100	100
51.00	19.40	30.45
52.00	16.90	14.87
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : R1407422-010|1.0
Data File : I:\ACQUDATA\msvoa10\data\092414\A2340.D Vial: 41
Acq On : 25 Sep 2014 5:45 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc : VERINA 7979 T4

Quant Time: Sep 25 08:33:07 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



TIC: A2340.D\data.ms

(49) Benzene (P)

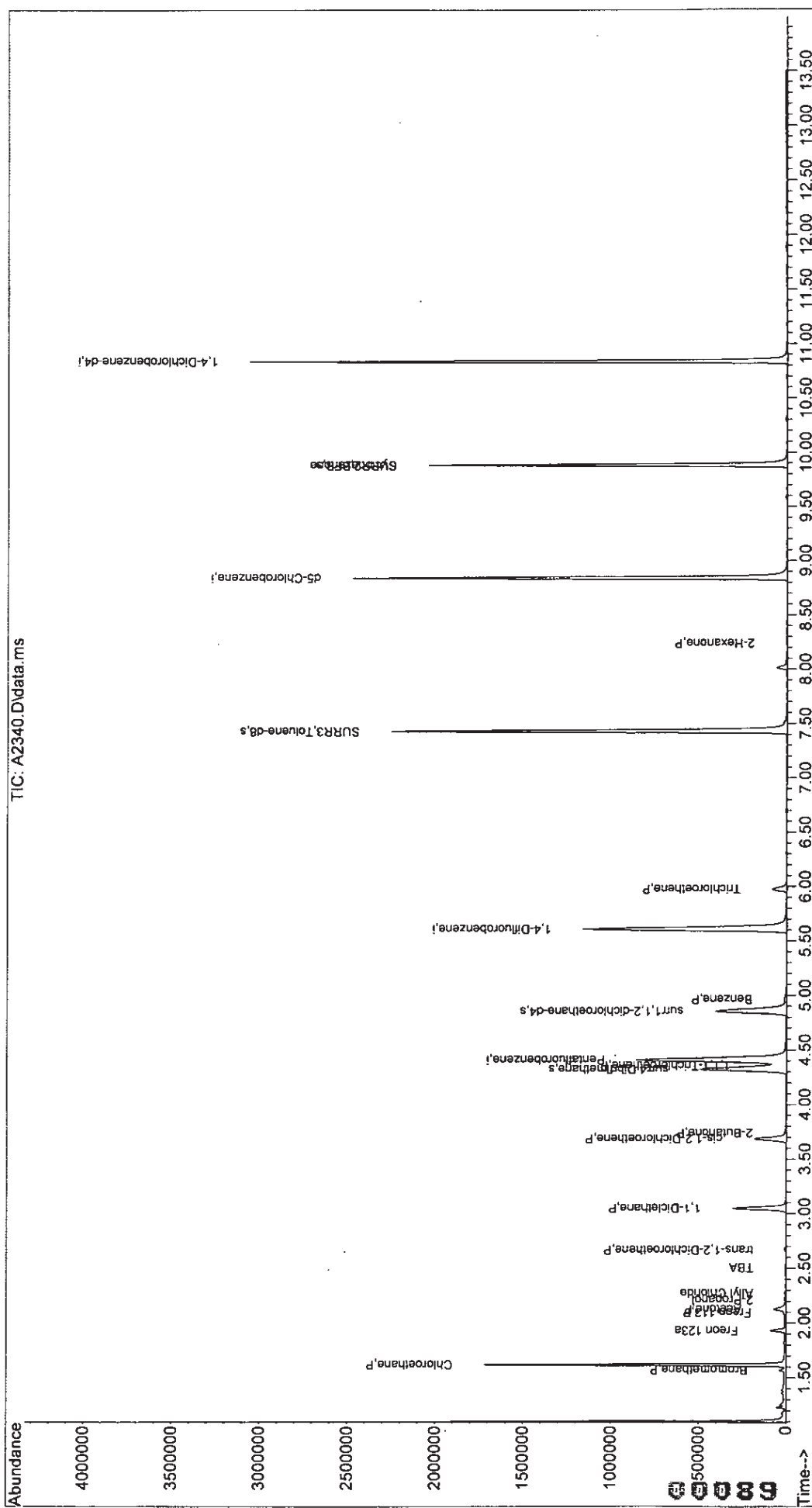
4.964min (+0.006) 0.38 ug/L m

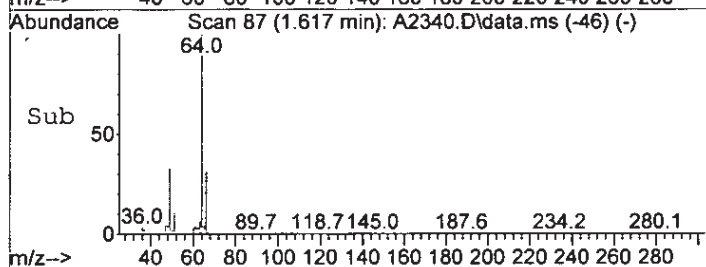
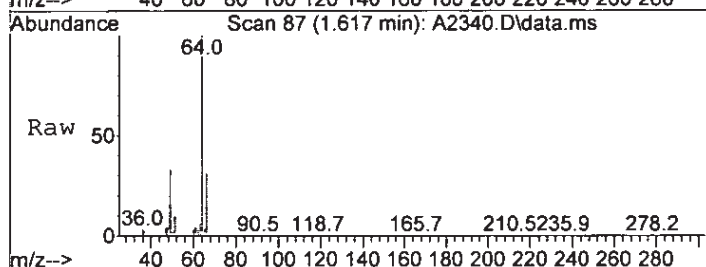
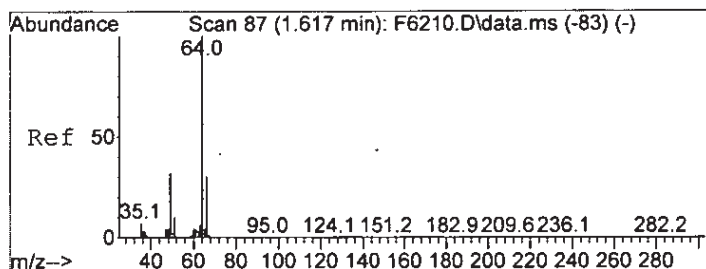
response 11062

Ion	Exp%	Act%
78.00	100	100
51.00	19.40	30.45
52.00	16.90	14.87
0.00	0.00	0.00

Sample : R1407422-01011.0
 Data File : I:\ACQUDATA\msvoa10\data\092414\A2340.D Vial: 41
 Acq On : 25 Sep 2014 5:45 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 7979 T4

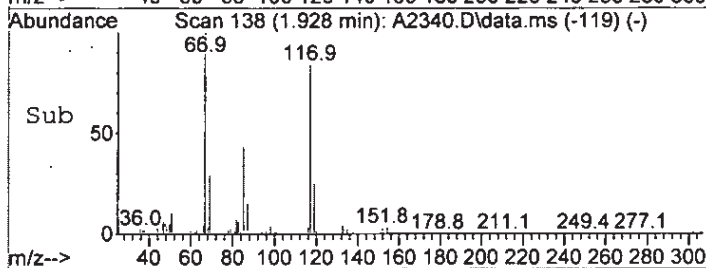
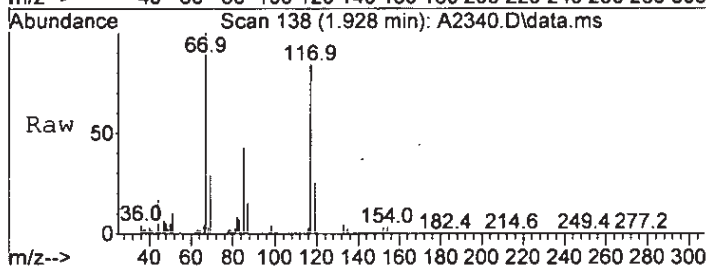
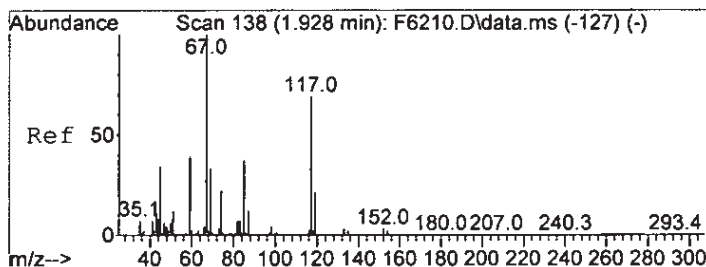
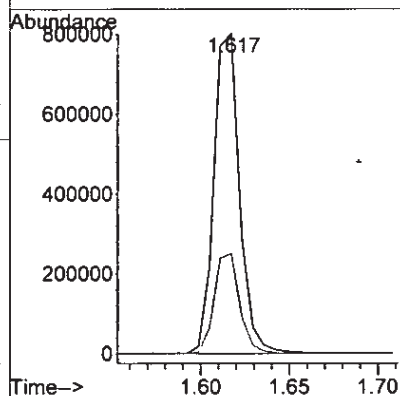
Quant Time: Sep 25 08:33:07 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration





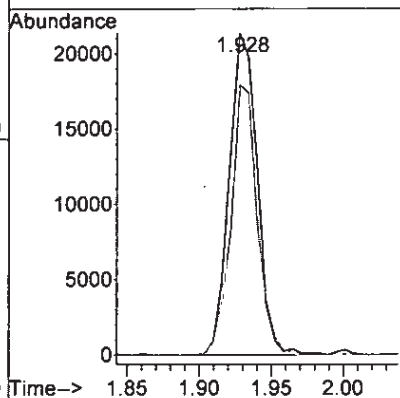
#6
Chloroethane
Concen: 143.41 ug/L
RT: 1.617 min Scan# 87
Delta R.T. 0.006 min
Lab File: A2340.D
Acq: 25 Sep 2014 5:45 am

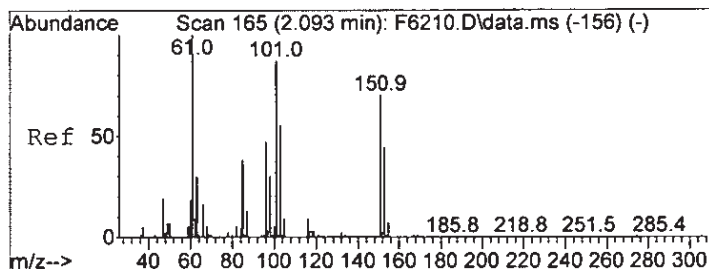
Tgt Ion: 64 Resp: 804029
Ion Ratio Lower Upper
64 100
66 31.3 13.4 53.4



#10
Freon 123a
Concen: 2.91 ug/L
RT: 1.928 min Scan# 138
Delta R.T. -0.000 min
Lab File: A2340.D
Acq: 25 Sep 2014 5:45 am

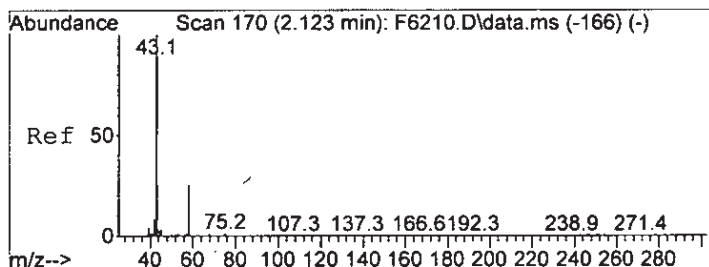
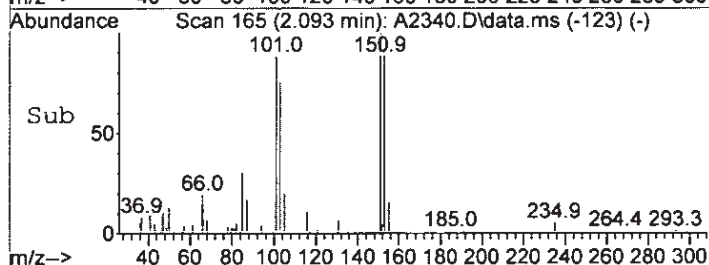
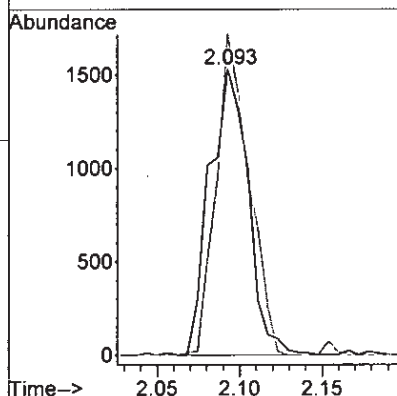
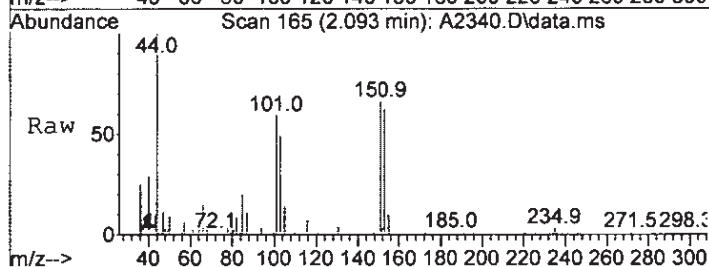
Tgt Ion: 67 Resp: 28549
Ion Ratio Lower Upper
67 100
117 83.8 53.0 93.0





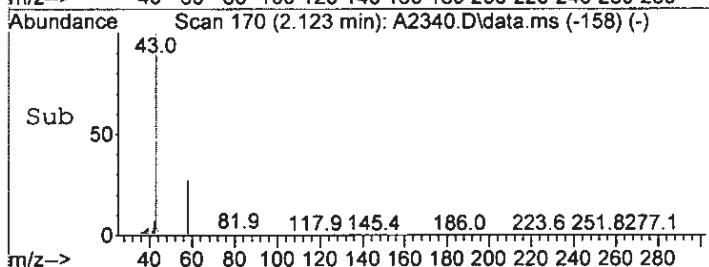
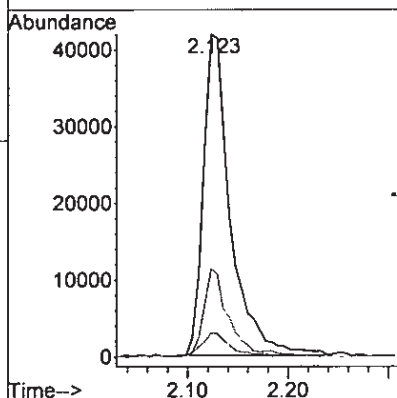
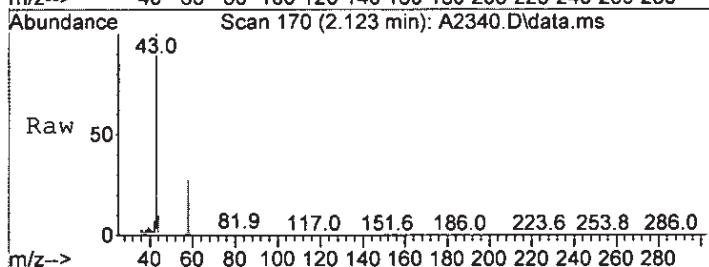
#14
 Freon 113
 Concen: 0.33 ug/L
 RT: 2.093 min Scan# 165
 Delta R.T. -0.000 min
 Lab File: A2340.D
 Acq: 25 Sep 2014 5:45 am

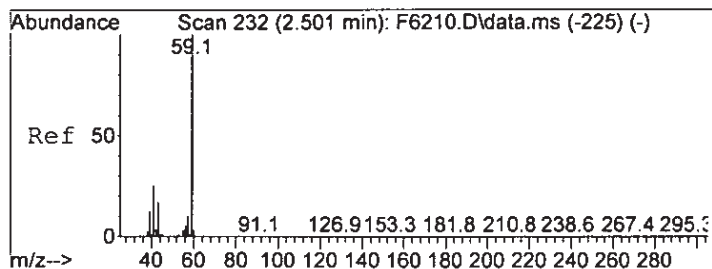
Tgt Ion: 101 Resp: 2472
 Ion Ratio Lower Upper
 101 100
 151 112.3 60.3 100.3#



#15
 Acetone
 Concen: 30.51 ug/L
 RT: 2.123 min Scan# 170
 Delta R.T. 0.000 min
 Lab File: A2340.D
 Acq: 25 Sep 2014 5:45 am

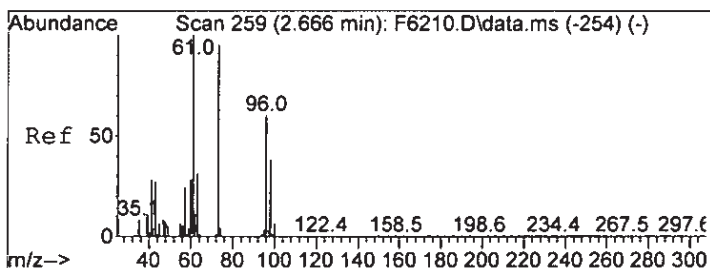
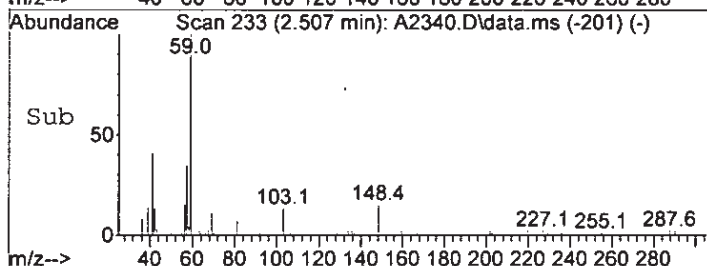
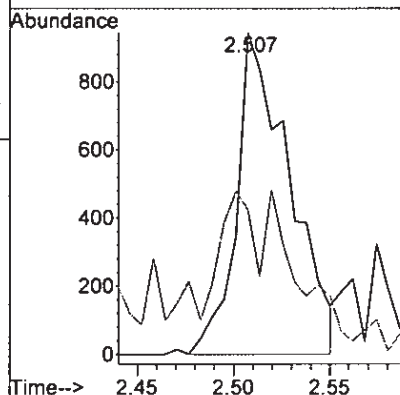
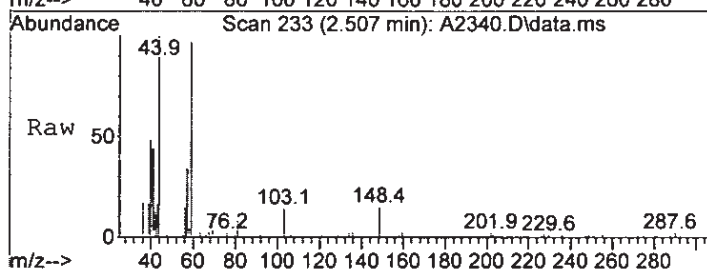
Tgt Ion: 43 Resp: 78438
 Ion Ratio Lower Upper
 43 100
 58 27.2 7.2 47.2
 42 7.3 0.0 27.0





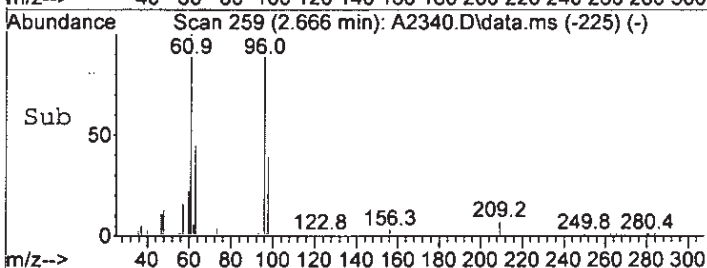
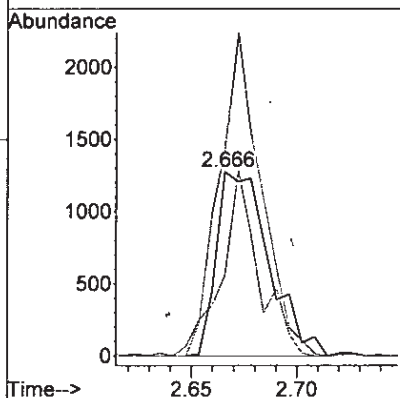
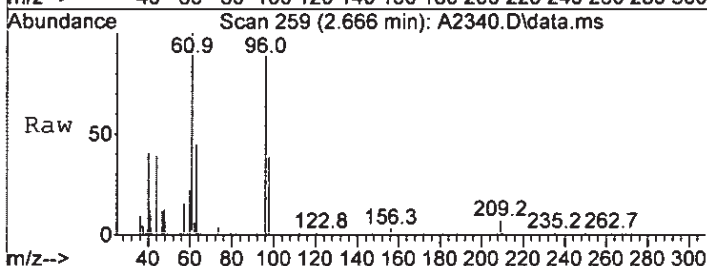
#23
TBA
Concen: 4.11 ug/L
RT: 2.507 min Scan# 233
Delta R.T. 0.006 min
Lab File: A2340.D
Acq: 25 Sep 2014 5:45 am

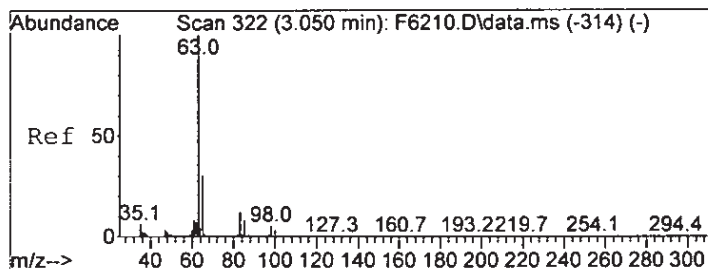
Tgt Ion: 59 Resp: 1797
Ion Ratio Lower Upper
59 100
41 45.0 2.8 42.8#



#26
trans-1,2-Dichloroethene
Concen: 0.29 ug/L
RT: 2.666 min Scan# 259
Delta R.T. -0.000 min
Lab File: A2340.D
Acq: 25 Sep 2014 5:45 am

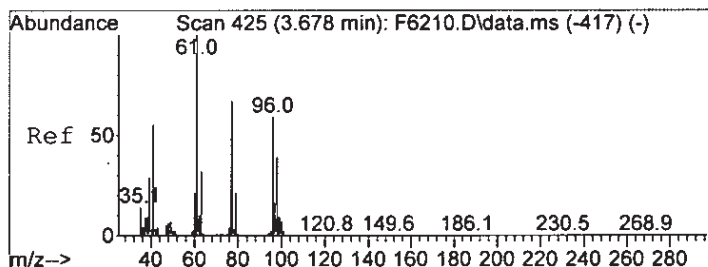
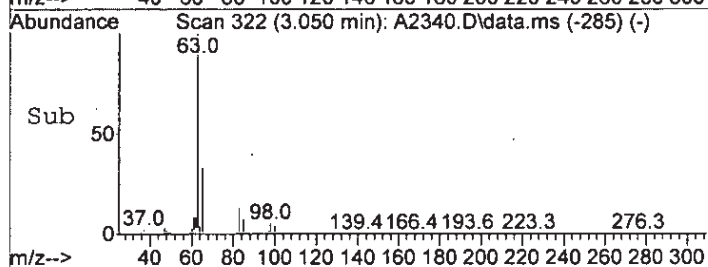
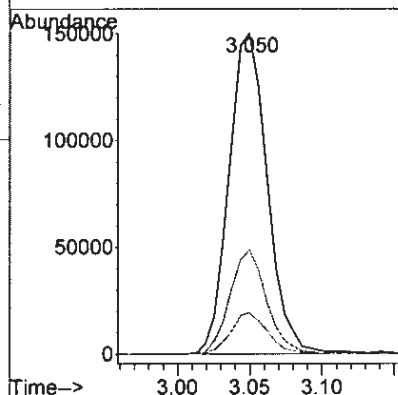
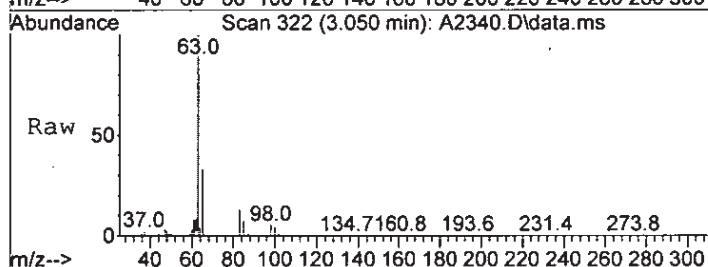
Tgt Ion: 96 Resp: 2193
Ion Ratio Lower Upper
96 100
98 43.3 44.0 84.0#
61 112.5 124.3 164.3#





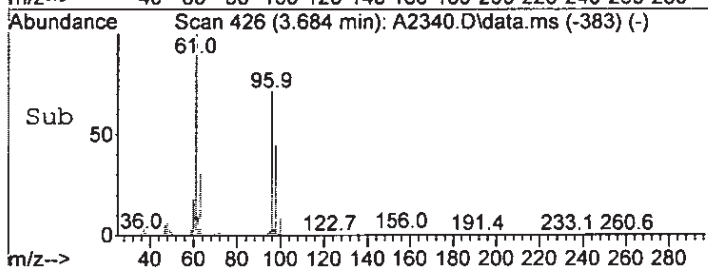
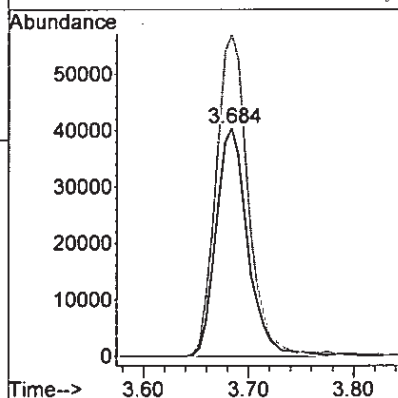
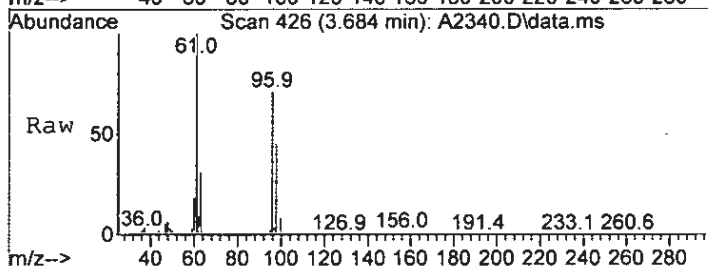
#28
1,1-Dicethane
Concen: 17.18 ug/L
RT: 3.050 min Scan# 322
Delta R.T. -0.000 min
Lab File: A2340.D
Acq: 25 Sep 2014 5:45 am

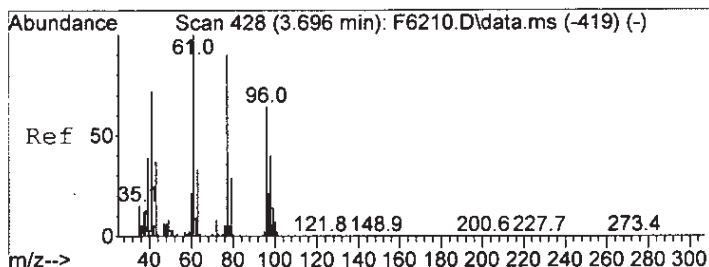
Tgt Ion: 63 Resp: 275535
Ion Ratio Lower Upper
63 100
65 32.6 11.1 51.1
83 12.8 0.0 33.1



#34
cis-1,2-Dichloroethene
Concen: 10.06 ug/L
RT: 3.684 min Scan# 426
Delta R.T. 0.006 min
Lab File: A2340.D
Acq: 25 Sep 2014 5:45 am

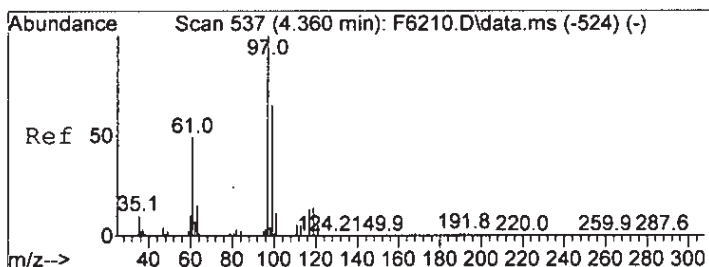
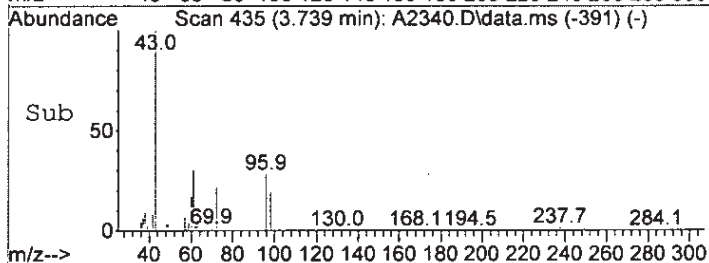
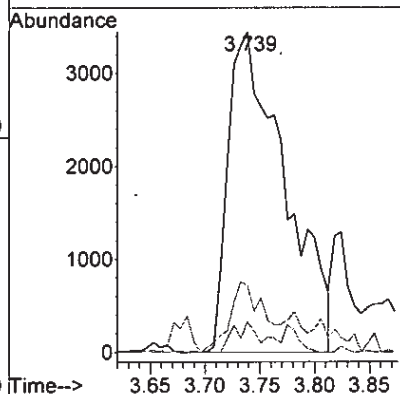
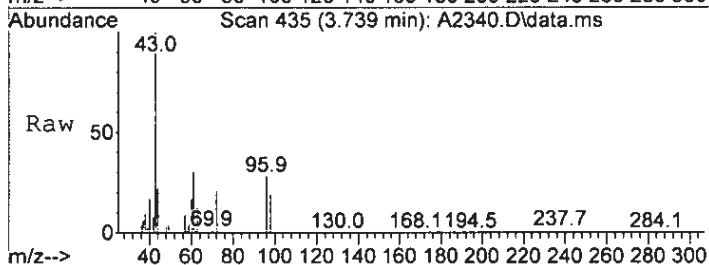
Tgt Ion: 96 Resp: 83453
Ion Ratio Lower Upper
96 100
61 141.3 128.3 168.3





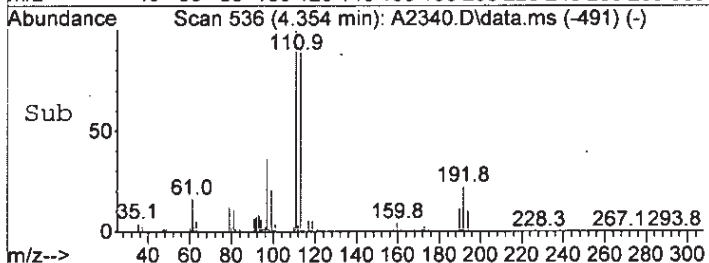
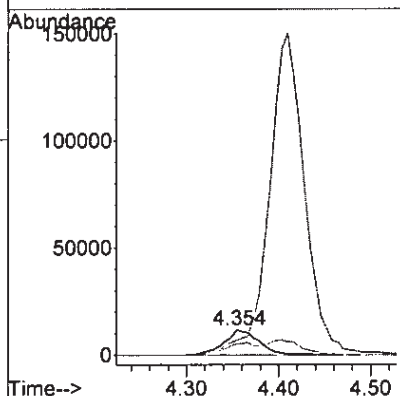
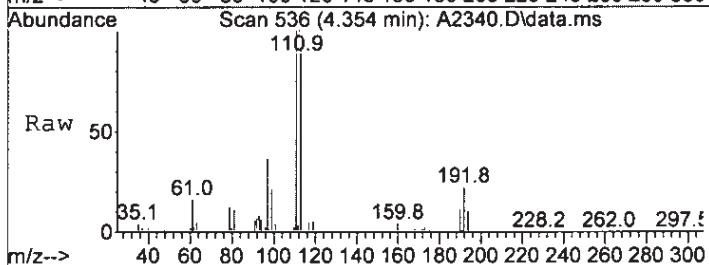
#35
2-Butanone
Concen: 3.63 ug/L
RT: 3.739 min Scan# 435
Delta R.T. 0.043 min
Lab File: A2340.D
Acq: 25 Sep 2014 5:45 am

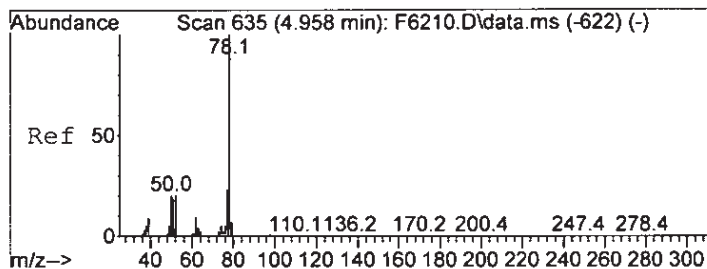
Tgt Ion: 43 Resp: 12304
Ion Ratio Lower Upper
43 100
57 9.4 0.0 28.3
72 20.8 3.5 43.5



#41
1,1,1-Trichloroethane
Concen: 2.60 ug/L
RT: 4.354 min Scan# 536
Delta R.T. -0.006 min
Lab File: A2340.D
Acq: 25 Sep 2014 5:45 am

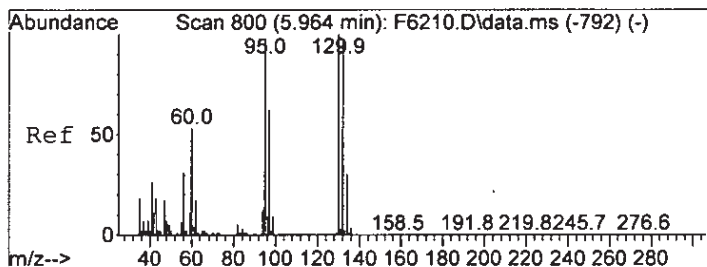
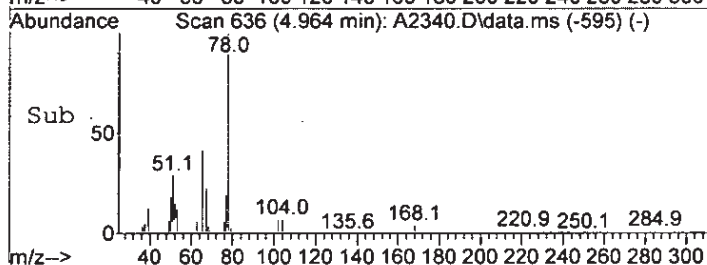
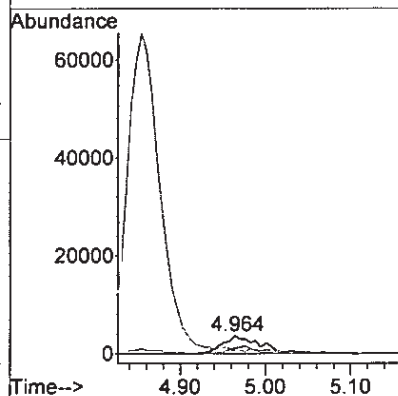
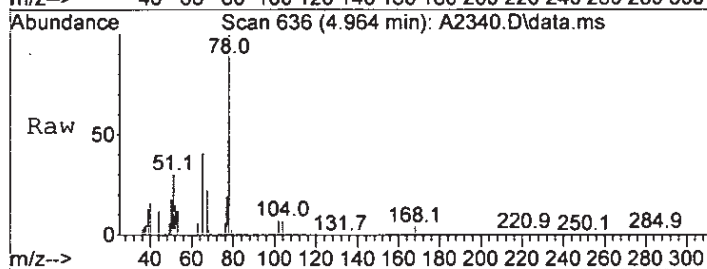
Tgt Ion: 97 Resp: 30106
Ion Ratio Lower Upper
97 100
99 58.7 47.6 87.6
61 45.4 27.6 67.6





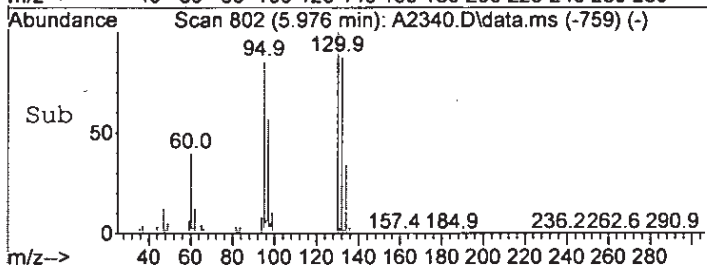
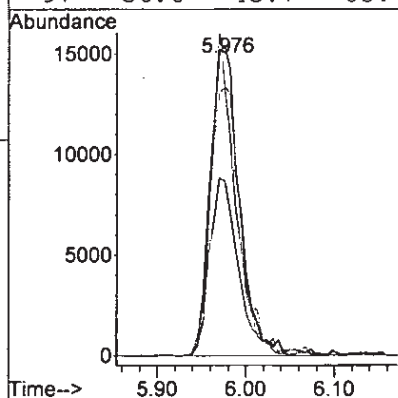
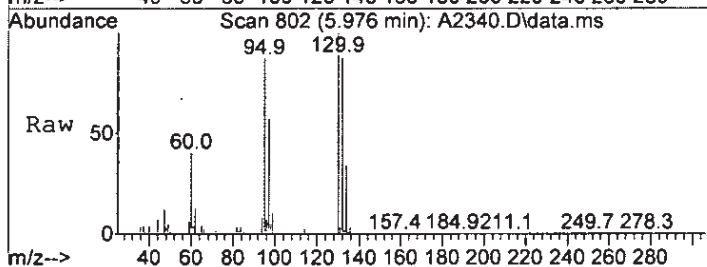
#49
Benzene
Concen: 0.38 ug/L m
RT: 4.964 min Scan# 636
Delta R.T. 0.006 min
Lab File: A2340.D
Acq: 25 Sep 2014 5:45 am

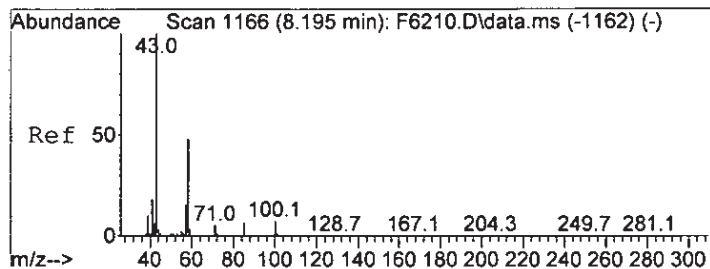
Tgt Ion: 78 Resp: 11062
Ion Ratio Lower Upper
78 100
51 30.4 0.0 39.4
52 14.9 0.0 36.9



#54
Trichloroethene
Concen: 4.31 ug/L
RT: 5.976 min Scan# 802
Delta R.T. 0.012 min
Lab File: A2340.D
Acq: 25 Sep 2014 5:45 am

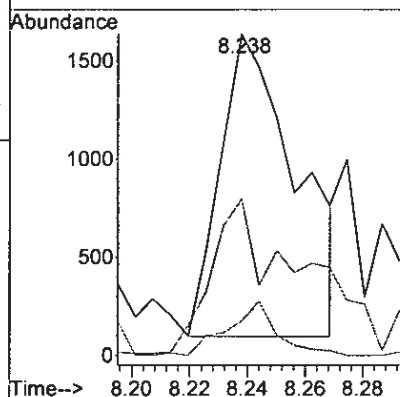
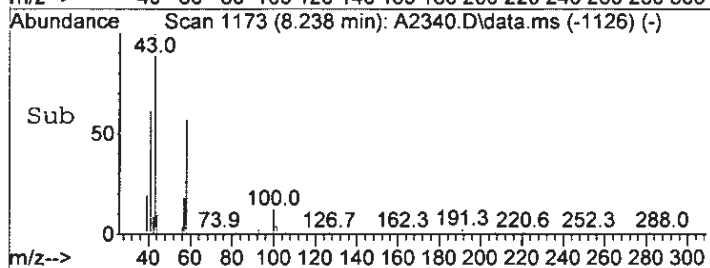
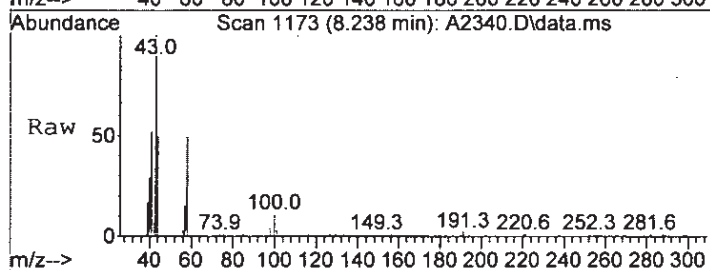
Tgt Ion: 130 Resp: 34987
Ion Ratio Lower Upper
130 100
132 87.2 74.1 114.1
95 86.5 76.9 116.9
97 56.6 43.7 83.7





#73
 2-Hexanone
 Concen: 0.59 ug/L
 RT: 8.238 min Scan# 1173
 Delta R.T. 0.043 min
 Lab File: A2340.D
 Acq: 25 Sep 2014 5:45 am

Tgt Ion: 43 Resp: 2806
 Ion Ratio Lower Upper
 43 100
 58 48.6 30.8 70.8
 100 10.5 0.0 30.1



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: 9/21/14 0916
Date Received: 9/23/14
Date Analyzed: 9/25/14 06:14

Sample Name: MW-16
Lab Code: R1407422-011

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\092414\A2341.D\

Analysis Lot: 412875
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	6.0	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	41	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	0.43 J	5.0	0.30	
79-01-6	Trichloroethene (TCE)	8.6	5.0	0.22	
75-01-4	Vinyl Chloride	5.0 U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	17	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0 U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85-122	9/25/14 06:14	
Dibromofluoromethane	100	89-119	9/25/14 06:14	
Toluene-d8	97	87-121	9/25/14 06:14	

Sample : R1407422-011|1.0
 Data File : I:\ACQUDATA\msvoa10\data\092414\A2341.D Vial: 42
 Acq On : 25 Sep 2014 6:14 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 7979 T4

Quant Time: Sep 25 08:33:17 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

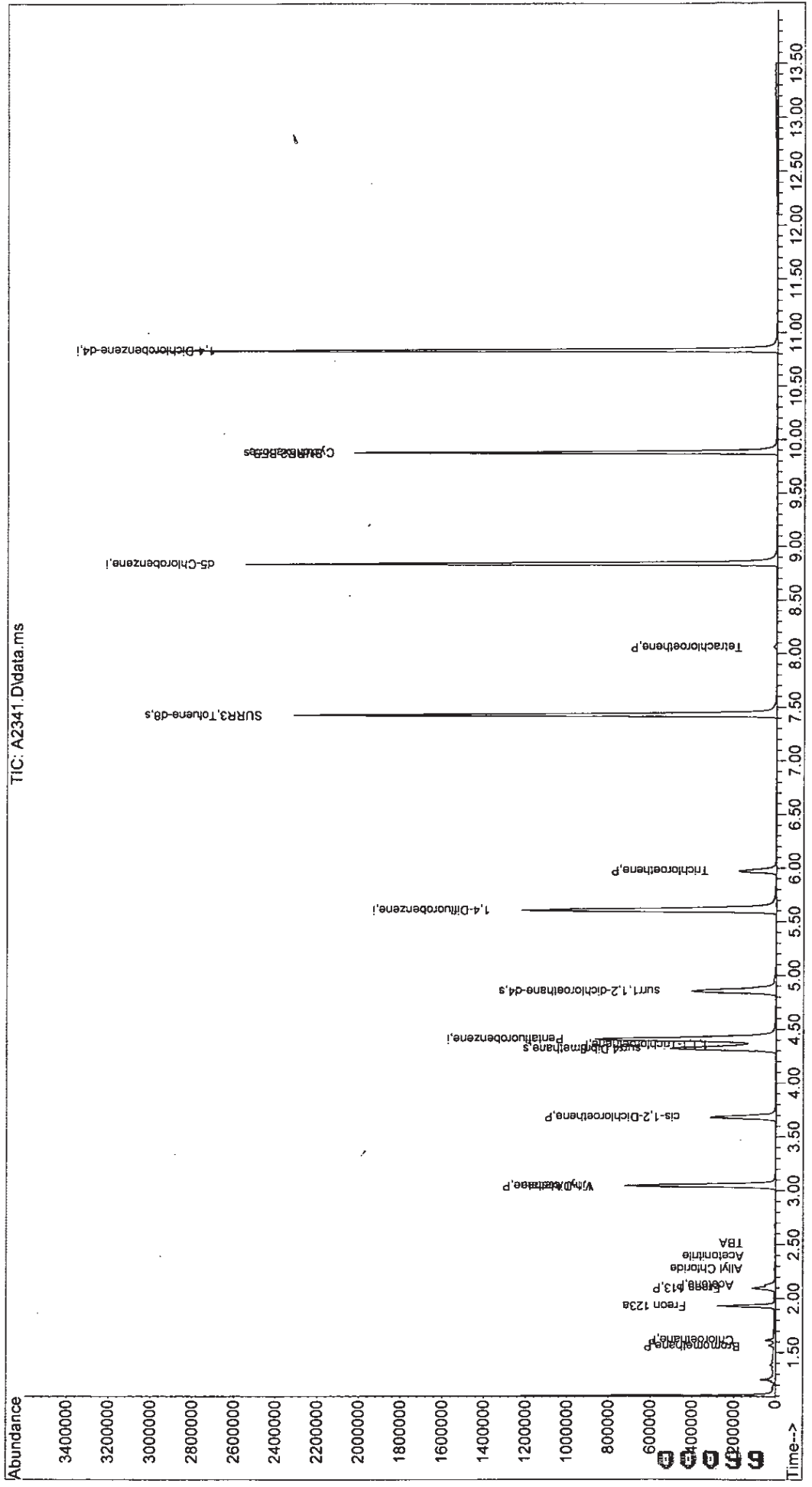
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	871767	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1237221	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1144345	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	633329	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.318	113	394927	50.06	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	= 100.12%	
48) surr1,1,2-dichloroetha...	4.854	65	373253	44.83	ug/L	0.00
Spiked Amount	50.000	Range	78 - 122	Recovery	= 89.66%	
65) SURR3,Toluene-d8	7.427	98	1343399	48.35	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	= 96.70%	
70) SURR2,BFB	9.878	95	518477	47.42	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	= 94.84%	
Target Compounds						
					Qvalue	
5) Bromomethane	1.556	94	527	0.29	ug/L	85
6) Chloroethane	1.611	64	17445	3.01	ug/L	91
10) Freon 123a	1.928	67	90010	8.89	ug/L	92
11) Freon 123	1.928	83	5820	0.54	ug/L #	1
14) Freon 113	2.093	101	31280	4.07	ug/L	91
15) Acetone	2.123	43	49871	18.79	ug/L	99
19) Acetonitrile	2.392	40	543	1.91	ug/L #	1
20) Allyl Chloride	2.276	76	4304	1.13	ug/L #	1
23) TBA	2.513	59	1428	3.16	ug/L #	1
28) 1,1-Dicethane	3.044	63	671831	40.56	ug/L	99
29) Vinyl Acetate	3.044	86	1259	1.29	ug/L #	1
34) cis-1,2-Dichloroethene	3.684	96	145027	16.93	ug/L	93
41) 1,1,1-Trichloroethane	4.355	97	71486	5.99	ug/L	96
54) Trichloroethene	5.976	130	72275	8.57	ug/L	90
72) Tetrachloroethene	8.061	164	2829	0.43	ug/L #	86
89) Cyclohexanone	9.884	55	1679	1.59	ug/L #	14

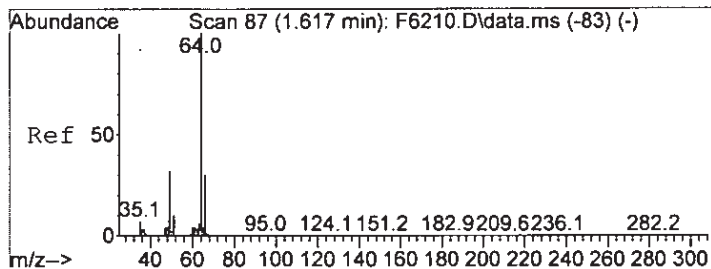
(#) = qualifier out of range (m) = manual integration (+) = signals summed

FU
9/28/14

Sample : R1407422-01111.0
 Data File : I:\ACQUDATA\msvoa10\data\092414\A2341.D Vial: 42
 Acq On : 25 Sep 2014 6:14 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 7979 T4

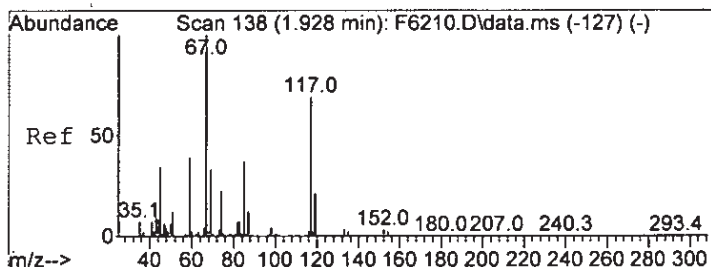
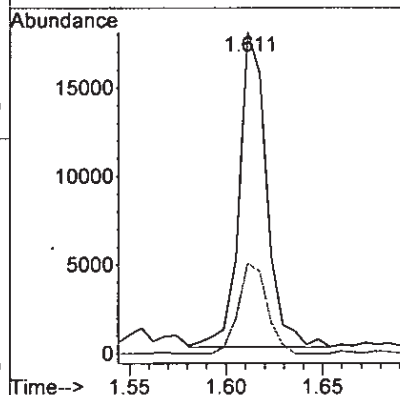
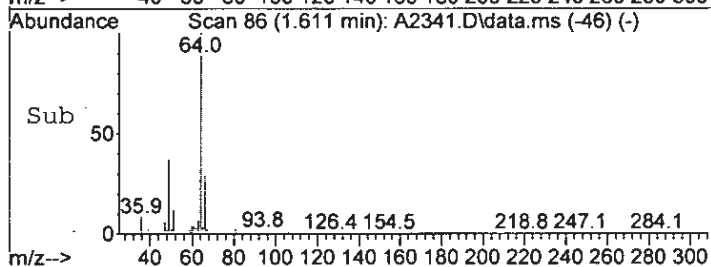
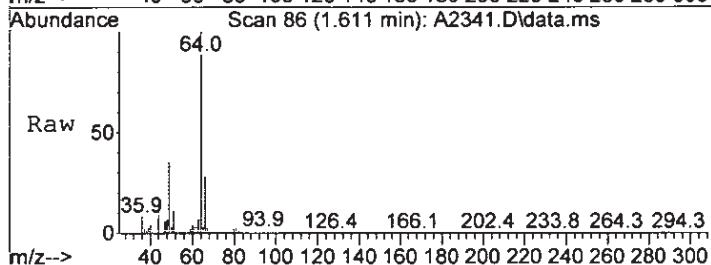
Quant Time: Sep 25 08:33:17 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration





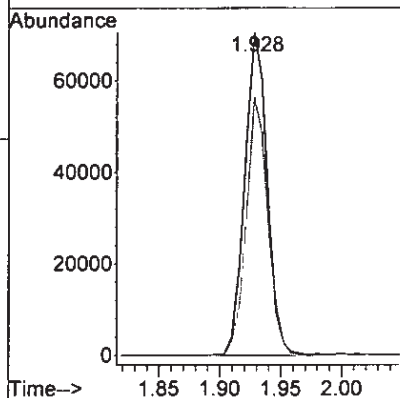
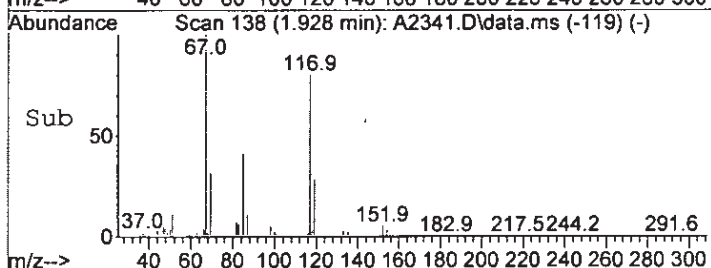
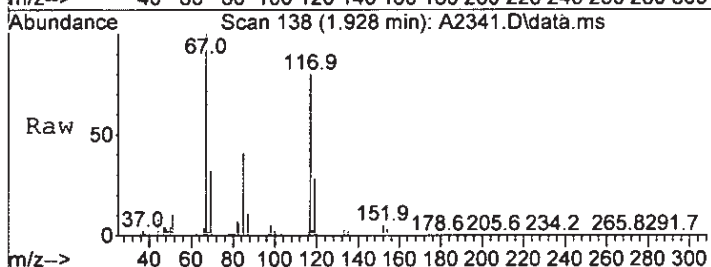
#6
Chloroethane
Concen: 3.01 ug/L
RT: 1.611 min Scan# 86
Delta R.T. 0.000 min
Lab File: A2341.D
Acq: 25 Sep 2014 6:14 am

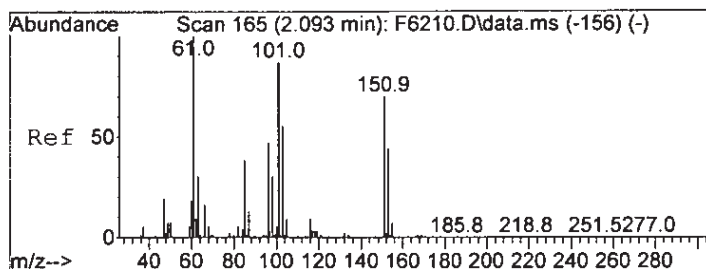
Tgt Ion: 64 Resp: 17445
Ion Ratio Lower Upper
64 100
66 28.0 13.4 53.4



#10
Freon 123a
Concen: 8.89 ug/L
RT: 1.928 min Scan# 138
Delta R.T. 0.000 min
Lab File: A2341.D
Acq: 25 Sep 2014 6:14 am

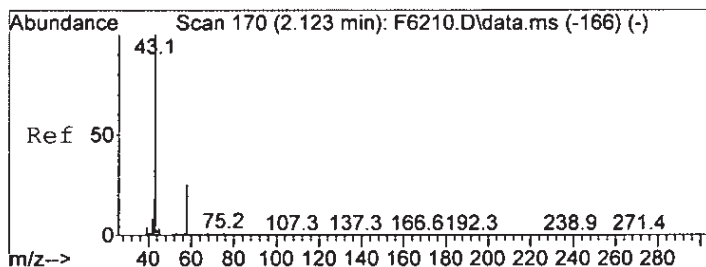
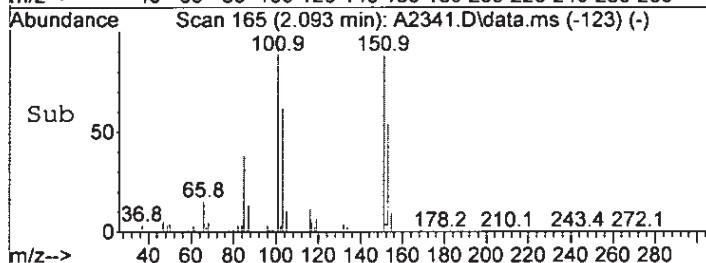
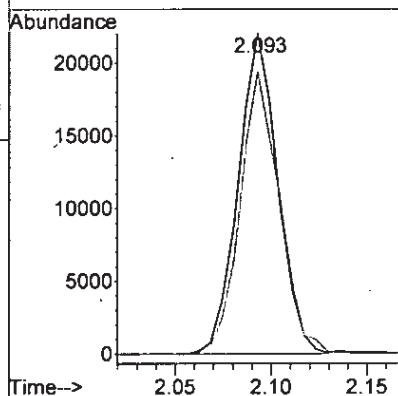
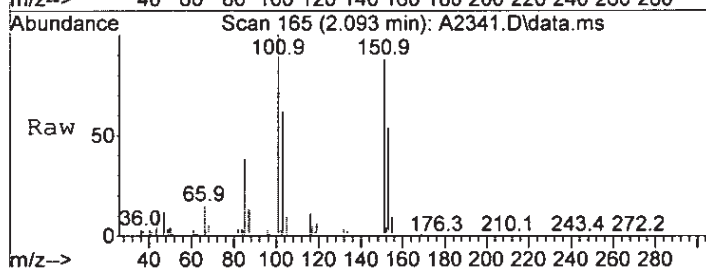
Tgt Ion: 67 Resp: 90010
Ion Ratio Lower Upper
67 100
117 79.8 53.0 93.0





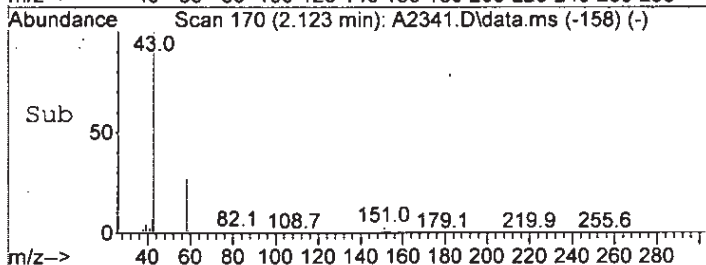
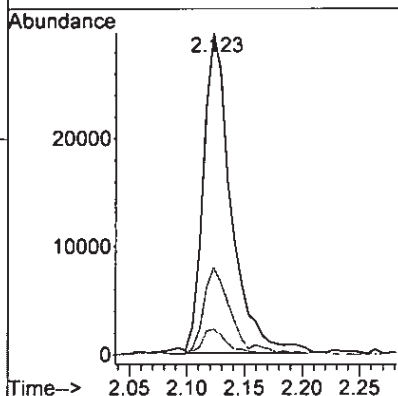
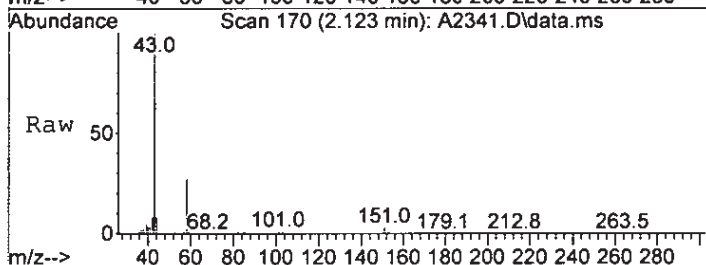
#14
 Freon 113
 Concen: 4.07 ug/L
 RT: 2.093 min Scan# 165
 Delta R.T. 0.000 min
 Lab File: A2341.D
 Acq: 25 Sep 2014 6:14 am

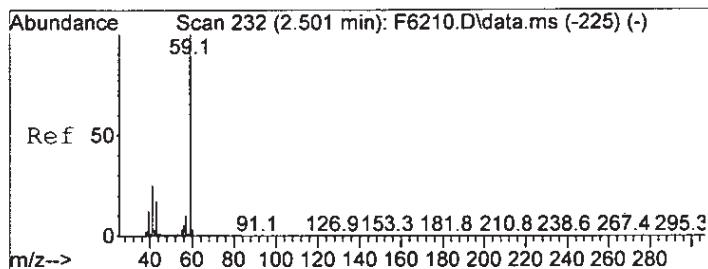
Tgt Ion: 101 Resp: 31280
 Ion Ratio Lower Upper
 101 100
 151 88.1 60.3 100.3



#15
 Acetone
 Concen: 18.79 ug/L
 RT: 2.123 min Scan# 170
 Delta R.T. 0.000 min
 Lab File: A2341.D
 Acq: 25 Sep 2014 6:14 am

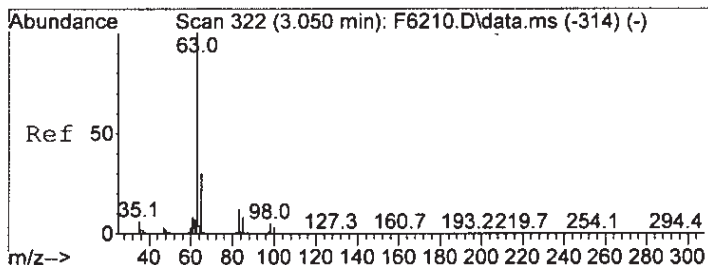
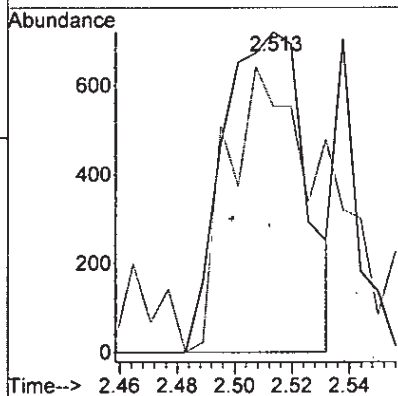
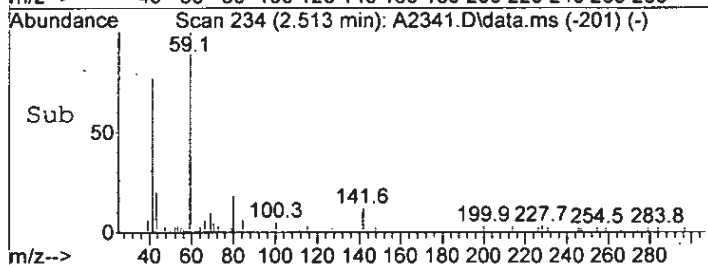
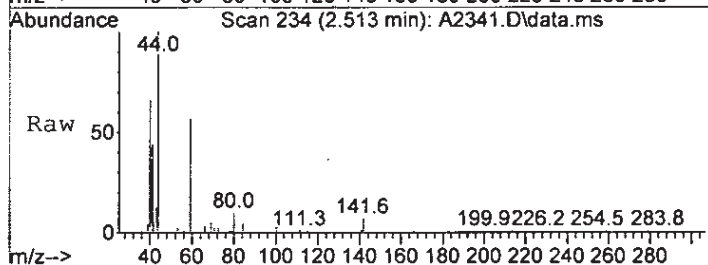
Tgt Ion: 43 Resp: 49871
 Ion Ratio Lower Upper
 43 100
 58 27.0 7.2 47.2
 42 7.9 0.0 27.0





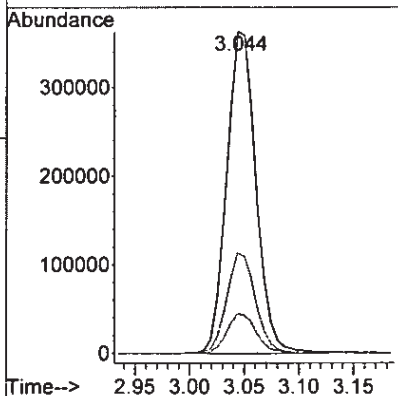
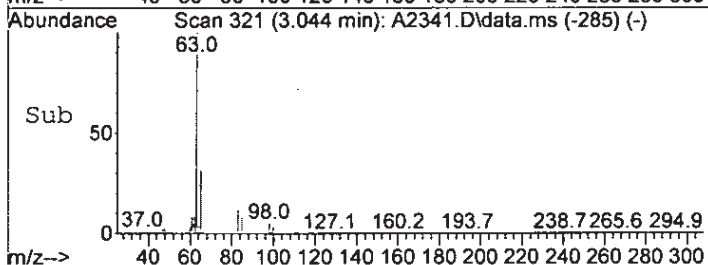
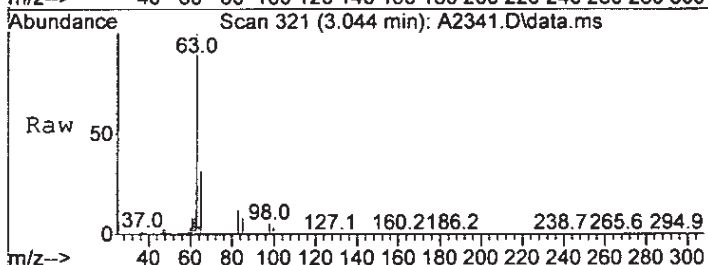
#23
TBA
Concen: 3.16 ug/L
RT: 2.513 min Scan# 234
Delta R.T. 0.012 min
Lab File: A2341.D
Acq: 25 Sep 2014 6:14 am

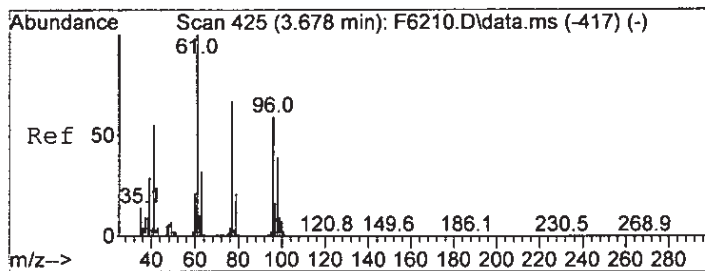
Tgt Ion: 59 Resp: 1428
Ion Ratio Lower Upper
59 100
41 76.8 2.8 42.8#



#28
1,1-Dicloroethane
Concen: 40.56 ug/L
RT: 3.044 min Scan# 321
Delta R.T. -0.006 min
Lab File: A2341.D
Acq: 25 Sep 2014 6:14 am

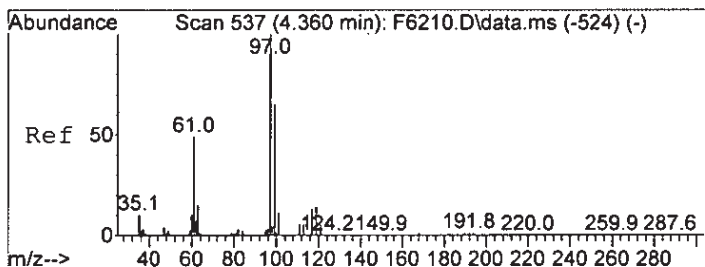
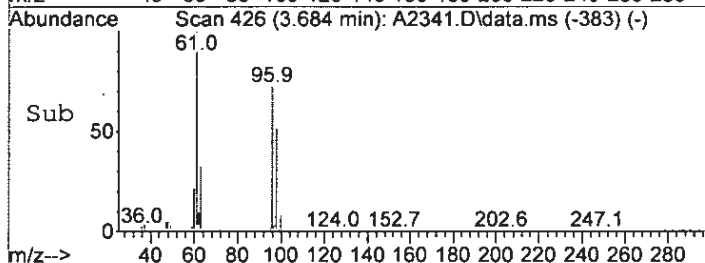
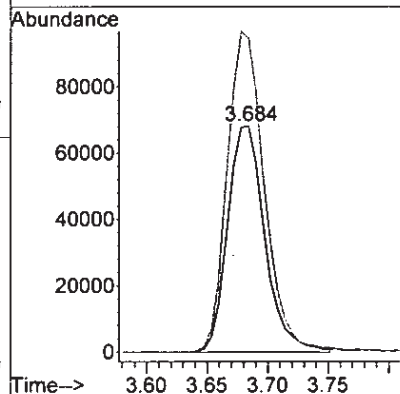
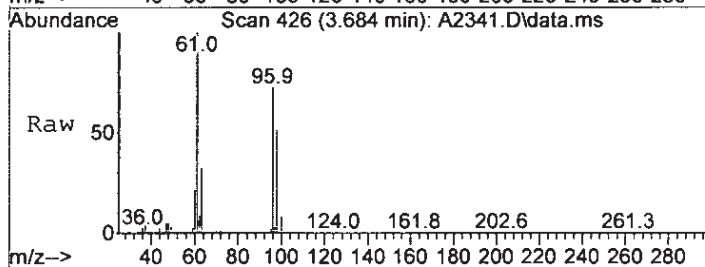
Tgt Ion: 63 Resp: 671831
Ion Ratio Lower Upper
63 100
65 31.2 11.1 51.1
83 12.1 0.0 33.1





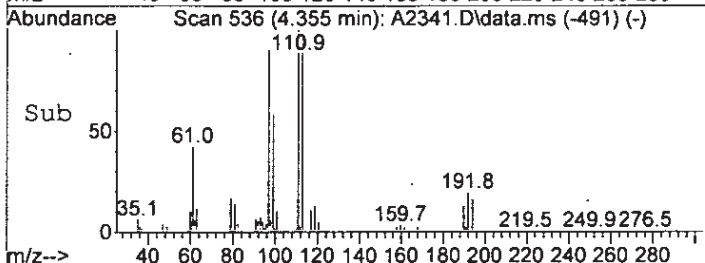
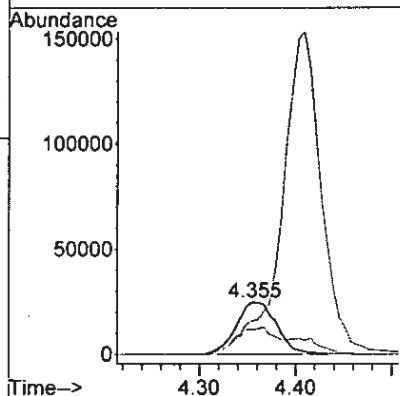
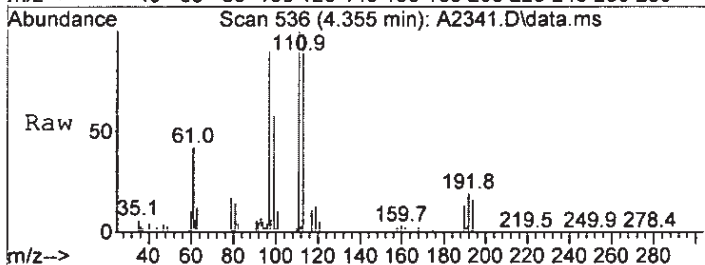
#34
 cis-1,2-Dichloroethene
 Concen: 16.93 ug/L
 RT: 3.684 min Scan# 426
 Delta R.T. 0.006 min
 Lab File: A2341.D
 Acq: 25 Sep 2014 6:14 am

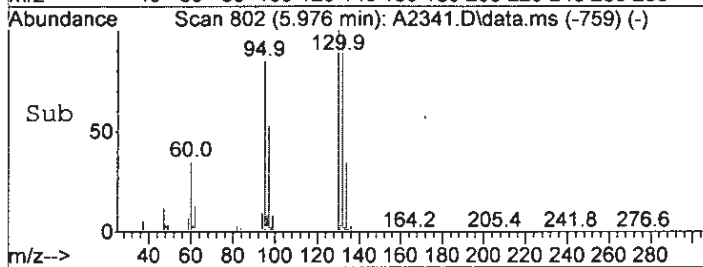
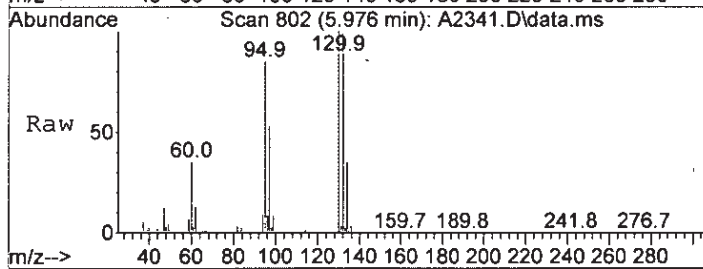
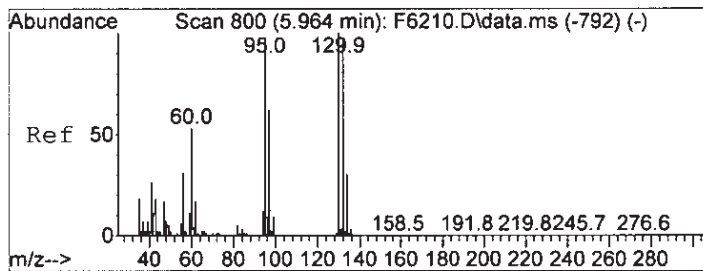
Tgt Ion: 96 Resp: 145027
 Ion Ratio Lower Upper
 96 100
 61 139.1 128.3 168.3



#41
 1,1,1-Trichloroethane
 Concen: 5.99 ug/L
 RT: 4.355 min Scan# 536
 Delta R.T. -0.006 min
 Lab File: A2341.D
 Acq: 25 Sep 2014 6:14 am

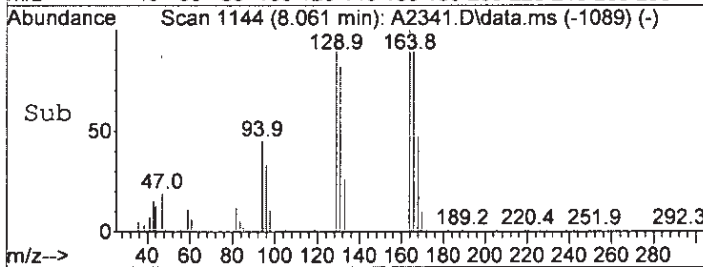
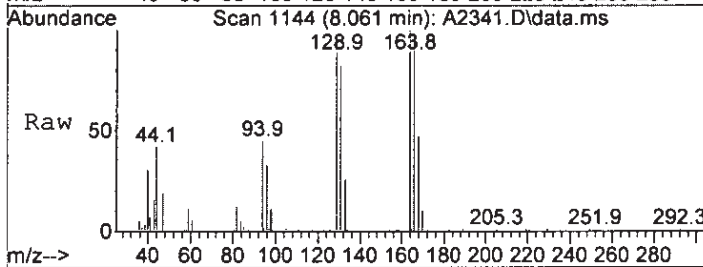
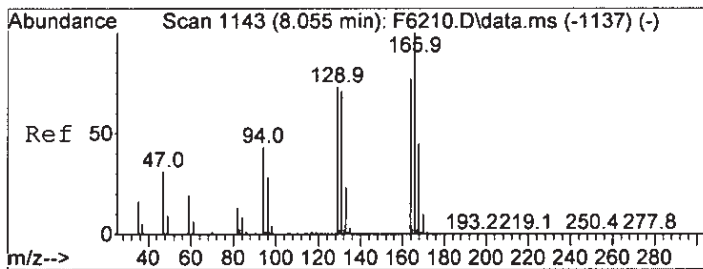
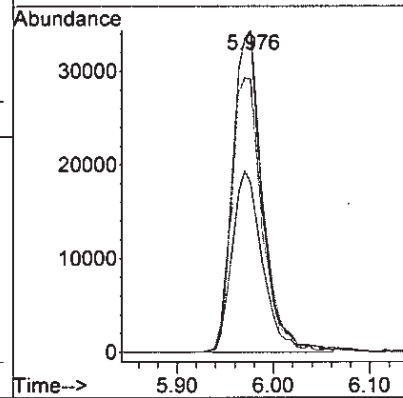
Tgt Ion: 97 Resp: 71486
 Ion Ratio Lower Upper
 97 100
 99 63.8 47.6 87.6
 61 46.3 27.6 67.6





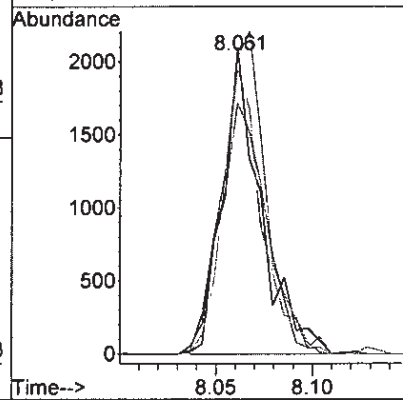
#54
Trichloroethene
Concen: 8.57 ug/L
RT: 5.976 min Scan# 802
Delta R.T. 0.012 min
Lab File: A2341.D
Acq: 25 Sep 2014 6:14 am

Tgt Ion:130 Resp: 72275
Ion Ratio Lower Upper
130 100
132 98.8 74.1 114.1
95 84.9 76.9 116.9
97 52.6 43.7 83.7



#72
Tetrachloroethene
Concen: 0.43 ug/L
RT: 8.061 min Scan# 1144
Delta R.T. 0.006 min
Lab File: A2341.D
Acq: 25 Sep 2014 6:14 am

Tgt Ion:164 Resp: 2829
Ion Ratio Lower Upper
164 100
166 96.2 106.8 146.8#
129 92.3 69.6 109.6
131 81.7 68.5 108.5



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: 9/21/14 1035
Date Received: 9/23/14
Date Analyzed: 9/25/14 06:44

Sample Name: MW-9
Lab Code: R1407422-012

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvov10\data\092414\A2342.D\

Analysis Lot: 412875
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	0.56 J	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0 U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	22	5.0	0.22	
75-01-4	Vinyl Chloride	5.0 U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	5.0 U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0 U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85-122	9/25/14 06:44	
Dibromofluoromethane	101	89-119	9/25/14 06:44	
Toluene-d8	97	87-121	9/25/14 06:44	

Sample : R1407422-012|1.0
 Data File : I:\ACQUDATA\msvoa10\data\092414\A2342.D Vial: 43
 Acq On : 25 Sep 2014 6:44 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 7979 T4

Quant Time: Sep 25 08:33:25 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	866035	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1242380	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1168097	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	637791	50.00	ug/L	0.00

System Monitoring Compounds						
45) surr4,Dibrflmethane	4.324	113	398760	50.34	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	100.68%
48) surr1,1,2-dichloroetha...	4.854	65	393645	47.08	ug/L	0.00
Spiked Amount	50.000	Range	78 - 122	Recovery	=	94.16%
65) SURR3,Toluene-d8	7.433	98	1353529	48.51	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	97.02%
70) SURR2,BFB	9.878	95	533167	48.56	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	97.12%

Target Compounds						Qvalue
5) Bromomethane	1.562	94	488	0.28	ug/L	# 84
10) Freon 123a	1.928	67	2976	0.30	ug/L	89
14) Freon 113	2.093	101	43826	5.75	ug/L	85
15) Acetone	2.123	43	2804	1.06	ug/L	85
19) Acetonitrile	2.257	40	720	2.55	ug/L	# 1
20) Allyl Chloride	2.276	76	2643	0.70	ug/L	# 1
34) cis-1,2-Dichloroethene	3.690	96	2299	0.27	ug/L	86
41) 1,1,1-Trichloroethane	4.347	97	6678	2250	0.56	0.23 ug/L 95 FU 9/28/14
54) Trichloroethene	5.970	130	189311	22.36	ug/L	92
72) Tetrachloroethene	8.067	164	1927	0.29	ug/L	89
89) Cyclohexanone	9.878	55	1721	1.60	ug/L	# 21
40) Chloroform	4.392		2946	0.21	ug/L	FU 9/28/14

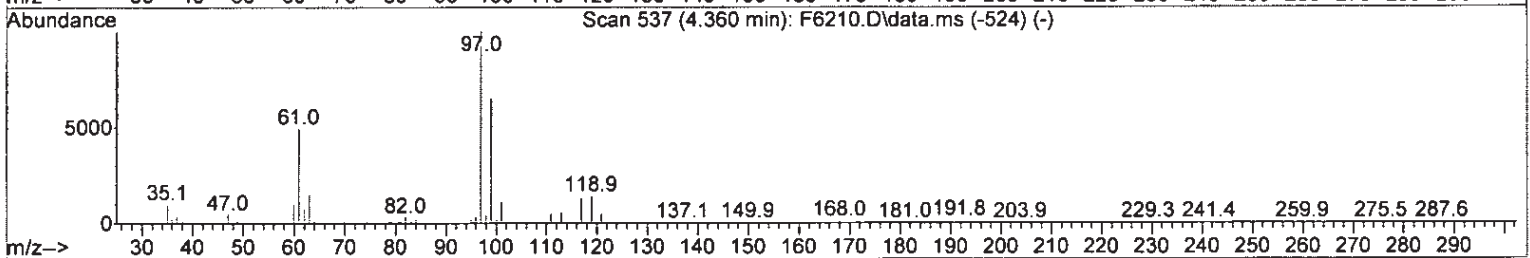
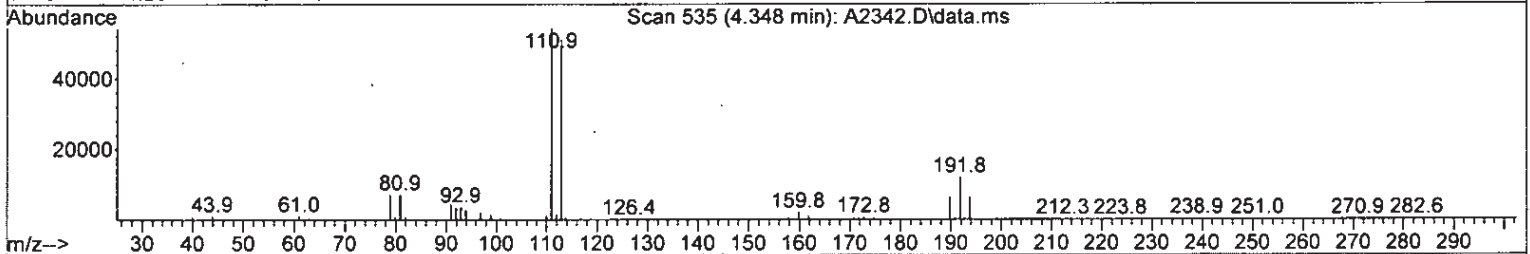
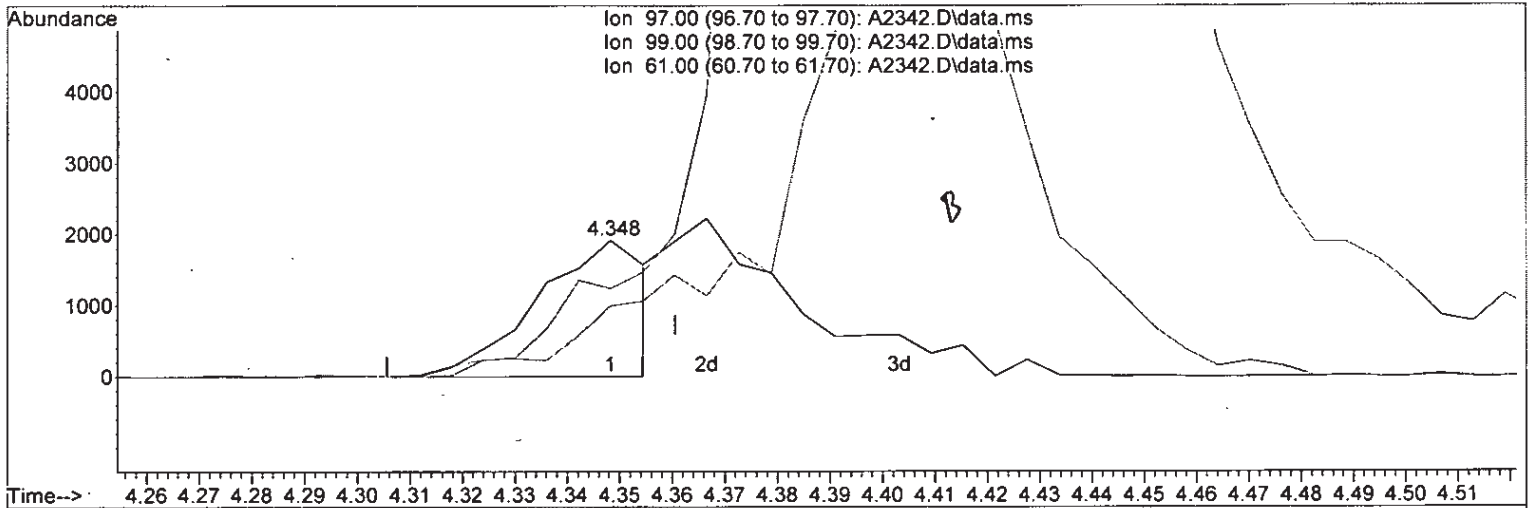
(#) = qualifier out of range (m) = manual integration (+) = signals summed

FU
9/28/14

Quantitation Report (Qedit)

Sample : R1407422-012|1.0
 Data File : I:\ACQUDATA\msvoa10\data\092414\A2342.D Vial: 43
 Acq On : 25 Sep 2014 6:44 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 7979 T4

Quant Time: Sep 25 08:33:25 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration



TIC: A2342.D\data.ms

(41) 1,1,1-Trichloroethane (P)

4.348min (-0.012) 0.23 ug/L

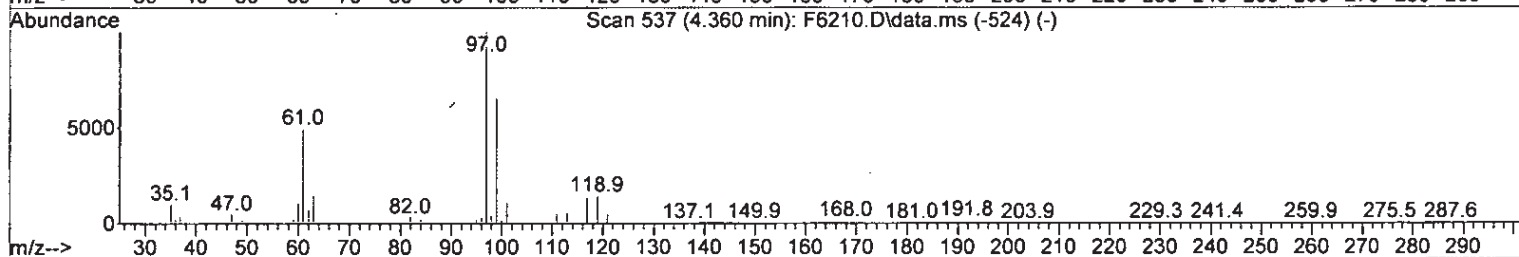
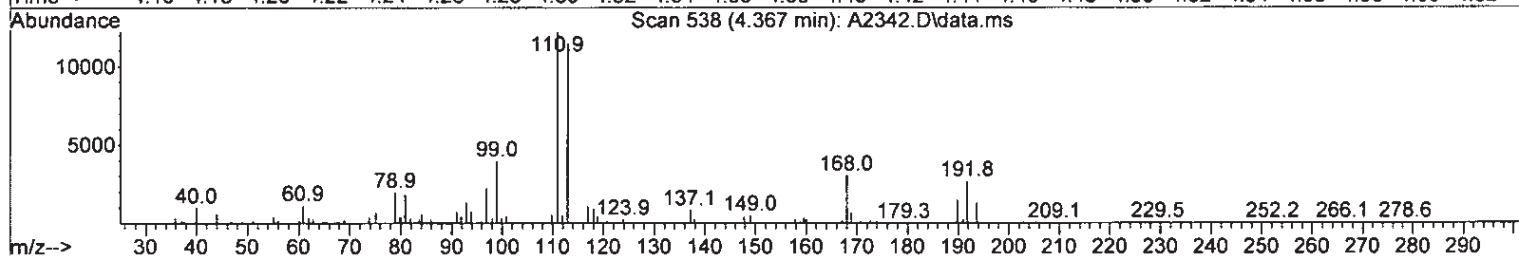
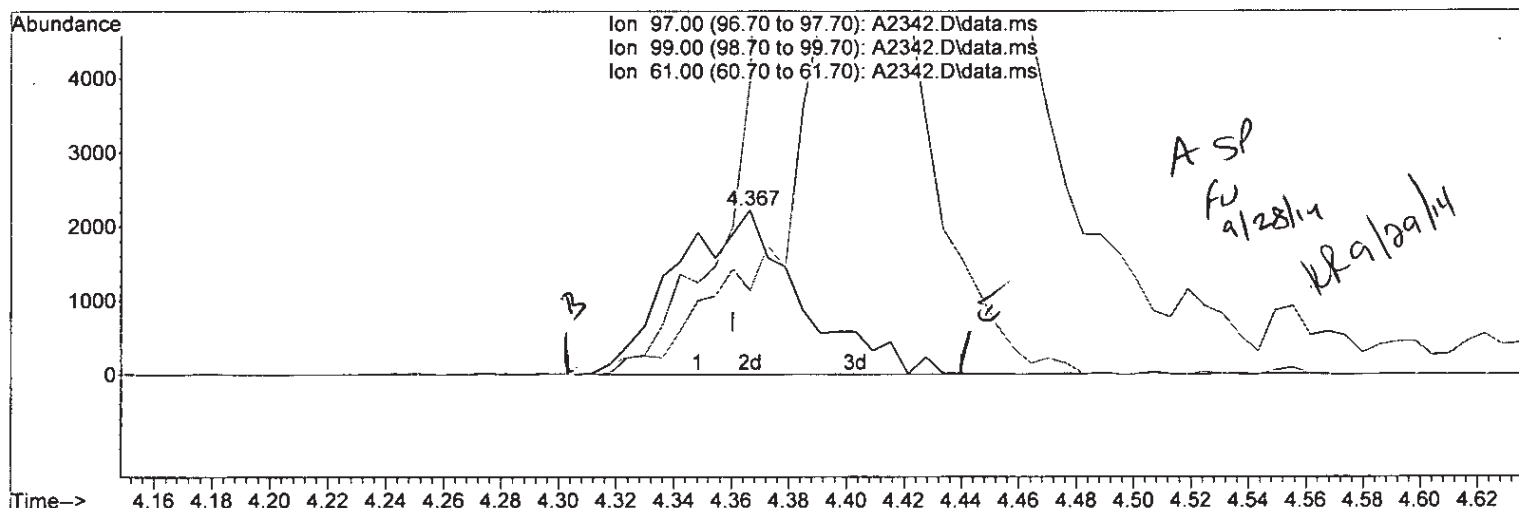
response 2750

Ion	Exp%	Act%
97.00	100	100
99.00	67.60	64.68
61.00	47.60	51.78
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : R1407422-012|1.0
Data File : I:\ACQUDATA\msvoa10\data\092414\A2342.D Vial: 43
Acq On : 25 Sep 2014 6:44 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc : VERINA 7979 T4

Quant Time: Sep 25 08:33:25 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



TIC: A2342.D\data.ms

(41) 1,1,1-Trichloroethane (P)

4.367min (+0.006) 0.56 ug/L m

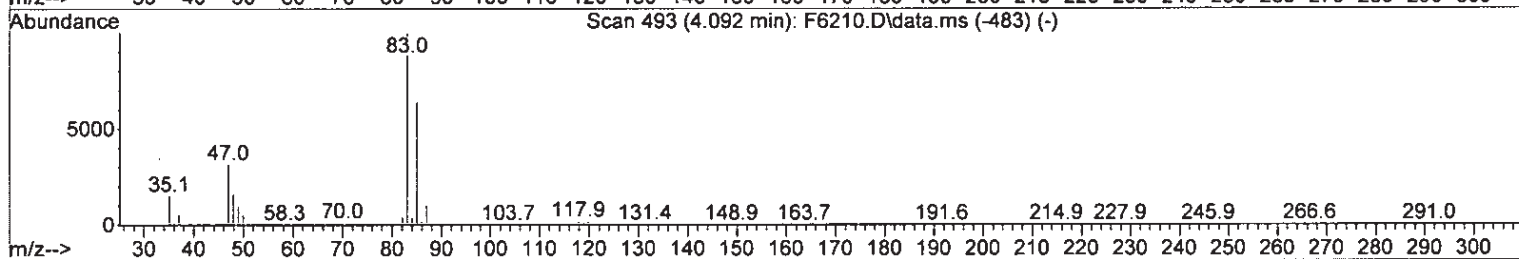
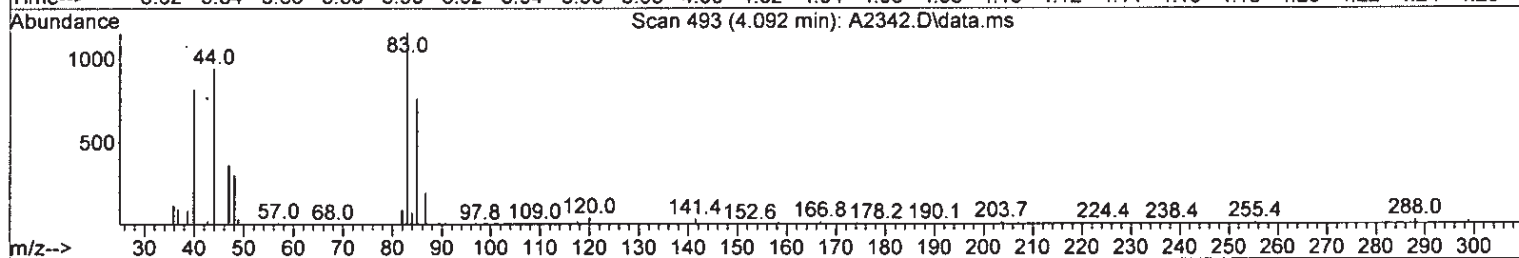
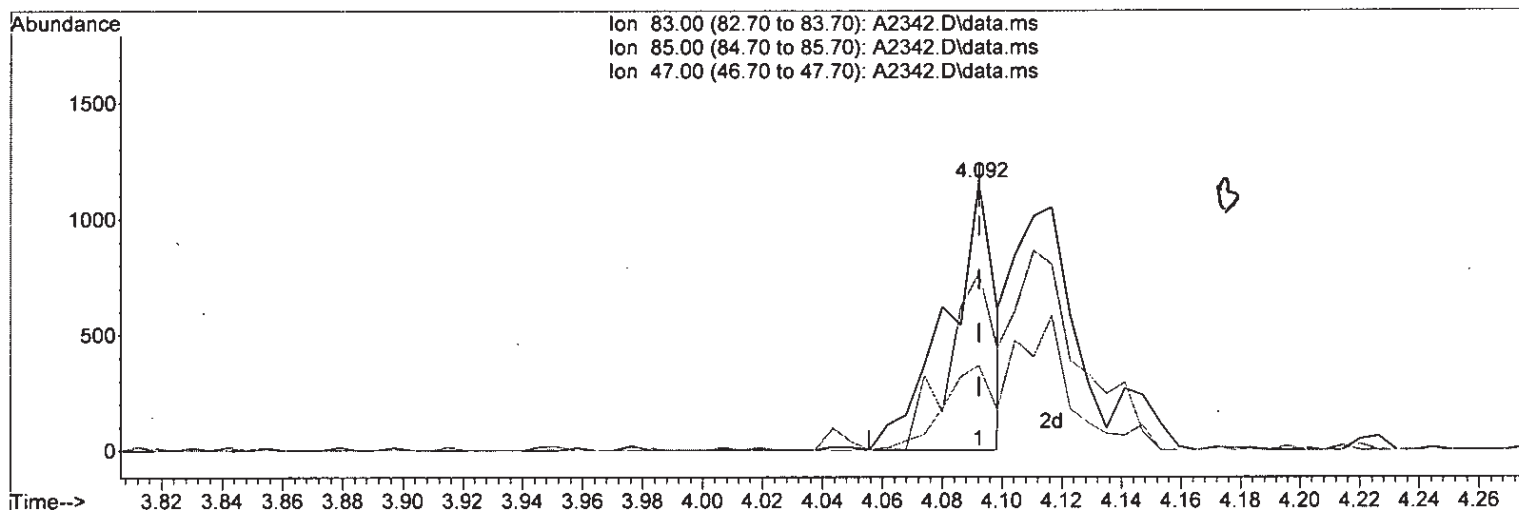
response 6678

Ion	Exp%	Act%
97.00	100	100
99.00	67.60	178.49#
61.00	47.60	50.95
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : R1407422-012|1.0
Data File : I:\ACQUDATA\msvoa10\data\092414\A2342.D Vial: 43
Acq On : 25 Sep 2014 6:44 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc : VERINA 7979 T4

Quant Time: Sep 25 08:33:25 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



TIC: A2342.D\data.ms

(40) Chloroform (P)

4.092min (-0.000) 0.09 ug/L

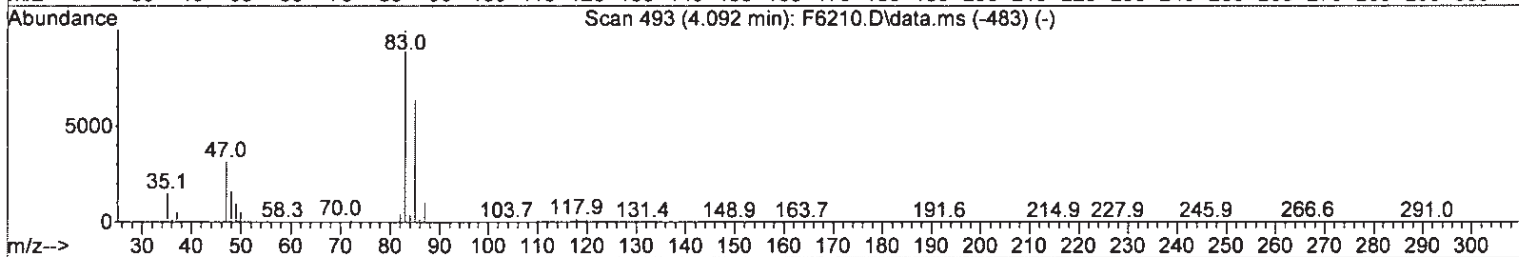
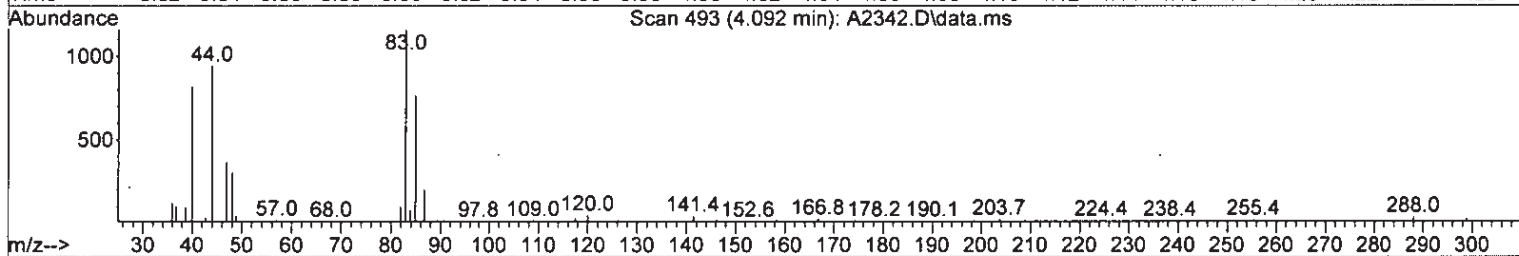
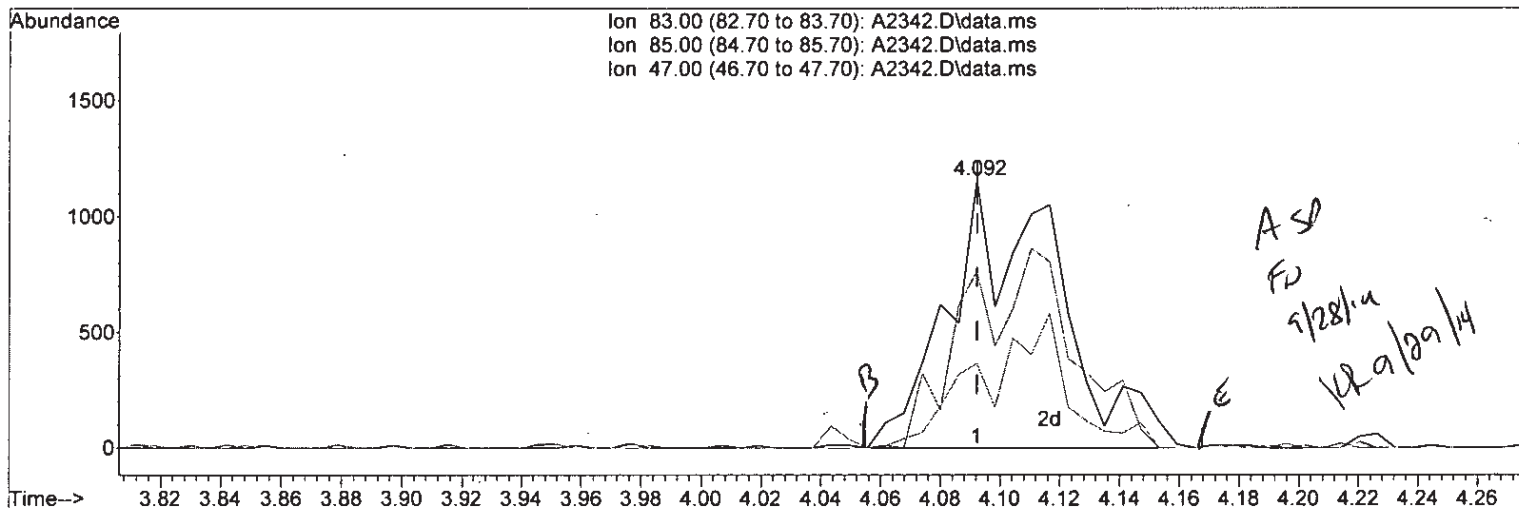
response 1299

Ion	Exp%	Act%
83.00	100	100
85.00	62.70	65.92
47.00	25.90	31.49
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : R1407422-012|1.0
 Data File : I:\ACQUDATA\msvoa10\data\092414\A2342.D Vial: 43
 Acq On : 25 Sep 2014 6:44 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 7979 T4

Quant Time: Sep 25 08:33:25 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration



TIC: A2342.D\data.ms

(40) Chloroform (P)

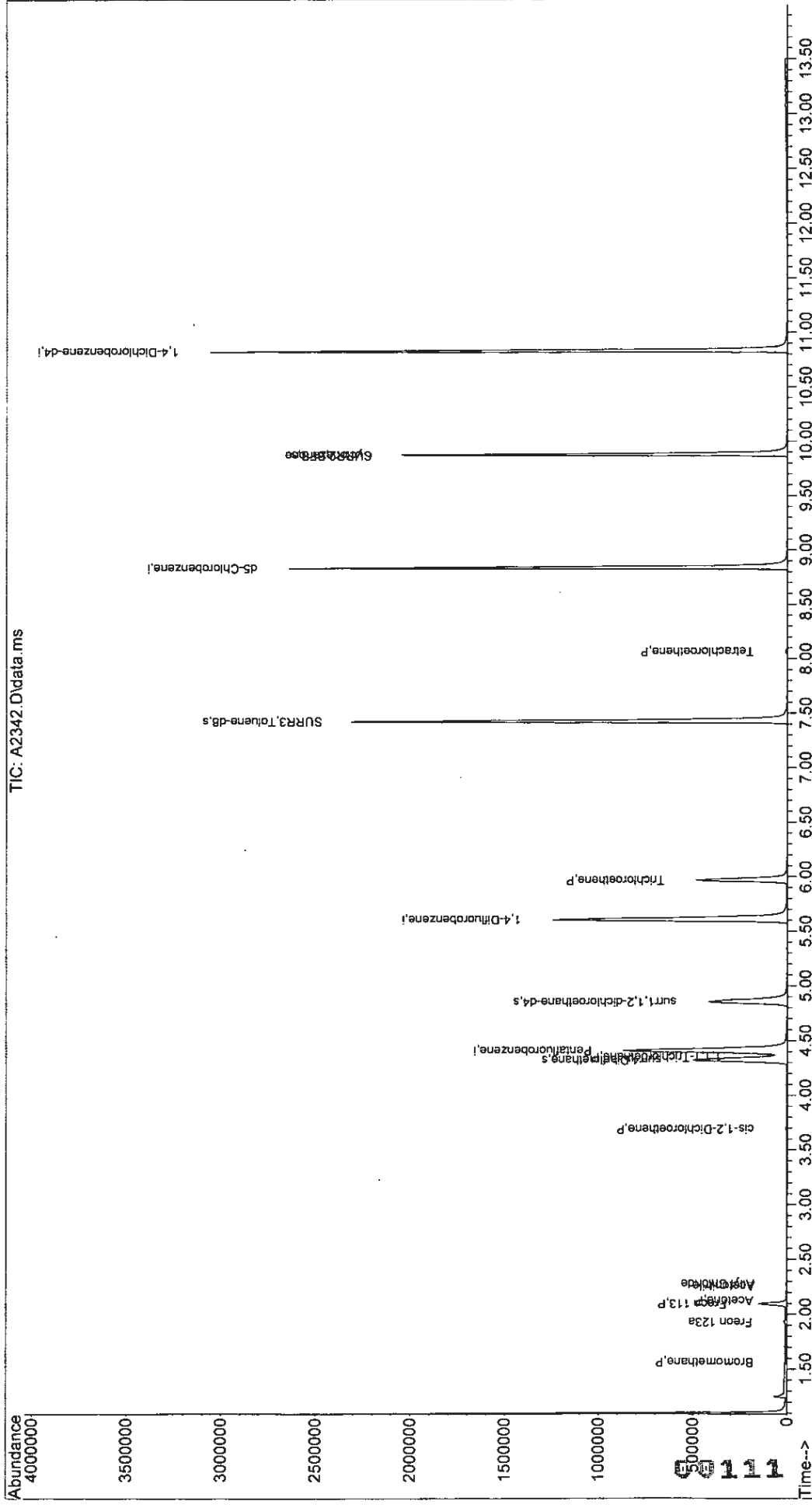
4.092min (-0.000) 0.21 ug/L m

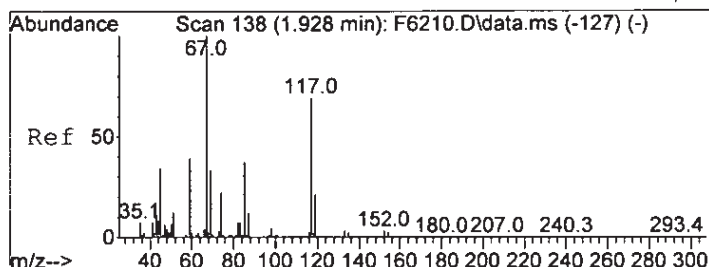
response 2946

Ion	Exp%	Act%
83.00	100	100
85.00	62.70	65.92
47.00	25.90	31.49
0.00	0.00	0.00

Sample : R1407422-012|1.0
 Data File : I:\ACQUDATA\msvoa10\data\092414\A2342.D Vial: 43
 Acq On : 25 Sep 2014 6:44 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 7979 T4

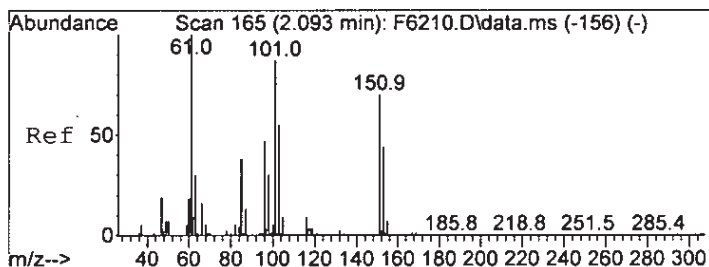
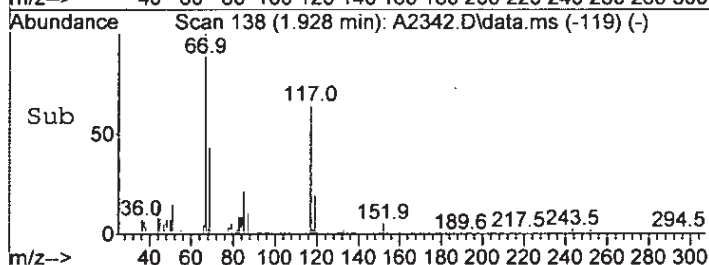
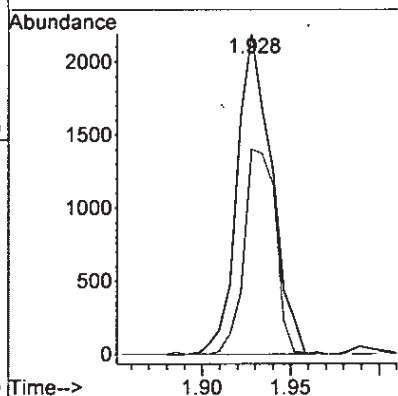
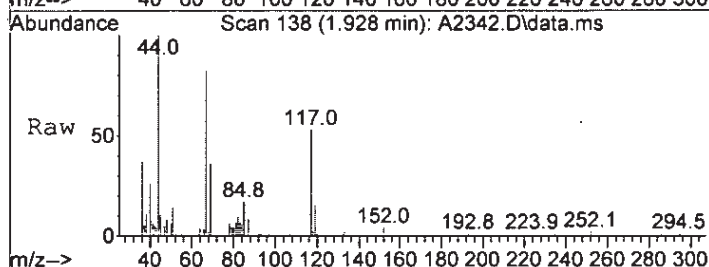
Quant Time: Sep 25 08:33:25 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 Qlast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration





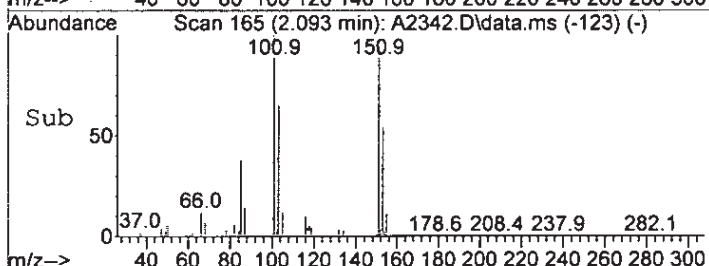
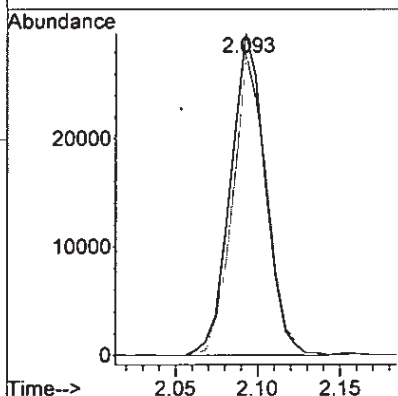
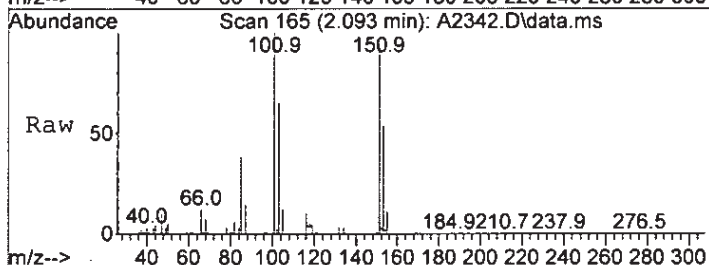
#10
 Freon 123a
 Concen: 0.30 ug/L
 RT: 1.928 min Scan# 138
 Delta R.T. -0.000 min
 Lab File: A2342.D
 Acq: 25 Sep 2014 6:44 am

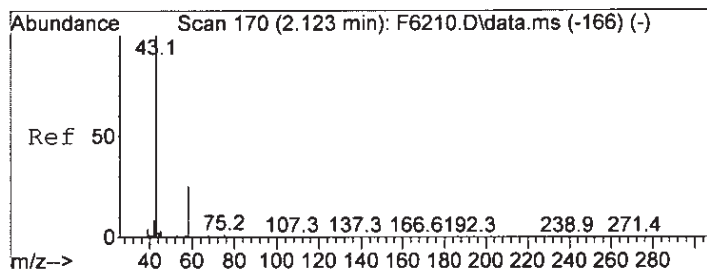
Tgt Ion: 67 Resp: 2976
 Ion Ratio Lower Upper
 67 100
 117 64.0 53.0 93.0



#14
 Freon 113
 Concen: 5.75 ug/L
 RT: 2.093 min Scan# 165
 Delta R.T. -0.000 min
 Lab File: A2342.D
 Acq: 25 Sep 2014 6:44 am

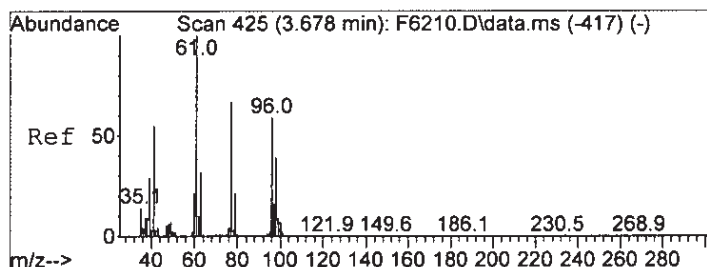
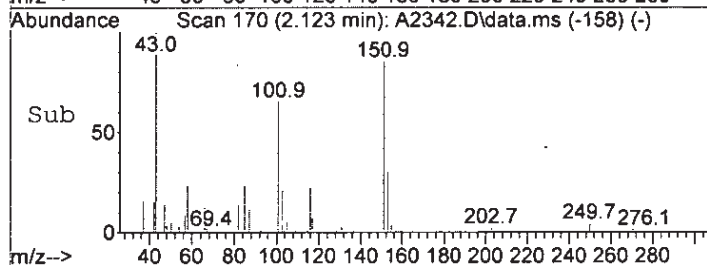
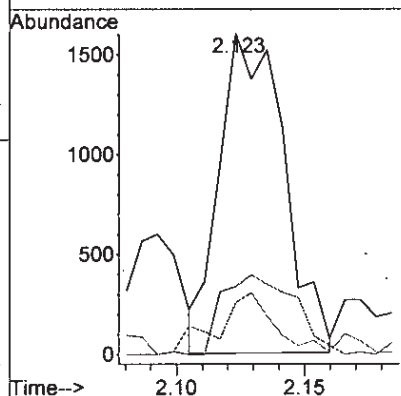
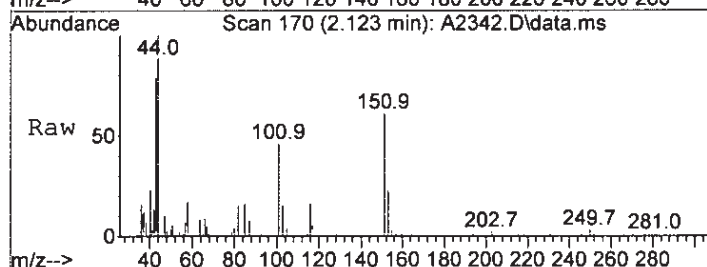
Tgt Ion: 101 Resp: 43826
 Ion Ratio Lower Upper
 101 100
 151 93.9 60.3 100.3





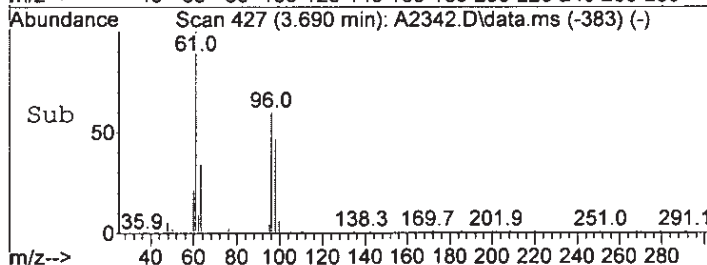
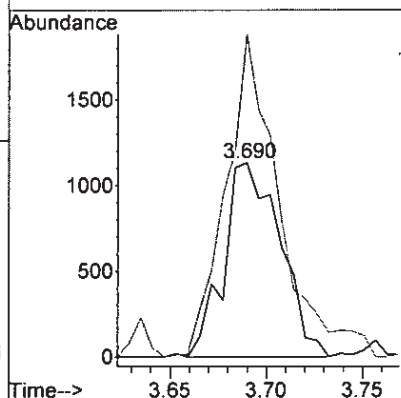
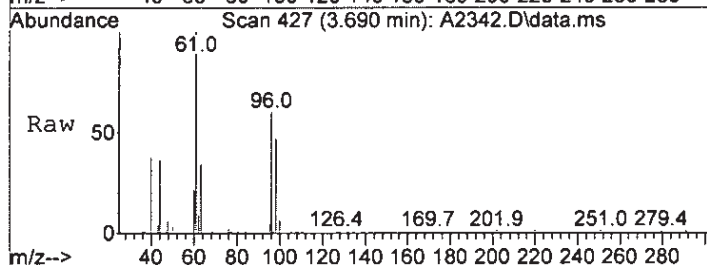
#15
Acetone
Concen: 1.06 ug/L
RT: 2.123 min Scan# 170
Delta R.T. 0.000 min
Lab File: A2342.D
Acq: 25 Sep 2014 6:44 am

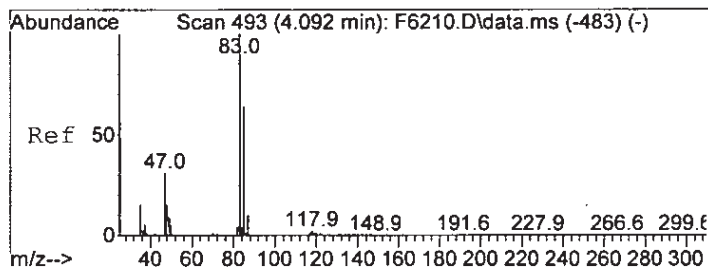
Tgt Ion: 43 Resp: 2804
Ion Ratio Lower Upper
43 100
58 21.1 7.2 47.2
42 16.2 0.0 27.0



#34
cis-1,2-Dichloroethene
Concen: 0.27 ug/L
RT: 3.690 min Scan# 427
Delta R.T. 0.012 min
Lab File: A2342.D
Acq: 25 Sep 2014 6:44 am

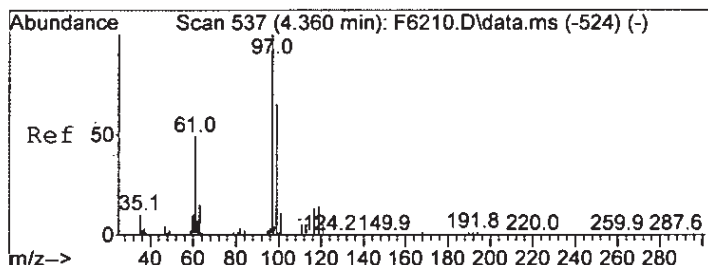
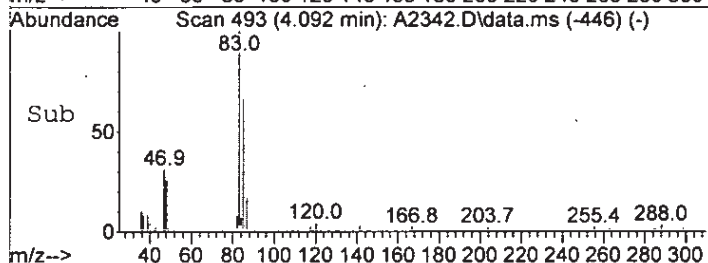
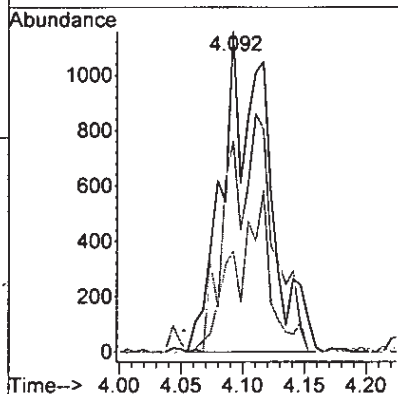
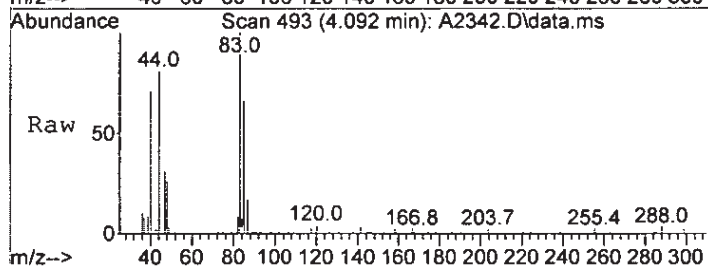
Tgt Ion: 96 Resp: 2299
Ion Ratio Lower Upper
96 100
61 166.2 128.3 168.3





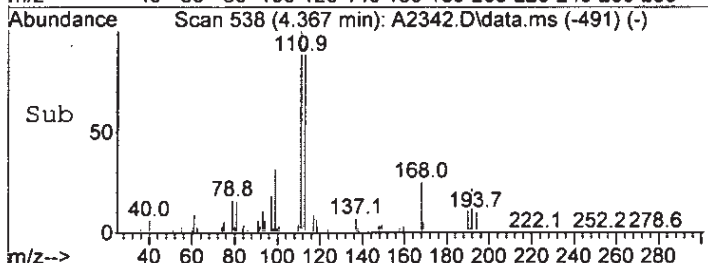
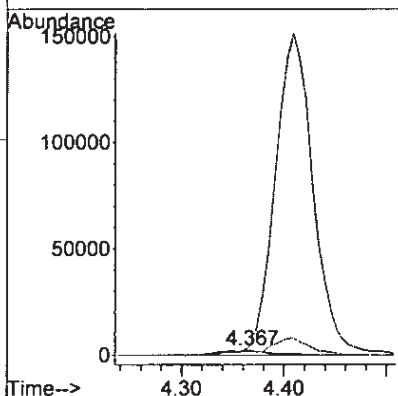
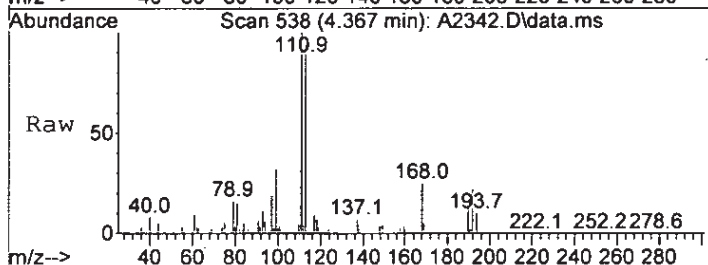
#40
Chloroform
Concen: 0.21 ug/L m
RT: 4.092 min Scan# 493
Delta R.T. -0.000 min
Lab File: A2342.D
Acq: 25 Sep 2014 6:44 am

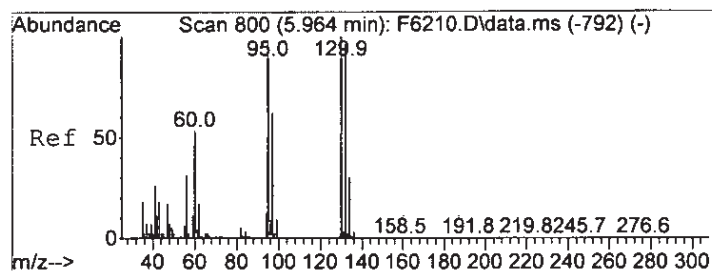
Tgt Ion: 83 Resp: 2946
Ion Ratio Lower Upper
83 100
85 65.9 42.7 82.7
47 31.5 5.9 45.9



#41
1,1,1-Trichloroethane
Concen: 0.56 ug/L m
RT: 4.367 min Scan# 538
Delta R.T. 0.006 min
Lab File: A2342.D
Acq: 25 Sep 2014 6:44 am

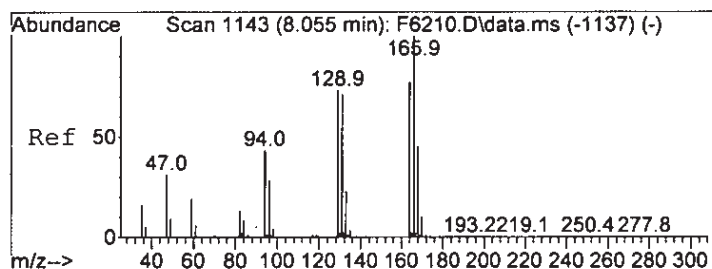
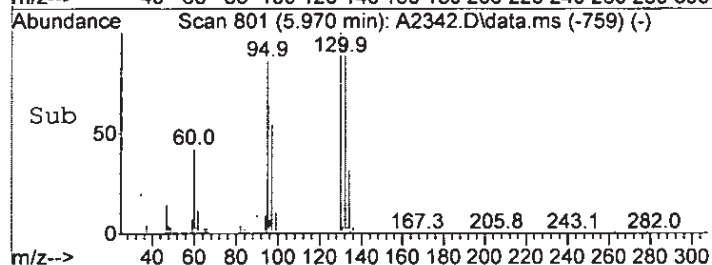
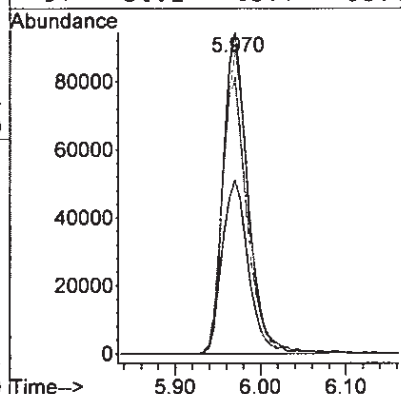
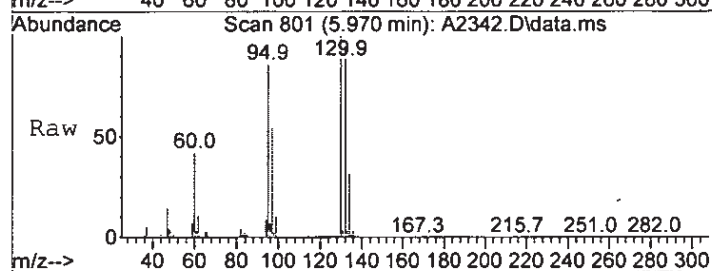
Tgt Ion: 97 Resp: 6678
Ion Ratio Lower Upper
97 100
99 178.5 47.6 87.6#
61 50.9 27.6 67.6





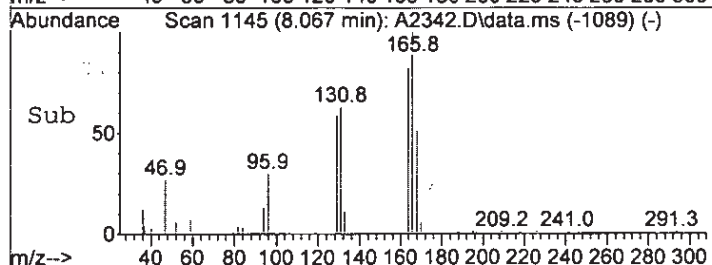
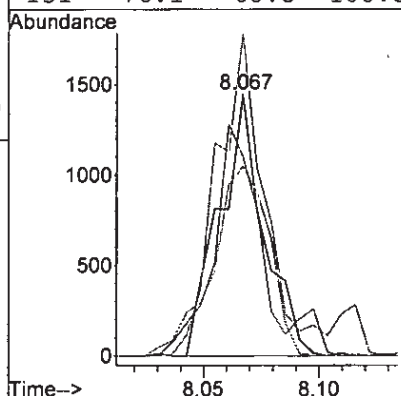
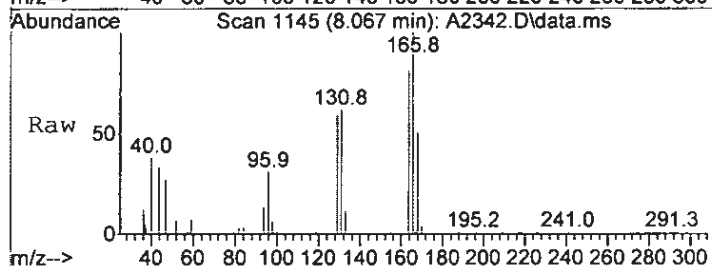
#54
 Trichloroethene
 Concen: 22.36 ug/L
 RT: 5.970 min Scan# 801
 Delta R.T. 0.006 min
 Lab File: A2342.D
 Acq: 25 Sep 2014 6:44 am

Tgt Ion:130 Resp: 189311
 Ion Ratio Lower Upper
 130 100
 132 95.0 74.1 114.1
 95 86.1 76.9 116.9
 97 54.1 43.7 83.7



#72
 Tetrachloroethene
 Concen: 0.29 ug/L
 RT: 8.067 min Scan# 1145
 Delta R.T. 0.012 min
 Lab File: A2342.D
 Acq: 25 Sep 2014 6:44 am

Tgt Ion:164 Resp: 1927
 Ion Ratio Lower Upper
 164 100
 166 123.2 106.8 146.8
 129 72.4 69.6 109.6
 131 76.1 68.5 108.5



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: 9/21/14 1045
Date Received: 9/23/14
Date Analyzed: 9/29/14 21:02

Sample Name: MW-10
Lab Code: R1407422-013

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\092914\A2438.D\

Analysis Lot: 413648
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	3.7 J	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	1.1 J	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	1.4 J	5.0	0.30	
79-01-6	Trichloroethene (TCE)	29	5.0	0.22	
75-01-4	Vinyl Chloride	0.69 J	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	8.9	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0 U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85-122	9/29/14 21:02	
Dibromofluoromethane	92	89-119	9/29/14 21:02	
Toluene-d8	88	87-121	9/29/14 21:02	

Sample : R1407422-013|1.0
 Data File : I:\ACQUDATA\MSVOA10\DATA\092914\A2438.D Vial: 20
 Acq On : 29 Sep 2014 9:02 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 6646 T4

Quant Time: Sep 29 21:15:42 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

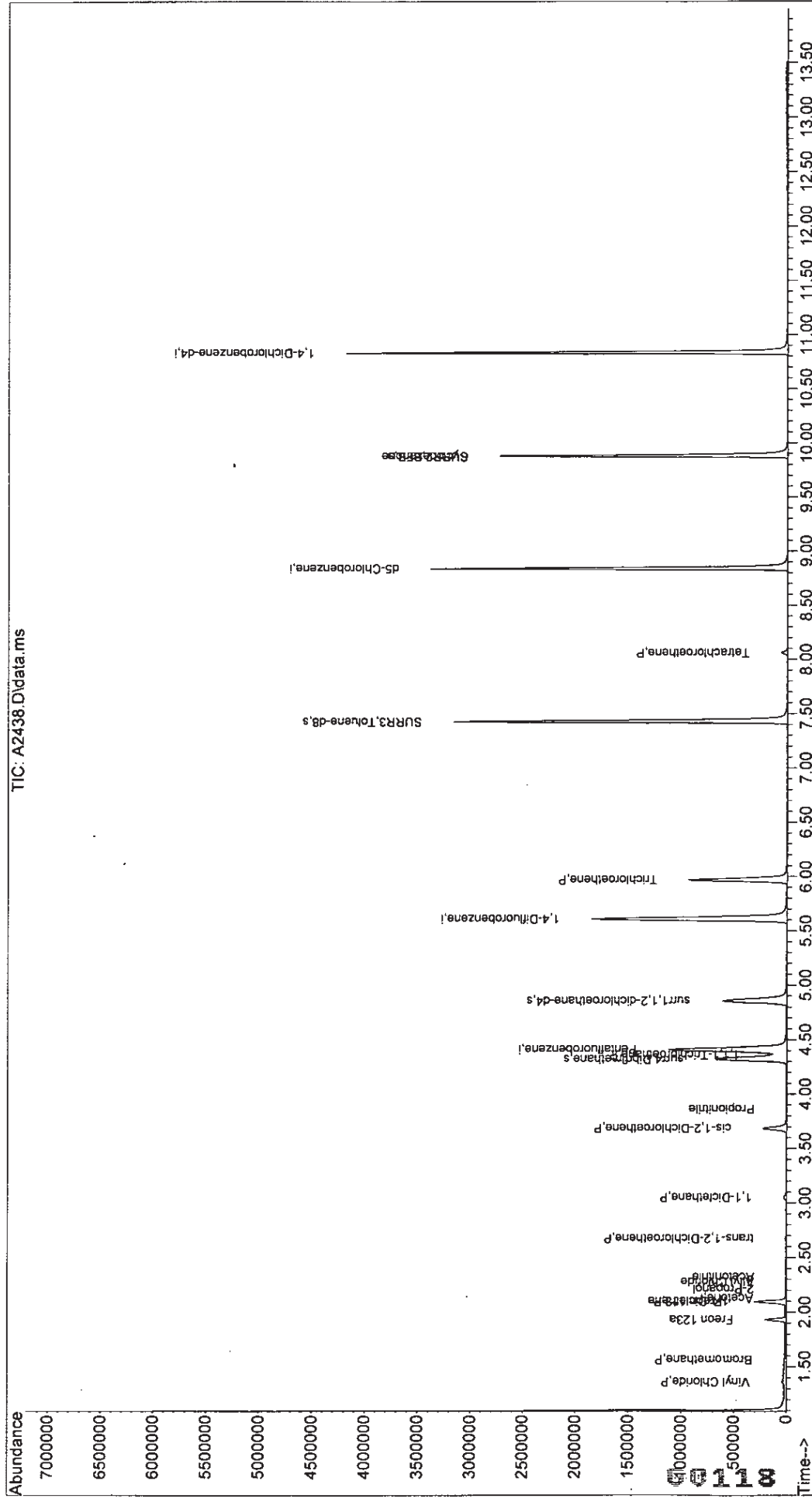
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	982352	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1713629	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1371775	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	802009	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.318	113	504759	46.19	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery =	92.38%		
48) surr1,1,2-dichloroetha...	4.854	65	567608	49.22	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery =	98.44%		
65) SURR3,Toluene-d8	7.427	98	1697417	44.11	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery =	88.22%		
70) SURR2,BFB	9.878	95	716833	47.33	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery =	94.66%		
Target Compounds						
					Qvalue	
4) Vinyl Chloride	1.361	62	8852	0.69	ug/L	74
5) Bromomethane	1.562	94	874	0.37	ug/L	86
10) Freon 123a	1.928	67	68857	6.04	ug/L	77
11) Freon 123	1.928	83	4276	0.35	ug/L #	1
13) 1,1-Dicethene	2.099	96	3642	0.53	ug/L #	71
14) Freon 113	2.093	101	90284	10.44	ug/L	99
15) Acetone	2.123	43	5490	1.84	ug/L	90
16) 2-Propanol	2.208	45	1319	3.12	ug/L	82
19) Acetonitrile	2.318	40	1179	3.68	ug/L #	1
20) Allyl Chloride	2.276	76	2169	0.50	ug/L #	1
26) trans-1,2-Dichloroethene	2.672	96	2406	0.27	ug/L	97
28) 1,1-Dicethane	3.050	63	21219	1.14	ug/L	87
34) cis-1,2-Dichloroethene	3.684	96	85713	8.88	ug/L	97
36) Propionitrile	3.861	54	271	2.11	ug/L	66
41) 1,1,1-Trichloroethane	4.361	97	49128	3.65	ug/L	97
54) Trichloroethene	5.970	130	333269	28.54	ug/L	99
72) Tetrachloroethene	8.061	164	11145	1.40	ug/L	95
89) Cyclohexanone	9.878	55	2271	1.80	ug/L #	13

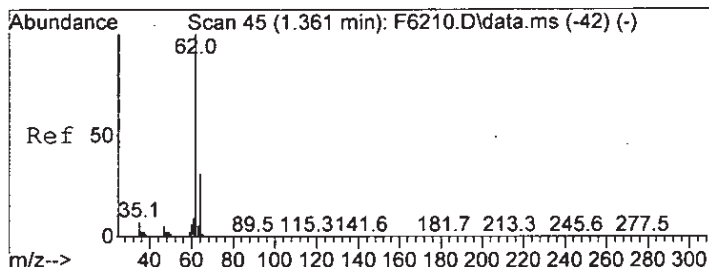
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Fu
10/6/14

Sample : R1407422-01311.0
 Data File : I:\ACQDATA\MSVOA10\DATA\092914\A2438.D Vial: 20
 Acq On : 29 Sep 2014 9:02 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 6646 T4

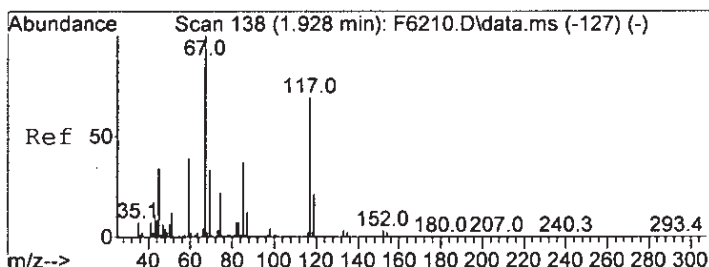
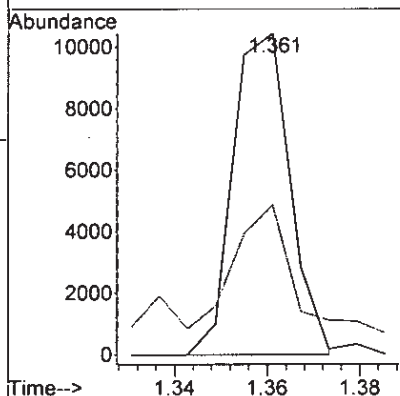
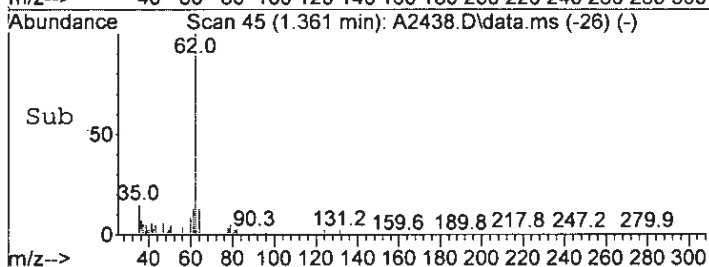
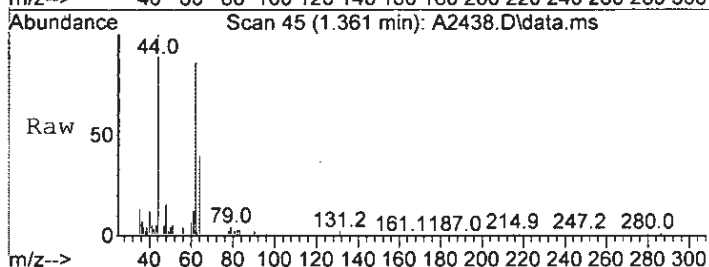
Quant Time: Sep 29 21:15:42 2014
 Quant Method : I:\ACQDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration





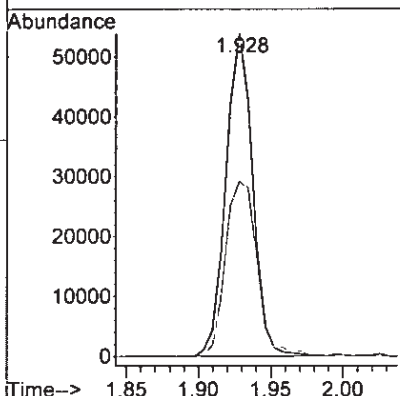
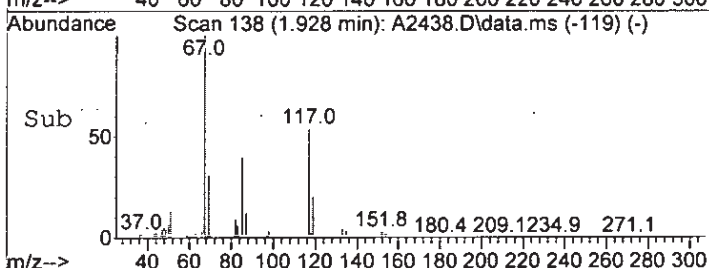
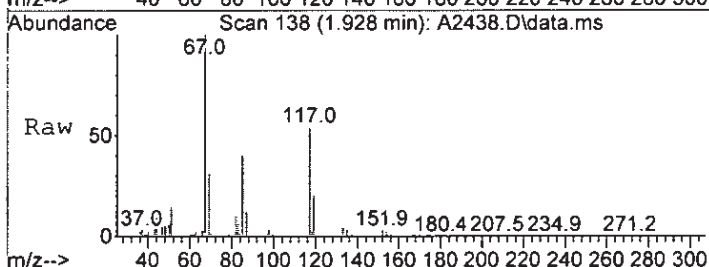
#4
 Vinyl Chloride
 Concen: 0.69 ug/L
 RT: 1.361 min Scan# 45
 Delta R.T. -0.000 min
 Lab File: A2438.D
 Acq: 29 Sep 2014 9:02 pm

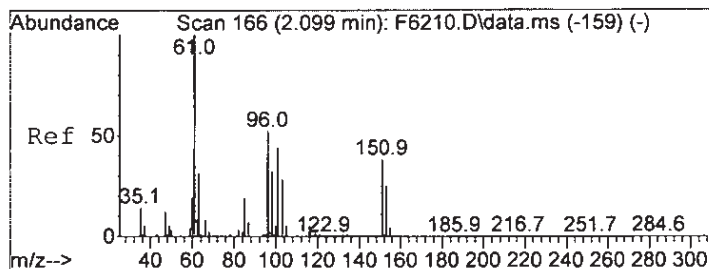
Tgt Ion: 62 Resp: 8852
 Ion Ratio Lower Upper
 62 100
 64 46.7 12.0 52.0



#10
 Freon 123a
 Concen: 6.04 ug/L
 RT: 1.928 min Scan# 138
 Delta R.T. -0.000 min
 Lab File: A2438.D
 Acq: 29 Sep 2014 9:02 pm

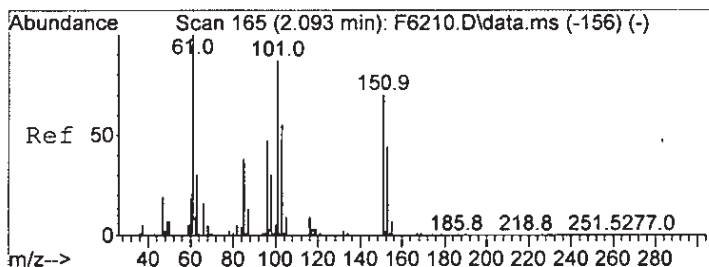
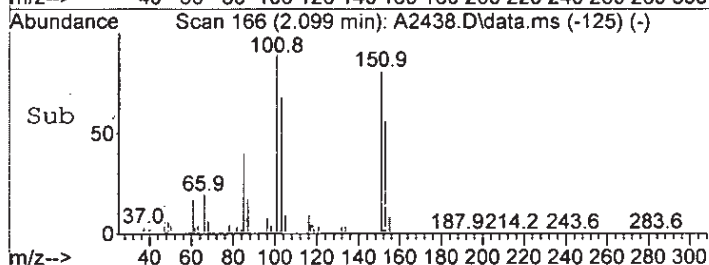
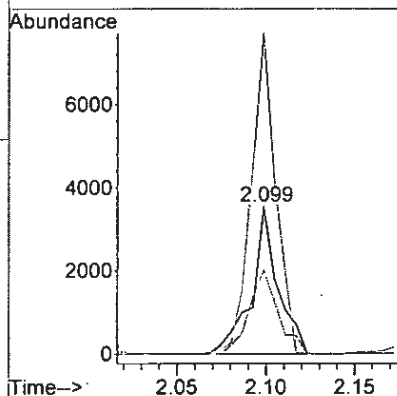
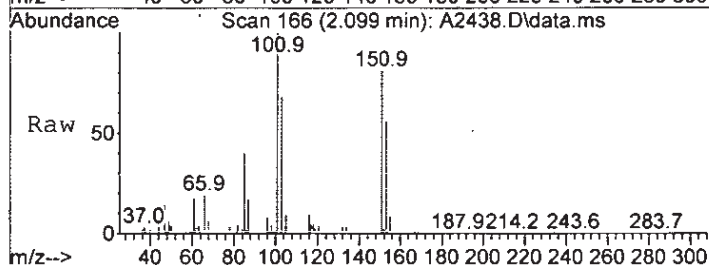
Tgt Ion: 67 Resp: 68857
 Ion Ratio Lower Upper
 67 100
 117 54.0 53.0 93.0





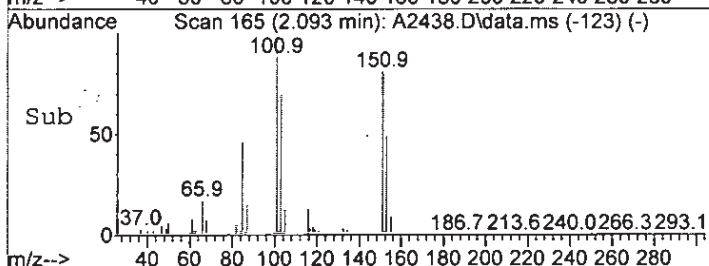
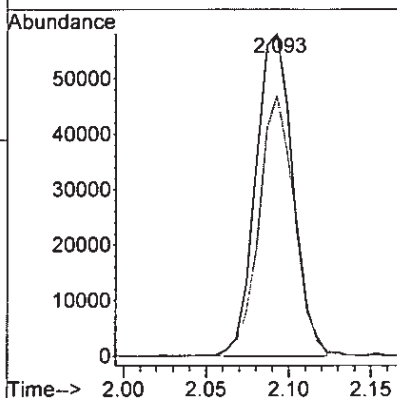
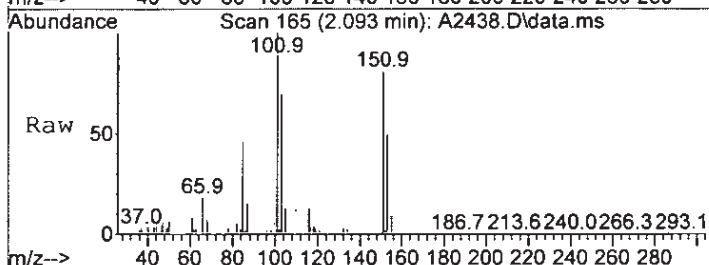
#13
1,1-Dicloroethene
Concen: 0.53 ug/L
RT: 2.099 min Scan# 166
Delta R.T. -0.000 min
Lab File: A2438.D
Acq: 29 Sep 2014 9:02 pm

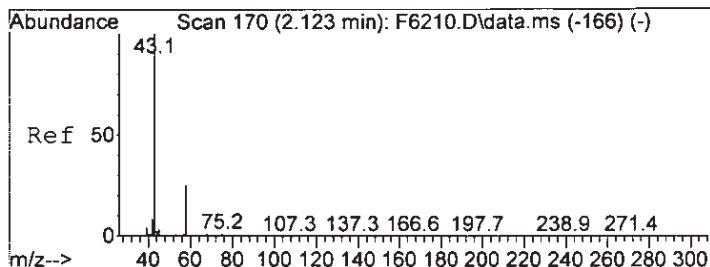
Tgt Ion: 96 Resp: 3642
Ion Ratio Lower Upper
96 100
98 56.9 47.5 87.5
61 217.7 149.6 189.6#



#14
Freon 113
Concen: 10.44 ug/L
RT: 2.093 min Scan# 165
Delta R.T. -0.000 min
Lab File: A2438.D
Acq: 29 Sep 2014 9:02 pm

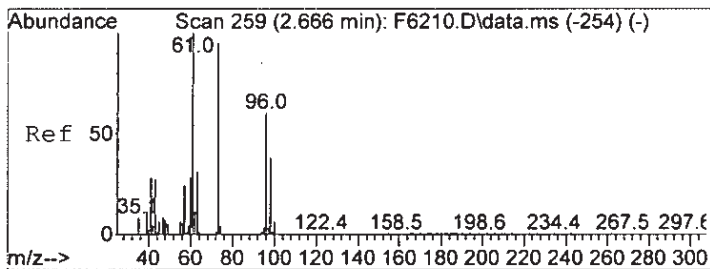
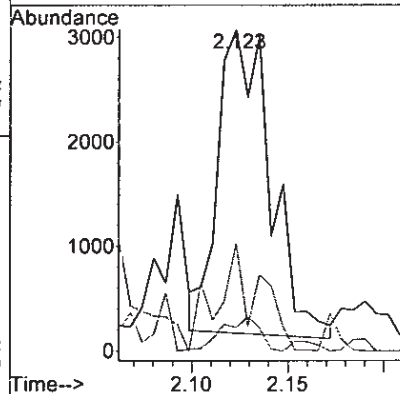
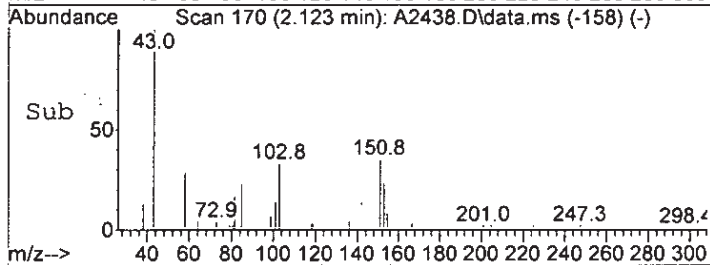
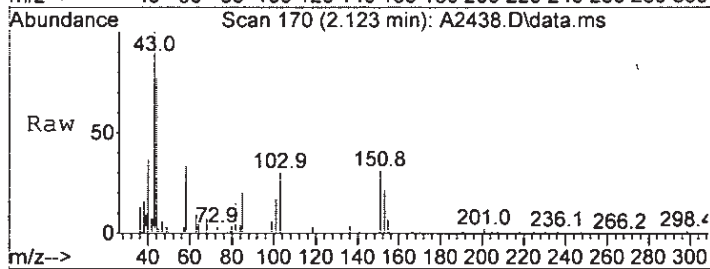
Tgt Ion: 101 Resp: 90284
Ion Ratio Lower Upper
101 100
151 80.8 60.3 100.3





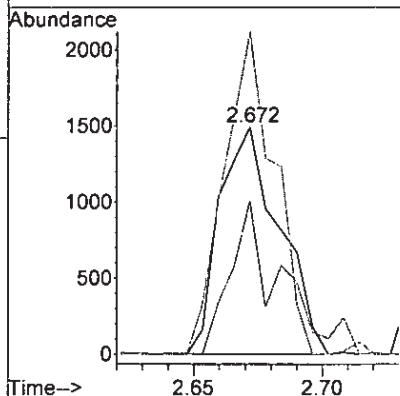
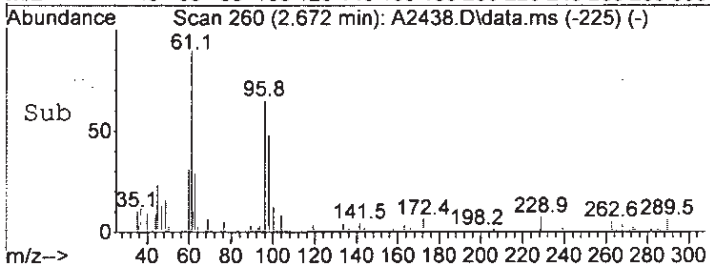
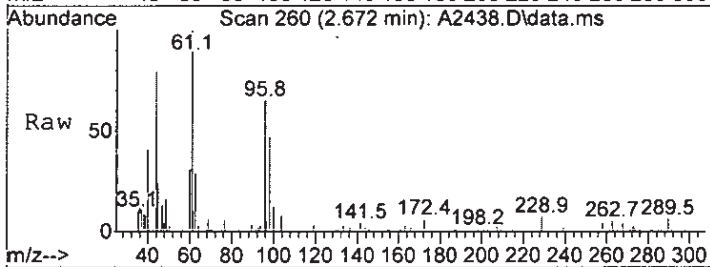
#15
Acetone
Concen: 1.84 ug/L
RT: 2.123 min Scan# 170
Delta R.T. 0.000 min
Lab File: A2438.D
Acq: 29 Sep 2014 9:02 pm

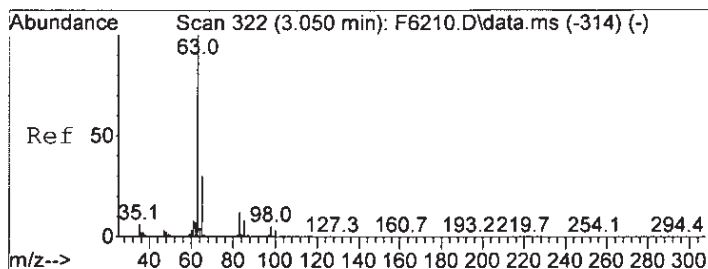
Tgt Ion: 43 Resp: 5490
Ion Ratio Lower Upper
43 100
58 33.4 7.2 47.2
42 7.3 0.0 27.0



#26
trans-1,2-Dichloroethene
Concen: 0.27 ug/L
RT: 2.672 min Scan# 260
Delta R.T. 0.006 min
Lab File: A2438.D
Acq: 29 Sep 2014 9:02 pm

Tgt Ion: 96 Resp: 2406
Ion Ratio Lower Upper
96 100
98 67.5 44.0 84.0
61 142.1 124.3 164.3

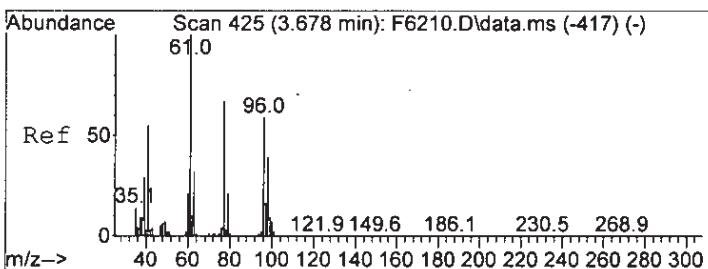
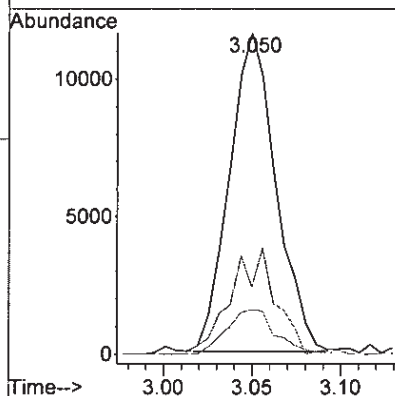
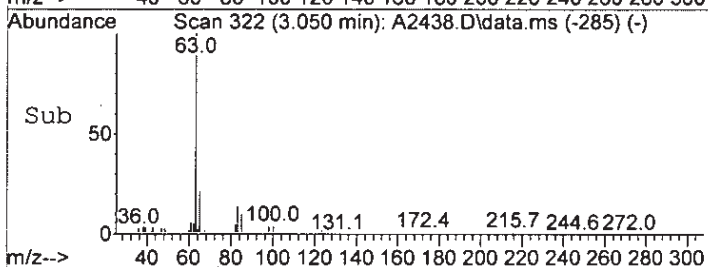
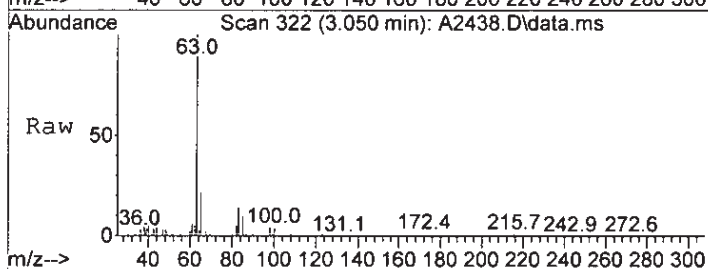




#28
1,1-Dicethane
Concen: 1.14 ug/L
RT: 3.050 min Scan# 322
Delta R.T. -0.000 min
Lab File: A2438.D
Acq: 29 Sep 2014 9:02 pm

Tgt Ion: 63 Resp: 21219

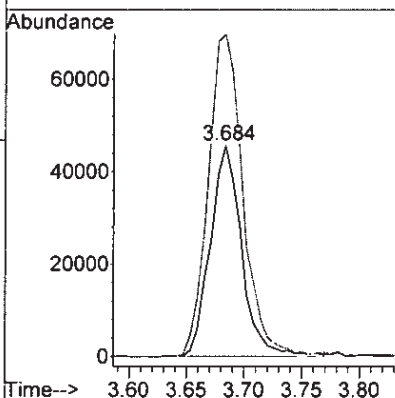
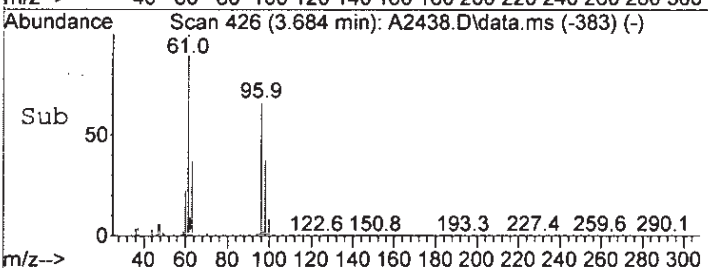
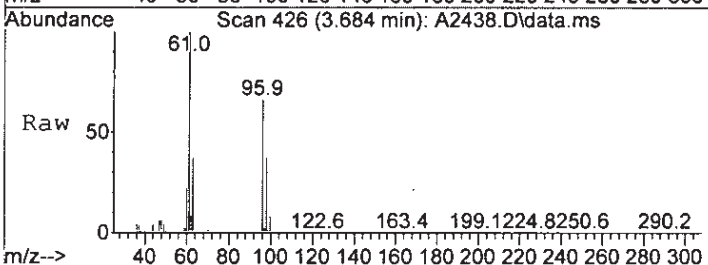
Ion	Ratio	Lower	Upper
63	100		
65	21.0	11.1	51.1
83	13.8	0.0	33.1

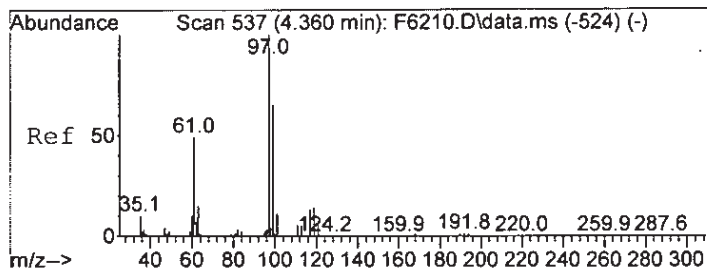


#34
cis-1,2-Dichloroethene
Concen: 8.88 ug/L
RT: 3.684 min Scan# 426
Delta R.T. 0.006 min
Lab File: A2438.D
Acq: 29 Sep 2014 9:02 pm

Tgt Ion: 96 Resp: 85713

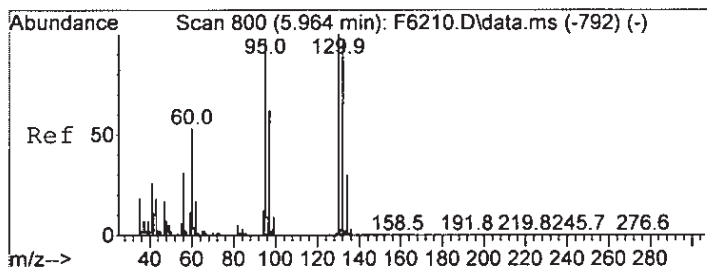
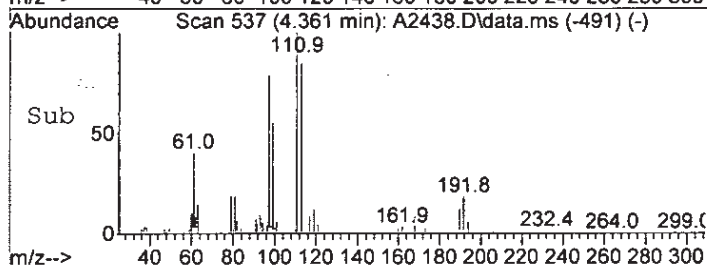
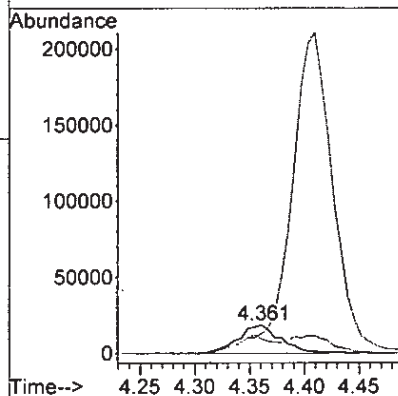
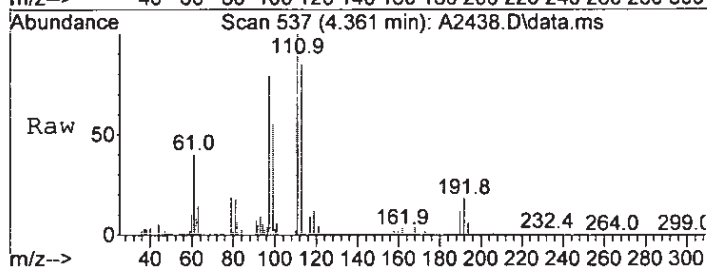
Ion	Ratio	Lower	Upper
96	100		
61	152.7	128.3	168.3





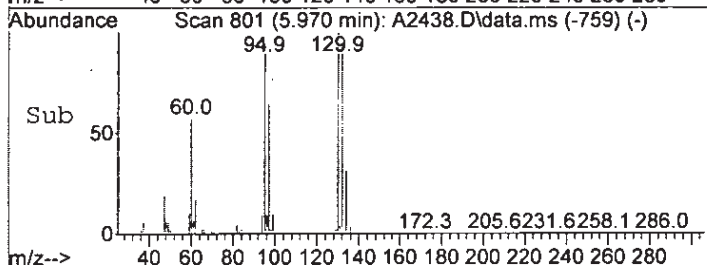
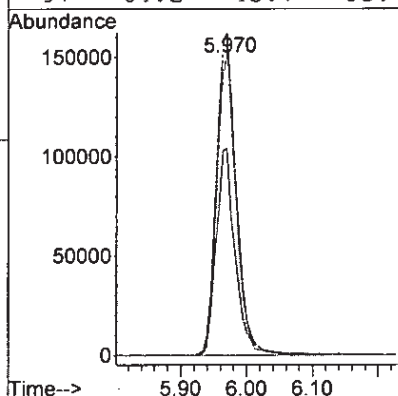
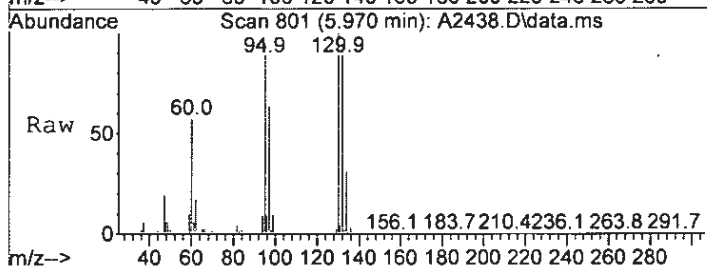
#41
1,1,1-Trichloroethane
Concen: 3.65 ug/L
RT: 4.361 min Scan# 537
Delta R.T. -0.000 min
Lab File: A2438.D
Acq: 29 Sep 2014 9:02 pm

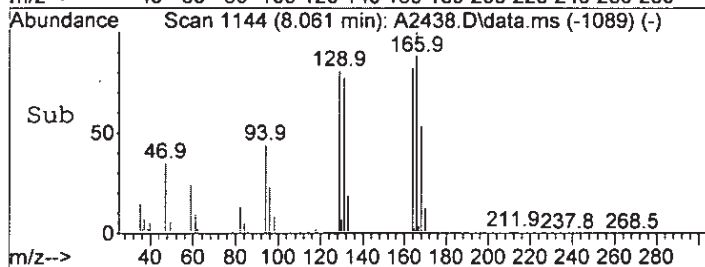
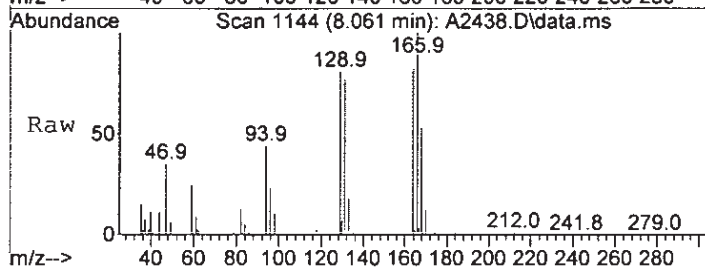
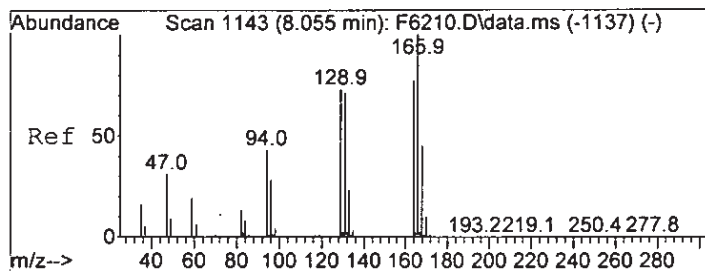
Tgt Ion: 97 Resp: 49128
Ion Ratio Lower Upper
97 100
99 69.3 47.6 87.6
61 51.2 27.6 67.6



#54
Trichloroethene
Concen: 28.54 ug/L
RT: 5.970 min Scan# 801
Delta R.T. 0.006 min
Lab File: A2438.D
Acq: 29 Sep 2014 9:02 pm

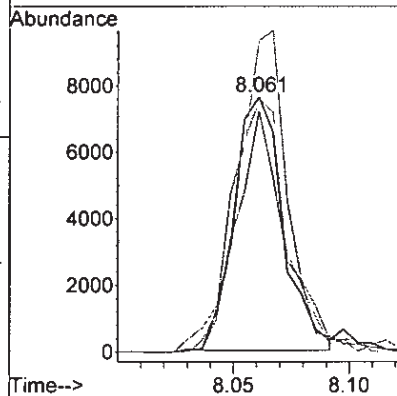
Tgt Ion: 130 Resp: 333269
Ion Ratio Lower Upper
130 100
132 93.4 74.1 114.1
95 95.1 76.9 116.9
97 64.2 43.7 83.7





#72
Tetrachloroethene
Concen: 1.40 ug/L
RT: 8.061 min Scan# 1144
Delta R.T. 0.006 min
Lab File: A2438.D
Acq: 29 Sep 2014 9:02 pm

Tgt Ion: 164 Resp: 11145
Ion Ratio Lower Upper
164 100
166 122.2 106.8 146.8
129 96.7 69.6 109.6
131 92.1 68.5 108.5



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: 9/21/14 1055
Date Received: 9/23/14
Date Analyzed: 9/29/14 18:34

Sample Name: FB-092114
Lab Code: R1407422-014

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\092914\A2433.D\

Analysis Lot: 413648
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	5.0	U	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	5.0	U	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0	U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	5.0	U	5.0	0.22	
75-01-4	Vinyl Chloride	5.0	U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85-122	9/29/14 18:34	
Dibromofluoromethane	107	89-119	9/29/14 18:34	
Toluene-d8	106	87-121	9/29/14 18:34	

Sample : R1407422-014|1.0
 Data File : I:\ACQUDATA\MSVOA10\DATA\092914\A2433.D Vial: 15
 Acq On : 29 Sep 2014 6:34 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 6646 T4

Quant Time: Sep 29 18:47:14 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

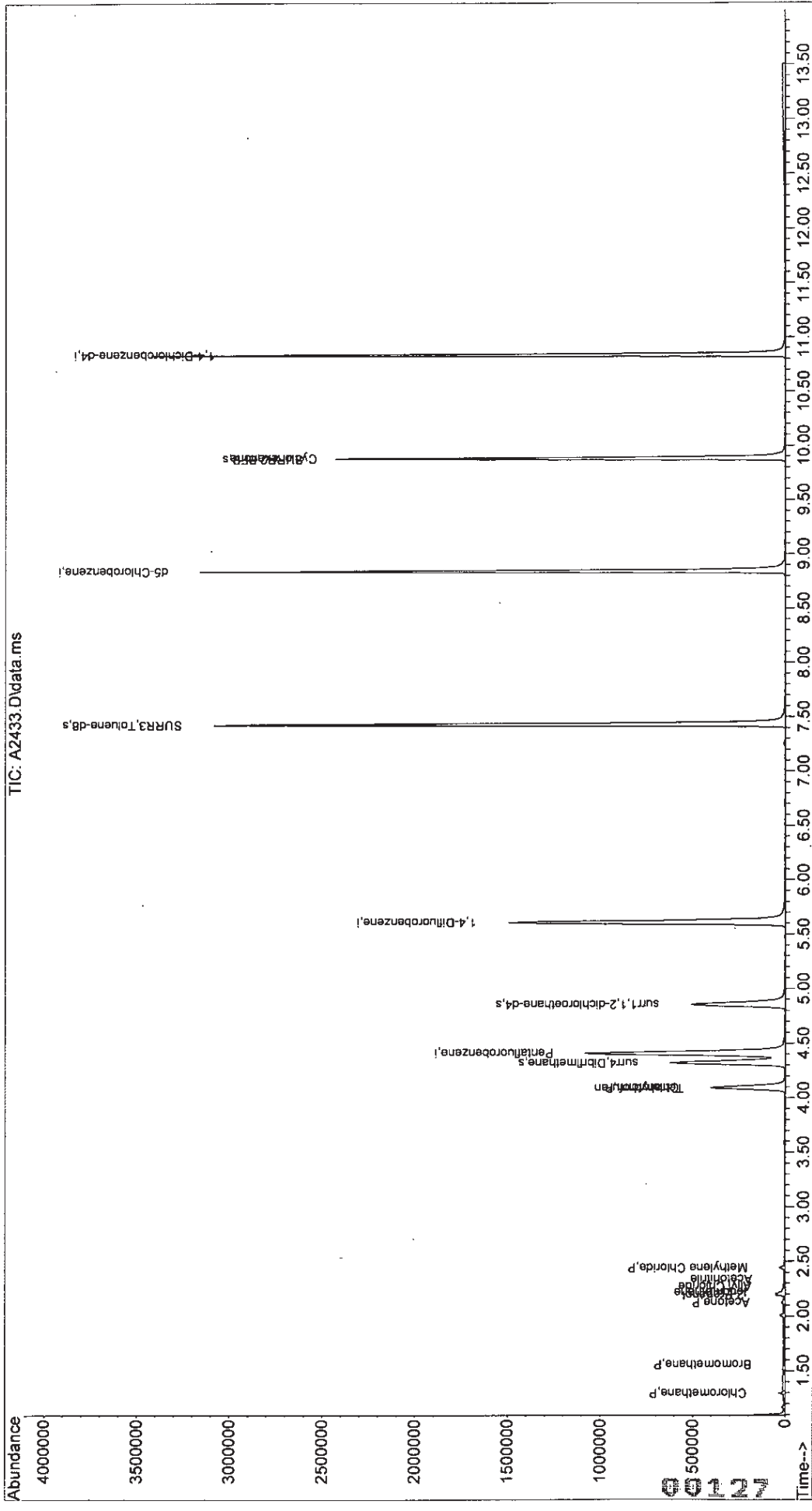
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	1002929	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1416350	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1296995	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	669090	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.318	113	481304	53.29	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	= 106.58%	
48) surr1,1,2-dichloroetha...	4.854	65	491581	51.58	ug/L	0.00
Spiked Amount	50.000	Range	78 - 122	Recovery	= 103.16%	
65) SURR3,Toluene-d8	7.427	98	1680839	52.84	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	= 105.68%	
70) SURR2,BFB	9.878	95	620035	49.54	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	= 99.08%	
Target Compounds						
					Qvalue	
3) Chloromethane	1.294	50	10409	0.72	ug/L	78
5) Bromomethane	1.556	94	642	0.30	ug/L #	43
15) Acetone	2.123	43	12758	4.18	ug/L	83
16) 2-Propanol	2.190	45	71579	165.76	ug/L	95
17) Iodomethane	2.215	142	333	4.96	ug/L #	27
19) Acetonitrile	2.337	40	902	2.76	ug/L #	1
20) Allyl Chloride	2.270	76	2105	0.48	ug/L #	1
22) Methylene Chloride	2.440	84	7039	0.77	ug/L #	78
39) Tetrahydrofuran	4.086	42	1760	0.79	ug/L #	1
40) Chloroform	4.092	83	350645	21.12	ug/L	96
89) Cyclohexanone	9.884	55	1788	1.50	ug/L #	14

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

ES
 10/6/14
 K2 10/6/14

Sample : R1407422-014|1.0
 Data File : I:\ACQDATA\MSVOA10\DATA\092914\A2433.D Vial: 15
 Acq On : 29 Sep 2014 6:34 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 6646 T4

Quant Time: Sep 29 18:47:14 2014
 Quant Method : I:\ACQDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration





VOLATILE ORGANICS STANDARDS DATA

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Initial Calibration - Summary Report

Calibration ID: RC1400062

7/21/14

Instrument ID: R-MS-10

Column Name: 1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
1,1,1,2-Tetrachloroethane	T	Average RF			0.3374	<=20	9.5
1,1,1-Trichloroethane (TCA)	T	Average RF		0.100	0.6850	<=20	2.5
1,1,2,2-Tetrachloroethane	T	Average RF		0.300	0.5487	<=20	3.9
1,1,2-Trichloroethane	T	Average RF		0.100	0.2259	<=20	3.9
1,1,2-Trichlorotrifluoroethane	T	Average RF		0.100	0.4403	<=20	6.1
1,1-Dichloroethane (1,1-DCA)	T	Average RF		0.200	0.9501	<=20	2.2
1,1-Dichloroethene (1,1-DCE)	T	Average RF		0.100	0.3485	<=20	5.3
1,1-Dichloropropene	T	Average RF			0.3911	<=20	5.2
1,2,3-Trichlorobenzene	T	Average RF			0.5634	<=20	10.0
1,2,3-Trichloropropane	T	Average RF			0.1534	<=20	8.8
1,2,4-Trichlorobenzene	T	Average RF		0.200	0.7687	<=20	5.4
1,2,4-Trimethylbenzene	T	Average RF			2.294	<=20	7.0
1,2-Dibromo-3-chloropropane (DBCP)	T	Average RF		0.050	0.08353	<=20	17.5
1,2-Dibromoethane	T	Average RF		0.100	0.2429	<=20	6.4
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123)	T	Average RF			0.5807	<=20	3.3
1,2-Dichlorobenzene	T	Average RF		0.400	1.357	<=20	2.4
1,2-Dichloroethane	T	Average RF		0.100	0.4240	<=20	2.6
1,2-Dichloropropane	T	Average RF		0.100	0.3562	<=20	3.9
1,3,5-Trichlorobenzene	T	Average RF			0.9702	<=20	5.6
1,3,5-Trimethylbenzene	T	Average RF			2.269	<=20	5.7
1,3-Dichlorobenzene	T	Average RF		0.600	1.444	<=20	4.4
1,3-Dichloropropane	T	Average RF			0.4284	<=20	1.5
1,4-Dichlorobenzene	T	Average RF		0.500	1.496	<=20	2.1
1,4-Dioxane	T	Average RF			0.002027	<=20	8.9
1-Butanol	T	Quadratic	1/X2		0.003955	>=0.99	0.9990
1-Chloro-4-(trifluoromethyl)benzene	T	Average RF			0.4892	<=20	6.7
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	T	Average RF			0.6180	<=20	5.5
2,2-Dichloropropane	T	Average RF			0.5885	<=20	9.5
2,3,6-Trichlorotoluene	T	Average RF			0.3556	<=20	11.0
2,4,5-Trichlorotoluene	T	Average RF			0.3514	<=20	18.1
2,4-, 2,5-, and 2,6-Dichlorotoluene Coelution	T	Average RF			1.137	<=20	9.3
2,4-Dichlorobenzotrifluoride	T	Average RF			0.6099	<=20	7.0
2,5-Dichlorobenzotrifluoride	T	Average RF			0.7285	<=20	8.0
2-Bromo-2-chloro-1,1,1-trifluoroethane	T	Average RF				<=20	
2-Butanone (MEK)	T	Average RF		0.05	0.2007	<=20	5.9
2-Chloro-1,3-butadiene	T	Average RF			0.9344	<=20	4.7
2-Chlorobenzotrifluoride	T	Average RF			0.5264	<=20	6.6
2-Chloroethyl Vinyl Ether	T	Average RF			0.1490	<=20	18.8
2-Chlorotoluene	T	Average RF			1.925	<=20	4.3
2-Hexanone	T	Average RF		0.05	0.2113	<=20	9.0
2-Methyl-1-propanol	T	Average RF			0.009932	<=20	16.8
2-Methyl-2-propanol	T	Average RF			0.02592	<=20	14.6
2-Nitropropane	T	Average RF			0.04919	<=20	15.5
2-Propanol	T	Average RF			0.02153	<=20	10.4
3,4- and 2,3-Dichlorotoluene Coelution	T	Average RF			1.179	<=20	9.3
3,4-Dichlorobenzotrifluoride	T	Average RF			0.6845	<=20	6.3
3-Chloro-1-propene	T	Average RF			0.2191	<=20	8.2
3-Chlorobenzotrifluoride	T	Average RF			0.5312	<=20	7.3
3-Chlorotoluene	T	Average RF			2.046	<=20	4.1
4-Chlorotoluene	T	Average RF			2.316	<=20	3.1
4-Isopropyltoluene	T	Average RF			2.313	<=20	8.7
4-Methyl-2-pentanone	T	Average RF		0.05	0.2664	<=20	9.5

Initial Calibration - Summary Report

Calibration ID: RC1400062

Instrument ID: R-MS-10

Column Name: 1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
Acetone	T	Average RF		0.05	0.1523	<=20	16.0
Acetonitrile	T	Average RF			0.01632	<=20	7.9
Acrolein	T	Average RF			0.06115	<=20	8.3
Acrylonitrile	T	Average RF			0.1399	<=20	6.5
Benzene	T	Average RF		0.500	1.222	<=20	3.8
Bromobenzene	T	Average RF			0.7548	<=20	2.7
Bromochloromethane	T	Average RF			0.3021	<=20	5.2
Bromodichloromethane	T	Average RF		0.200	0.3900	<=20	5.0
Bromoform	T	Average RF		0.100	0.1754	<=20	12.9
Bromomethane	T	Quadratic	1/X2	0.100	0.1903	>=0.99	0.9952
Carbon Disulfide	T	Average RF		0.100	1.474	<=20	3.7
Carbon Tetrachloride	T	Average RF		0.05	0.1274	<=20	7.6
Chlorobenzene	T	Average RF		0.500	0.9640	<=20	2.7
Chloroethane	T	Average RF		0.100	0.3320	<=20	2.6
Chloroform	T	Average RF		0.200	0.8279	<=20	4.2
Chloromethane	T	Average RF		0.100	0.7175	<=20	4.5
Cyclohexane	T	Average RF		0.100	0.4527	<=20	5.5
Cyclohexanone	T	Average RF			0.04603	<=20	12.3
Dibromochloromethane	T	Average RF		0.100	0.3054	<=20	10.9
Dibromomethane	T	Average RF			0.1717	<=20	4.1
Dichlorodifluoromethane (CFC 12)	T	Average RF		0.100	0.5381	<=20	8.9
Dichlorofluoromethane (CFC 21)	T	Average RF			0.9222	<=20	2.8
Dichloromethane	T	Average RF		0.100	0.4573	<=20	6.0
Diethyl Ether	T	Average RF			0.3910	<=20	5.2
Diisopropyl Ether	T	Average RF			2.181	<=20	5.5
Ethyl Methacrylate	T	Average RF			0.2657	<=20	13.1
Ethyl tert-Butyl Ether	T	Average RF			1.463	<=20	4.6
Ethylbenzene	T	Average RF		0.100	0.4804	<=20	6.8
Hexachlorobutadiene	T	Average RF			0.3147	<=20	4.0
Iodomethane	T	Quadratic	1/X		0.3548	>=0.99	0.9908
Isopropylbenzene (Cumene)	T	Average RF		0.100	1.457	<=20	7.7
Methacrylonitrile	T	Average RF			0.1086	<=20	14.1
Methyl Acetate	T	Average RF		0.100	0.3020	<=20	5.4
Methyl Methacrylate	T	Average RF			0.1265	<=20	18.5
Methyl tert-Butyl Ether	T	Average RF		0.100	0.9984	<=20	4.0
Methylcyclohexane	T	Average RF		0.100	0.4697	<=20	5.4
Naphthalene	T	Average RF			1.321	<=20	15.3
Propionitrile	T	Linear	1/X		0.04118	>=0.99	0.9991
Styrene	T	Average RF		0.300	0.9623	<=20	12.4
Tetrachloroethene (PCE)	T	Average RF		0.200	0.2891	<=20	4.5
Tetrahydrofuran (THF)	T	Average RF			0.1111	<=20	4.3
Toluene	T	Average RF		0.400	1.281	<=20	2.5
Trichloroethene (TCE)	T	Average RF		0.200	0.3407	<=20	3.6
Trichlorofluoromethane (CFC 11)	T	Average RF		0.100	0.7423	<=20	3.3
Vinyl Acetate	T	Average RF			0.05589	<=20	18.1
Vinyl Chloride	T	Average RF		0.100	0.6553	<=20	3.7
cis-1,2-Dichloroethene	T	Average RF		0.100	0.4913	<=20	4.0
cis-1,3-Dichloropropene	T	Average RF		0.200	0.4120	<=20	13.9
m,p-Xylenes	T	Average RF		0.100	0.5924	<=20	7.8
n-Butyl Acetate	T	Average RF			0.4703	<=20	13.3
n-Butylbenzene	T	Average RF			1.960	<=20	11.6
n-Heptane	T	Average RF			0.4609	<=20	7.6

Initial Calibration - Summary Report

Calibration ID: RC1400062

Instrument ID: R-MS-10

Column Name: 1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
n-Propylbenzene	T	Average RF			3.120	<=20	6.0
o-Xylene	T	Average RF		0.300	0.5792	<=20	8.8
sec-Butylbenzene	T	Average RF			2.666	<=20	6.4
tert-Amyl Methyl Ether	T	Average RF			0.9868	<=20	8.3
tert-Butylbenzene	T	Average RF			1.902	<=20	6.3
trans-1,2-Dichloroethene	T	Average RF		0.100	0.4493	<=20	3.9
trans-1,3-Dichloropropene	T	Average RF		0.100	0.3260	<=20	17.8
trans-1,4-Dichloro-2-butene	T	Quadratic	1/X2		0.07205	>=0.99	0.9957
1,2-Dichloroethane-d4	S	Average RF			0.3365	<=20	3.6
4-Bromofluorobenzene	S	Average RF			0.4419	<=20	2.8
Dibromofluoromethane	S	Average RF			0.3188	<=20	2.2
Toluene-d8	S	Average RF			1.123	<=20	2.2

Initial Calibration - Detailed Report

Calibration ID: RC1400062

Instrument ID: R-MS-10
Signal ID: 1

#	Lab Code	Sample Name	File Location	Acquisition Date
01	RC1400062-01	0.5 PPB STD	I:\ACQUDATA\msvoa10\data\072114\A0510.D	7/21/14 11:52
02	RC1400062-02	1.0 PPB STD	I:\ACQUDATA\msvoa10\data\072114\A0511.D	7/21/14 12:22
03	RC1400062-03	2.0 PPB STD	I:\ACQUDATA\msvoa10\data\072114\A0512.D	7/21/14 12:52
04	RC1400062-04	5.0 PPB STD	I:\ACQUDATA\msvoa10\data\072114\A0513.D	7/21/14 13:23
05	RC1400062-05	10 PPB STD	I:\ACQUDATA\msvoa10\data\072114\A0514.D	7/21/14 13:53
06	RC1400062-06	50 PPB STD	I:\ACQUDATA\msvoa10\data\072114\A0515.D	7/21/14 14:23
07	RC1400062-07	100 PPB STD	I:\ACQUDATA\msvoa10\data\072114\A0516.D	7/21/14 14:54
08	RC1400062-08	150 PPB STD	I:\ACQUDATA\msvoa10\data\072114\A0517.D	7/21/14 15:24
09	RC1400062-09	200 PPB STD	I:\ACQUDATA\msvoa10\data\072114\A0518.D	7/21/14 15:55

Analyte			Curve Fit			Weighting		
1,1,1,2-Tetrachloroethane			Average RF			RSD = 9.5		
						Average RF = 0.3374		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3108	02	1.000	0.2976	03	2.000	0.3013
05	10.000	0.3367	06	50.000	0.3450	07	100.000	0.3721
09	200.000	0.3737				08	150.000	0.3787
1,1,1-Trichloroethane (TCA)			Average RF			RSD = 2.5		
						Average RF = 0.6850		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6918	02	1.000	0.6746	03	2.000	0.6764
05	10.000	0.6552	06	50.000	0.6704	07	100.000	0.7039
09	200.000	0.6956				08	150.000	0.7085
1,1,2,2-Tetrachloroethane			Average RF			RSD = 3.9		
						Average RF = 0.5487		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5244	02	1.000	0.5222	03	2.000	0.5855
05	10.000	0.5603	06	50.000	0.5308	07	100.000	0.5524
09	200.000	0.5391				08	150.000	0.5518
1,1,2-Trichloroethane			Average RF			RSD = 3.9		
						Average RF = 0.2259		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2138	02	1.000	0.2359	03	2.000	0.2210
05	10.000	0.2275	06	50.000	0.2228	07	100.000	0.2310
09	200.000	0.2308				08	150.000	0.2371
1,1,2-Trichlorotrifluoroethane			Average RF			RSD = 6.1		
						Average RF = 0.4403		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4656	02	1.000	0.4831	03	2.000	0.4314
05	10.000	0.3916	06	50.000	0.4226	07	100.000	0.4432
09	200.000	0.4225				08	150.000	0.4463
1,1-Dichloroethane (1,1-DCA)			Average RF			RSD = 2.2		
						Average RF = 0.9501		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.9434	02	1.000	0.9445	03	2.000	0.9993
05	10.000	0.9542	06	50.000	0.9379	07	100.000	0.9488
09	200.000	0.9221				08	150.000	0.9415
1,1-Dichloroethane (1,1-DCE)			Average RF			RSD = 5.3		
						Average RF = 0.3485		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3739	02	1.000	0.3370	03	2.000	0.3731
05	10.000	0.3186	06	50.000	0.3314	07	100.000	0.3493
09	200.000	0.3409				08	150.000	0.3586

Initial Calibration - Detailed Report

Calibration ID: RC1400062

Instrument ID: R-MS-10
Signal ID: 1

Analyte			Curve Fit			Weighting		
1,1-Dichloropropene			Average RF			RSD = 5.2		
						Average RF = 0.3911		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4241	02	1.000	0.3618	03	2.000	0.3895
05	10.000	0.3648	06	50.000	0.3815	07	100.000	0.4073
09	200.000	0.3956				08	150.000	0.4087
1,2,3-Trichlorobenzene			Average RF			RSD = 10.0		
						Average RF = 0.5634		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4936	02	1.000	0.5077	03	2.000	0.5167
05	10.000	0.5715	06	50.000	0.5996	07	100.000	0.6079
09	200.000	0.6247				08	150.000	0.6372
1,2,3-Trichloropropane			Average RF			RSD = 8.8		
						Average RF = 0.1534		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1808	02	1.000	0.1507	03	2.000	0.1710
05	10.000	0.1436	06	50.000	0.1418	07	100.000	0.1472
09	200.000	0.1476				08	150.000	0.1434
1,2,4-Trichlorobenzene			Average RF			RSD = 5.4		
						Average RF = 0.7687		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7170	02	1.000	0.7290	03	2.000	0.7324
05	10.000	0.7655	06	50.000	0.7859	07	100.000	0.8073
09	200.000	0.8108				08	150.000	0.8304
1,2,4-Trimethylbenzene			Average RF			RSD = 7.0		
						Average RF = 2.294		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.071	02	1.000	2.040	03	2.000	2.195
05	10.000	2.309	06	50.000	2.376	07	100.000	2.505
09	200.000	2.361				08	150.000	2.458
1,2-Dibromo-3-chloropropane (DBCP)			Average RF			RSD = 17.5		
						Average RF = 0.08353		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.06568	02	1.000	0.06613	03	2.000	0.07412
05	10.000	0.07834	06	50.000	0.09037	07	100.000	0.09768
09	200.000	0.1020				08	150.000	0.1016
1,2-Dibromoethane			Average RF			RSD = 6.4		
						Average RF = 0.2429		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2437	02	1.000	0.2097	03	2.000	0.2386
05	10.000	0.2306	06	50.000	0.2503	07	100.000	0.2576
09	200.000	0.2545				08	150.000	0.2579
1,2-Dichloro-1,1,2-trifluoroethane (CFC)			Average RF			RSD = 3.3		
						Average RF = 0.5807		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5669	02	1.000	0.5967	03	2.000	0.6050
05	10.000	0.5599	06	50.000	0.6101	07	100.000	0.5673
09	200.000	0.5612				08	150.000	0.5765
1,2-Dichlorobenzene			Average RF			RSD = 2.4		
						Average RF = 1.357		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.336	02	1.000	1.348	03	2.000	1.300
05	10.000	1.345	06	50.000	1.346	07	100.000	1.395
09	200.000	1.370				08	150.000	1.411

Initial Calibration - Detailed Report

Calibration ID: RC1400062

Instrument ID: R-MS-10
Signal ID: 1

Analyte			Curve Fit			Weighting		
1,2-Dichloroethane			Average RF			RSD = 2.6		
						Average RF = 0.4240		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4372	02	1.000	0.4170	03	2.000	0.4057
05	10.000	0.4297	06	50.000	0.4205	07	100.000	0.4269
09	200.000	0.4129				08	150.000	0.4293
1,2-Dichloroethane-d4			Average RF			RSD = 3.6		
						Average RF = 0.3365		
#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	0.3415	04	60.000	0.3457	05	70.000	0.3492
08	125.000	0.3262	09	150.000	0.3179	07	100.000	0.3383
1,2-Dichloropropane			Average RF			RSD = 3.9		
						Average RF = 0.3562		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3457	02	1.000	0.3282	03	2.000	0.3682
05	10.000	0.3500	06	50.000	0.3557	07	100.000	0.3675
09	200.000	0.3645				08	150.000	0.3726
1,3,5-Trichlorobenzene			Average RF			RSD = 5.6		
						Average RF = 0.9702		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.041	02	1.000	0.8688	03	2.000	0.9314
05	10.000	0.9547	06	50.000	1.004	07	100.000	0.9874
09	200.000	1.001				08	150.000	1.019
1,3,5-Trimethylbenzene			Average RF			RSD = 5.7		
						Average RF = 2.269		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.098	02	1.000	2.142	03	2.000	2.228
05	10.000	2.207	06	50.000	2.326	07	100.000	2.481
09	200.000	2.308				08	150.000	2.435
1,3-Dichlorobenzene			Average RF			RSD = 4.4		
						Average RF = 1.444		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.361	02	1.000	1.356	03	2.000	1.417
05	10.000	1.442	06	50.000	1.451	07	100.000	1.527
09	200.000	1.501				08	150.000	1.523
1,3-Dichloropropane			Average RF			RSD = 1.5		
						Average RF = 0.4284		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4417	02	1.000	0.4230	03	2.000	0.4268
05	10.000	0.4222	06	50.000	0.4278	07	100.000	0.4341
09	200.000	0.4249				08	150.000	0.4330
1,4-Dichlorobenzene			Average RF			RSD = 2.1		
						Average RF = 1.496		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.499	02	1.000	1.436	03	2.000	1.490
05	10.000	1.484	06	50.000	1.479	07	100.000	1.530
09	200.000	1.513				08	150.000	1.543
1,4-Dioxane			Average RF			RSD = 8.9		
						Average RF = 0.002027		
#	Amount	RF	#	Amount	RF	#	Amount	RF
02	20.000	0.001651	03	40.000	0.002130	04	100.000	0.002058
06	1000.000	0.001971	07	2000.000	0.001932	08	3000.000	0.002151
						05	200.000	0.002234
						09	4000.000	0.002090
1-Butanol			Quadratic			COD = 0.9990		
			1/X2			Y = 1.036E-5 X ² + 0.003783 X + -0.002167		
#	Amount	RF	#	Amount	RF	#	Amount	RF
02	50.000	0.001665	03	100.000	0.002739	04	250.000	0.003084
06	2500.000	0.004406	07	5000.000	0.004776	05	500.000	0.003792
						08	7500.000	0.005461
						09	10000.000	0.005713

Initial Calibration - Detailed Report

Calibration ID: RC1400062

Instrument ID: R-MS-10

Signal ID: 1

Analyte	Curve Fit			Weighting		
1-Chloro-4-(trifluoromethyl)benzene	Average RF			RSD = 6.7		
				Average RF = 0.4892		
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
01 0.500 0.4542	02 1.000 0.4567	03 2.000 0.4652	04 5.000 0.4750	05 10.000 0.4618	06 50.000 0.5087	07 100.000 0.5195
09 200.000 0.5246						
2,2-Dichloro-1,1,1-trifluoroethane (CFC)	Average RF			RSD = 5.5		
				Average RF = 0.6180		
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
01 0.500 0.6609	02 1.000 0.6670	03 2.000 0.6452	04 5.000 0.6070	05 10.000 0.5678	06 50.000 0.6230	07 100.000 0.5875
09 200.000 0.5982						
2,2-Dichloropropane	Average RF			RSD = 9.5		
				Average RF = 0.5885		
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
01 0.500 0.5596	02 1.000 0.5312	03 2.000 0.5525	04 5.000 0.5482	05 10.000 0.5330	06 50.000 0.6012	07 100.000 0.6423
09 200.000 0.6582						
2,3,6-Trichlorotoluene	Average RF			RSD = 11.0		
				Average RF = 0.3556		
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
01 0.500 0.2902	02 1.000 0.3444	03 2.000 0.3436	04 5.000 0.3110	05 10.000 0.3575	06 50.000 0.3699	07 100.000 0.3715
09 200.000 0.4094						
2,4,5-Trichlorotoluene	Average RF			RSD = 18.1		
				Average RF = 0.3514		
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
01 0.500 0.2794	02 1.000 0.2684	03 2.000 0.2884	04 5.000 0.3238	05 10.000 0.3572	06 50.000 0.3939	07 100.000 0.3950
09 200.000 0.4273						
2,4-, 2,5-, and 2,6-Dichlorotoluene Coelut	Average RF			RSD = 9.3		
				Average RF = 1.137		
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
01 1.500 0.9500	02 3.000 1.024	03 6.000 1.066	04 15.000 1.109	05 30.000 1.172	06 150.000 1.244	07 300.000 1.234
09 600.000 1.188						
2,4-Dichlorobenzotrifluoride	Average RF			RSD = 7.0		
				Average RF = 0.6099		
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
01 0.500 0.5793	02 1.000 0.5642	03 2.000 0.5576	04 5.000 0.5840	05 10.000 0.5938	06 50.000 0.6422	07 100.000 0.6403
09 200.000 0.6643						
2,5-Dichlorobenzotrifluoride	Average RF			RSD = 8.0		
				Average RF = 0.7285		
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
01 0.500 0.8389	02 1.000 0.6922	03 2.000 0.7400	04 5.000 0.6404	05 10.000 0.6649	06 50.000 0.7279	07 100.000 0.7365
09 200.000 0.7542						
2-Butanone (MEK)	Average RF			RSD = 5.9		
				Average RF = 0.2007		
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
03 2.000 0.1904	04 5.000 0.1834	05 10.000 0.2011	06 50.000 0.2201	07 100.000 0.2046	08 150.000 0.2073	09 200.000 0.1978

Initial Calibration - Detailed Report

Calibration ID: RC1400062

Instrument ID: R-MS-10
Signal ID: 1

Analyte	Curve Fit			Weighting		
2-Chloro-1,3-butadiene	Average RF			RSD = 4.7		
				Average RF = 0.9344		
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
01 0.500 0.8693	02 1.000 0.8644	03 2.000 0.9308	04 5.000 0.9625	05 10.000 0.9118	06 50.000 0.9701	07 100.000 0.9817
09 200.000 0.9497						
2-Chlorobenzotrifluoride	Average RF			RSD = 6.6		
				Average RF = 0.5264		
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
01 0.500 0.5176	02 1.000 0.4683	03 2.000 0.4995	04 5.000 0.5062	05 10.000 0.5097	06 50.000 0.5473	07 100.000 0.5561
09 200.000 0.5549						
2-Chloroethyl Vinyl Ether	Average RF			RSD = 18.8		
				Average RF = 0.1490		
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
02 1.000 0.1145	03 2.000 0.1117	04 5.000 0.1315	05 10.000 0.1395	06 50.000 0.1665	07 100.000 0.1751	08 150.000 0.1774
09 200.000 0.1754						
2-Chlorotoluene	Average RF			RSD = 4.3		
				Average RF = 1.925		
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
01 0.500 1.781	02 1.000 1.830	03 2.000 1.891	04 5.000 1.941	05 10.000 1.939	06 50.000 1.933	07 100.000 2.056
09 200.000 1.947						
2-Hexanone	Average RF			RSD = 9.0		
				Average RF = 0.2113		
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
03 2.000 0.1923	04 5.000 0.2002	05 10.000 0.1830	06 50.000 0.2275	07 100.000 0.2239	08 150.000 0.2286	09 200.000 0.2239
2-Methyl-1-propanol	Average RF			RSD = 16.8		
				Average RF = 0.009932		
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
02 20.000 0.008465	03 40.000 0.008984	04 100.000 0.007832	05 200.000 0.008770	06 1000.000 0.01028	07 2000.000 0.01087	08 3000.000 0.01217
09 4000.000 0.01208						
2-Methyl-2-propanol	Average RF			RSD = 14.6		
				Average RF = 0.02592		
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
01 10.000 0.01923	02 20.000 0.02431	03 40.000 0.02297	04 100.000 0.02413	05 200.000 0.02639	06 1000.000 0.02684	07 2000.000 0.02722
09 4000.000 0.03098						
2-Nitropropane	Average RF			RSD = 15.5		
				Average RF = 0.04919		
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
02 2.000 0.06304	03 4.000 0.04854	04 10.000 0.03744	05 20.000 0.04261	06 100.000 0.04639	07 200.000 0.05022	08 300.000 0.05283
09 400.000 0.05248						
2-Propanol	Average RF			RSD = 10.4		
				Average RF = 0.02153		
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
01 10.000 0.02303	02 20.000 0.02185	03 40.000 0.01792	04 100.000 0.01762	05 200.000 0.02212	06 1000.000 0.02231	07 2000.000 0.02181
09 4000.000 0.02334						
3,4- and 2,3-Dichlorotoluene Coelution	Average RF			RSD = 9.3		
				Average RF = 1.179		
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
01 1.000 0.9779	02 2.000 1.084	03 4.000 1.084	04 10.000 1.165	05 20.000 1.251	06 100.000 1.297	07 200.000 1.281
09 400.000 1.202						

Initial Calibration - Detailed Report

Calibration ID: RC1400062

Instrument ID: R-MS-10
Signal ID: 1

Analyte	Curve Fit		Weighting								
3,4-Dichlorobenzotrifluoride	Average RF				RSD = 6.3	Average RF = 0.6845					
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
01 0.500 0.6214	02 1.000 0.6757	03 2.000 0.6480	04 5.000 0.6781	05 10.000 0.6379	06 50.000 0.7022	07 100.000 0.7211	08 150.000 0.7402	09 200.000 0.7359			
3-Chloro-1-propene	Average RF				RSD = 8.2	Average RF = 0.2191					
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
01 0.500 0.1809	02 1.000 0.2135	03 2.000 0.2217	04 5.000 0.2107	05 10.000 0.2133	06 50.000 0.2324	07 100.000 0.2416	08 150.000 0.2360	09 200.000 0.2215			
3-Chlorobenzotrifluoride	Average RF				RSD = 7.3	Average RF = 0.5312					
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
01 0.500 0.4978	02 1.000 0.5098	03 2.000 0.4891	04 5.000 0.5184	05 10.000 0.4859	06 50.000 0.5568	07 100.000 0.5679	08 150.000 0.5834	09 200.000 0.5715			
3-Chlorotoluene	Average RF				RSD = 4.1	Average RF = 2.046					
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
01 0.500 1.967	02 1.000 1.920	03 2.000 1.958	04 5.000 2.020	05 10.000 2.143	06 50.000 2.105	07 100.000 2.134	08 150.000 2.107	09 200.000 2.056			
4-Bromofluorobenzene	Average RF				RSD = 2.8	Average RF = 0.4419					
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
06 50.000 0.4506	04 60.000 0.4320	05 70.000 0.4485	07 100.000 0.4524	08 125.000 0.4462	09 150.000 0.4215						
4-Chlorotoluene	Average RF				RSD = 3.1	Average RF = 2.316					
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
01 0.500 2.217	02 1.000 2.357	03 2.000 2.353	04 5.000 2.314	05 10.000 2.222	06 50.000 2.275	07 100.000 2.433	08 150.000 2.381	09 200.000 2.292			
4-Isopropyltoluene	Average RF				RSD = 8.7	Average RF = 2.313					
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
01 0.500 2.000	02 1.000 2.070	03 2.000 2.235	04 5.000 2.238	05 10.000 2.288	06 50.000 2.446	07 100.000 2.592	08 150.000 2.529	09 200.000 2.416			
4-Methyl-2-pentanone	Average RF				RSD = 9.5	Average RF = 0.2664					
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
03 2.000 0.2283	04 5.000 0.2419	05 10.000 0.2515	06 50.000 0.2813	07 100.000 0.2844	08 150.000 0.2917	09 200.000 0.2859					
Acetone	Average RF				RSD = 16.0	Average RF = 0.1523					
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
03 2.000 0.2006	04 5.000 0.1539	05 10.000 0.1637	06 50.000 0.1371	07 100.000 0.1269	08 150.000 0.1454	09 200.000 0.1382					
Acetonitrile	Average RF				RSD = 7.9	Average RF = 0.01632					
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
01 2.500 0.01405	02 5.000 0.01613	03 10.000 0.01663	04 25.000 0.01496	05 50.000 0.01819	06 250.000 0.01596	07 500.000 0.01684	08 750.000 0.01781	09 1000.000 0.01632			

Initial Calibration - Detailed Report

Calibration ID: RC1400062

Instrument ID: R-MS-10
Signal ID: 1

Analyte			Curve Fit			Weighting		
Acrolein			Average RF			RSD = 8.3		
						Average RF = 0.06115		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.07341	02	5.000	0.06441	03	10.000	0.06026
05	50.000	0.05698	06	250.000	0.06061	07	500.000	0.05882
09	1000.000	0.05794				08	750.000	0.05945
Acrylonitrile			Average RF			RSD = 6.5		
						Average RF = 0.1399		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.1169	02	5.000	0.1432	03	10.000	0.1467
05	50.000	0.1470	06	250.000	0.1418	07	500.000	0.1415
09	1000.000	0.1380				08	750.000	0.1413
Benzene			Average RF			RSD = 3.8		
						Average RF = 1.222		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.122	02	1.000	1.210	03	2.000	1.194
05	10.000	1.246	06	50.000	1.220	07	100.000	1.266
09	200.000	1.244				08	150.000	1.279
Bromobenzene			Average RF			RSD = 2.7		
						Average RF = 0.7548		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7476	02	1.000	0.7418	03	2.000	0.7975
05	10.000	0.7424	06	50.000	0.7346	07	100.000	0.7768
09	200.000	0.7564				08	150.000	0.7568
Bromochloromethane			Average RF			RSD = 5.2		
						Average RF = 0.3021		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3152	02	1.000	0.3312	03	2.000	0.3034
05	10.000	0.3058	06	50.000	0.2908	07	100.000	0.2891
09	200.000	0.2832				08	150.000	0.2879
Bromodichloromethane			Average RF			RSD = 5.0		
						Average RF = 0.3900		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3485	02	1.000	0.3826	03	2.000	0.4034
05	10.000	0.3860	06	50.000	0.3881	07	100.000	0.4057
09	200.000	0.4038				08	150.000	0.4125
Bromoform			Average RF			RSD = 12.9		
						Average RF = 0.1754		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1633	02	1.000	0.1361	03	2.000	0.1570
05	10.000	0.1680	06	50.000	0.1789	07	100.000	0.1952
09	200.000	0.2022				08	150.000	0.2049
Bromomethane			Quadratic			COD = 0.9952		
			1/X2			Y = 0.02646 X ² + 0.1677 X + -3.664E-4		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1448	02	1.000	0.1307	03	2.000	0.1462
05	10.000	0.1874	06	50.000	0.2042	07	100.000	0.2395
09	200.000	0.2590				08	150.000	0.2497
Carbon Disulfide			Average RF			RSD = 3.7		
						Average RF = 1.474		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.572	02	1.000	1.516	03	2.000	1.522
05	10.000	1.406	06	50.000	1.460	07	100.000	1.469
09	200.000	1.403				08	150.000	1.454

Initial Calibration - Detailed Report

Calibration ID:	RC1400062	Instrument ID:	R-MS-10
		Signal ID:	1

Analyte	Curve Fit	Weighting									
Carbon Tetrachloride	Average RF		RSD = 7.6		Average RF = 0.1274						
# Amount RF	# Amount RF		# Amount RF		# Amount RF		# Amount RF		# Amount RF		
01 0.500 0.1150	02 1.000 0.1276		03 2.000 0.1205		04 5.000 0.1240		05 10.000 0.1179		06 50.000 0.1238		07 100.000 0.1378
09 200.000 0.1376					08 150.000 0.1420						
Chlorobenzene	Average RF		RSD = 2.7		Average RF = 0.9640						
# Amount RF	# Amount RF		# Amount RF		# Amount RF		# Amount RF		# Amount RF		
01 0.500 0.9164	02 1.000 0.9520		03 2.000 0.9738		04 5.000 0.9784		05 10.000 0.9472		06 50.000 0.9474		07 100.000 0.9968
09 200.000 0.9671					08 150.000 0.9973						
Chloroethane	Average RF		RSD = 2.6		Average RF = 0.3320						
# Amount RF	# Amount RF		# Amount RF		# Amount RF		# Amount RF		# Amount RF		
01 0.500 0.3410	02 1.000 0.3293		03 2.000 0.3416		04 5.000 0.3341		05 10.000 0.3378		06 50.000 0.3327		07 100.000 0.3319
09 200.000 0.3132					08 150.000 0.3268						
Chloroform	Average RF		RSD = 4.2		Average RF = 0.8279						
# Amount RF	# Amount RF		# Amount RF		# Amount RF		# Amount RF		# Amount RF		
01 0.500 0.8897	02 1.000 0.8677		03 2.000 0.8333		04 5.000 0.8272		05 10.000 0.8452		06 50.000 0.7861		07 100.000 0.8012
09 200.000 0.7930					08 150.000 0.8076						
Chloromethane	Average RF		RSD = 4.5		Average RF = 0.7175						
# Amount RF	# Amount RF		# Amount RF		# Amount RF		# Amount RF		# Amount RF		
01 0.500 0.7430	02 1.000 0.6897		03 2.000 0.6771		04 5.000 0.6806		05 10.000 0.7672		06 50.000 0.7395		07 100.000 0.7395
09 200.000 0.6966					08 150.000 0.7240						
Cyclohexane	Average RF		RSD = 5.5		Average RF = 0.4527						
# Amount RF	# Amount RF		# Amount RF		# Amount RF		# Amount RF		# Amount RF		
01 0.500 0.4964	02 1.000 0.4498		03 2.000 0.4809		04 5.000 0.4416		05 10.000 0.4140		06 50.000 0.4664		07 100.000 0.4384
09 200.000 0.4384					08 150.000 0.4487						
Cyclohexanone	Average RF		RSD = 12.3		Average RF = 0.04603						
# Amount RF	# Amount RF		# Amount RF		# Amount RF		# Amount RF		# Amount RF		
01 10.000 0.03458	02 20.000 0.03891		03 40.000 0.04578		04 100.000 0.04682		05 200.000 0.04994		06 1000.000 0.05054		07 2000.000 0.04900
09 4000.000 0.04750					08 3000.000 0.05118						
Dibromochloromethane	Average RF		RSD = 10.9		Average RF = 0.3054						
# Amount RF	# Amount RF		# Amount RF		# Amount RF		# Amount RF		# Amount RF		
01 0.500 0.2648	02 1.000 0.2699		03 2.000 0.2753		04 5.000 0.2994		05 10.000 0.2882		06 50.000 0.3186		07 100.000 0.3388
09 200.000 0.3473					08 150.000 0.3461						
Dibromofluoromethane	Average RF		RSD = 2.2		Average RF = 0.3188						
# Amount RF	# Amount RF		# Amount RF		# Amount RF		# Amount RF		# Amount RF		
06 50.000 0.3253	04 60.000 0.3151		05 70.000 0.3253		07 100.000 0.3250		08 125.000 0.3112		09 150.000 0.3110		

Initial Calibration - Detailed Report

Calibration ID: RC1400062

Instrument ID: R-MS-10
Signal ID: 1

Analyte			Curve Fit			Weighting		
Dibromomethane			Average RF			RSD = 4.1		
						Average RF = 0.1717		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1793	02	1.000	0.1663	03	2.000	0.1870
05	10.000	0.1675	06	50.000	0.1657	07	100.000	0.1702
09	200.000	0.1676				08	150.000	0.1709
Dichlorodifluoromethane (CFC 12)			Average RF			RSD = 8.9		
						Average RF = 0.5381		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4942	02	1.000	0.5485	03	2.000	0.4794
05	10.000	0.5654	06	50.000	0.5744	07	100.000	0.5890
09	200.000	0.5504				08	150.000	0.5817
Dichlorofluoromethane (CFC 21)			Average RF			RSD = 2.8		
						Average RF = 0.9222		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.9548	02	1.000	0.9324	03	2.000	0.9495
05	10.000	0.9227	06	50.000	0.9412	07	100.000	0.8810
09	200.000	0.8868				08	150.000	0.9108
Dichloromethane			Average RF			RSD = 6.0		
						Average RF = 0.4573		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4871	02	1.000	0.5054	03	2.000	0.4849
05	10.000	0.4457	06	50.000	0.4347	07	100.000	0.4408
09	200.000	0.4298				08	150.000	0.4399
Diethyl Ether			Average RF			RSD = 5.2		
						Average RF = 0.3910		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4251	02	1.000	0.4153	03	2.000	0.3878
05	10.000	0.3993	06	50.000	0.3757	07	100.000	0.3728
09	200.000	0.3642				08	150.000	0.3792
Diisopropyl Ether			Average RF			RSD = 5.5		
						Average RF = 2.181		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.992	02	1.000	2.067	03	2.000	2.182
05	10.000	2.394	06	50.000	2.285	07	100.000	2.208
09	200.000	2.102				08	150.000	2.176
Ethyl Methacrylate			Average RF			RSD = 13.1		
						Average RF = 0.2657		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2325	02	1.000	0.2446	03	2.000	0.2258
05	10.000	0.2480	06	50.000	0.2781	07	100.000	0.2969
09	200.000	0.3100				08	150.000	0.3153
Ethyl tert-Butyl Ether			Average RF			RSD = 4.6		
						Average RF = 1.463		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.447	02	1.000	1.344	03	2.000	1.429
05	10.000	1.557	06	50.000	1.486	07	100.000	1.483
09	200.000	1.512				08	150.000	1.519
Ethylbenzene			Average RF			RSD = 6.8		
						Average RF = 0.4804		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4418	02	1.000	0.4433	03	2.000	0.4482
05	10.000	0.4752	06	50.000	0.4852	07	100.000	0.5209
09	200.000	0.5112				08	150.000	0.5243

Initial Calibration - Detailed Report

Calibration ID: RC1400062

Instrument ID: R-MS-10
Signal ID: 1

Analyte			Curve Fit			Weighting		
Hexachlorobutadiene			Average RF			RSD = 4.0		
						Average RF = 0.3147		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3208	02	1.000	0.3132	03	2.000	0.2909
05	10.000	0.3020	06	50.000	0.3183	07	100.000	0.3198
09	200.000	0.3239				08	150.000	0.3328
Iodomethane			Quadratic			1/X		
						COD = 0.9908		
						$Y = 0.04189 X^2 + 0.3945 X - 0.03918$		
#	Amount	RF	#	Amount	RF	#	Amount	RF
04	5.000	0.09270	05	10.000	0.1525	06	50.000	0.3199
08	150.000	0.5393	09	200.000	0.5301	07	100.000	0.4944
Isopropylbenzene (Cumene)			Average RF			RSD = 7.7		
						Average RF = 1.457		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.263	02	1.000	1.376	03	2.000	1.426
05	10.000	1.396	06	50.000	1.514	07	100.000	1.627
09	200.000	1.476				08	150.000	1.591
Methacrylonitrile			Average RF			RSD = 14.1		
						Average RF = 0.1086		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.08756	02	1.000	0.08229	03	2.000	0.1019
05	10.000	0.1077	06	50.000	0.1186	07	100.000	0.1215
09	200.000	0.1237				08	150.000	0.1228
Methyl Acetate			Average RF			RSD = 5.4		
						Average RF = 0.3020		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2736	02	1.000	0.2828	03	2.000	0.3043
05	10.000	0.3218	06	50.000	0.3246	07	100.000	0.3013
09	200.000	0.2999				08	150.000	0.3000
Methyl Methacrylate			Average RF			RSD = 18.5		
						Average RF = 0.1265		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.07771	02	1.000	0.1430	03	2.000	0.1044
05	10.000	0.1267	06	50.000	0.1342	07	100.000	0.1413
09	200.000	0.1454				08	150.000	0.1495
Methyl tert-Butyl Ether			Average RF			RSD = 4.0		
						Average RF = 0.9984		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.9383	02	1.000	0.9448	03	2.000	0.9733
05	10.000	0.9967	06	50.000	1.010	07	100.000	1.034
09	200.000	1.037				08	150.000	1.052
Methylcyclohexane			Average RF			RSD = 5.4		
						Average RF = 0.4697		
#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4470	02	1.000	0.4579	03	2.000	0.4810
05	10.000	0.4164	06	50.000	0.4955	07	100.000	0.4772
09	200.000	0.4848				08	150.000	0.4946
Naphthalene			Average RF			RSD = 15.3		
						Average RF = 1.321		
#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	1.104	03	2.000	1.004	04	5.000	1.202
06	50.000	1.449	07	100.000	1.491	08	150.000	1.542
						09	200.000	1.486

Initial Calibration - Detailed Report

Calibration ID:	RC1400062	Instrument ID:	R-MS-10
		Signal ID:	1

Analyte	Curve Fit	Weighting								
Propionitrile	Linear	1/X	R2 = 0.9991	Y = 0.04878 X + -0.001783						
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
01 2.500 0.01416	02 5.000 0.04207	03 10.000 0.03601	04 25.000 0.03956	05 50.000 0.04437	06 250.000 0.04887	07 500.000 0.04677	08 750.000 0.05005	09 1000.000 0.04872		
Styrene	Average RF	RSD = 12.4	Average RF = 0.9623							
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
01 0.500 0.7468	02 1.000 0.8480	03 2.000 0.8902	04 5.000 0.9342	05 10.000 0.9699	06 50.000 1.023	07 100.000 1.095	08 150.000 1.104	09 200.000 1.049		
Tetrachloroethene (PCE)	Average RF	RSD = 4.5	Average RF = 0.2891							
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
01 0.500 0.3021	02 1.000 0.2880	03 2.000 0.2711	04 5.000 0.2832	05 10.000 0.2704	06 50.000 0.2850	07 100.000 0.3031	08 150.000 0.3024	09 200.000 0.2970		
Tetrahydrofuran (THF)	Average RF	RSD = 4.3	Average RF = 0.1111							
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
02 1.000 0.1026	03 2.000 0.1138	04 5.000 0.1115	05 10.000 0.1048	06 50.000 0.1141	07 100.000 0.1125	08 150.000 0.1157	09 200.000 0.1141			
Toluene	Average RF	RSD = 2.5	Average RF = 1.281							
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
01 0.500 1.246	02 1.000 1.295	03 2.000 1.260	04 5.000 1.262	05 10.000 1.253	06 50.000 1.270	07 100.000 1.323	08 150.000 1.338	09 200.000 1.279		
Toluene-d8	Average RF	RSD = 2.2	Average RF = 1.123							
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
06 50.000 1.159	04 60.000 1.105	05 70.000 1.140	07 100.000 1.133	08 125.000 1.106	09 150.000 1.094					
Trichloroethene (TCE)	Average RF	RSD = 3.6	Average RF = 0.3407							
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
01 0.500 0.3247	02 1.000 0.3409	03 2.000 0.3377	04 5.000 0.3364	05 10.000 0.3286	06 50.000 0.3323	07 100.000 0.3515	08 150.000 0.3619	09 200.000 0.3526		
Trichlorofluoromethane (CFC 11)	Average RF	RSD = 3.3	Average RF = 0.7423							
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
01 0.500 0.7879	02 1.000 0.7432	03 2.000 0.7252	04 5.000 0.7395	05 10.000 0.7016	06 50.000 0.7396	07 100.000 0.7599	08 150.000 0.7575	09 200.000 0.7266		
Vinyl Acetate	Average RF	RSD = 18.1	Average RF = 0.05589							
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
02 1.000 0.03626	03 2.000 0.04476	04 5.000 0.05793	05 10.000 0.05835	06 50.000 0.05905	07 100.000 0.06563	08 150.000 0.06268	09 200.000 0.06250			
Vinyl Chloride	Average RF	RSD = 3.7	Average RF = 0.6553							
# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF	# Amount RF
01 0.500 0.6511	02 1.000 0.6983	03 2.000 0.6395	04 5.000 0.6148	05 10.000 0.6438	06 50.000 0.6582	07 100.000 0.6765	08 150.000 0.6713	09 200.000 0.6446		

Initial Calibration - Detailed Report

Calibration ID: RC1400062

Instrument ID: R-MS-10
Signal ID: 1

Analyte	Curve Fit			Weighting								
cis-1,2-Dichloroethene	Average RF			RSD = 4.0			Average RF = 0.4913					
# Amount RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01 0.500 0.4618	02	1.000	0.4589	03	2.000	0.5045	04	5.000	0.5140	05	10.000	0.5091
05 10.000 0.5091	06	50.000	0.4873	07	100.000	0.4939	08	150.000	0.5008	09	200.000	0.4916
09 200.000 0.4916												
cis-1,3-Dichloropropene	Average RF			RSD = 13.9			Average RF = 0.4120					
# Amount RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01 0.500 0.3343	02	1.000	0.3639	03	2.000	0.3613	04	5.000	0.3697	05	10.000	0.4089
05 10.000 0.4089	06	50.000	0.4399	07	100.000	0.4685	08	150.000	0.4845	09	200.000	0.4765
09 200.000 0.4765												
m,p-Xylenes	Average RF			RSD = 7.8			Average RF = 0.5924					
# Amount RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01 1.000 0.5081	02	2.000	0.5402	03	4.000	0.5776	04	10.000	0.6066	05	20.000	0.5903
05 20.000 0.5903	06	100.000	0.6045	07	200.000	0.6497	08	300.000	0.6474	09	400.000	0.6075
09 400.000 0.6075												
n-Butyl Acetate	Average RF			RSD = 13.3			Average RF = 0.4703					
# Amount RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01 0.500 0.3814	02	1.000	0.4167	03	2.000	0.4473	04	5.000	0.3995	05	10.000	0.4638
05 10.000 0.4638	06	50.000	0.5284	07	100.000	0.5225	08	150.000	0.5408	09	200.000	0.5319
09 200.000 0.5319												
n-Butylbenzene	Average RF			RSD = 11.6			Average RF = 1.960					
# Amount RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01 0.500 1.520	02	1.000	1.779	03	2.000	1.835	04	5.000	1.921	05	10.000	1.941
05 10.000 1.941	06	50.000	2.116	07	100.000	2.212	08	150.000	2.214	09	200.000	2.104
09 200.000 2.104												
n-Heptane	Average RF			RSD = 7.6			Average RF = 0.4609					
# Amount RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01 0.500 0.4544	02	1.000	0.4668	03	2.000	0.4216	04	5.000	0.4287	05	10.000	0.4087
05 10.000 0.4087	06	50.000	0.4829	07	100.000	0.4958	08	150.000	0.5082	09	200.000	0.4814
09 200.000 0.4814												
n-Propylbenzene	Average RF			RSD = 6.0			Average RF = 3.120					
# Amount RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01 0.500 2.799	02	1.000	2.961	03	2.000	3.080	04	5.000	3.158	05	10.000	3.135
05 10.000 3.135	06	50.000	3.277	07	100.000	3.431	08	150.000	3.243	09	200.000	2.999
09 200.000 2.999												
o-Xylene	Average RF			RSD = 8.8			Average RF = 0.5792					
# Amount RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01 0.500 0.5477	02	1.000	0.4764	03	2.000	0.5469	04	5.000	0.5779	05	10.000	0.5754
05 10.000 0.5754	06	50.000	0.6051	07	100.000	0.6320	08	150.000	0.6378	09	200.000	0.6138
09 200.000 0.6138												
sec-Butylbenzene	Average RF			RSD = 6.4			Average RF = 2.666					
# Amount RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01 0.500 2.444	02	1.000	2.450	03	2.000	2.660	04	5.000	2.605	05	10.000	2.562
05 10.000 2.562	06	50.000	2.793	07	100.000	2.928	08	150.000	2.861	09	200.000	2.692
09 200.000 2.692												

Initial Calibration - Detailed Report

Calibration ID:	RC1400062	Instrument ID:	R-MS-10
		Signal ID:	1

Analyte	Curve Fit	Weighting									
tert-Amyl Methyl Ether	Average RF		RSD = 8.3		Average RF = 0.9868						
# Amount RF	# Amount RF		# Amount RF		# Amount RF		# Amount RF		# Amount RF		
01 0.500 0.8467	02 1.000 0.9308		03 2.000 0.9110		04 5.000 0.9352		05 10.000 1.043		06 50.000 1.034		07 100.000 1.034
09 200.000 1.073							08 150.000 1.074				
tert-Butylbenzene	Average RF		RSD = 6.3		Average RF = 1.902						
# Amount RF	# Amount RF		# Amount RF		# Amount RF		# Amount RF		# Amount RF		
01 0.500 1.801	02 1.000 1.783		03 2.000 1.789		04 5.000 1.859		05 10.000 1.801		06 50.000 1.958		07 100.000 2.077
09 200.000 1.989							08 150.000 2.059				
trans-1,2-Dichloroethene	Average RF		RSD = 3.9		Average RF = 0.4493						
# Amount RF	# Amount RF		# Amount RF		# Amount RF		# Amount RF		# Amount RF		
01 0.500 0.4824	02 1.000 0.4293		03 2.000 0.4260		04 5.000 0.4594		05 10.000 0.4594		06 50.000 0.4418		07 100.000 0.4512
09 200.000 0.4398							08 150.000 0.4544				
trans-1,3-Dichloropropene	Average RF		RSD = 17.8		Average RF = 0.3260						
# Amount RF	# Amount RF		# Amount RF		# Amount RF		# Amount RF		# Amount RF		
01 0.500 0.2493	02 1.000 0.2700		03 2.000 0.2759		04 5.000 0.2990		05 10.000 0.3100		06 50.000 0.3489		07 100.000 0.3833
09 200.000 0.3974							08 150.000 0.4005				
trans-1,4-Dichloro-2-butene	Quadratic	1/X2	COD = 0.9957		Y = 0.007435 X ² + 0.06784 X + -2.039E-4						
# Amount RF	# Amount RF		# Amount RF		# Amount RF		# Amount RF		# Amount RF		
01 0.500 0.04966	02 1.000 0.05506		03 2.000 0.06137		04 5.000 0.06324		05 10.000 0.06641		06 50.000 0.08121		07 100.000 0.08676
09 200.000 0.09235							08 150.000 0.09244				

Initial Calibration - Detailed Report

Calibration ID: RC1400062

Instrument ID: R-MS-10

Signal ID: 1

Analyte

1,1,1,2-Tetrachloroethane

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.46	-7.9	02	1.000	0.88	-11.8	03	2.000	1.79	-10.7
04	5.000	4.75	-5.0	05	10.000	9.98	-0.2	06	50.000	51.12	2.2
07	100.000	110.30	10.3	08	150.000	168.35	12.2	09	200.000	221.54	10.8

1,1,1-Trichloroethane (TCA)

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.51	1.0	02	1.000	0.98	-1.5	03	2.000	1.97	-1.3
04	5.000	5.02	0.5	05	10.000	9.57	-4.3	06	50.000	48.94	-2.1
07	100.000	102.77	2.8	08	150.000	155.16	3.4	09	200.000	203.10	1.6

1,1,2,2-Tetrachloroethane

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.48	-4.4	02	1.000	0.95	-4.8	03	2.000	2.13	6.7
04	5.000	5.21	4.1	05	10.000	10.21	2.1	06	50.000	48.37	-3.3
07	100.000	100.69	0.7	08	150.000	150.87	0.6	09	200.000	196.51	-1.7

1,1,2-Trichloroethane

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.47	-5.4	02	1.000	1.04	4.4	03	2.000	1.96	-2.2
04	5.000	4.72	-5.5	05	10.000	10.07	0.7	06	50.000	49.30	-1.4
07	100.000	102.24	2.2	08	150.000	157.44	5.0	09	200.000	204.30	2.1

1,1,2-Trichlorotrifluoroethane

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.53	5.8	02	1.000	1.10	9.7	03	2.000	1.96	-2.0
04	5.000	5.18	3.6	05	10.000	8.90	-11.0	06	50.000	47.99	-4.0
07	100.000	100.67	0.7	08	150.000	152.06	1.4	09	200.000	191.91	-4.0

1,1-Dichloroethane (1,1-DCA)

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.50	-0.7	02	1.000	0.99	-0.6	03	2.000	2.10	5.2
04	5.000	5.05	1.0	05	10.000	10.04	0.4	06	50.000	49.36	-1.3
07	100.000	99.86	-0.1	08	150.000	148.65	-0.9	09	200.000	194.11	-2.9

1,1-Dichloroethene (1,1-DCE)

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.54	7.3	02	1.000	0.97	-3.3	03	2.000	2.14	7.1
04	5.000	5.07	1.4	05	10.000	9.14	-8.6	06	50.000	47.55	-4.9
07	100.000	100.25	0.2	08	150.000	154.36	2.9	09	200.000	195.66	-2.2

1,1-Dichloropropene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.54	8.4	02	1.000	0.93	-7.5	03	2.000	1.99	-0.4
04	5.000	4.94	-1.2	05	10.000	9.33	-6.7	06	50.000	48.78	-2.4
07	100.000	104.16	4.2	08	150.000	156.76	4.5	09	200.000	202.32	1.2

Initial Calibration - Detailed Report

Calibration ID:	RC1400062	Instrument ID:	R-MS-10
		Signal ID:	1

Analyte

1,2,3-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.44	-12.4	02	1.000	0.90	-9.9	03	2.000	1.83	-8.3
04	5.000	4.54	-9.1	05	10.000	10.14	1.4	06	50.000	53.21	6.4
07	100.000	107.90	7.9	08	150.000	169.64	13.1	09	200.000	221.75	10.9

1,2,3-Trichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.59	17.9	02	1.000	0.98	-1.7	03	2.000	2.23	11.5
04	5.000	5.03	0.6	05	10.000	9.36	-6.4	06	50.000	46.23	-7.5
07	100.000	95.97	-4.0	08	150.000	140.26	-6.5	09	200.000	192.50	-3.8

1,2,4-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-6.7	02	1.000	0.95	-5.2	03	2.000	1.91	-4.7
04	5.000	4.81	-3.8	05	10.000	9.96	-0.4	06	50.000	51.12	2.2
07	100.000	105.03	5.0	08	150.000	162.05	8.0	09	200.000	210.96	5.5

1,2,4-Trimethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-9.7	02	1.000	0.89	-11.0	03	2.000	1.91	-4.3
04	5.000	5.07	1.5	05	10.000	10.07	0.7	06	50.000	51.78	3.6
07	100.000	109.23	9.2	08	150.000	160.75	7.2	09	200.000	205.89	2.9

1,2-Dibromo-3-chloropropane (DBCP)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.39	-21.4	02	1.000	0.79	-20.8	03	2.000	1.77	-11.3
04	5.000	4.54	-9.3	05	10.000	9.38	-6.2	06	50.000	54.10	8.2
07	100.000	116.94	16.9	08	150.000	182.52	21.7	09	200.000	244.27	22.1

1,2-Dibromoethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	0.3	02	1.000	0.86	-13.7	03	2.000	1.96	-1.8
04	5.000	5.01	0.2	05	10.000	9.49	-5.1	06	50.000	51.51	3.0
07	100.000	106.06	6.1	08	150.000	159.25	6.2	09	200.000	209.55	4.8

1,2-Dichloro-1,1,2-trifluoroethane (CFC)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.4	02	1.000	1.03	2.8	03	2.000	2.08	4.2
04	5.000	5.02	0.4	05	10.000	9.64	-3.6	06	50.000	52.53	5.1
07	100.000	97.68	-2.3	08	150.000	148.91	-0.7	09	200.000	193.29	-3.4

1,2-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-1.6	02	1.000	0.99	-0.6	03	2.000	1.92	-4.2
04	5.000	5.01	0.2	05	10.000	9.91	-0.9	06	50.000	49.62	-0.8
07	100.000	102.84	2.8	08	150.000	155.99	4.0	09	200.000	201.99	1.0

Initial Calibration - Detailed Report

Calibration ID: RC1400062

Instrument ID: R-MS-10
Signal ID: 1

Analyte

1,2-Dichloroethane

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
01	0.500	0.52	3.1	02	1.000	0.98	-1.7	03	2.000	1.91	-4.3
04	5.000	5.16	3.1	05	10.000	10.13	1.3	06	50.000	49.58	-0.8
07	100.000	100.67	0.7	08	150.000	151.85	1.2	09	200.000	194.73	-2.6

1,2-Dichloroethane-d4

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
06	50.000	50.75	1.5	04	60.000	61.64	2.7	05	70.000	72.65	3.8
07	100.000	100.55	0.6	08	125.000	121.19	-3.0	09	150.000	141.72	-5.5

1,2-Dichloropropane

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
01	0.500	0.49	-3.0	02	1.000	0.92	-7.9	03	2.000	2.07	3.4
04	5.000	4.97	-0.7	05	10.000	9.82	-1.8	06	50.000	49.93	-0.1
07	100.000	103.16	3.2	08	150.000	156.87	4.6	09	200.000	204.64	2.3

1,3,5-Trichlorobenzene

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
01	0.500	0.54	7.3	02	1.000	0.90	-10.5	03	2.000	1.92	-4.0
04	5.000	4.77	-4.7	05	10.000	9.84	-1.6	06	50.000	51.74	3.5
07	100.000	101.77	1.8	08	150.000	157.52	5.0	09	200.000	206.31	3.2

1,3,5-Trimethylbenzene

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
01	0.500	0.46	-7.5	02	1.000	0.94	-5.6	03	2.000	1.96	-1.8
04	5.000	4.84	-3.2	05	10.000	9.73	-2.7	06	50.000	51.25	2.5
07	100.000	109.33	9.3	08	150.000	160.99	7.3	09	200.000	203.44	1.7

1,3-Dichlorobenzene

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
01	0.500	0.47	-5.8	02	1.000	0.94	-6.1	03	2.000	1.96	-1.9
04	5.000	4.91	-1.8	05	10.000	9.99	-0.1	06	50.000	50.23	0.5
07	100.000	105.76	5.8	08	150.000	158.21	5.5	09	200.000	207.96	4.0

1,3-Dichloropropane

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
01	0.500	0.52	3.1	02	1.000	0.99	-1.3	03	2.000	1.99	-0.4
04	5.000	4.93	-1.4	05	10.000	9.85	-1.5	06	50.000	49.93	-0.1
07	100.000	101.32	1.3	08	150.000	151.60	1.1	09	200.000	198.37	-0.8

1,4-Dichlorobenzene

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
01	0.500	0.50	0.2	02	1.000	0.96	-4.0	03	2.000	1.99	-0.4
04	5.000	4.98	-0.5	05	10.000	9.92	-0.8	06	50.000	49.46	-1.1
07	100.000	102.25	2.3	08	150.000	154.69	3.1	09	200.000	202.31	1.2

Initial Calibration - Detailed Report

Calibration ID:	RC1400062	Instrument ID:	R-MS-10
		Signal ID:	1

Analyte

1,4-Dioxane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	20.000	16.29	-18.5	03	40.000	42.03	5.1	04	100.000	101.51	1.5
05	200.000	220.42	10.2	06	1000.000	972.09	-2.8	07	2000.000	1,906.34	-4.7
08	3000.000	3,183.77	6.1	09	4000.000	4,123.39	3.1				

1-Butanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	50.000	50.51	1.0	03	100.000	100.50	0.5	04	250.000	229.54	-8.2
05	500.000	515.33	3.1	06	2500.000	2,576.95	3.1	07	5000.000	4,982.17	-0.4
08	7500.000	7,650.84	2.0	09	10000.000	9,835.61	-1.6				

1-Chloro-4-(trifluoromethyl)benzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-7.2	02	1.000	0.93	-6.6	03	2.000	1.90	-4.9
04	5.000	4.85	-2.9	05	10.000	9.44	-5.6	06	50.000	52.00	4.0
07	100.000	106.19	6.2	08	150.000	164.67	9.8	09	200.000	214.49	7.2

2,2-Dichloro-1,1,1-trifluoroethane (CFC)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.9	02	1.000	1.08	7.9	03	2.000	2.09	4.4
04	5.000	4.91	-1.8	05	10.000	9.19	-8.1	06	50.000	50.40	0.8
07	100.000	95.06	-4.9	08	150.000	146.97	-2.0	09	200.000	193.59	-3.2

2,2-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.9	02	1.000	0.90	-9.7	03	2.000	1.88	-6.1
04	5.000	4.66	-6.9	05	10.000	9.06	-9.4	06	50.000	51.07	2.1
07	100.000	109.13	9.1	08	150.000	170.93	14.0	09	200.000	223.68	11.8

2,3,6-Trichlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.41	-18.4	02	1.000	0.97	-3.2	03	2.000	1.93	-3.4
04	5.000	4.37	-12.6	05	10.000	10.05	0.5	06	50.000	52.01	4.0
07	100.000	104.46	4.5	08	150.000	170.09	13.4	09	200.000	230.23	15.1

2,4,5-Trichlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.40	-20.5	02	1.000	0.76	-23.6	03	2.000	1.64	-17.9
04	5.000	4.61	-7.9	05	10.000	10.16	1.6	06	50.000	56.04	12.1
07	100.000	112.38	12.4	08	150.000	183.37	22.2	09	200.000	243.15	21.6

2,4-, 2,5-, and 2,6-Dichlorotoluene Coelut

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.500	1.25	-16.4	02	3.000	2.70	-10.0	03	6.000	5.62	-6.3
04	15.000	14.63	-2.5	05	30.000	30.93	3.1	06	150.000	164.13	9.4
07	300.000	325.70	8.6	08	450.000	493.00	9.6	09	600.000	626.82	4.5

Initial Calibration - Detailed Report

Calibration ID: RC1400062

Instrument ID: R-MS-10
Signal ID: 1

Analyte

2,4-Dichlorobenzotrifluoride

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
01	0.500	0.47	-5.0	02	1.000	0.93	-7.5	03	2.000	1.83	-8.6
04	5.000	4.79	-4.3	05	10.000	9.74	-2.6	06	50.000	52.64	5.3
07	100.000	104.98	5.0	08	150.000	163.22	8.8	09	200.000	217.83	8.9

2,5-Dichlorobenzotrifluoride

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
01	0.500	0.58	15.2	02	1.000	0.95	-5.0	03	2.000	2.03	1.6
04	5.000	4.40	-12.1	05	10.000	9.13	-8.7	06	50.000	49.96	-0.1
07	100.000	101.10	1.1	08	150.000	156.79	4.5	09	200.000	207.05	3.5

2-Butanone (MEK)

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
03	2.000	1.90	-5.1	04	5.000	4.57	-8.6	05	10.000	10.02	0.2
06	50.000	54.85	9.7	07	100.000	101.93	1.9	08	150.000	154.93	3.3
09	200.000	197.12	-1.4								

2-Chloro-1,3-butadiene

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
01	0.500	0.47	-7.0	02	1.000	0.93	-7.5	03	2.000	1.99	-0.4
04	5.000	5.15	3.0	05	10.000	9.76	-2.4	06	50.000	51.91	3.8
07	100.000	105.06	5.1	08	150.000	155.67	3.8	09	200.000	203.25	1.6

2-Chlorobenzotrifluoride

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
01	0.500	0.49	-1.7	02	1.000	0.89	-11.0	03	2.000	1.90	-5.1
04	5.000	4.81	-3.9	05	10.000	9.68	-3.2	06	50.000	51.98	4.0
07	100.000	105.63	5.6	08	150.000	164.78	9.9	09	200.000	210.83	5.4

2-Chloroethyl Vinyl Ether

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
02	1.000	0.77	-23.1	03	2.000	1.50	-25.0	04	5.000	4.41	-11.7
05	10.000	9.36	-6.4	06	50.000	55.89	11.8	07	100.000	117.57	17.6
08	150.000	178.63	19.1	09	200.000	235.56	17.8				

2-Chlorotoluene

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
01	0.500	0.46	-7.5	02	1.000	0.95	-5.0	03	2.000	1.96	-1.8
04	5.000	5.04	0.8	05	10.000	10.07	0.7	06	50.000	50.20	0.4
07	100.000	106.82	6.8	08	150.000	156.49	4.3	09	200.000	202.22	1.1

2-Hexanone

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
03	2.000	1.82	-9.0	04	5.000	4.74	-5.3	05	10.000	8.66	-13.4
06	50.000	53.81	7.6	07	100.000	105.94	5.9	08	150.000	162.24	8.2
09	200.000	211.86	5.9								

Initial Calibration - Detailed Report

Calibration ID: RC1400062

Instrument ID: R-MS-10
Signal ID: 1

Analyte

2-Methyl-1-propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	20.000	17.05	-14.8	03	40.000	36.18	-9.5	04	100.000	78.86	-21.1
05	200.000	176.61	-11.7	06	1000.000	1,035.18	3.5	07	2000.000	2,189.80	9.5
08	3000.000	3,676.51	22.6	09	4000.000	4,863.64	21.6				

2-Methyl-2-propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	10.000	7.42	-25.8	02	20.000	18.76	-6.2	03	40.000	35.45	-11.4
04	100.000	93.10	-6.9	05	200.000	203.64	1.8	06	1000.000	1,035.71	3.6
07	2000.000	2,100.84	5.0	08	3000.000	3,608.65	20.3	09	4000.000	4,781.53	19.5

2-Nitropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	2.000	2.56	28.1	03	4.000	3.95	-1.3	04	10.000	7.61	-23.9
05	20.000	17.32	-13.4	06	100.000	94.31	-5.7	07	200.000	204.17	2.1
08	300.000	322.16	7.4	09	400.000	426.73	6.7				

2-Propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	10.000	10.70	7.0	02	20.000	20.30	1.5	03	40.000	33.29	-16.8
04	100.000	81.84	-18.2	05	200.000	205.48	2.7	06	1000.000	1,036.50	3.6
07	2000.000	2,025.96	1.3	08	3000.000	3,309.83	10.3	09	4000.000	4,337.45	8.4

3,4- and 2,3-Dichlorotoluene Coelution

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.000	0.83	-17.0	02	2.000	1.84	-8.0	03	4.000	3.68	-8.1
04	10.000	9.88	-1.2	05	20.000	21.23	6.1	06	100.000	110.01	10.0
07	200.000	217.38	8.7	08	300.000	322.30	7.4	09	400.000	407.99	2.0

3,4-Dichlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-9.2	02	1.000	0.99	-1.3	03	2.000	1.89	-5.3
04	5.000	4.95	-0.9	05	10.000	9.32	-6.8	06	50.000	51.30	2.6
07	100.000	105.35	5.3	08	150.000	162.20	8.1	09	200.000	215.03	7.5

3-Chloro-1-propene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.41	-17.4	02	1.000	0.97	-2.6	03	2.000	2.02	1.2
04	5.000	4.81	-3.8	05	10.000	9.74	-2.6	06	50.000	53.04	6.1
07	100.000	110.29	10.3	08	150.000	161.61	7.7	09	200.000	202.20	1.1

3-Chlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-6.3	02	1.000	0.96	-4.0	03	2.000	1.84	-7.9
04	5.000	4.88	-2.4	05	10.000	9.15	-8.5	06	50.000	52.41	4.8
07	100.000	106.91	6.9	08	150.000	164.75	9.8	09	200.000	215.18	7.6

Initial Calibration - Detailed Report

Calibration ID:	RC1400062	Instrument ID:	R-MS-10
		Signal ID:	1

Analyte

3-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.9	02	1.000	0.94	-6.1	03	2.000	1.91	-4.3
04	5.000	4.94	-1.2	05	10.000	10.48	4.8	06	50.000	51.45	2.9
07	100.000	104.32	4.3	08	150.000	154.52	3.0	09	200.000	201.06	0.5

4-Bromofluorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	50.000	50.98	2.0	04	60.000	58.66	-2.2	05	70.000	71.05	1.5
07	100.000	102.39	2.4	08	125.000	126.23	1.0	09	150.000	143.09	-4.6

4-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.3	02	1.000	1.02	1.8	03	2.000	2.03	1.6
04	5.000	4.99	-0.1	05	10.000	9.59	-4.1	06	50.000	49.12	-1.8
07	100.000	105.07	5.1	08	150.000	154.25	2.8	09	200.000	197.91	-1.0

4-Isopropyltoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.43	-13.5	02	1.000	0.89	-10.5	03	2.000	1.93	-3.4
04	5.000	4.84	-3.2	05	10.000	9.89	-1.1	06	50.000	52.88	5.8
07	100.000	112.06	12.1	08	150.000	164.05	9.4	09	200.000	208.92	4.5

4-Methyl-2-pentanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	1.71	-14.3	04	5.000	4.54	-9.2	05	10.000	9.44	-5.6
06	50.000	52.79	5.6	07	100.000	106.76	6.8	08	150.000	164.20	9.5
09	200.000	214.63	7.3								

Acetone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	2.63	31.7	04	5.000	5.06	1.1	05	10.000	10.75	7.5
06	50.000	45.03	-9.9	07	100.000	83.38	-16.6	08	150.000	143.22	-4.5
09	200.000	181.49	-9.3								

Acetonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	2.500	2.15	-13.9	02	5.000	4.94	-1.2	03	10.000	10.19	1.9
04	25.000	22.91	-8.4	05	50.000	55.73	11.5	06	250.000	244.42	-2.2
07	500.000	515.83	3.2	08	750.000	818.65	9.2	09	1000.000	999.74	0.0

Acrolein

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	2.500	3.00	20.0	02	5.000	5.27	5.3	03	10.000	9.86	-1.4
04	25.000	23.90	-4.4	05	50.000	46.59	-6.8	06	250.000	247.78	-0.9
07	500.000	480.97	-3.8	08	750.000	729.20	-2.8	09	1000.000	947.53	-5.2

Initial Calibration - Detailed Report

Calibration ID: RC1400062

Instrument ID: R-MS-10

Signal ID: 1

Analyte

Acrylonitrile

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
01	2.500	2.09	-16.5	02	5.000	5.12	2.3	03	10.000	10.48	4.8
04	25.000	25.54	2.2	05	50.000	52.53	5.1	06	250.000	253.38	1.4
07	500.000	505.50	1.1	08	750.000	757.45	1.0	09	1000.000	986.54	-1.3

Benzene

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
01	0.500	0.46	-8.2	02	1.000	0.99	-1.0	03	2.000	1.95	-2.3
04	5.000	4.99	-0.2	05	10.000	10.19	1.9	06	50.000	49.91	-0.2
07	100.000	103.59	3.6	08	150.000	156.96	4.6	09	200.000	203.50	1.8

Bromobenzene

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
01	0.500	0.50	-1.0	02	1.000	0.98	-1.7	03	2.000	2.11	5.7
04	5.000	4.90	-2.0	05	10.000	9.84	-1.6	06	50.000	48.66	-2.7
07	100.000	102.91	2.9	08	150.000	150.40	0.3	09	200.000	200.41	0.2

Bromochloromethane

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
01	0.500	0.52	4.3	02	1.000	1.10	9.6	03	2.000	2.01	0.4
04	5.000	5.17	3.5	05	10.000	10.12	1.2	06	50.000	48.12	-3.8
07	100.000	95.67	-4.3	08	150.000	142.92	-4.7	09	200.000	187.49	-6.3

Bromodichloromethane

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
01	0.500	0.45	-10.6	02	1.000	0.98	-1.9	03	2.000	2.07	3.4
04	5.000	4.86	-2.7	05	10.000	9.90	-1.0	06	50.000	49.76	-0.5
07	100.000	104.02	4.0	08	150.000	158.67	5.8	09	200.000	207.08	3.5

Bromoform

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
01	0.500	0.47	-6.9	02	1.000	0.78	-22.4	03	2.000	1.79	-10.5
04	5.000	4.93	-1.4	05	10.000	9.58	-4.2	06	50.000	51.01	2.0
07	100.000	111.29	11.3	08	150.000	175.18	16.8	09	200.000	230.56	15.3

Bromomethane

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
01	0.500	0.54	8.0	02	1.000	0.89	-11.4	03	2.000	1.84	-7.9
04	5.000	4.57	-8.7	05	10.000	10.91	9.1	06	50.000	52.35	4.7
07	100.000	106.88	6.9	08	150.000	151.27	0.8	09	200.000	192.29	-3.9

Carbon Disulfide

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
01	0.500	0.53	6.6	02	1.000	1.03	2.8	03	2.000	2.06	3.2
04	5.000	4.97	-0.5	05	10.000	9.54	-4.6	06	50.000	49.52	-1.0
07	100.000	99.63	-0.4	08	150.000	147.90	-1.4	09	200.000	190.30	-4.9

Initial Calibration - Detailed Report

Calibration ID: RC1400062

Instrument ID: R-MS-10
Signal ID: 1

Analyte

Carbon Tetrachloride

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
01	0.500	0.45	-9.7	02	1.000	1.00	0.2	03	2.000	1.89	-5.4
04	5.000	4.87	-2.7	05	10.000	9.26	-7.4	06	50.000	48.60	-2.8
07	100.000	108.21	8.2	08	150.000	167.28	11.5	09	200.000	216.03	8.0

Chlorobenzene

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
01	0.500	0.48	-4.9	02	1.000	0.99	-1.3	03	2.000	2.02	1.0
04	5.000	5.07	1.5	05	10.000	9.83	-1.7	06	50.000	49.14	-1.7
07	100.000	103.40	3.4	08	150.000	155.18	3.5	09	200.000	200.64	0.3

Chloroethane

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
01	0.500	0.51	2.7	02	1.000	0.99	-0.8	03	2.000	2.06	2.9
04	5.000	5.03	0.6	05	10.000	10.17	1.7	06	50.000	50.09	0.2
07	100.000	99.96	0.0	08	150.000	147.64	-1.6	09	200.000	188.64	-5.7

Chloroform

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
01	0.500	0.54	7.5	02	1.000	1.05	4.8	03	2.000	2.01	0.6
04	5.000	5.00	-0.1	05	10.000	10.21	2.1	06	50.000	47.48	-5.0
07	100.000	96.77	-3.2	08	150.000	146.32	-2.5	09	200.000	191.57	-4.2

Chloromethane

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
01	0.500	0.52	3.6	02	1.000	0.96	-3.9	03	2.000	1.89	-5.6
04	5.000	4.74	-5.1	05	10.000	10.69	6.9	06	50.000	51.53	3.1
07	100.000	103.07	3.1	08	150.000	151.36	0.9	09	200.000	194.18	-2.9

Cyclohexane

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
01	0.500	0.55	9.6	02	1.000	0.99	-0.6	03	2.000	2.12	6.2
04	5.000	4.88	-2.5	05	10.000	9.15	-8.5	06	50.000	51.51	3.0
07	100.000	96.82	-3.2	08	150.000	148.65	-0.9	09	200.000	193.67	-3.2

Cyclohexanone

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
01	10.000	7.51	-24.9	02	20.000	16.91	-15.5	03	40.000	39.78	-0.5
04	100.000	101.72	1.7	05	200.000	217.02	8.5	06	1000.000	1,098.03	9.8
07	2000.000	2,129.22	6.5	08	3000.000	3,335.60	11.2	09	4000.000	4,127.84	3.2

Dibromochloromethane

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
01	0.500	0.43	-13.3	02	1.000	0.88	-11.6	03	2.000	1.80	-9.9
04	5.000	4.90	-2.0	05	10.000	9.44	-5.6	06	50.000	52.17	4.3
07	100.000	110.96	11.0	08	150.000	170.00	13.3	09	200.000	227.44	13.7

Initial Calibration - Detailed Report

Calibration ID: RC1400062

Instrument ID: R-MS-10

Signal ID: 1

Analyte

Dibromofluoromethane

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
06	50.000	51.02	2.0	04	60.000	59.31	-1.2	05	70.000	71.42	2.0
07	100.000	101.95	1.9	08	125.000	121.99	-2.4	09	150.000	146.32	-2.5

Dibromomethane

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
01	0.500	0.52	4.4	02	1.000	0.97	-3.2	03	2.000	2.18	8.9
04	5.000	4.99	-0.3	05	10.000	9.75	-2.5	06	50.000	48.25	-3.5
07	100.000	99.09	-0.9	08	150.000	149.22	-0.5	09	200.000	195.16	-2.4

Dichlorodifluoromethane (CFC 12)

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
01	0.500	0.46	-8.2	02	1.000	1.02	1.9	03	2.000	1.78	-10.9
04	5.000	4.28	-14.5	05	10.000	10.51	5.1	06	50.000	53.37	6.7
07	100.000	109.46	9.5	08	150.000	162.14	8.1	09	200.000	204.56	2.3

Dichlorofluoromethane (CFC 21)

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
01	0.500	0.52	3.5	02	1.000	1.01	1.1	03	2.000	2.06	3.0
04	5.000	4.99	-0.2	05	10.000	10.01	0.1	06	50.000	51.03	2.1
07	100.000	95.53	-4.5	08	150.000	148.15	-1.2	09	200.000	192.33	-3.8

Dichloromethane

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
01	0.500	0.53	6.5	02	1.000	1.11	10.5	03	2.000	2.12	6.0
04	5.000	4.90	-2.1	05	10.000	9.75	-2.5	06	50.000	47.53	-4.9
07	100.000	96.38	-3.6	08	150.000	144.27	-3.8	09	200.000	187.97	-6.0

Diethyl Ether

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
01	0.500	0.54	8.7	02	1.000	1.06	6.2	03	2.000	1.98	-0.8
04	5.000	5.11	2.1	05	10.000	10.21	2.1	06	50.000	48.05	-3.9
07	100.000	95.36	-4.6	08	150.000	145.47	-3.0	09	200.000	186.30	-6.8

Diisopropyl Ether

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
01	0.500	0.46	-8.6	02	1.000	0.95	-5.2	03	2.000	2.00	0.1
04	5.000	5.10	1.9	05	10.000	10.97	9.7	06	50.000	52.39	4.8
07	100.000	101.22	1.2	08	150.000	149.68	-0.2	09	200.000	192.73	-3.6

Ethyl Methacrylate

#	Amount	Calculated		#	Amount	Calculated		#	Amount	Calculated	
		Conc	%D			Conc	%D			Conc	%D
01	0.500	0.44	-12.5	02	1.000	0.92	-7.9	03	2.000	1.70	-15.0
04	5.000	4.52	-9.7	05	10.000	9.33	-6.7	06	50.000	52.34	4.7
07	100.000	111.75	11.8	08	150.000	178.02	18.7	09	200.000	233.33	16.7

Initial Calibration - Detailed Report

Calibration ID: RC1400062

Instrument ID: R-MS-10
Signal ID: 1

Analyte

Ethyl tert-Butyl Ether

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.49	-1.1	02	1.000	0.92	-8.1	03	2.000	1.95	-2.3
04	5.000	4.74	-5.2	05	10.000	10.65	6.5	06	50.000	50.81	1.6
07	100.000	101.41	1.4	08	150.000	155.77	3.8	09	200.000	206.76	3.4

Ethylbenzene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.46	-8.0	02	1.000	0.92	-7.7	03	2.000	1.87	-6.7
04	5.000	4.93	-1.5	05	10.000	9.89	-1.1	06	50.000	50.51	1.0
07	100.000	108.43	8.4	08	150.000	163.72	9.1	09	200.000	212.81	6.4

Hexachlorobutadiene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.51	2.0	02	1.000	1.00	-0.5	03	2.000	1.85	-7.6
04	5.000	4.93	-1.4	05	10.000	9.60	-4.0	06	50.000	50.57	1.1
07	100.000	101.62	1.6	08	150.000	158.64	5.8	09	200.000	205.88	2.9

Iodomethane

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
04	5.000	6.06	21.3	05	10.000	8.67	-13.3	06	50.000	41.80	-16.4
07	100.000	106.30	6.3	08	150.000	157.41	4.9	09	200.000	193.88	-3.1

Isopropylbenzene (Cumene)

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.43	-13.3	02	1.000	0.94	-5.6	03	2.000	1.96	-2.1
04	5.000	4.95	-1.1	05	10.000	9.59	-4.1	06	50.000	51.96	3.9
07	100.000	111.70	11.7	08	150.000	163.84	9.2	09	200.000	202.66	1.3

Methacrylonitrile

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.40	-19.4	02	1.000	0.76	-24.2	03	2.000	1.88	-6.2
04	5.000	5.12	2.4	05	10.000	9.92	-0.8	06	50.000	54.63	9.3
07	100.000	111.91	11.9	08	150.000	169.63	13.1	09	200.000	227.85	13.9

Methyl Acetate

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.45	-9.4	02	1.000	0.94	-6.4	03	2.000	2.02	0.8
04	5.000	5.13	2.7	05	10.000	10.65	6.5	06	50.000	53.73	7.5
07	100.000	99.76	-0.2	08	150.000	149.00	-0.7	09	200.000	198.57	-0.7

Methyl Methacrylate

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.31	-38.6	02	1.000	1.13	13.0	03	2.000	1.65	-17.5
04	5.000	4.61	-7.9	05	10.000	10.02	0.2	06	50.000	53.03	6.1
07	100.000	111.68	11.7	08	150.000	177.22	18.1	09	200.000	229.88	14.9

Initial Calibration - Detailed Report

Calibration ID: RC1400062

Instrument ID: R-MS-10
Signal ID: 1

Analyte

Methyl tert-Butyl Ether

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.47	-6.0	02	1.000	0.95	-5.4	03	2.000	1.95	-2.5
04	5.000	5.01	0.1	05	10.000	9.98	-0.2	06	50.000	50.59	1.2
07	100.000	103.52	3.5	08	150.000	158.05	5.4	09	200.000	207.80	3.9

Methylcyclohexane

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.48	-4.8	02	1.000	0.97	-2.5	03	2.000	2.05	2.4
04	5.000	5.03	0.7	05	10.000	8.87	-11.3	06	50.000	52.74	5.5
07	100.000	101.59	1.6	08	150.000	157.95	5.3	09	200.000	206.44	3.2

Naphthalene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	1.000	0.84	-16.4	03	2.000	1.52	-24.0	04	5.000	4.55	-9.0
05	10.000	9.76	-2.4	06	50.000	54.86	9.7	07	100.000	112.86	12.9
08	150.000	175.06	16.7	09	200.000	225.06	12.5				

Propionitrile

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	2.500	2.55	2.1	02	5.000	6.14	22.8	03	10.000	9.21	-7.9
04	25.000	22.10	-11.6	05	50.000	47.30	-5.4	06	250.000	252.26	0.9
07	500.000	481.16	-3.8	08	750.000	771.31	2.8	09	1000.000	1,000.46	0.0

Styrene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.39	-22.4	02	1.000	0.88	-11.9	03	2.000	1.85	-7.5
04	5.000	4.85	-2.9	05	10.000	10.08	0.8	06	50.000	53.15	6.3
07	100.000	113.83	13.8	08	150.000	172.15	14.8	09	200.000	217.99	9.0

Tetrachloroethene (PCE)

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.52	4.5	02	1.000	1.00	-0.4	03	2.000	1.88	-6.2
04	5.000	4.90	-2.0	05	10.000	9.35	-6.5	06	50.000	49.29	-1.4
07	100.000	104.83	4.8	08	150.000	156.86	4.6	09	200.000	205.41	2.7

Tetrahydrofuran (THF)

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
02	1.000	0.92	-7.7	03	2.000	2.05	2.4	04	5.000	5.02	0.4
05	10.000	9.43	-5.7	06	50.000	51.35	2.7	07	100.000	101.24	1.2
08	150.000	156.13	4.1	09	200.000	205.27	2.6				

Toluene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.49	-2.7	02	1.000	1.01	1.1	03	2.000	1.97	-1.6
04	5.000	4.93	-1.4	05	10.000	9.78	-2.2	06	50.000	49.60	-0.8
07	100.000	103.27	3.3	08	150.000	156.75	4.5	09	200.000	199.67	-0.2

00156

Initial Calibration - Detailed Report

Calibration ID:	RC1400062	Instrument ID:	R-MS-10
		Signal ID:	1

Analyte

Toluene-d8

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	50.000	51.62	3.2	04	60.000	59.06	-1.6	05	70.000	71.05	1.5
07	100.000	100.87	0.9	08	125.000	123.16	-1.5	09	150.000	146.13	-2.6

Trichloroethene (TCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.7	02	1.000	1.00	0.0	03	2.000	1.98	-0.9
04	5.000	4.94	-1.3	05	10.000	9.64	-3.6	06	50.000	48.76	-2.5
07	100.000	103.17	3.2	08	150.000	159.32	6.2	09	200.000	206.97	3.5

Trichlorofluoromethane (CFC 11)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.1	02	1.000	1.00	0.1	03	2.000	1.95	-2.3
04	5.000	4.98	-0.4	05	10.000	9.45	-5.5	06	50.000	49.82	-0.4
07	100.000	102.36	2.4	08	150.000	153.07	2.0	09	200.000	195.77	-2.1

Vinyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.65	-35.1	03	2.000	1.60	-19.9	04	5.000	5.18	3.6
05	10.000	10.44	4.4	06	50.000	52.82	5.6	07	100.000	117.41	17.4
08	150.000	168.21	12.1	09	200.000	223.65	11.8				

Vinyl Chloride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.6	02	1.000	1.07	6.5	03	2.000	1.95	-2.4
04	5.000	4.69	-6.2	05	10.000	9.82	-1.8	06	50.000	50.22	0.4
07	100.000	103.24	3.2	08	150.000	153.66	2.4	09	200.000	196.73	-1.6

cis-1,2-Dichloroethene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-6.0	02	1.000	0.93	-6.6	03	2.000	2.05	2.7
04	5.000	5.23	4.6	05	10.000	10.36	3.6	06	50.000	49.59	-0.8
07	100.000	100.53	0.5	08	150.000	152.90	1.9	09	200.000	200.12	0.1

cis-1,3-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.41	-18.9	02	1.000	0.88	-11.7	03	2.000	1.75	-12.3
04	5.000	4.49	-10.2	05	10.000	9.93	-0.7	06	50.000	53.40	6.8
07	100.000	113.72	13.7	08	150.000	176.43	17.6	09	200.000	231.35	15.7

m,p-Xylenes

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.000	0.86	-14.2	02	2.000	1.82	-8.8	03	4.000	3.90	-2.5
04	10.000	10.24	2.4	05	20.000	19.93	-0.4	06	100.000	102.03	2.0
07	200.000	219.33	9.7	08	300.000	327.85	9.3	09	400.000	410.17	2.5

Initial Calibration - Detailed Report

Calibration ID:	RC1400062	Instrument ID:	R-MS-10
		Signal ID:	1

Analyte

n-Butyl Acetate

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.41	-18.9	02	1.000	0.89	-11.4	03	2.000	1.90	-4.9
04	5.000	4.25	-15.0	05	10.000	9.86	-1.4	06	50.000	56.18	12.4
07	100.000	111.12	11.1	08	150.000	172.49	15.0	09	200.000	226.20	13.1

n-Butylbenzene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.39	-22.5	02	1.000	0.91	-9.2	03	2.000	1.87	-6.4
04	5.000	4.90	-2.0	05	10.000	9.90	-1.0	06	50.000	53.97	7.9
07	100.000	112.84	12.8	08	150.000	169.42	12.9	09	200.000	214.69	7.3

n-Heptane

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.49	-1.4	02	1.000	1.01	1.3	03	2.000	1.83	-8.5
04	5.000	4.65	-7.0	05	10.000	8.87	-11.3	06	50.000	52.39	4.8
07	100.000	107.55	7.6	08	150.000	165.39	10.3	09	200.000	208.87	4.4

n-Propylbenzene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.45	-10.3	02	1.000	0.95	-5.1	03	2.000	1.97	-1.3
04	5.000	5.06	1.2	05	10.000	10.05	0.5	06	50.000	52.51	5.0
07	100.000	109.97	10.0	08	150.000	155.90	3.9	09	200.000	192.20	-3.9

o-Xylene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.47	-5.4	02	1.000	0.82	-17.8	03	2.000	1.89	-5.6
04	5.000	4.99	-0.2	05	10.000	9.93	-0.7	06	50.000	52.23	4.5
07	100.000	109.10	9.1	08	150.000	165.18	10.1	09	200.000	211.95	6.0

sec-Butylbenzene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.46	-8.3	02	1.000	0.92	-8.1	03	2.000	2.00	-0.2
04	5.000	4.88	-2.3	05	10.000	9.61	-3.9	06	50.000	52.39	4.8
07	100.000	109.84	9.8	08	150.000	160.95	7.3	09	200.000	201.90	1.0

tert-Amyl Methyl Ether

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.43	-14.2	02	1.000	0.94	-5.7	03	2.000	1.85	-7.7
04	5.000	4.74	-5.2	05	10.000	10.57	5.7	06	50.000	52.37	4.7
07	100.000	104.78	4.8	08	150.000	163.18	8.8	09	200.000	217.50	8.7

tert-Butylbenzene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.47	-5.3	02	1.000	0.94	-6.2	03	2.000	1.88	-5.9
04	5.000	4.89	-2.3	05	10.000	9.47	-5.3	06	50.000	51.49	3.0
07	100.000	109.23	9.2	08	150.000	162.38	8.3	09	200.000	209.20	4.6

Initial Calibration - Detailed Report

Calibration ID: RC1400062

Instrument ID: R-MS-10
Signal ID: 1

Analyte

trans-1,2-Dichloroethene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.54	7.4	02	1.000	0.96	-4.5	03	2.000	1.90	-5.2
04	5.000	5.11	2.3	05	10.000	10.22	2.2	06	50.000	49.16	-1.7
07	100.000	100.43	0.4	08	150.000	151.69	1.1	09	200.000	195.77	-2.1

trans-1,3-Dichloropropene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.38	-23.5	02	1.000	0.83	-17.2	03	2.000	1.69	-15.4
04	5.000	4.59	-8.3	05	10.000	9.51	-4.9	06	50.000	53.51	7.0
07	100.000	117.57	17.6	08	150.000	184.27	22.8	09	200.000	243.79	21.9

trans-1,4-Dichloro-2-butene

Calculated				Calculated				Calculated			
#	Amount	Conc	%D	#	Amount	Conc	%D	#	Amount	Conc	%D
01	0.500	0.52	3.1	02	1.000	0.96	-4.0	03	2.000	1.95	-2.4
04	5.000	4.76	-4.8	05	10.000	9.73	-2.7	06	50.000	53.69	7.4
07	100.000	104.23	4.2	08	150.000	153.13	2.1	09	200.000	191.79	-4.1

Sample : 0.5 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
 Acq On : 21 Jul 2014 11:52 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 16:13:30 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration

FW
7/22/14

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	935323	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1383304	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1262685	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	659289	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.324	113	453295	54.98	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery =	109.96%		
48) surr1,1,2-dichloroetha...	4.854	65	473241	57.92	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery =	115.84%		
65) SURR3,Toluene-d8	7.433	98	1591336	49.98	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery =	99.96%		
70) SURR2,BFB	9.878	95	623027	49.69	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery =	99.38%		
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.191	85	4622	0.53	ug/L	89
3) Chloromethane	1.294	50	6949	0.64	ug/L	99
4) Vinyl Chloride	1.361	62	6090	0.54	ug/L	89
5) Bromomethane	1.562	94	1354	0.33	ug/L #	68
6) Chloroethane	1.617	64	3189	0.52	ug/L	95
7) Freon 21	1.721	67	8930	0.54	ug/L	95
8) Trichlorofluoromethane	1.770	101	7369	0.60	ug/L #	73
9) Diethyl Ether	1.940	59	3976	0.57	ug/L #	71
10) Freon 123a	1.934	67	5302m	0.50	ug/L	
11) Freon 123	1.971	83	6182	0.55	ug/L	88
12) Acrolein	2.032	56	3433	3.16	ug/L	97
13) 1,1-Dicethene	2.099	96	3497	0.56	ug/L #	81
14) Freon 113	2.093	101	4355	0.61	ug/L	88
15) Acetone	2.129	43	2412	1.14	ug/L	76
16) 2-Propanol	2.196	45	4309m	11.80	ug/L	
18) Carbon Disulfide	2.270	76	14703	0.55	ug/L	98
19) Acetonitrile	2.324	40	657	2.32	ug/L #	14
20) Allyl Chloride	2.355	76	1692	0.38	ug/L #	80
21) Methyl Acetate	2.361	43	2559	0.57	ug/L	87
22) Methylene Chloride	2.440	84	4556	0.49	ug/L #	82
23) TBA	2.507	59	3598m	6.25	ug/L	
24) Acrylonitrile	2.654	53	5466m	2.37	ug/L	
25) Methyl-t-Butyl Ether	2.660	73	8776	0.44	ug/L #	62
26) trans-1,2-Dichloroethene	2.672	96	4512	0.57	ug/L #	63
28) 1,1-Dicethane	3.050	63	8824	0.54	ug/L	79
30) DIPE	3.117	45	18636	0.57	ug/L	92
31) 2-Chloro-1,3-Butadiene	3.154	53	8131	0.52	ug/L #	55
32) ETBE	3.513	59	13530	0.48	ug/L	90
33) 2,2-Dichloropropane	3.678	77	5234	0.44	ug/L	87
34) cis-1,2-Dichloroethene	3.696	96	4319	0.48	ug/L	98
36) Propionitrile	3.836	54	662m	0.89	ug/L	
37) Bromochloromethane	4.001	130	2948m	0.56	ug/L	
38) Methacrylonitrile	4.044	67	819m	0.35	ug/L	
40) Chloroform	4.092	83	8322	0.57	ug/L	96
41) 1,1,1-Trichloroethane	4.355	97	6471m	0.51	ug/L	

Quantitation Report (QT Reviewed)

Sample : 0.5 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
 Acq On : 21 Jul 2014 11:52 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 16:13:30 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) TAME	5.190	73	7919	0.38	ug/L #	84
44) Cyclohexane	4.434	41	6867m	0.67	ug/L	
46) Carbontetrachloride	4.617	121	1591	0.43	ug/L #	53
47) 1,1-Dichloropropene	4.629	75	5866	0.52	ug/L	83
49) Benzene	4.958	78	15519	0.43	ug/L	81
50) 1,2-Dichloroethane	5.007	62	6048	0.52	ug/L #	74
52) n-Heptane	5.470	43	6286	0.63	ug/L	79
54) Trichloroethene	5.995	130	4491	0.47	ug/L #	57
55) Methylcyclohexane	6.220	55	6183	0.49	ug/L #	72
56) 1,2-Diclp propane	6.269	63	4782	0.47	ug/L	82
57) Dibromomethane	6.409	93	2480	0.53	ug/L #	58
59) Methyl Methacrylate	6.507	69	1075m	0.26	ug/L	
60) Bromodichloromethane	6.629	83	4821	0.43	ug/L	90
61) 2-Nitropropane	6.927	41	1949m	1.22	ug/L	
62) 2-Chloroethylvinyl Ether	7.043	63	1121	0.24	ug/L #	47
63) cis-1,3-Dichloropropene	7.165	75	4624	0.34	ug/L	88
64) 4-Methyl-2-pentanone	7.366	43	2917m	0.43	ug/L	
66) Toluene	7.506	91	17235	0.45	ug/L	95
67) trans-1,3-Dichloropropene	7.762	75	3448	0.31	ug/L	88
68) Ethyl Methacrylate	7.903	69	3216m	0.37	ug/L	
69) 1,1,2-Trichloroethane	7.939	97	2958	0.44	ug/L	94
72) Tetrachloroethene	8.061	164	3814	0.49	ug/L #	91
74) 1,3-Dichloropropane	8.098	76	5577	0.48	ug/L	93
75) Dibromochloromethane	8.311	129	3343	0.40	ug/L	96
76) N-Butyl Acetate	8.384	43	4816m	0.37	ug/L	
77) 1,2-Dibromoethane	8.415	107	3077	0.45	ug/L #	71
78) 3-Chlorobenzotrifluoride	8.884	180	6286	0.43	ug/L #	95
79) Chlorobenzene	8.866	112	11571	0.44	ug/L	97
80) 4-Chlorobenzotrifluoride	8.933	180	5735	0.43	ug/L	83
81) 1,1,1,2-Tetrachloroethane	8.951	131	3924	0.41	ug/L #	38
82) Ethylbenzene	8.988	106	5578	0.41	ug/L #	66
83) (m+p)Xylene	9.098	106	12832	0.78	ug/L	92
84) o-Xylene	9.445	106	6916	0.41	ug/L #	71
85) Styrene	9.463	104	9430	0.33	ug/L	96
86) Bromoform	9.610	173	2062	0.41	ug/L	77
87) 2-Chlorobenzotrifluoride	9.677	180	6536	0.45	ug/L	96
88) Isopropylbenzene	9.756	105	15953	0.39	ug/L	98
89) Cyclohexanone	9.835	55	8732	8.85	ug/L	95
90) trans-1,4-Dichloro-2-B...	10.073	53	627m	0.29	ug/L	
92) 1,1,2,2-Tetrachloroethane	10.018	83	3457	0.46	ug/L	84
93) Bromobenzene	10.006	156	4929	0.45	ug/L	97
94) 1,2,3-Trichloropropane	10.042	110	1192	0.59	ug/L #	23
95) n-Propylbenzene	10.110	91	18455	0.41	ug/L	90
96) 2-Chlorotoluene	10.177	91	11743	0.43	ug/L	97
97) 3-Chlorotoluene	10.231	91	12965	0.47	ug/L	89
98) 4-Chlorotoluene	10.274	91	14614	0.44	ug/L	94
99) 1,3,5-Trimethylbenzene	10.256	105	13830	0.42	ug/L	84
100) tert-Butylbenzene	10.518	119	11873	0.44	ug/L	93
101) 1,2,4-Trimethylbenzene	10.567	105	13651	0.41	ug/L	93
102) 3,4-Dichlorobenzotrifl...	10.622	214	4097	0.42	ug/L	83
103) sec-Butylbenzene	10.701	105	16112	0.43	ug/L	94
104) p-Isopropyltoluene	10.817	119	13188	0.40	ug/L	96

Sample : 0.5 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
 Acq On : 21 Jul 2014 11:52 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 16:13:30 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration

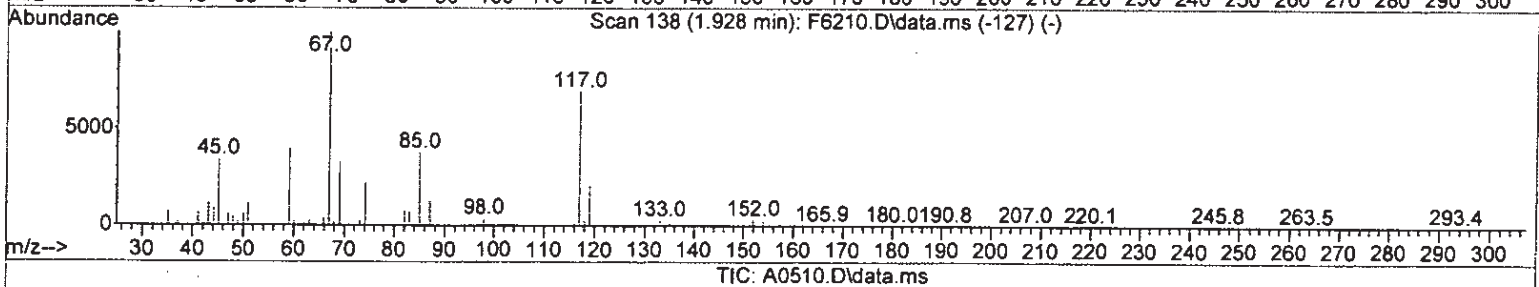
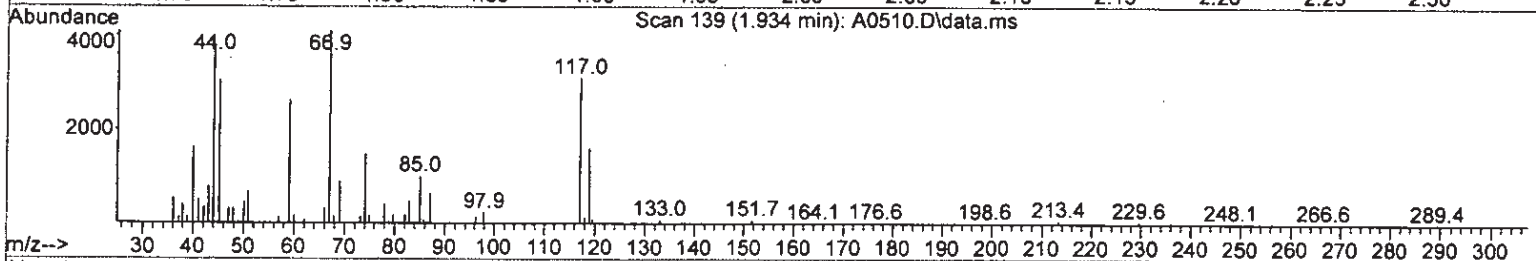
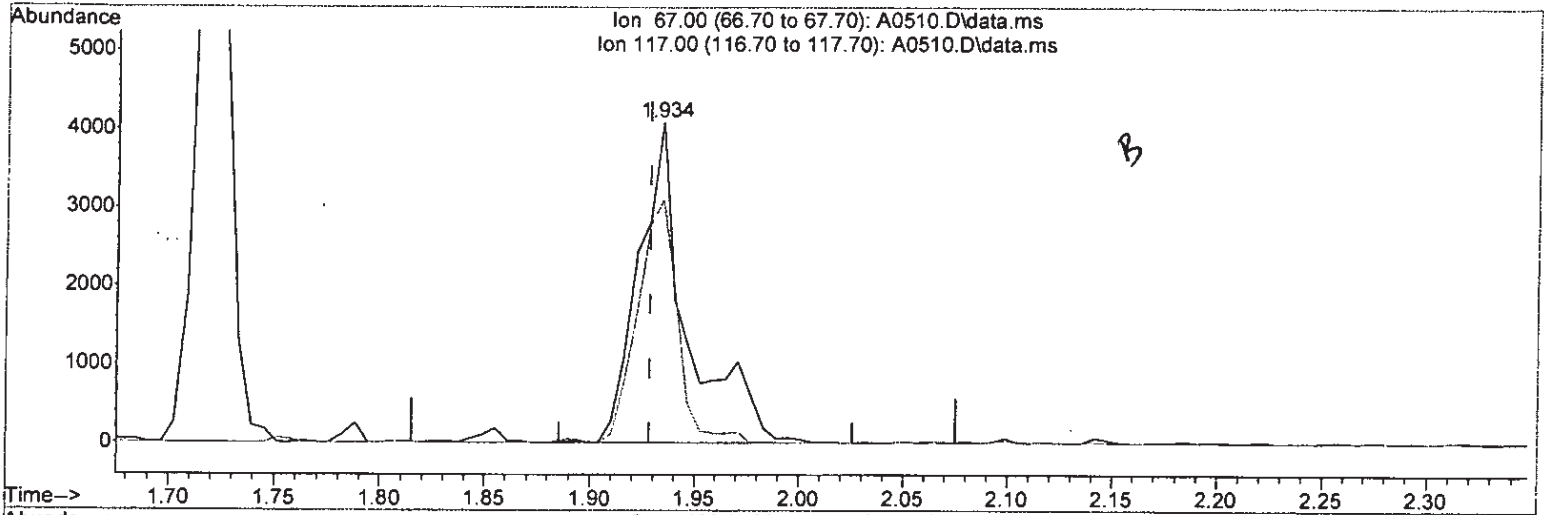
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) 1,3-Dclbenz	10.792	146	8970	0.44	ug/L	95
106) 1,4-Dclbenz	10.853	146	9880	0.48	ug/L #	71
107) 2,4-Dichlorobenzotrifl...	10.914	214	3819	0.43	ug/L	97
108) 2,5-Dichlorobenzotrifl...	10.951	214	5531m	0.55	ug/L	
109) n-Butylbenzene	11.158	91	10018	0.35	ug/L	88
110) 1,2-Dclbenz	11.170	146	8805	0.47	ug/L	81
111) 1,2-Dibromo-3-chloropr...	11.719	157	433	0.37	ug/L #	46
112) Trielution Dichlorotol...	11.823	125	18789	1.25	ug/L	93
113) 1,3,5-Trichlorobenzene	11.859	180	6863	0.54	ug/L	89
114) Coelution Dichlorotoluene	12.085	125	12894	0.84	ug/L	93
115) 1,2,4-Tcbenzene	12.255	180	4727	0.46	ug/L	89
116) Hexachlorobt	12.335	225	2115	0.43	ug/L	96
117) Naphthalen	12.420	128	4940m	0.31	ug/L	
118) 1,2,3-Tclbenzene	12.542	180	3254	0.46	ug/L	94
119) 2,4,5-Trichlorotoluene	12.969	159	1842	0.48	ug/L	83
120) 2,3,6-Trichlorotoluene	13.024	159	1913	0.50	ug/L	97

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

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
 Acq On : 21 Jul 2014 11:52 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:05:34 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(10) Freon 123a

1.934min (+0.006) 0.62 ug/L

response 6624

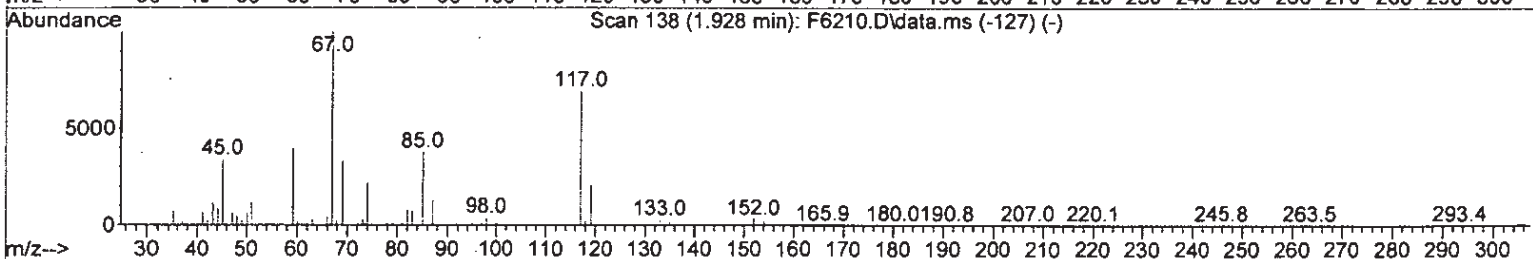
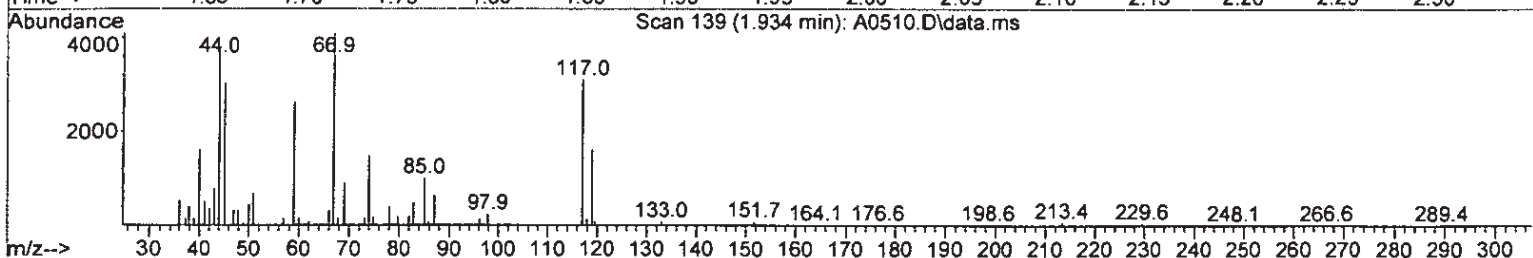
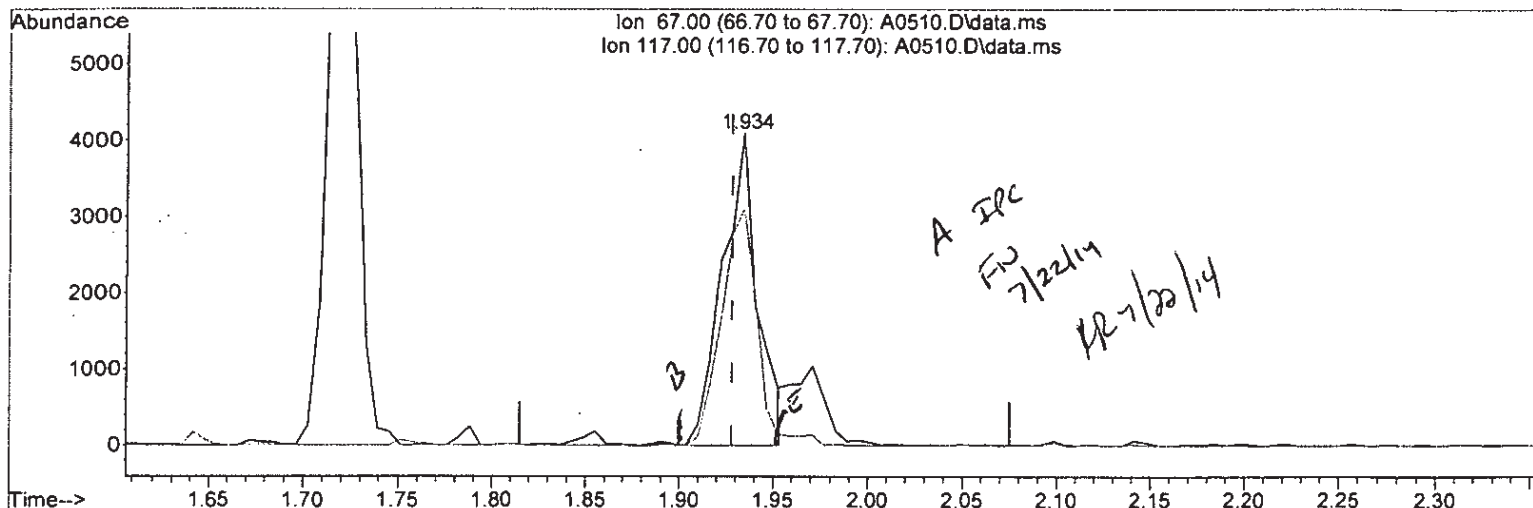
Ion	Exp%	Act%
67.00	100	100
117.00	73.00	75.75
0.00	0.00	0.00
0.00	0.00	0.00

00163

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
 Acq On : 21 Jul 2014 11:52 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:05:34 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0510.D\data.ms

(10) Freon 123a

1.934min (+0.006) 0.50 ug/L m

response 5302

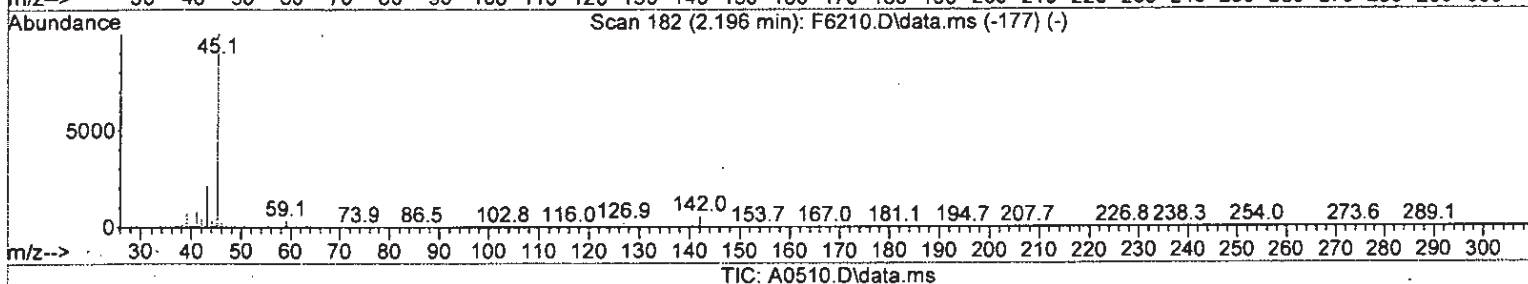
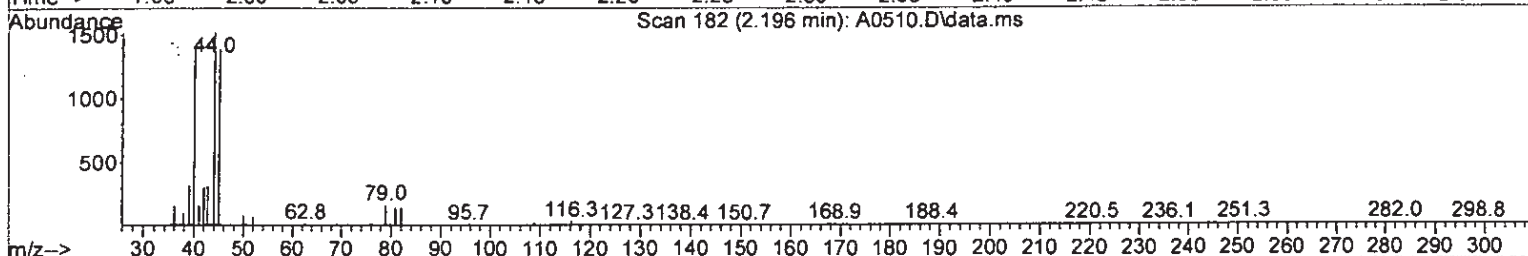
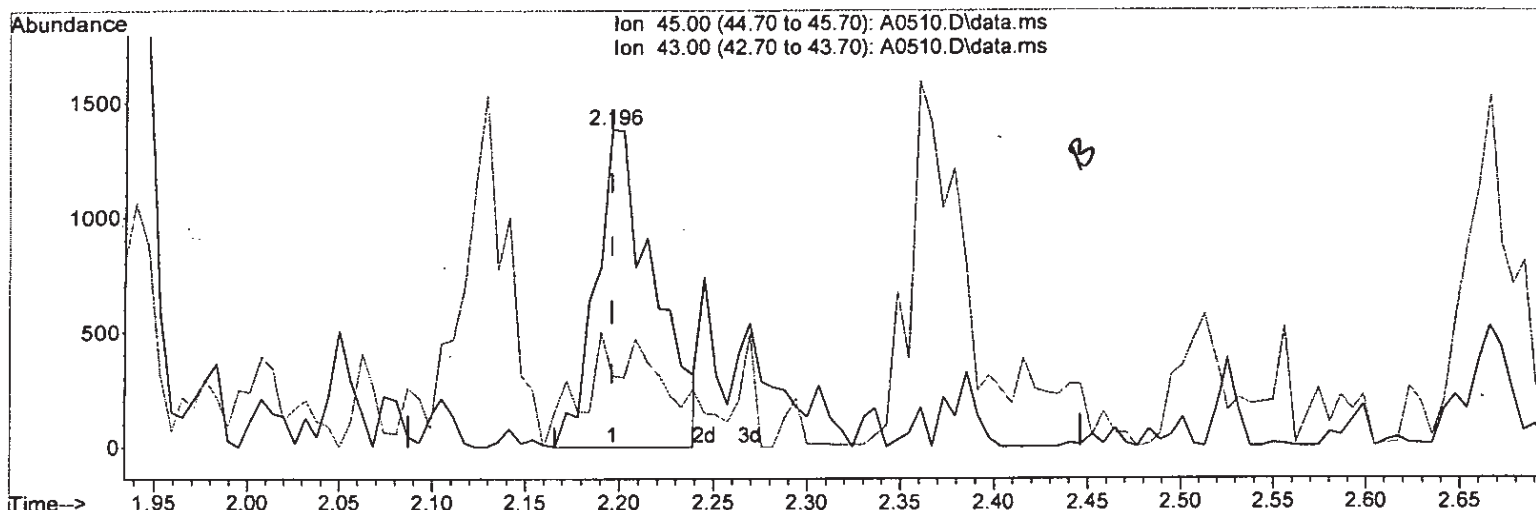
Ion	Exp%	Act%
67.00	100	100
117.00	73.00	75.75
0.00	0.00	0.00
0.00	0.00	0.00

00164

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:05:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



(16) 2-Propanol

2.196min (+0.000) 8.04 ug/L

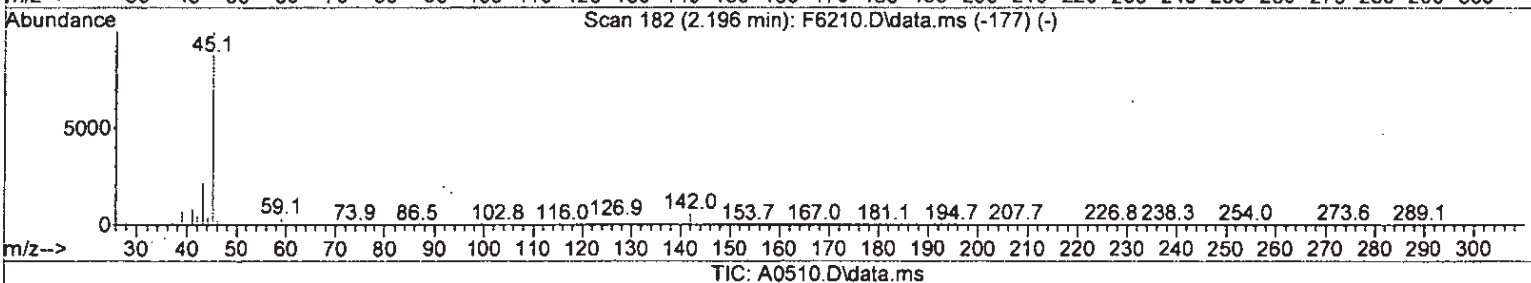
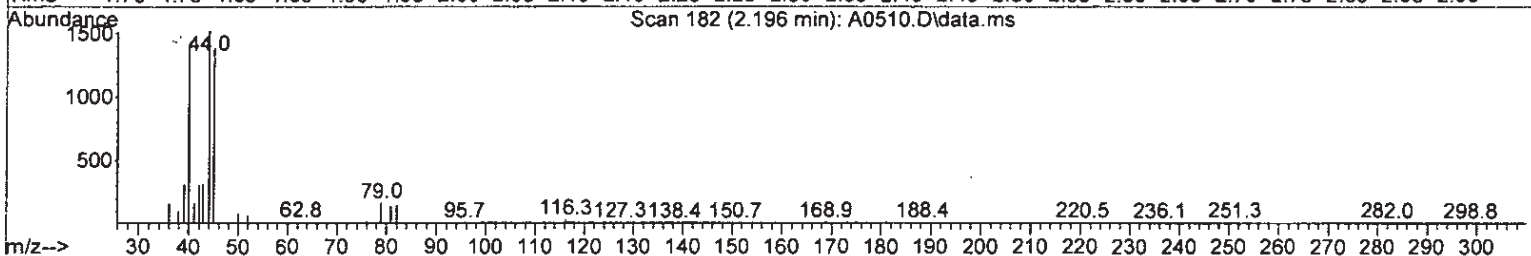
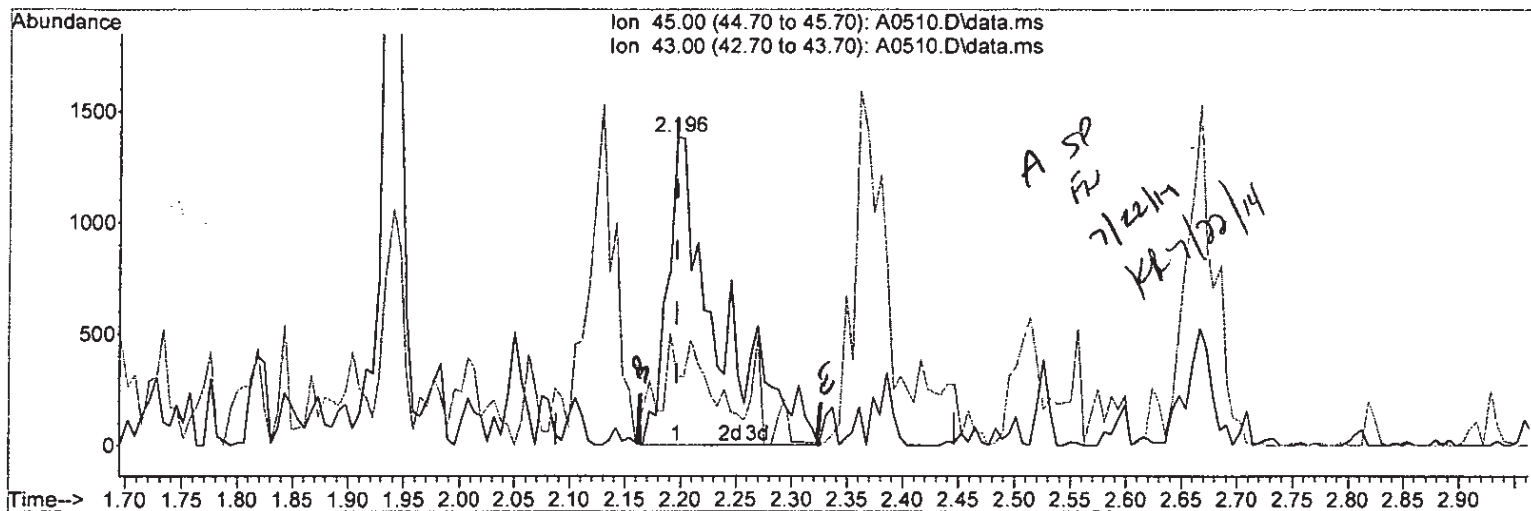
response 2937

Ion	Exp%	Act%
45.00	100	100
43.00	22.80	22.54
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
 Acq On : 21 Jul 2014 11:52 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:05:34 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(16) 2-Propanol

2.196min (+0.000) 11.80 ug/L m

response 4309

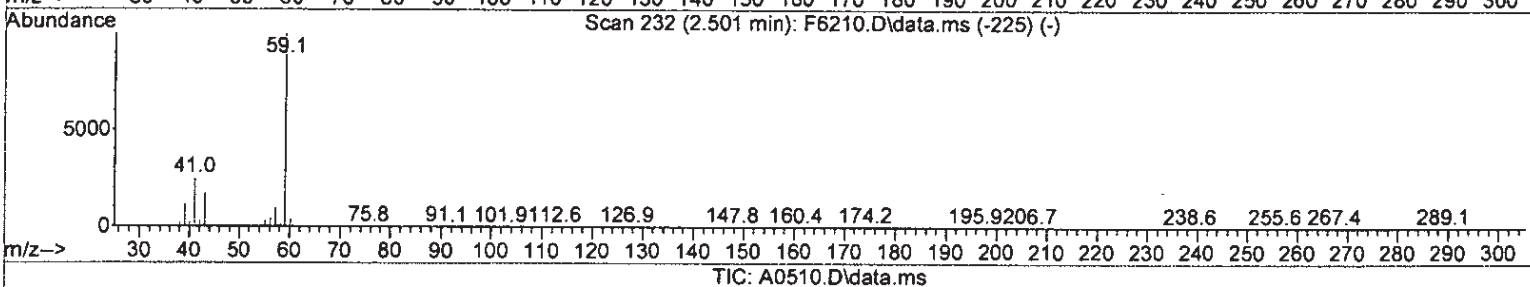
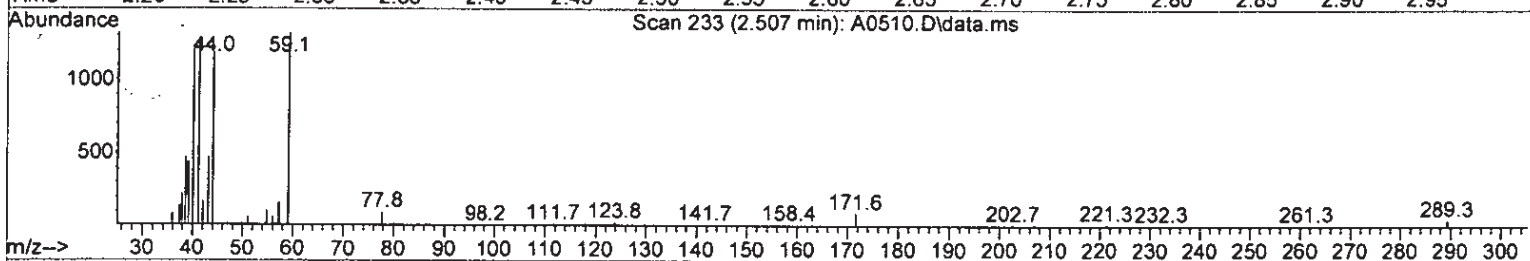
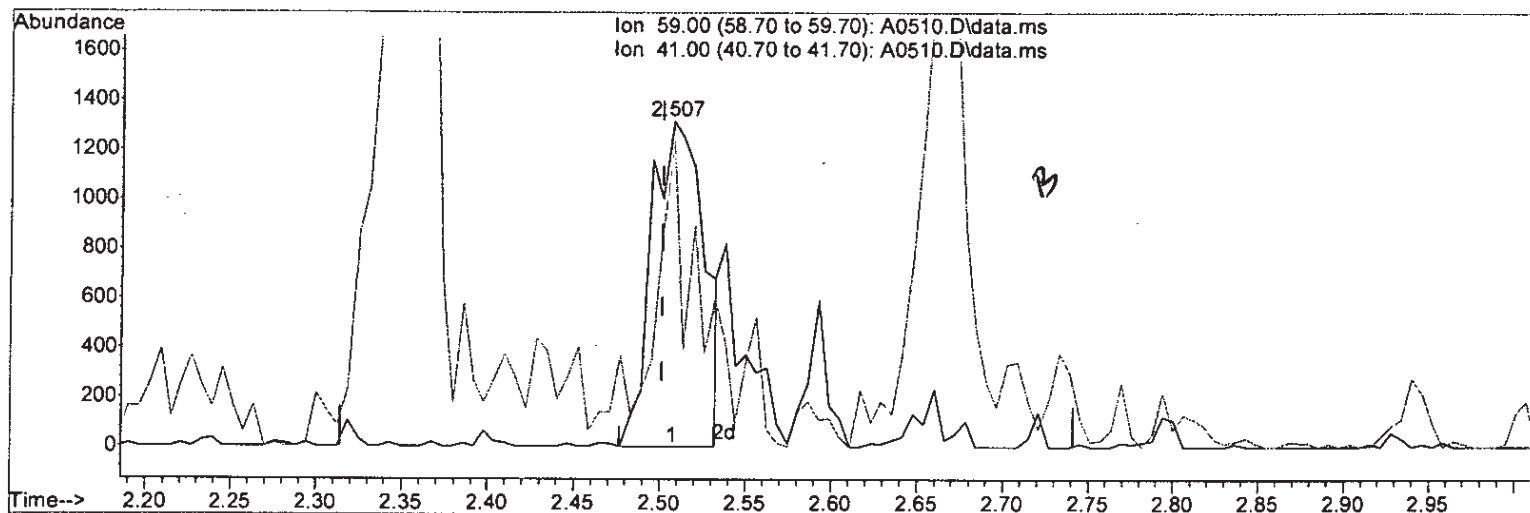
Ion	Exp%	Act%
45.00	100	100
43.00	22.80	22.54
0.00	0.00	0.00
0.00	0.00	0.00

00166

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:05:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



(23) TBA

2.507min (+0.006) 4.83 ug/L

response 2780

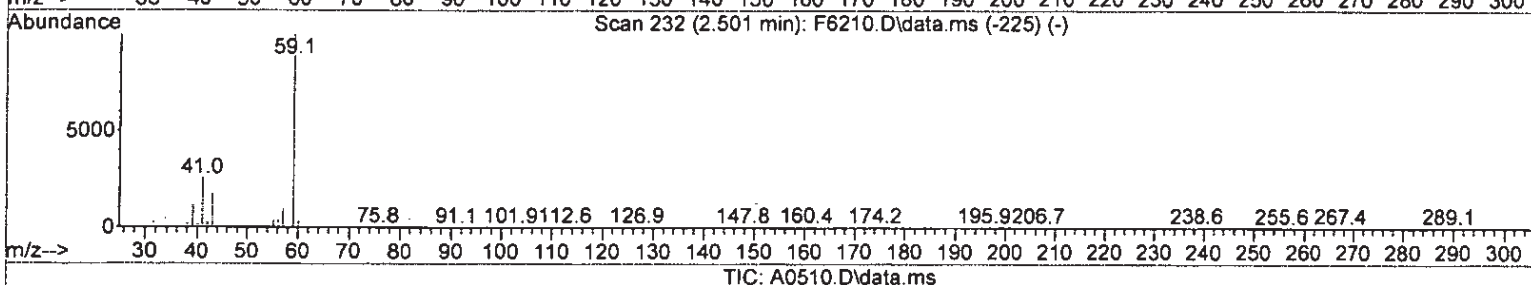
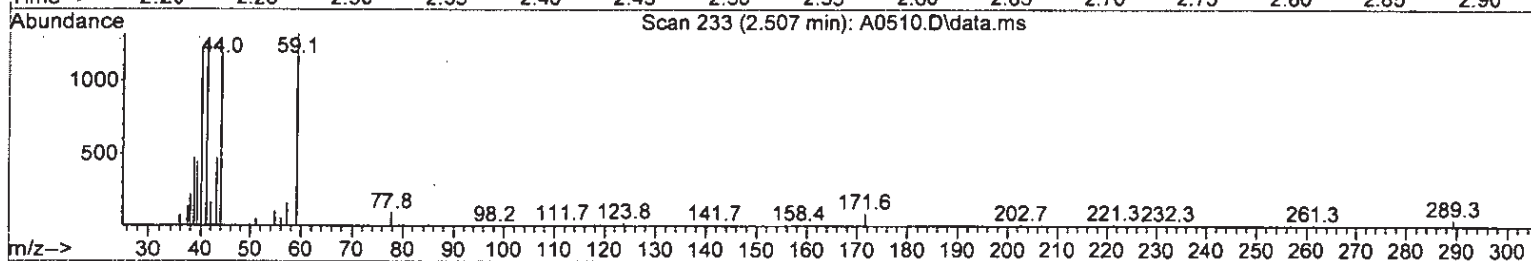
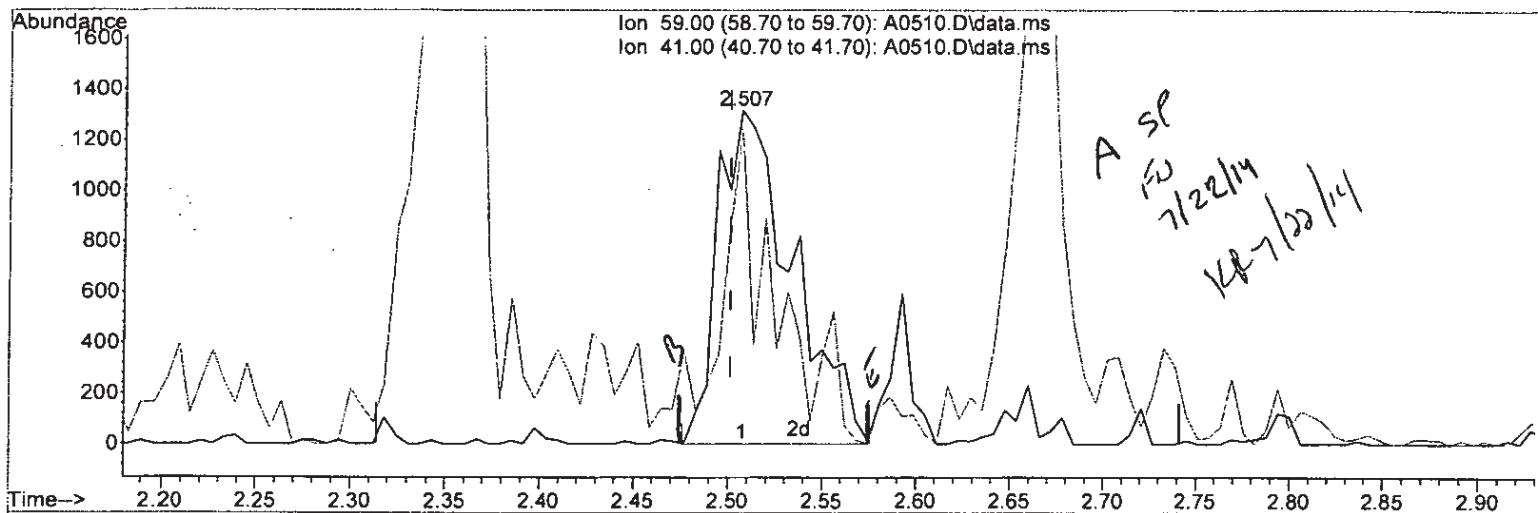
Ion	Exp%	Act%
59.00	100	100
41.00	22.80	94.68#
0.00	0.00	0.00
0.00	0.00	0.00

00167

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
 Acq On : 21 Jul 2014 11:52 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:05:34 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(23) TBA

2.507min (+0.006) 6.25 ug/L m

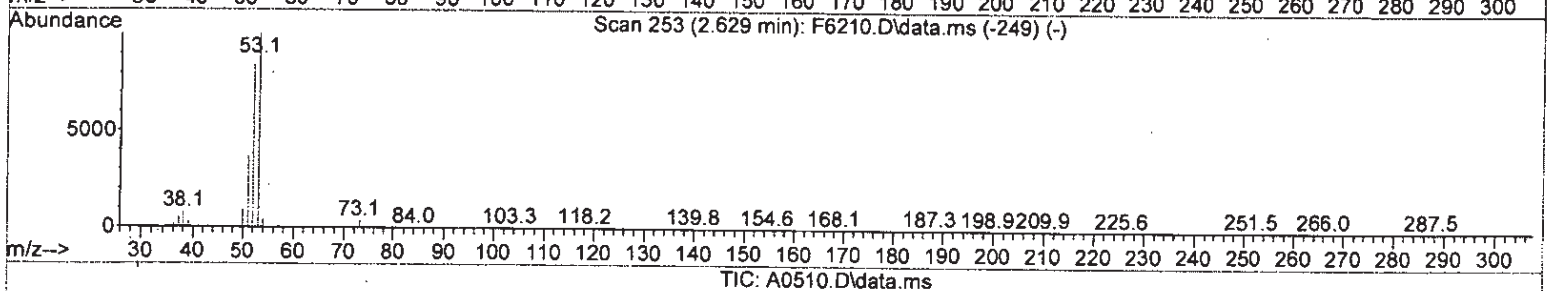
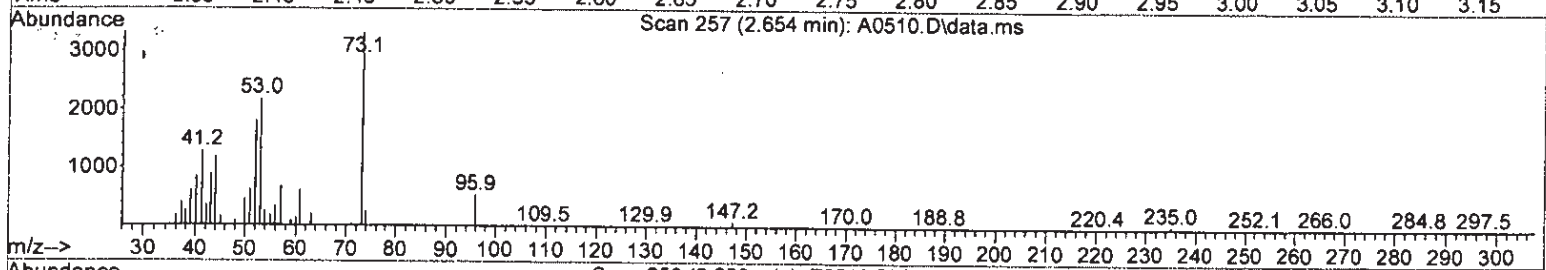
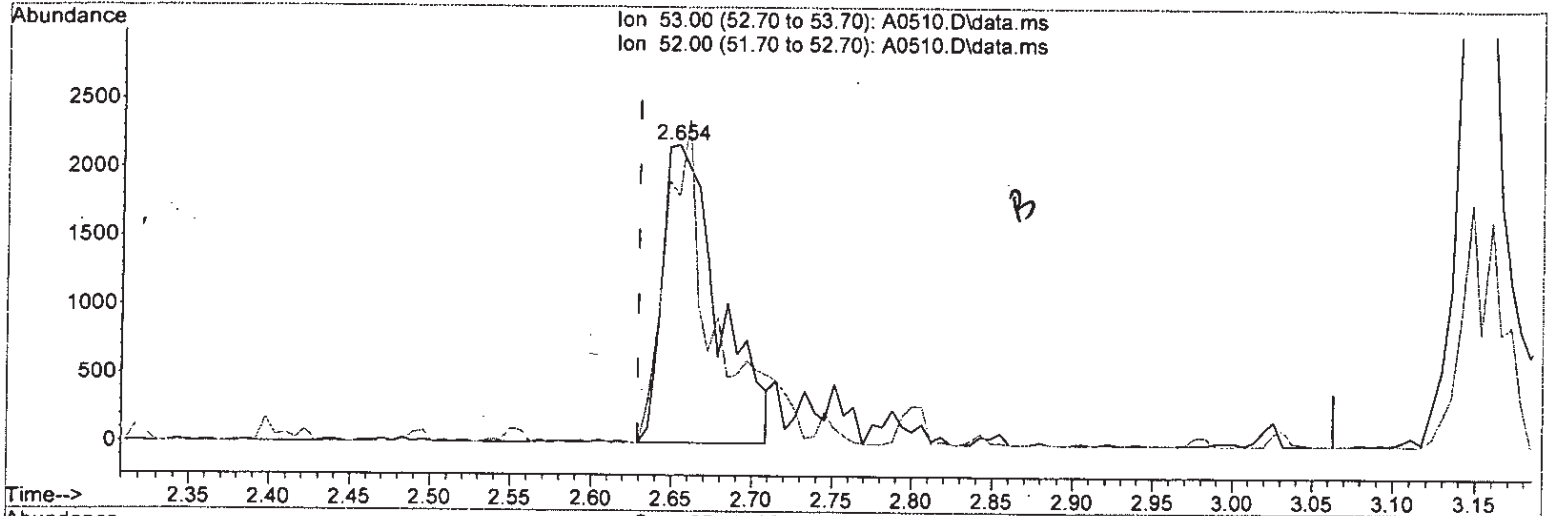
response 3598

Ion	Exp%	Act%
59.00	100	100
41.00	22.80	94.68#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
 Acq On : 21 Jul 2014 11:52 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:05:34 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(24) Acrylonitrile

2.654min (+0.024) 2.28 ug/L

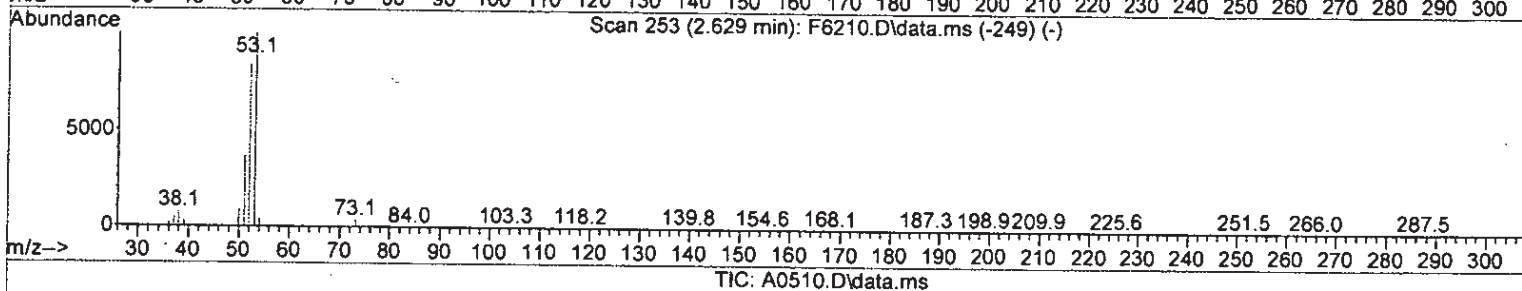
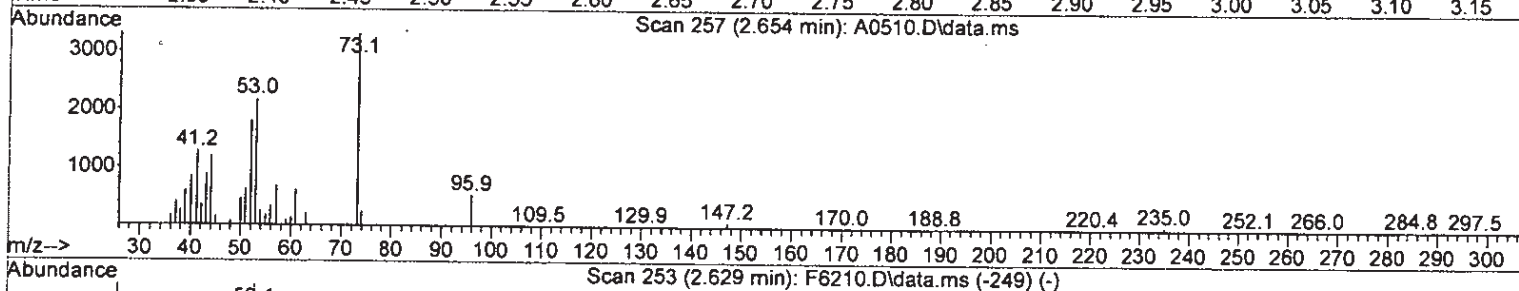
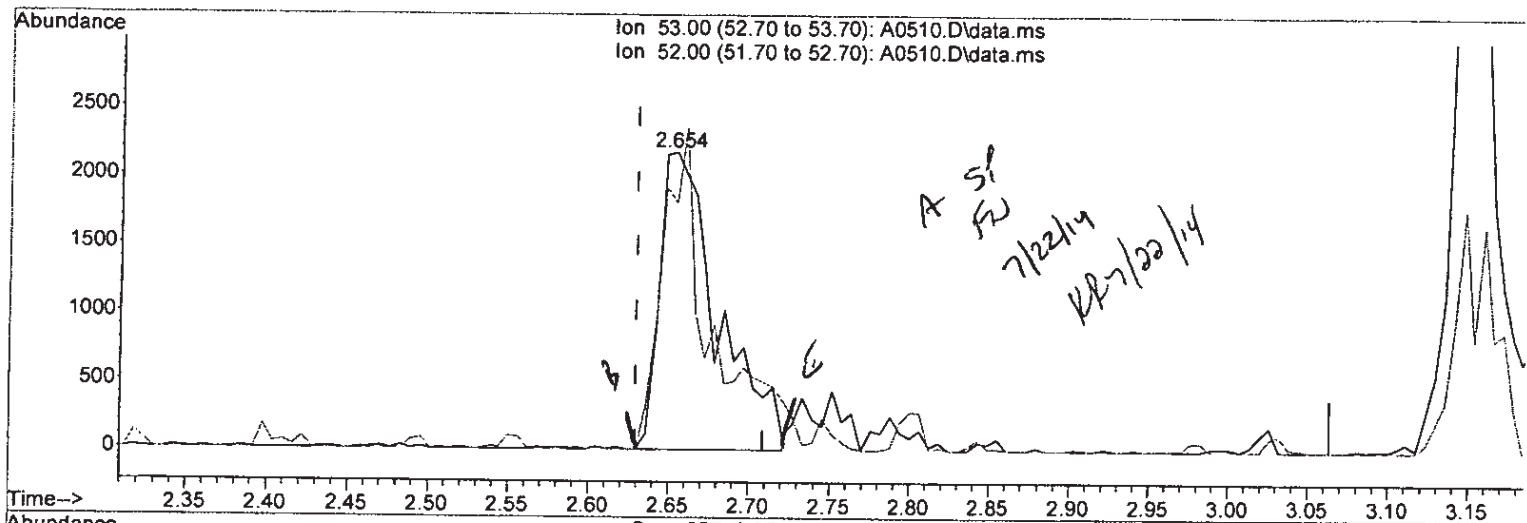
response 5261

Ion	Exp%	Act%
53.00	100	100
52.00	85.70	82.93
0.00	0.00	0.00
0.00	0.00	0.00

00169

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:05:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



(24) Acrylonitrile

2.654min (+0.024) 2.37 ug/L m

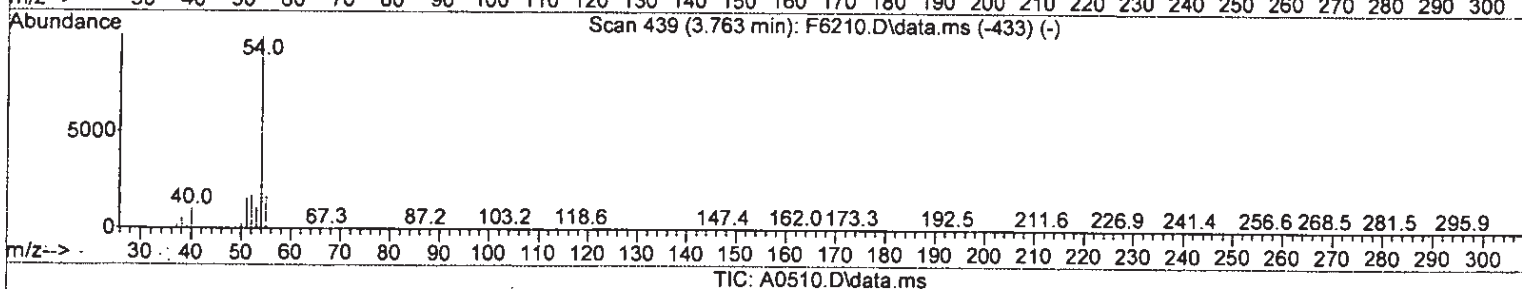
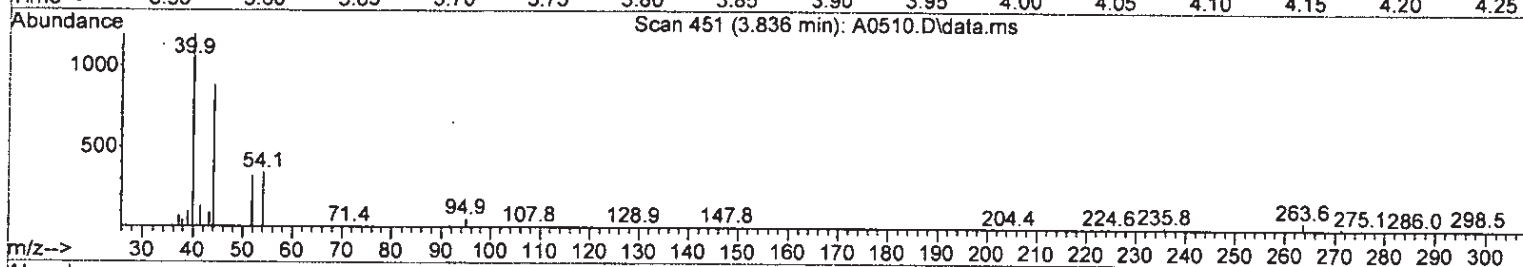
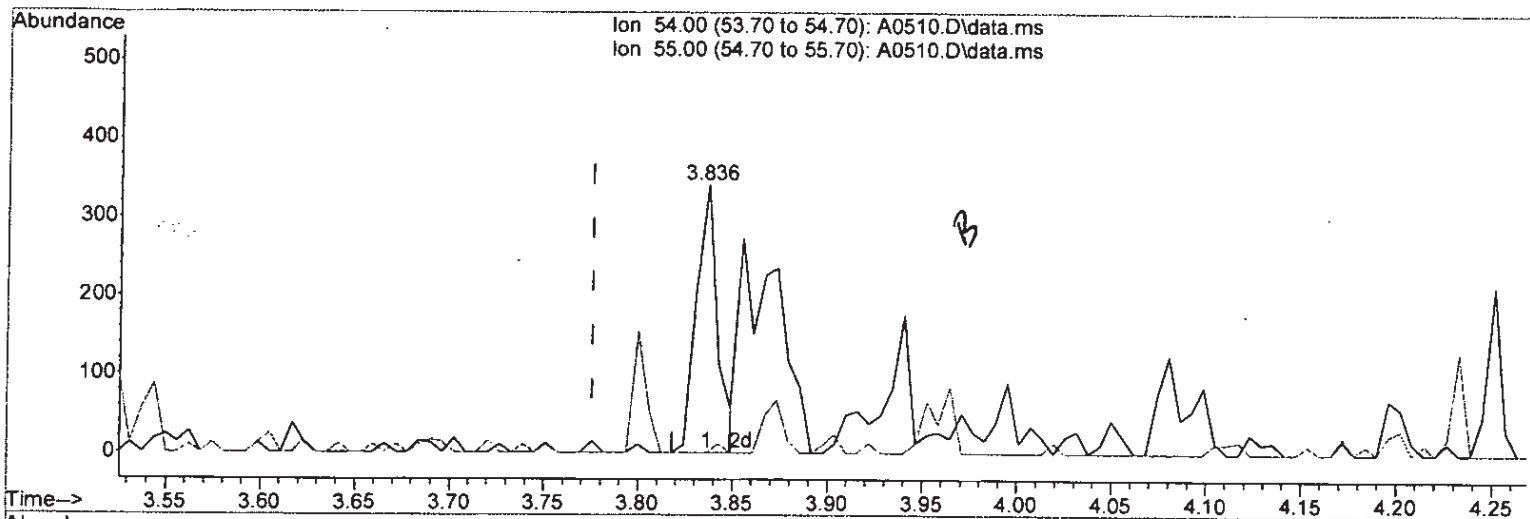
response 5466

Ion	Exp%	Act%
53.00	100	100
52.00	85.70	82.93
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
 Acq On : 21 Jul 2014 11:52 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:05:34 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(36) Propionitrile

3.836min (+0.061) 0.36 ug/L

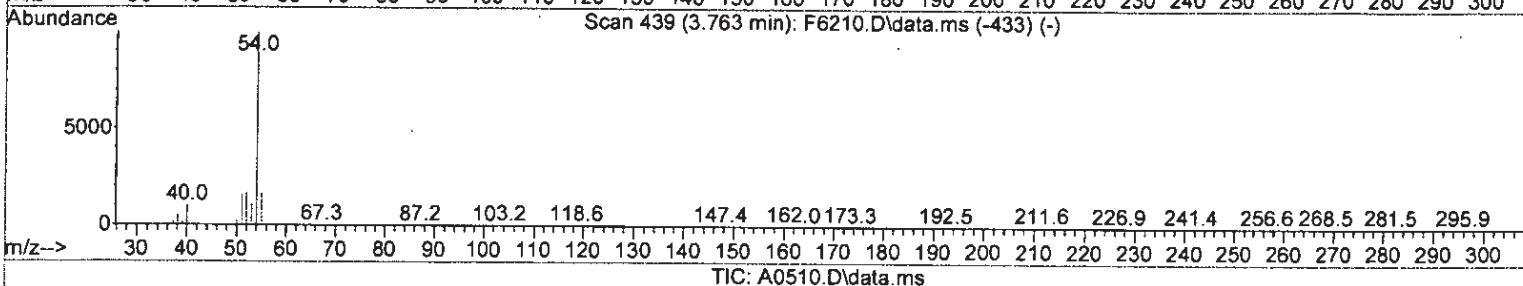
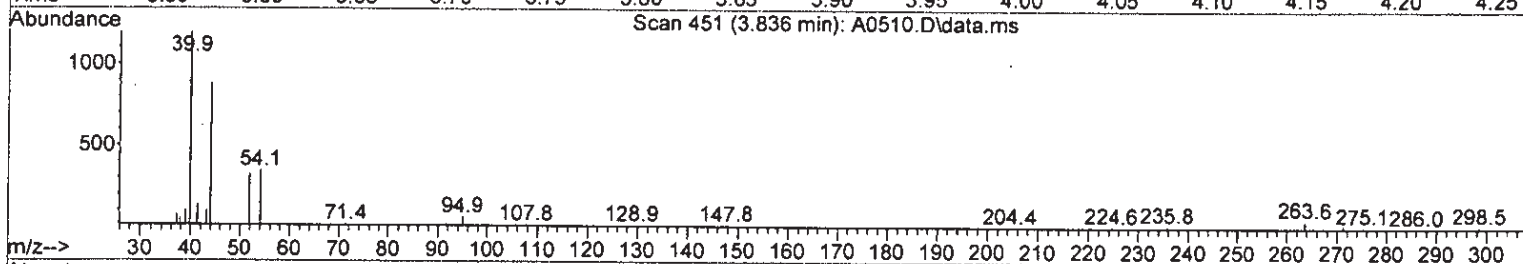
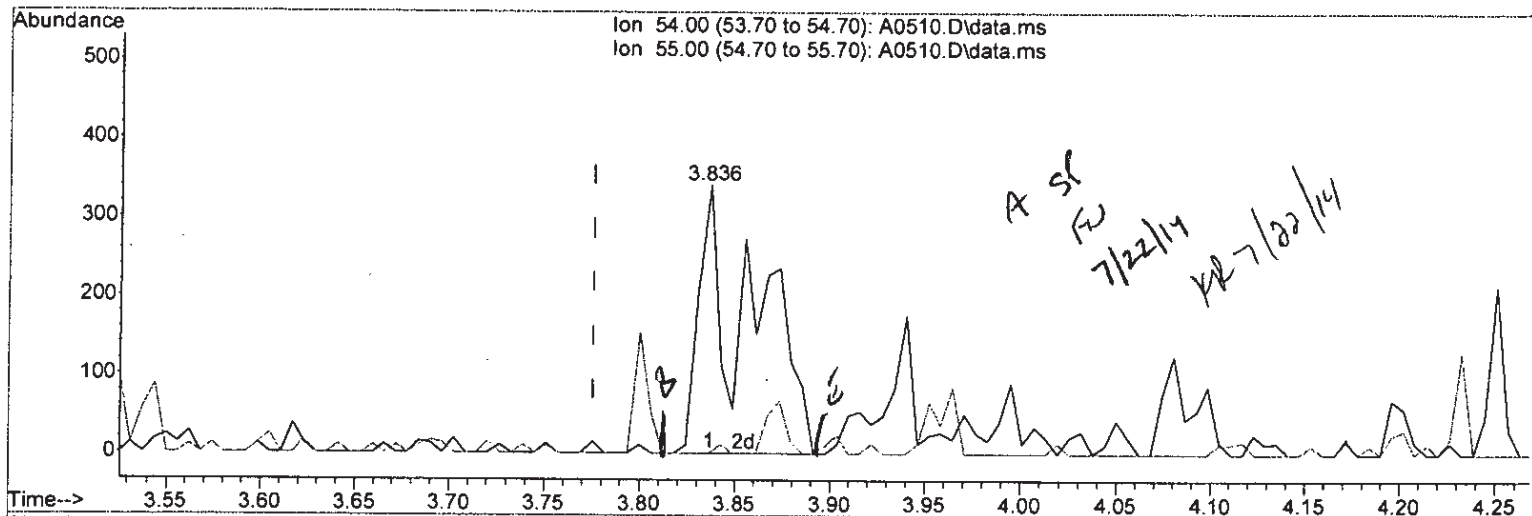
response 266

Ion	Exp%	Act%
54.00	100	100
55.00	13.70	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
 Acq On : 21 Jul 2014 11:52 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:05:34 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0510.D\data.ms

(36) Propionitrile

3.836min (+0.061) 0.89 ug/L m

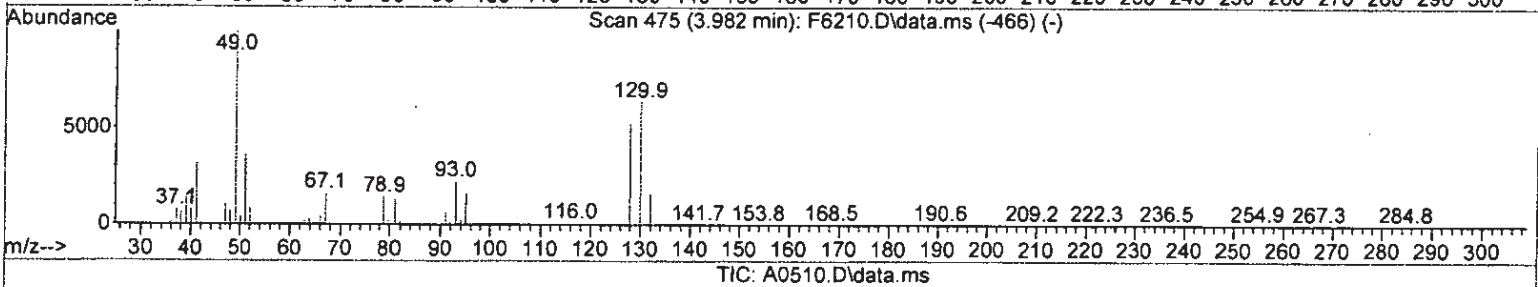
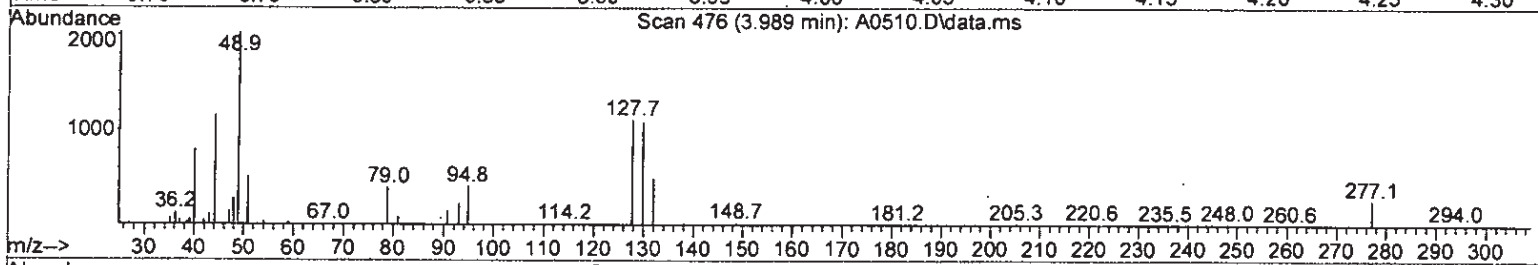
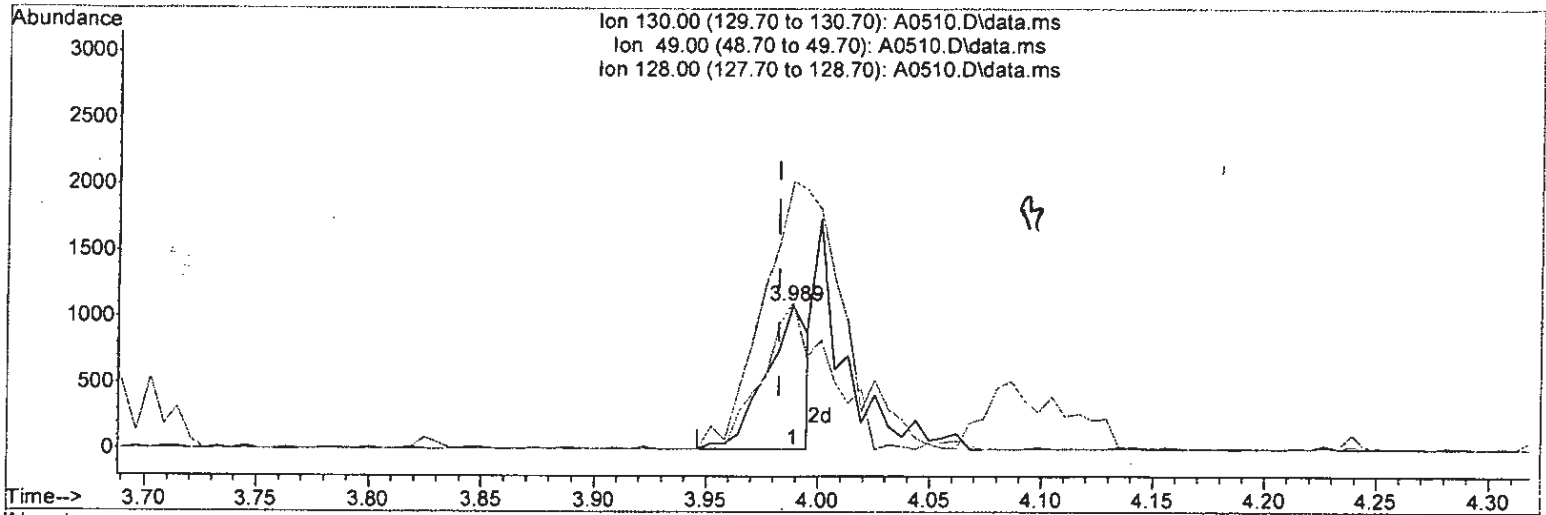
response 662

Ion	Exp%	Act%
54.00	100	100
55.00	13.70	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
 Acq On : 21 Jul 2014 11:52 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:05:34 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(37) Bromochloromethane
 3.989min (+0.006) 0.27 ug/L
 response 1409

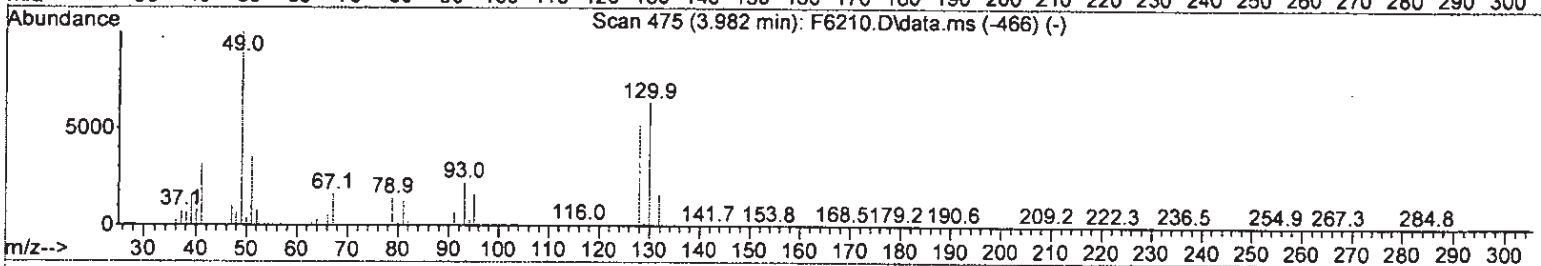
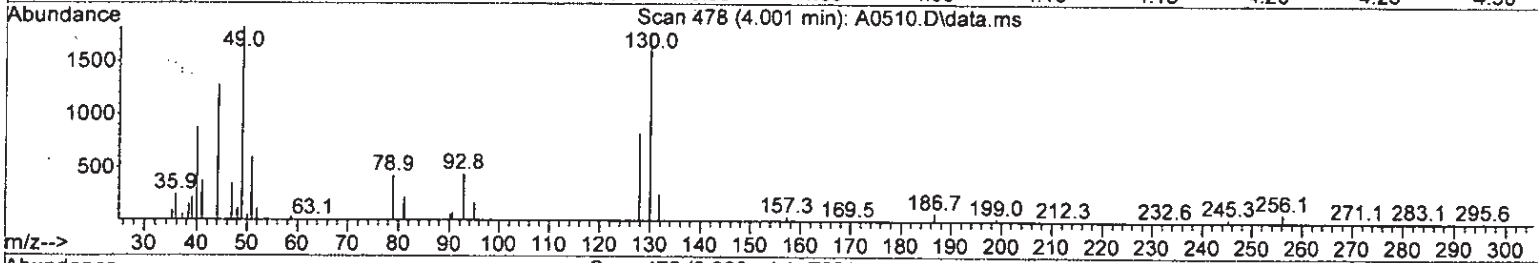
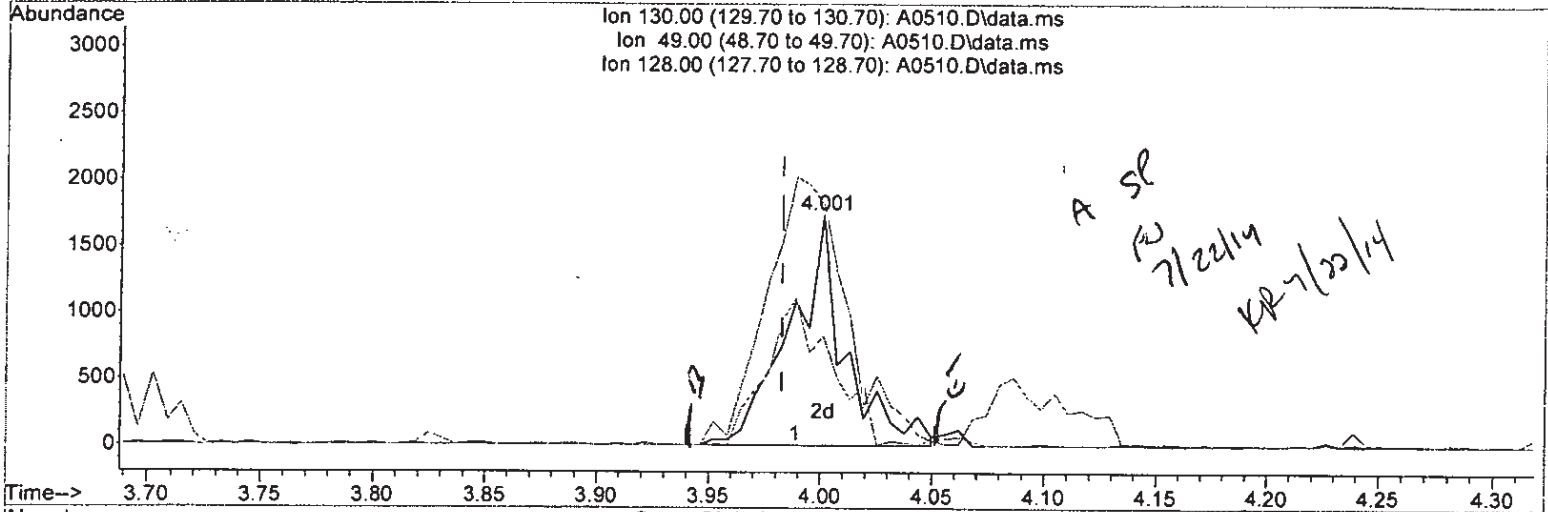
Ion	Exp%	Act%
130.00	100	100
49.00	135.10	186.56#
128.00	77.50	102.21#
0.00	0.00	0.00

00173

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
 Acq On : 21 Jul 2014 11:52 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:05:34 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(37) Bromochloromethane

4.001min (+0.018) 0.56 ug/L m

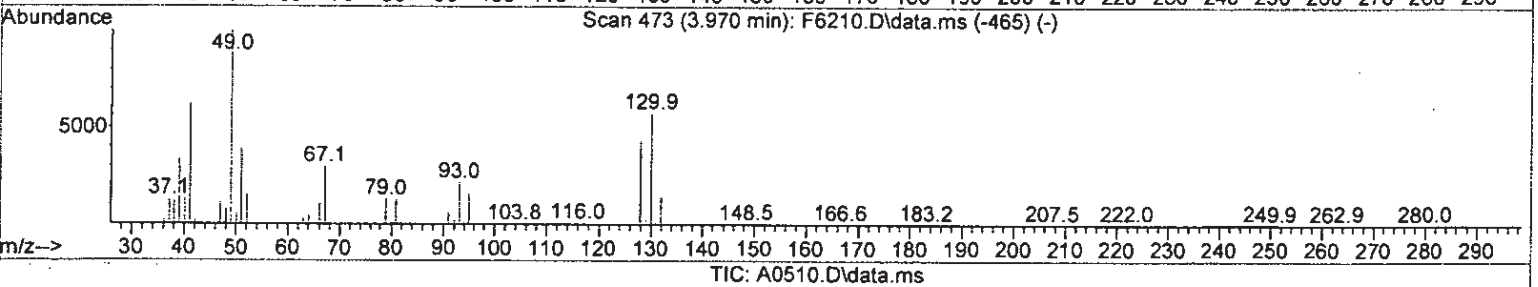
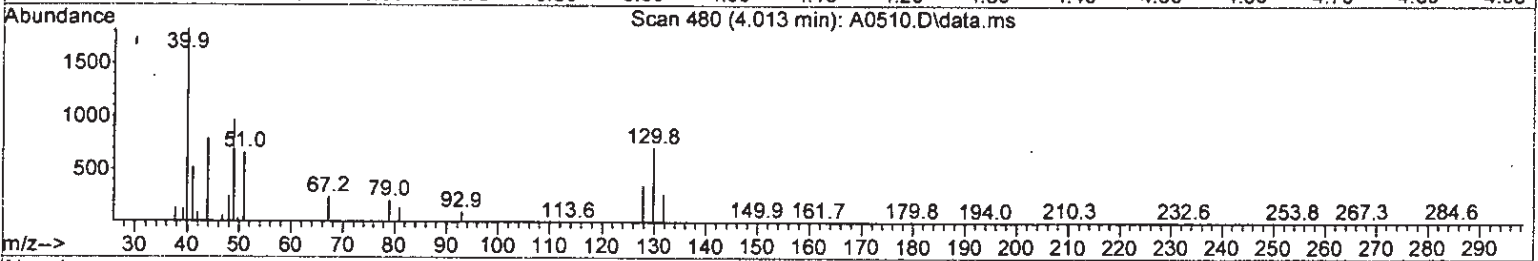
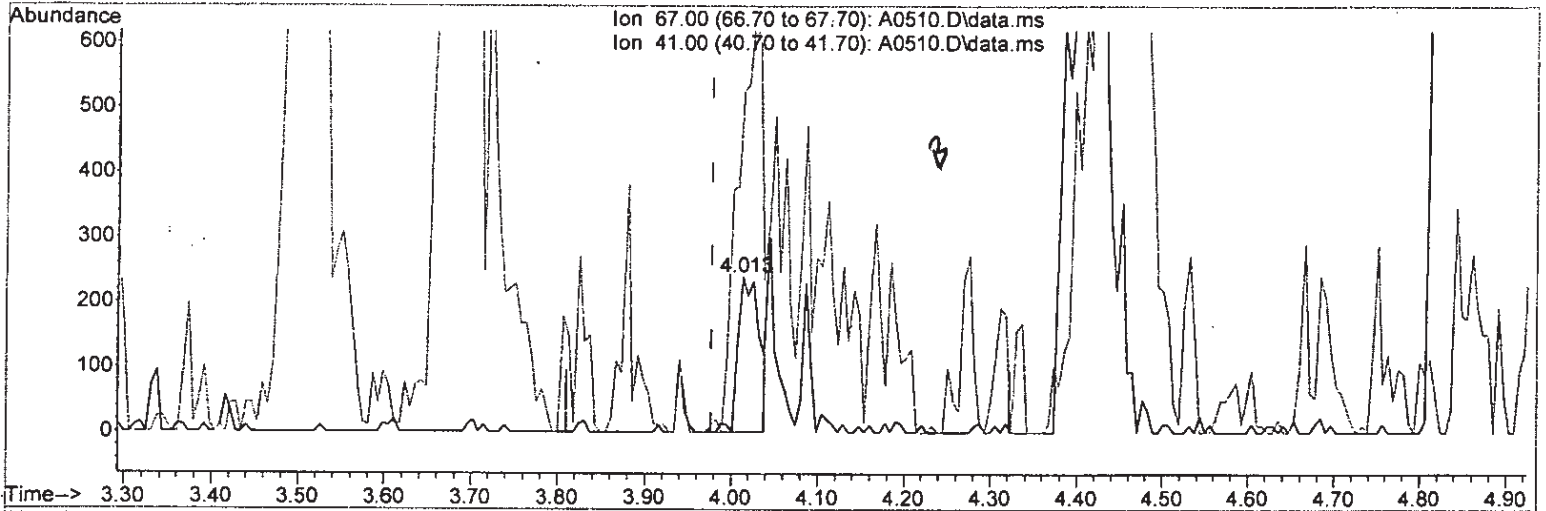
response 2948

Ion	Exp%	Act%
130.00	100	100
49.00	135.10	104.32#
128.00	77.50	47.53#
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
 Acq On : 21 Jul 2014 11:52 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:05:34 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(38) Methacrylonitrile

4.013min (+0.037) 0.17 ug/L

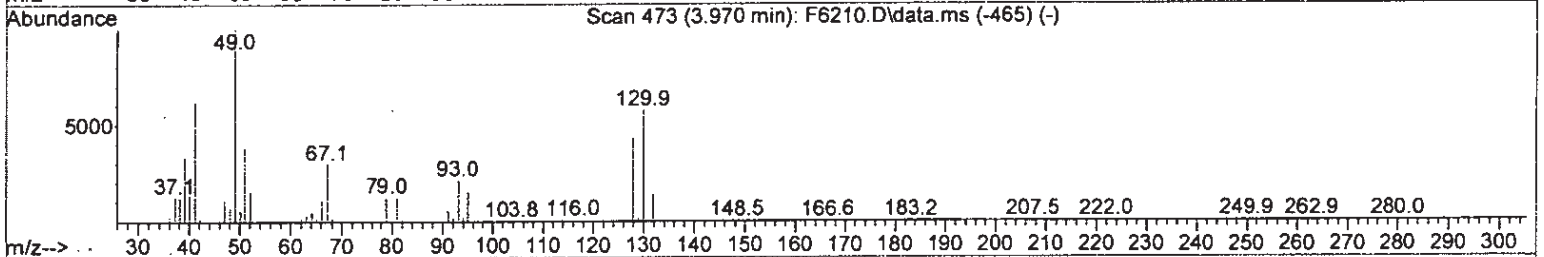
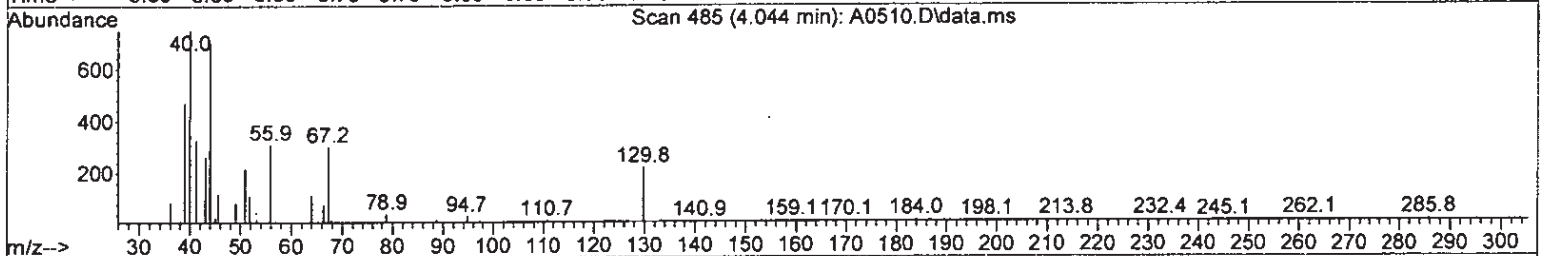
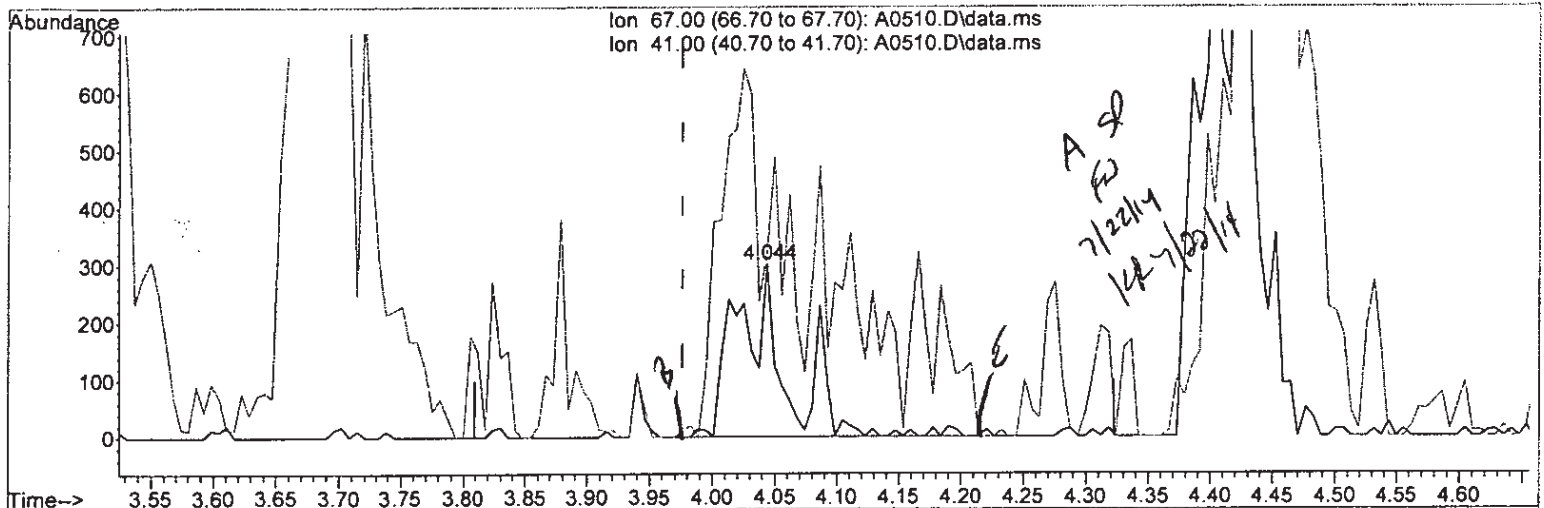
response 408

Ion	Exp%	Act%
67.00	100	100
41.00	149.10	219.25#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
 Acq On : 21 Jul 2014 11:52 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:24:48 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0510.D\data.ms

(38) Methacrylonitrile

4.044min (+0.067) 0.35 ug/L m

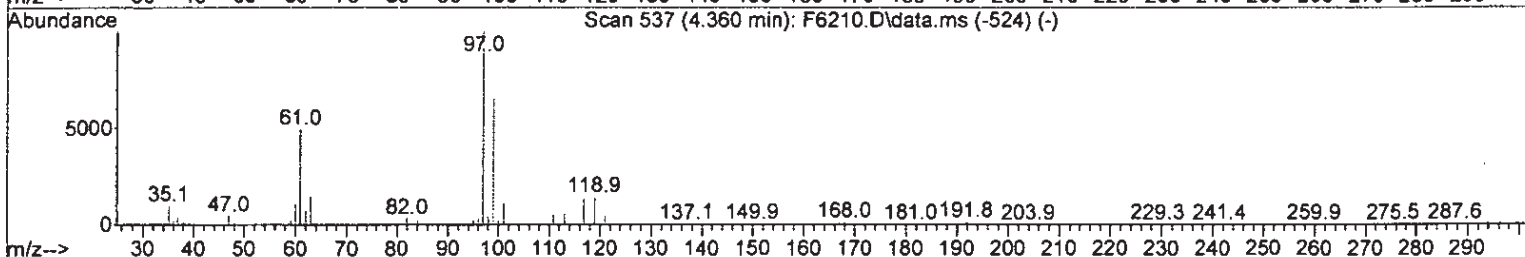
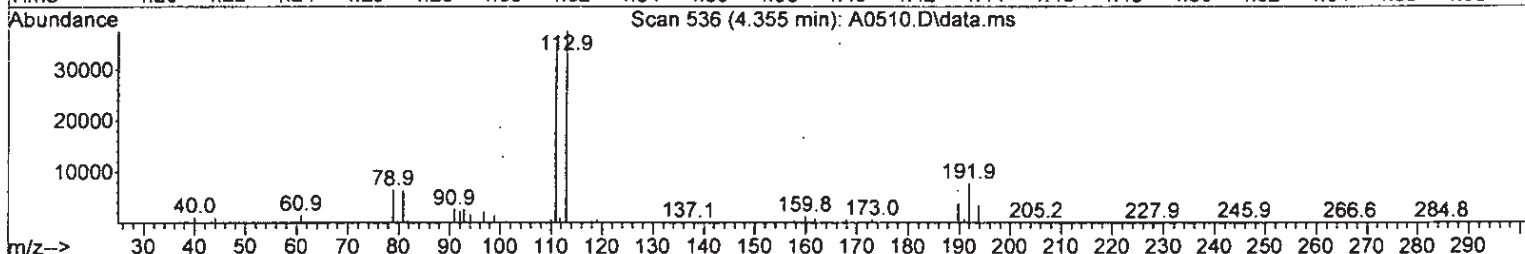
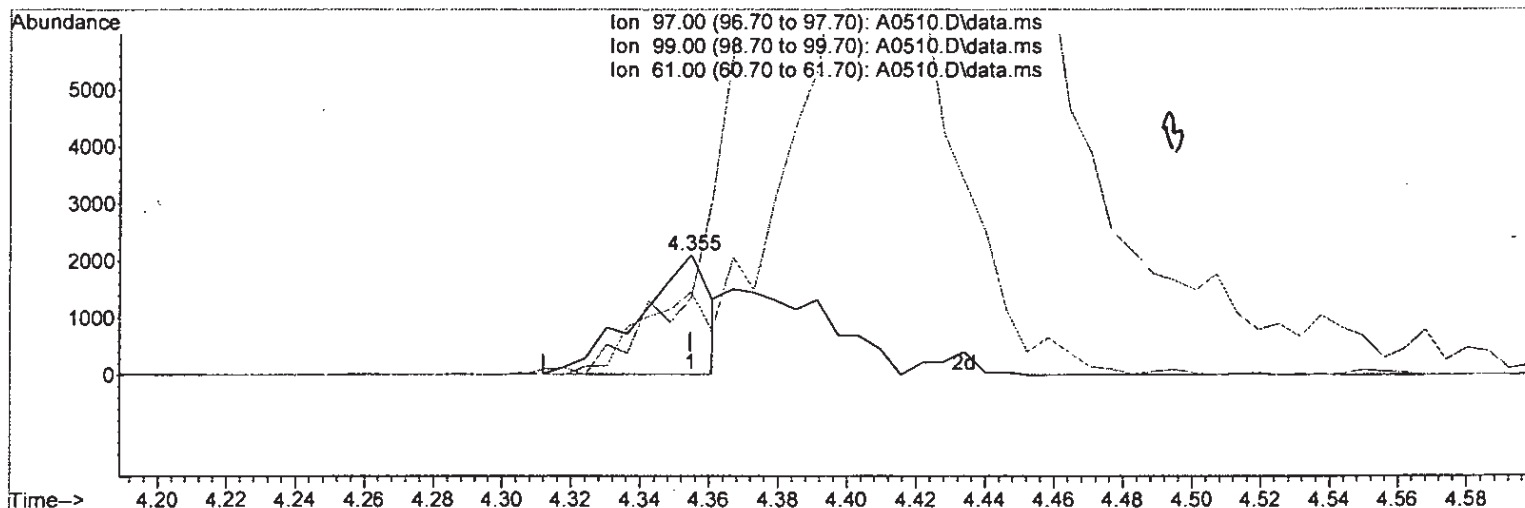
response 819

Ion	Exp%	Act%
67.00	100	100
41.00	149.10	108.33#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
 Acq On : 21 Jul 2014 11:52 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:05:34 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0510.D\data.ms

(41) 1,1,1-Trichloroethane (P)

4.355min (+0.000) 0.23 ug/L

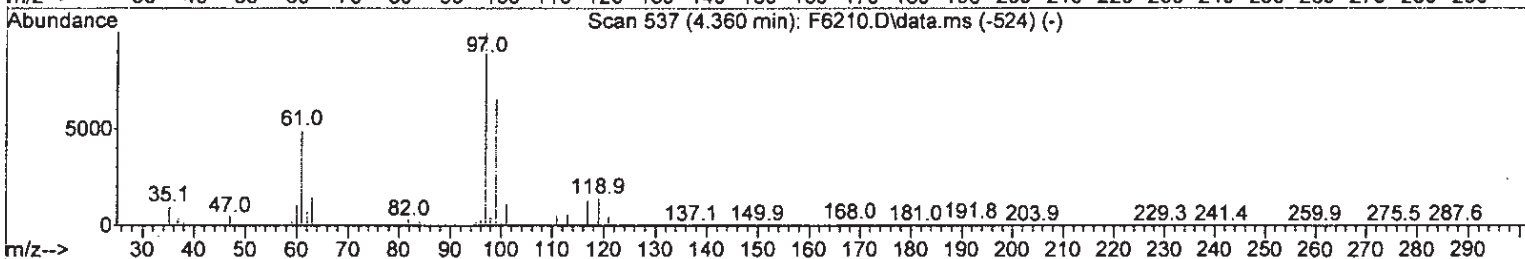
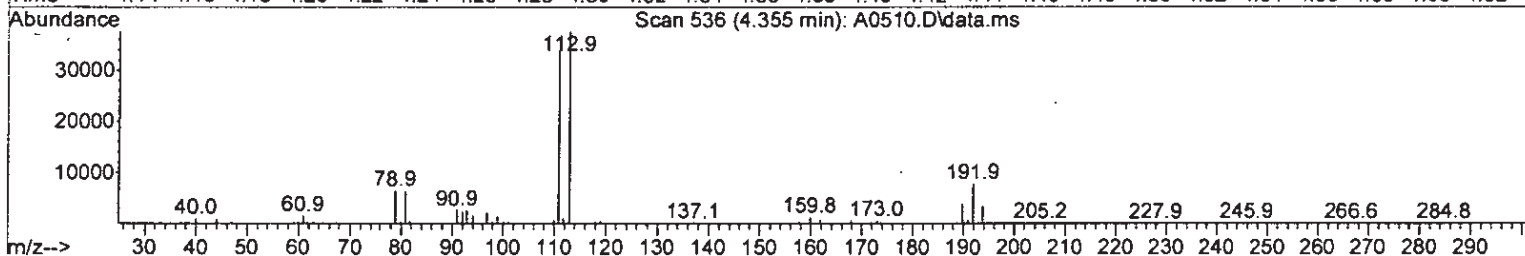
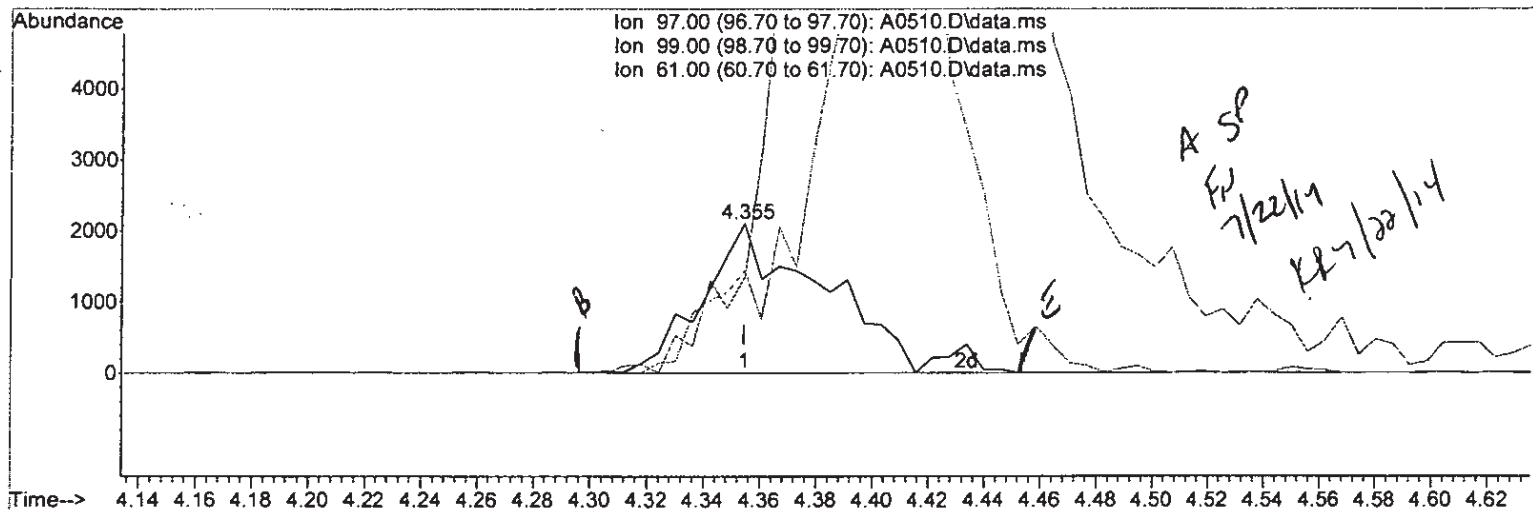
response 2980

Ion	Exp%	Act%
97.00	100	100
99.00	67.60	63.67
61.00	47.60	68.67#
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
 Acq On : 21 Jul 2014 11:52 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:05:34 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0510.D\data.ms

(41) 1,1,1-Trichloroethane (P)

4.355min (+0.000) 0.51 ug/L m

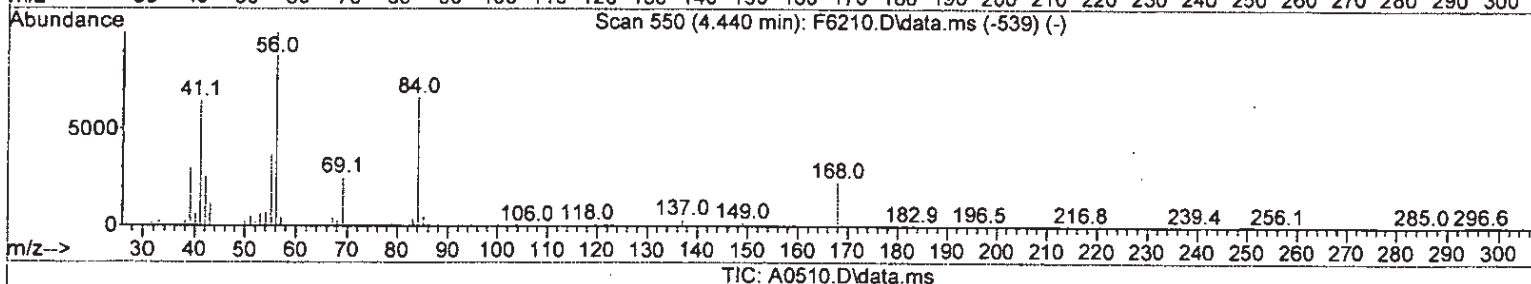
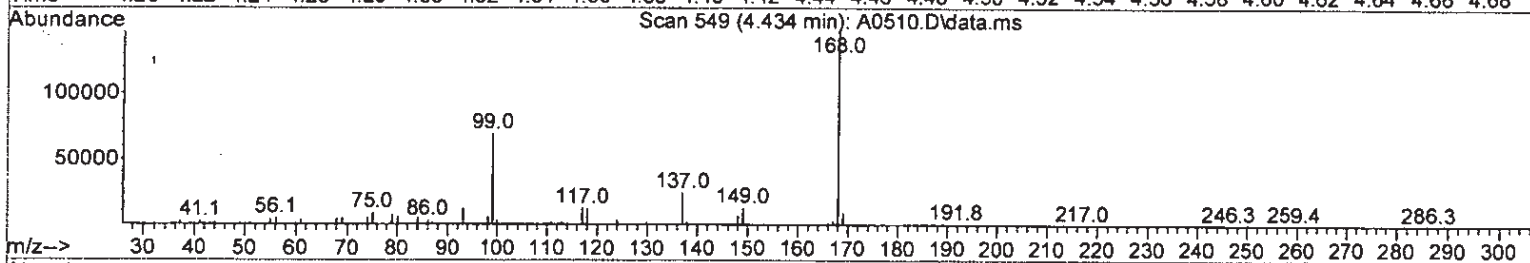
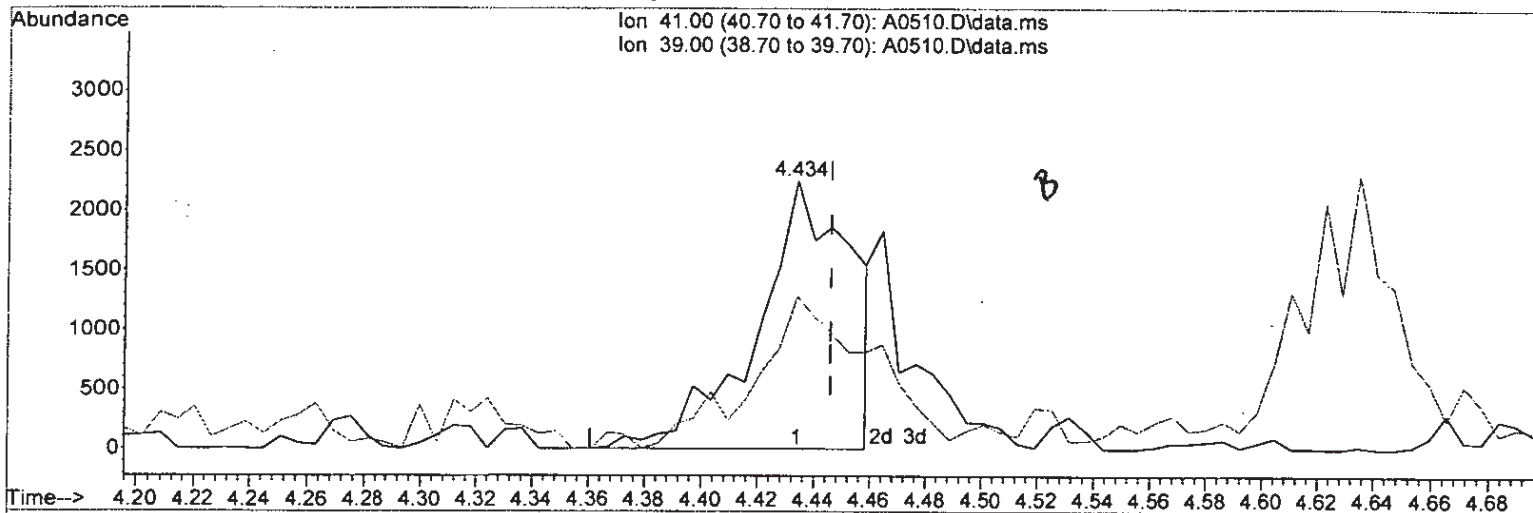
response 6471

Ion	Exp%	Act%
97.00	100	100
99.00	67.60	63.67
61.00	47.60	68.67#
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:05:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



(44) Cyclohexane (P)

4.434min (-0.012) 0.51 ug/L

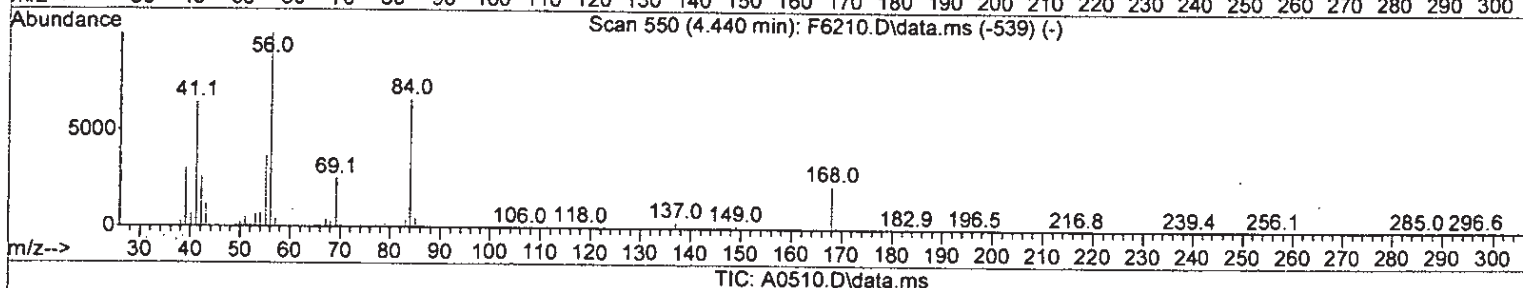
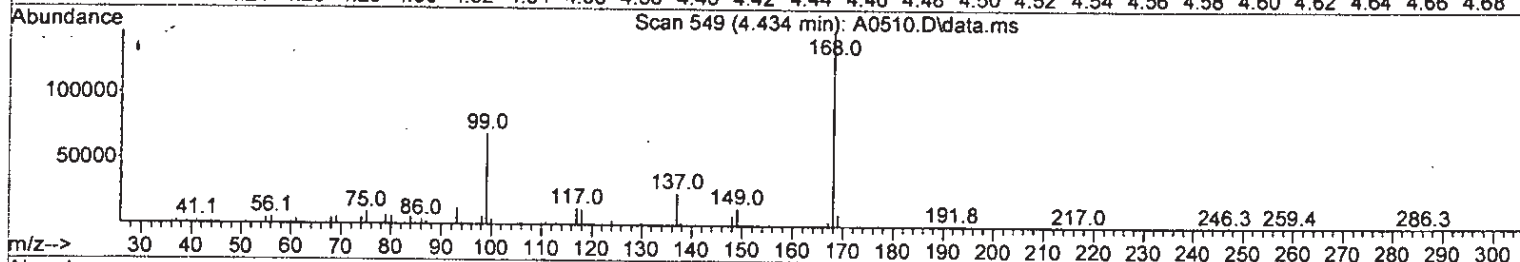
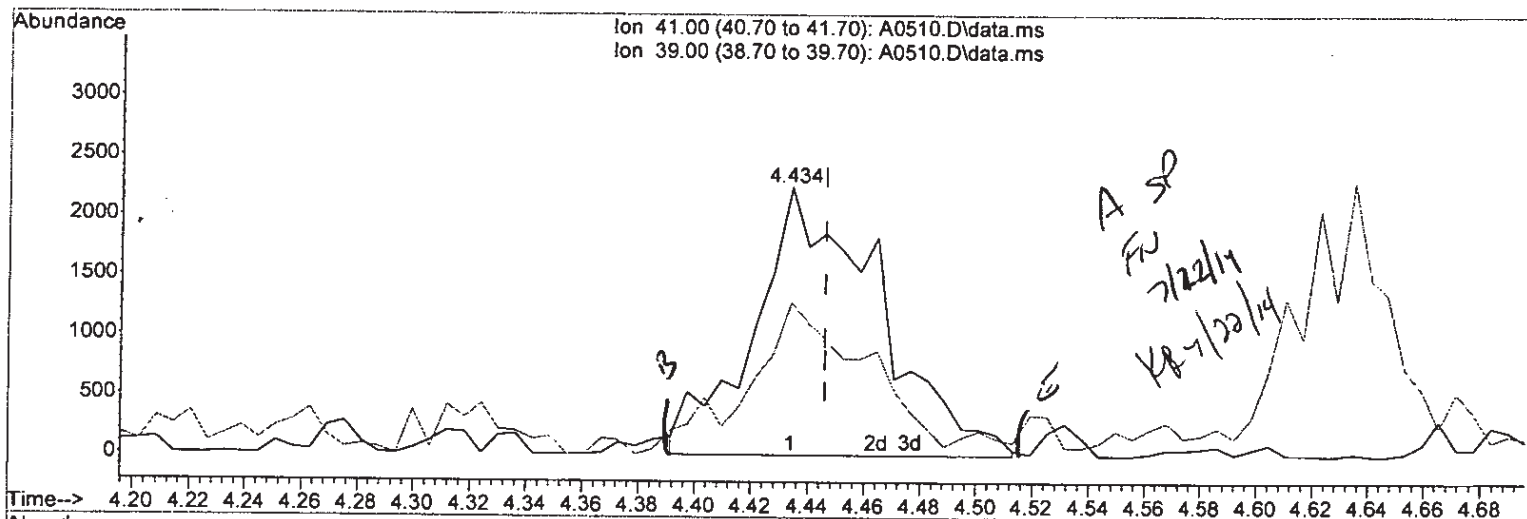
response 5231

Ion	Exp%	Act%
41.00	100	100
39.00	51.30	56.81
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
 Acq On : 21 Jul 2014 11:52 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:05:34 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(44) Cyclohexane (P)

4.434min (-0.012) 0.67 ug/L m

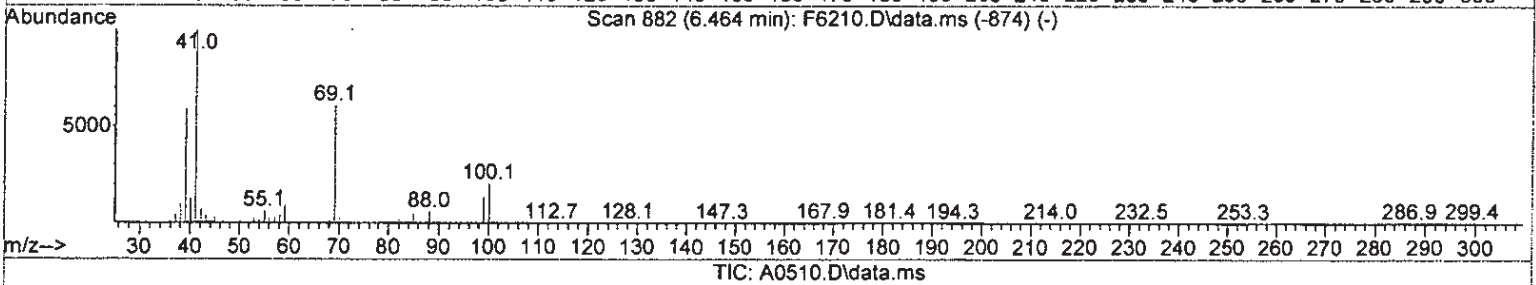
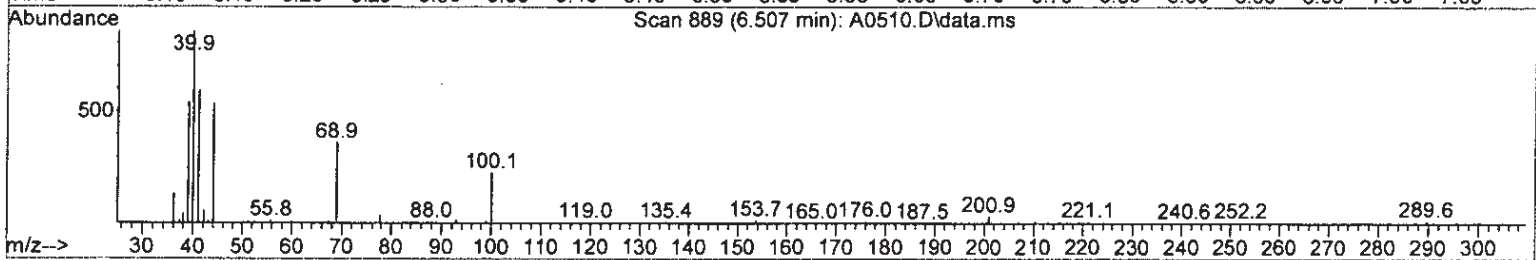
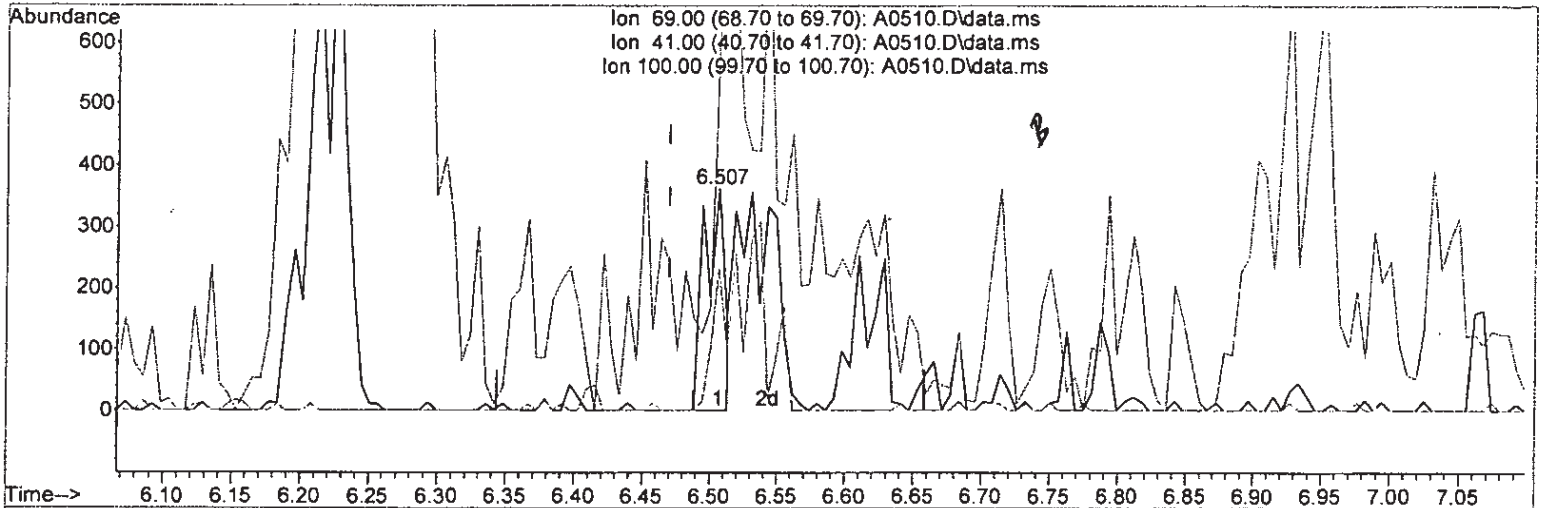
response 6867

Ion	Exp%	Act%
41.00	100	100
39.00	51.30	56.81
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
 Acq On : 21 Jul 2014 11:52 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:05:34 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(59) Methyl Methacrylate

6.507min (+0.037) 0.09 ug/L

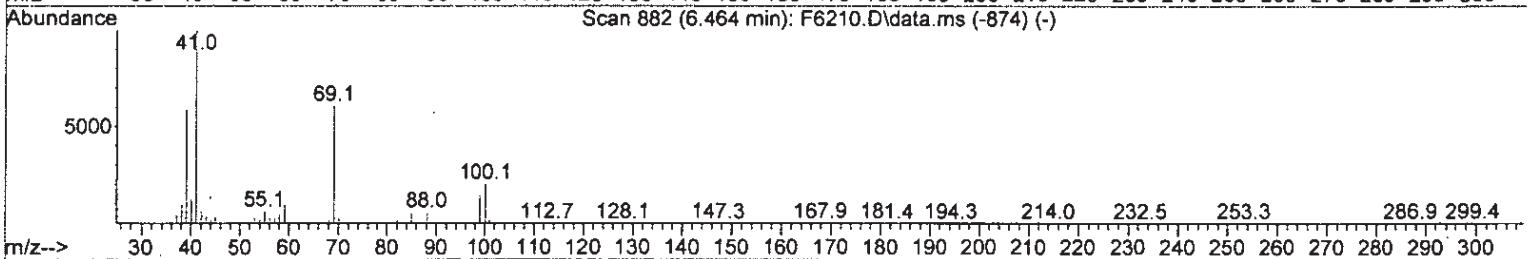
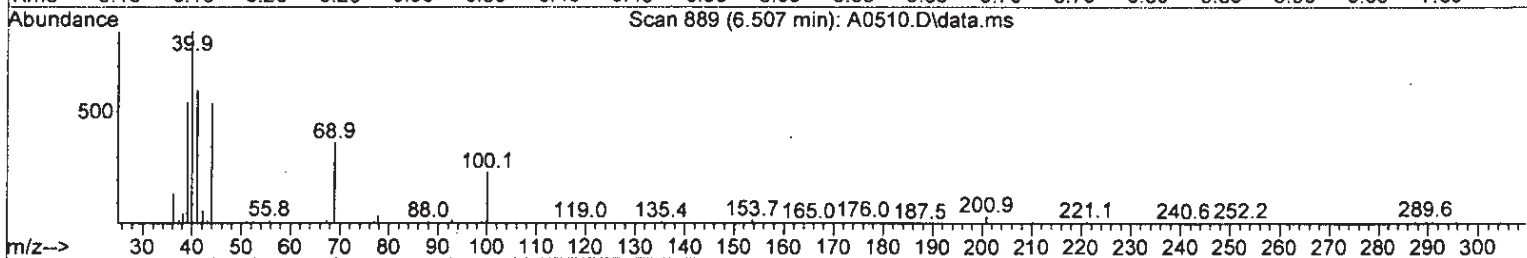
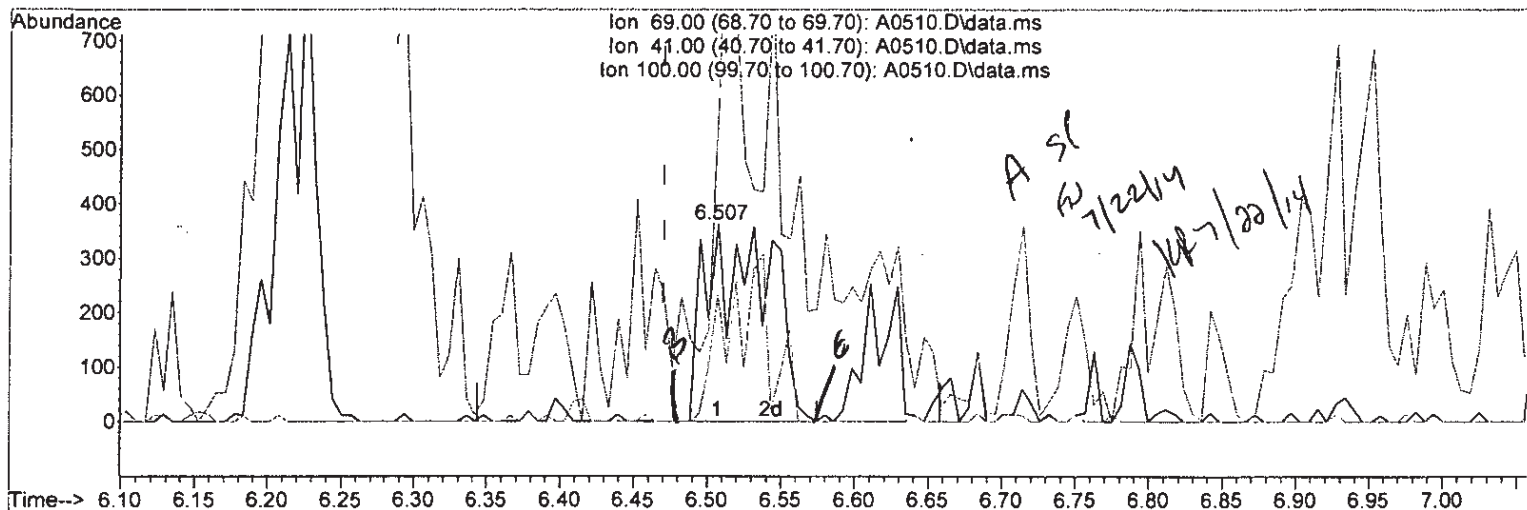
response 377

Ion	Exp%	Act%
69.00	100	100
41.00	128.90	163.99#
100.00	36.90	63.71#
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:05:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



TIC: A0510.D\data.ms

(59) Methyl Methacrylate

6.507min (+0.037) 0.26 ug/L m

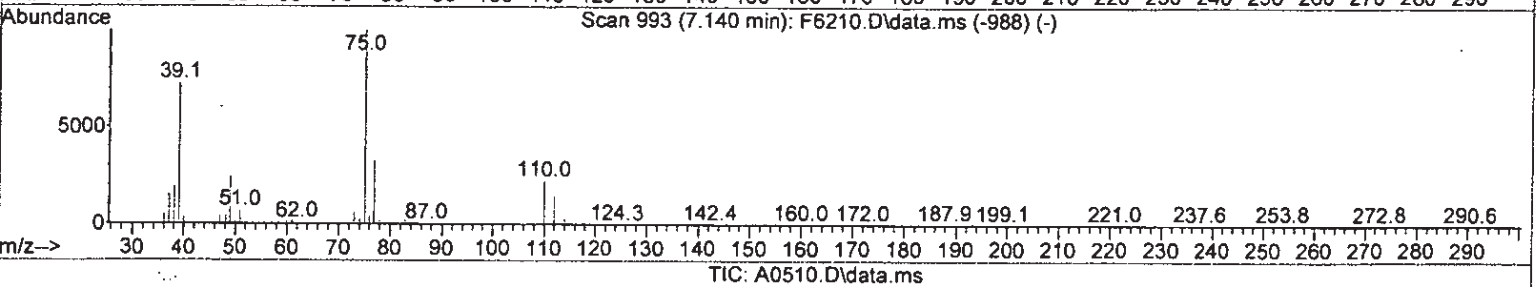
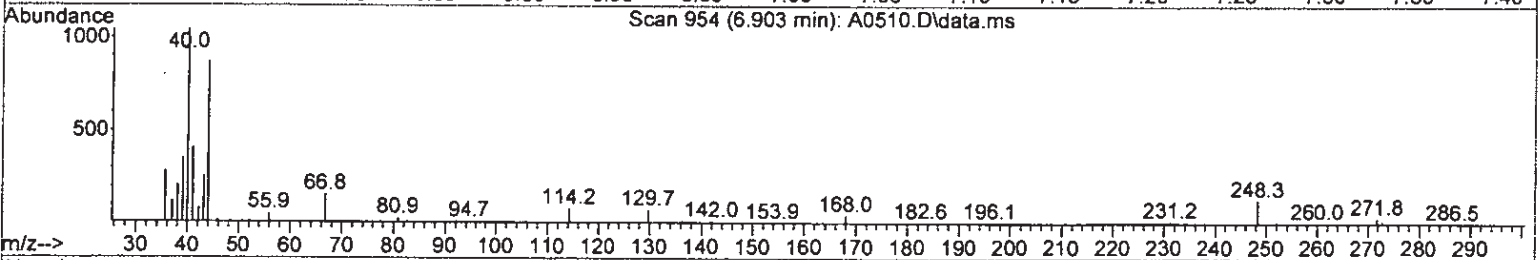
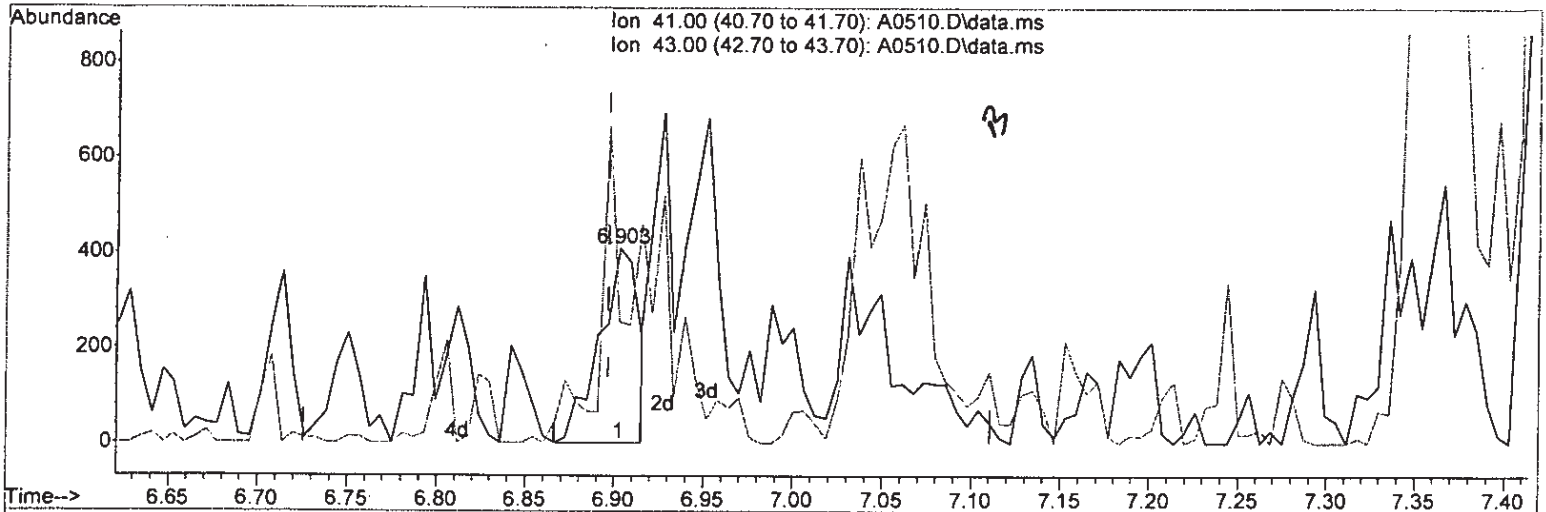
response 1075

Ion	Exp%	Act%
69.00	100	100
41.00	128.90	163.99#
100.00	36.90	63.71#
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
 Acq On : 21 Jul 2014 11:52 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:05:34 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(61) 2-Nitropropane

6.903min (+0.006) 0.39 ug/L

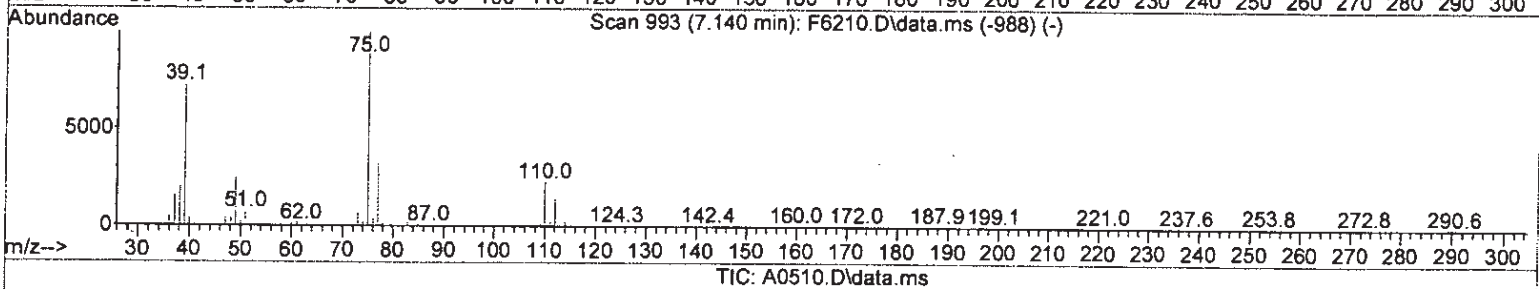
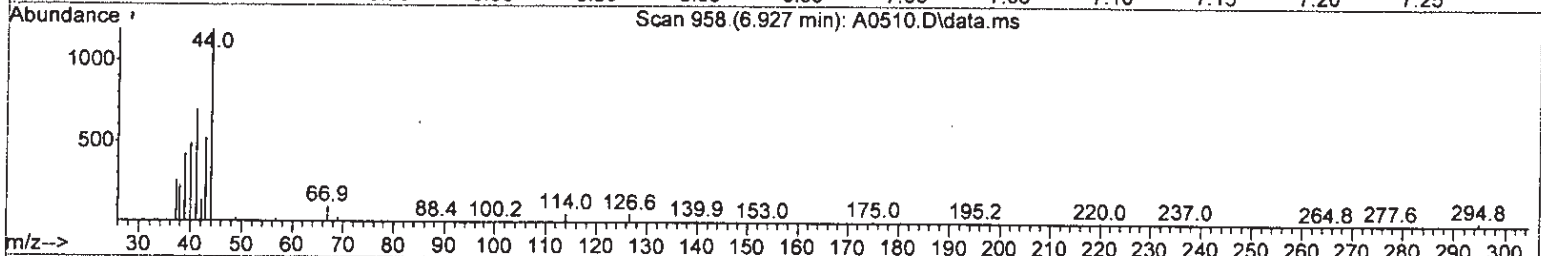
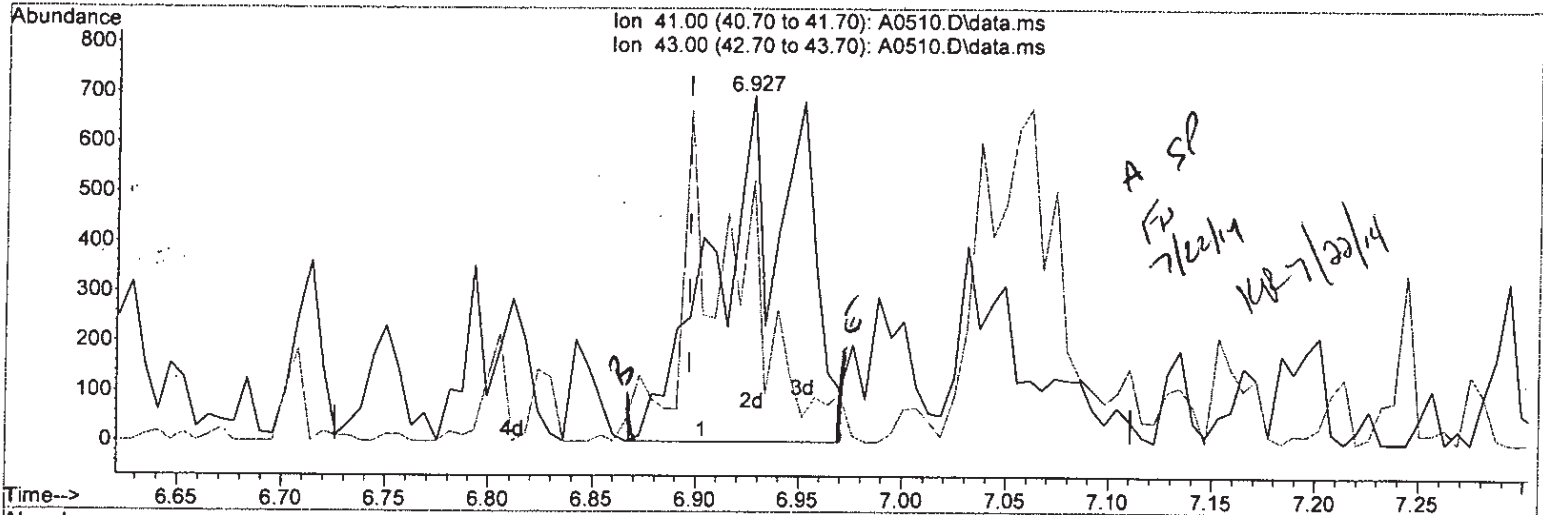
response 618

Ion	Exp%	Act%
41.00	100	100
43.00	108.60	62.10#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
 Acq On : 21 Jul 2014 11:52 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:05:34 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(61) 2-Nitropropane

6.927min (+0.031) 1.22 ug/L m

response 1949

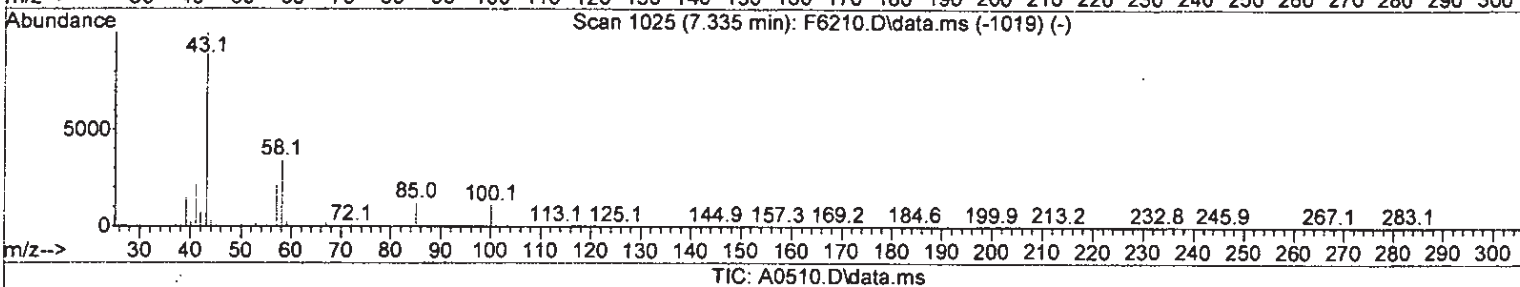
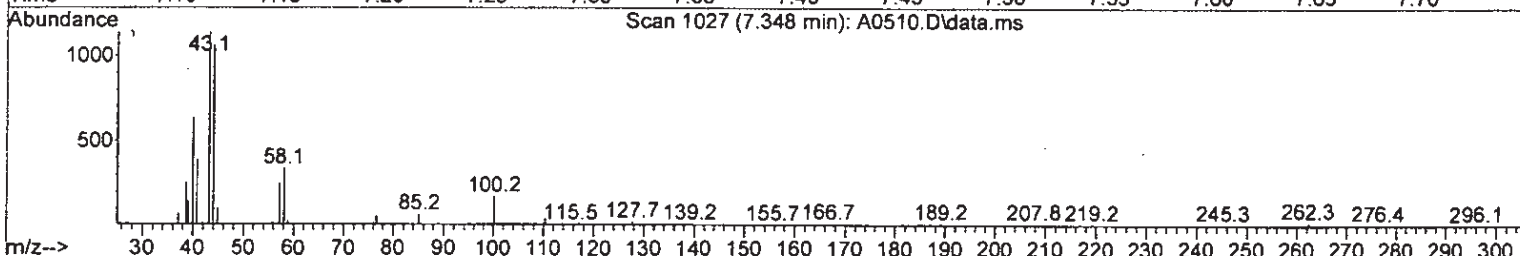
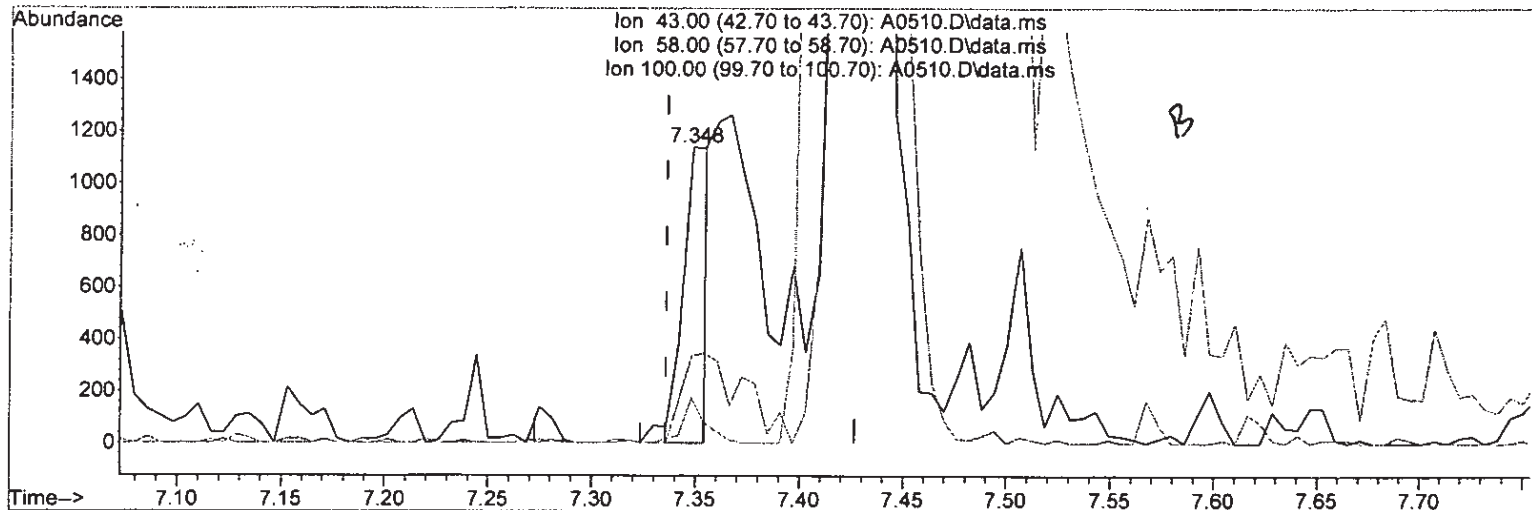
Ion	Exp%	Act%
41.00	100	100
43.00	108.60	75.22#
0.00	0.00	0.00
0.00	0.00	0.00

00184

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
 Acq On : 21 Jul 2014 11:52 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:05:34 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(64) 4-Methyl-2-pentanone (P)

7.348min (+0.012) 0.15 ug/L

response 1020

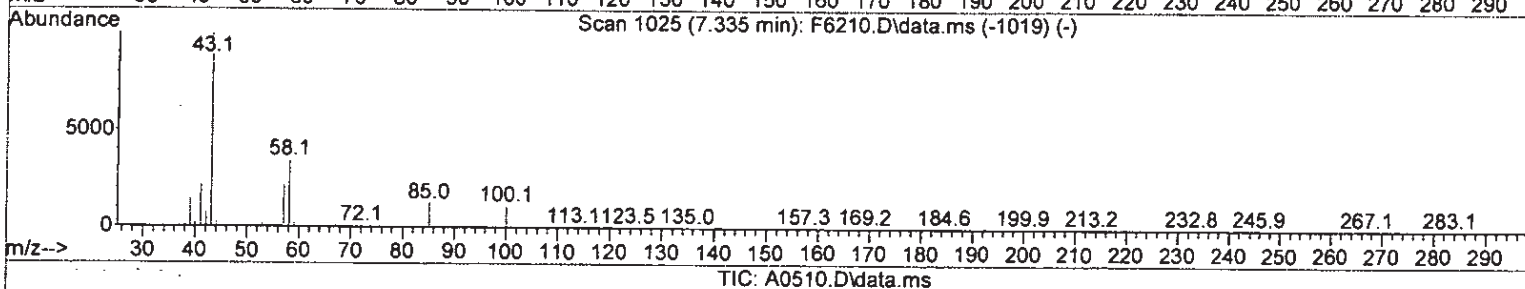
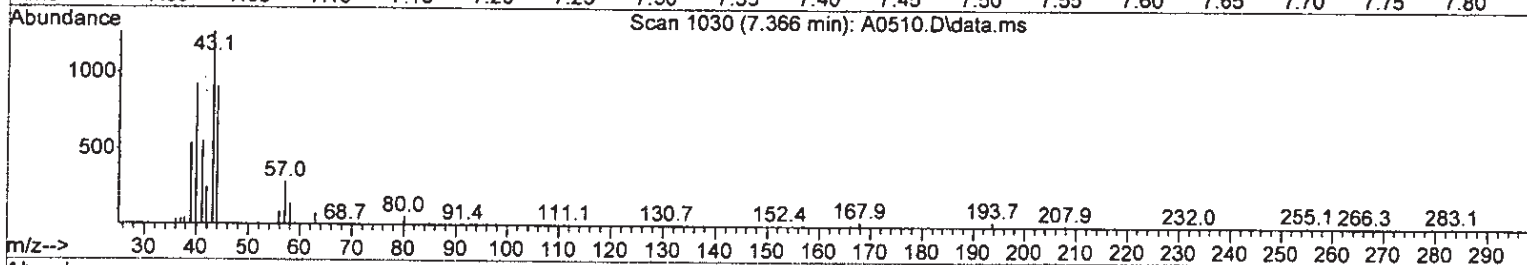
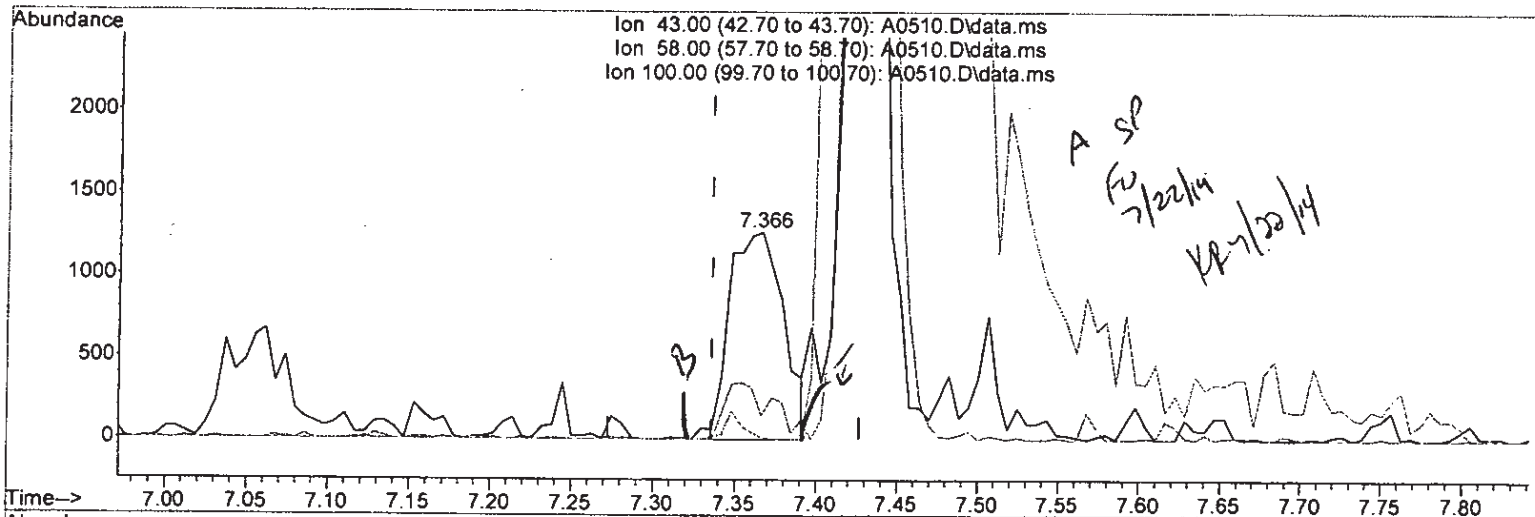
Ion	Exp%	Act%
43.00	100	100
58.00	36.30	29.38
100.00	12.60	15.13
0.00	0.00	0.00

00185

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
 Acq On : 21 Jul 2014 11:52 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:05:34 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(64) 4-Methyl-2-pentanone (P)

7.366min (+0.031) 0.43 ug/L m

response 2917

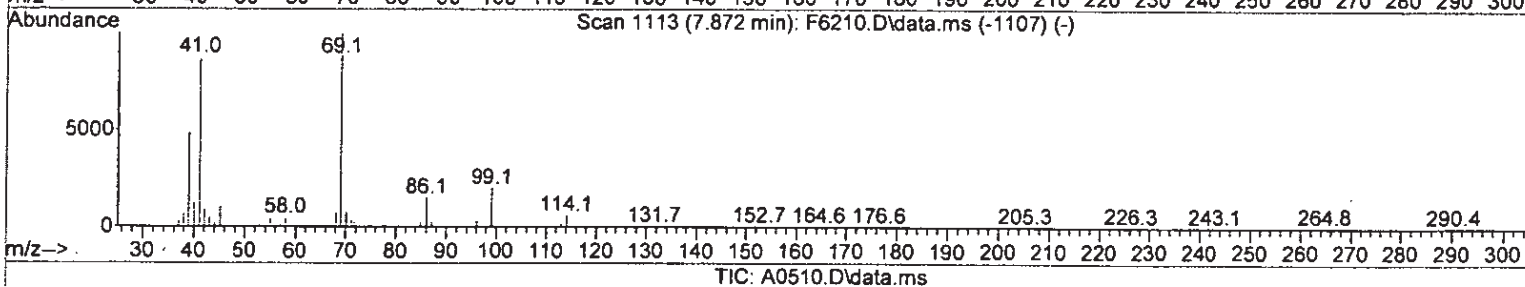
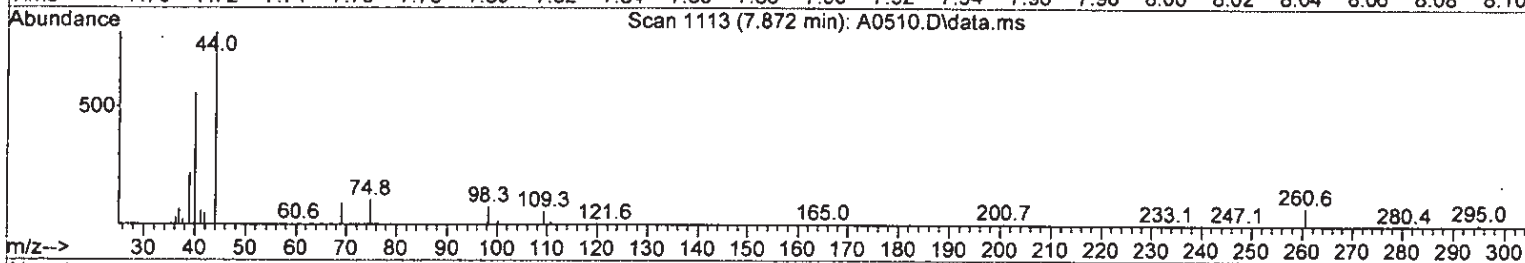
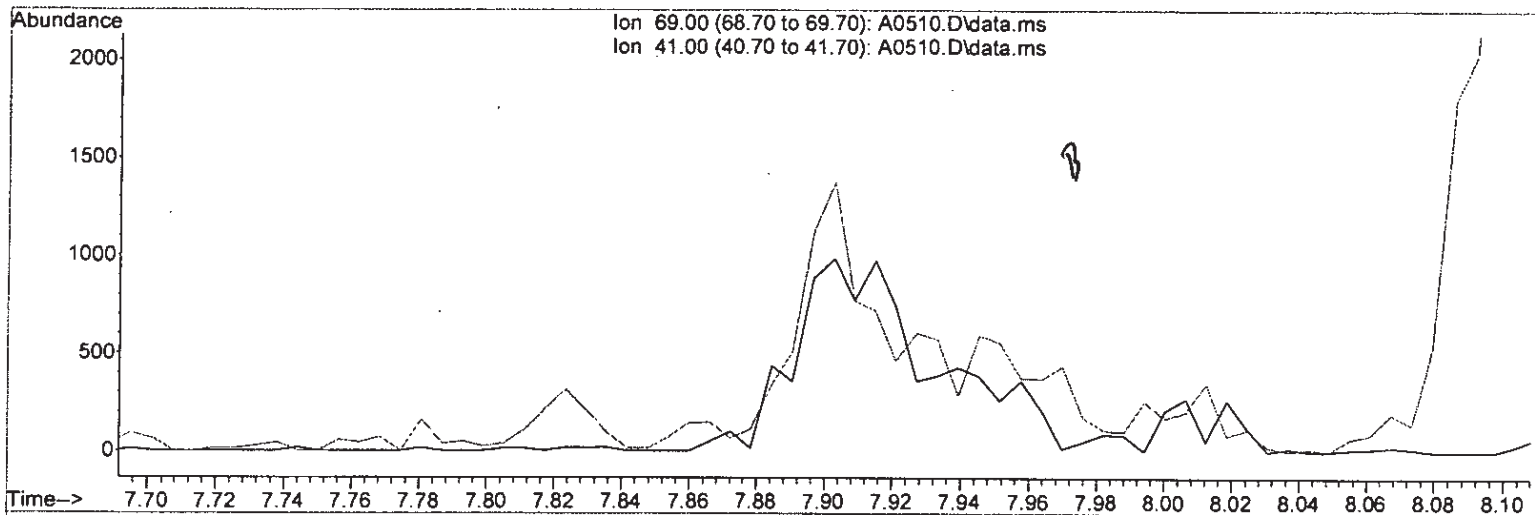
Ion	Exp%	Act%
43.00	100	100
58.00	36.30	11.41#
100.00	12.60	0.87
0.00	0.00	0.00

00186

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
 Acq On : 21 Jul 2014 11:52 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:05:34 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(68) Ethyl Methacrylate

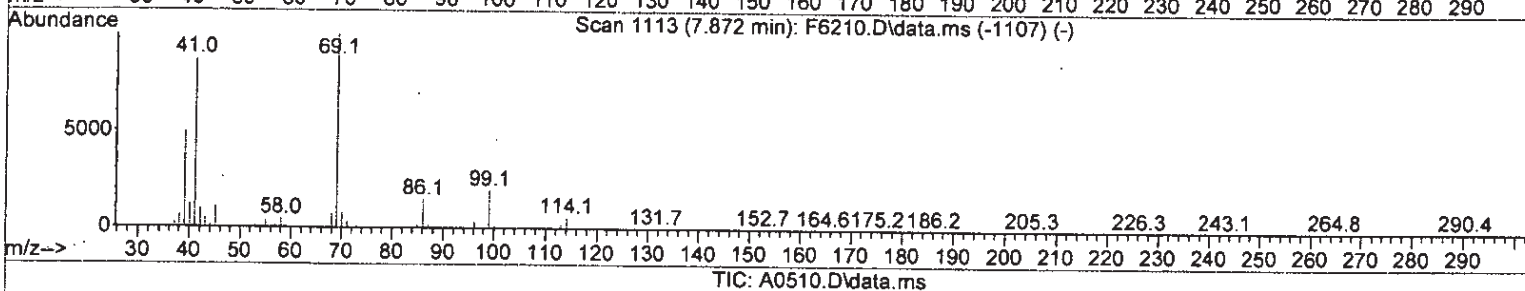
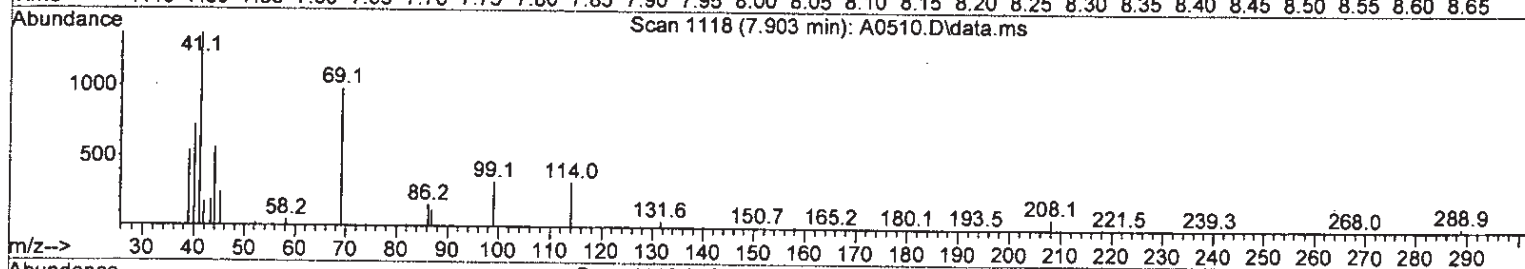
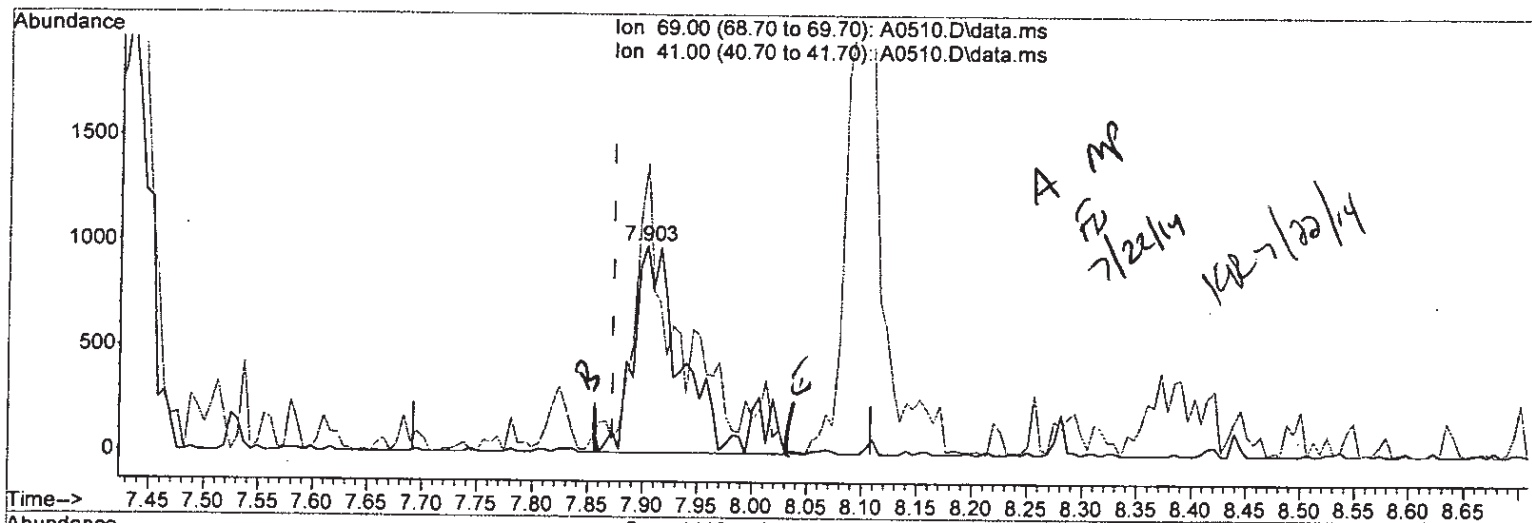
7.872min (-7.872) 0.00 ug/L

response 0

Ion	Exp%	Act%
69.00	100	0.00
41.00	71.50	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:24:48 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



(68) Ethyl Methacrylate

7.903min (+0.031) 0.37 ug/L m

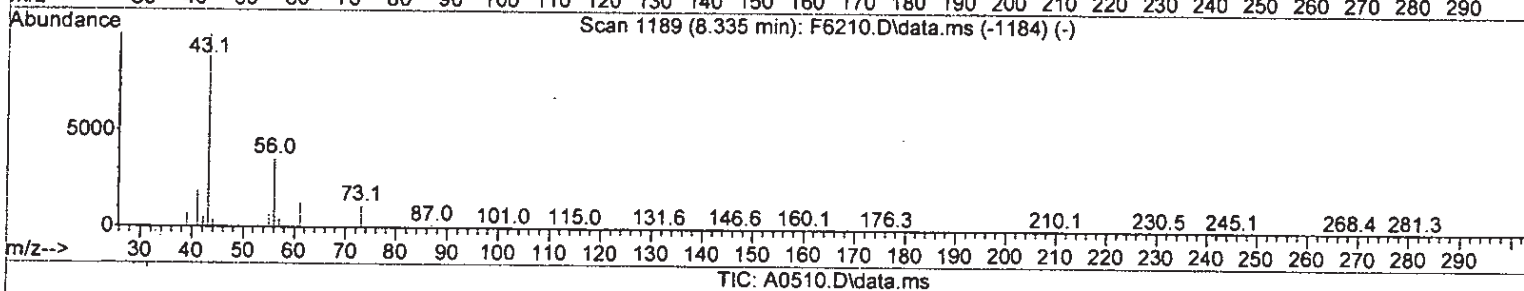
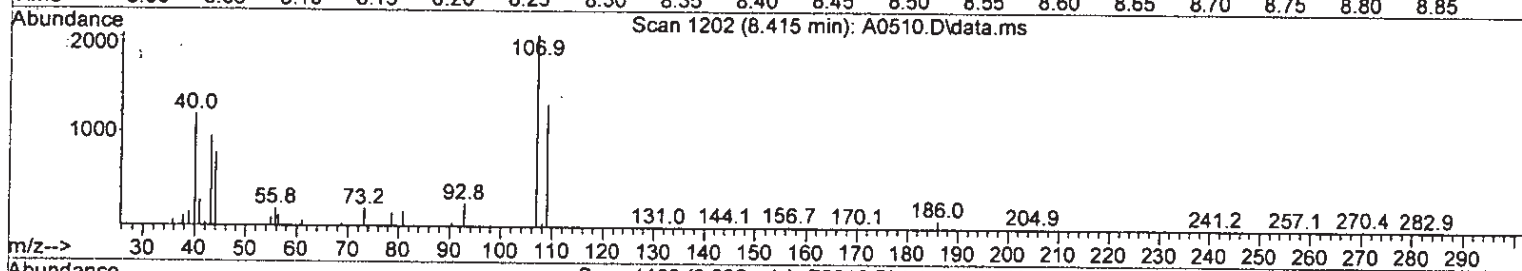
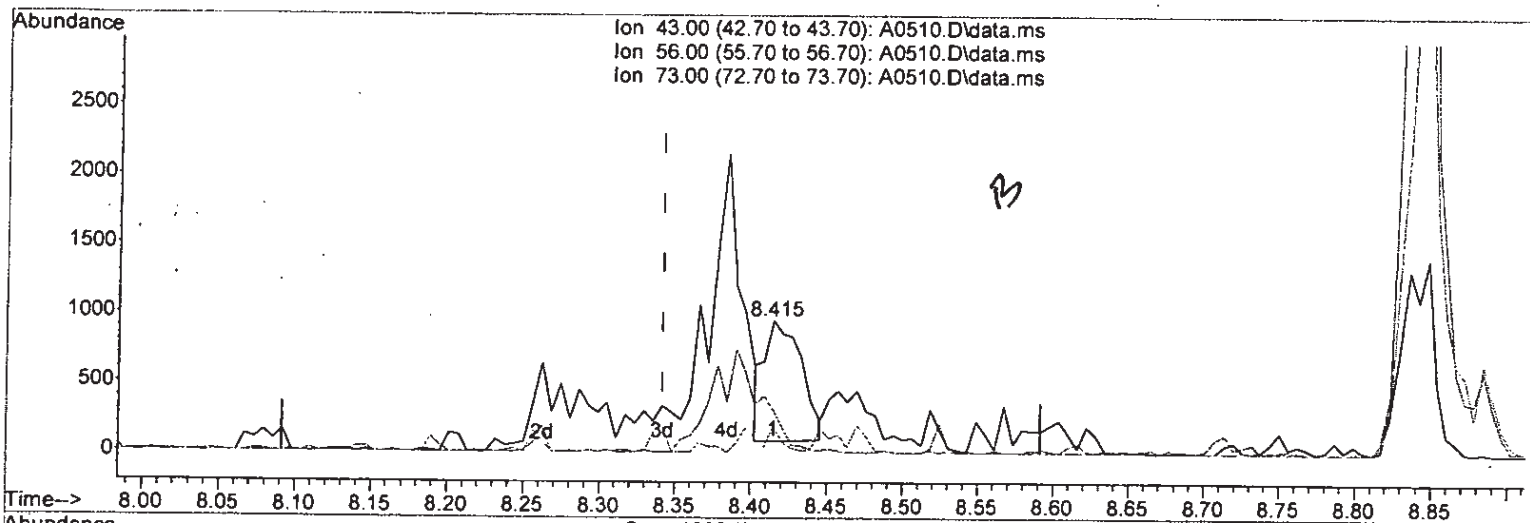
response 3216

Ion	Exp%	Act%
69.00	100	100
41.00	71.50	139.43#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:05:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



(76) N-Butyl Acetate

8.415min (+0.073) 0.11 ug/L

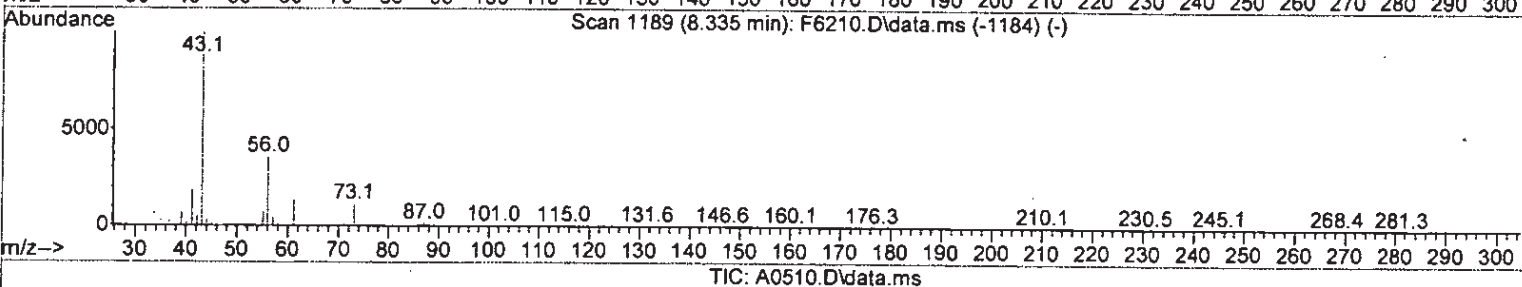
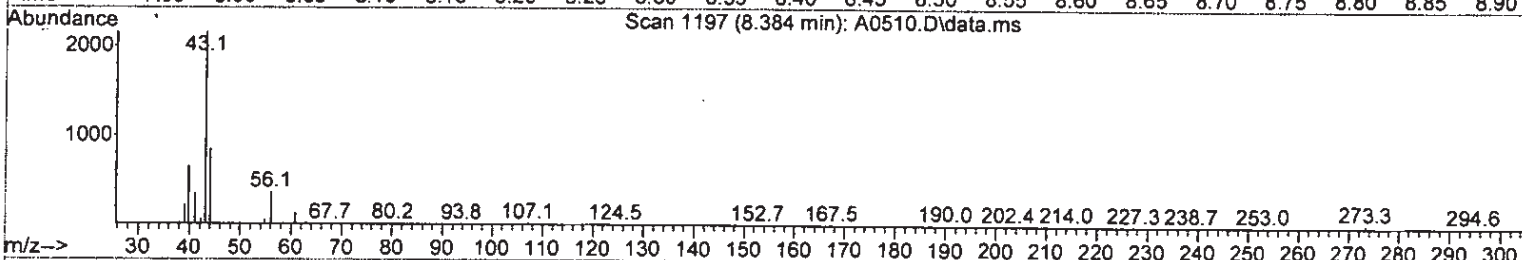
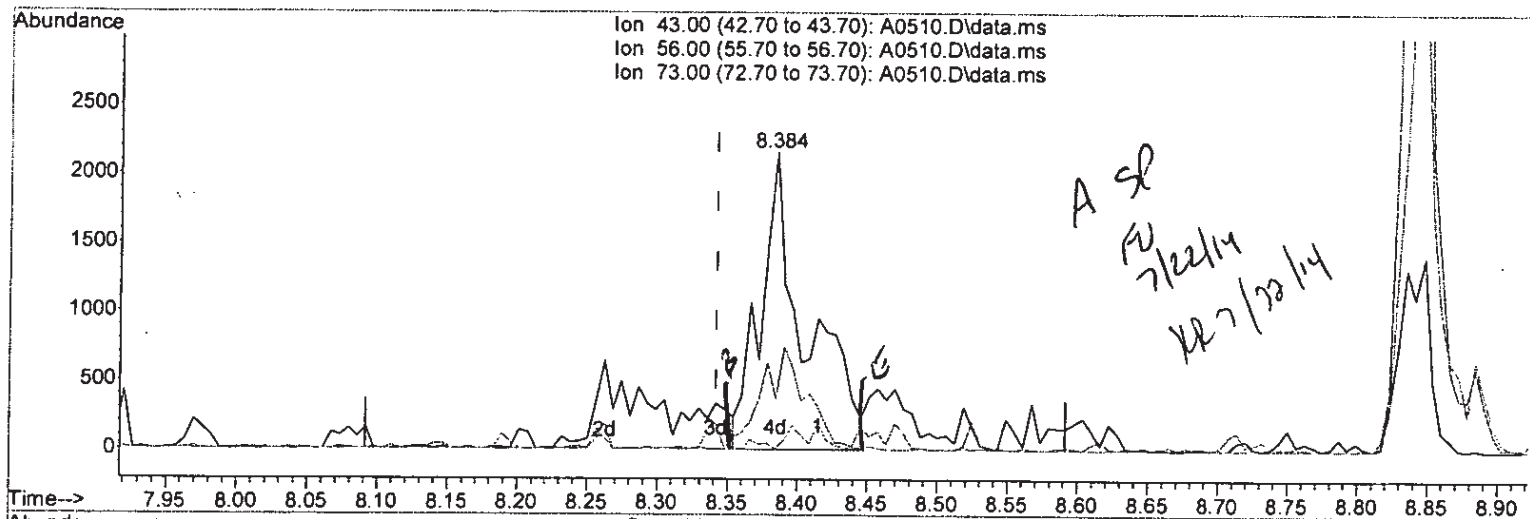
response 1456

Ion	Exp%	Act%
43.00	100	100
56.00	38.80	31.97
73.00	14.00	20.08
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
 Acq On : 21 Jul 2014 11:52 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:05:34 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(76) N-Butyl Acetate

8.384min (+0.043) 0.37 ug/L m

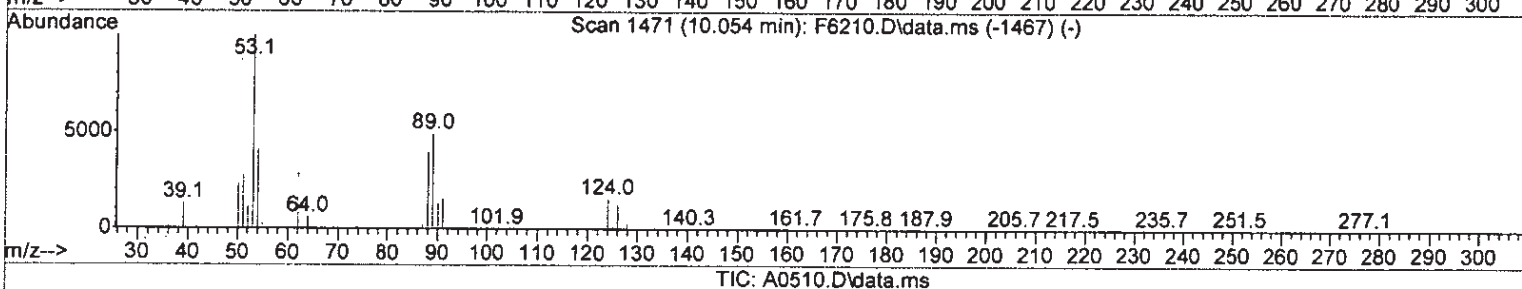
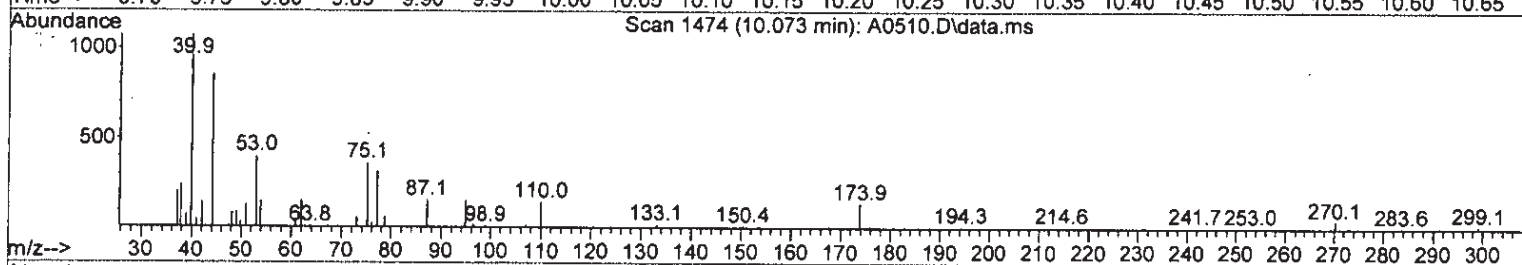
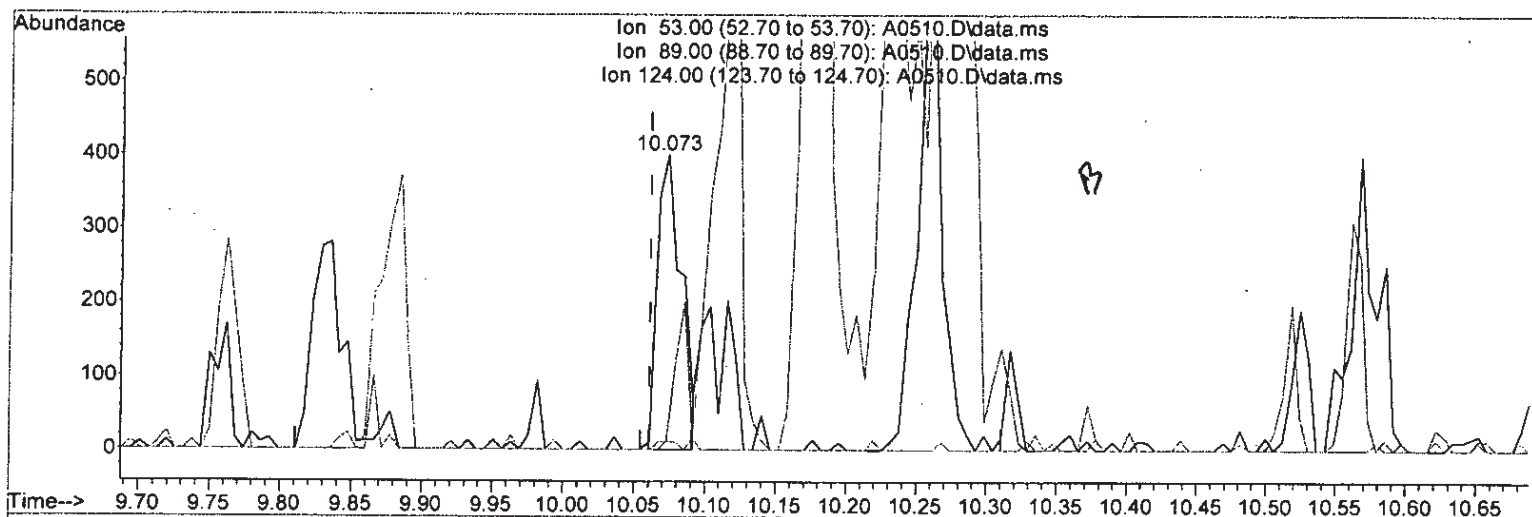
response 4816

Ion	Exp%	Act%
43.00	100	100
56.00	38.80	16.89#
73.00	14.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:24:48 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



(90) trans-1,4-Dichloro-2-Butene

10.073min (+0.012) 0.22 ug/L

response 477

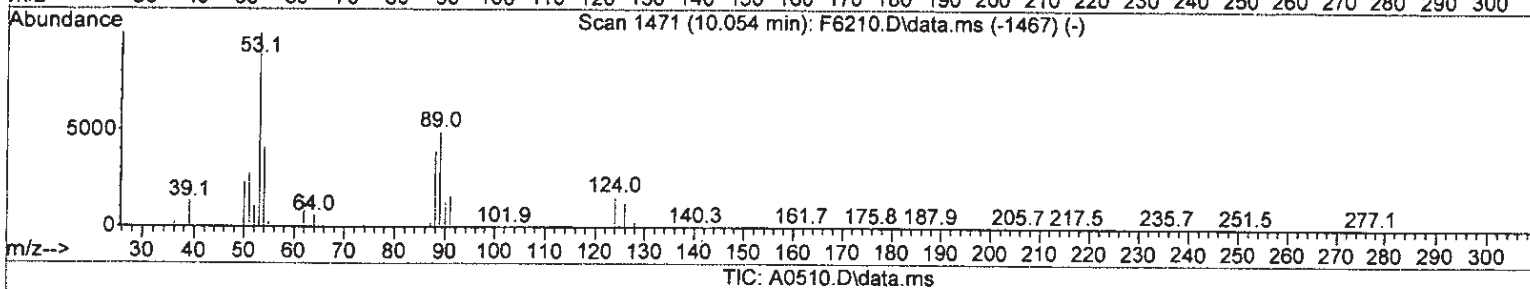
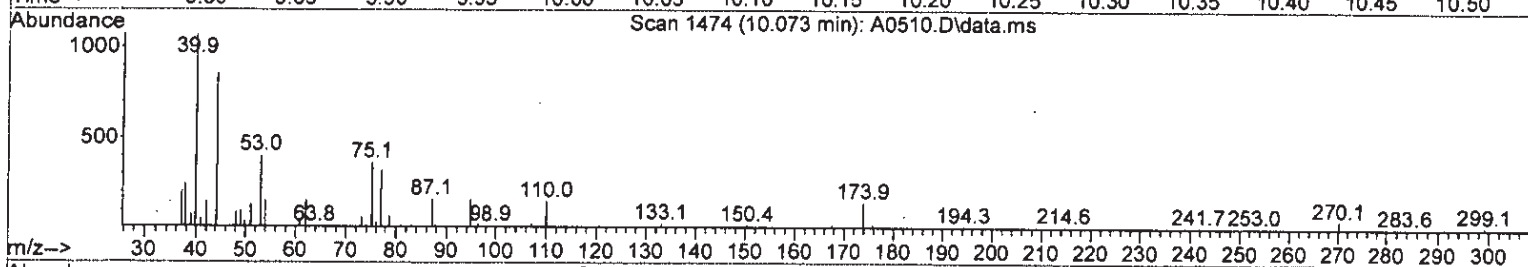
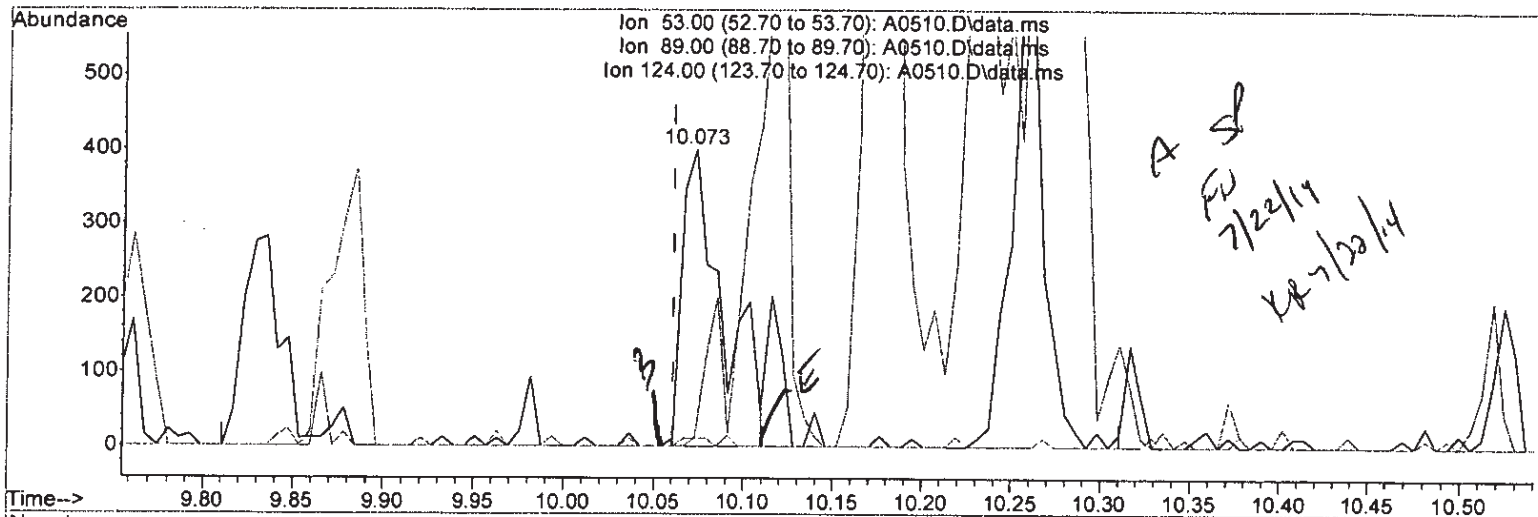
Ion	Exp%	Act%
53.00	100	100
89.00	57.40	3.00#
124.00	20.90	2.75
0.00	0.00	0.00

00191

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
 Acq On : 21 Jul 2014 11:52 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:24:48 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(90) trans-1,4-Dichloro-2-Butene

10.073min (+0.012) 0.29 ug/L m

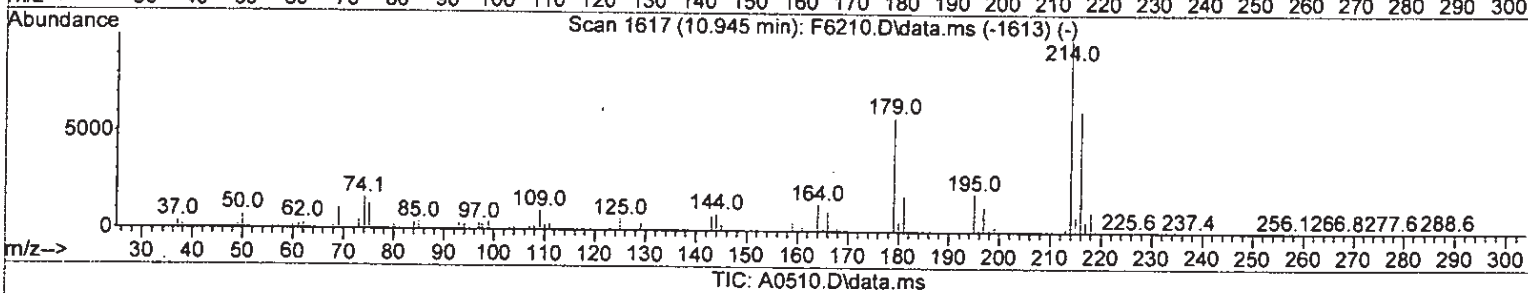
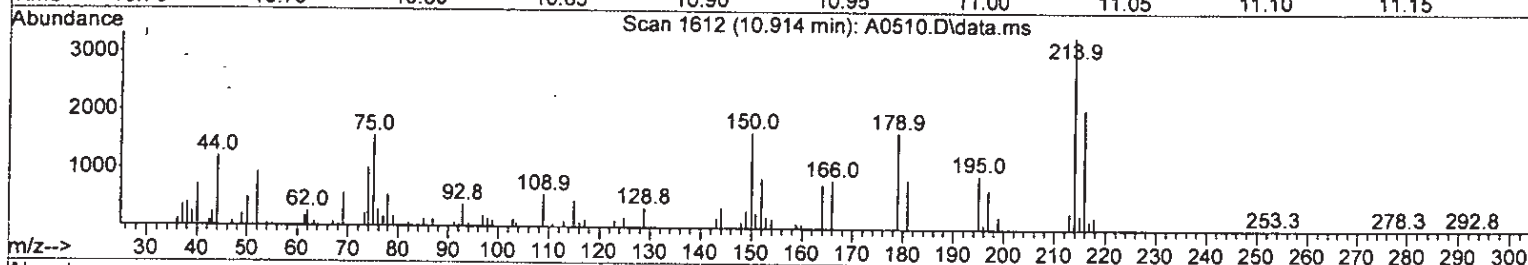
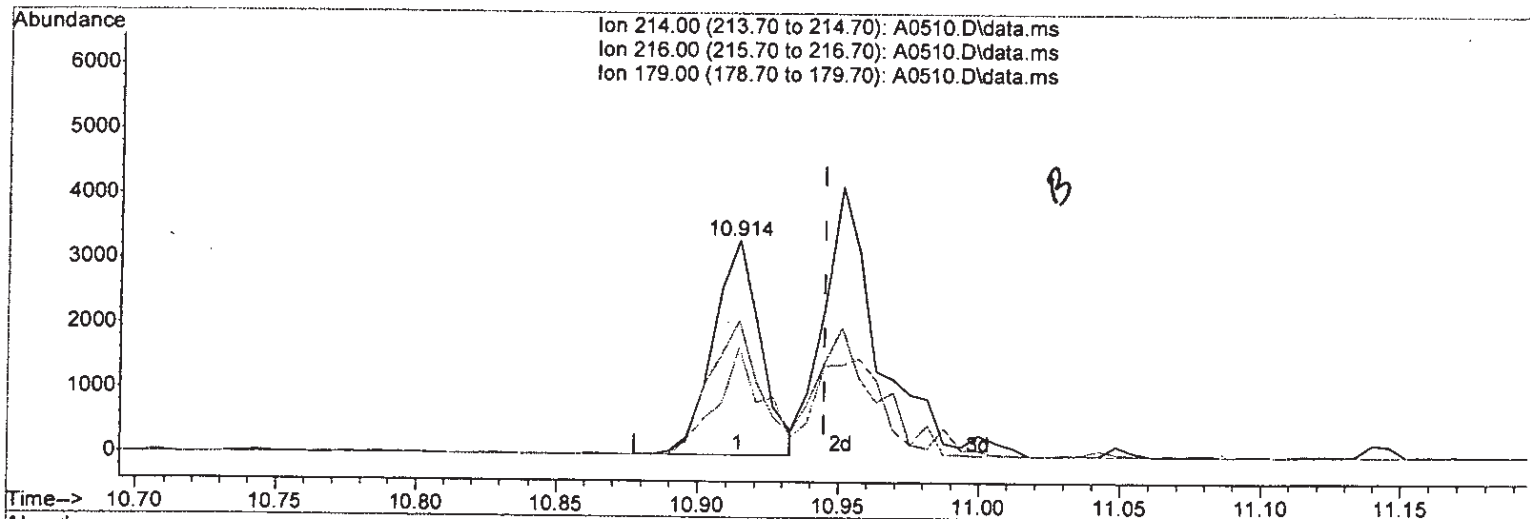
response 627

Ion	Exp%	Act%
53.00	100	100
89.00	57.40	3.00#
124.00	20.90	2.75
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
 Acq On : 21 Jul 2014 11:52 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:05:34 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(108) 2,5-Dichlorobenzotrifluoride

10.914min (-0.030) 0.38 ug/L

response 3819

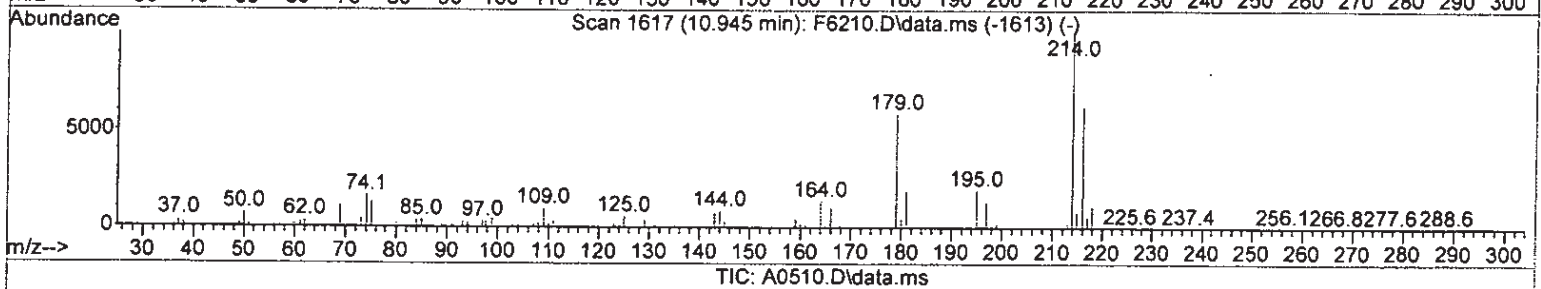
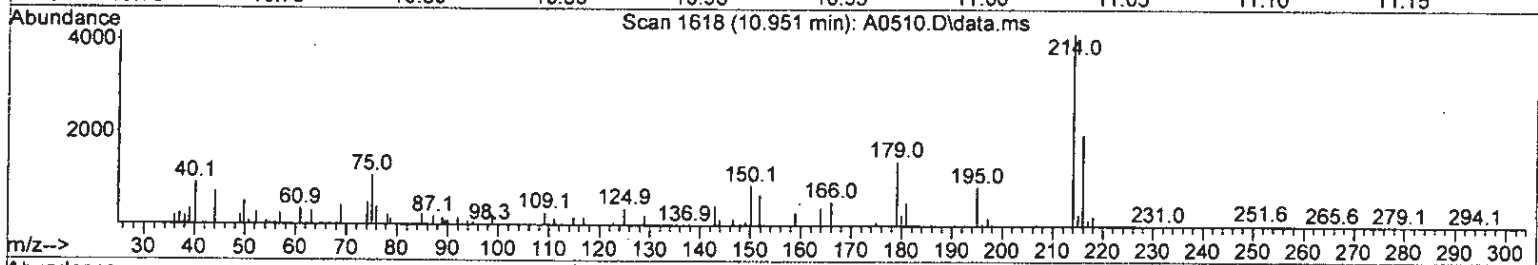
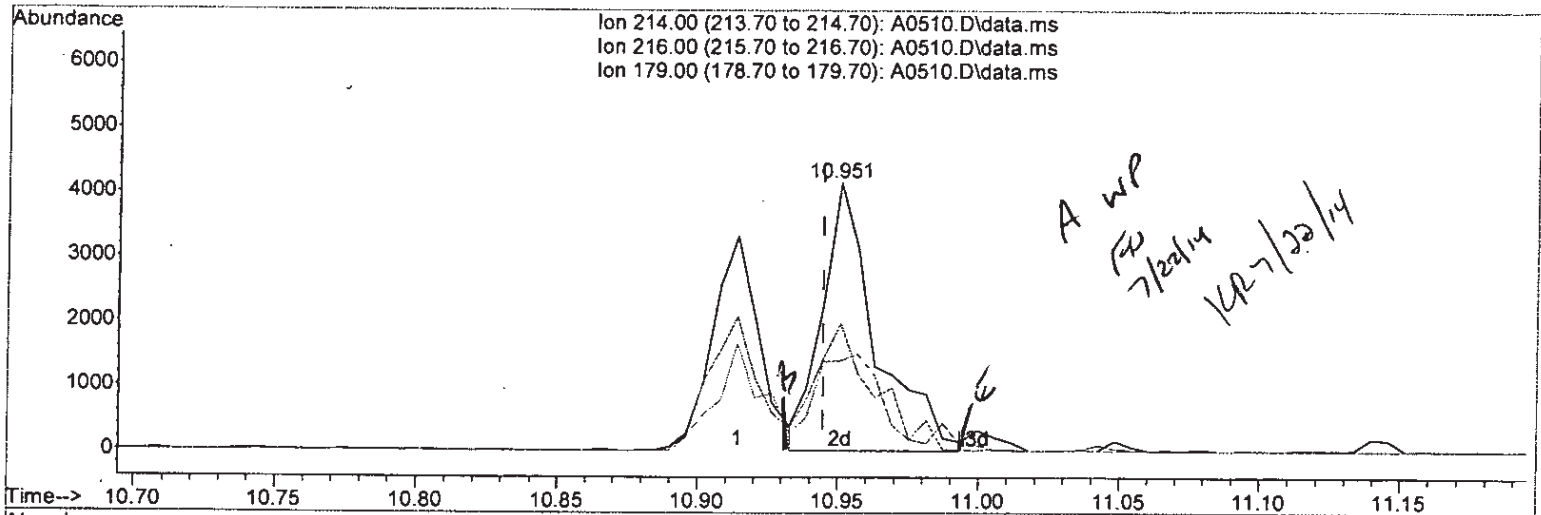
Ion	Exp%	Act%
214.00	100	100
216.00	62.10	62.51
179.00	62.80	49.94
0.00	0.00	0.00

00193

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
 Acq On : 21 Jul 2014 11:52 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:05:34 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(108) 2,5-Dichlorobenzotrifluoride

10.951min (+0.006) 0.55 ug/L m

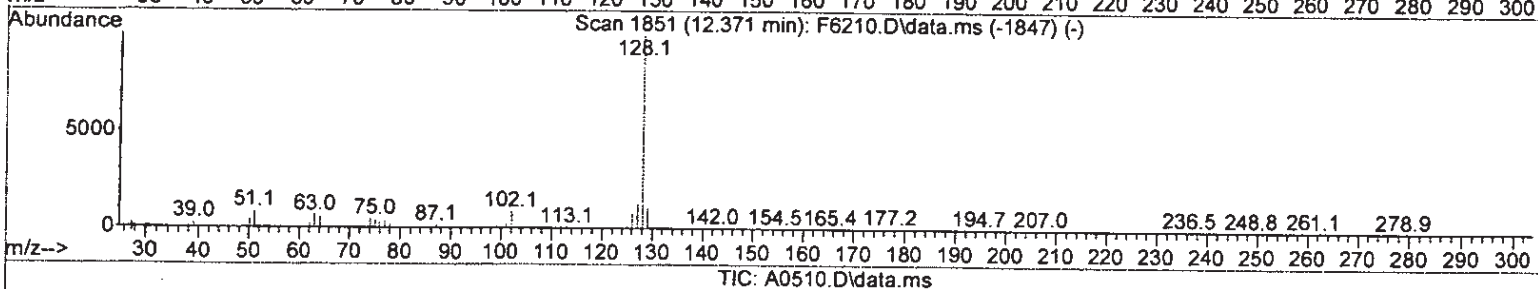
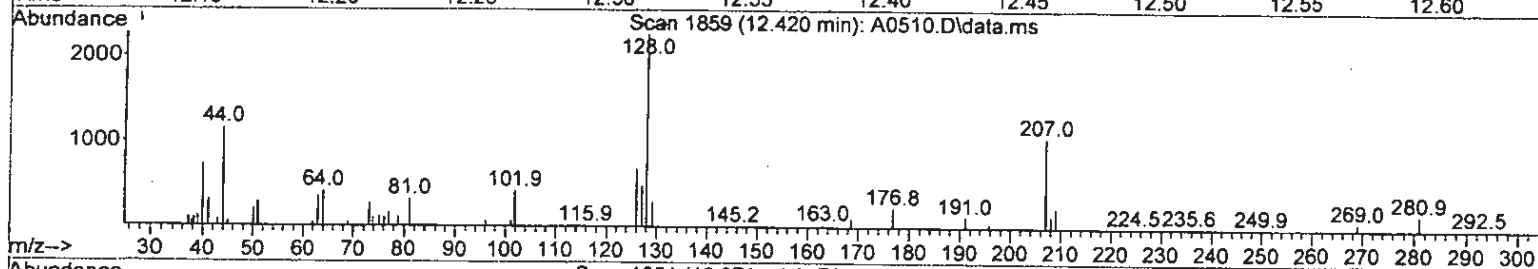
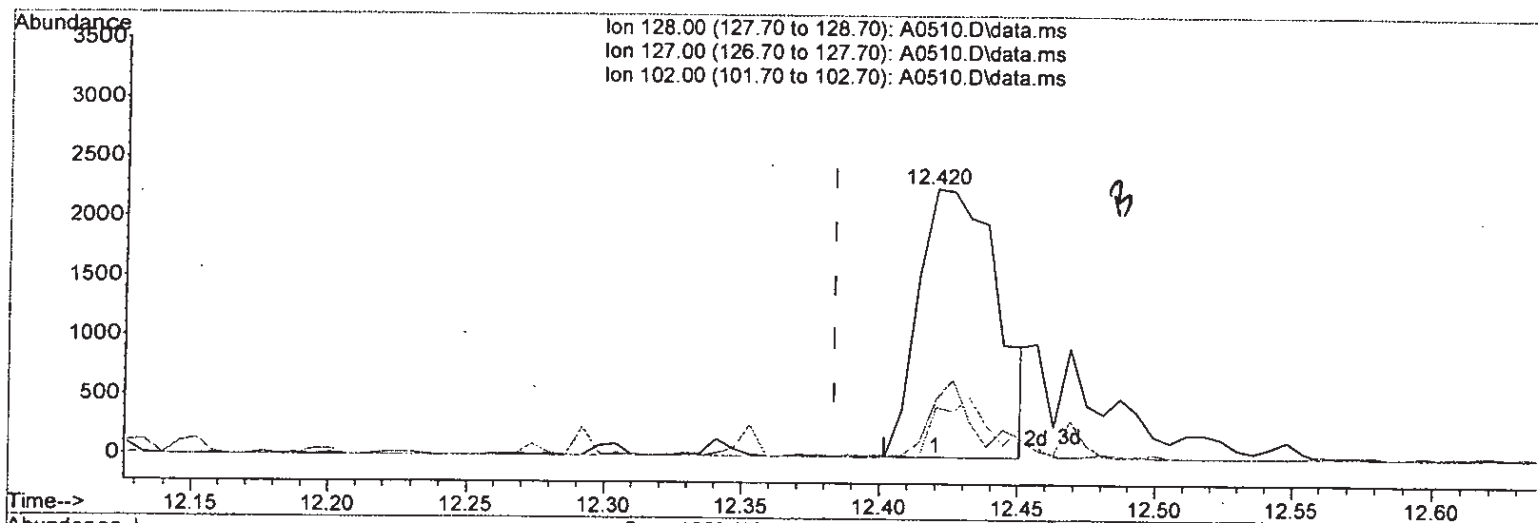
response 5531

Ion	Exp%	Act%
214.00	100	100
216.00	62.10	47.40
179.00	62.80	33.56#
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:05:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



(117) Naphthalen

12.420min (+0.037) 0.28 ug/L

response 4495

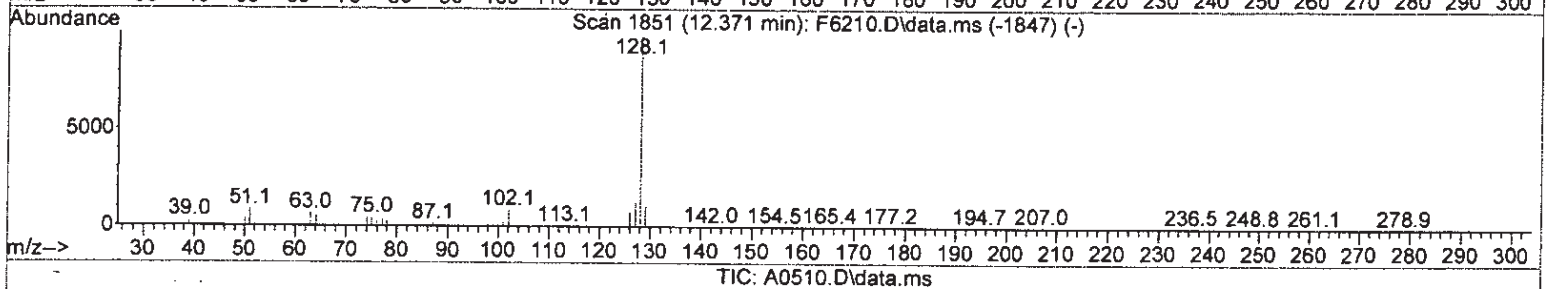
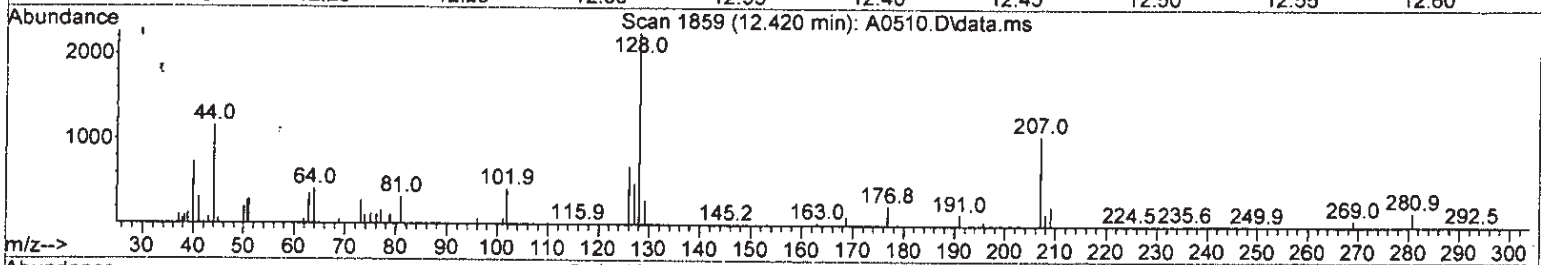
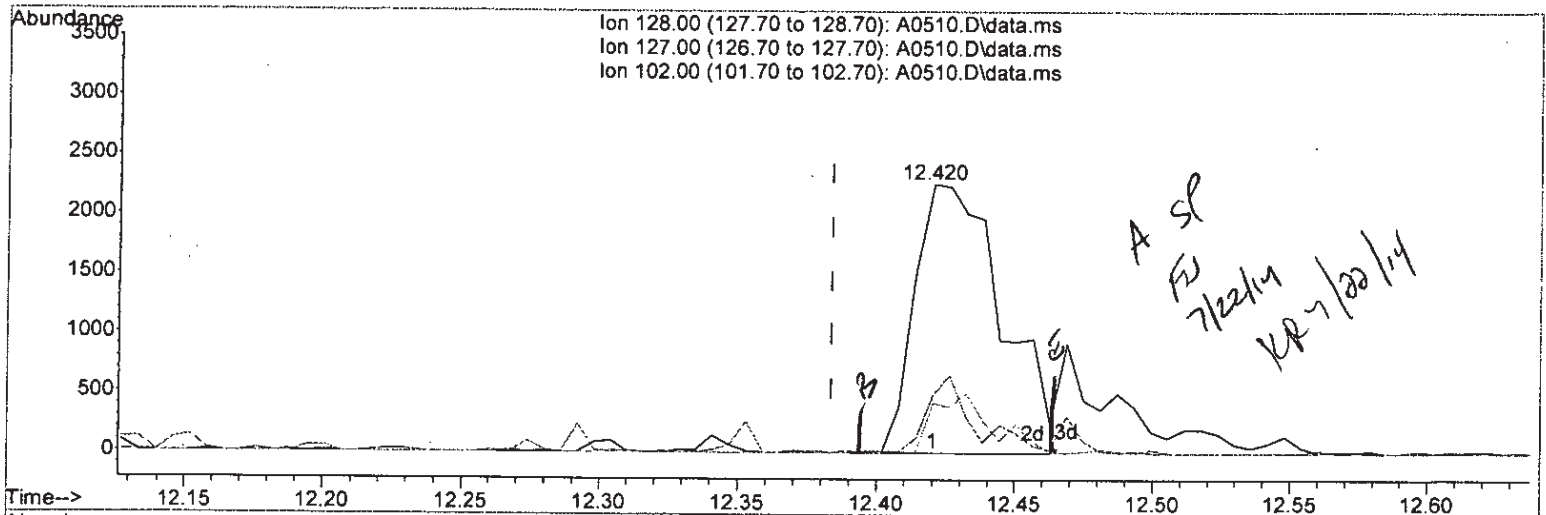
Ion	Exp%	Act%
128.00	100	100
127.00	12.90	21.36
102.00	8.70	18.53
0.00	0.00	0.00

00155

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
 Acq On : 21 Jul 2014 11:52 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:05:34 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(117) Naphthalen

12.420min (+0.037) 0.31 ug/L m

response 4940

Ion	Exp%	Act%
128.00	100	100
127.00	12.90	21.36
102.00	8.70	18.53
0.00	0.00	0.00

00196

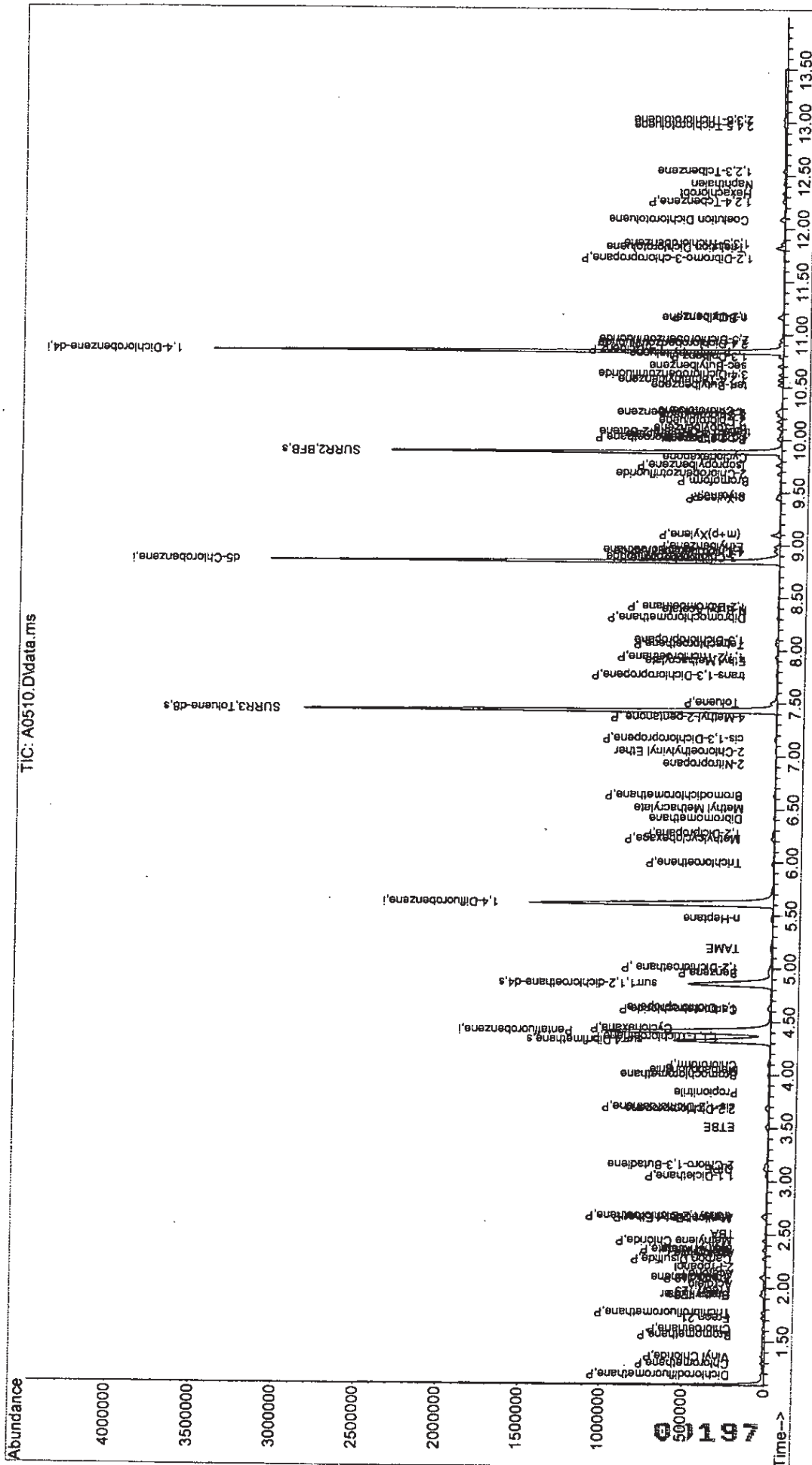
(QT Reviewed)

```

Sample      : 0.5 FPB STD
Data File   : I:\ACQUDATA\msvoa10\data\072114\A0510.D
Acq On      : 21 Jul 2014 11:52 am
Operator     : F.NAEGLER
InstName     : MSVOA10
Misc         :
Vial: 3

```

Quant Time: Jul 21 16:13:30 2014
Quant Method : I:\ACQDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



Sample : 1.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
 Acq On : 21 Jul 2014 12:22 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 16:17:40 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration

FW
7/22/14

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) Pentafluorobenzene	4.415	168	915629	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1383652	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1274162	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	647214	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4, Dibromomethane	4.324	113	450996	54.69	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 109.38%			
48) surr1, 1,2-dichloroetha...	4.854	65	480346	58.77	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 117.54%			
65) SURR3, Toluene-d8	7.427	98	1613221	50.65	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 101.30%			
70) SURR2, BFB	9.878	95	623933	49.75	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.50%			
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.190	85	10045	1.17	ug/L	92
3) Chloromethane	1.294	50	12631	1.19	ug/L	90
4) Vinyl Chloride	1.361	62	12787	1.15	ug/L	91
5) Bromomethane	1.556	94	2393	0.60	ug/L #	60
6) Chloroethane	1.611	64	6031	1.00	ug/L	94
7) Freon 21	1.721	67	17075	1.06	ug/L	99
8) Trichlorofluoromethane	1.770	101	13610	1.14	ug/L	96
9) Diethyl Ether	1.934	59	7605	1.11	ug/L #	73
10) Freon 123a	1.928	67	10928	1.05	ug/L	95
11) Freon 123	1.965	83	12215	1.11	ug/L	92
12) Acrolein	2.026	56	5898	5.55	ug/L	84
13) 1,1-Dicethene	2.099	96	6172	1.01	ug/L #	83
14) Freon 113	2.093	101	8847	1.27	ug/L	98
15) Acetone	2.123	43	3665m	1.78	ug/L	
16) 2-Propanol	2.202	45	8002m	22.39	ug/L	
17) Iodomethane	2.215	142	1441	0.23	ug/L	99
18) Carbon Disulfide	2.276	76	27756	1.07	ug/L	96
19) Acetonitrile	2.324	40	1477	5.33	ug/L #	62
20) Allyl Chloride	2.349	76	3909	0.89	ug/L #	41
21) Methyl Acetate	2.361	43	5178	1.17	ug/L	83
22) Methylene Chloride	2.440	84	9255	1.01	ug/L #	70
23) TBA	2.507	59	8904	15.81	ug/L	60
24) Acrylonitrile	2.647	53	13108	5.81	ug/L	85
25) Methyl-t-Butyl Ether	2.660	73	17301	0.89	ug/L	95
26) trans-1,2-Dichloroethene	2.672	96	7861	1.01	ug/L #	85
28) 1,1-Dicethane	3.044	63	17296	1.08	ug/L	88
29) Vinyl Acetate	3.111	86	664m	0.59	ug/L	
30) DIPE	3.111	45	37861	1.17	ug/L	83
31) 2-Chloro-1,3-Butadiene	3.147	53	15829	1.03	ug/L	85
32) ETBE	3.513	59	24603m	0.90	ug/L	
33) 2,2-Dichloropropane	3.678	77	9728	0.83	ug/L	81
34) cis-1,2-Dichloroethene	3.690	96	8403	0.96	ug/L #	79
36) Propionitrile	3.824	54	3852m	5.30	ug/L	
37) Bromochloromethane	3.989	130	6065	1.18	ug/L	93
38) Methacrylonitrile	4.007	67	1507m	0.66	ug/L	

Sample : 1.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
 Acq On : 21 Jul 2014 12:22 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 16:17:40 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) Tetrahydrofuran	4.098	42	1879	1.12	ug/L #	48
40) Chloroform	4.098	83	15889	1.11	ug/L	85
41) 1,1,1-Trichloroethane	4.354	97	12354	0.99	ug/L	85
42) TAME	5.183	73	17045m	0.83	ug/L	
44) Cyclohexane	4.446	41	12448	1.21	ug/L	95
46) Carbontetrachloride	4.623	121	3532m	0.95	ug/L	
47) 1,1-Dichloropropene	4.629	75	10013	0.89	ug/L	97
49) Benzene	4.970	78	33493	0.94	ug/L	89
50) 1,2-Dichloroethane	4.994	62	11541	0.98	ug/L	79
51) Iso-Butyl Alcohol	4.885	43	4685m	16.14	ug/L	
52) n-Heptane	5.458	43	12917	1.29	ug/L #	56
53) 1-Butanol	6.086	56	2304m	16.96	ug/L	
54) Trichloroethene	5.976	130	9434	0.98	ug/L #	84
55) Methylcyclohexane	6.220	55	12672	1.01	ug/L	92
56) 1,2-Dichloropropane	6.269	63	9083	0.89	ug/L	85
57) Dibromomethane	6.409	93	4602	0.98	ug/L #	68
58) 1,4-Dioxane	6.482	88	914m	18.22	ug/L	
59) Methyl Methacrylate	6.494	69	3956m	0.96	ug/L	
60) Bromodichloromethane	6.622	83	10588	0.94	ug/L	92
61) 2-Nitropropane	6.903	41	3489m	2.18	ug/L	
62) 2-Chloroethylvinyl Ether	7.037	63	3169m	0.67	ug/L	
63) cis-1,3-Dichloropropene	7.159	75	10071m	0.74	ug/L	
64) 4-Methyl-2-pentanone	7.360	43	6033m	0.88	ug/L	
66) Toluene	7.506	91	35842	0.93	ug/L	98
67) trans-1,3-Dichloropropene	7.762	75	7473	0.67	ug/L	94
68) Ethyl Methacrylate	7.902	69	6769m	0.79	ug/L	
69) 1,1,2-Trichloroethane	7.933	97	6529	0.98	ug/L	94
72) Tetrachloroethene	8.061	164	7340	0.93	ug/L	89
73) 2-Hexanone	8.262	43	3902m	0.78	ug/L	
74) 1,3-Dichloropropane	8.098	76	10780	0.92	ug/L #	72
75) Dibromochloromethane	8.311	129	6879	0.82	ug/L	88
76) N-Butyl Acetate	8.360	43	10618m	0.81	ug/L	
77) 1,2-Dibromoethane	8.408	107	5343	0.78	ug/L	92
78) 3-Chlorobenzotrifluoride	8.884	180	12992	0.89	ug/L	91
79) Chlorobenzene	8.872	112	24259	0.92	ug/L	88
80) 4-Chlorobenzotrifluoride	8.939	180	11639	0.86	ug/L	88
81) 1,1,1,2-Tetrachloroethane	8.951	131	7585	0.79	ug/L #	81
82) Ethylbenzene	8.988	106	11297	0.83	ug/L #	81
83) (m+p)Xylene	9.091	106	27530	1.65	ug/L #	81
84) o-Xylene	9.439	106	12139	0.72	ug/L	89
85) Styrene	9.457	104	21611	0.76	ug/L	92
86) Bromoform	9.609	173	3468	0.69	ug/L	95
87) 2-Chlorobenzotrifluoride	9.670	180	11933	0.82	ug/L	93
88) Isopropylbenzene	9.762	105	35053	0.85	ug/L	98
89) Cyclohexanone	9.829	55	19833	19.92	ug/L	98
90) trans-1,4-Dichloro-2-B...	10.073	53	1403m	0.64	ug/L	
92) 1,1,2,2-Tetrachloroethane	10.012	83	6760	0.91	ug/L	88
93) Bromobenzene	10.012	156	9602	0.89	ug/L #	83
94) 1,2,3-Trichloropropane	10.048	110	1951	0.99	ug/L #	57
95) n-Propylbenzene	10.109	91	38328	0.87	ug/L	97
96) 2-Chlorotoluene	10.176	91	23686	0.88	ug/L	93
97) 3-Chlorotoluene	10.231	91	24855	0.91	ug/L	95

Sample : 1.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
 Acq On : 21 Jul 2014 12:22 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 16:17:40 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration

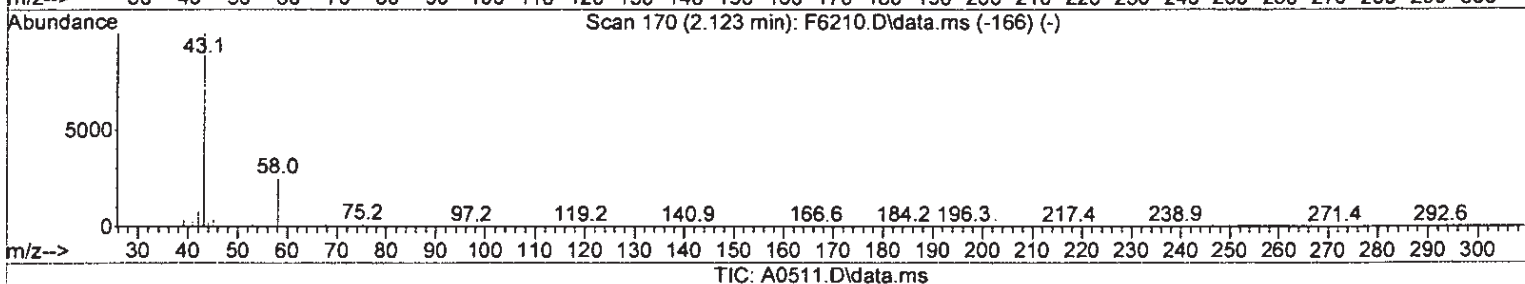
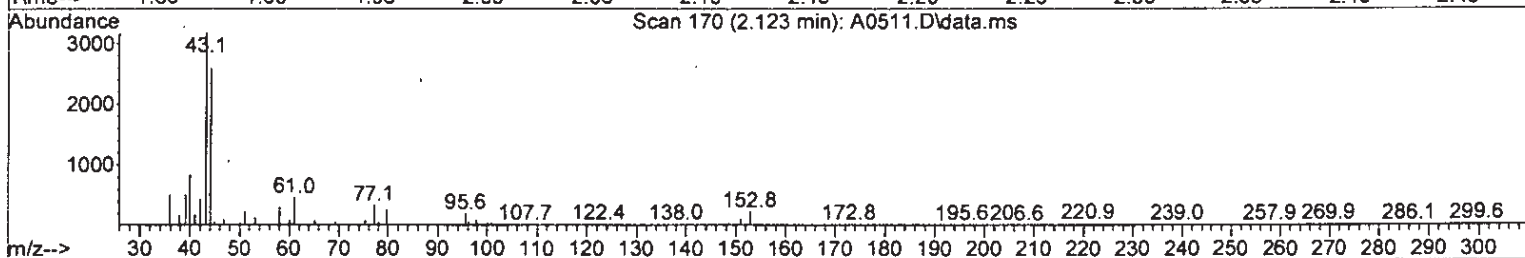
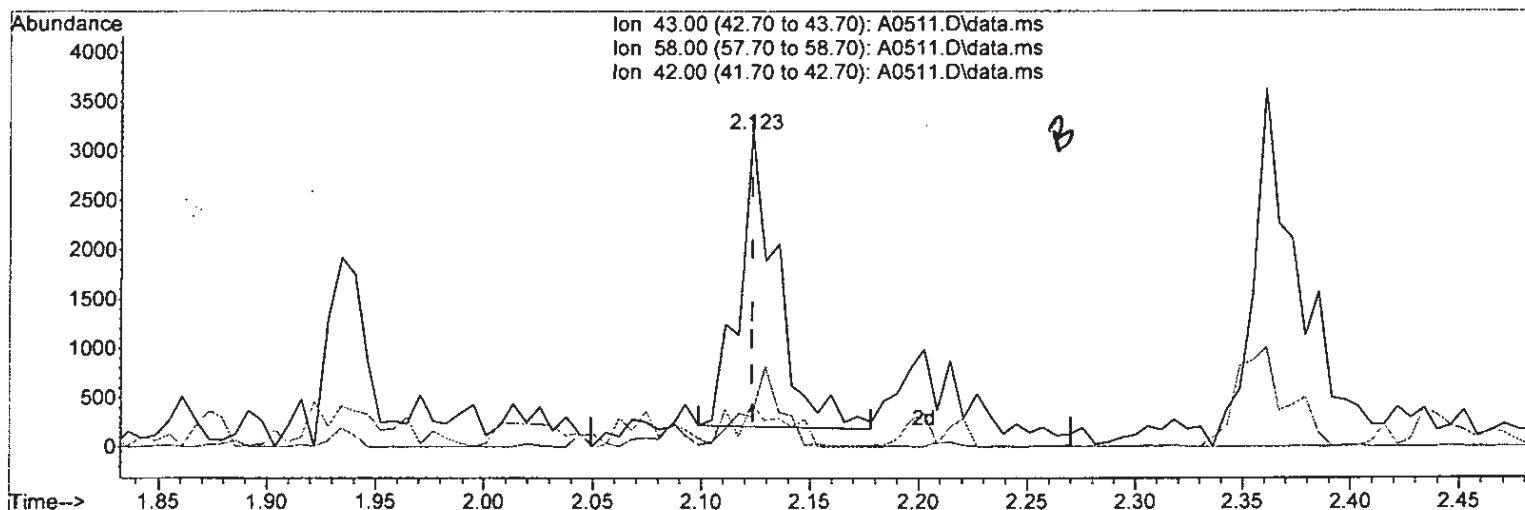
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98) 4-Chlorotoluene	10.268	91	30511	0.93	ug/L	89
99) 1,3,5-Trimethylbenzene	10.262	105	27724	0.86	ug/L	93
100) tert-Butylbenzene	10.518	119	23080	0.86	ug/L	98
101) 1,2,4-Trimethylbenzene	10.567	105	26412	0.81	ug/L	83
102) 3,4-Dichlorobenzotrifl...	10.621	214	8746	0.90	ug/L	96
103) sec-Butylbenzene	10.701	105	31710	0.86	ug/L	97
104) p-Isopropyltoluene	10.823	119	26791	0.83	ug/L	91
105) 1,3-Dclbenz	10.786	146	17557	0.88	ug/L	85
106) 1,4-Dclbenz	10.853	146	18590	0.92	ug/L	95
107) 2,4-Dichlorobenzotrifl...	10.914	214	7303	0.84	ug/L	92
108) 2,5-Dichlorobenzotrifl...	10.945	214	8960	0.90	ug/L	80
109) n-Butylbenzene	11.152	91	23029	0.83	ug/L	90
110) 1,2-Dclbenz	11.158	146	17451	0.96	ug/L	96
111) 1,2-Dibromo-3-chloropr...	11.719	157	856	0.75	ug/L #	78
112) Trielution Dichlorotol...	11.816	125	39746	2.69	ug/L	96
113) 1,3,5-Trichlorobenzene	11.853	180	11246	0.91	ug/L	85
114) Coelution Dichlorotoluene	12.078	125	28070	1.87	ug/L	93
115) 1,2,4-Tcbenzene	12.249	180	9437	0.93	ug/L	95
116) Hexachlorobt	12.335	225	4054	0.84	ug/L	99
117) Naphthalen	12.414	128	14291	0.92	ug/L	88
118) 1,2,3-Tclbenzene	12.536	180	6572	0.95	ug/L	92
119) 2,4,5-Trichlorotoluene	12.956	159	3474	0.92	ug/L	90
120) 2,3,6-Trichlorotoluene	13.023	159	4458	1.19	ug/L	88

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

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



(15) Acetone (P)

2.123min (-0.000) 1.77 ug/L

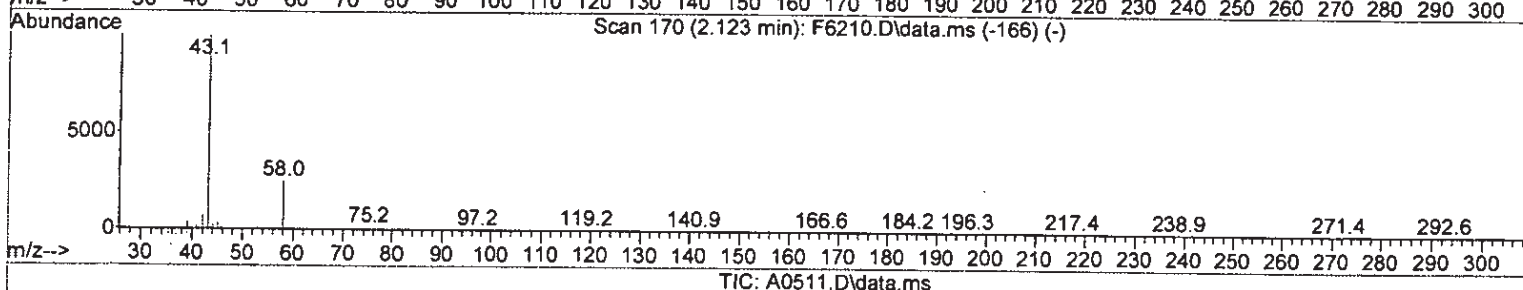
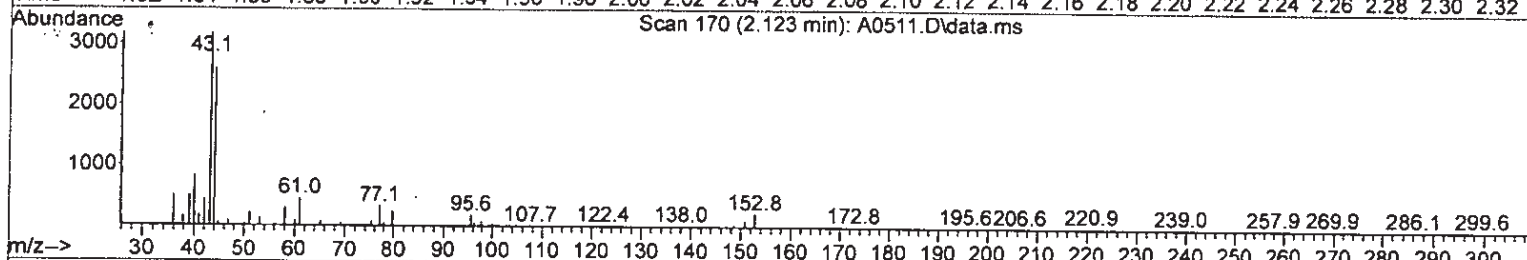
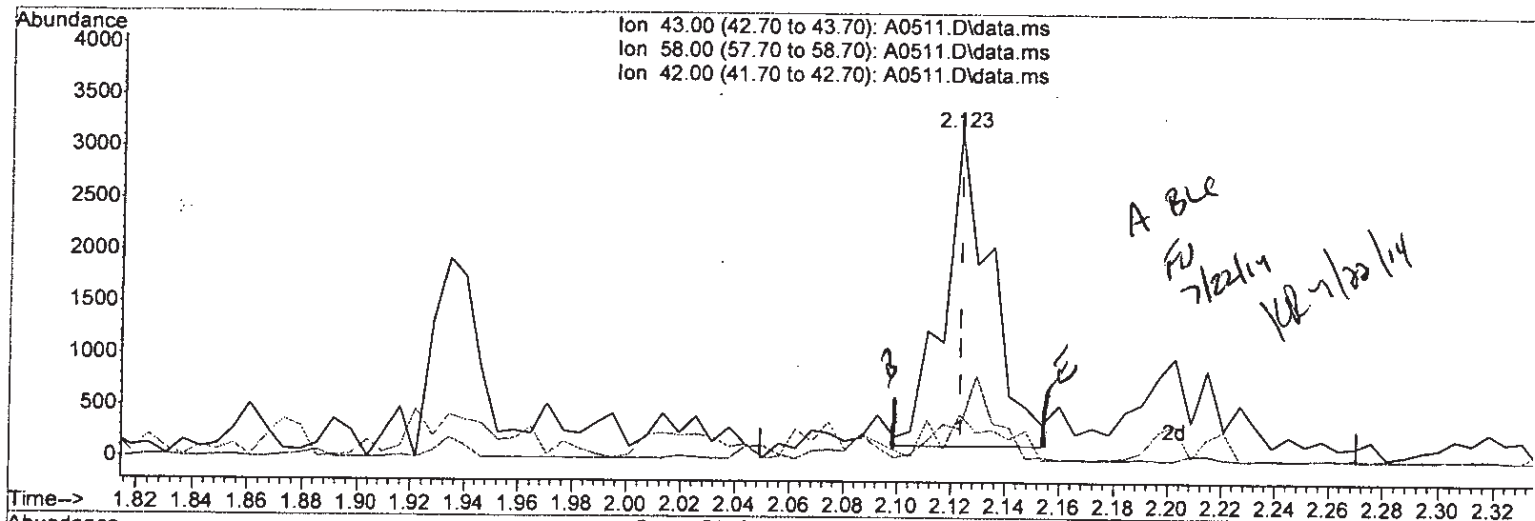
response 3648

Ion	Exp%	Act%
43.00	100	100
58.00	27.20	9.56
42.00	7.00	13.82
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
 Acq On : 21 Jul 2014 12:22 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:35:51 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(15) Acetone (P)

2.123min (-0.000) 1.78 ug/L m

response 3665

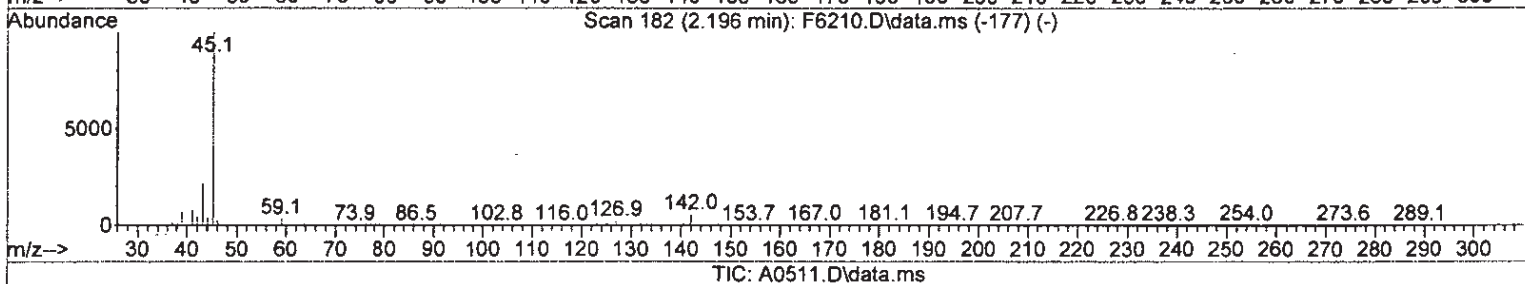
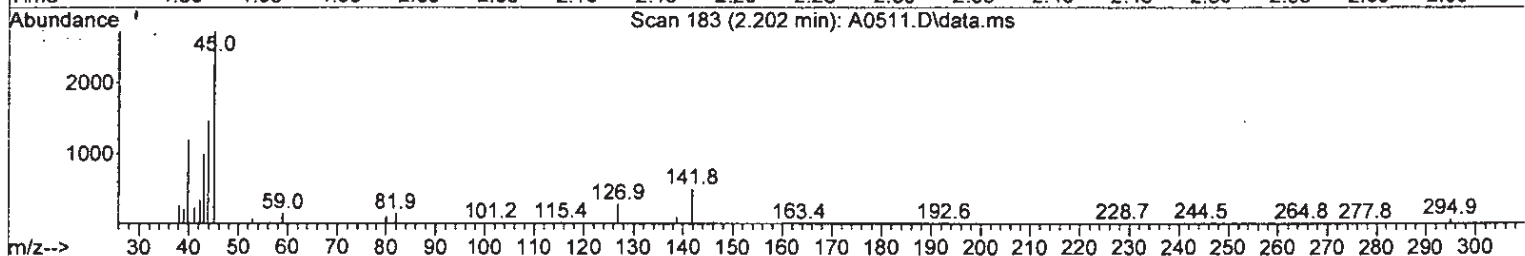
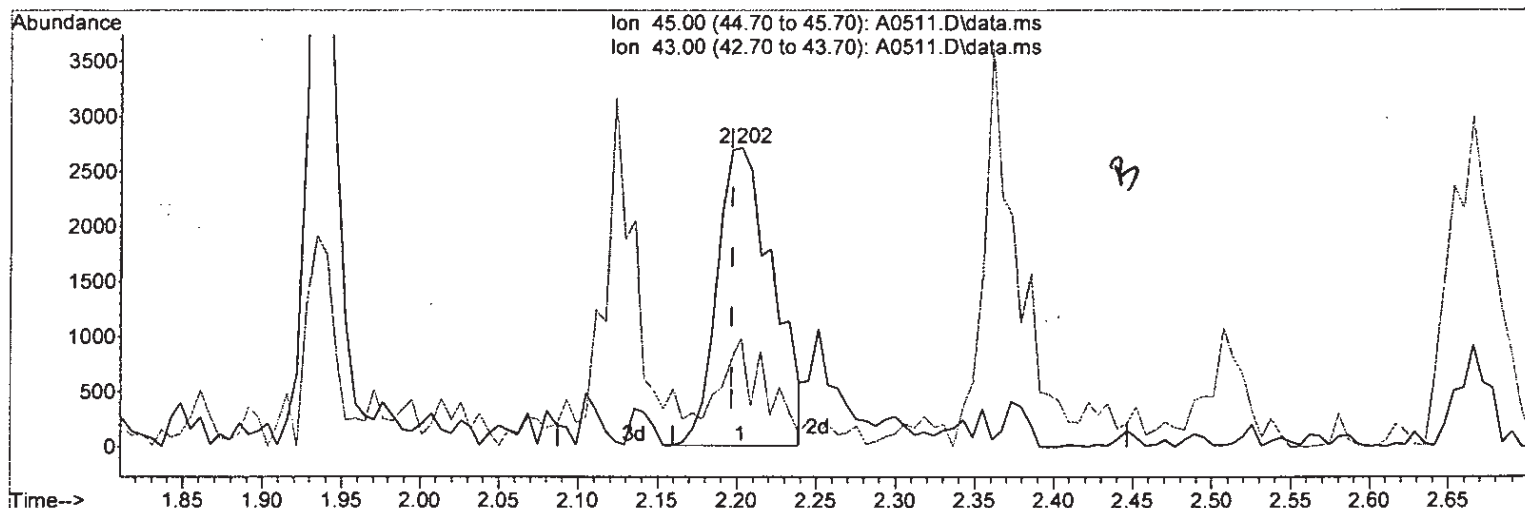
Ion	Exp%	Act%
43.00	100	100
58.00	27.20	9.56
42.00	7.00	13.82
0.00	0.00	0.00

00202

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



(16) 2-Propanol

2.202min (+0.006) 18.33 ug/L

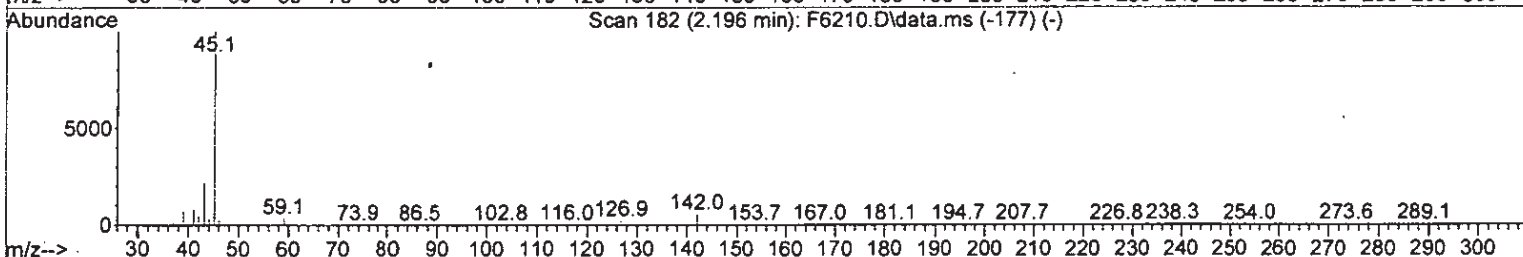
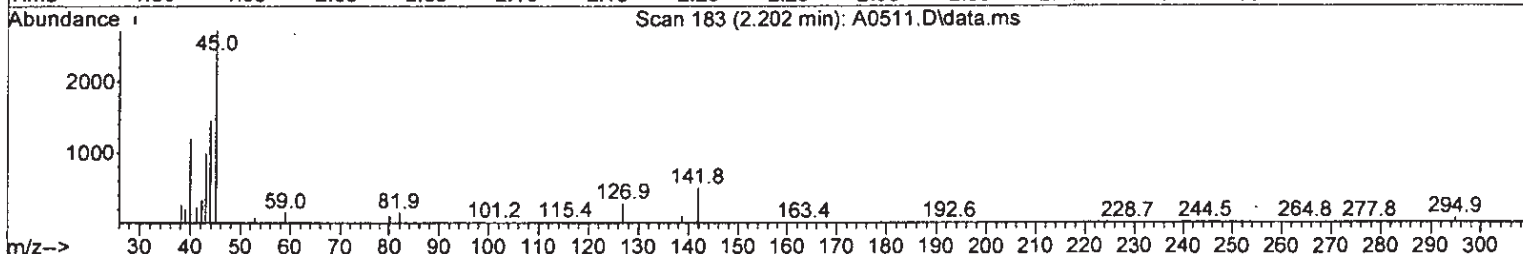
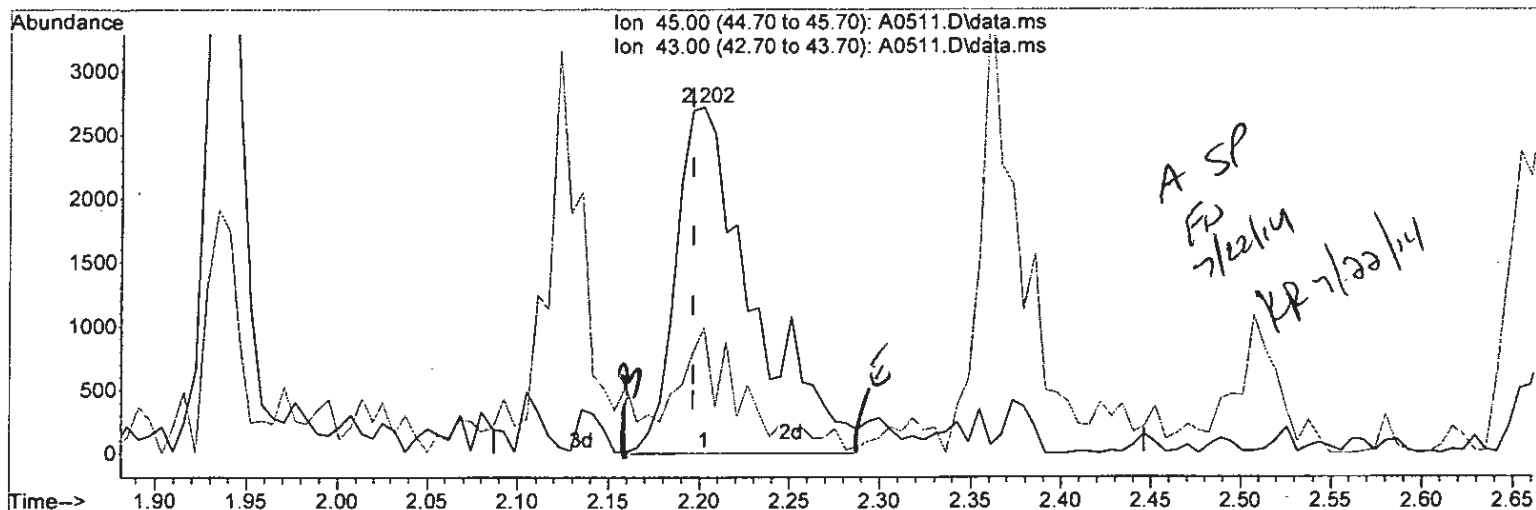
response 6551

Ion	Exp%	Act%
45.00	100	100
43.00	22.80	36.36
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
 Acq On : 21 Jul 2014 12:22 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:35:51 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0511.D\data.ms

(16) 2-Propanol

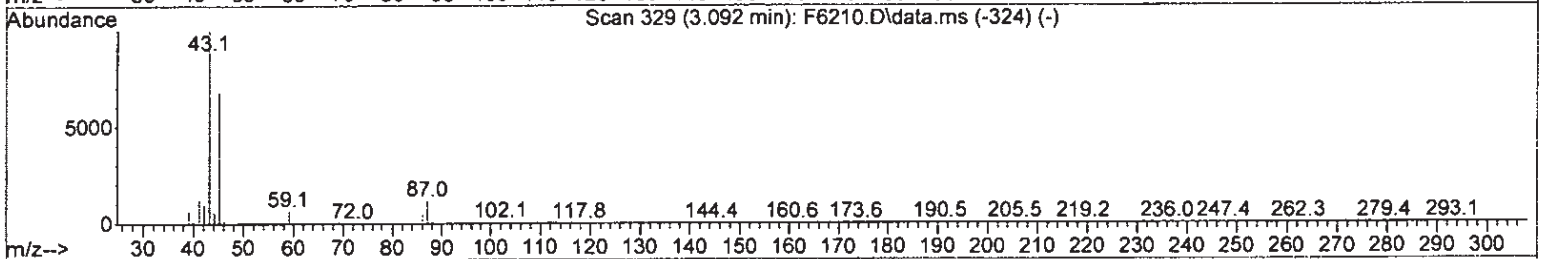
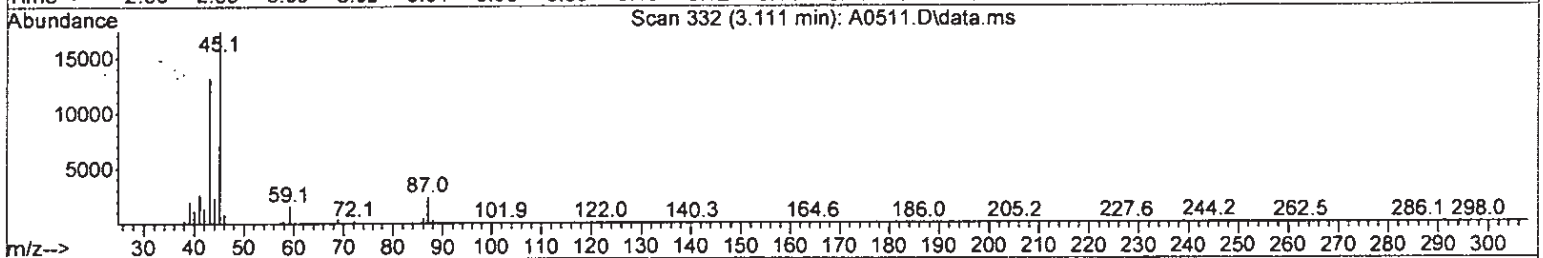
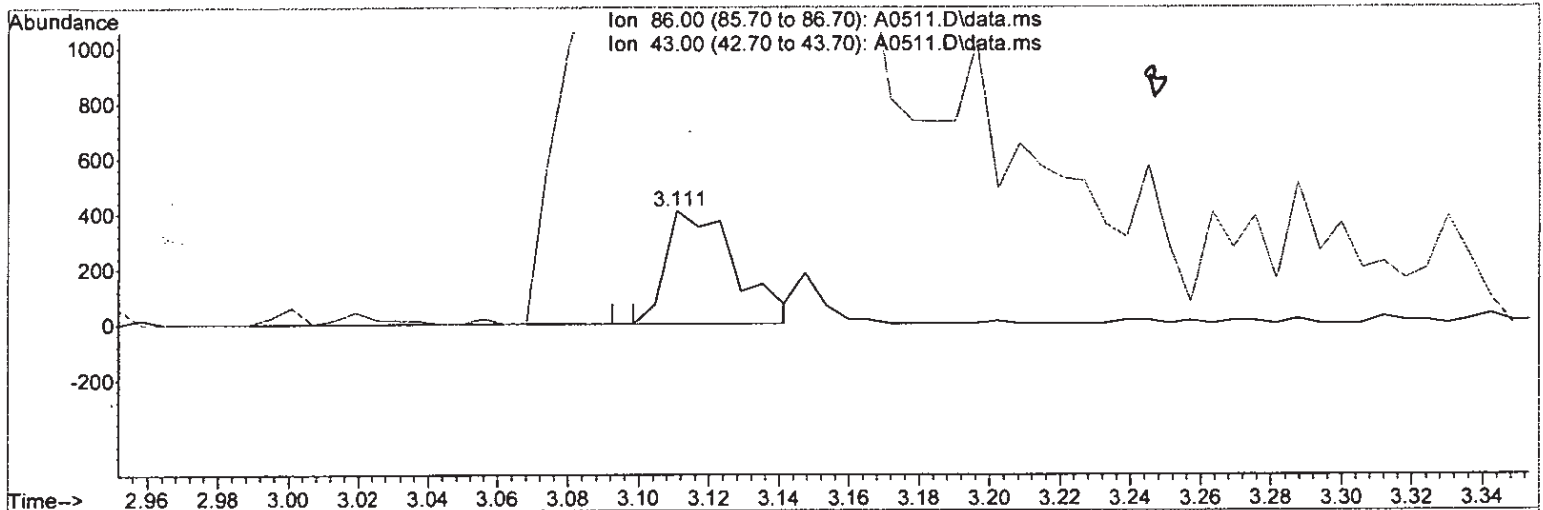
2.202min (+0.006) 22.39 ug/L m

response 8002

Ion	Exp%	Act%
45.00	100	100
43.00	22.80	36.36
0.00	0.00	0.00
0.00	0.00	0.00

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:20:37 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



TIC: A0511.D\data.ms

(29) Vinyl Acetate

3.111min (+0.018) 0.50 ug/L

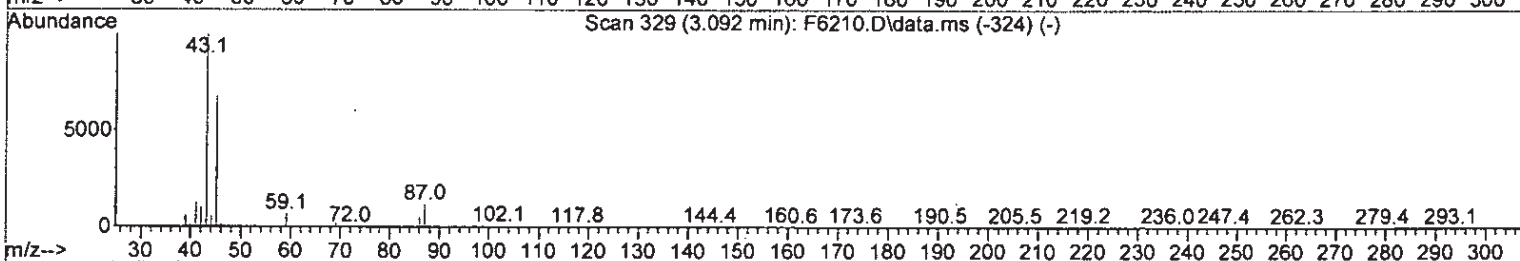
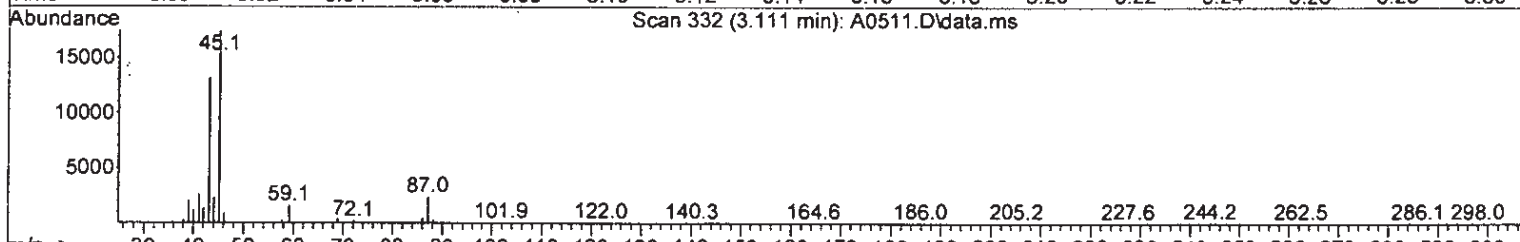
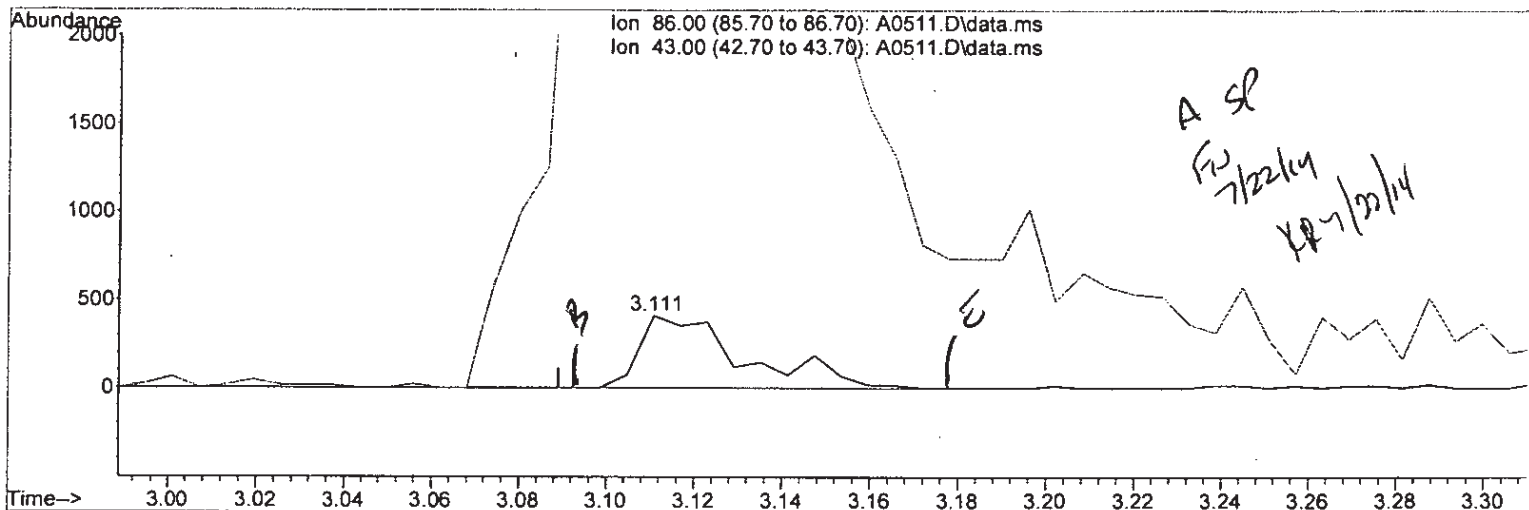
response 562

Ion	Exp%	Act%
86.00	100	100
43.00	1729.40	3219.80#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
 Acq On : 21 Jul 2014 12:22 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 15:20:37 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0511.D\data.ms

(29) Vinyl Acetate

3.111min (+0.018) 0.59 ug/L m

response 664

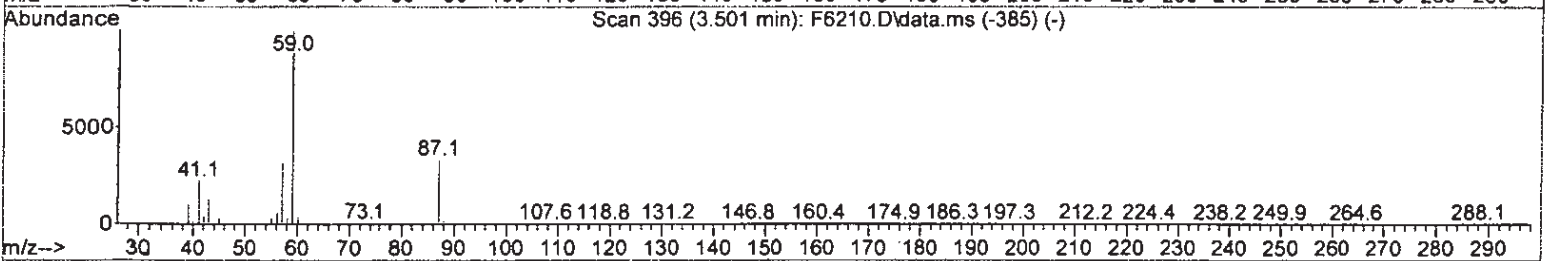
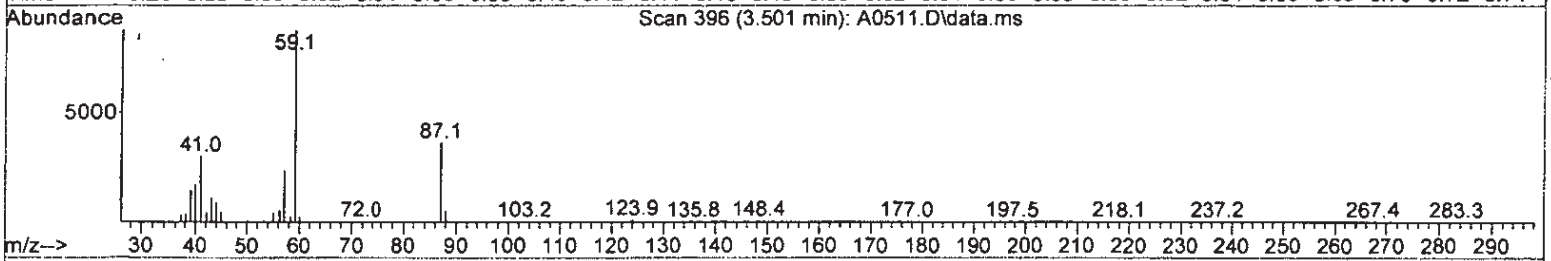
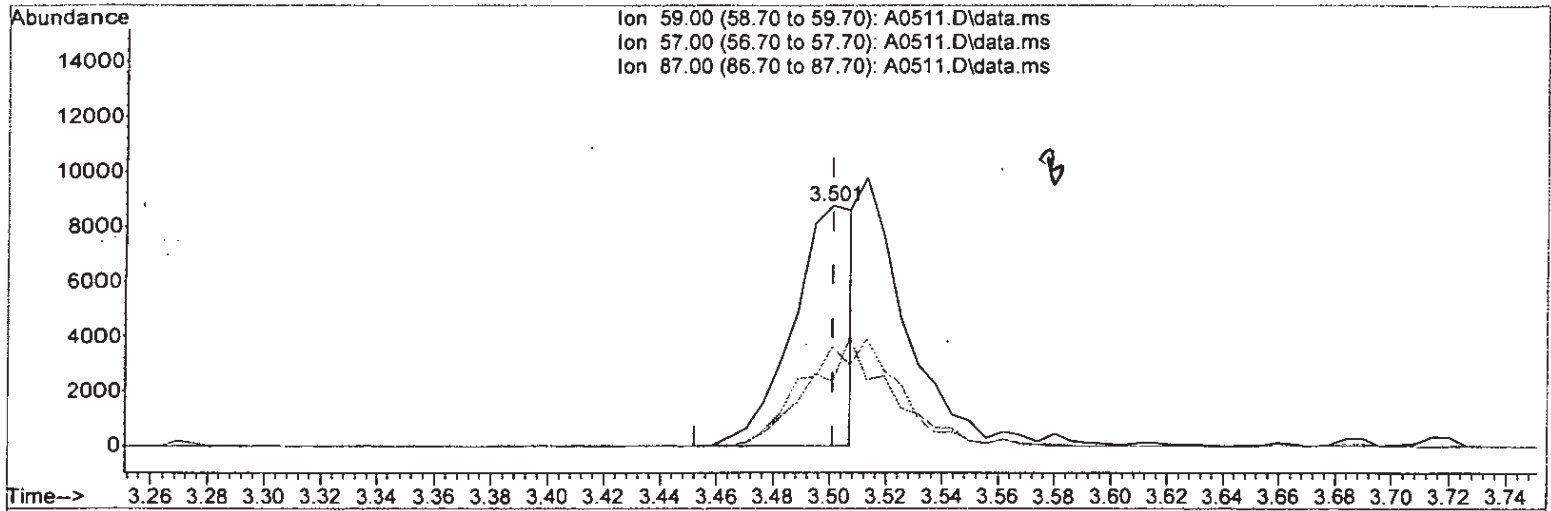
Ion	Exp%	Act%
86.00	100	100
43.00	1729.40	3219.80#
0.00	0.00	0.00
0.00	0.00	0.00

00206

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
 Acq On : 21 Jul 2014 12:22 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:35:51 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0511.D\data.ms

(32) ETBE

3.501min (-0.000) 0.48 ug/L

response 13112

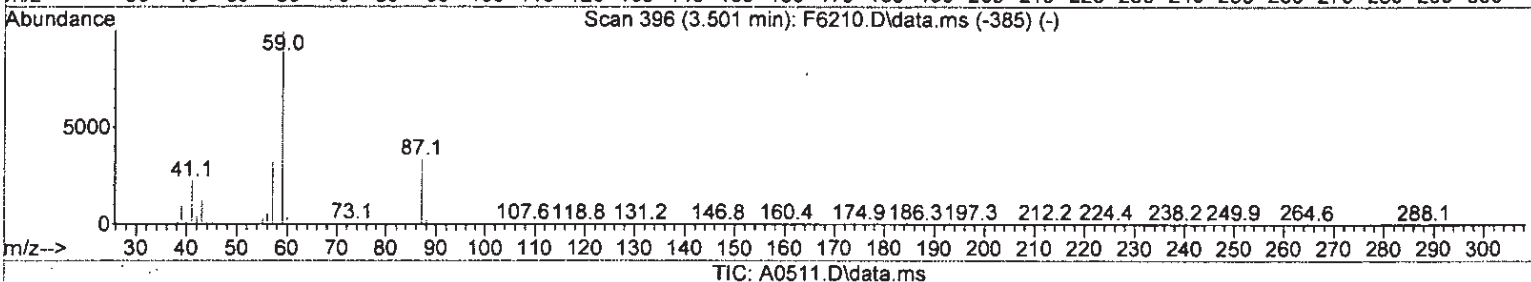
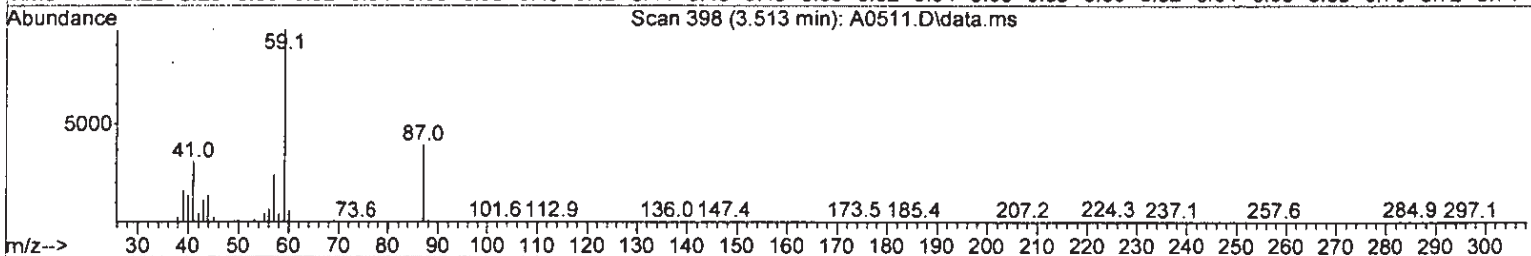
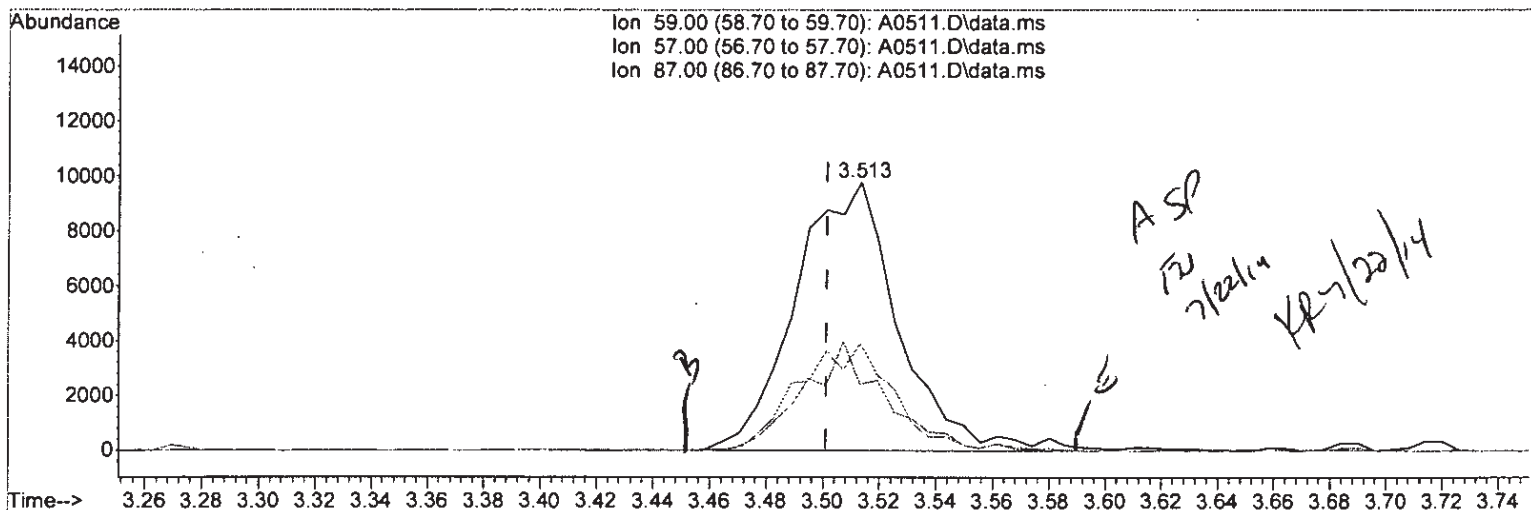
Ion	Exp%	Act%
59.00	100	100
57.00	29.50	26.72
87.00	38.90	41.36
0.00	0.00	0.00

00207

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
 Acq On : 21 Jul 2014 12:22 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:35:51 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0511.D\data.ms

(32) ETBE

3.513min (+0.012) 0.90 ug/L m

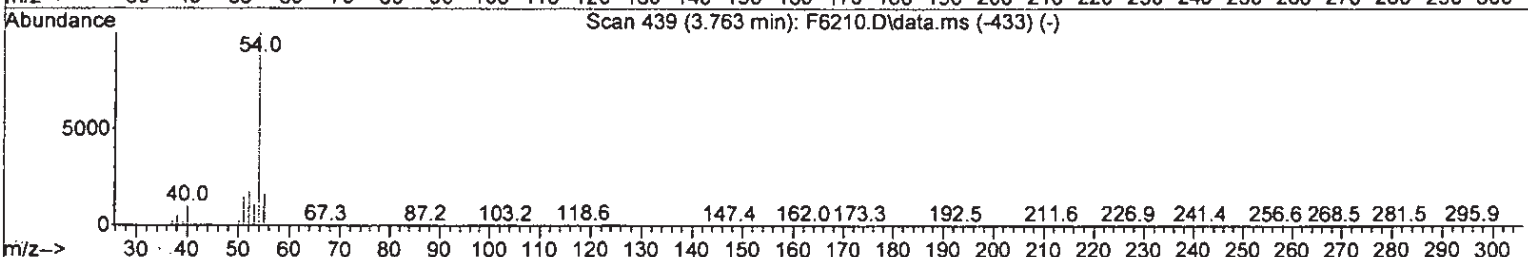
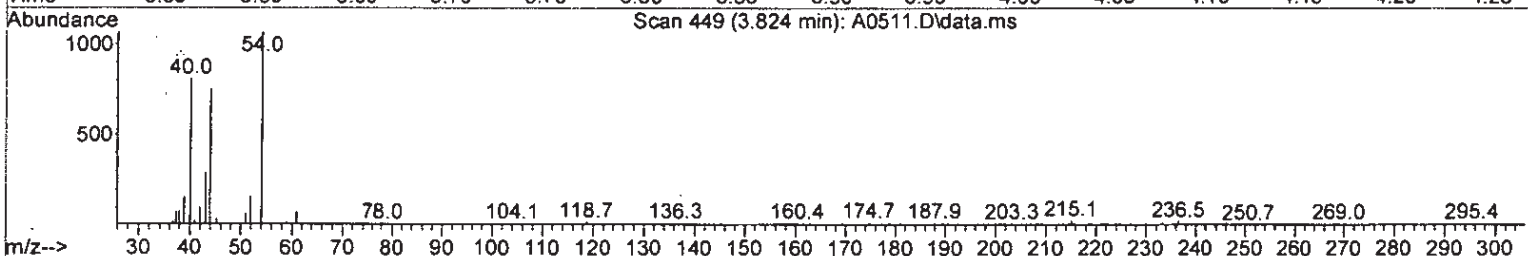
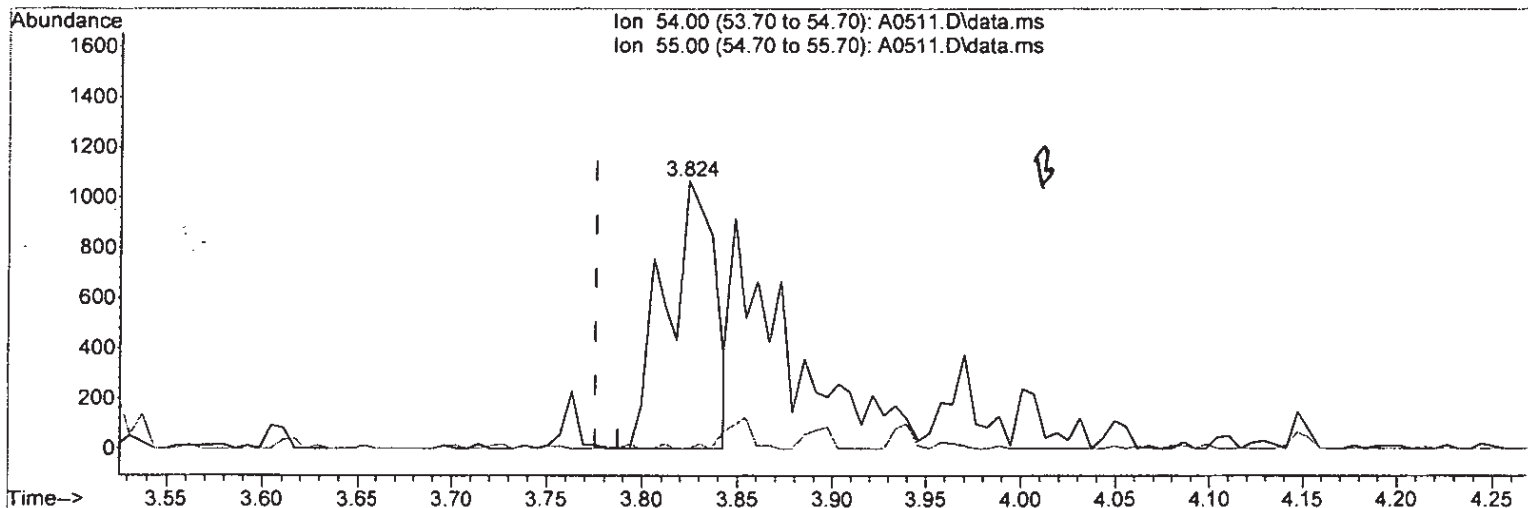
response 24603

Ion	Exp%	Act%
59.00	100	100
57.00	29.50	24.69
87.00	38.90	39.79
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
 Acq On : 21 Jul 2014 12:22 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:35:51 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0511.D\data.ms

(36) Propionitrile

3.824min (+0.049) 2.60 ug/L

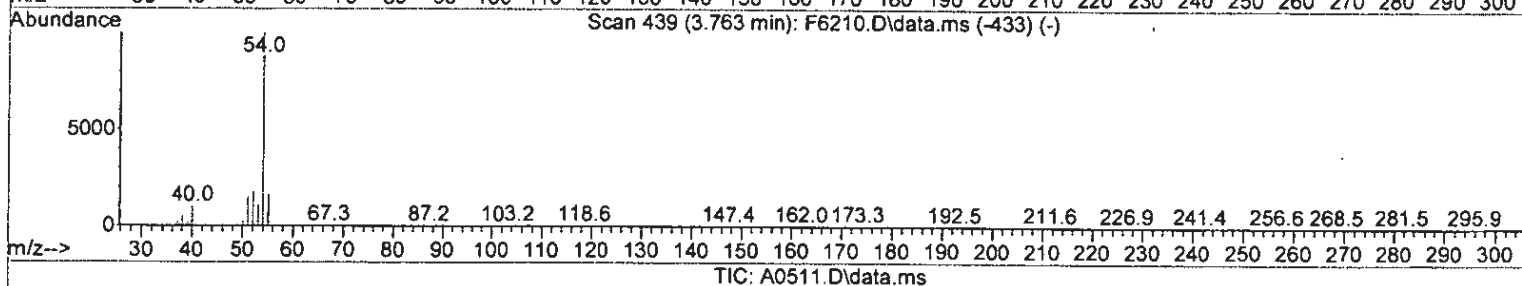
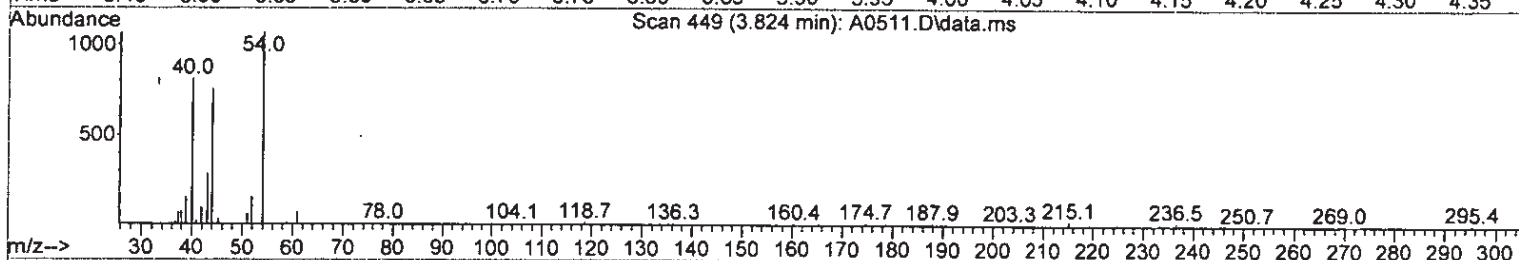
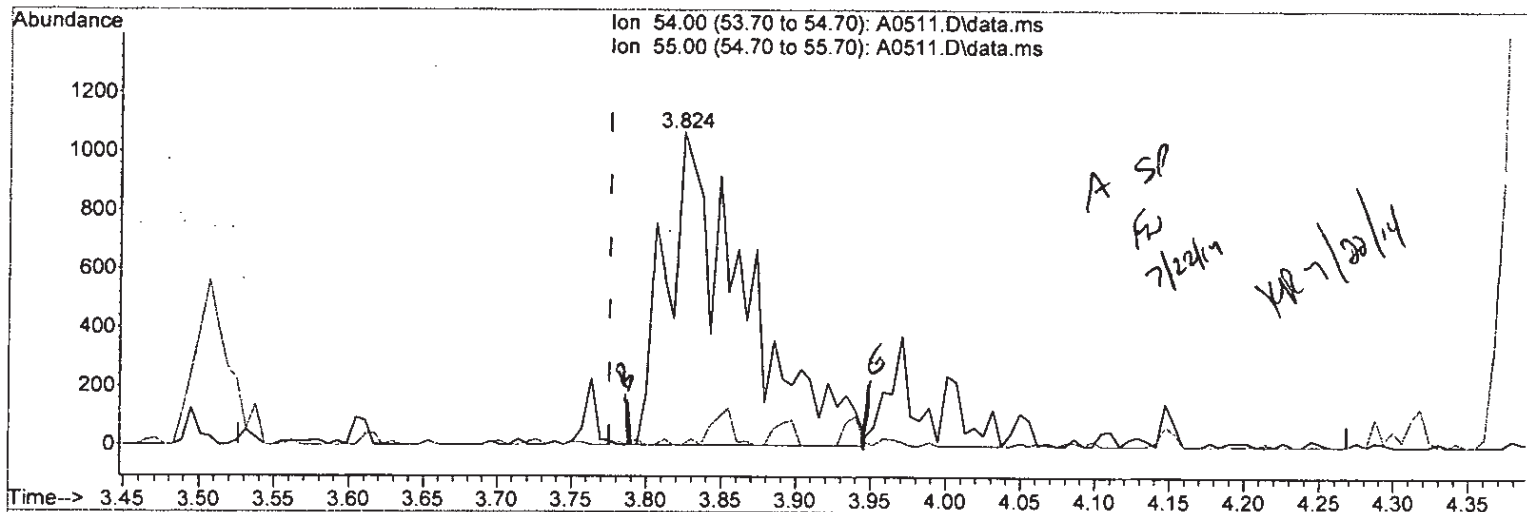
response 1892

Ion	Exp%	Act%
54.00	100	100
55.00	13.70	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
 Acq On : 21 Jul 2014 12:22 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:35:51 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(36) Propionitrile

3.824min (+0.049) 5.30 ug/L m

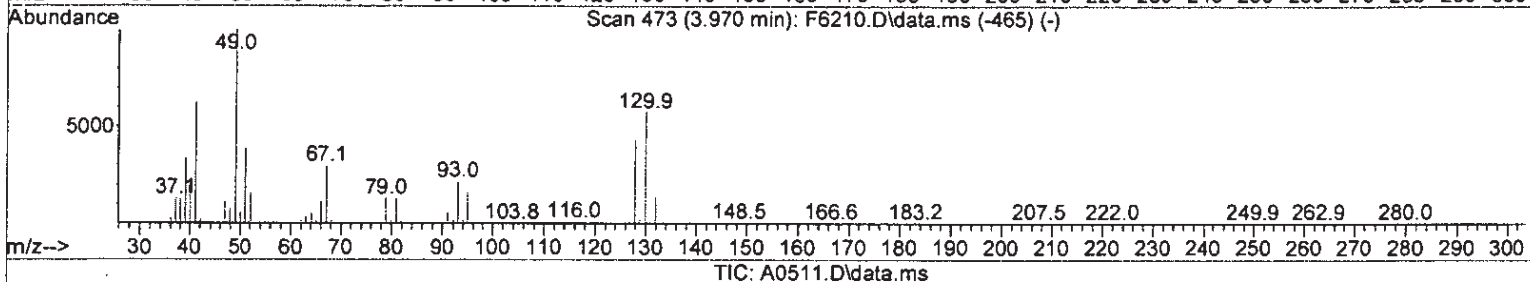
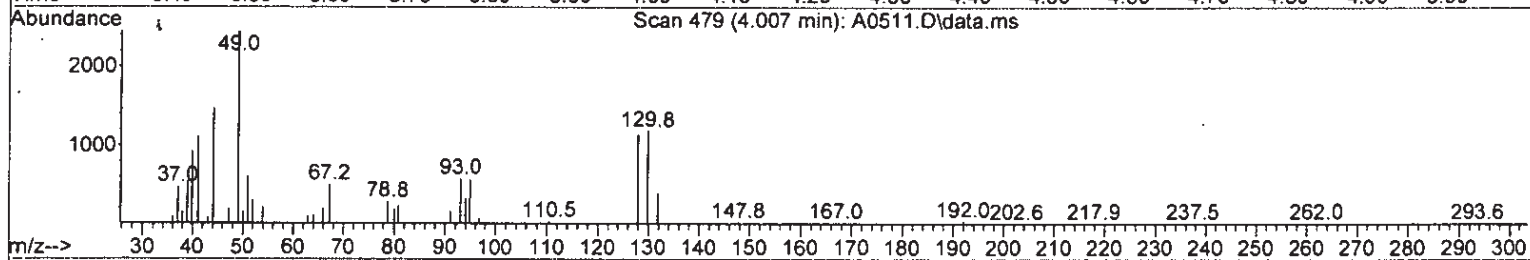
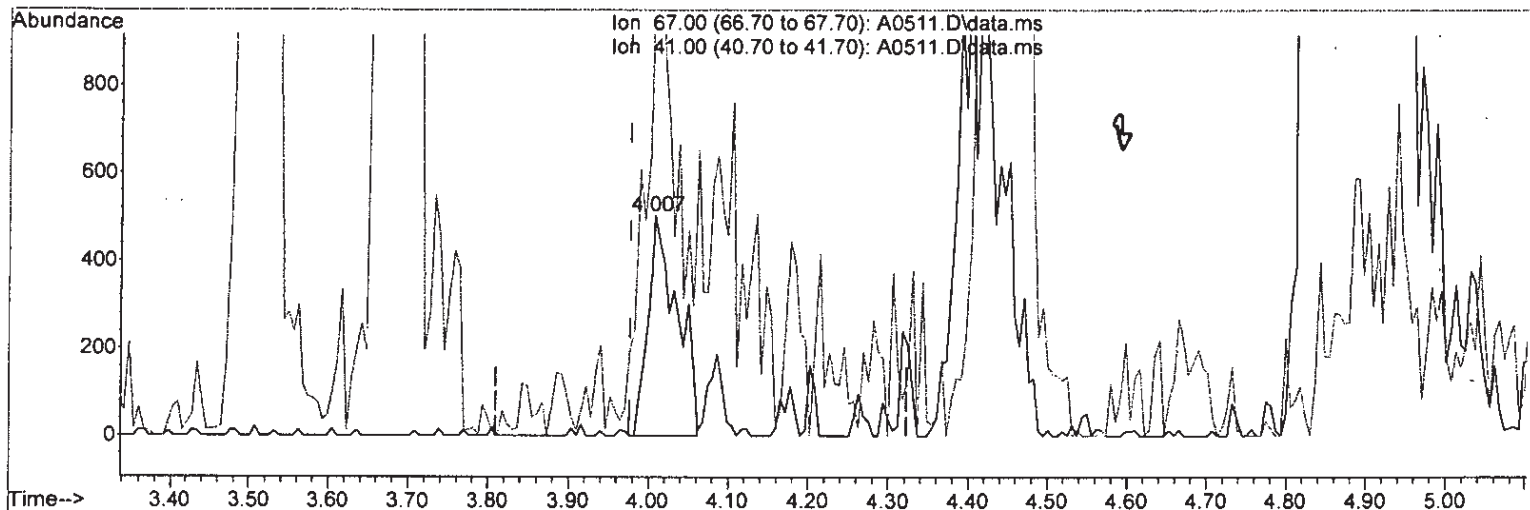
response 3852

Ion	Exp%	Act%
54.00	100	100
55.00	13.70	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:20:37 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



(38) Methacrylonitrile

4.007min (+0.030) 0.55 ug/L

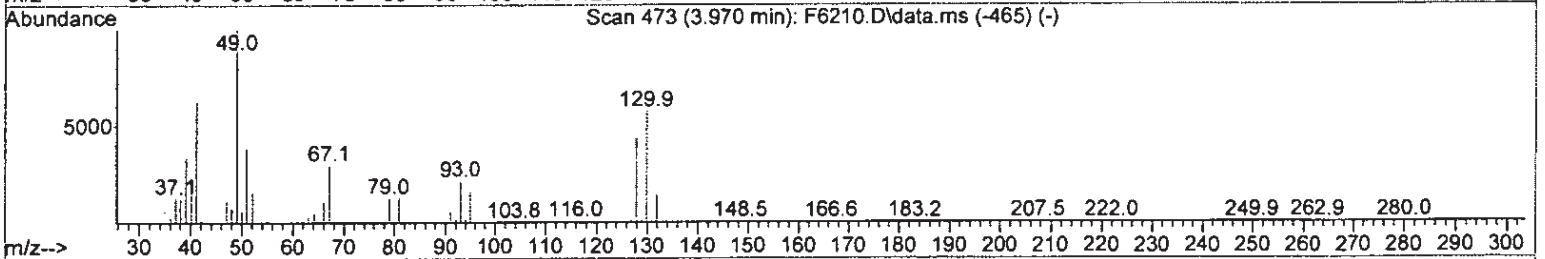
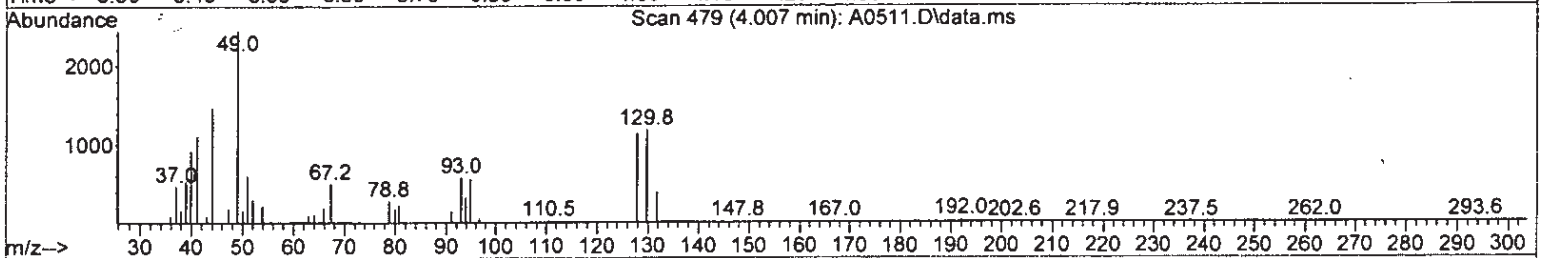
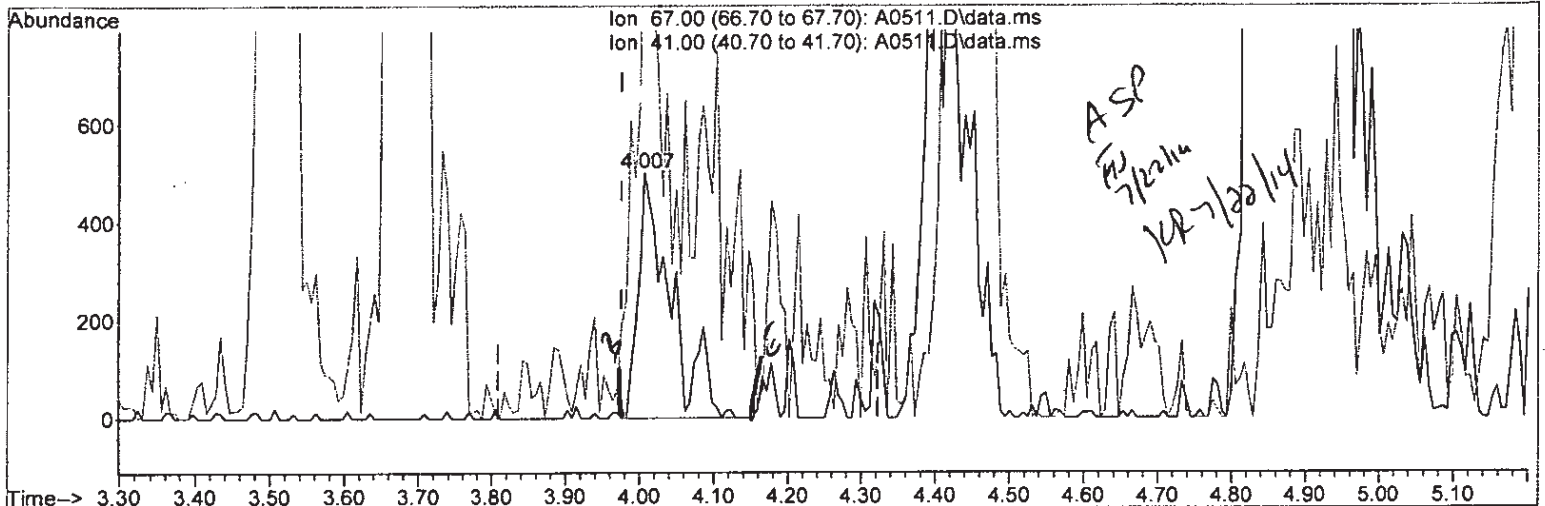
response 1268

Ion	Exp%	Act%
67.00	100	100
41.00	149.10	221.56#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
 Acq On : 21 Jul 2014 12:22 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 15:20:37 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0511.D\data.ms

(38) Methacrylonitrile

4.007min (+0.030) 0.66 ug/L m

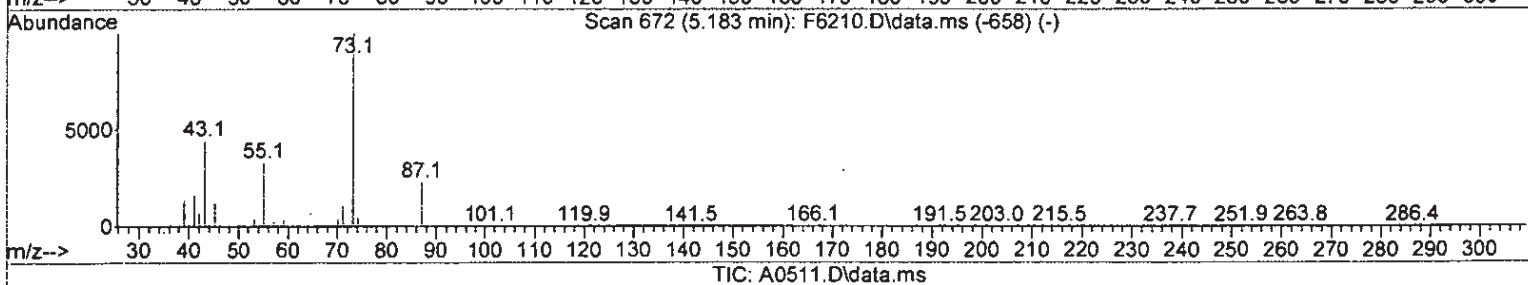
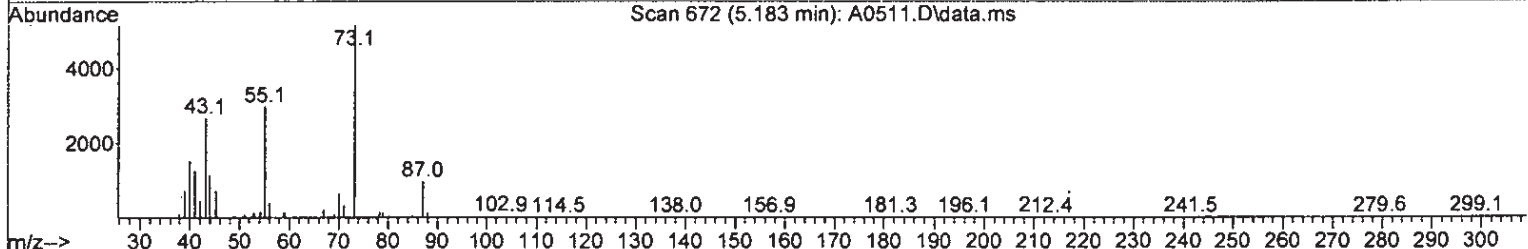
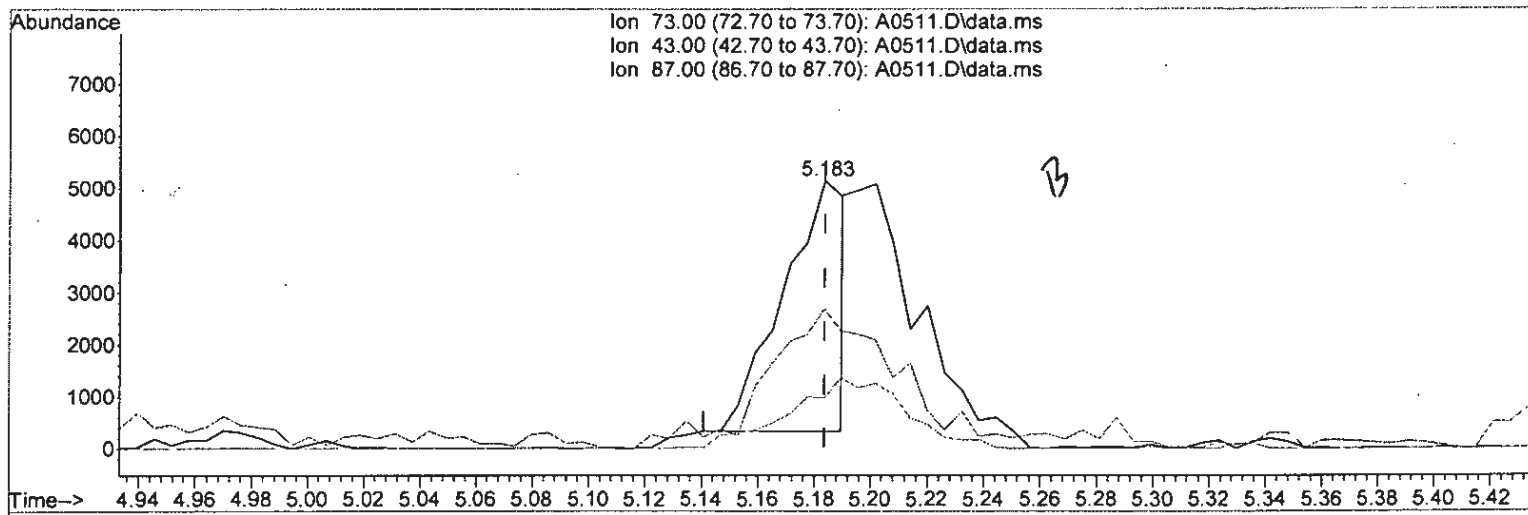
response 1507

Ion	Exp%	Act%
67.00	100	100
41.00	149.10	221.56#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
 Acq On : 21 Jul 2014 12:22 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:35:51 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(42) TAME

5.183min (-0.000) 0.36 ug/L

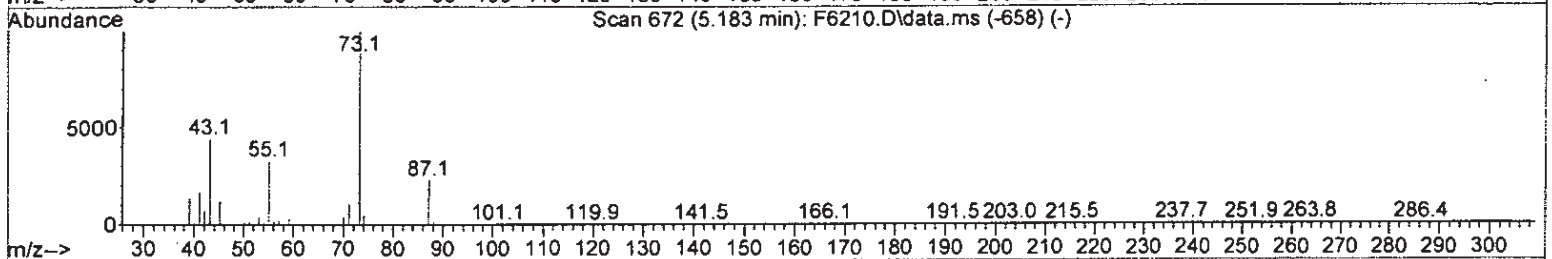
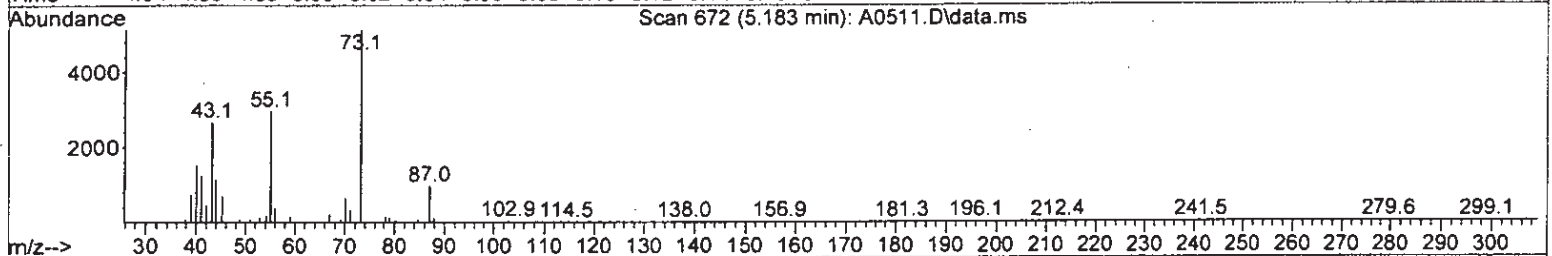
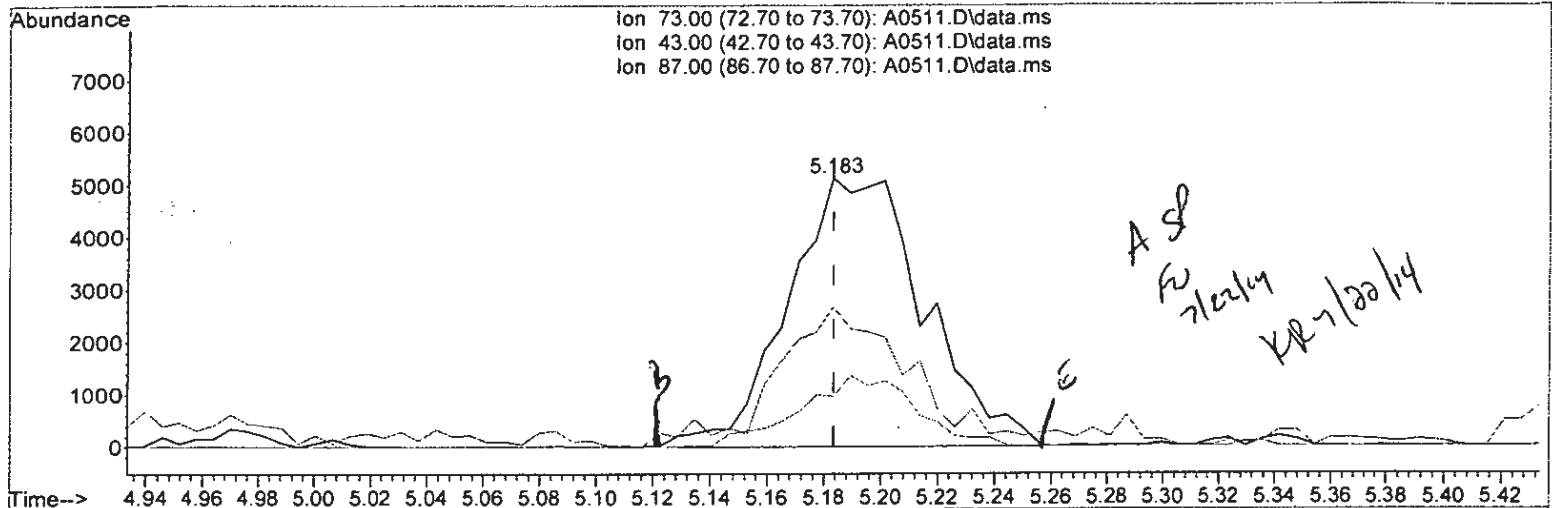
response 7344

Ion	Exp%	Act%
73.00	100	100
43.00	38.40	51.98
87.00	23.80	18.93
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
 Acq On : 21 Jul 2014 12:22 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:35:51 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0511.D\data.ms

(42) TAME

5.183min (-0.000) 0.83 ug/L m

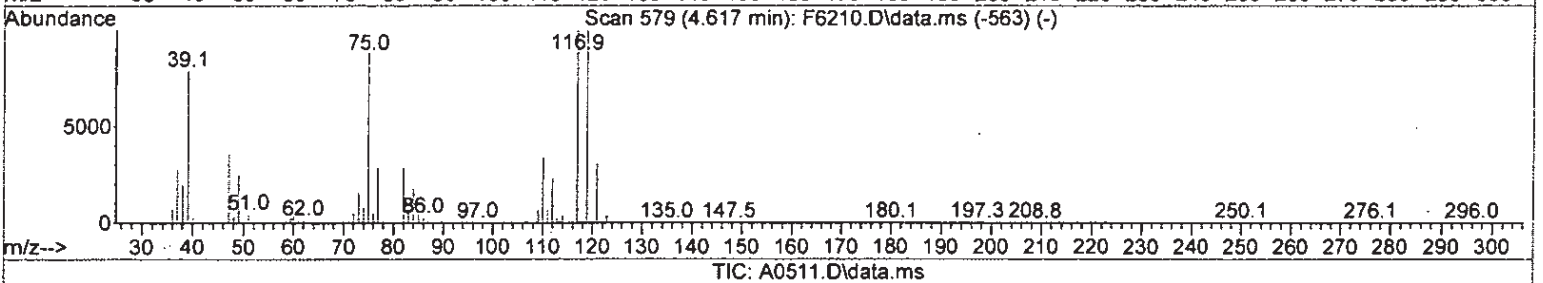
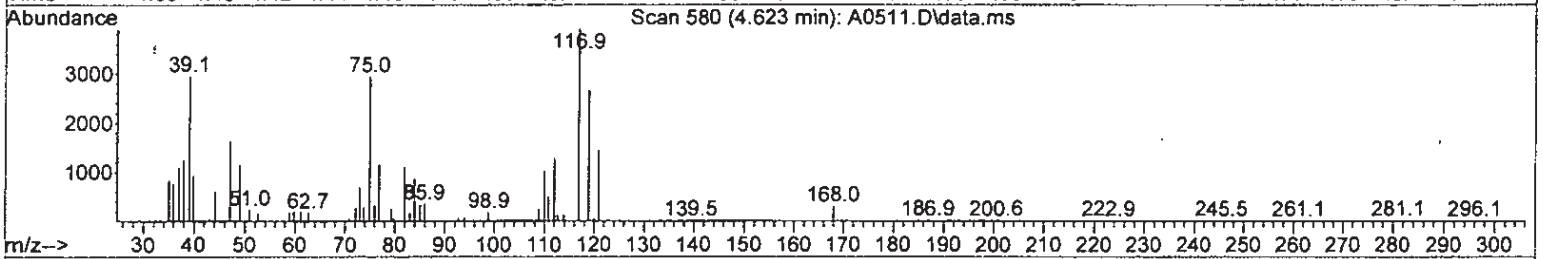
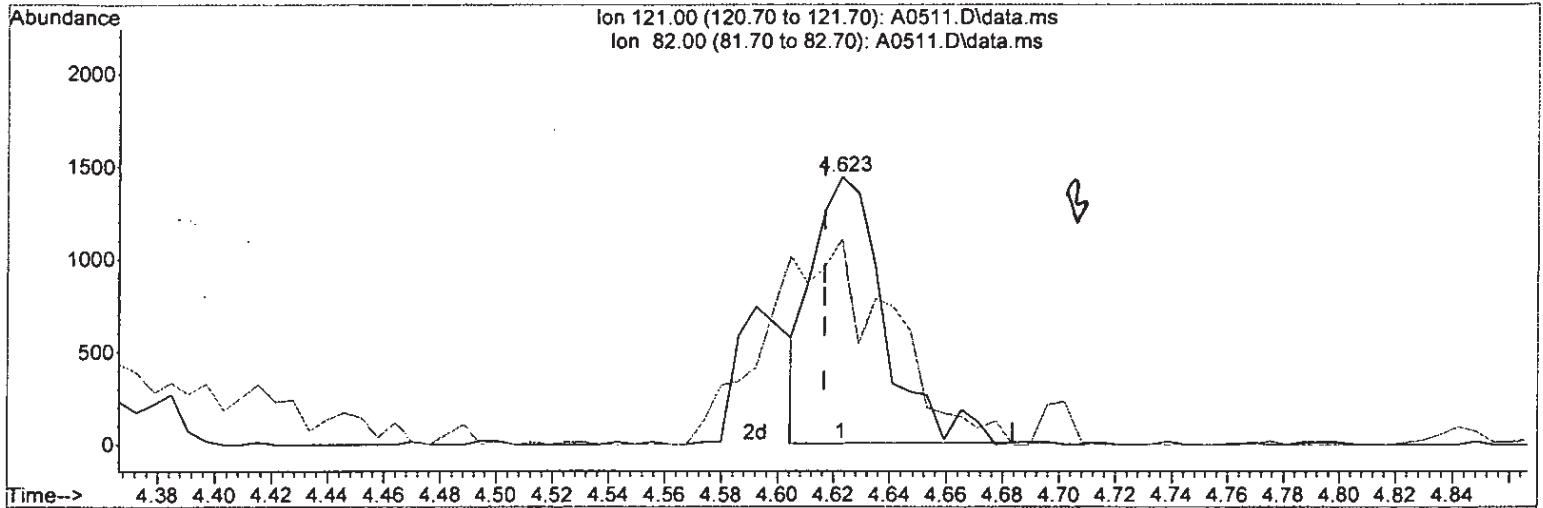
response 17045

Ion	Exp%	Act%
73.00	100	100
43.00	38.40	51.98
87.00	23.80	18.93
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
 Acq On : 21 Jul 2014 12:22 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:35:51 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(46) Carbontetrachloride (P)

4.623min (+0.006) 0.69 ug/L

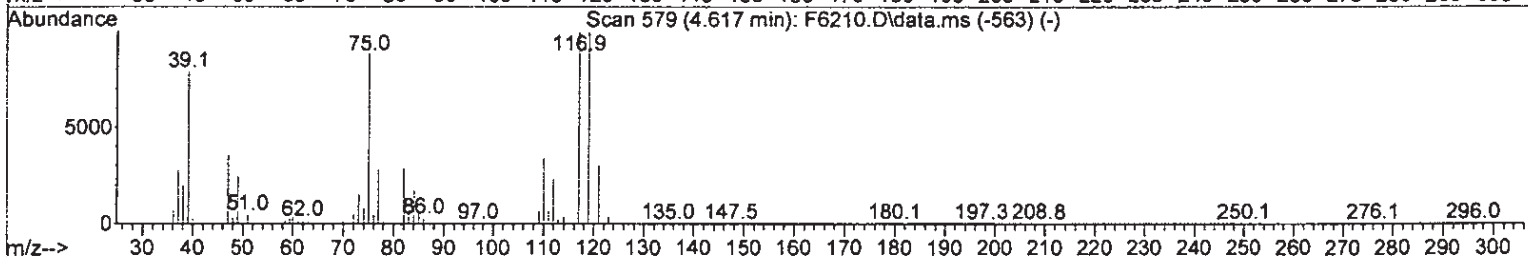
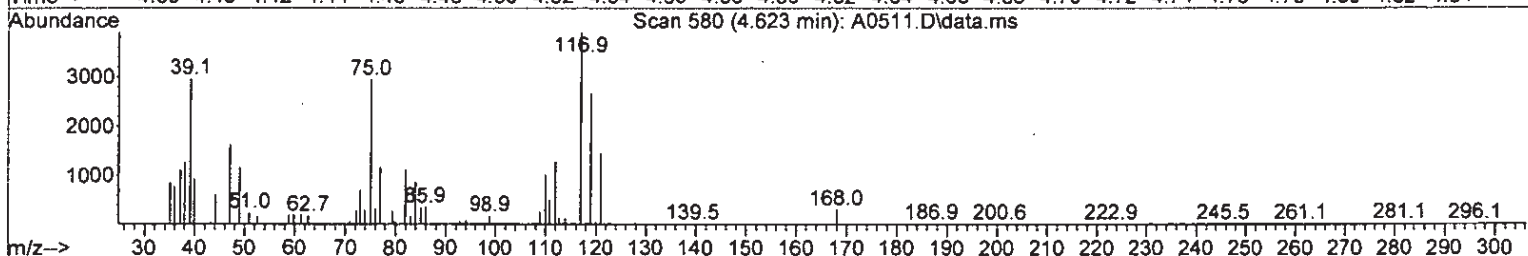
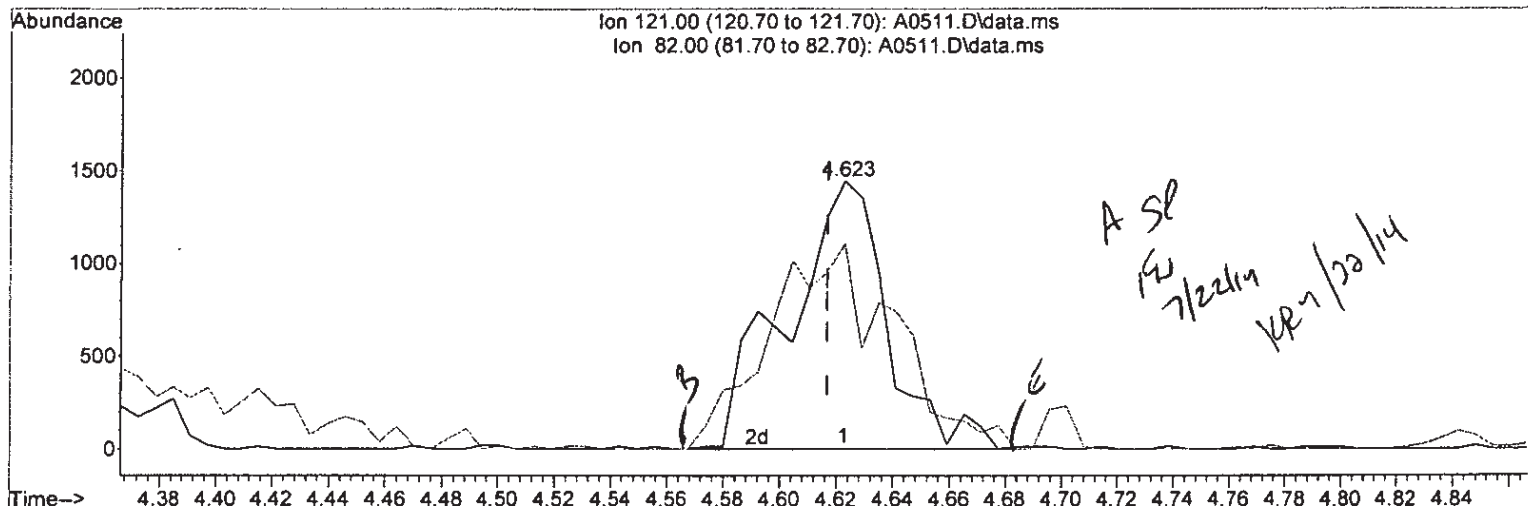
response 2557

Ion	Exp%	Act%
121.00	100	100
82.00	93.30	76.52
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
 Acq On : 21 Jul 2014 12:22 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:35:51 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0511.D\data.ms

(46) Carbontetrachloride (P)

4.623min (+0.006) 0.95 ug/L m

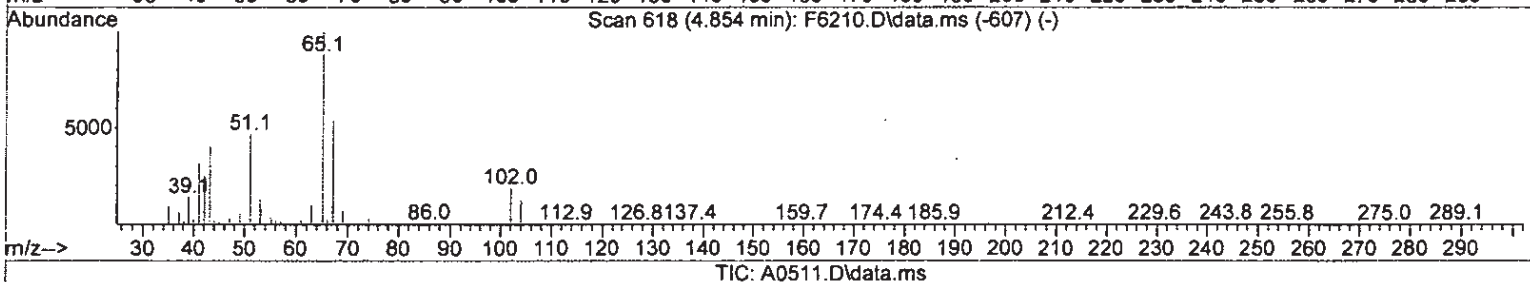
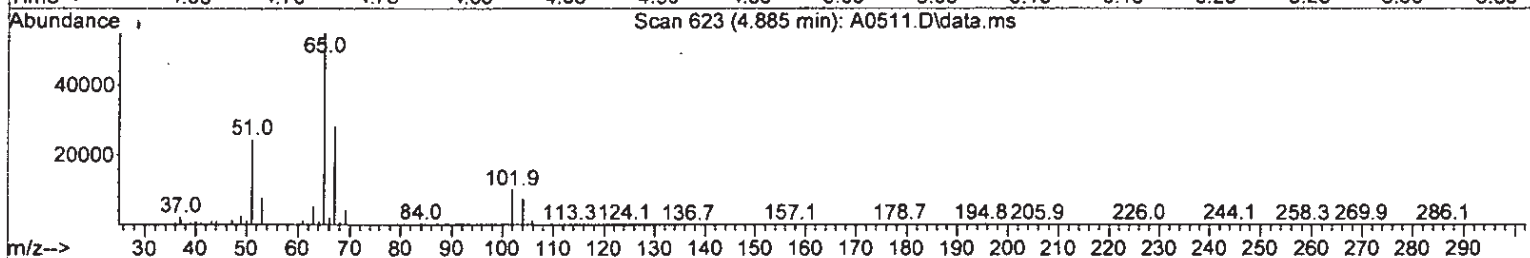
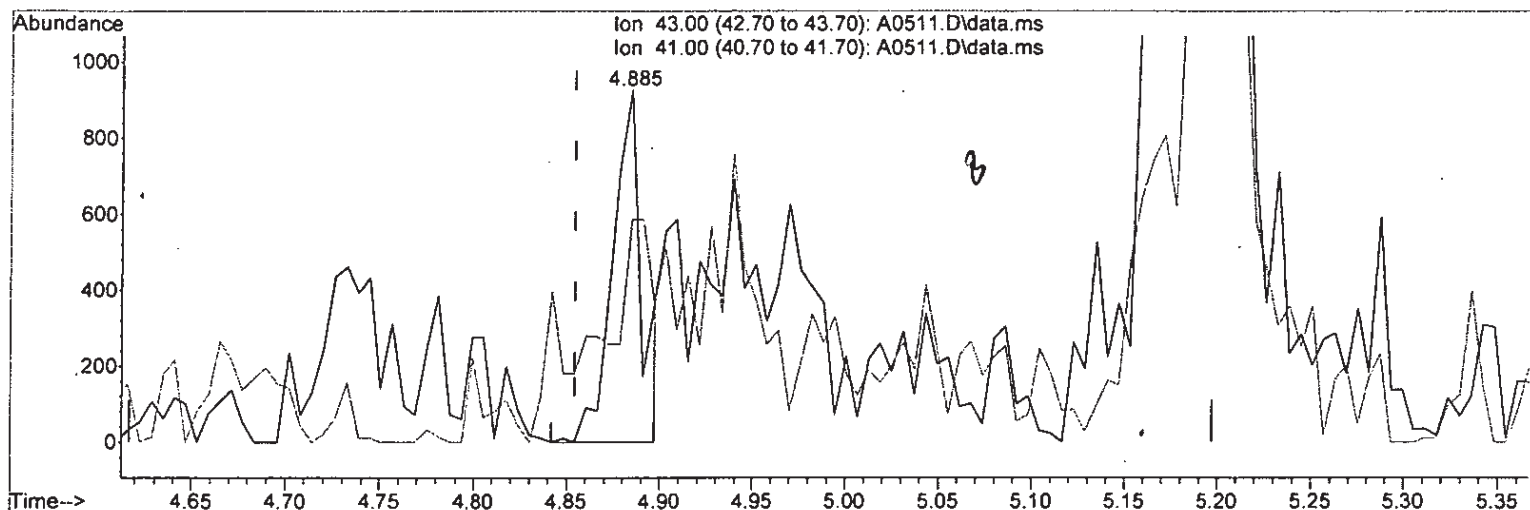
response 3532

Ion	Exp%	Act%
121.00	100	100
82.00	93.30	76.52
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
 Acq On : 21 Jul 2014 12:22 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:35:51 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(51) Iso-Butyl Alcohol

4.885min (+0.030) 3.47 ug/L

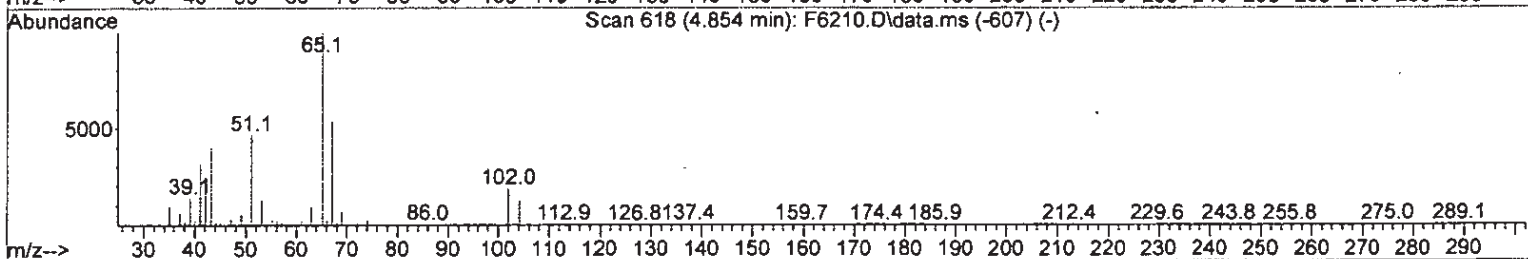
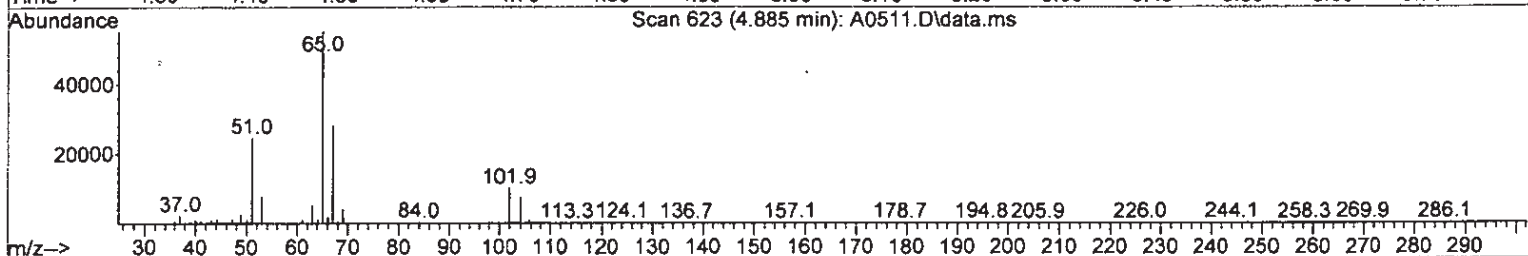
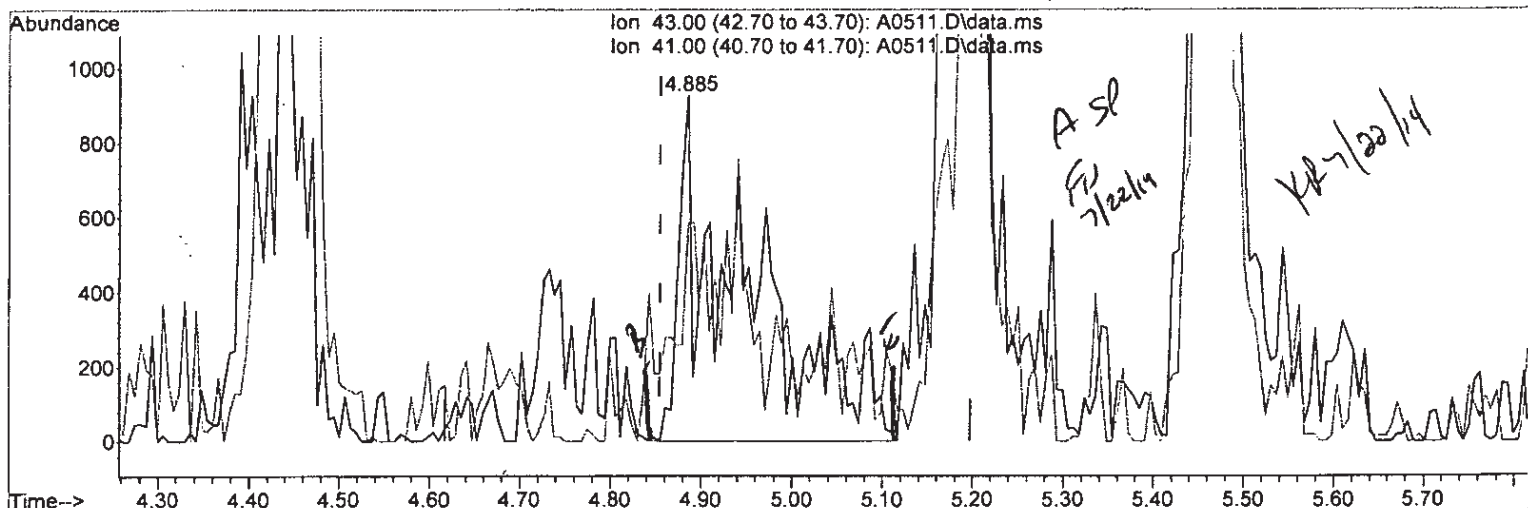
response 1007

Ion	Exp%	Act%
43.00	100	100
41.00	76.40	63.35
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
 Acq On : 21 Jul 2014 12:22 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 15:20:37 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0511.D\data.ms

(51) Iso-Butyl Alcohol

4.885min (+0.030) 16.14 ug/L m

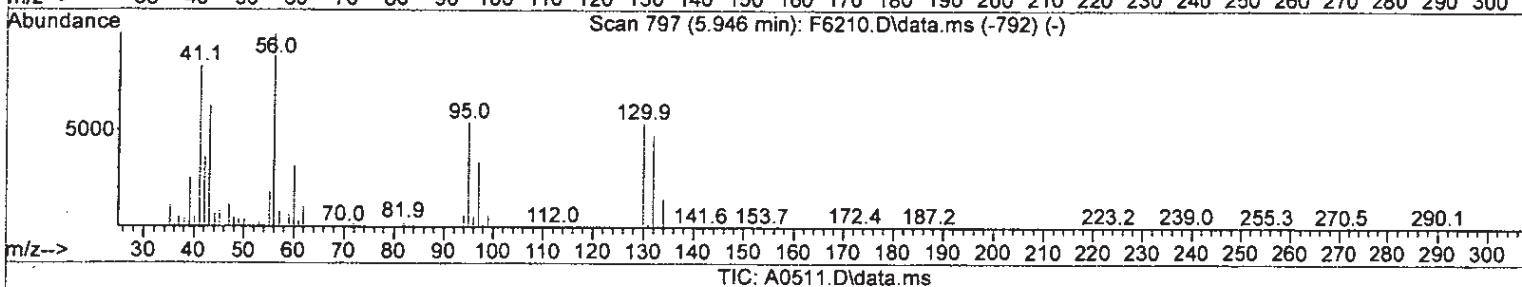
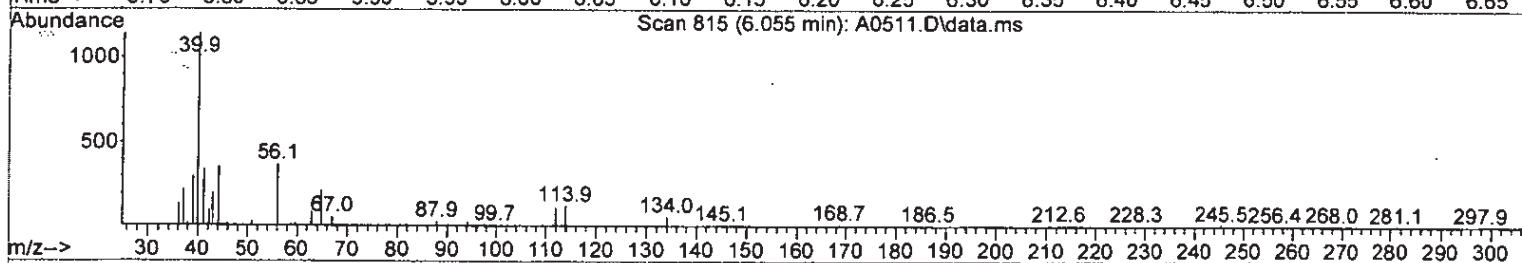
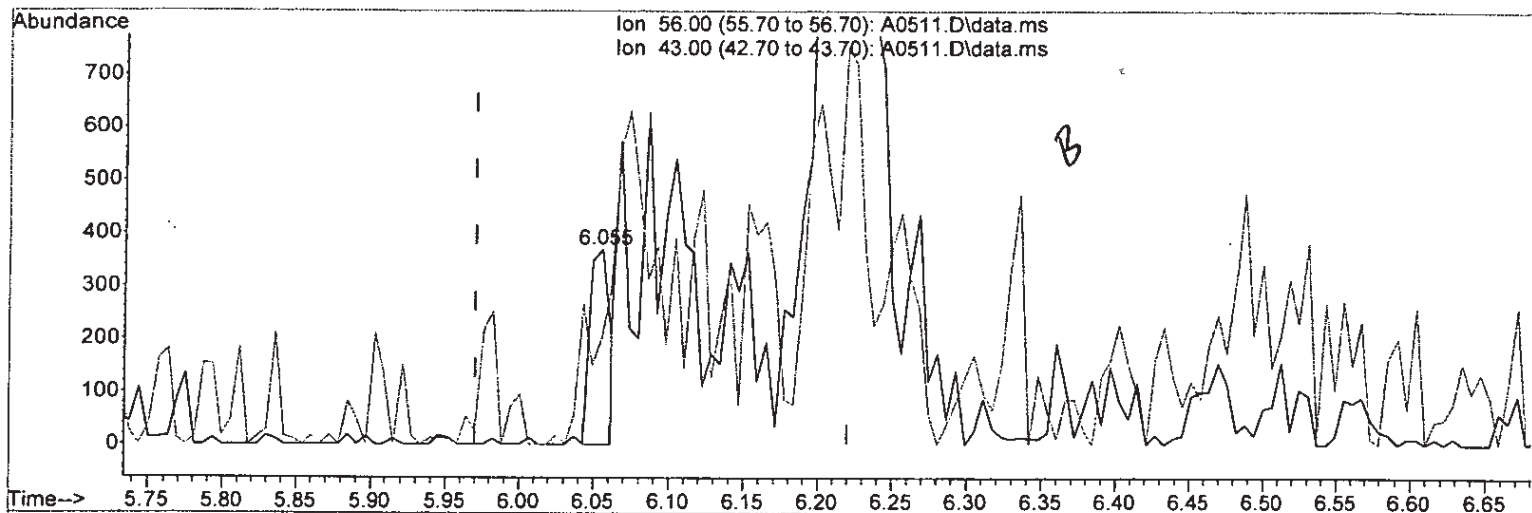
response 4685

Ion	Exp%	Act%
43.00	100	100
41.00	76.40	63.35
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



(53) 1-Butanol

6.055min (+0.085) 2.50 ug/L

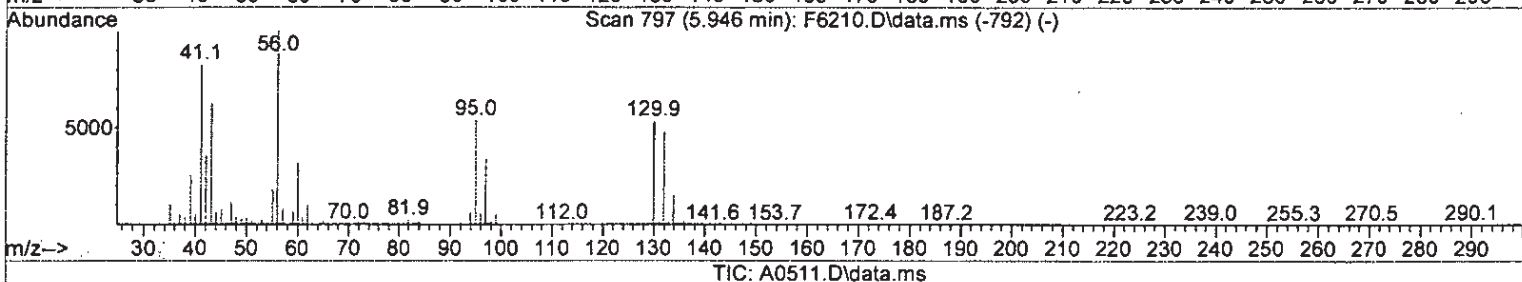
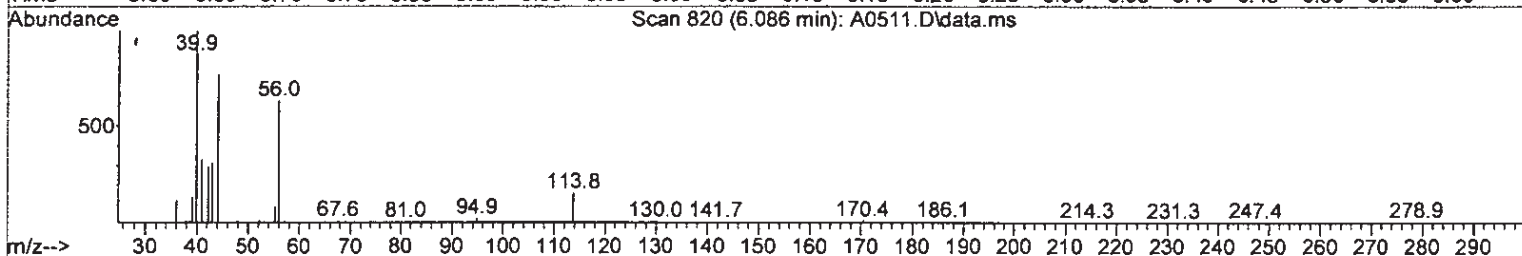
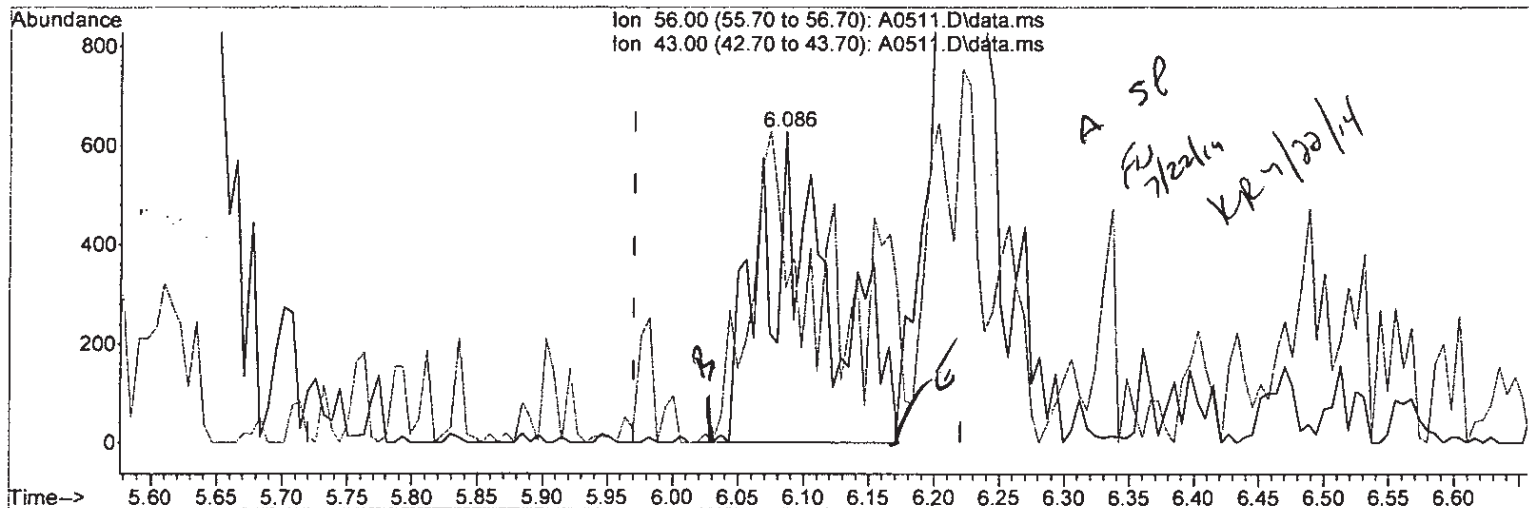
response 339

Ion	Exp%	Act%
56.00	100	100
43.00	56.20	55.01
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
 Acq On : 21 Jul 2014 12:22 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:35:51 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(53) 1-Butanol

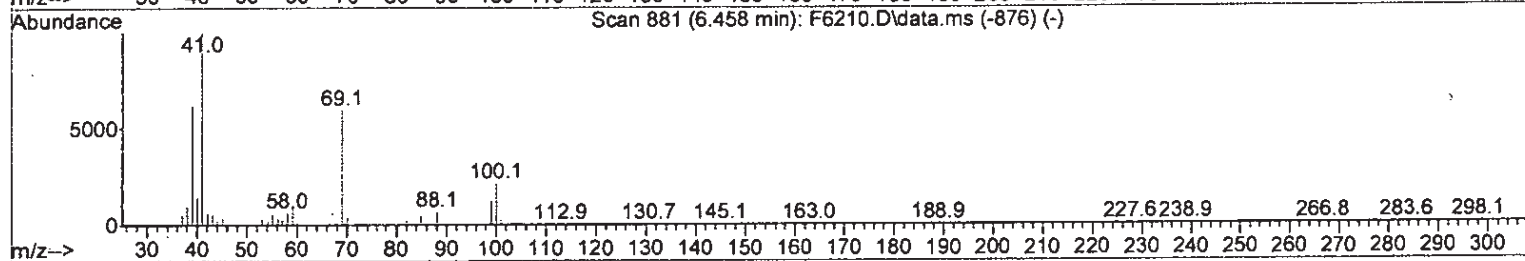
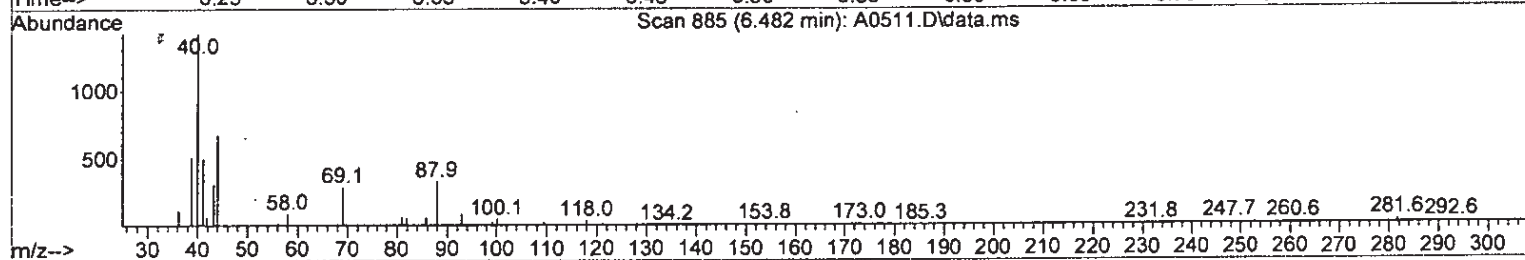
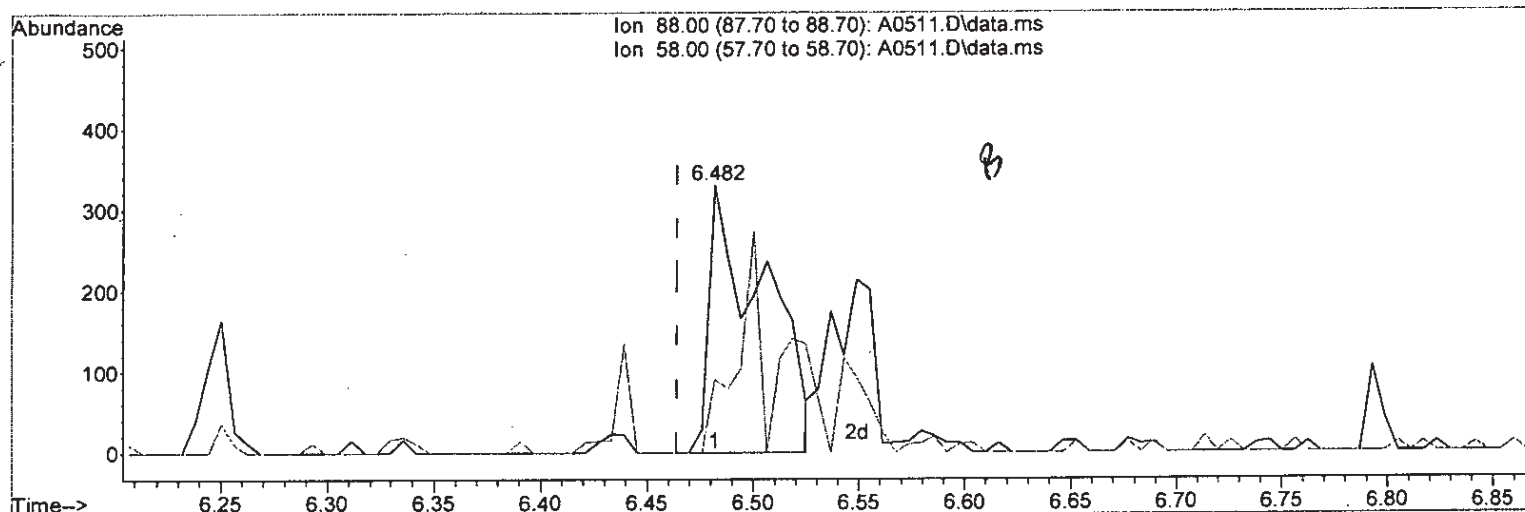
6.086min (+0.116) 16.96 ug/L m

response 2304

Ion	Exp%	Act%
56.00	100	100
43.00	56.20	49.76
0.00	0.00	0.00
0.00	0.00	0.00

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



TIC: A0511.D\data.ms

(58) 1,4-Dioxane

6.482min (+0.018) 11.74 ug/L

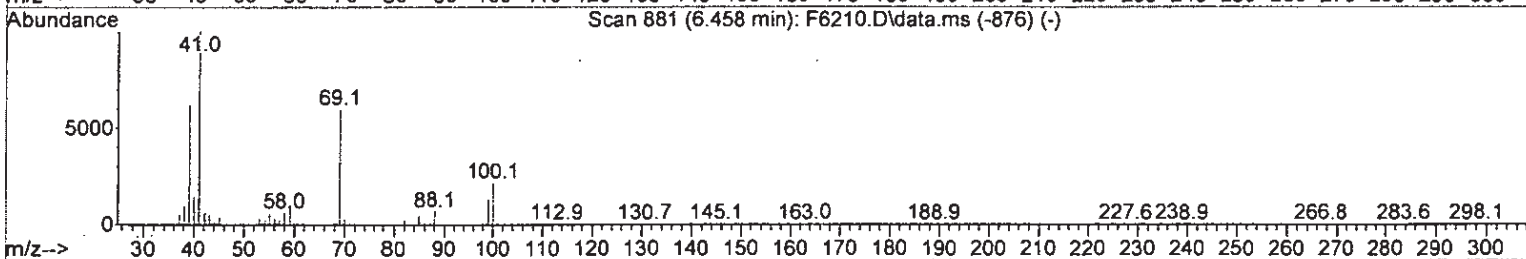
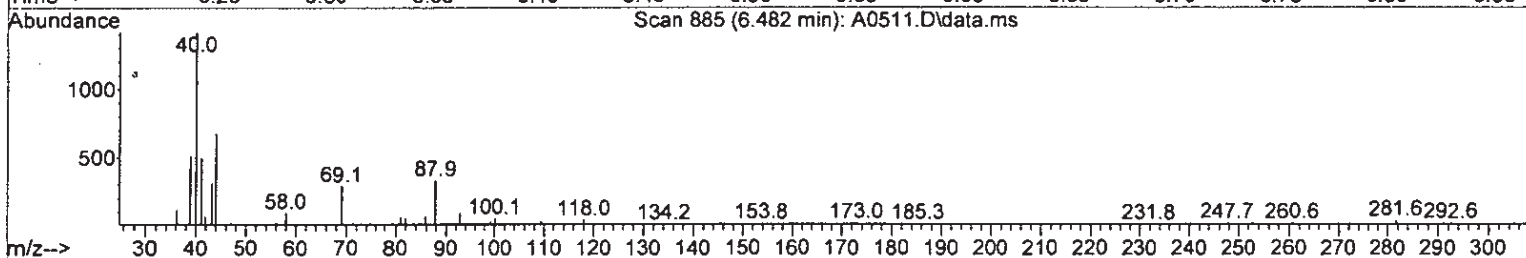
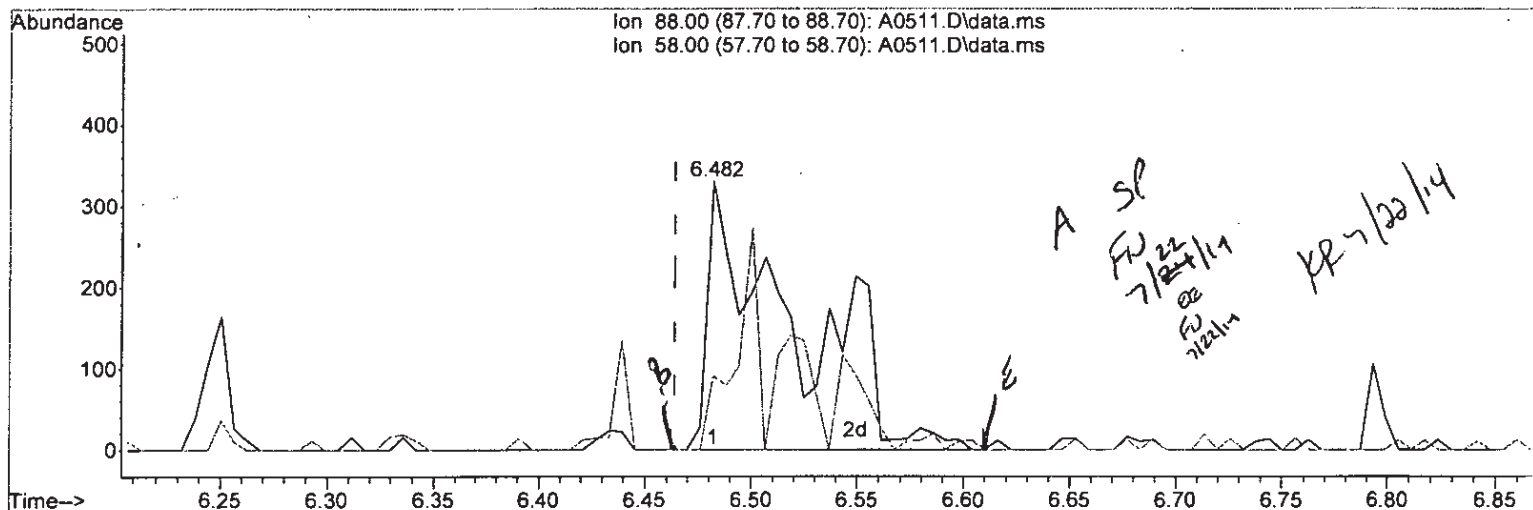
response 589

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	27.27#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
 Acq On : 21 Jul 2014 12:22 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:35:51 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0511.D\data.ms

(58) 1,4-Dioxane

6.482min (+0.018) 18.22 ug/L m

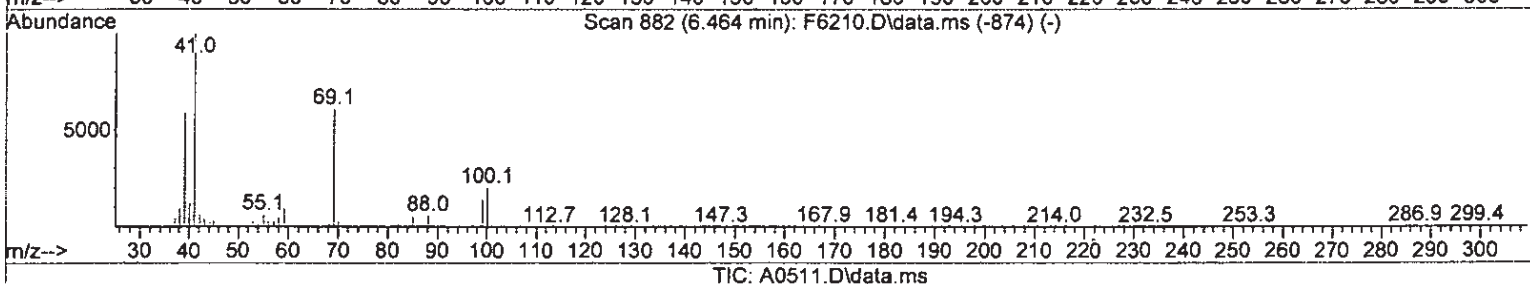
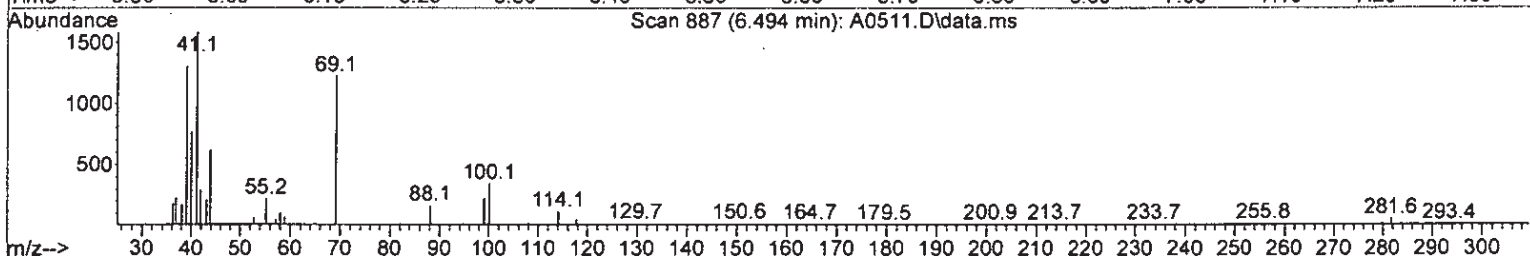
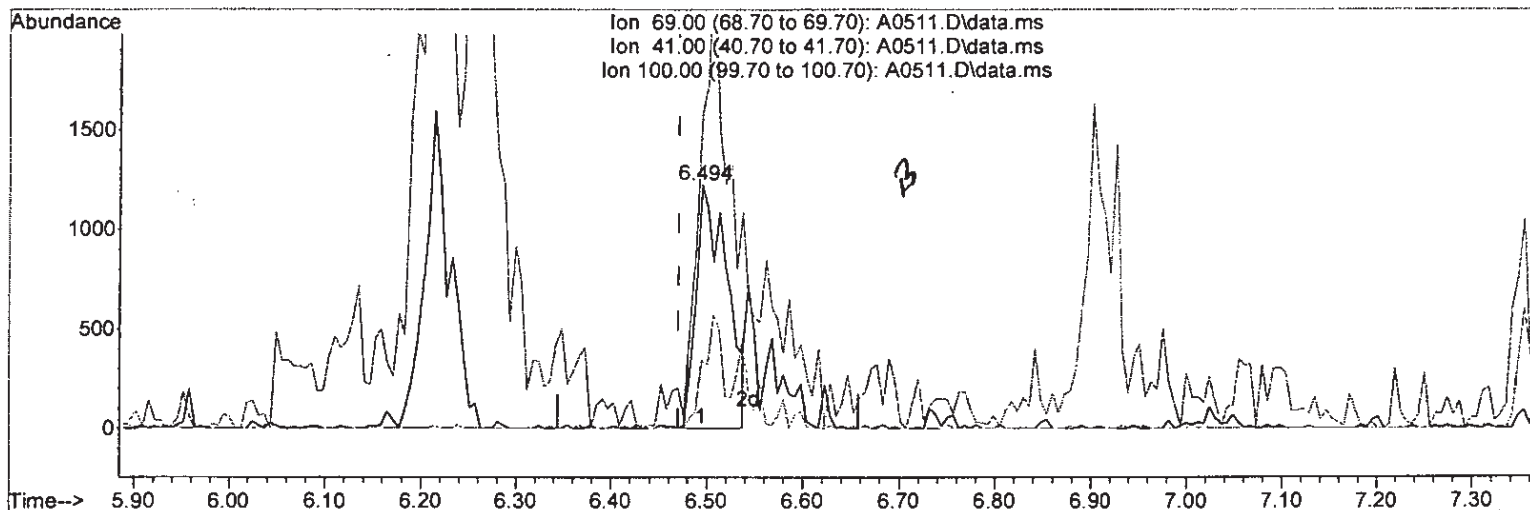
response 914

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	27.27#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



(59) Methyl Methacrylate

6.494min (+0.024) 0.66 ug/L

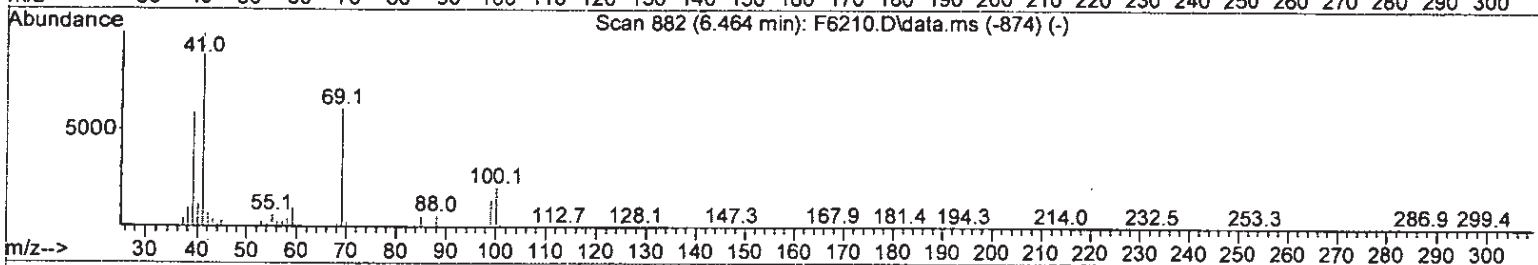
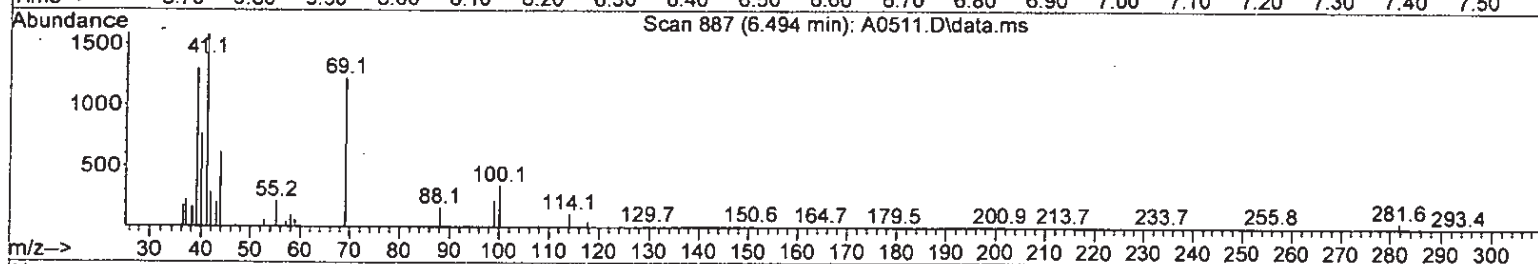
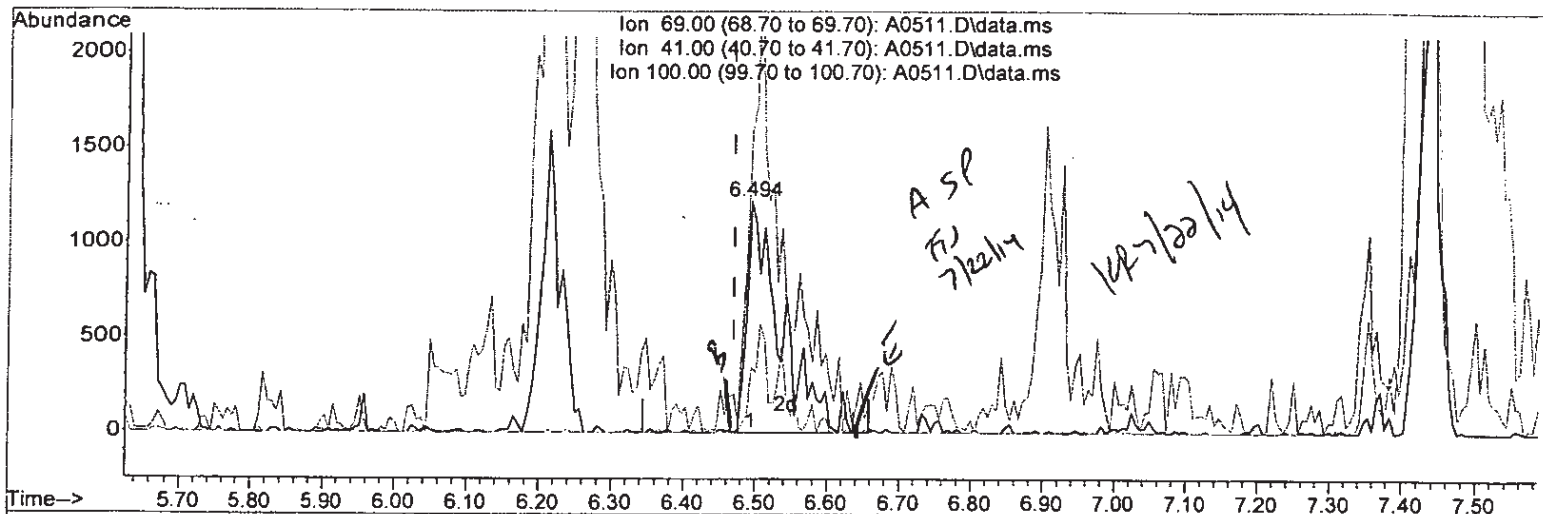
response 2719

Ion	Exp%	Act%
69.00	100	100
41.00	128.90	129.27
100.00	36.90	28.13
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
 Acq On : 21 Jul 2014 12:22 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:35:51 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0511.D\data.ms

(59) Methyl Methacrylate

6.494min (+0.024) 0.96 ug/L m

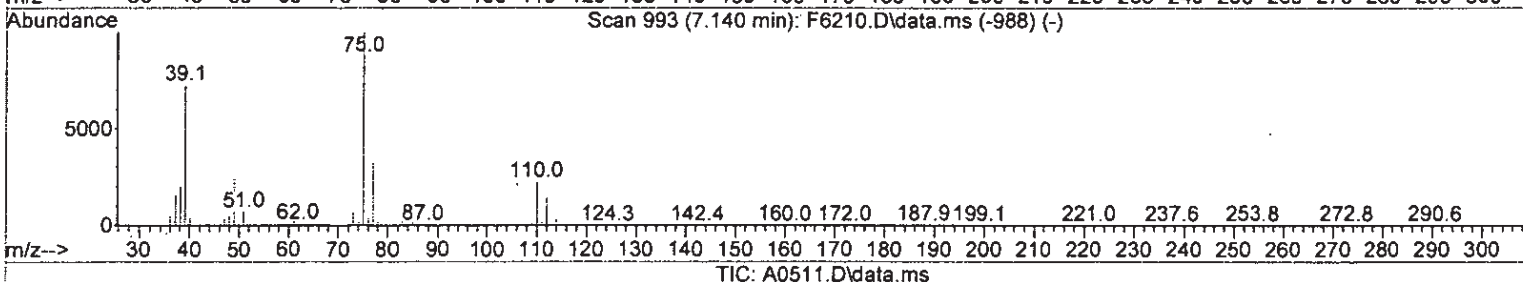
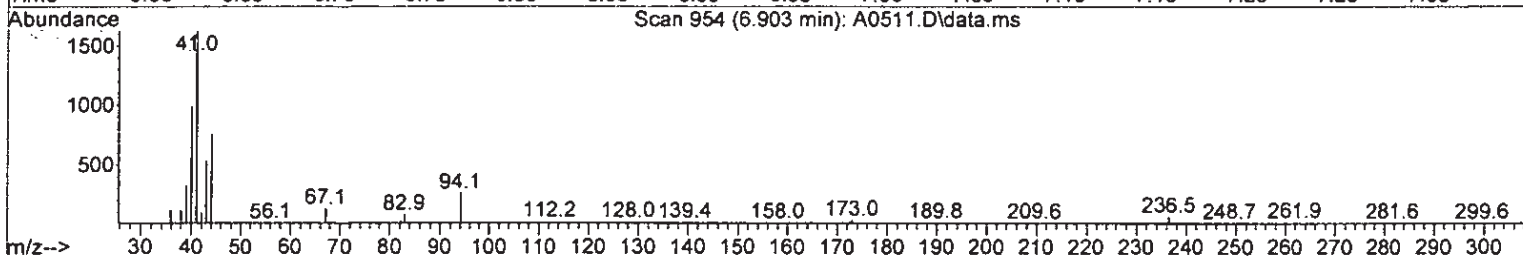
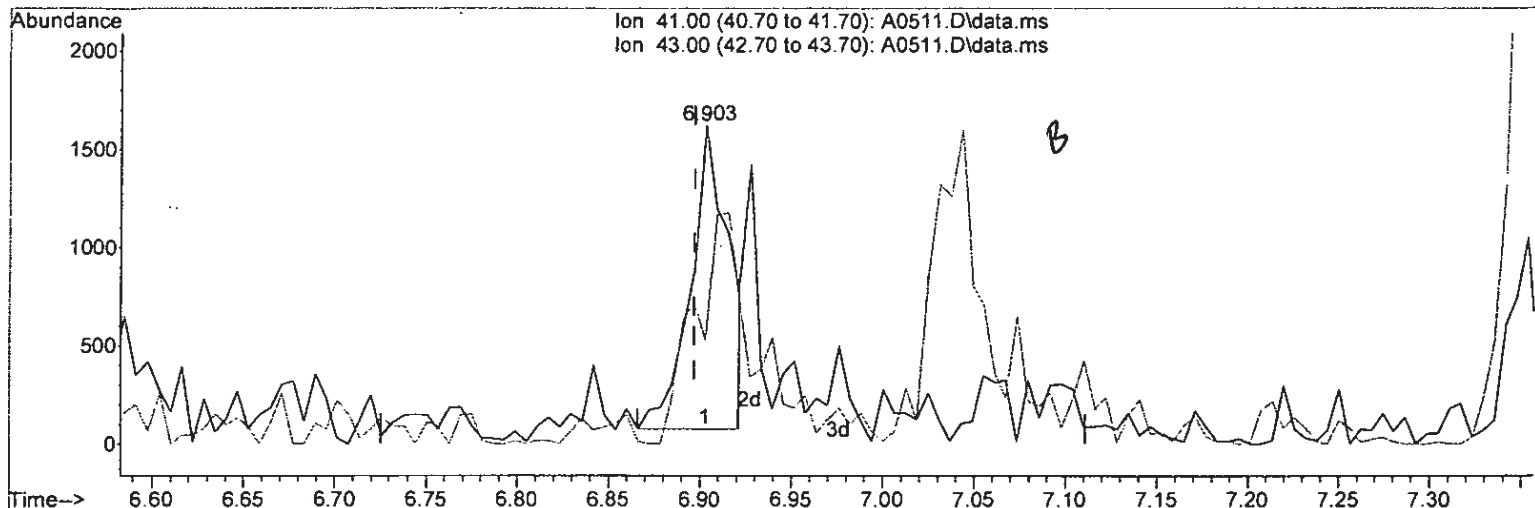
response 3956

Ion	Exp%	Act%
69.00	100	100
41.00	128.90	129.27
100.00	36.90	28.13
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
 Acq On : 21 Jul 2014 12:22 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:35:51 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(61) 2-Nitropropane

6.903min (+0.006) 1.39 ug/L

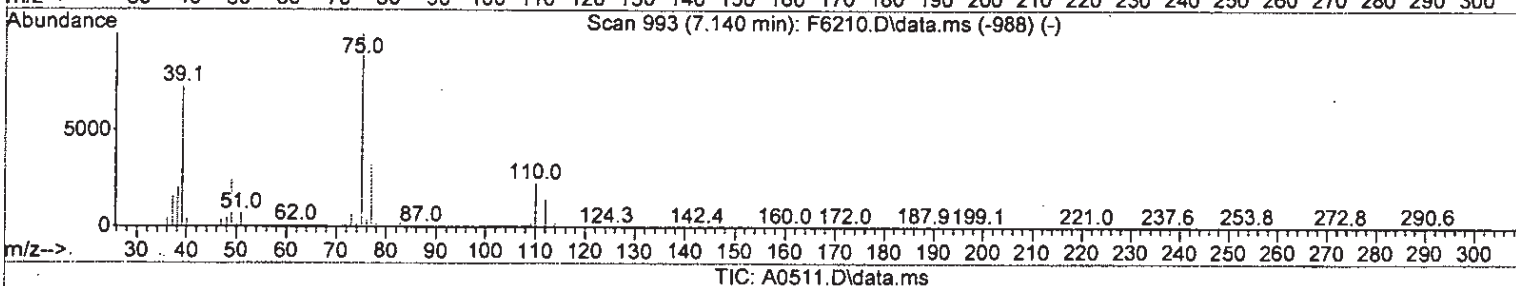
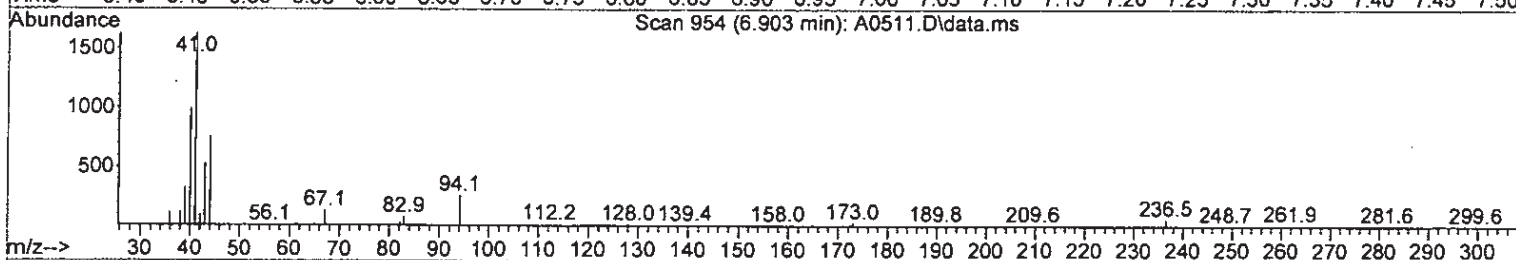
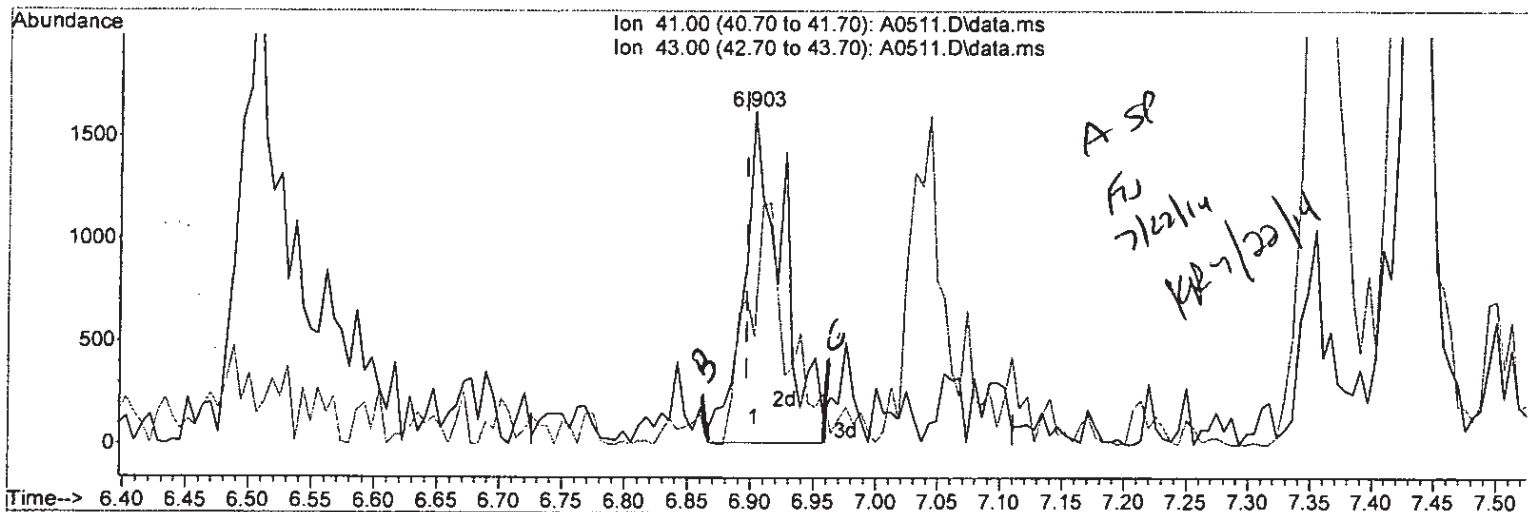
response 2228

Ion	Exp%	Act%
41.00	100	100
43.00	108.60	32.43#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
 Acq On : 21 Jul 2014 12:22 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:35:51 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0511.D\data.ms

(61) 2-Nitropropane

6.903min (+0.006) 2.18 ug/L m

response 3489

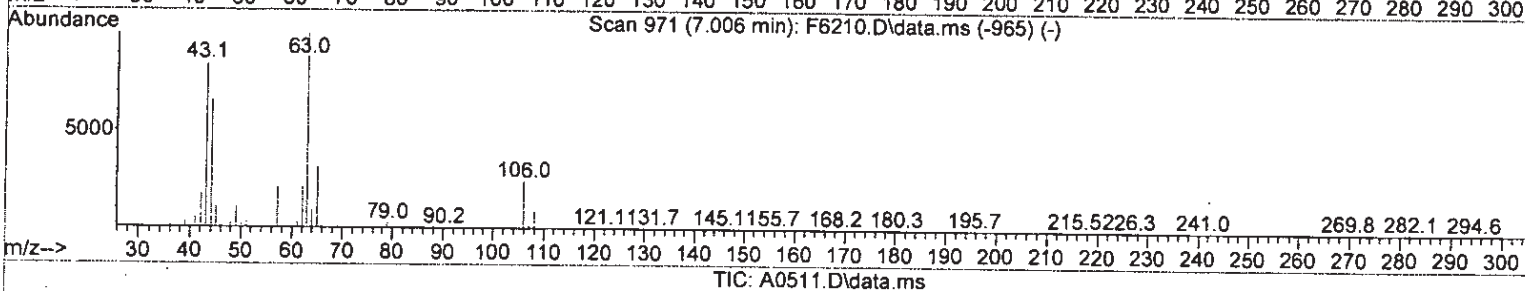
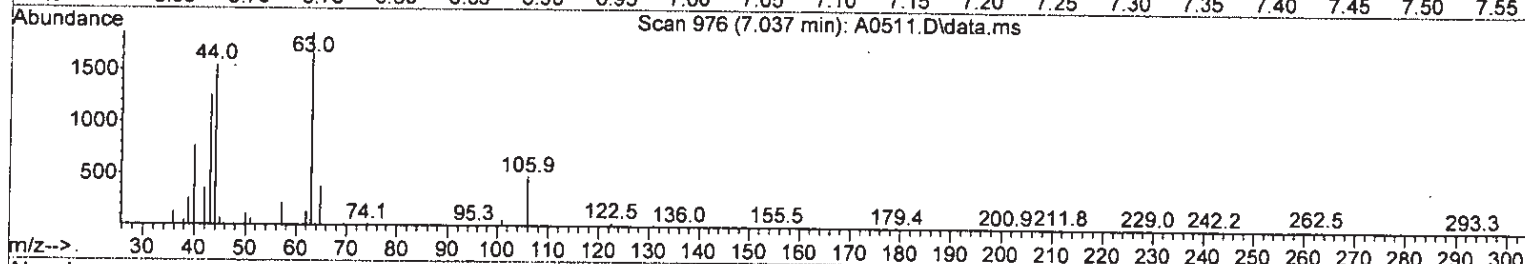
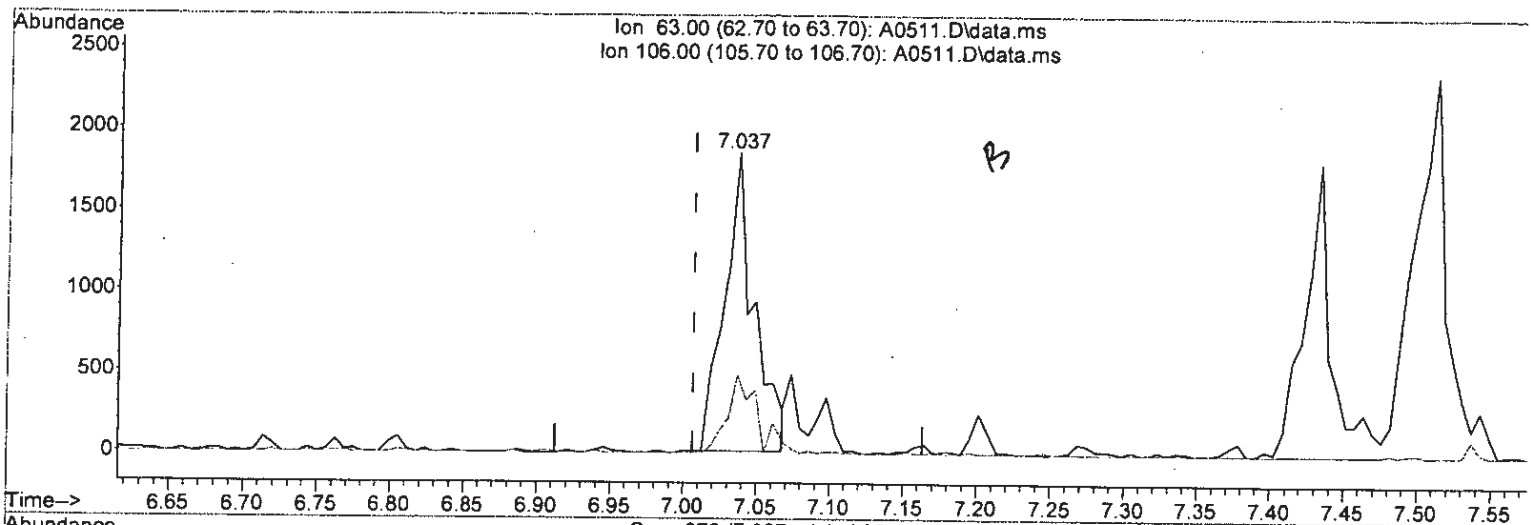
Ion	Exp%	Act%
41.00	100	100
43.00	108.60	32.43#
0.00	0.00	0.00
0.00	0.00	0.00

00226

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:20:37 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



(62) 2-Chloroethylvinyl Ether

7.037min (+0.030) 0.55 ug/L

response 2602

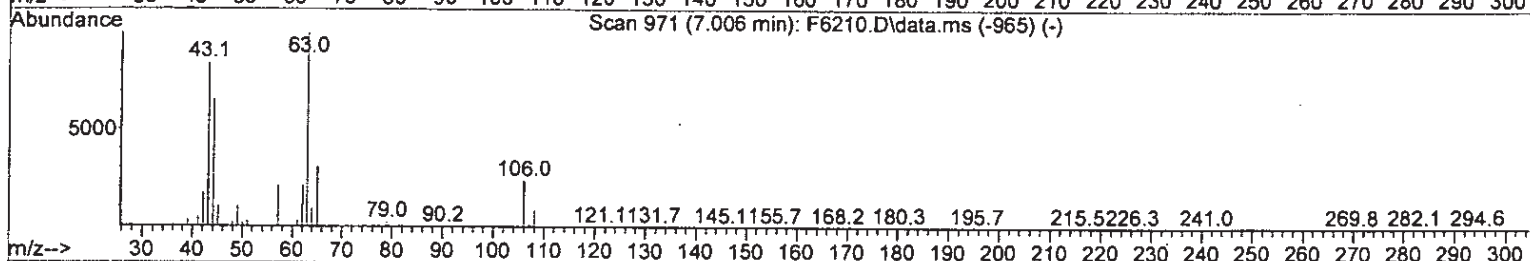
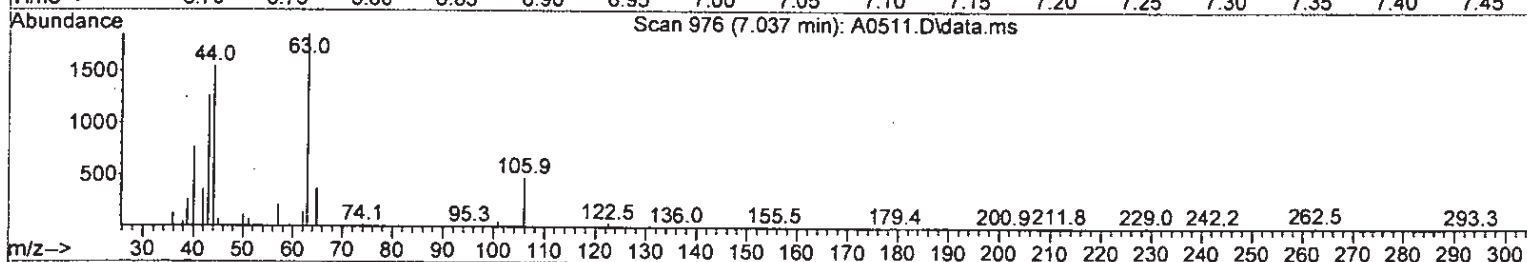
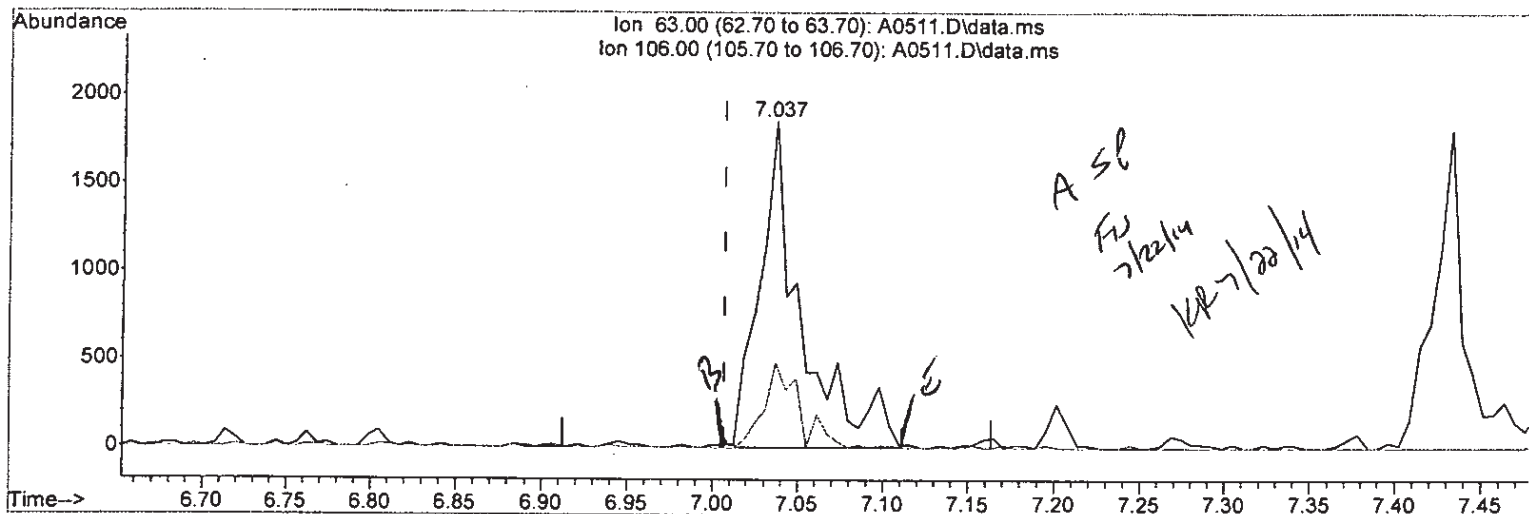
Ion	Exp%	Act%
63.00	100	100
106.00	27.80	25.94
0.00	0.00	0.00
0.00	0.00	0.00

00227

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:20:37 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



TIC: A0511.D\data.ms

(62) 2-Chloroethylvinyl Ether

7.037min (+0.030) 0.67 ug/L m

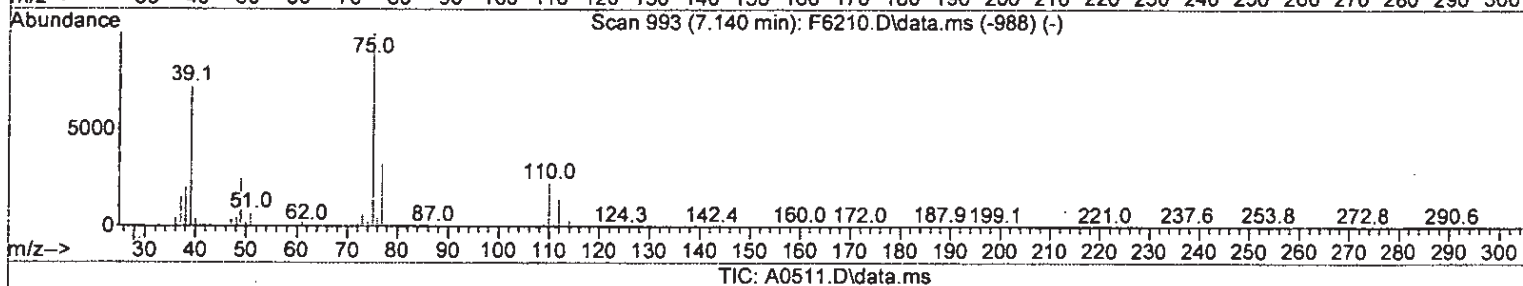
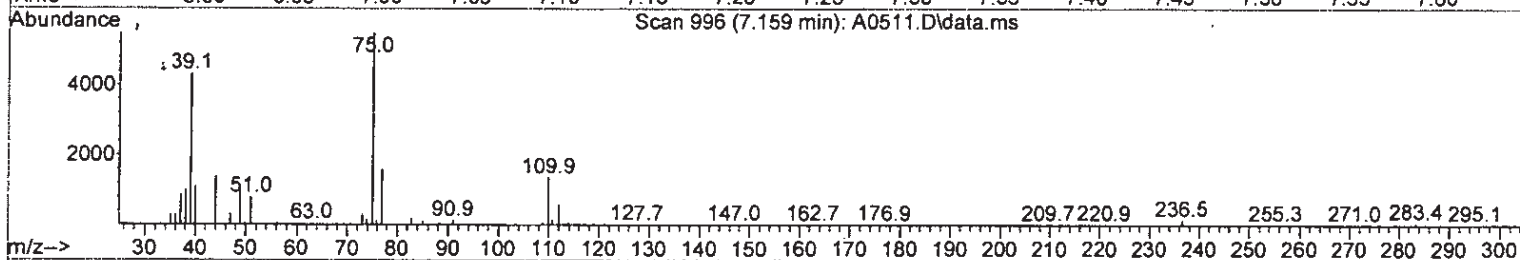
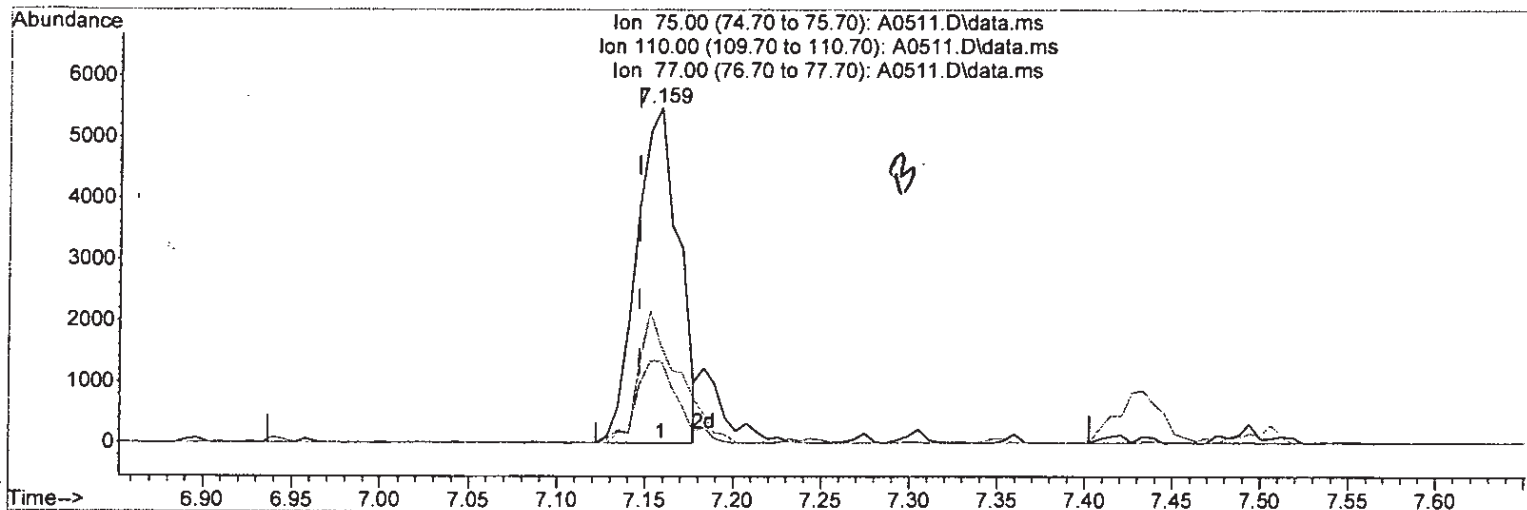
response 3169

Ion	Exp%	Act%
63.00	100	100
106.00	27.80	25.94
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
 Acq On : 21 Jul 2014 12:22 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:35:51 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(63) cis-1,3-Dichloropropene (P)

7.159min (+0.012) 0.67 ug/L

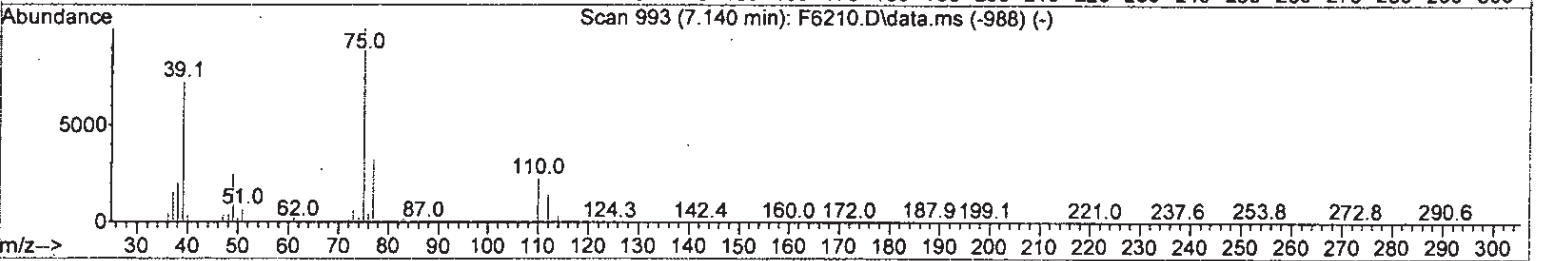
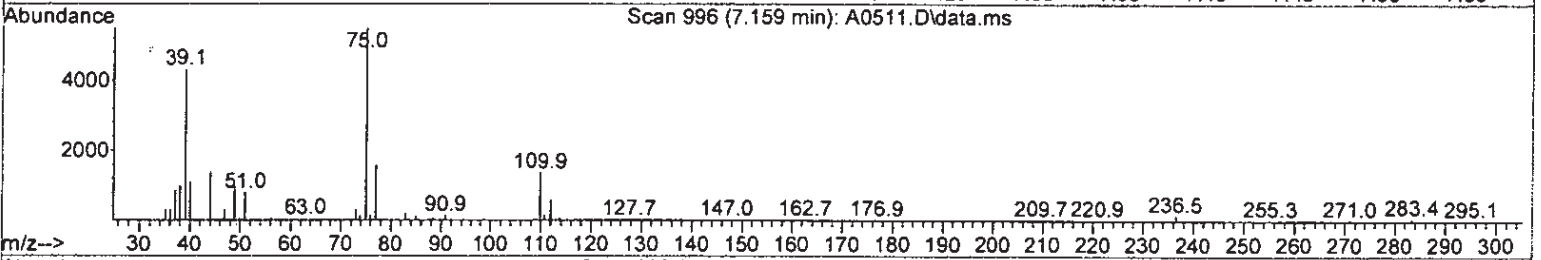
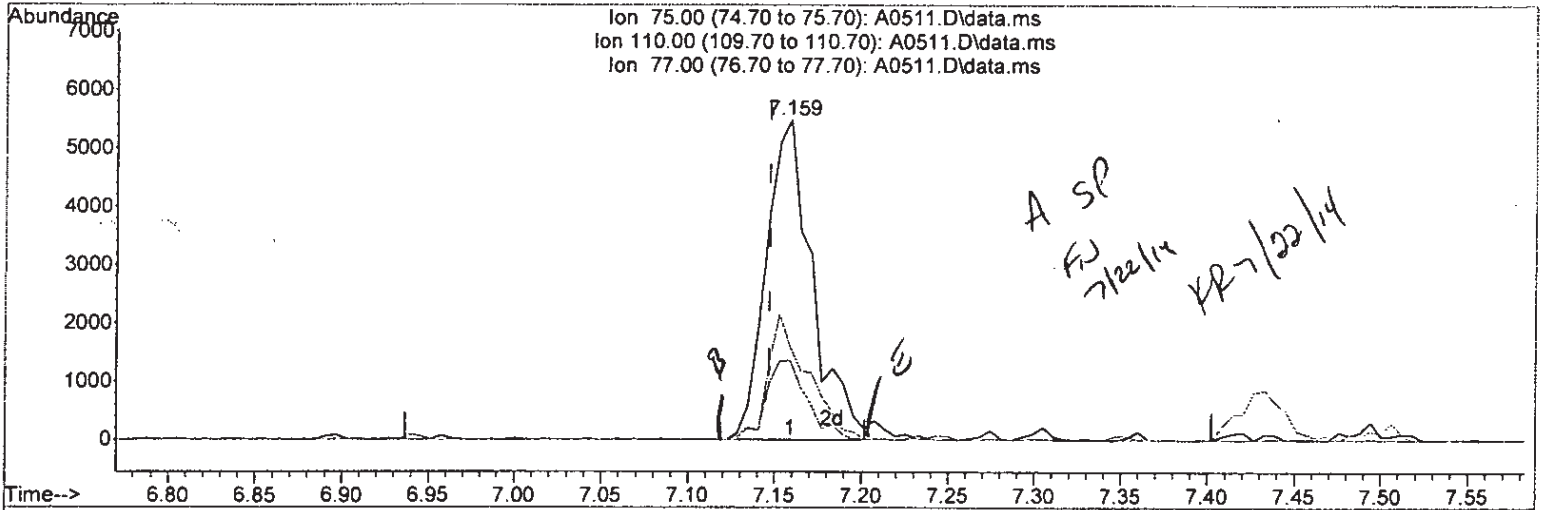
response 9058

Ion	Exp%	Act%
75.00	100	100
110.00	23.70	27.37
77.00	31.80	28.83
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
 Acq On : 21 Jul 2014 12:22 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:35:51 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0511.D\data.ms

(63) cis-1,3-Dichloropropene (P)

7.159min (+0.012) 0.74 ug/L m

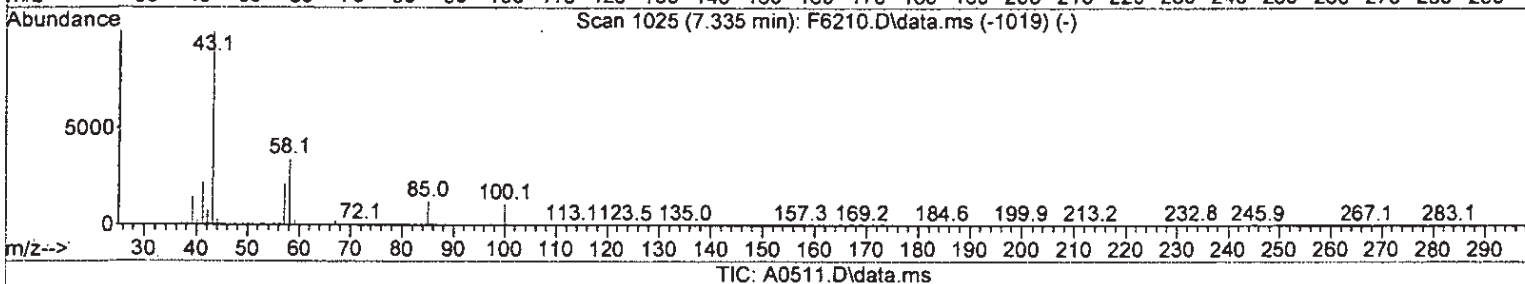
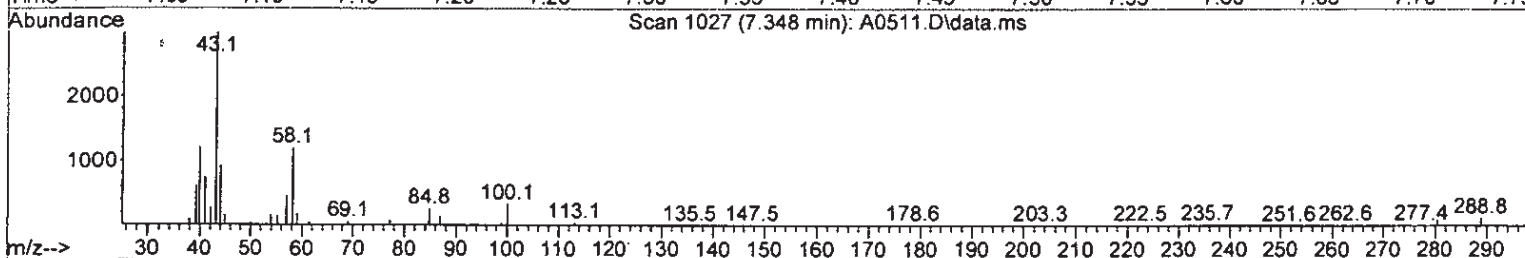
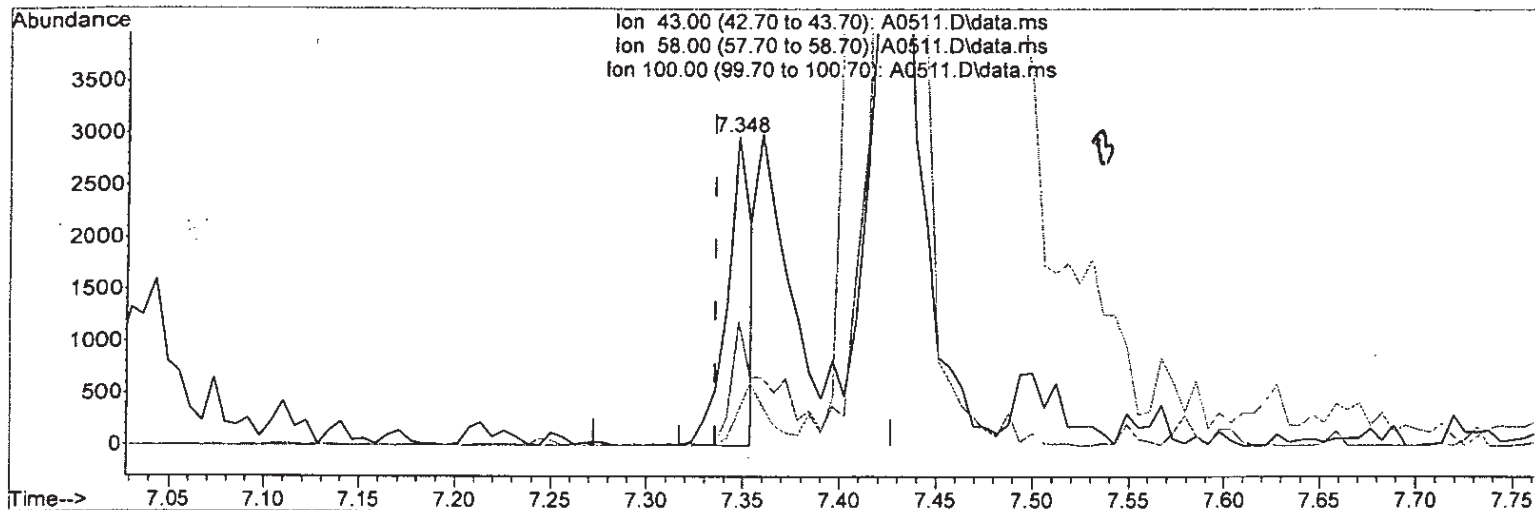
response 10071

Ion	Exp%	Act%
75.00	100	100
110.00	23.70	24.65
77.00	31.80	28.83
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



(64) 4-Methyl-2-pentanone (P)

7.348min (+0.012) 0.39 ug/L

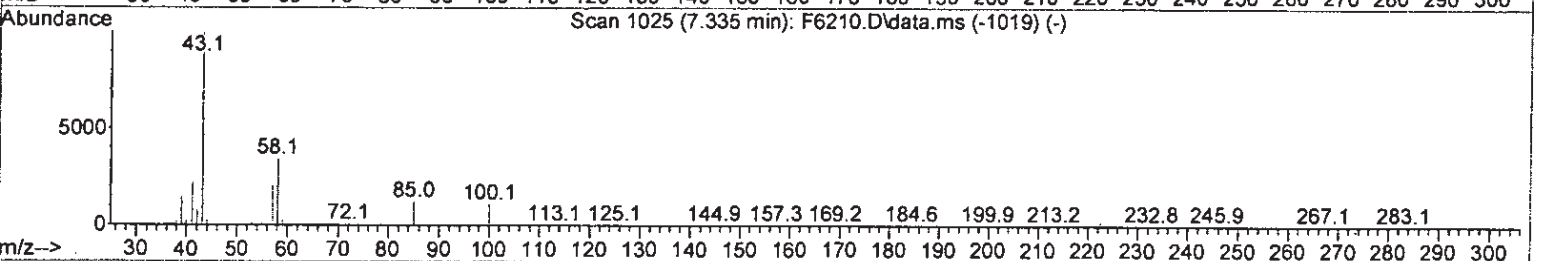
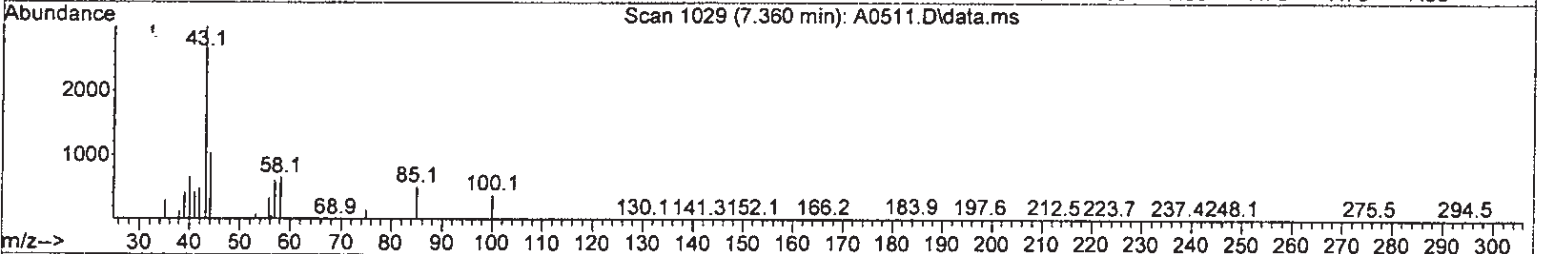
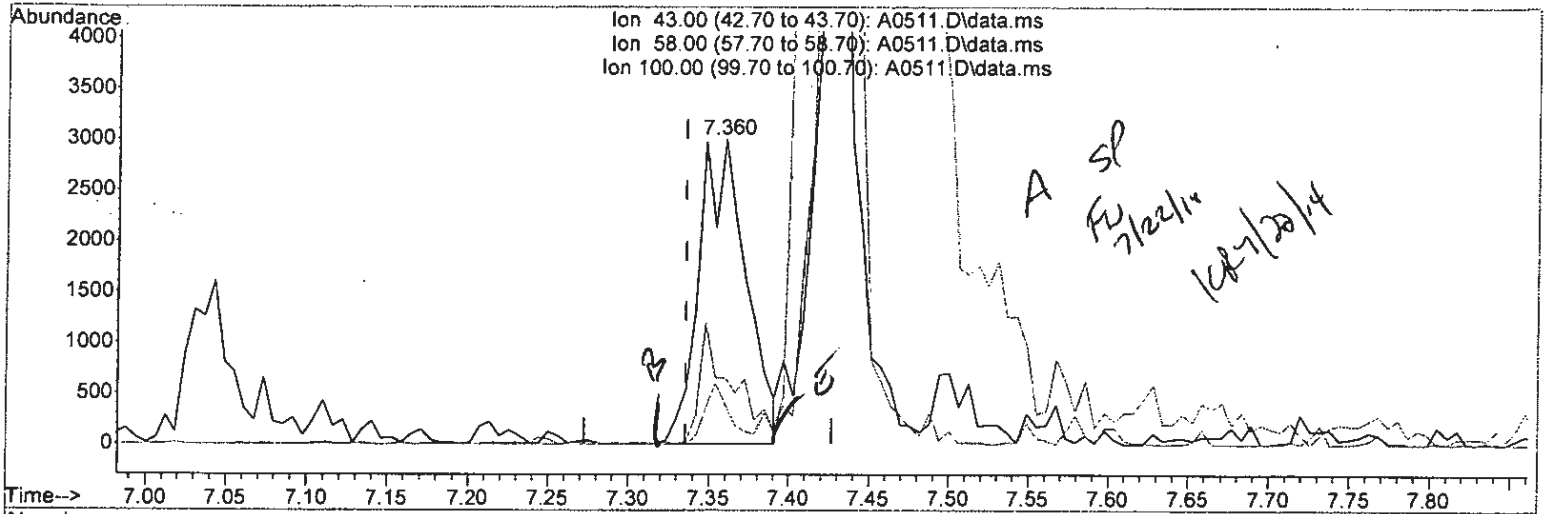
response 2639

Ion	Exp%	Act%
43.00	100	100
58.00	36.30	40.07
100.00	12.60	11.20
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
 Acq On : 21 Jul 2014 12:22 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:35:51 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0511.D\data.ms

(64) 4-Methyl-2-pentanone (P)

7.360min (+0.024) 0.88 ug/L m

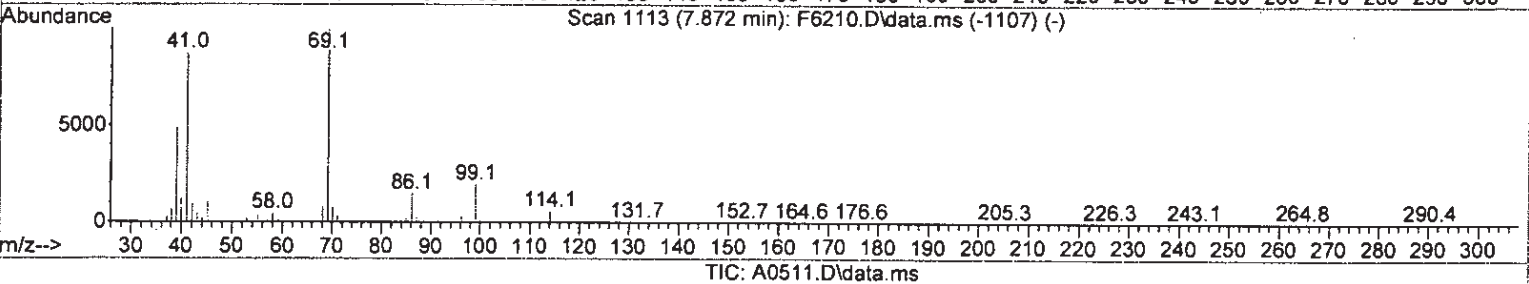
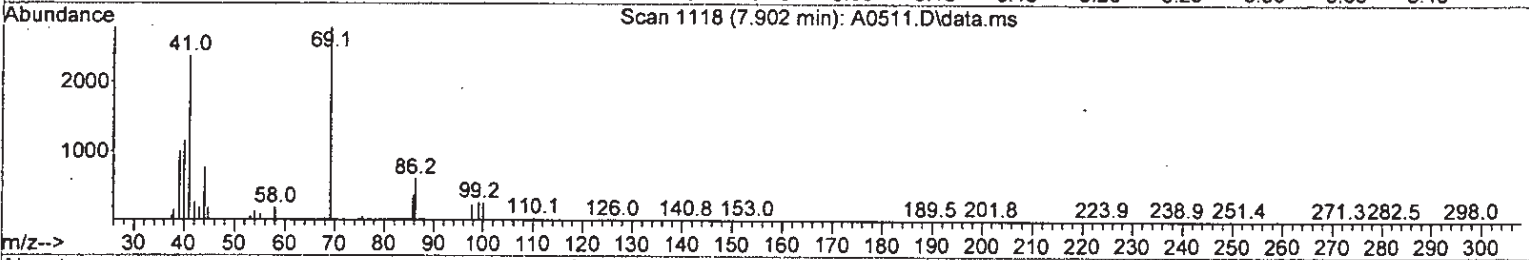
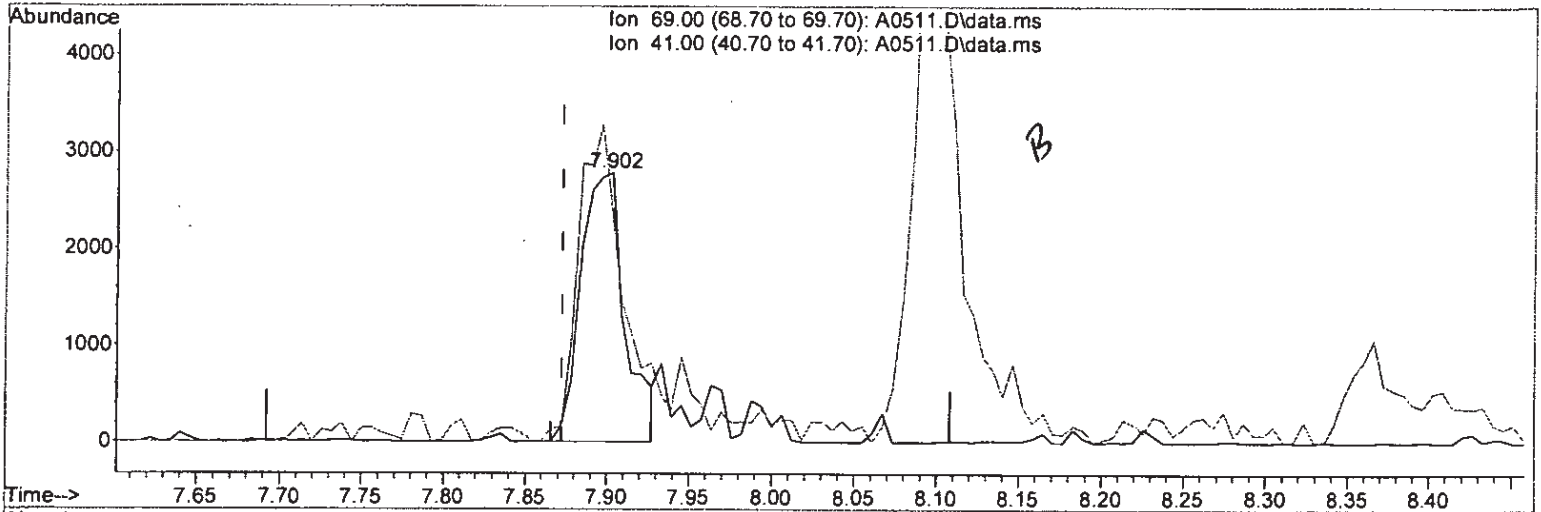
response 6033

Ion	Exp%	Act%
43.00	100	100
58.00	36.30	21.81
100.00	12.60	12.84
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
 Acq On : 21 Jul 2014 12:22 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:35:51 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(68) Ethyl Methacrylate

7.902min (+0.030) 0.60 ug/L

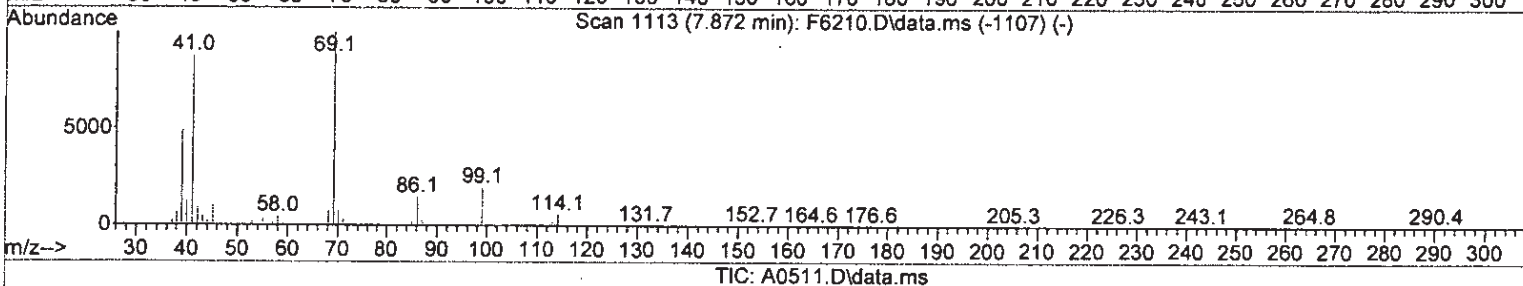
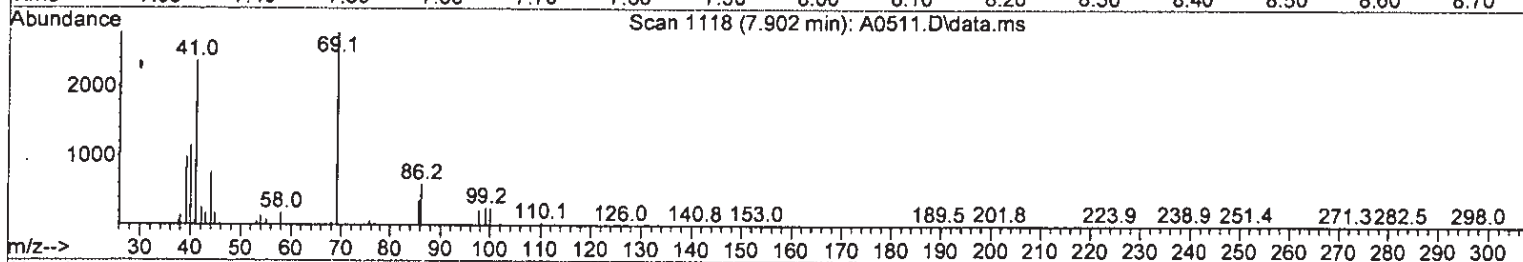
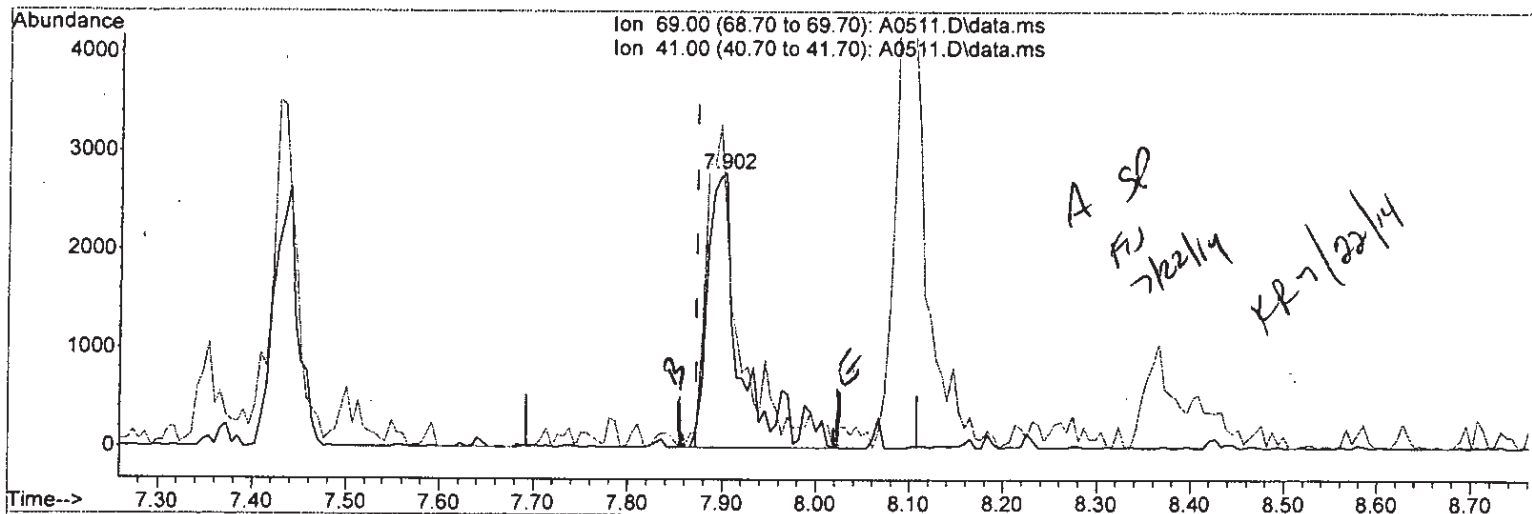
response 5195

Ion	Exp%	Act%
69.00	100	100
41.00	71.50	85.35
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
 Acq On : 21 Jul 2014 12:22 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:35:51 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(68) Ethyl Methacrylate

7.902min (+0.030) 0.79 ug/L m

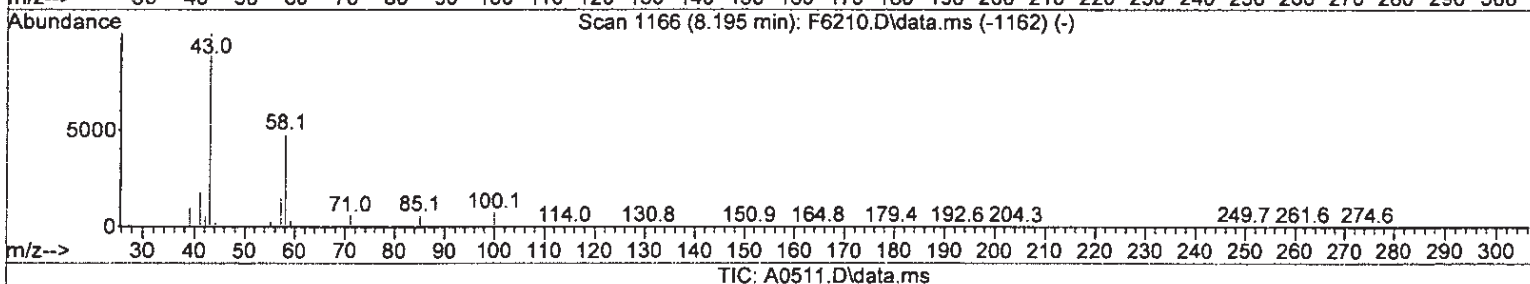
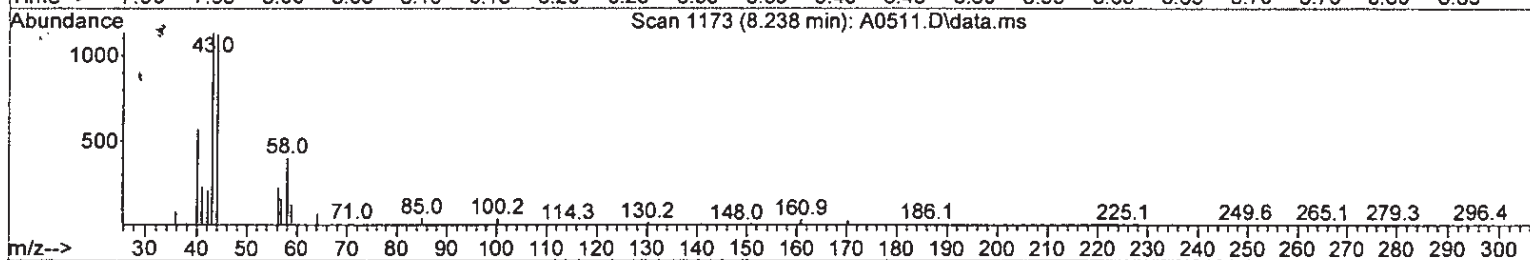
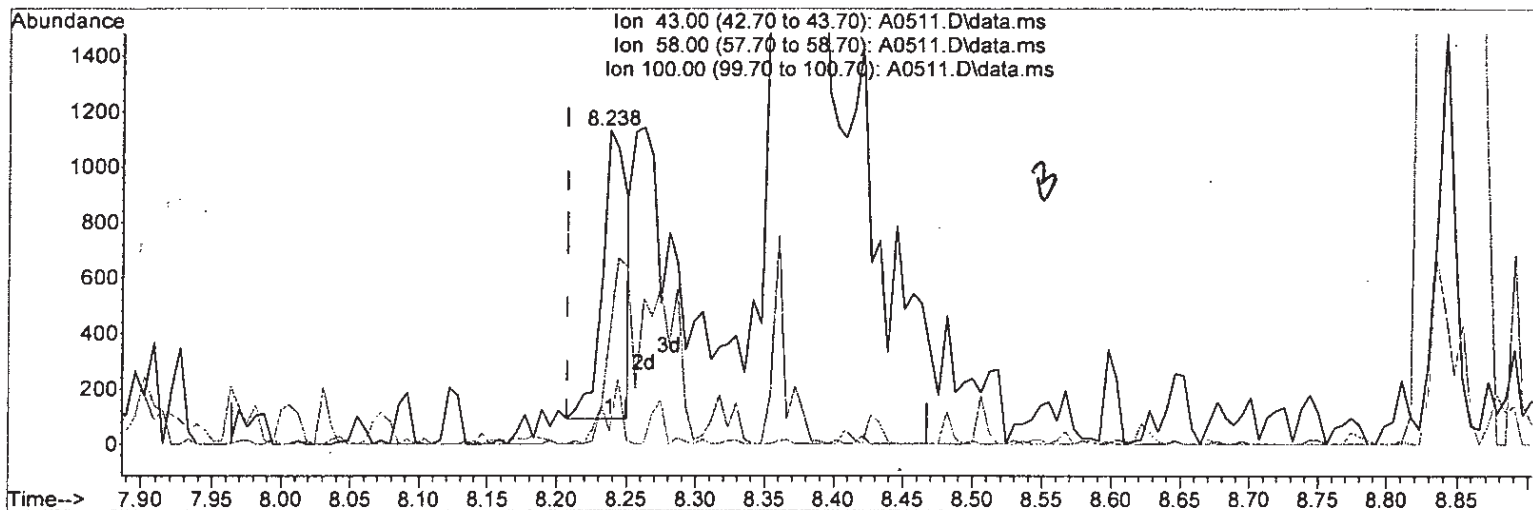
response 6769

Ion	Exp%	Act%
69.00	100	100
41.00	71.50	85.35
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



(73) 2-Hexanone (P)

8.238min (+0.030) 0.26 ug/L

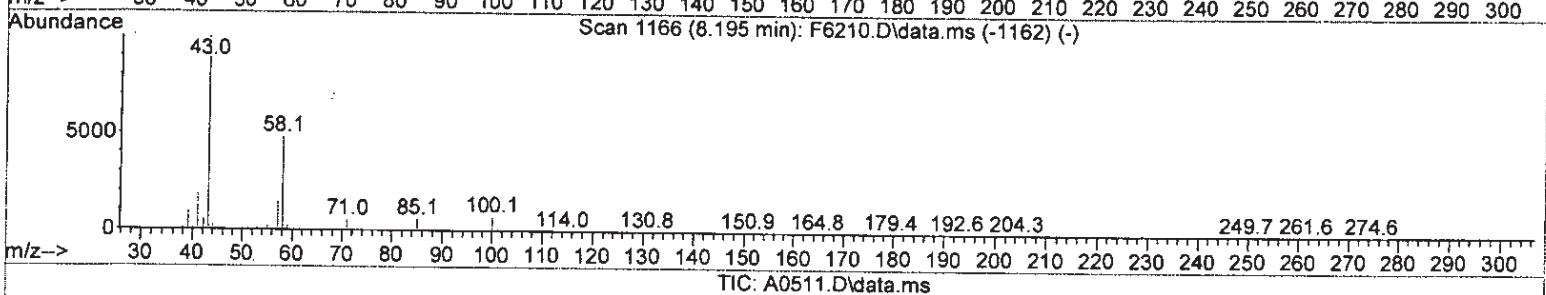
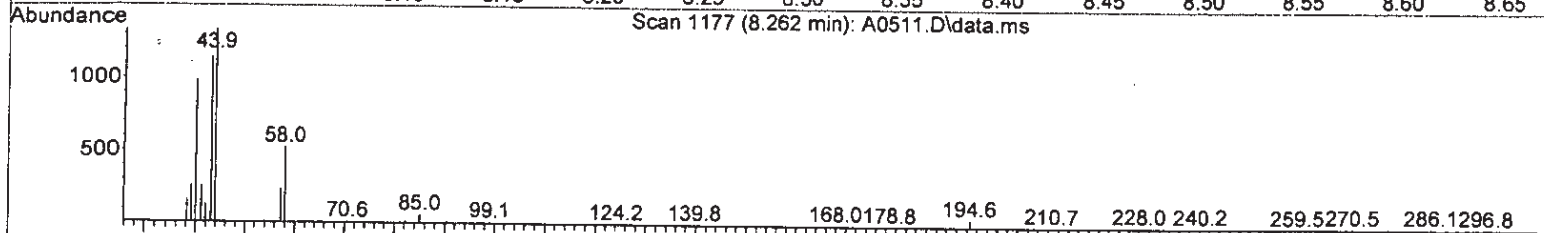
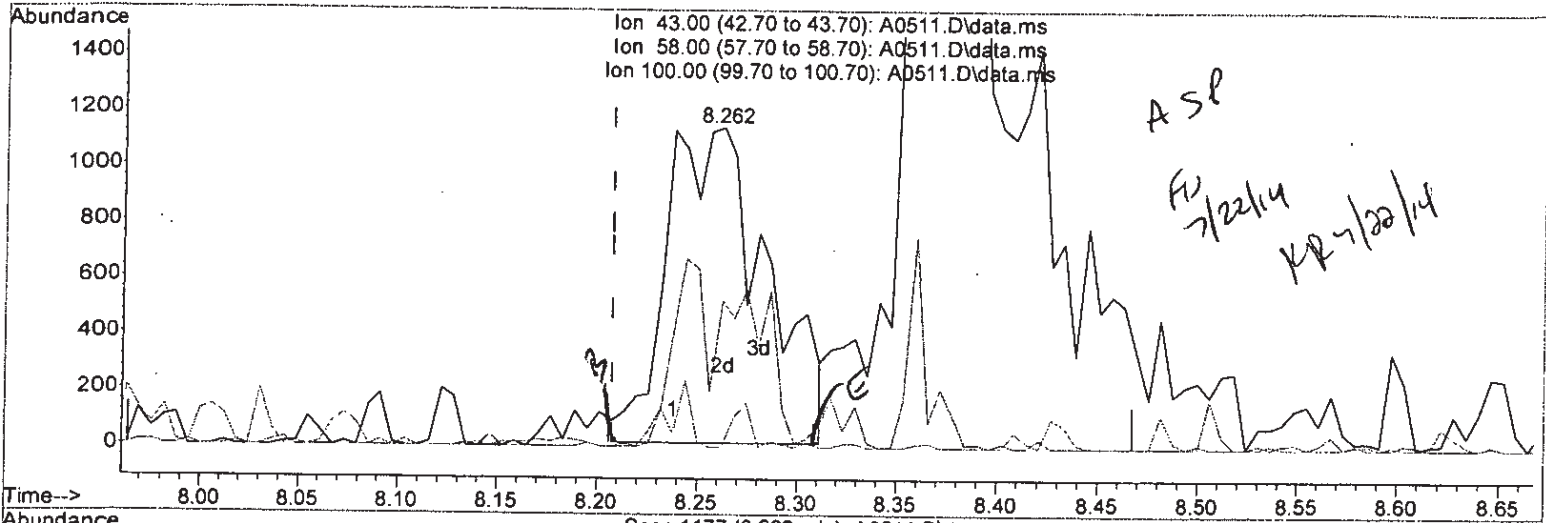
response 1279

Ion	Exp%	Act%
43.00	100	100
58.00	50.80	35.46
100.00	10.10	4.07
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



(73) 2-Hexanone (P)

8.262min (+0.055) 0.78 ug/L m

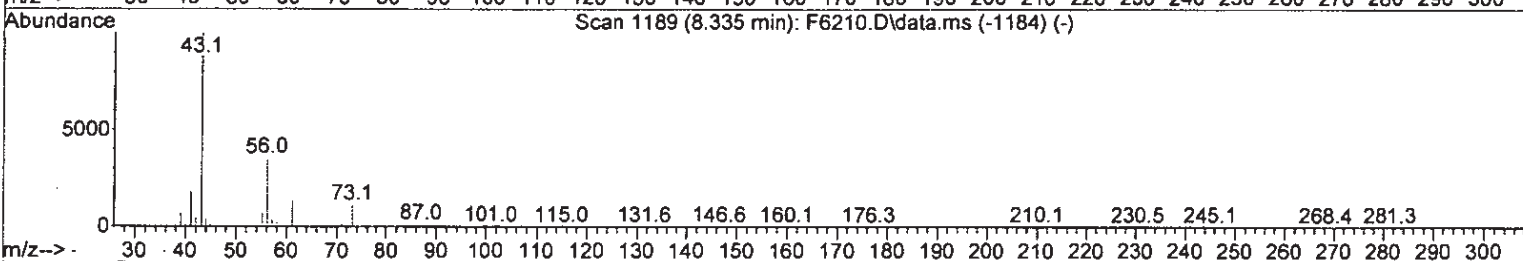
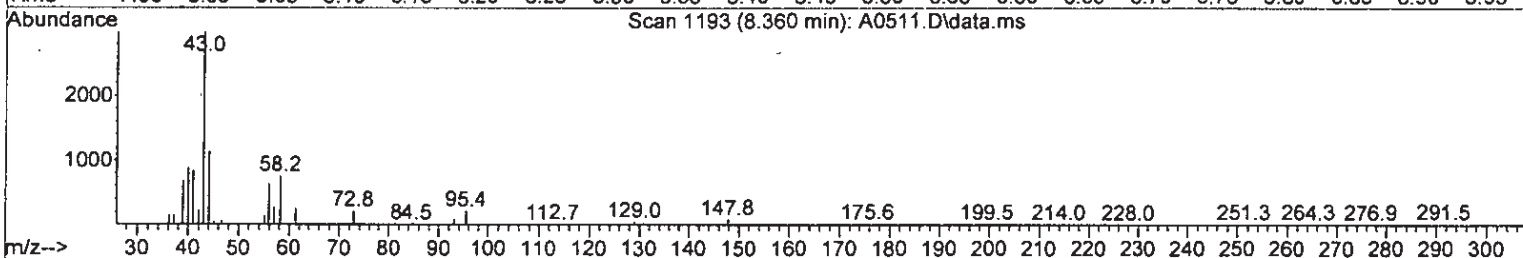
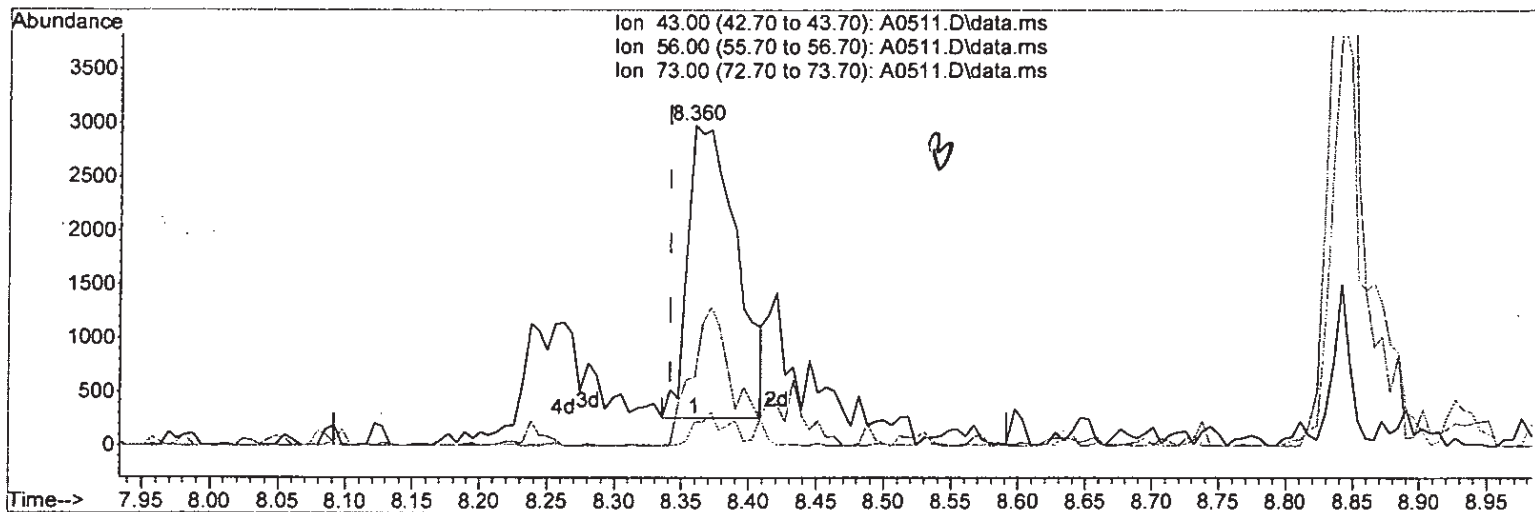
response 3902

Ion	Exp%	Act%
43.00	100	100
58.00	50.80	45.71
100.00	10.10	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
 Acq On : 21 Jul 2014 12:22 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:35:51 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0511.D\data.ms

(76) N-Butyl Acetate

8.360min (+0.018) 0.52 ug/L

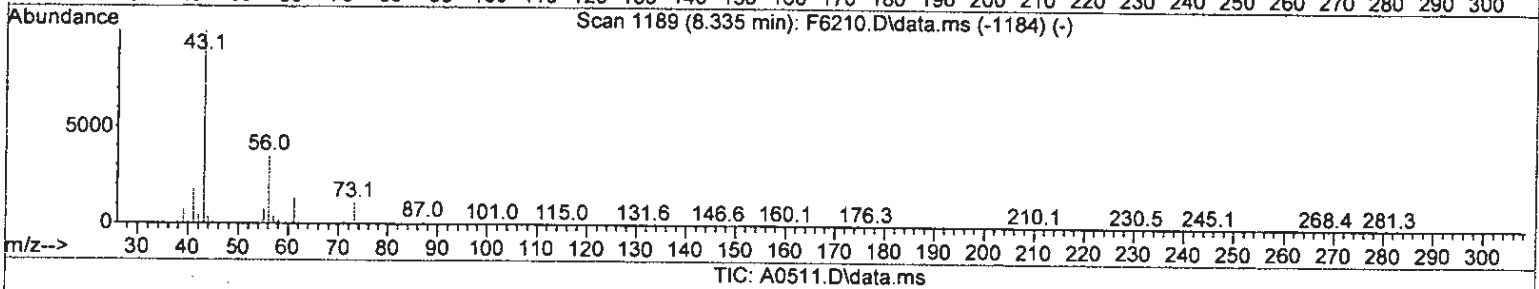
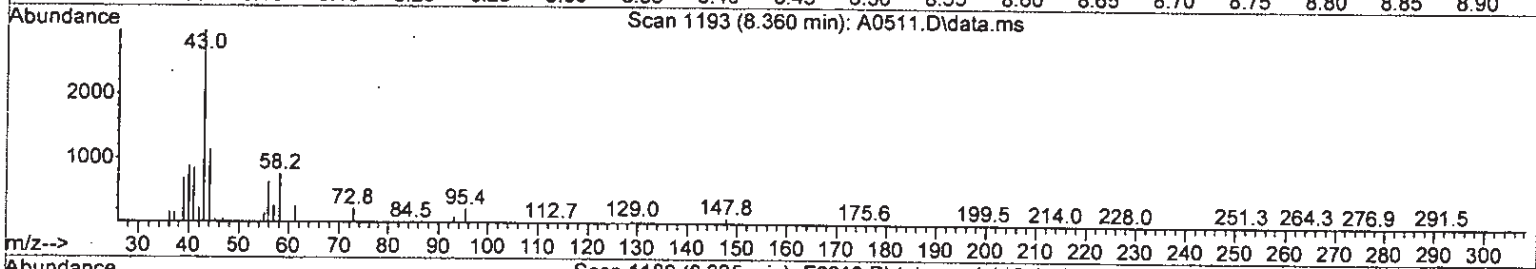
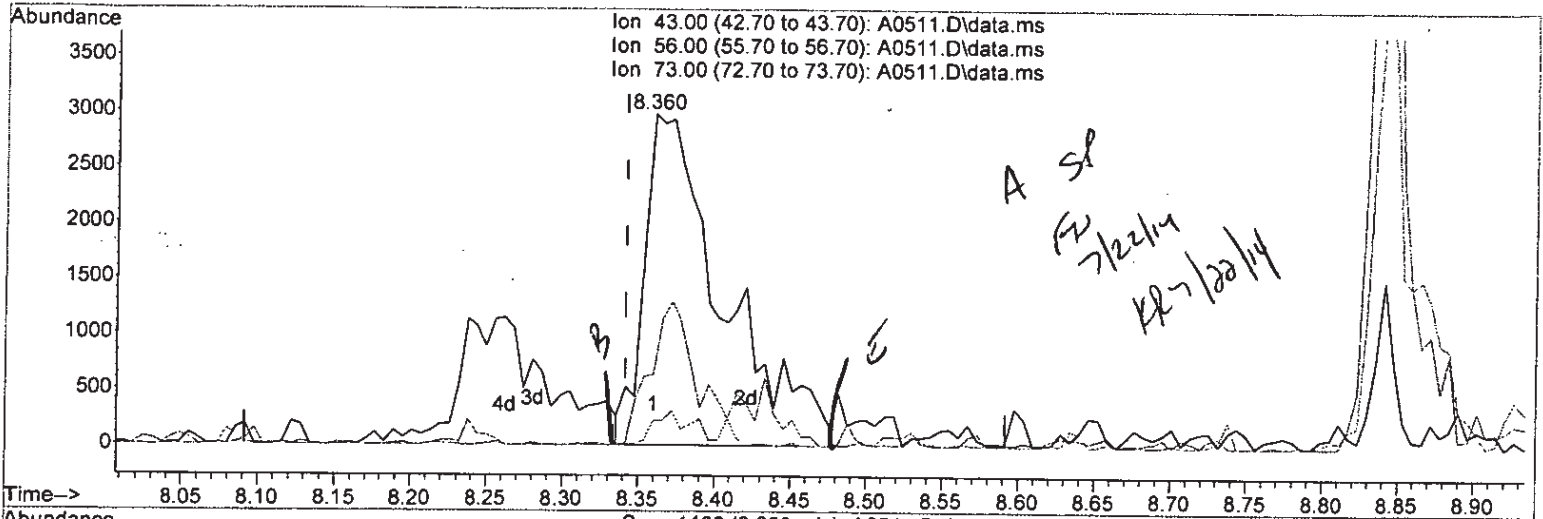
response 6867

Ion	Exp%	Act%
43.00	100	100
56.00	38.80	21.28
73.00	14.00	7.65
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
 Acq On : 21 Jul 2014 12:22 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 12:35:51 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(76) N-Butyl Acetate

8.360min (+0.018) 0.81 ug/L m

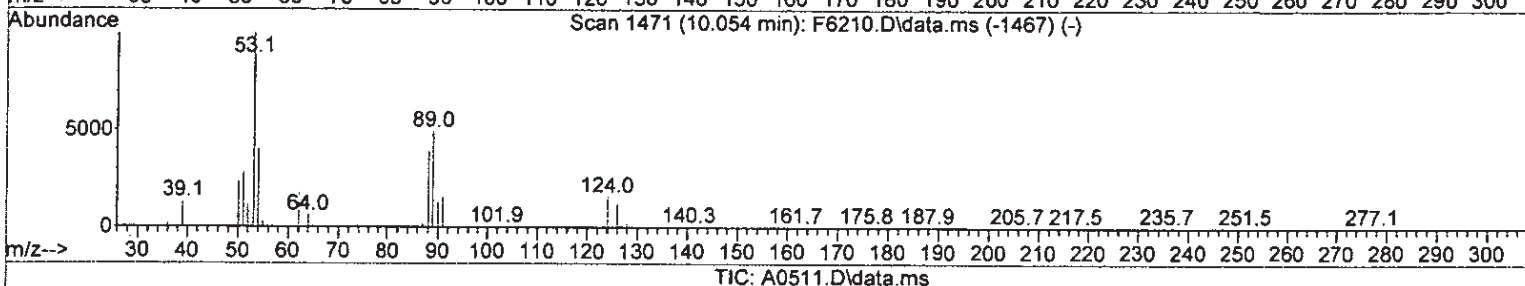
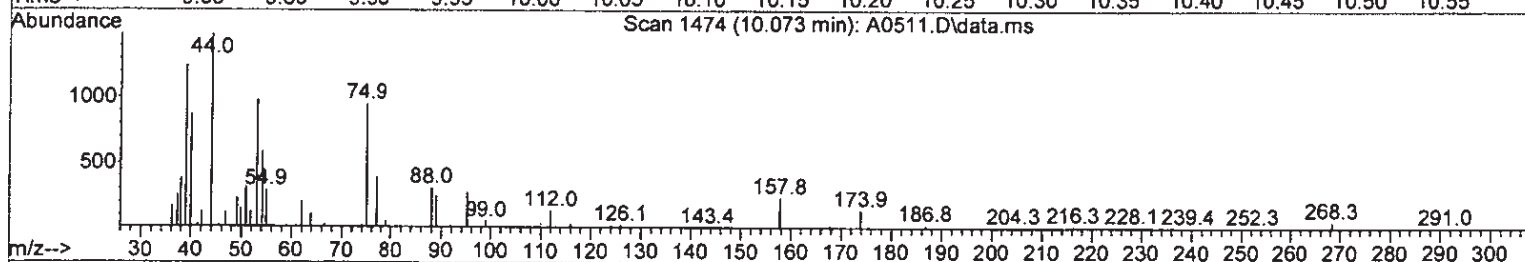
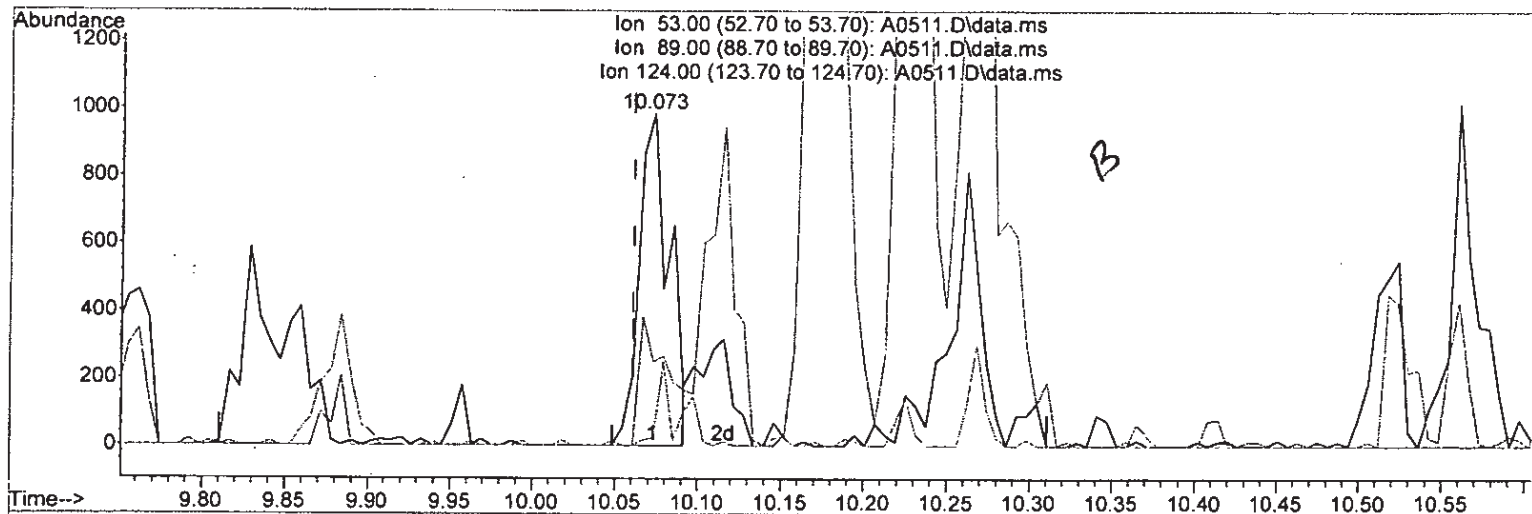
response 10618

Ion	Exp%	Act%
43.00	100	100
56.00	38.80	21.28
73.00	14.00	7.22
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:20:37 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



(90) trans-1,4-Dichloro-2-Butene

10.073min (+0.012) 0.57 ug/L

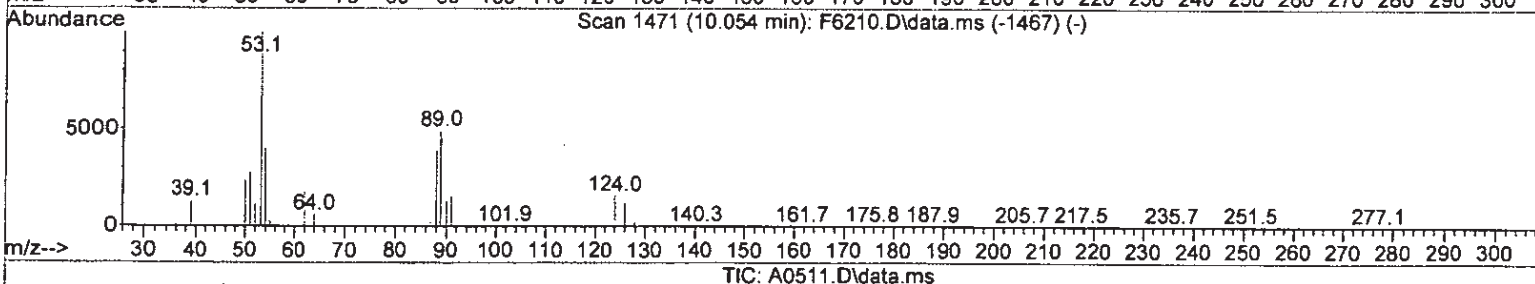
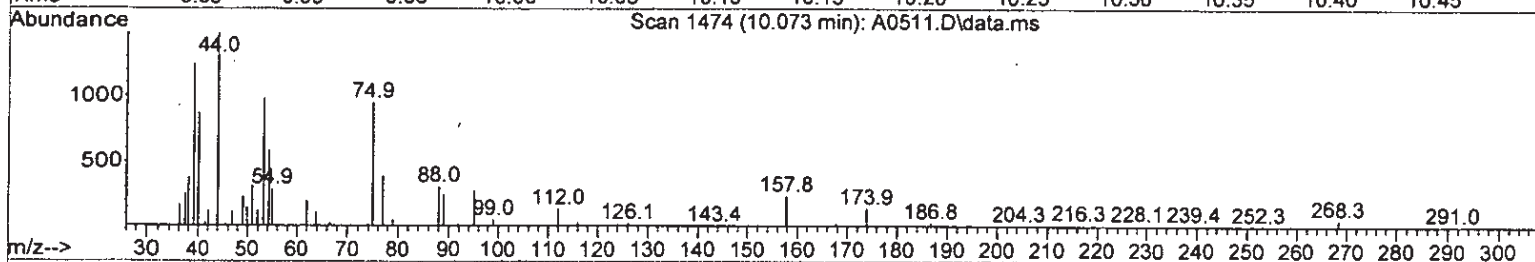
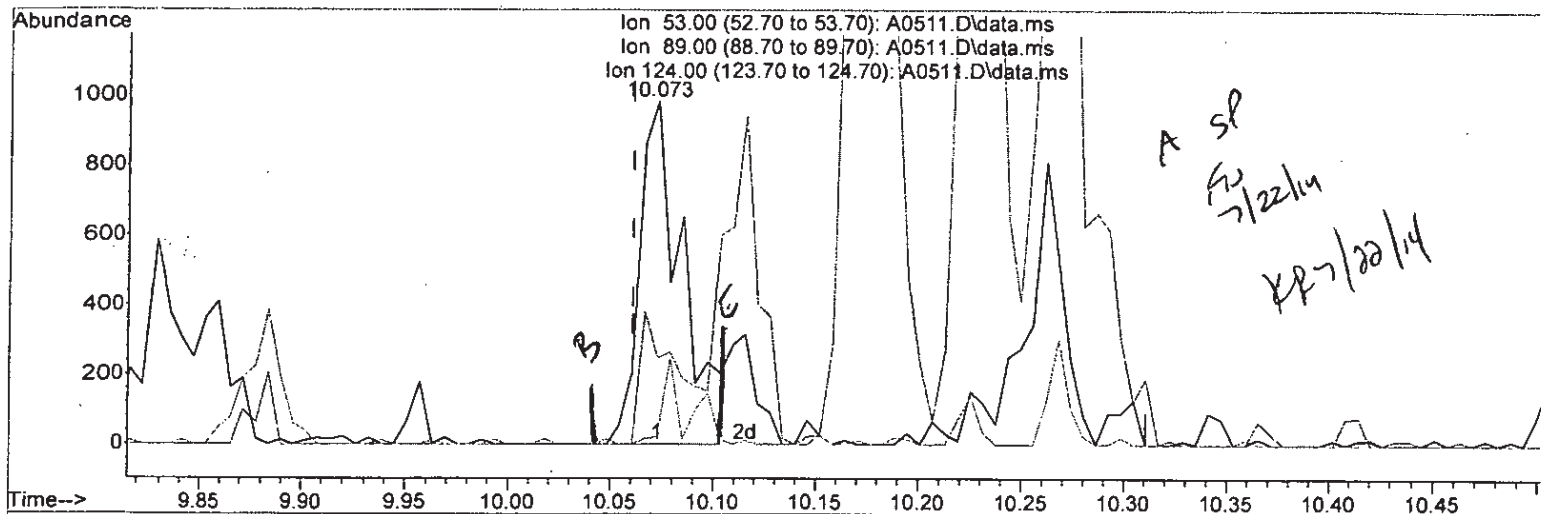
response 1243

Ion	Exp%	Act%
53.00	100	100
89.00	57.40	25.10#
124.00	20.90	2.24
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:20:37 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



(90) trans-1,4-Dichloro-2-Butene

10.073min (+0.012) 0.64 ug/L m

response 1403

Ion	Exp%	Act%
53.00	100	100
89.00	57.40	25.10#
124.00	20.90	2.24
0.00	0.00	0.00

Sample : 2.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
 Acq On : 21 Jul 2014 12:52 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 22 13:18:07 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration

FJ
7/22/14

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	908244	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1375547	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.842	117	1263990	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	661125	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4, Dibrflmethane	4.324	113	451095	55.02	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	=	110.04%	
48) surr1, 1,2-dichloroetha...	4.854	65	484305	59.61	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	=	119.22%	
65) SURR3, Toluene-d8	7.427	98	1599431	50.51	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	=	101.02%	
70) SURR2, BFB	9.878	95	626389	50.24	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	=	100.48%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.191	85	17416	2.05	ug/L	96
3) Chloromethane	1.294	50	24600	2.34	ug/L	98
4) Vinyl Chloride	1.361	62	23232	2.10	ug/L	99
5) Bromomethane	1.556	94	5312	1.33	ug/L	99
6) Chloroethane	1.611	64	12409	2.07	ug/L	94
7) Freon 21	1.721	67	34495	2.16	ug/L	96
8) Trichlorofluoromethane	1.770	101	26346	2.22	ug/L	88
9) Diethyl Ether	1.934	59	14090	2.07	ug/L	78
10) Freon 123a	1.928	67	21981	2.14	ug/L	84
11) Freon 123	1.965	83	23441	2.14	ug/L	98
12) Acrolein	2.026	56	10947	10.38	ug/L	90
13) 1,1-Dicethene	2.105	96	13556	2.24	ug/L #	83
14) Freon 113	2.093	101	15674	2.27	ug/L	91
15) Acetone	2.117	43	7286m	3.56	ug/L	
16) 2-Propanol	2.196	45	13018	36.72	ug/L	92
17) Iodomethane	2.209	142	3078	0.49	ug/L	96
18) Carbon Disulfide	2.270	76	55287	2.15	ug/L	97
19) Acetonitrile	2.318	40	3021	10.98	ug/L #	61
20) Allyl Chloride	2.355	76	8053	1.84	ug/L #	72
21) Methyl Acetate	2.361	43	11056	2.52	ug/L	95
22) Methylene Chloride	2.440	84	17616	1.93	ug/L #	78
23) TBA	2.507	59	16689	29.87	ug/L	77
24) Acrylonitrile	2.635	53	26643	11.91	ug/L	83
25) Methyl-t-Butyl Ether	2.660	73	35358	1.84	ug/L	90
26) trans-1,2-Dichloroethene	2.666	96	15477	2.01	ug/L #	87
28) 1,1-Dicethane	3.050	63	36304	2.30	ug/L	95
29) Vinyl Acetate	3.111	86	1626	1.45	ug/L #	25
30) DIPE	3.111	45	79281	2.48	ug/L	81
31) 2-Chloro-1,3-Butadiene	3.141	53	33814	2.22	ug/L	89
32) ETBE	3.501	59	51913	1.91	ug/L	92
33) 2,2-Dichloropropane	3.678	77	20072	1.73	ug/L	96
34) cis-1,2-Dichloroethene	3.690	96	18328	2.10	ug/L	89
35) 2-Butanone	3.769	43	6918m	2.48	ug/L	
36) Propionitrile	3.794	54	6542m	9.07	ug/L	
37) Bromochloromethane	3.983	130	11024	2.15	ug/L	88

Sample : 2.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
 Acq On : 21 Jul 2014 12:52 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 22 13:18:07 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Methacrylonitrile	3.989	67	3701	1.63	ug/L #	45
39) Tetrahydrofuran	4.092	42	4133	2.49	ug/L #	56
40) Chloroform	4.099	83	30272	2.14	ug/L	92
41) 1,1,1-Trichloroethane	4.361	97	24572	1.98	ug/L #	81
42) TAME	5.190	73	33098	1.62	ug/L	91
44) Cyclohexane	4.446	41	26461	2.59	ug/L	100
46) Carbontetrachloride	4.605	121	6629	1.79	ug/L	88
47) 1,1-Dichloropropene	4.617	75	21429	1.93	ug/L	91
49) Benzene	4.964	78	65693	1.85	ug/L	88
50) 1,2-Dichloroethane	4.989	62	22324	1.92	ug/L	78
51) Iso-Butyl Alcohol	4.885	43	9886m	34.27	ug/L	
52) n-Heptane	5.458	43	23196	2.33	ug/L #	79
53) 1-Butanol	6.037	56	7536m	55.80	ug/L	
54) Trichloroethene	5.976	130	18580	1.95	ug/L	90
55) Methylcyclohexane	6.214	55	26465	2.11	ug/L #	64
56) 1,2-Dicloropropane	6.263	63	20260	1.99	ug/L	96
57) Dibromomethane	6.409	93	10288	2.21	ug/L #	81
58) 1,4-Dioxane	6.494	88	2344m	47.00	ug/L	
59) Methyl Methacrylate	6.494	69	5744m	1.40	ug/L	
60) Bromodichloromethane	6.622	83	22196	1.99	ug/L	95
61) 2-Nitropropane	6.909	41	5342m	3.36	ug/L	
62) 2-Chloroethylvinyl Ether	7.031	63	6148m	1.31	ug/L	
63) cis-1,3-Dichloropropene	7.153	75	19878	1.48	ug/L	81
64) 4-Methyl-2-pentanone	7.354	43	12562	1.85	ug/L	89
66) Toluene	7.506	91	69335	1.82	ug/L	94
67) trans-1,3-Dichloropropene	7.756	75	15178	1.38	ug/L	86
68) Ethyl Methacrylate	7.884	69	12423m	1.45	ug/L	
69) 1,1,2-Trichloroethane	7.933	97	12160	1.84	ug/L	96
72) Tetrachloroethene	8.061	164	13708	1.75	ug/L	92
73) 2-Hexanone	8.232	43	9725m	1.97	ug/L	
74) 1,3-Dichloropropane	8.092	76	21580	1.85	ug/L #	73
75) Dibromochloromethane	8.305	129	13918	1.67	ug/L	94
76) N-Butyl Acetate	8.354	43	22614m	1.74	ug/L	
77) 1,2-Dibromoethane	8.409	107	12066	1.78	ug/L	83
78) 3-Chlorobenzotrifluoride	8.878	180	24728	1.70	ug/L	97
79) Chlorobenzene	8.872	112	49233	1.88	ug/L	90
80) 4-Chlorobenzotrifluoride	8.933	180	23520	1.75	ug/L	91
81) 1,1,1,2-Tetrachloroethane	8.951	131	15236	1.60	ug/L	97
82) Ethylbenzene	8.982	106	22662	1.67	ug/L	91
83) (m+p)Xylene	9.091	106	58405	3.52	ug/L #	87
84) o-Xylene	9.439	106	27653	1.65	ug/L	95
85) Styrene	9.451	104	45009	1.59	ug/L	97
86) Bromoform	9.604	173	7936	1.59	ug/L	86
87) 2-Chlorobenzotrifluoride	9.671	180	25254	1.75	ug/L	96
88) Isopropylbenzene	9.756	105	72100	1.76	ug/L	94
89) Cyclohexanone	9.829	55	46290	46.86	ug/L	98
90) trans-1,4-Dichloro-2-B...	10.073	53	3103	1.43	ug/L #	76
92) 1,1,2,2-Tetrachloroethane	10.012	83	15484	2.04	ug/L	94
93) Bromobenzene	10.006	156	21091	1.91	ug/L	95
94) 1,2,3-Trichloropropane	10.049	110	4523	2.24	ug/L #	56
95) n-Propylbenzene	10.103	91	81443	1.82	ug/L	96
96) 2-Chlorotoluene	10.171	91	50019	1.82	ug/L	99

00243

Sample : 2.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
 Acq On : 21 Jul 2014 12:52 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 22 13:18:07 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration

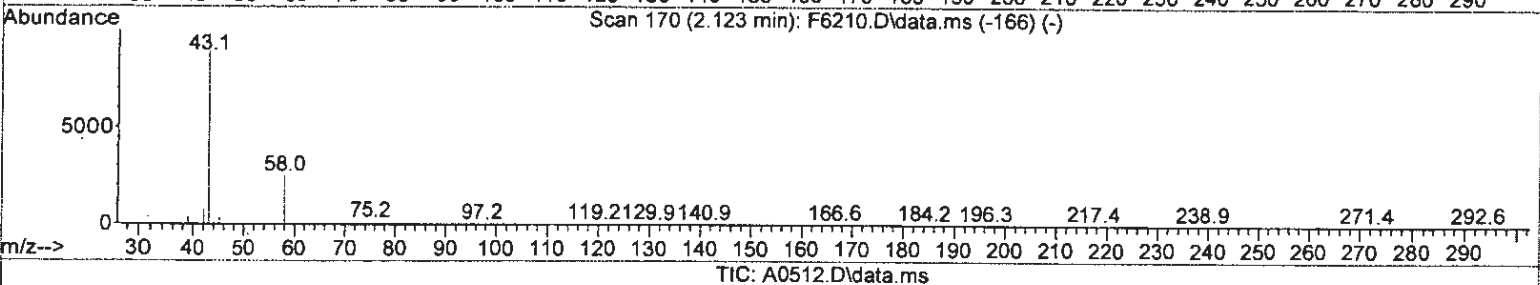
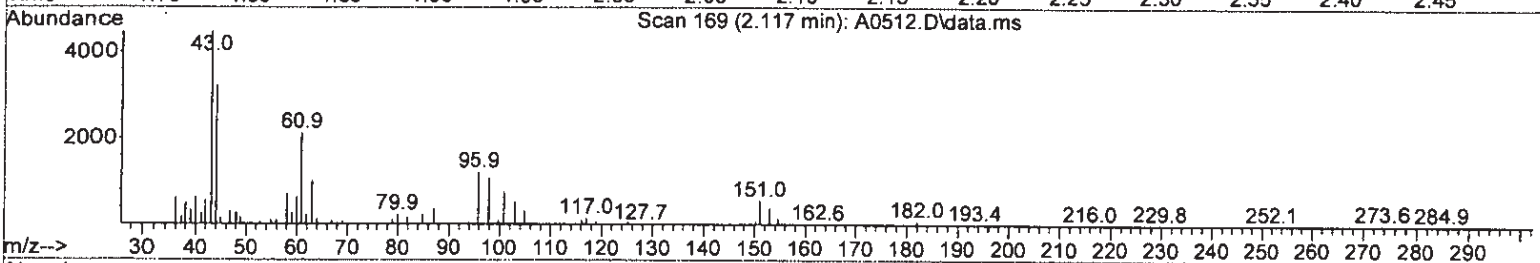
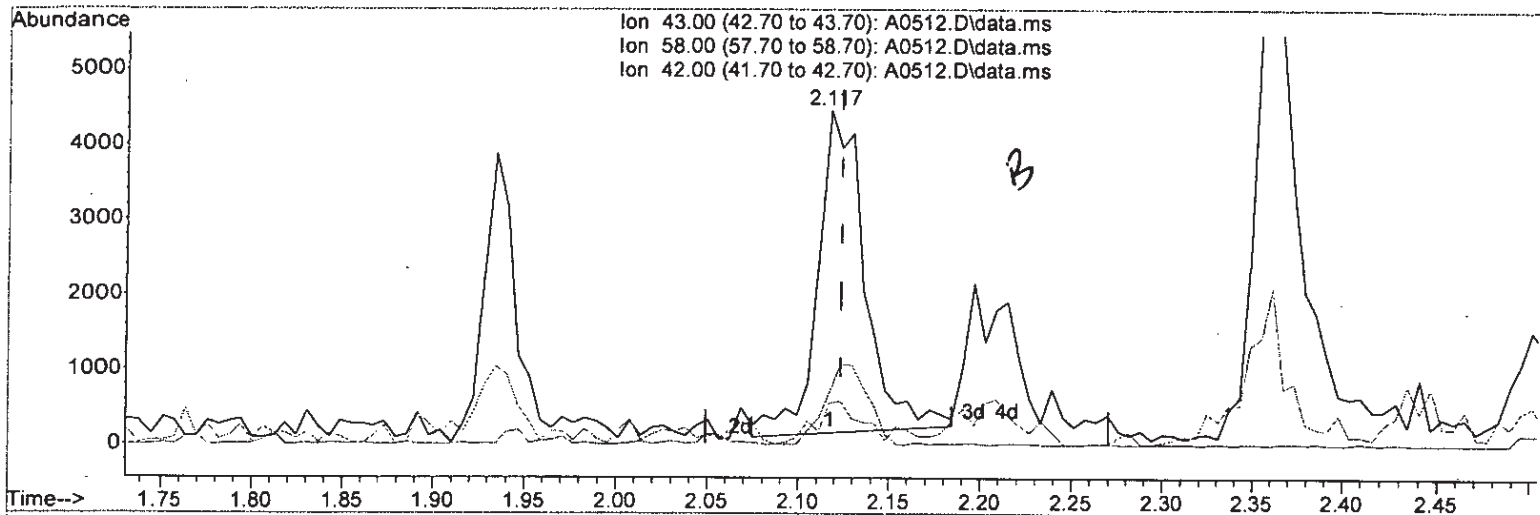
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97) 3-Chlorotoluene	10.225	91	51783	1.85	ug/L	97
98) 4-Chlorotoluene	10.268	91	62225	1.86	ug/L	93
99) 1,3,5-Trimethylbenzene	10.256	105	58925	1.79	ug/L	98
100) tert-Butylbenzene	10.518	119	47303	1.73	ug/L	98
101) 1,2,4-Trimethylbenzene	10.561	105	58036	1.74	ug/L	99
102) 3,4-Dichlorobenzotrifl...	10.616	214	17137	1.74	ug/L	98
103) sec-Butylbenzene	10.701	105	70354	1.87	ug/L	97
104) p-Isopropyltoluene	10.817	119	59099	1.79	ug/L	98
105) 1,3-Dclbenz	10.786	146	37472	1.84	ug/L	95
106) 1,4-Dclbenz	10.853	146	39414	1.91	ug/L	97
107) 2,4-Dichlorobenzotrifl...	10.908	214	14745	1.67	ug/L	99
108) 2,5-Dichlorobenzotrifl...	10.945	214	19568	1.92	ug/L	85
109) n-Butylbenzene	11.146	91	48518	1.70	ug/L	95
110) 1,2-Dclbenz	11.158	146	34370	1.84	ug/L	92
111) 1,2-Dibromo-3-chloropr...	11.713	157	1960	1.68	ug/L	84
112) Trielution Dichlorotol...	11.810	125	84532	5.61	ug/L	95
113) 1,3,5-Trichlorobenzene	11.853	180	24632	1.94	ug/L	98
114) Coelution Dichlorotoluene	12.073	125	57307	3.74	ug/L	96
115) 1,2,4-Tclbenzene	12.243	180	19368	1.87	ug/L	93
116) Hexachlorobt	12.335	225	7692	1.55	ug/L	90
117) Naphthalen	12.396	128	26549	1.68	ug/L	93
118) 1,2,3-Tclbenzene	12.530	180	13663	1.94	ug/L #	79
119) 2,4,5-Trichlorotoluene	12.950	159	7626	1.98	ug/L	83
120) 2,3,6-Trichlorotoluene	13.018	159	9087	2.38	ug/L	96

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

Quantitation Report (Qedit)

Sample : 2.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
 Acq On : 21 Jul 2014 12:52 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 16:19:39 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(15) Acetone (P)

2.117min (-0.006) 3.82 ug/L

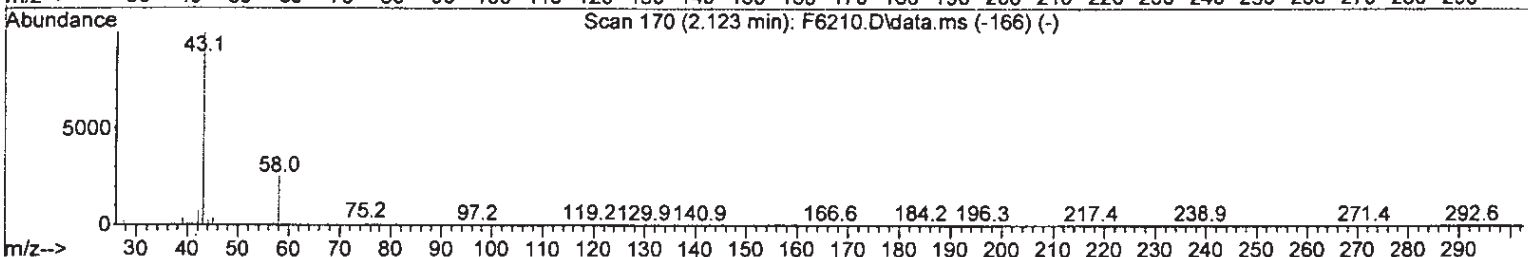
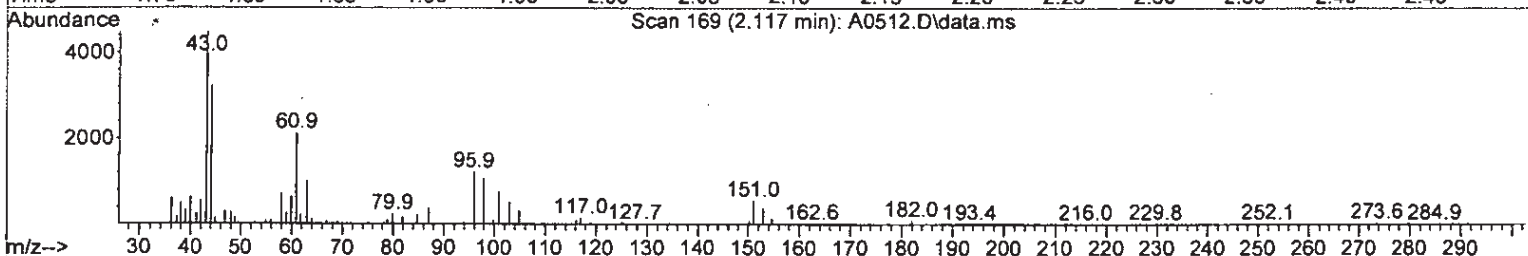
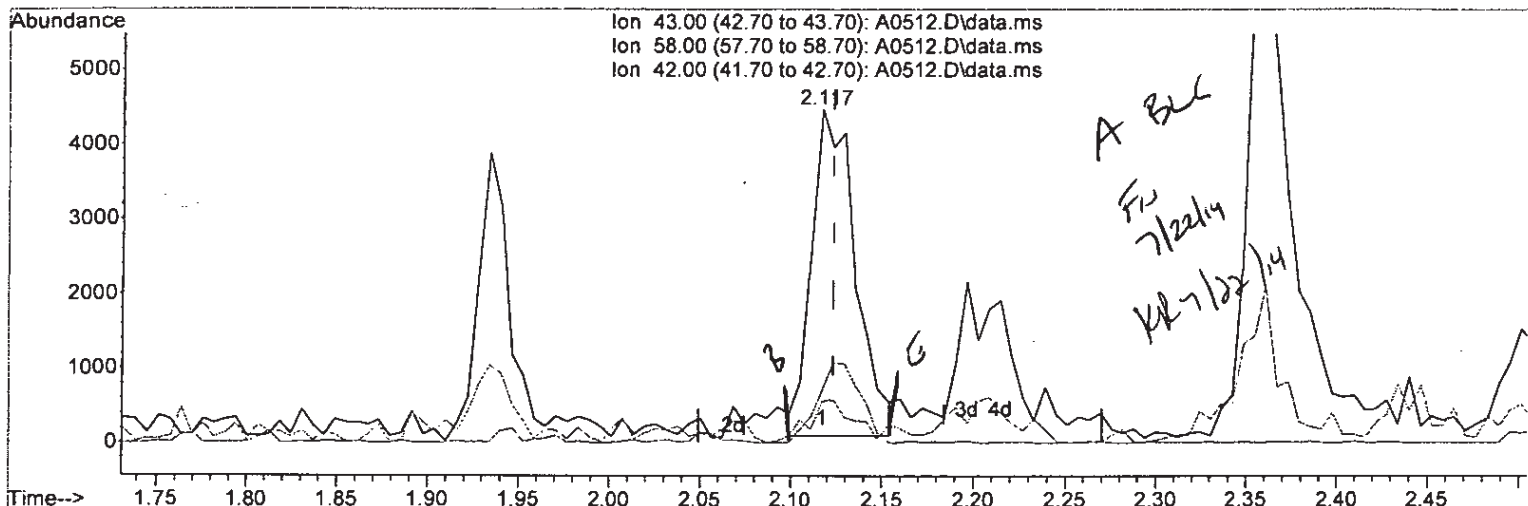
response 7819

Ion	Exp%	Act%
43.00	100	100
58.00	27.20	15.80
42.00	7.00	12.32
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 2.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
 Acq On : 21 Jul 2014 12:52 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 16:19:39 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0512.D\data.ms

(15) Acetone (P)

2.117min (-0.006) 3.56 ug/L m

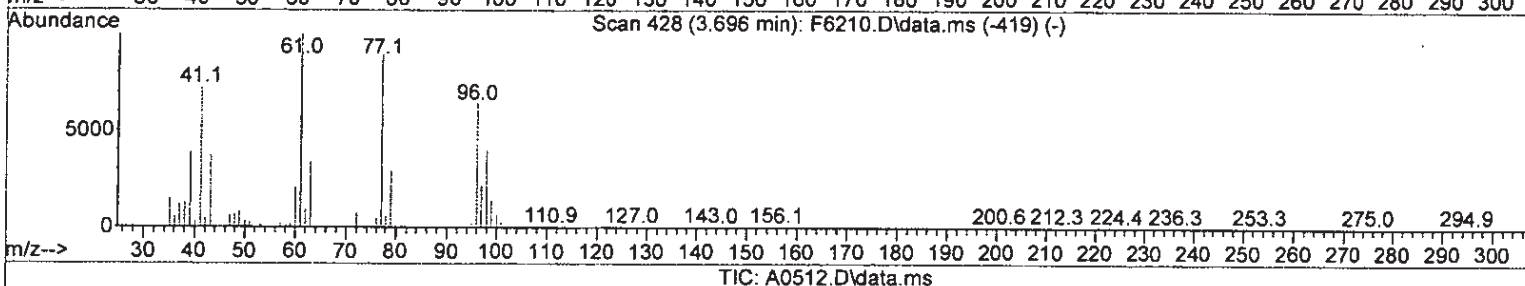
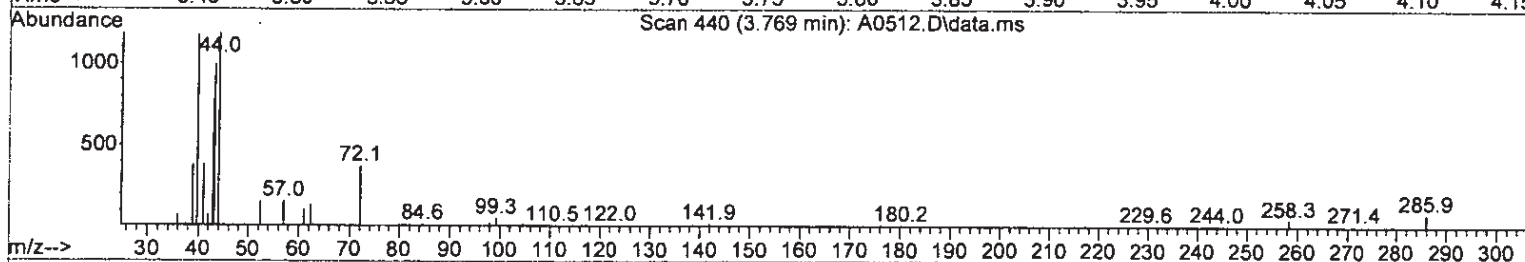
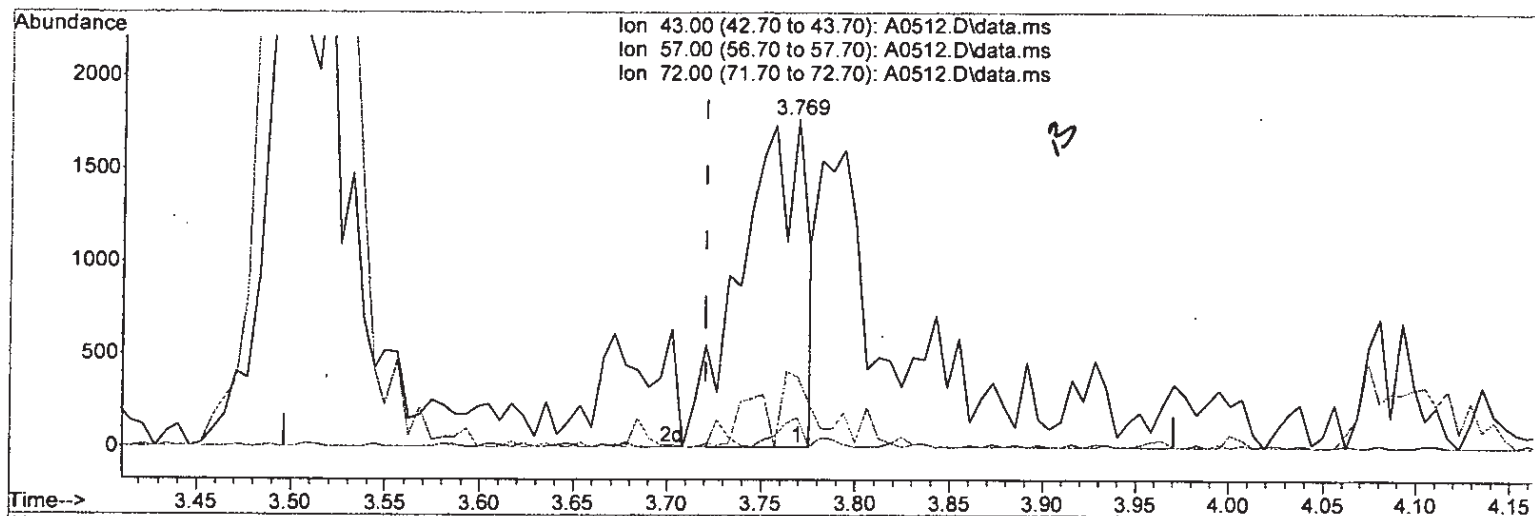
response 7286

Ion	Exp%	Act%
43.00	100	100
58.00	27.20	15.80
42.00	7.00	12.32
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 2.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
 Acq On : 21 Jul 2014 12:52 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 13:06:14 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(35) 2-Butanone (P)

3.769min (+0.049) 1.49 ug/L

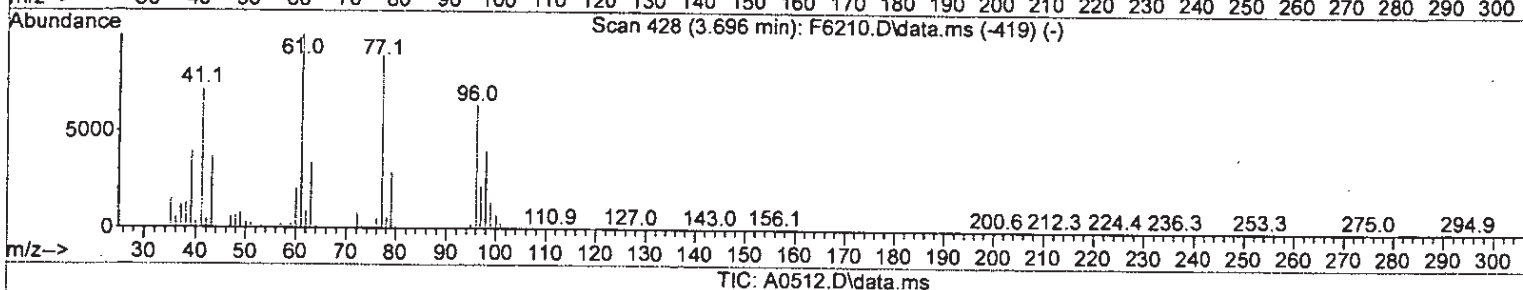
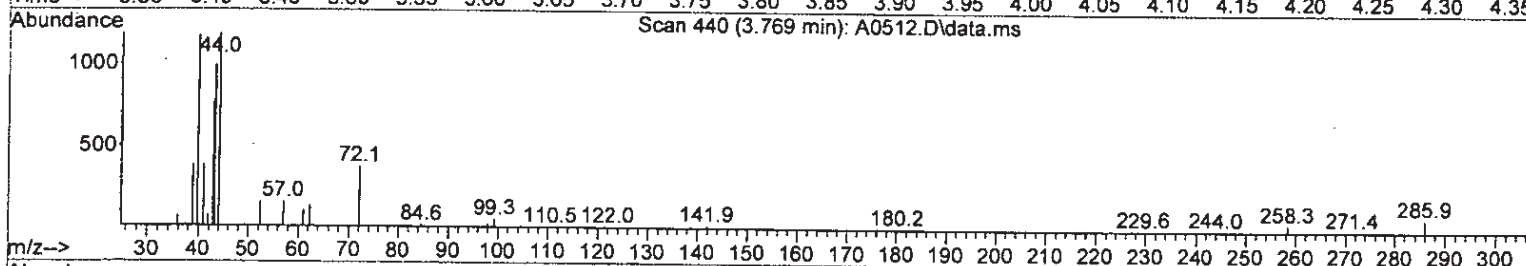
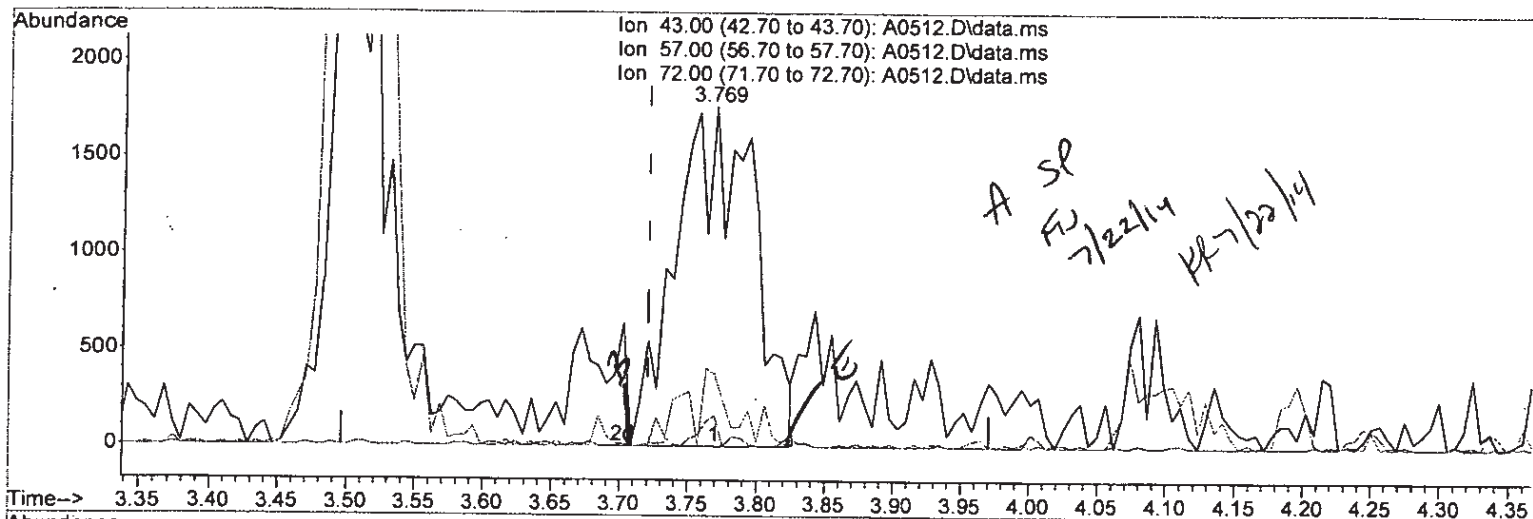
response 4165

Ion	Exp%	Act%
43.00	100	100
57.00	8.30	8.89
72.00	23.50	21.12
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 2.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
 Acq On : 21 Jul 2014 12:52 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 13:06:14 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(35) 2-Butanone (P)

3.769min (+0.049) 2.48 ug/L m

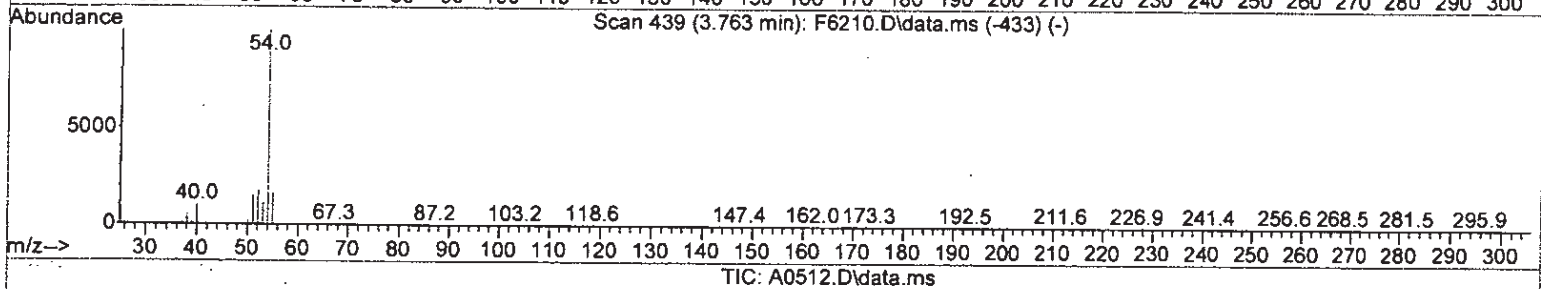
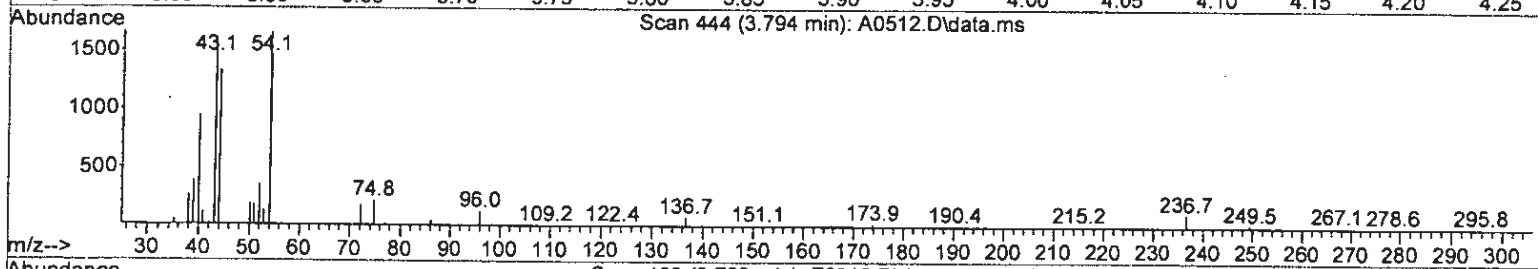
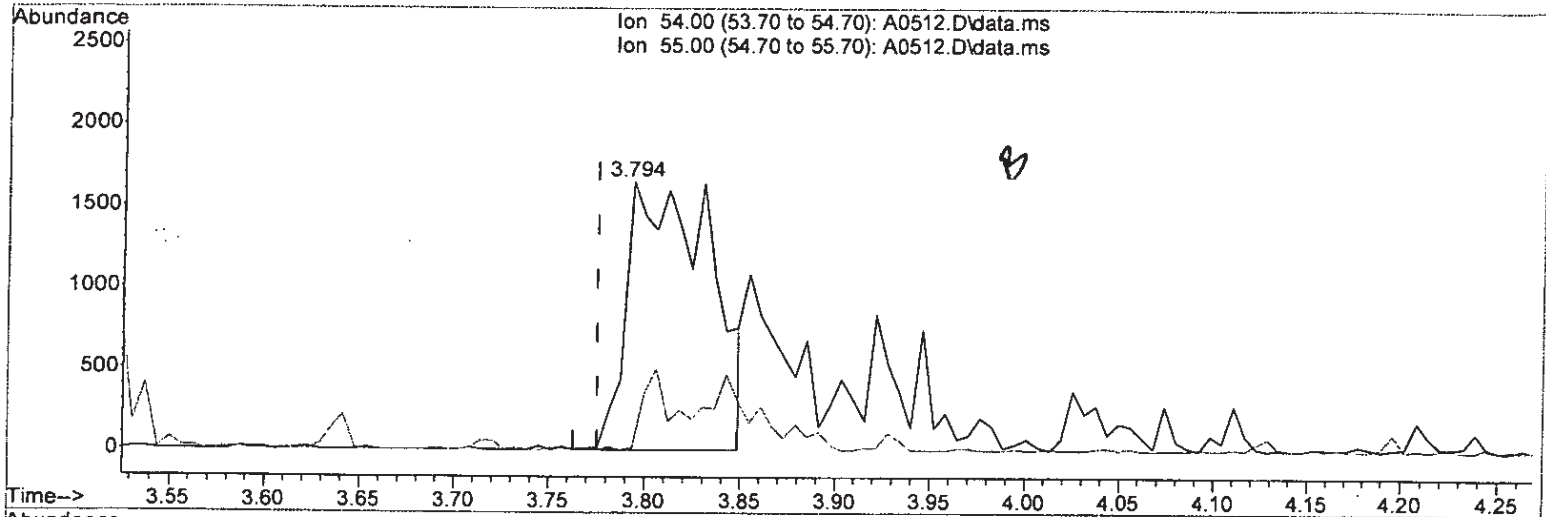
response 6918

Ion	Exp%	Act%
43.00	100	100
57.00	8.30	15.86
72.00	23.50	37.68
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
Acq On : 21 Jul 2014 12:52 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 13:06:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



(36) Propionitrile

3.794min (+0.018) 6.81 ug/L

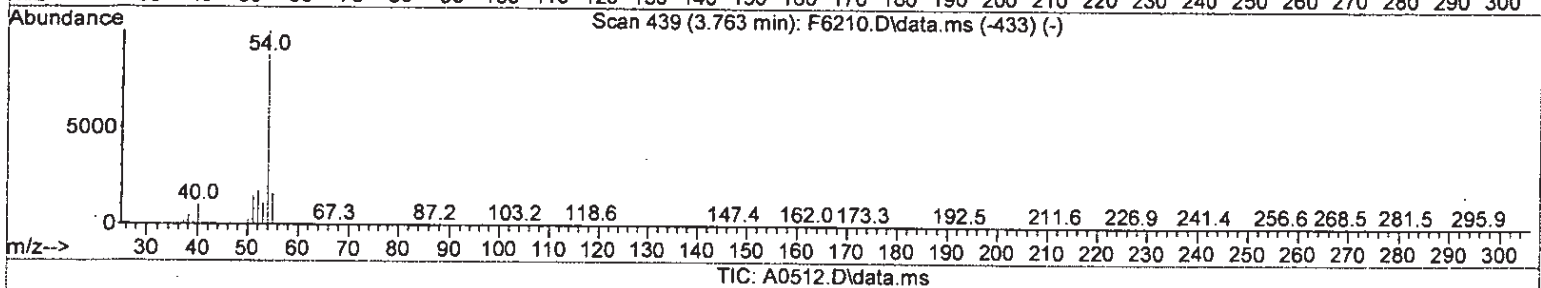
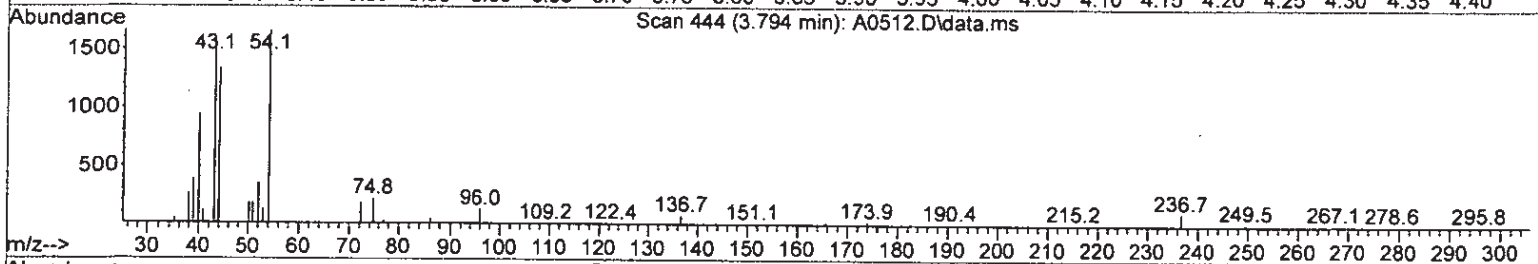
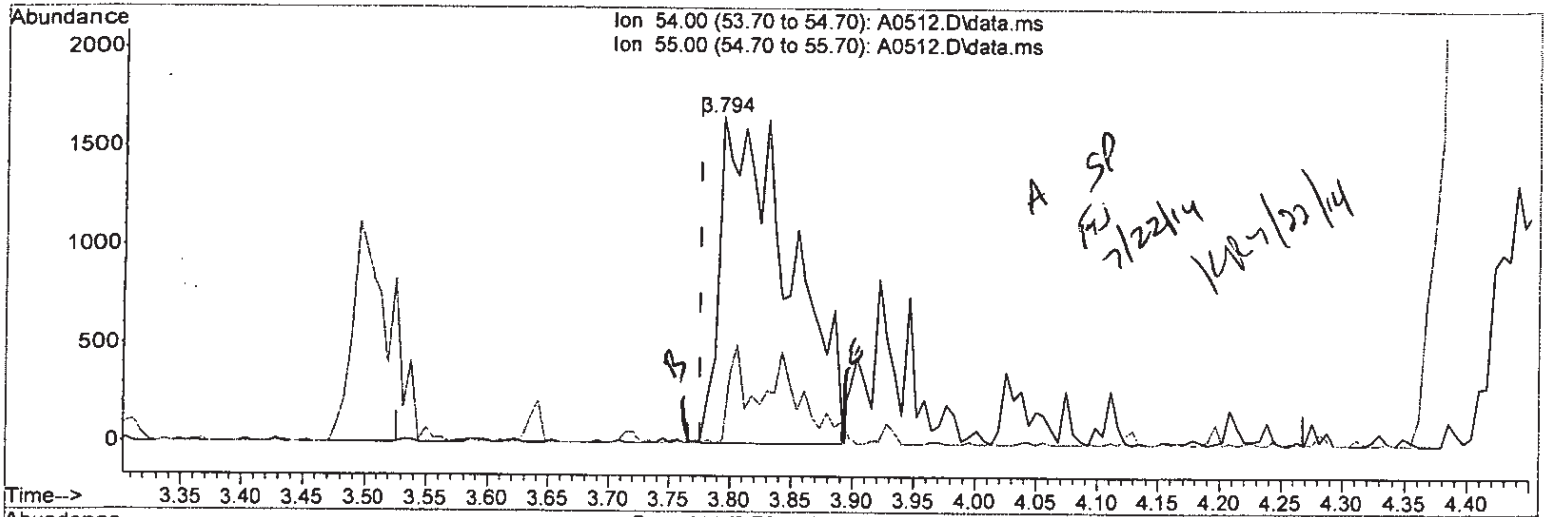
response 4914

Ion	Exp%	Act%
54.00	100	100
55.00	13.70	1.03
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
Acq On : 21 Jul 2014 12:52 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 13:06:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



(36) Propionitrile

3.794min (+0.018) 9.07 ug/L m

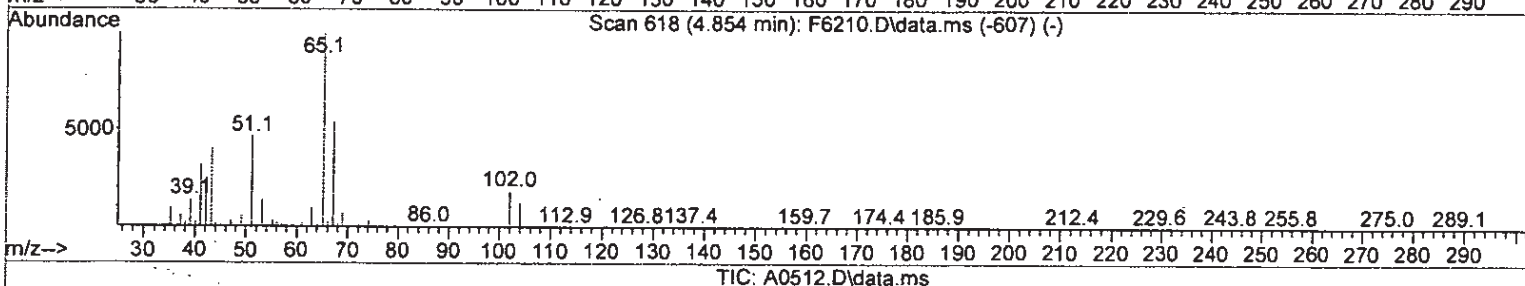
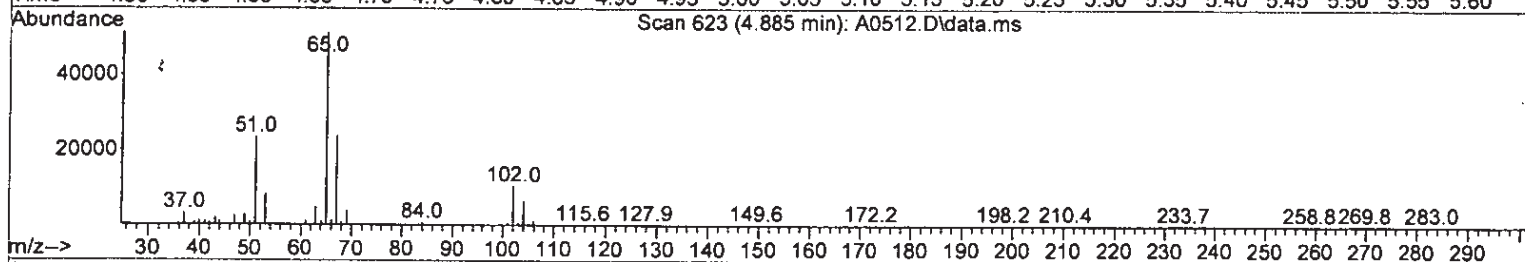
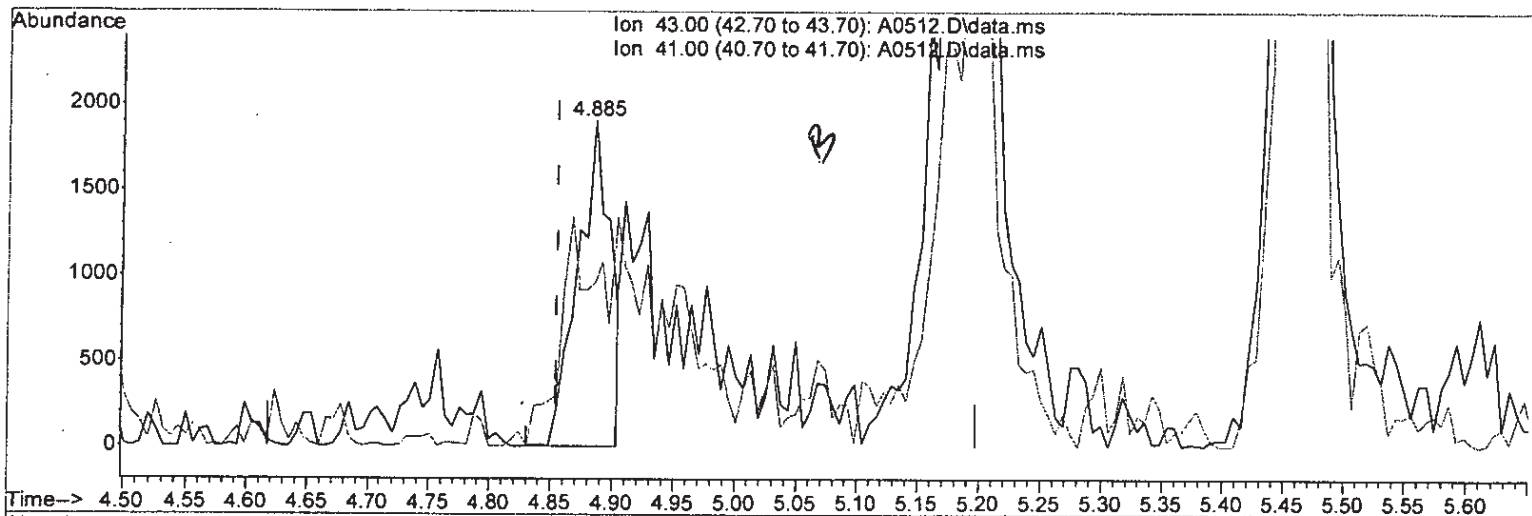
response 6542

Ion	Exp%	Act%
54.00	100	100
55.00	13.70	1.03
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 2.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
 Acq On : 21 Jul 2014 12:52 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 13:06:14 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(51) Iso-Butyl Alcohol

4.885min (+0.031) 12.01 ug/L

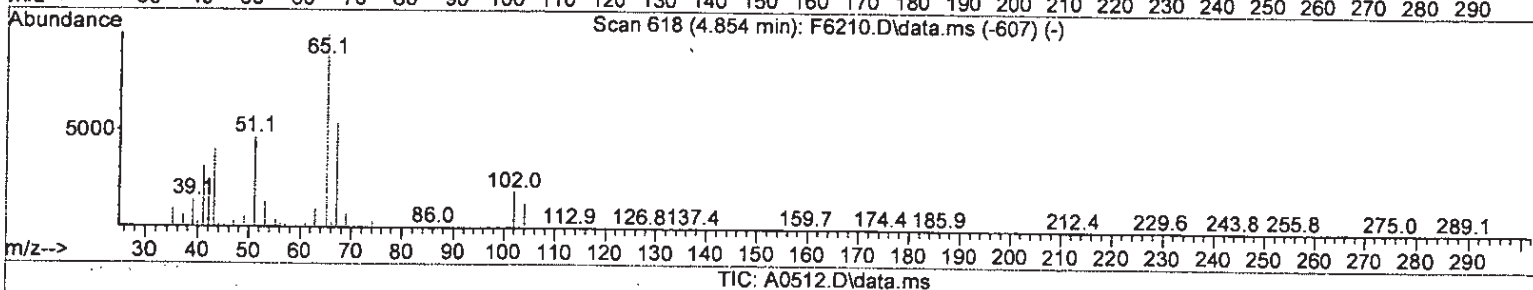
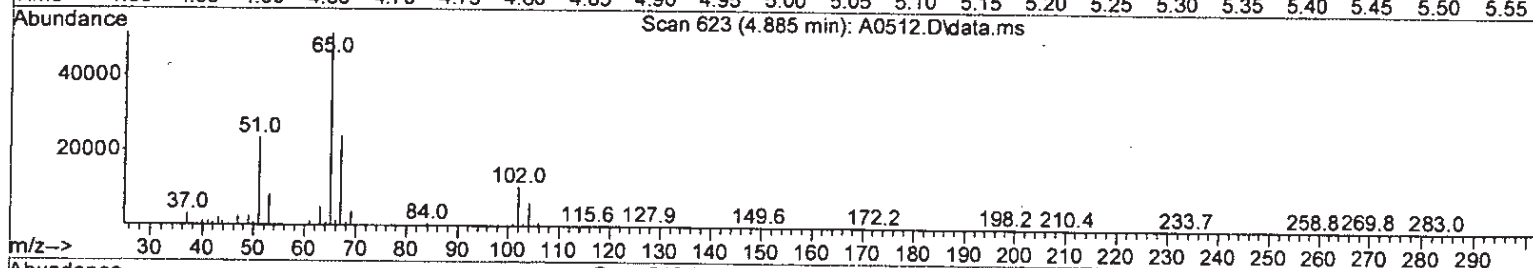
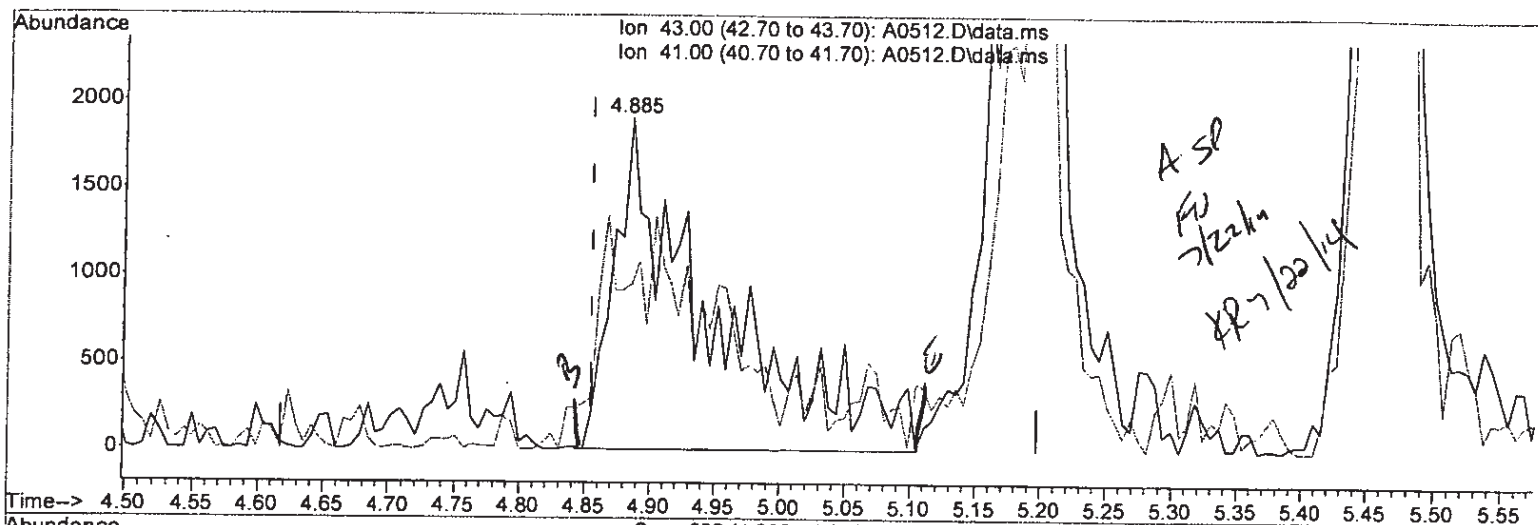
response 3466

Ion	Exp%	Act%
43.00	100	100
41.00	76.40	49.84#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 2.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
 Acq On : 21 Jul 2014 12:52 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 13:06:14 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(51) Iso-Butyl Alcohol

4.885min (+0.031) 34.27 ug/L m

response 9886

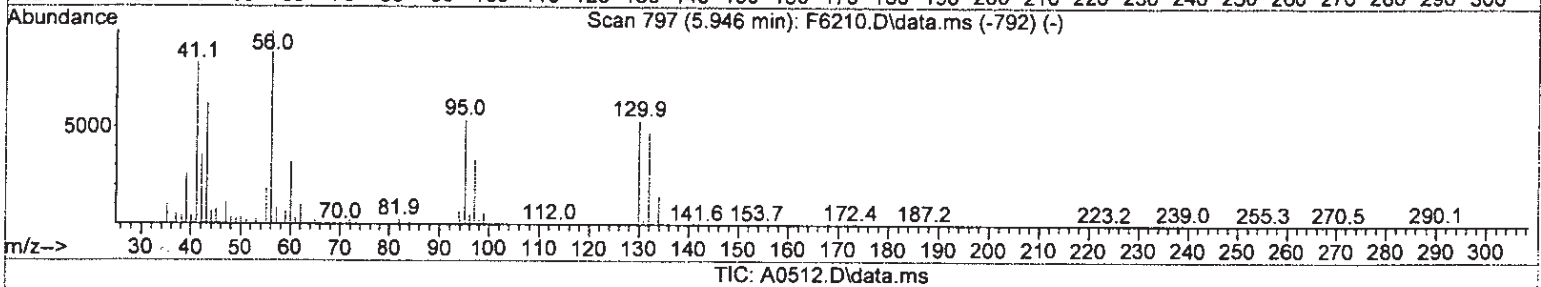
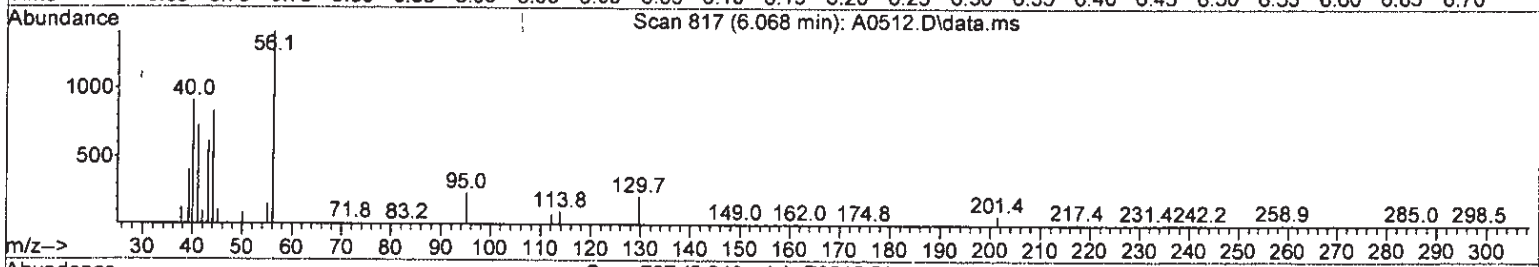
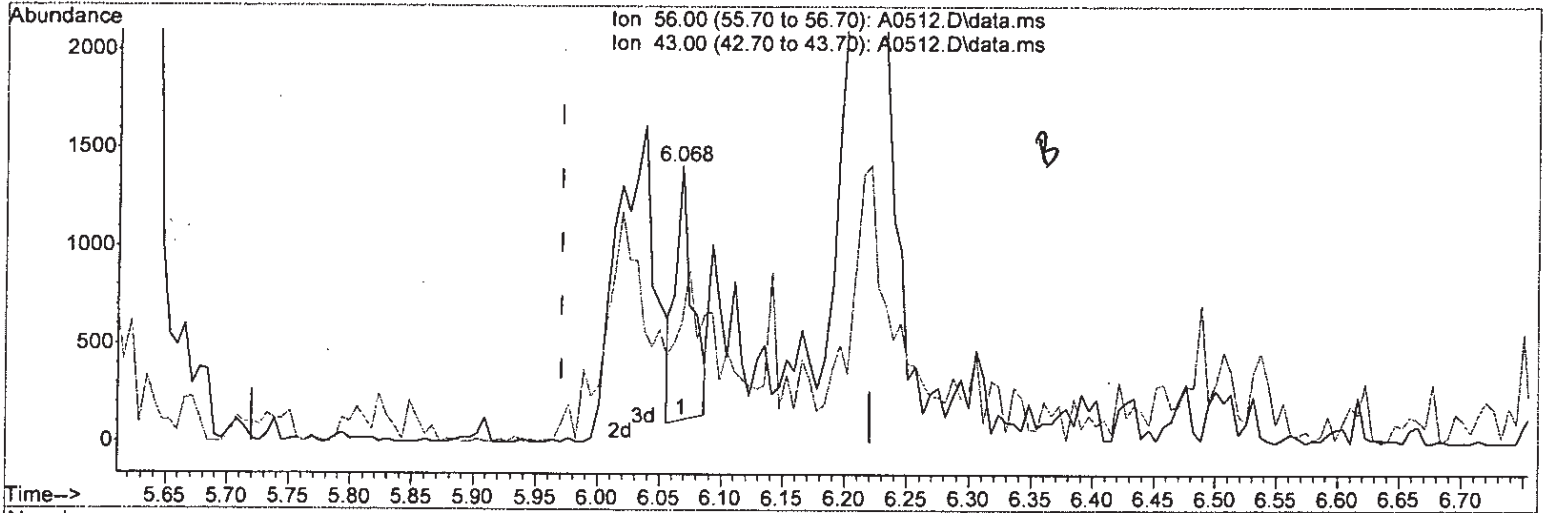
Ion	Exp%	Act%
43.00	100	100
41.00	76.40	49.84#
0.00	0.00	0.00
0.00	0.00	0.00

00252

Quantitation Report (Qedit)

Sample : 2.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
 Acq On : 21 Jul 2014 12:52 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 13:06:14 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(53) 1-Butanol

6.068min (+0.098) 8.98 ug/L

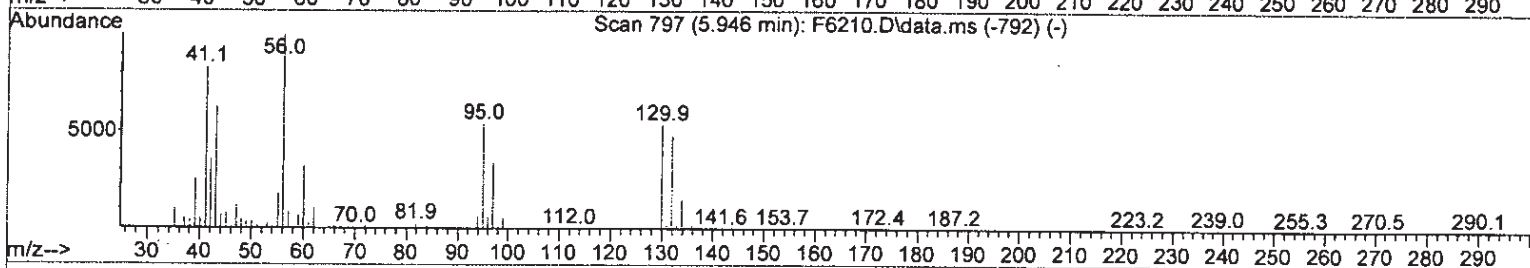
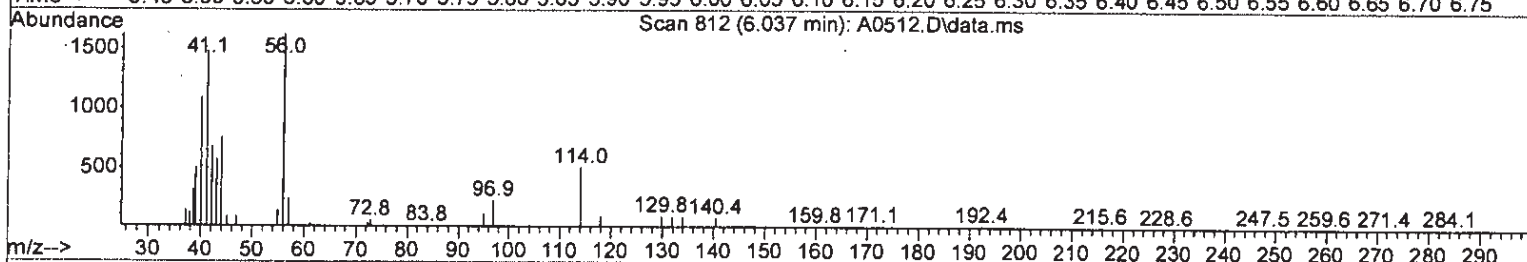
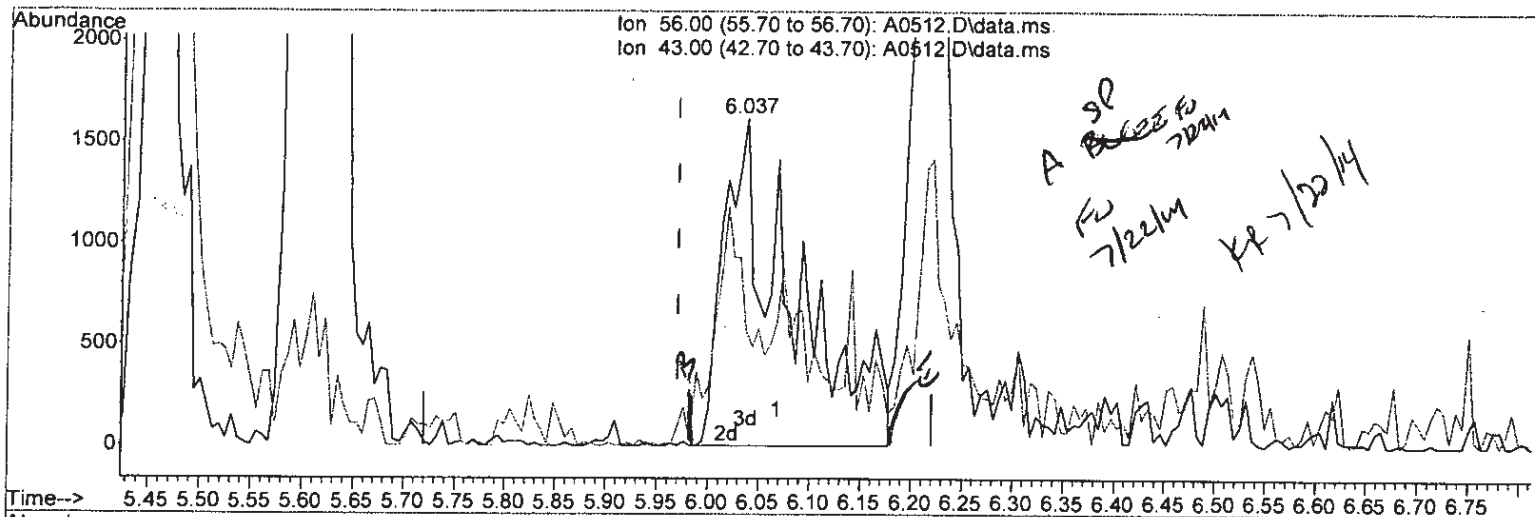
response 1213

Ion	Exp%	Act%
56.00	100	100
43.00	56.20	43.06
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 2.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
 Acq On : 21 Jul 2014 12:52 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 15:27:14 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0512.D\data.ms

(53) 1-Butanol

6.037min (+0.067) 55.80 ug/L m

response 7536

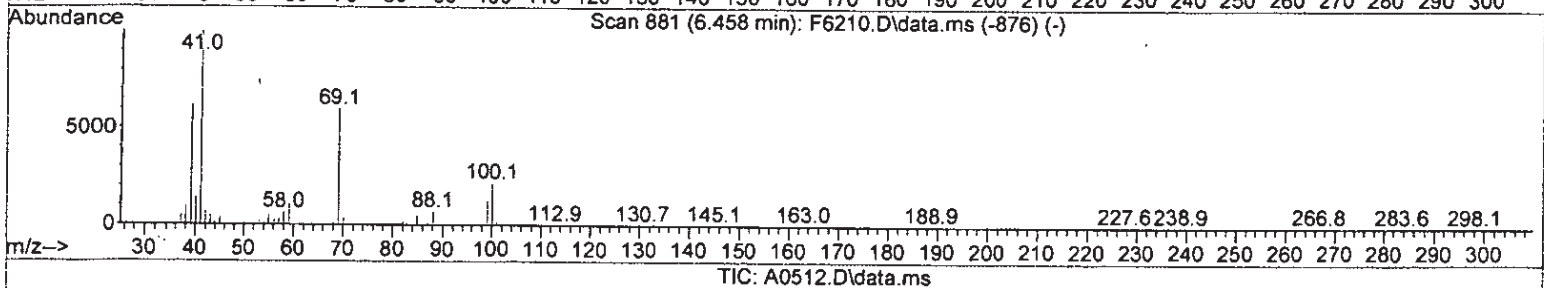
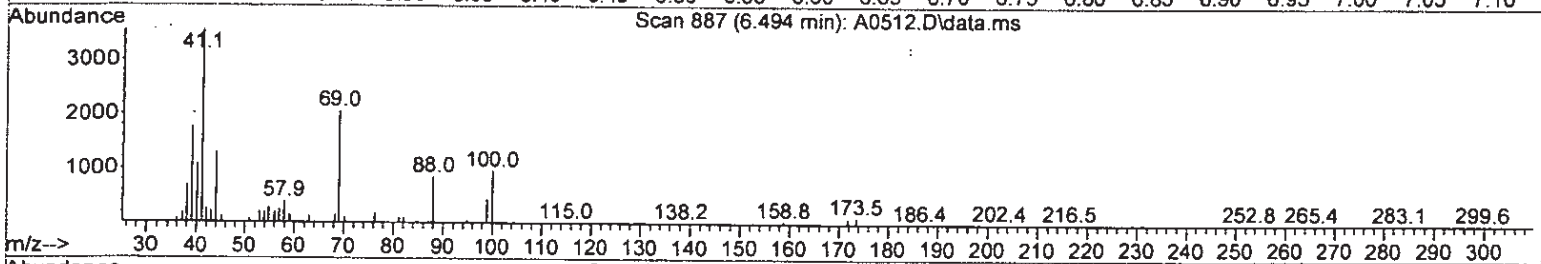
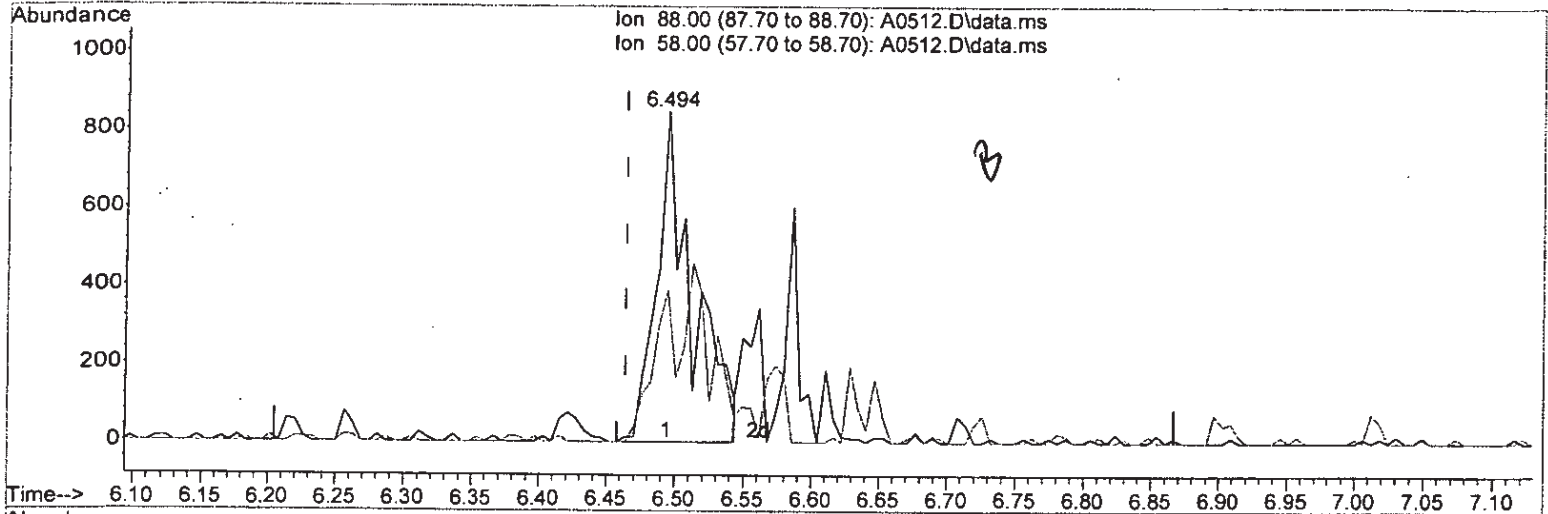
Ion	Exp%	Act%
56.00	100	100
43.00	56.20	35.04#
0.00	0.00	0.00
0.00	0.00	0.00

00254

Quantitation Report (Qedit)

Sample : 2.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
 Acq On : 21 Jul 2014 12:52 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 13:06:14 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(58) 1,4-Dioxane

6.494min (+0.031) 30.58 ug/L

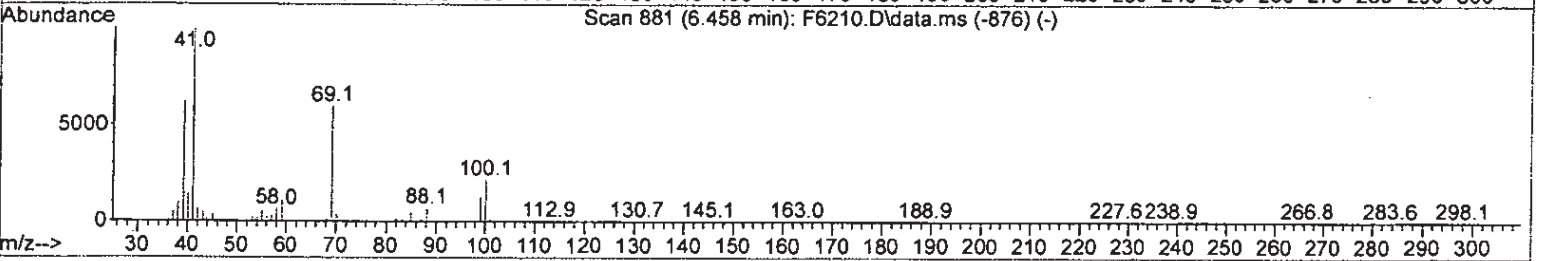
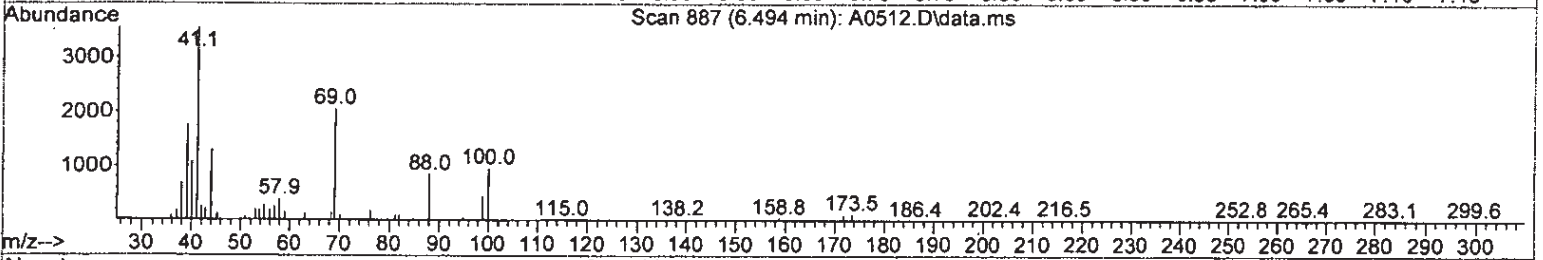
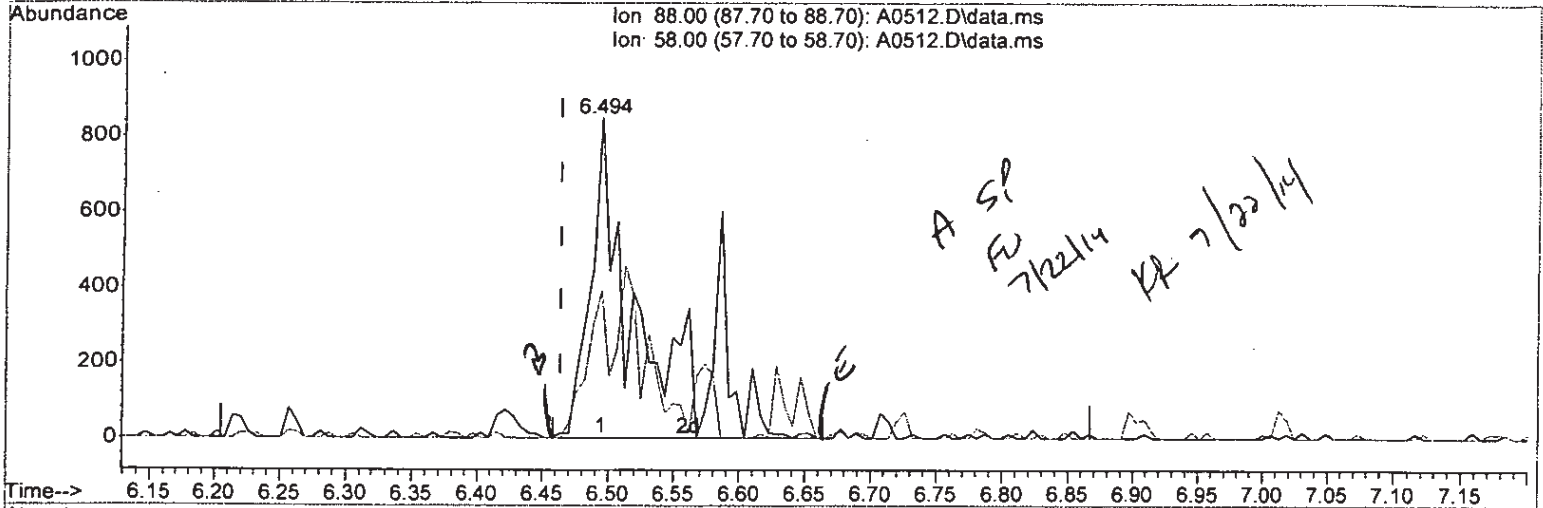
response 1525

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	45.70#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 2.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
 Acq On : 21 Jul 2014 12:52 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 13:06:14 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0512.D\data.ms

(58) 1,4-Dioxane

6.494min (+0.031) 47.00 ug/L m

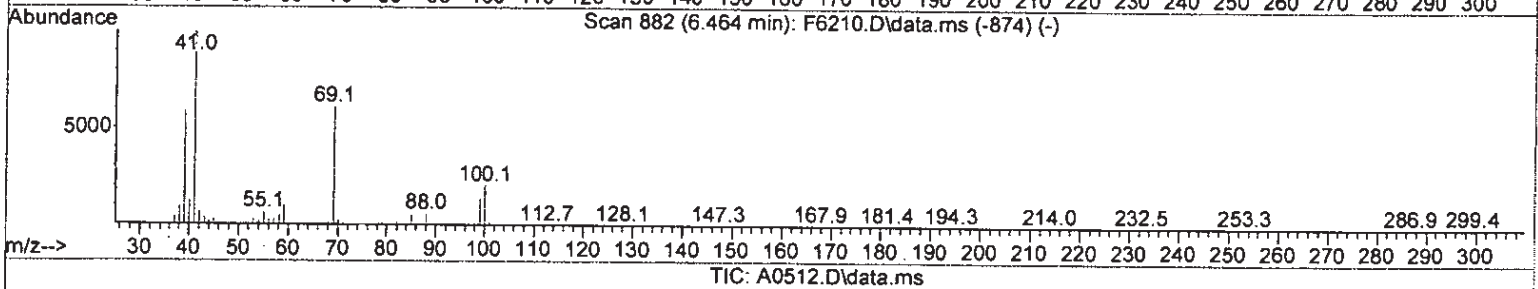
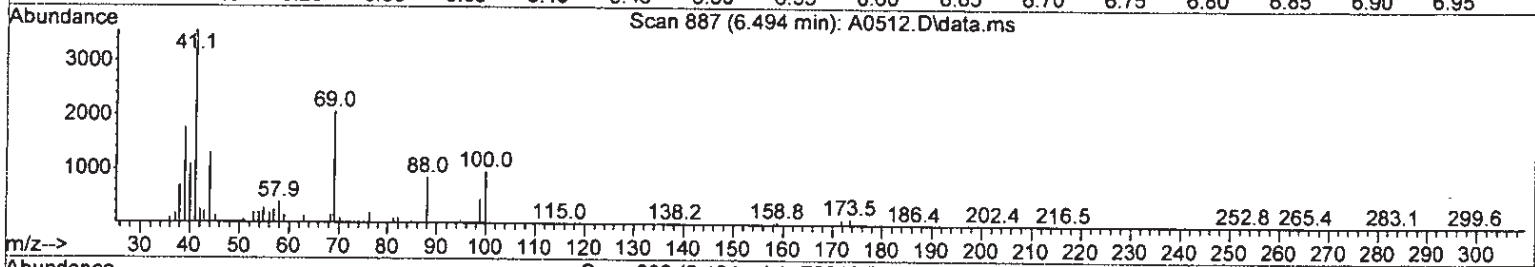
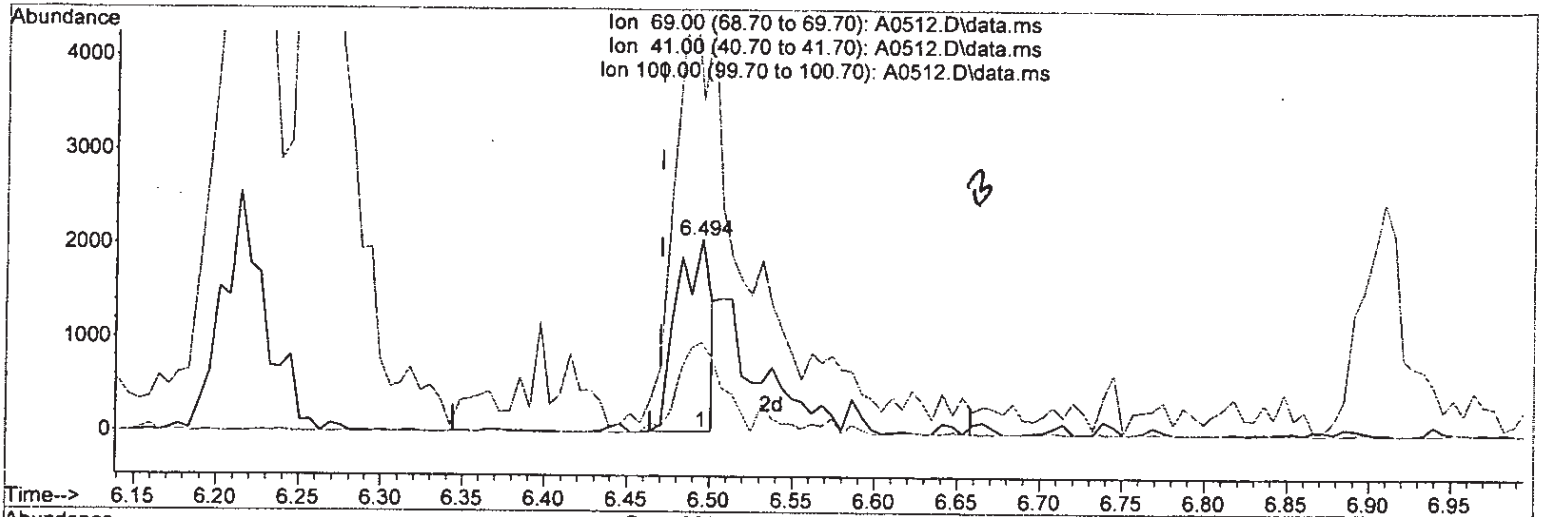
response 2344

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	45.70#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 2.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
 Acq On : 21 Jul 2014 12:52 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 13:06:14 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(59) Methyl Methacrylate

6.494min (+0.025) 0.70 ug/L

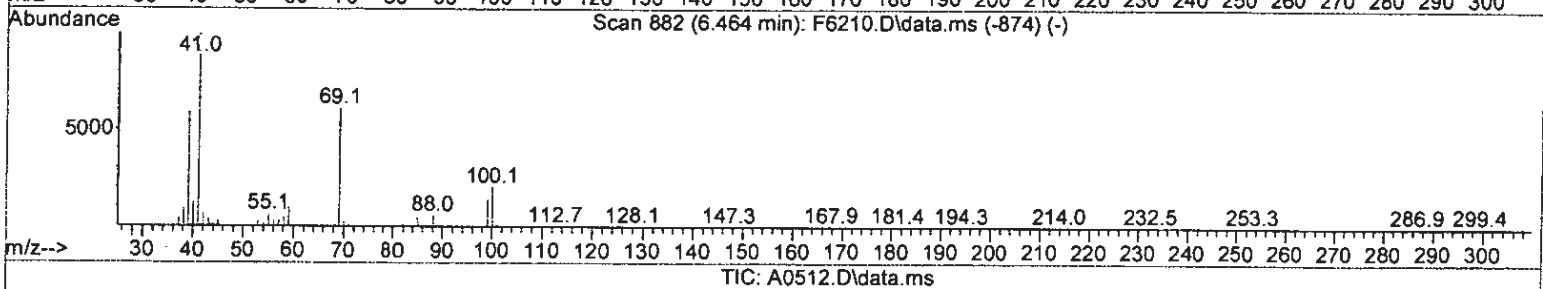
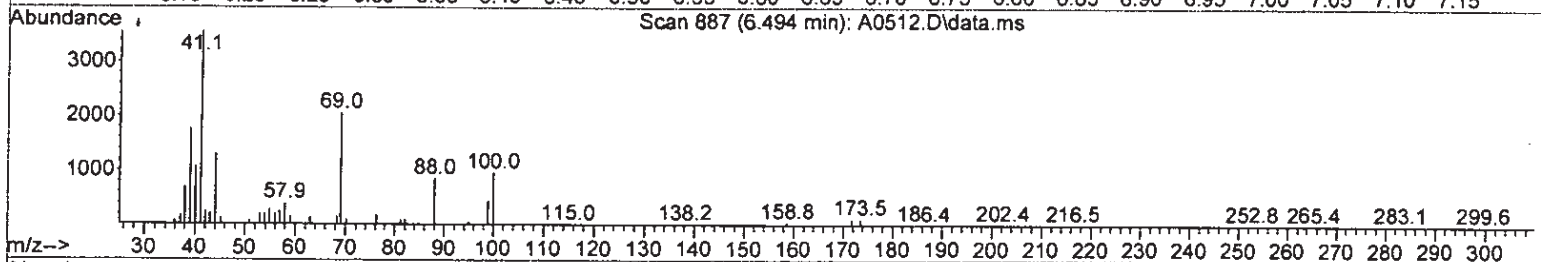
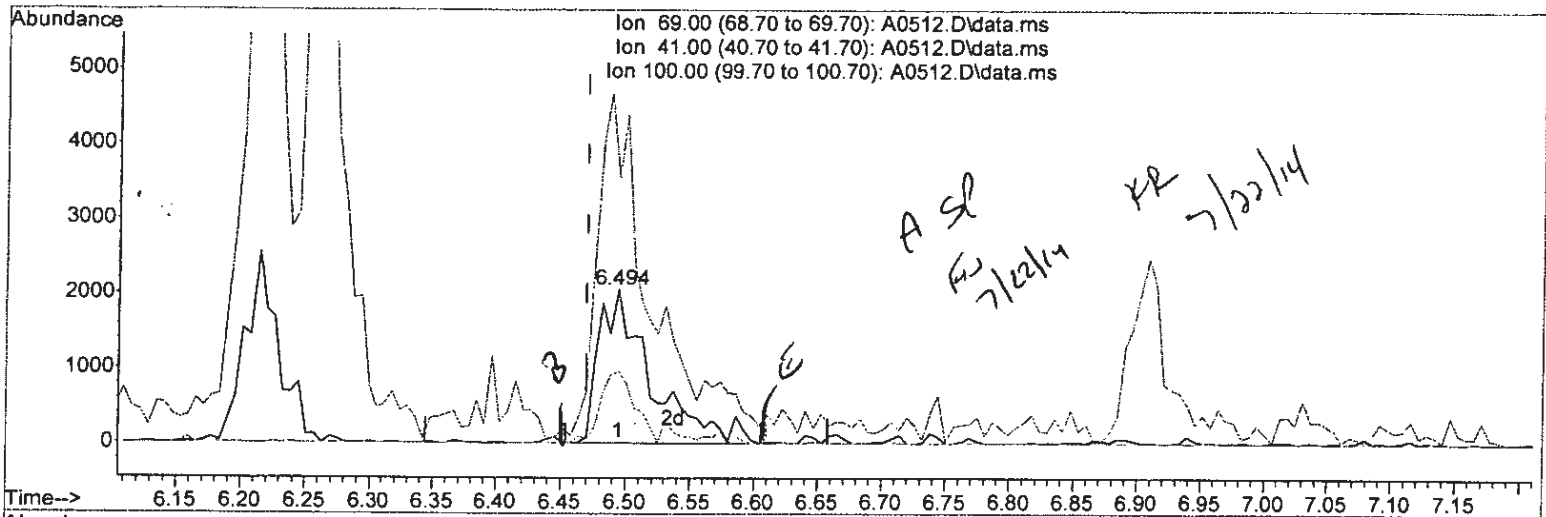
response 2894

Ion	Exp%	Act%
69.00	100	100
41.00	128.90	172.86#
100.00	36.90	46.64
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 2.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
 Acq On : 21 Jul 2014 12:52 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 13:06:14 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(59) Methyl Methacrylate

6.494min (+0.025) 1.40 ug/L m

response 5744

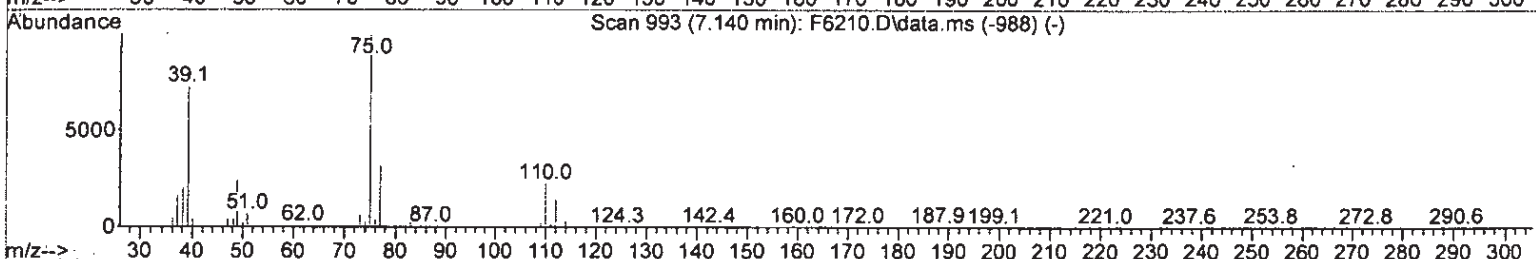
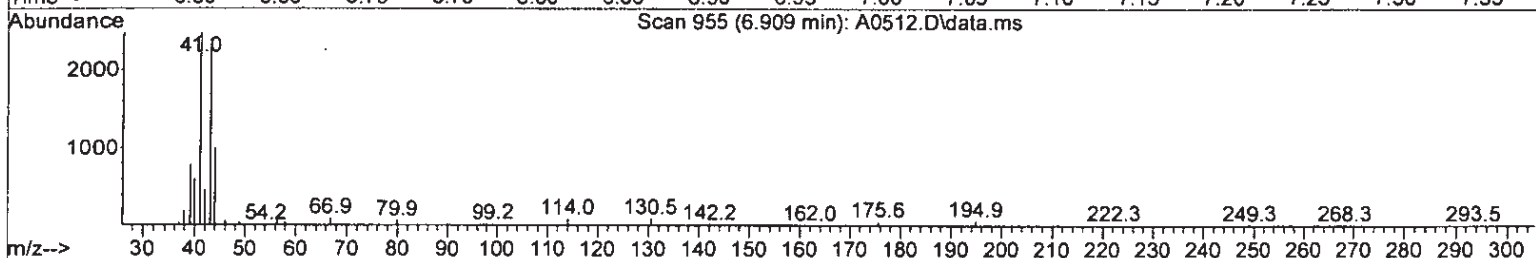
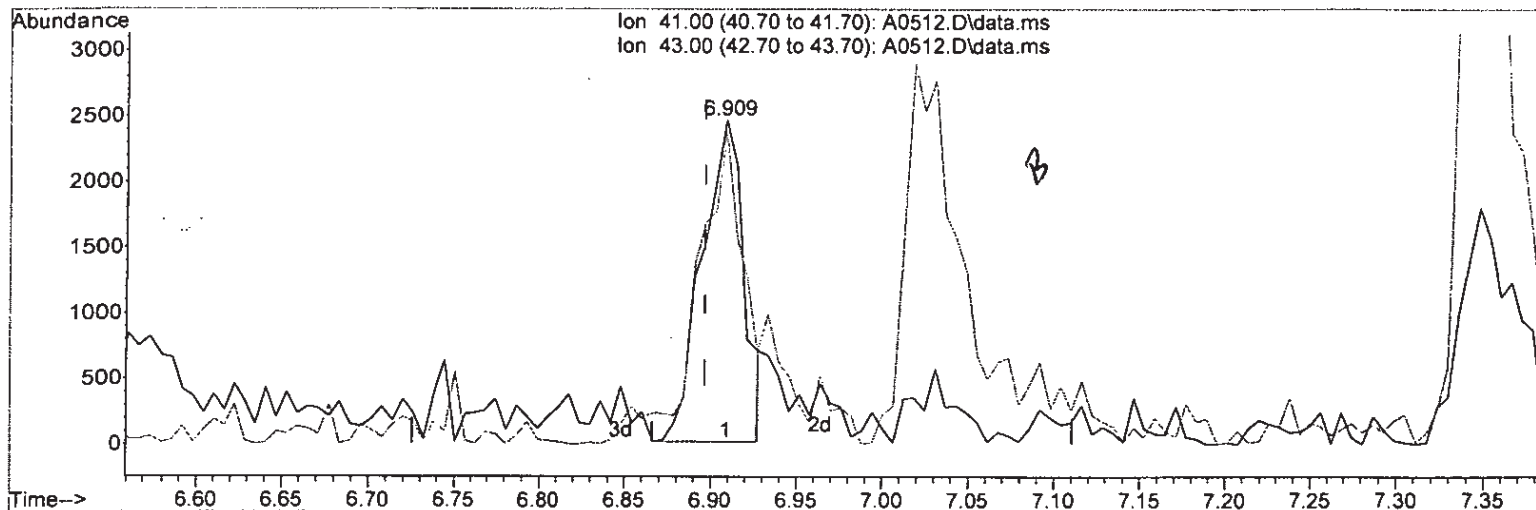
Ion	Exp%	Act%
69.00	100	100
41.00	128.90	172.86#
100.00	36.90	46.64
0.00	0.00	0.00

00258

Quantitation Report (Qedit)

Sample : 2.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
 Acq On : 21 Jul 2014 12:52 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 13:06:14 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0512.D\data.ms

(61) 2-Nitropropane

6.909min (+0.012) 2.59 ug/L

response 4119

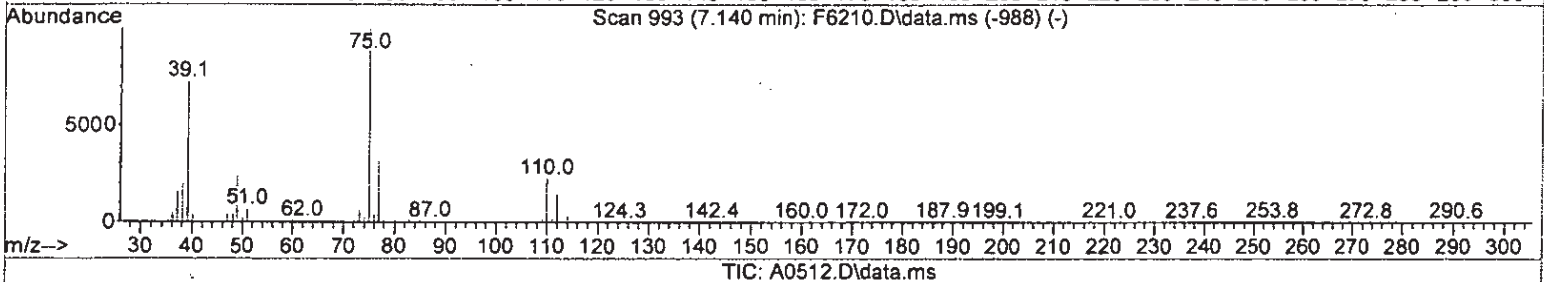
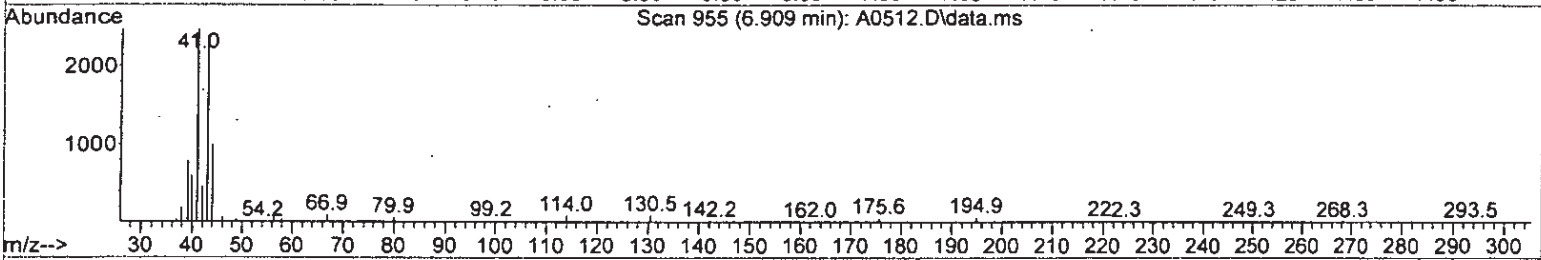
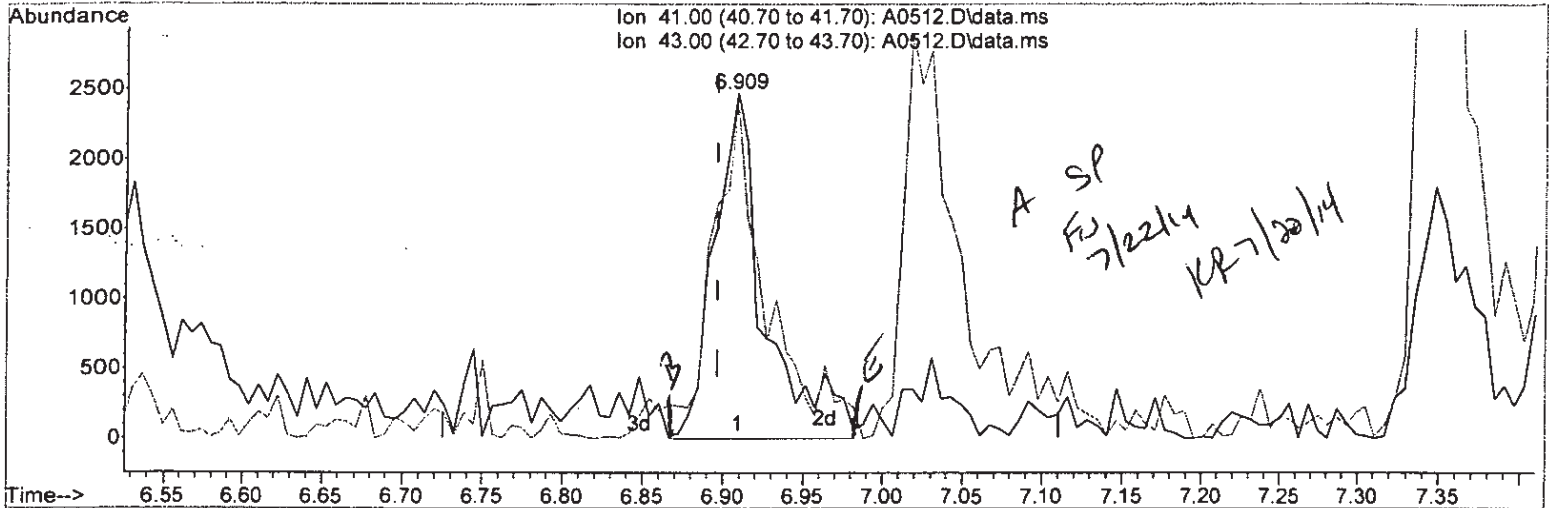
Ion	Exp%	Act%
41.00	100	100
43.00	108.60	96.64
0.00	0.00	0.00
0.00	0.00	0.00

00259

Quantitation Report (Qedit)

Sample : 2.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
 Acq On : 21 Jul 2014 12:52 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 13:06:14 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(61) 2-Nitropropane

6.909min (+0.012) 3.36 ug/L m

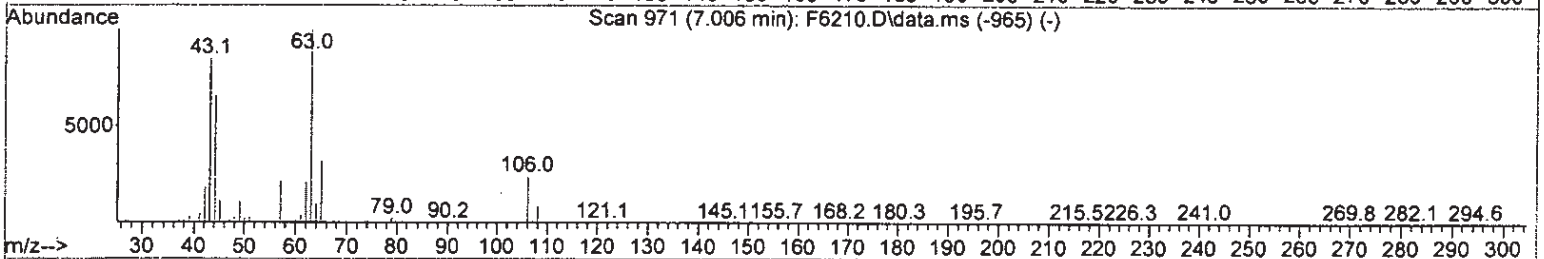
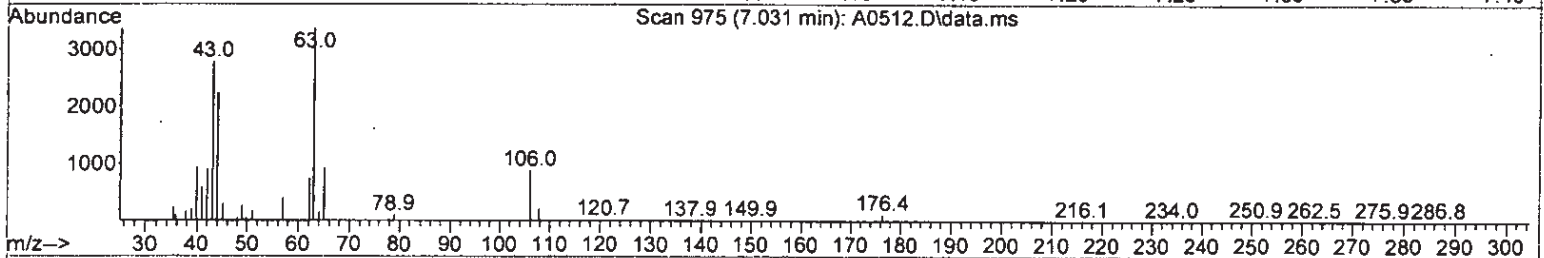
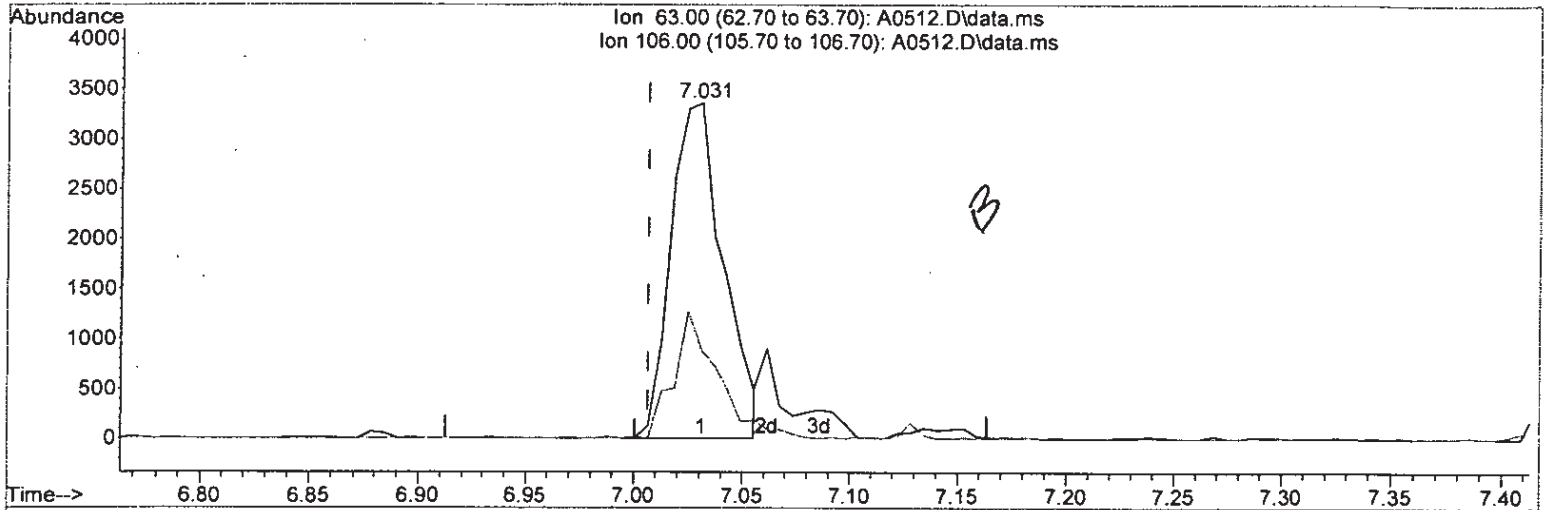
response 5342

Ion	Exp%	Act%
41.00	100	100
43.00	108.60	96.64
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 2.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
 Acq On : 21 Jul 2014 12:52 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 13:06:14 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0512.D\data.ms

(62) 2-Chloroethylvinyl Ether

7.031min (+0.024) 1.20 ug/L

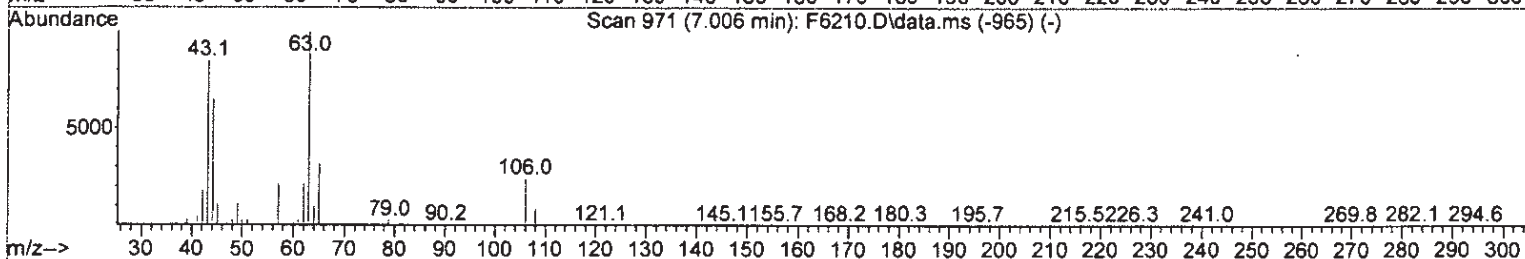
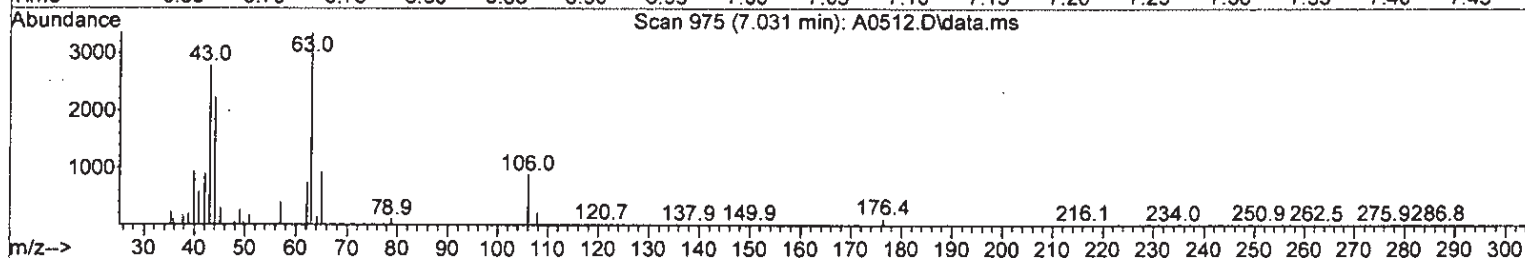
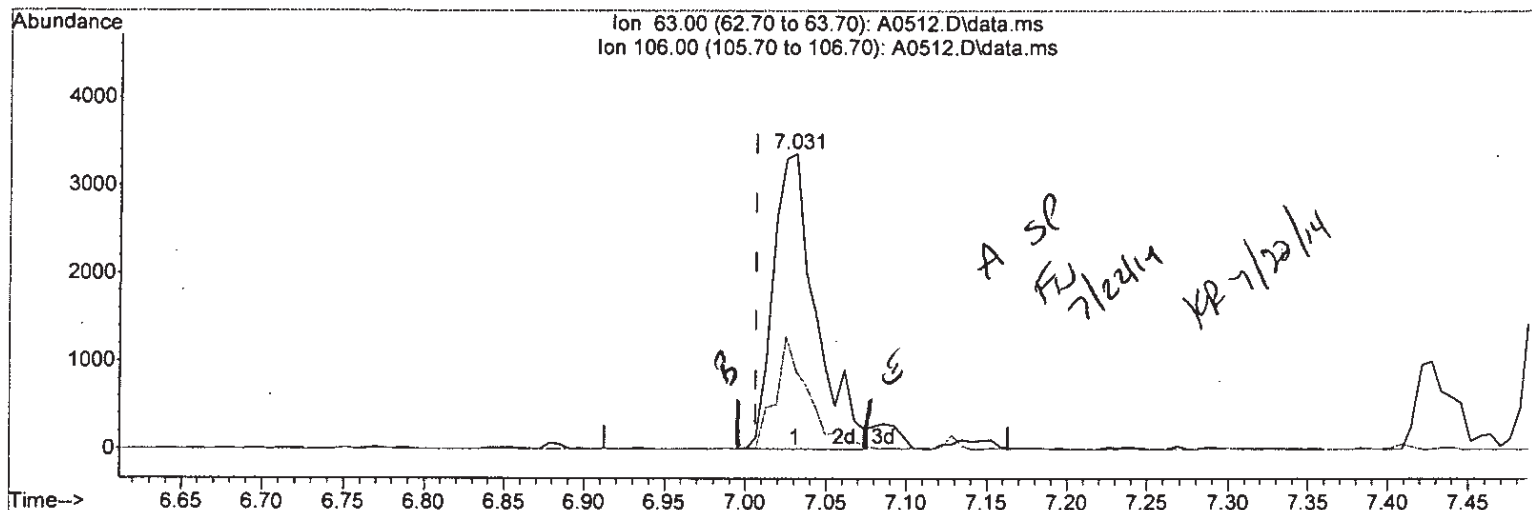
response 5619

Ion	Exp%	Act%
63.00	100	100
106.00	27.80	26.30
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 2.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
 Acq On : 21 Jul 2014 12:52 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 13:06:14 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0512.D\data.ms

(62) 2-Chloroethylvinyl Ether

7.031min (+0.024) 1.31 ug/L m

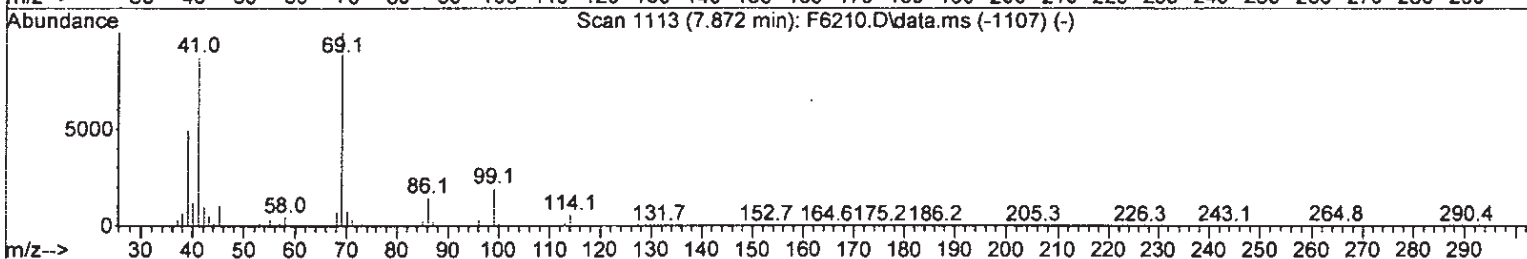
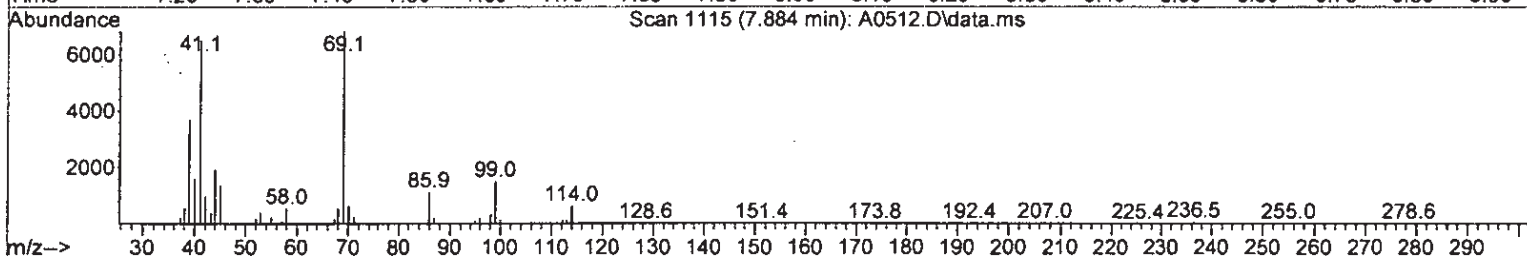
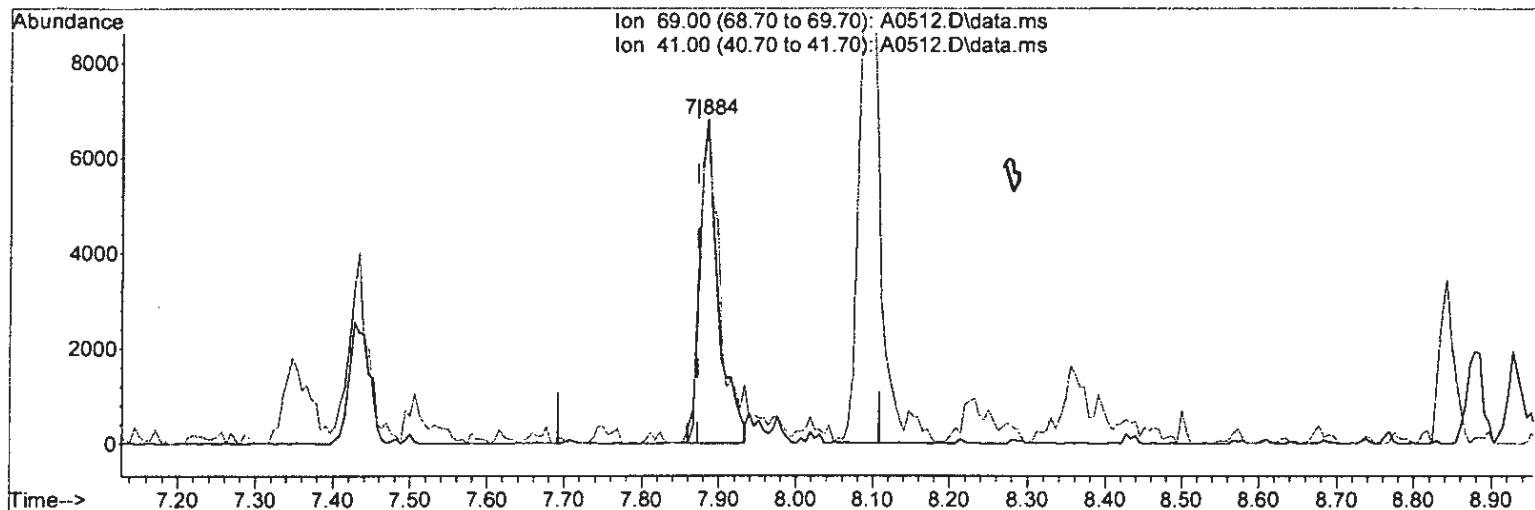
response 6148

Ion	Exp%	Act%
63.00	100	100
106.00	27.80	26.30
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 2.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
 Acq On : 21 Jul 2014 12:52 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 15:27:14 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0512.D\data.ms

(68) Ethyl Methacrylate

7.884min (+0.012) 1.31 ug/L

response 11254

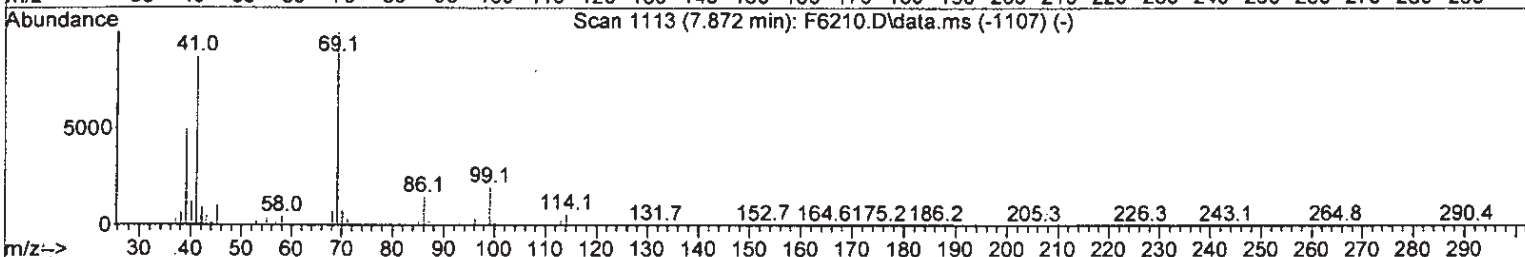
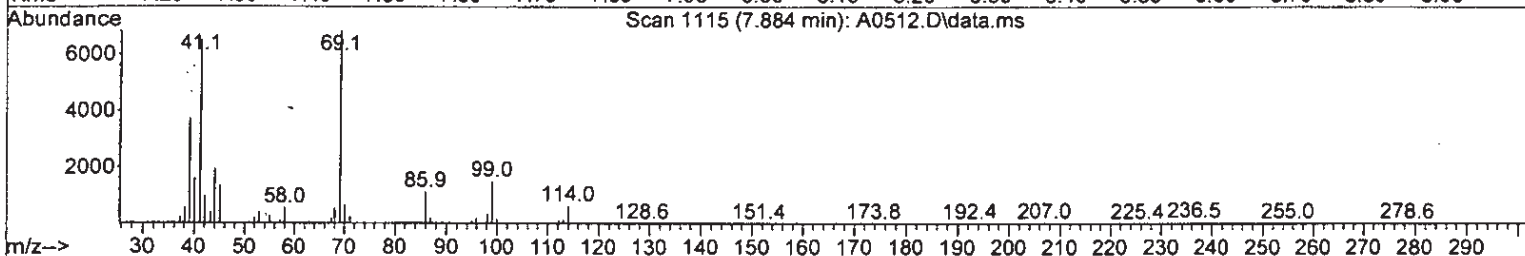
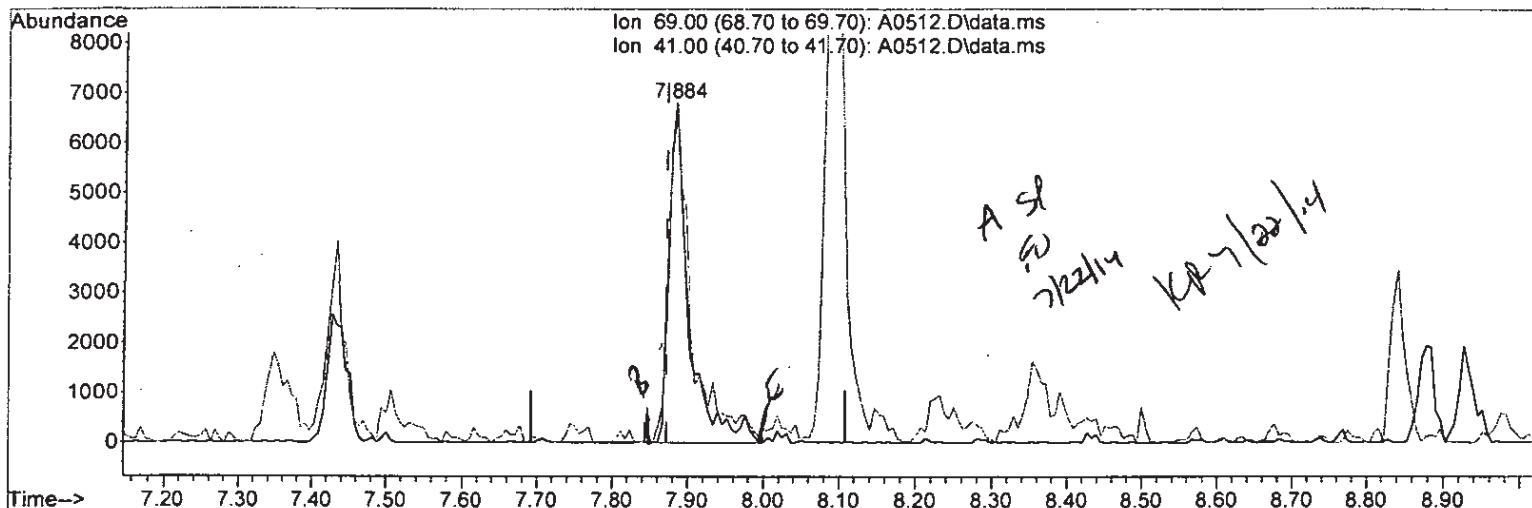
Ion	Exp%	Act%
69.00	100	100
41.00	71.50	95.31#
0.00	0.00	0.00
0.00	0.00	0.00

00263

Quantitation Report (Qedit)

Sample : 2.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
 Acq On : 21 Jul 2014 12:52 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 15:27:14 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0512.D\data.ms

(68) Ethyl Methacrylate

7.884min (+0.012) 1.45 ug/L m

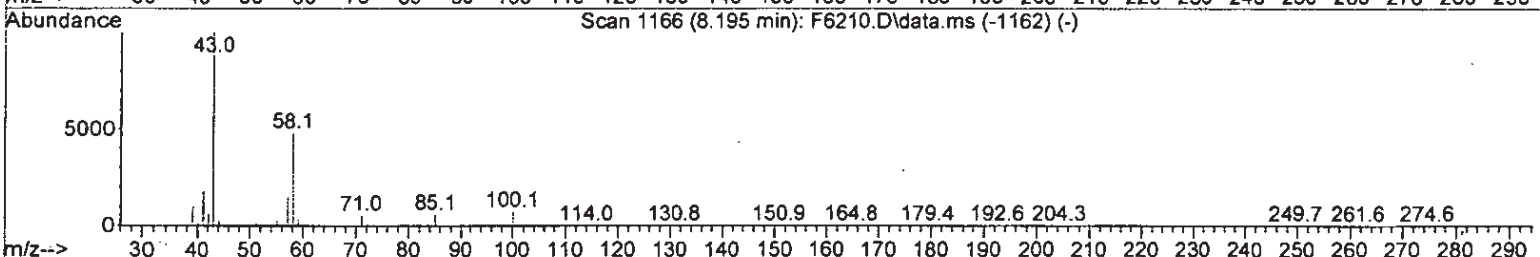
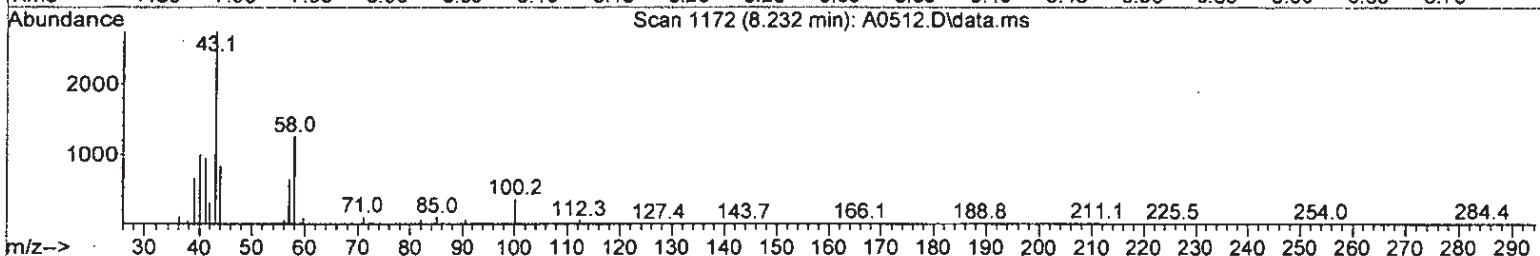
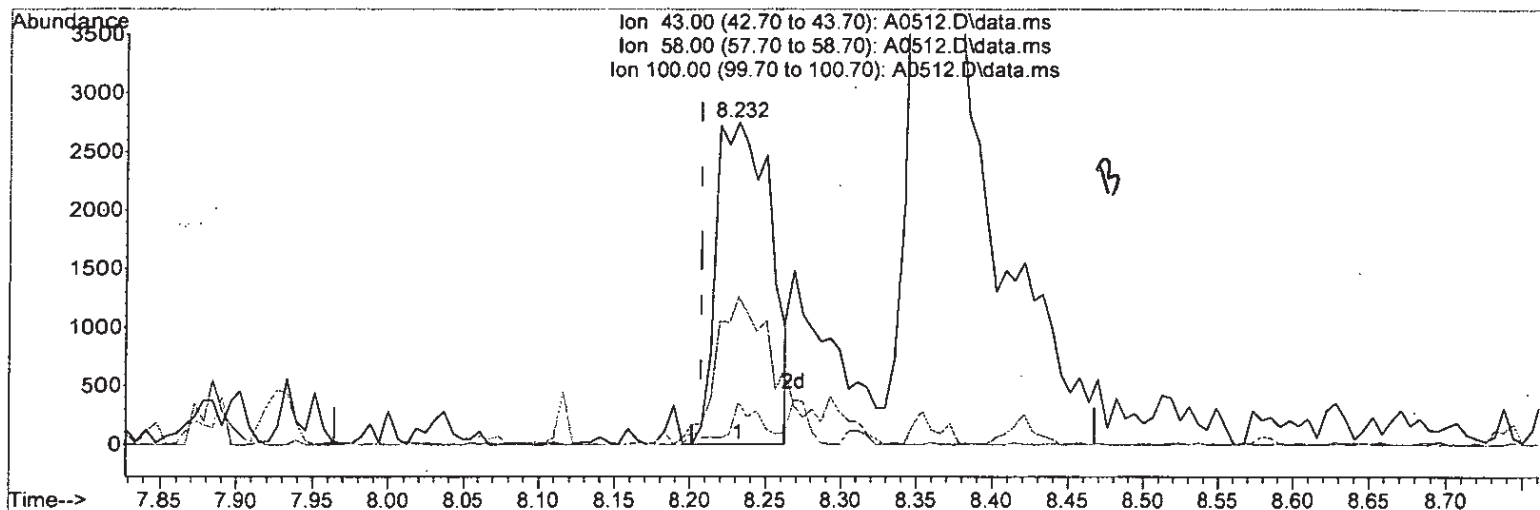
response 12423

Ion	Exp%	Act%
69.00	100	100
41.00	71.50	95.31#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 2.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
 Acq On : 21 Jul 2014 12:52 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 13:06:14 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0512.D\data.ms

(73) 2-Hexanone (P)

8.232min (+0.025) 1.38 ug/L

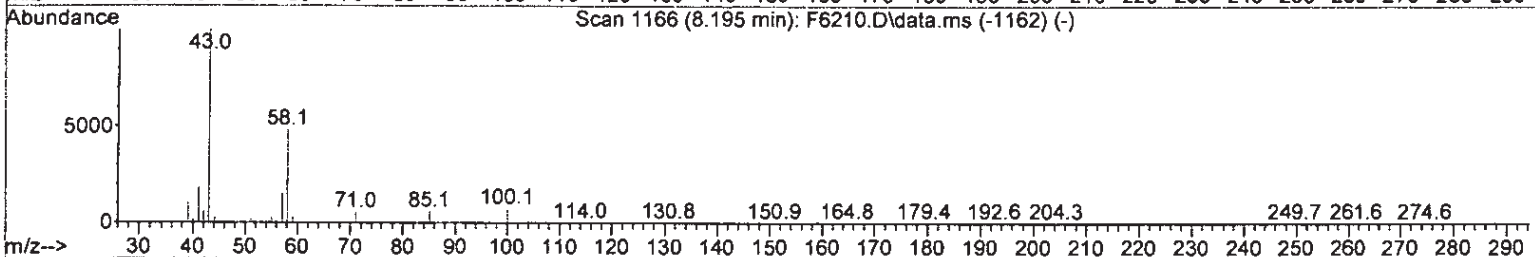
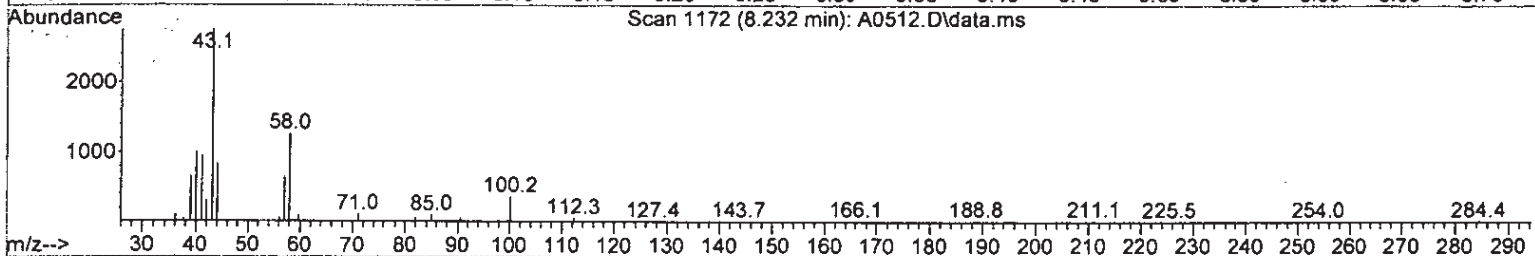
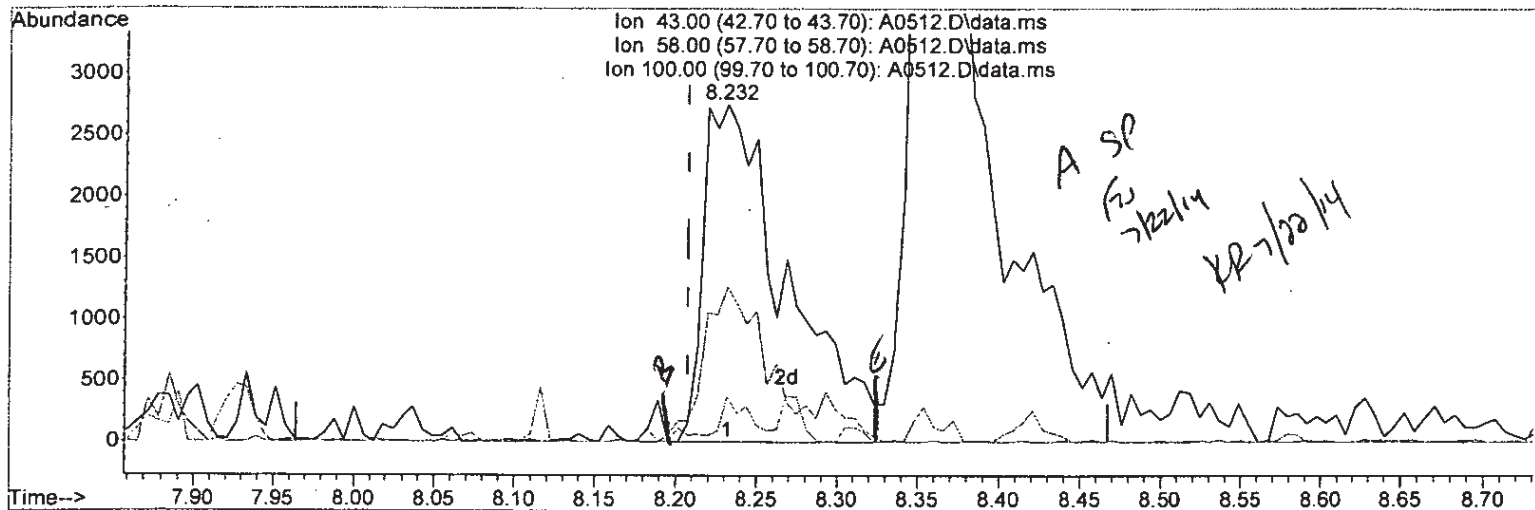
response 6817

Ion	Exp%	Act%
43.00	100	100
58.00	50.80	45.71
100.00	10.10	13.01
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 2.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
 Acq On : 21 Jul 2014 12:52 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 13:06:14 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0512.D\data.ms

(73) 2-Hexanone (P)

8.232min (+0.025) 1.97 ug/L m

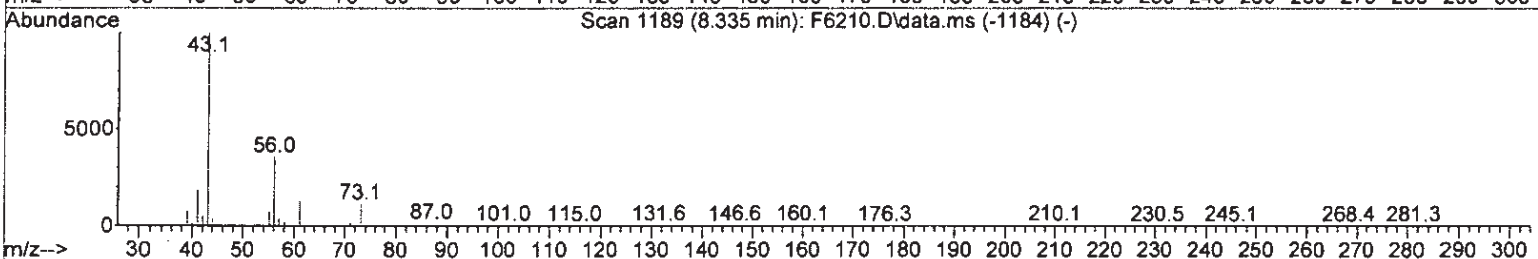
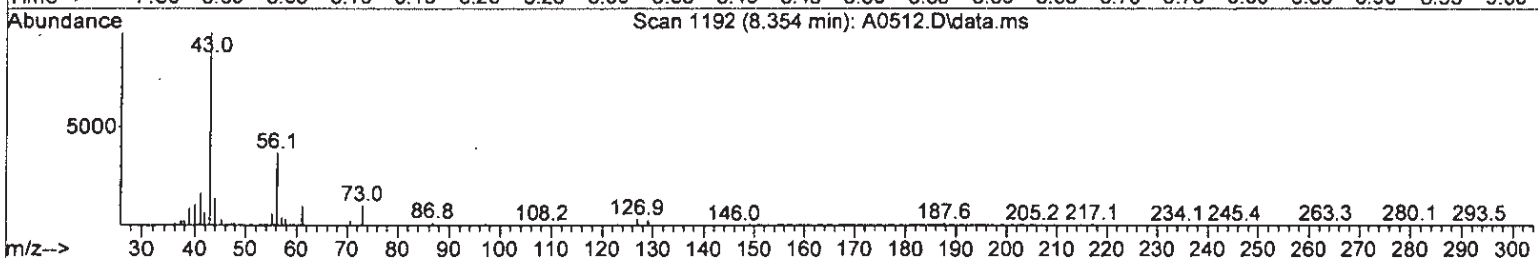
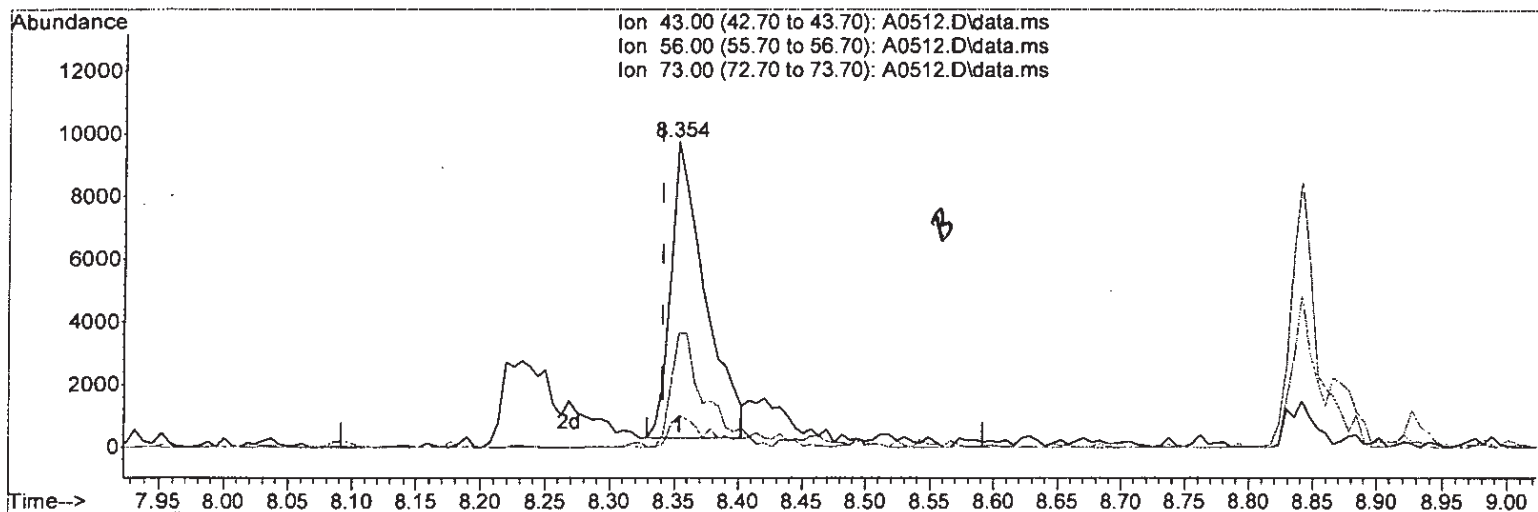
response 9725

Ion	Exp%	Act%
43.00	100	100
58.00	50.80	45.71
100.00	10.10	13.01
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 2.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
 Acq On : 21 Jul 2014 12:52 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 15:27:14 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0512.D\data.ms

(76) N-Butyl Acetate

8.354min (+0.012) 1.33 ug/L

response 17278

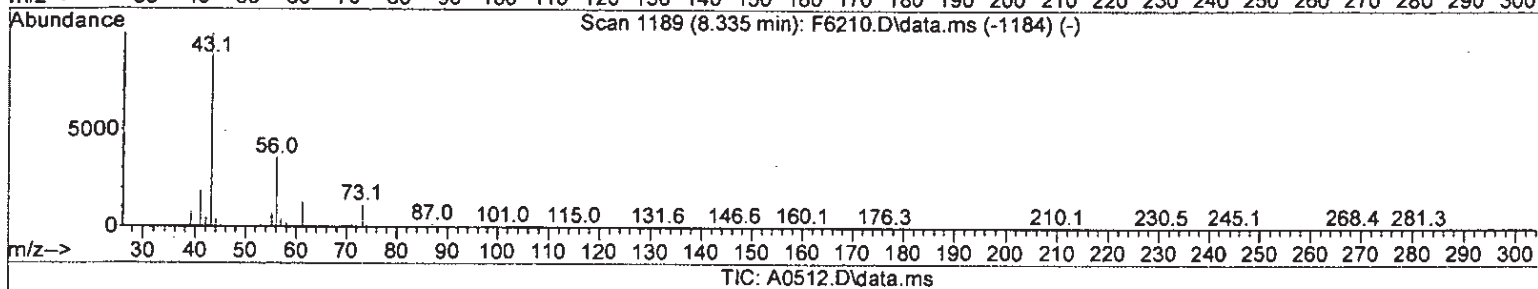
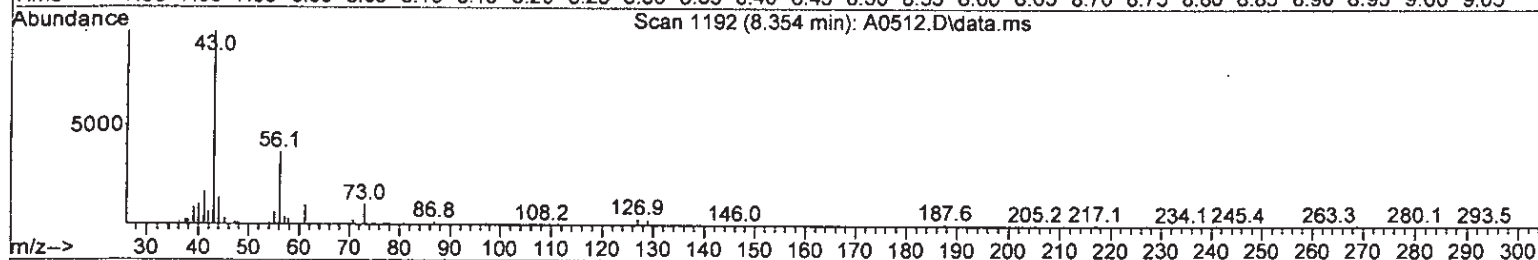
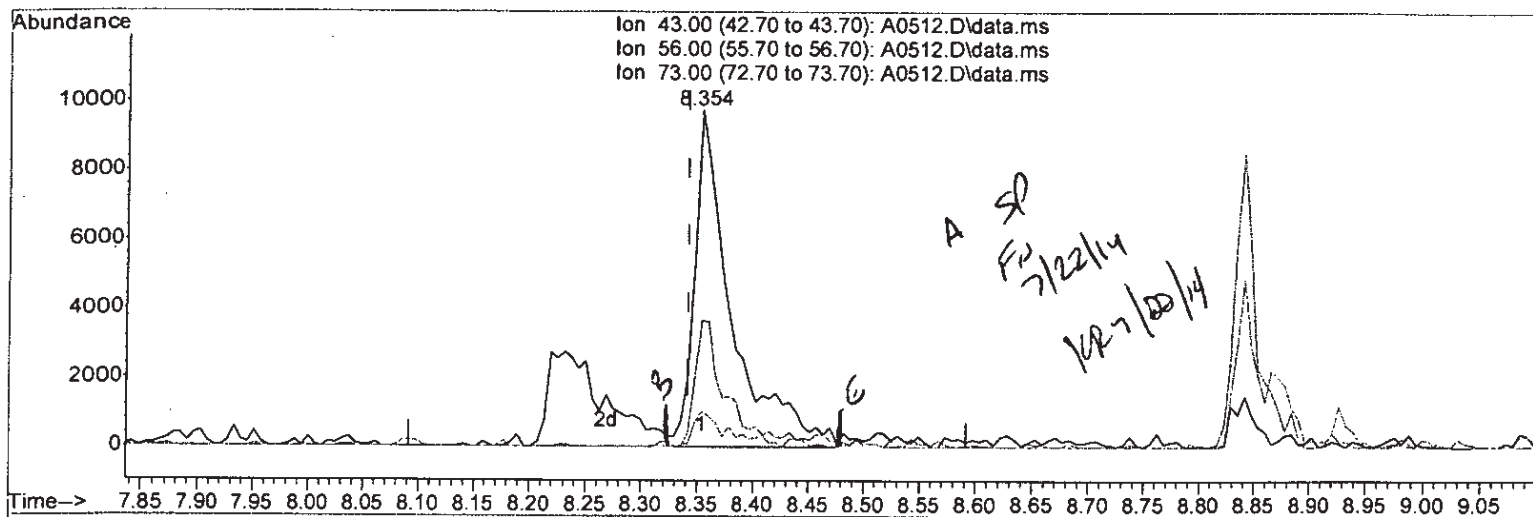
Ion	Exp%	Act%
43.00	100	100
56.00	38.80	37.52
73.00	14.00	10.38
0.00	0.00	0.00

00267

Quantitation Report (Qedit)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
Acq On : 21 Jul 2014 12:52 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:27:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



(76) N-Butyl Acetate

8.354min (+0.012) 1.74 ug/L m

response 22614

Ion	Exp%	Act%
43.00	100	100
56.00	38.80	37.52
73.00	14.00	10.38
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

```
Sample      : 2.0 PPB STD
Data File   : I:\ACQ\DATA
Acq On      : 21 Jul 2014
Operator    : F.NAEGLER
InstName    : MSVOAL0
Misc        :
```

Quant Time: Jul 21 16:19:39 2014
Quant Method : I:\ACQ\DATA\MSVOA
Quant Title : MS#10 - 8260B WAT
Qlast Update : Mon Jul 21 10:57:
Response via : Initial Calibration



Sample : 5.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0513.D Vial: 6
 Acq On : 21 Jul 2014 1:23 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 16:22:02 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration

FW
7/22/14

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	939367	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1413896	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1261317	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	679621	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibromomethane	4.324	113	534669	63.45	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 126.90%#			
48) surr1,1,2-dichloroetha...	4.854	65	586473	70.22	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 140.44%#			
65) SURR3,Toluene-d8	7.427	98	1875444	57.62	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 115.24%			
70) SURR2,BFB	9.878	95	733005	57.20	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 114.40%			
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.190	85	43234	4.92	ug/L	94
3) Chloromethane	1.294	50	63934	5.87	ug/L	98
4) Vinyl Chloride	1.361	62	57753	5.06	ug/L	98
5) Bromomethane	1.556	94	14250	3.46	ug/L	99
6) Chloroethane	1.611	64	31388	5.05	ug/L	91
7) Freon 21	1.721	67	86474	5.23	ug/L	96
8) Trichlorofluoromethane	1.770	101	69467	5.66	ug/L	96
9) Diethyl Ether	1.934	59	37507	5.32	ug/L	81
10) Freon 123a	1.928	67	54749	5.14	ug/L	96
11) Freon 123	1.965	83	57017	5.03	ug/L	98
12) Acrolein	2.026	56	27456	25.17	ug/L	98
13) 1,1-Dichloroethene	2.099	96	33192	5.30	ug/L #	80
14) Freon 113	2.093	101	42845	6.00	ug/L	98
15) Acetone	2.123	43	14460	6.83	ug/L	87
16) 2-Propanol	2.196	45	33103	90.27	ug/L	99
17) Iodomethane	2.208	142	8708	1.33	ug/L	96
18) Carbon Disulfide	2.269	76	137770	5.17	ug/L	97
19) Acetonitrile	2.318	40	7025	24.69	ug/L	94
20) Allyl Chloride	2.349	76	19796	4.37	ug/L #	23
21) Methyl Acetate	2.355	43	29135	6.41	ug/L	88
22) Methylene Chloride	2.440	84	42058	4.46	ug/L #	72
23) TBA	2.501	59	45331	78.45	ug/L #	57
24) Acrylonitrile	2.635	53	67129	29.01	ug/L	89
25) Methyl-t-Butyl Ether	2.666	73	93912	4.73	ug/L	89
26) trans-1,2-Dichloroethene	2.672	96	43157	5.42	ug/L #	82
28) 1,1-Dichloroethane	3.050	63	90103	5.51	ug/L	98
29) Vinyl Acetate	3.092	86	5442	4.70	ug/L #	68
30) DIPE	3.111	45	208781	6.31	ug/L	89
31) 2-Chloro-1,3-Butadiene	3.141	53	90417	5.75	ug/L	80
32) ETBE	3.501	59	130263	4.63	ug/L	87
33) 2,2-Dichloropropane	3.684	77	51495	4.30	ug/L	95
34) cis-1,2-Dichloroethene	3.684	96	48288	5.35	ug/L #	84
35) 2-Butanone	3.720	43	17230m	5.97	ug/L	
36) Propionitrile	3.781	54	18579	24.91	ug/L	92
37) Bromochloromethane	3.989	130	29370	5.55	ug/L #	75

00270

Sample : 5.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0513.D Vial: 6
 Acq On : 21 Jul 2014 1:23 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 16:22:02 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Methacrylonitrile	3.983	67	10442	4.45	ug/L #	59
39) Tetrahydrofuran	4.074	42	10478	6.10	ug/L	96
40) Chloroform	4.098	83	77707	5.31	ug/L	94
41) 1,1,1-Trichloroethane	4.361	97	64647	5.04	ug/L	100
42) TAME	5.177	73	87845	4.15	ug/L	88
44) Cyclohexane	4.440	41	62439	5.93	ug/L	95
46) Carbontetrachloride	4.623	121	17531	4.61	ug/L	81
47) 1,1-Dichloropropene	4.623	75	54624	4.78	ug/L	87
49) Benzene	4.958	78	172390	4.72	ug/L	92
50) 1,2-Dichloroethane	4.988	62	61815	5.16	ug/L	95
51) Iso-Butyl Alcohol	4.867	43	22147m	74.68	ug/L	
52) n-Heptane	5.464	43	60613	5.92	ug/L #	78
53) 1-Butanol	5.988	56	21799m	157.03	ug/L	
54) Trichloroethene	5.970	130	47569	4.85	ug/L	93
55) Methylcyclohexane	6.214	55	66867	5.20	ug/L #	76
56) 1,2-Dicloropropane	6.263	63	50023	4.79	ug/L	94
57) Dibromomethane	6.403	93	24219	5.07	ug/L #	77
58) 1,4-Dioxane	6.470	88	5819m	113.50	ug/L	
59) Methyl Methacrylate	6.476	69	16483m	3.90	ug/L	
60) Bromodichloromethane	6.616	83	53640	4.68	ug/L	93
61) 2-Nitropropane	6.897	41	10586	6.48	ug/L #	70
62) 2-Chloroethylvinyl Ether	7.012	63	18586	3.86	ug/L	80
63) cis-1,3-Dichloropropene	7.147	75	52278	3.78	ug/L	96
64) 4-Methyl-2-pentanone	7.342	43	34200	4.91	ug/L	95
66) Toluene	7.500	91	178454	4.55	ug/L	95
67) trans-1,3-Dichloropropene	7.750	75	42275	3.73	ug/L	97
68) Ethyl Methacrylate	7.878	69	33933	3.85	ug/L #	68
69) 1,1,2-Trichloroethane	7.927	97	30181	4.44	ug/L	86
72) Tetrachloroethene	8.055	164	35723	4.56	ug/L	97
73) 2-Hexanone	8.213	43	25252m	5.12	ug/L	
74) 1,3-Dichloropropene	8.085	76	53265	4.57	ug/L #	73
75) Dibromochloromethane	8.305	129	37759	4.53	ug/L	95
76) N-Butyl Acetate	8.348	43	50392	3.88	ug/L	86
77) 1,2-Dibromoethane	8.402	107	30690	4.54	ug/L	81
78) 3-Chlorobenzotrifluoride	8.878	180	65383	4.51	ug/L	90
79) Chlorobenzene	8.866	112	123405	4.72	ug/L	97
80) 4-Chlorobenzotrifluoride	8.933	180	59912	4.46	ug/L	97
81) 1,1,1,2-Tetrachloroethane	8.951	131	40420	4.25	ug/L	96
82) Ethylbenzene	8.982	106	59697	4.42	ug/L #	89
83) (m+p)Xylene	9.091	106	153019	9.25	ug/L	94
84) o-Xylene	9.439	106	72891	4.37	ug/L	92
85) Styrene	9.451	104	117838	4.18	ug/L	96
86) Bromoform	9.597	173	21825	4.37	ug/L	97
87) 2-Chlorobenzotrifluoride	9.670	180	63842	4.45	ug/L	94
88) Isopropylbenzene	9.756	105	181770	4.45	ug/L	99
89) Cyclohexanone	9.829	55	118101	119.82	ug/L	90
90) trans-1,4-Dichloro-2-B...	10.067	53	7977	3.68	ug/L	81
92) 1,1,2,2-Tetrachloroethane	10.012	83	38831	4.97	ug/L	93
93) Bromobenzene	10.006	156	50253	4.43	ug/L	96
94) 1,2,3-Trichloropropane	10.042	110	10484	5.04	ug/L	100
95) n-Propylbenzene	10.103	91	214592	4.65	ug/L	96
96) 2-Chlorotoluene	10.170	91	131888	4.66	ug/L	94

Sample : 5.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0513.D Vial: 6
 Acq On : 21 Jul 2014 1:23 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 16:22:02 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration

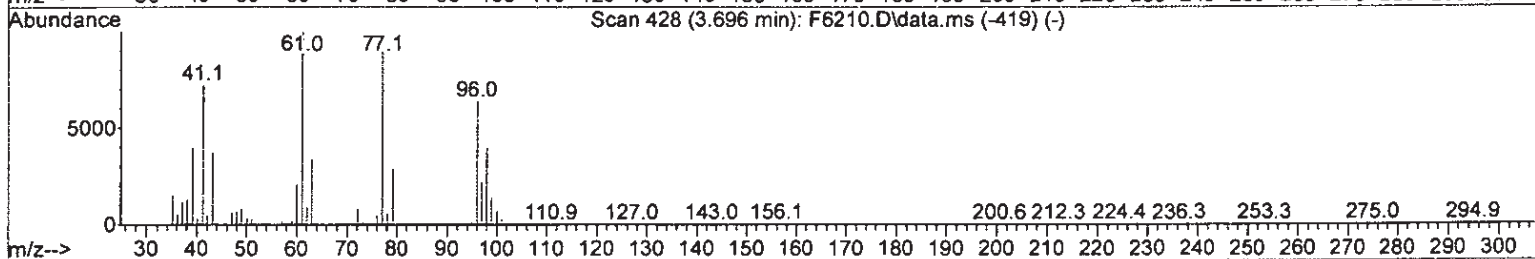
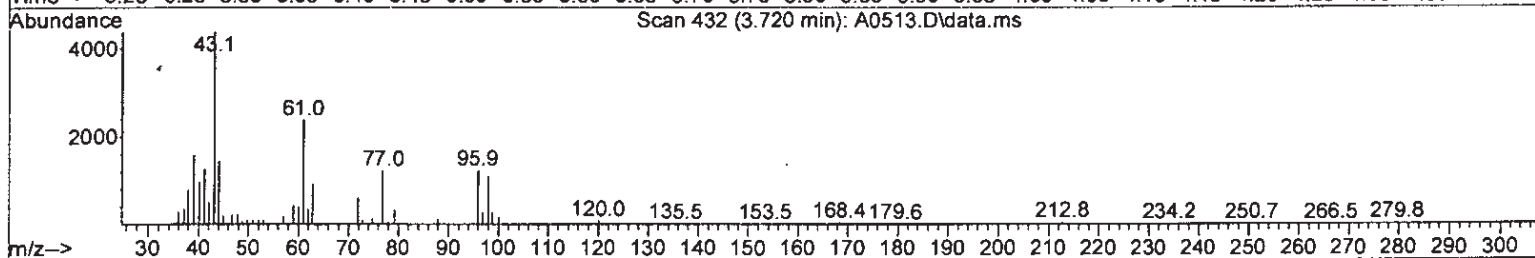
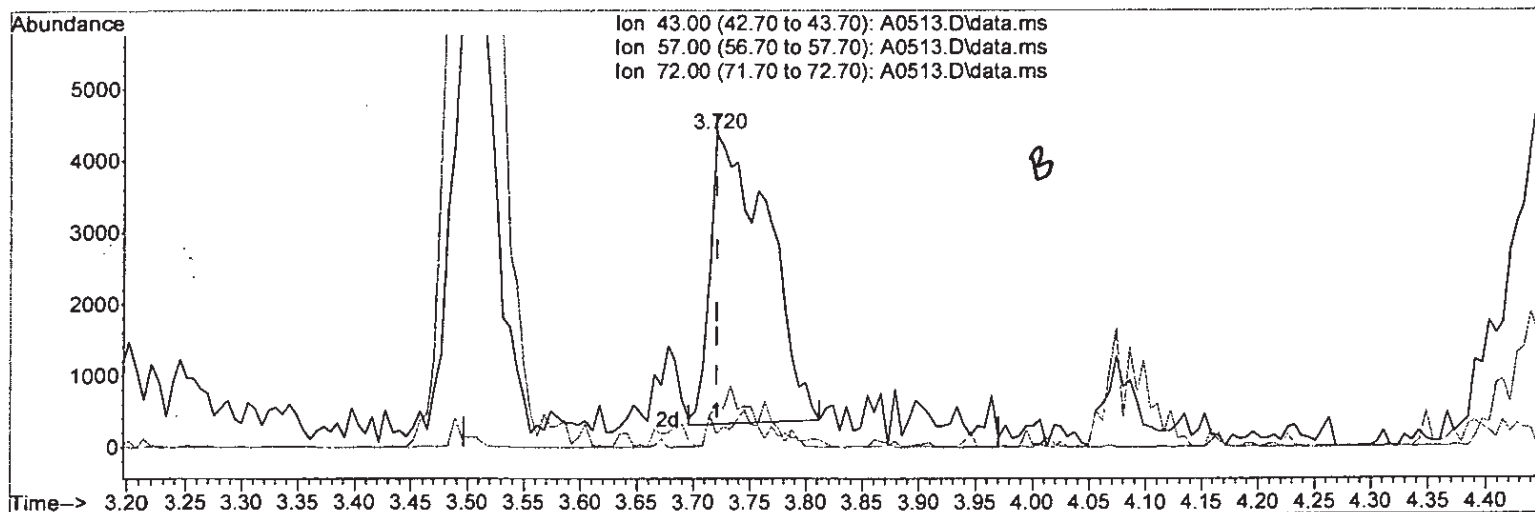
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97) 3-Chlorotoluene	10.225	91	137297	4.78	ug/L	92
98) 4-Chlorotoluene	10.262	91	157231	4.58	ug/L	98
99) 1,3,5-Trimethylbenzene	10.256	105	149259	4.41	ug/L	99
100) tert-Butylbenzene	10.518	119	126311	4.49	ug/L	99
101) 1,2,4-Trimethylbenzene	10.561	105	158212	4.62	ug/L	98
102) 3,4-Dichlorobenzotrifl...	10.615	214	46082	4.54	ug/L	90
103) sec-Butylbenzene	10.701	105	177027	4.57	ug/L	98
104) p-Isopropyltoluene	10.817	119	152126	4.49	ug/L	97
105) 1,3-Dclbenz	10.786	146	96336	4.59	ug/L	96
106) 1,4-Dclbenz	10.853	146	101159	4.76	ug/L	91
107) 2,4-Dichlorobenzotrifl...	10.908	214	39687	4.36	ug/L	87
108) 2,5-Dichlorobenzotrifl...	10.945	214	43525	4.16	ug/L	92
109) n-Butylbenzene	11.146	91	130533	4.45	ug/L	96
110) 1,2-Dclbenz	11.152	146	92437	4.82	ug/L	94
111) 1,2-Dibromo-3-chloropr...	11.707	157	5151	4.28	ug/L	80
112) Trielution Dichlorotol...	11.810	125	226082	14.59	ug/L	96
113) 1,3,5-Trichlorobenzene	11.847	180	62858	4.82	ug/L	94
114) Coelution Dichlorotoluene	12.072	125	158359	10.06	ug/L	96
115) 1,2,4-Tcbenzene	12.237	180	50274	4.73	ug/L	100
116) Hexachlorobt	12.335	225	21093	4.14	ug/L	95
117) Naphthalen	12.389	128	81684	5.02	ug/L	98
118) 1,2,3-Tclbenzene	12.524	180	34792	4.81	ug/L	98
119) 2,4,5-Trichlorotoluene	12.950	159	22009	5.55	ug/L	92
120) 2,3,6-Trichlorotoluene	13.011	159	21134	5.37	ug/L	94

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

Quantitation Report (Qedit)

Sample : 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0513.D Vial: 6
Acq On : 21 Jul 2014 1:23 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:32:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



TIC: A0513.D\data.ms

(35) 2-Butanone (P)

3.720min (-0.000) 4.97 ug/L

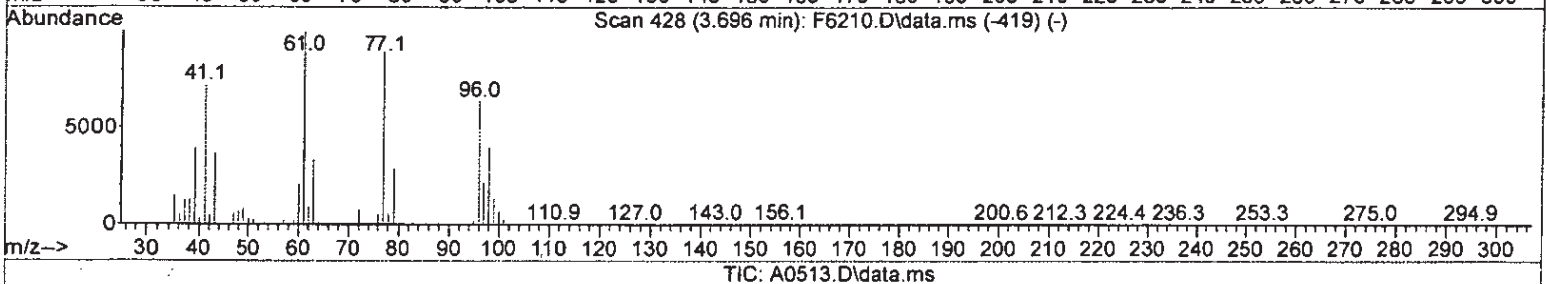
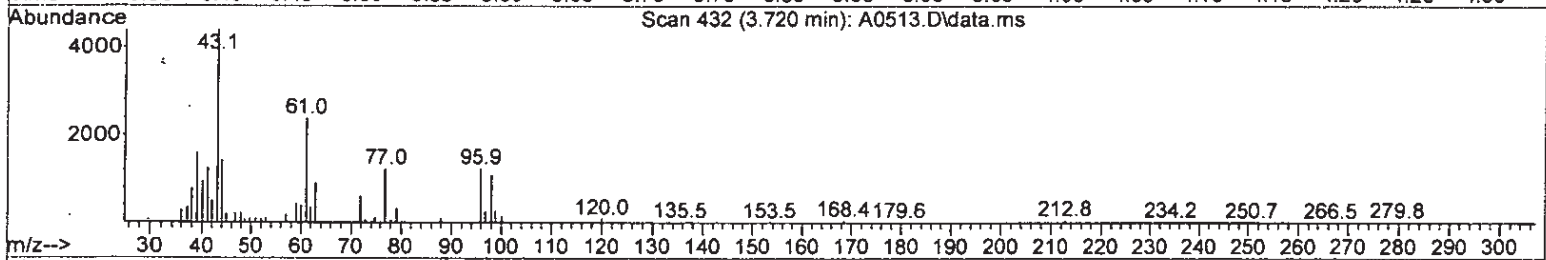
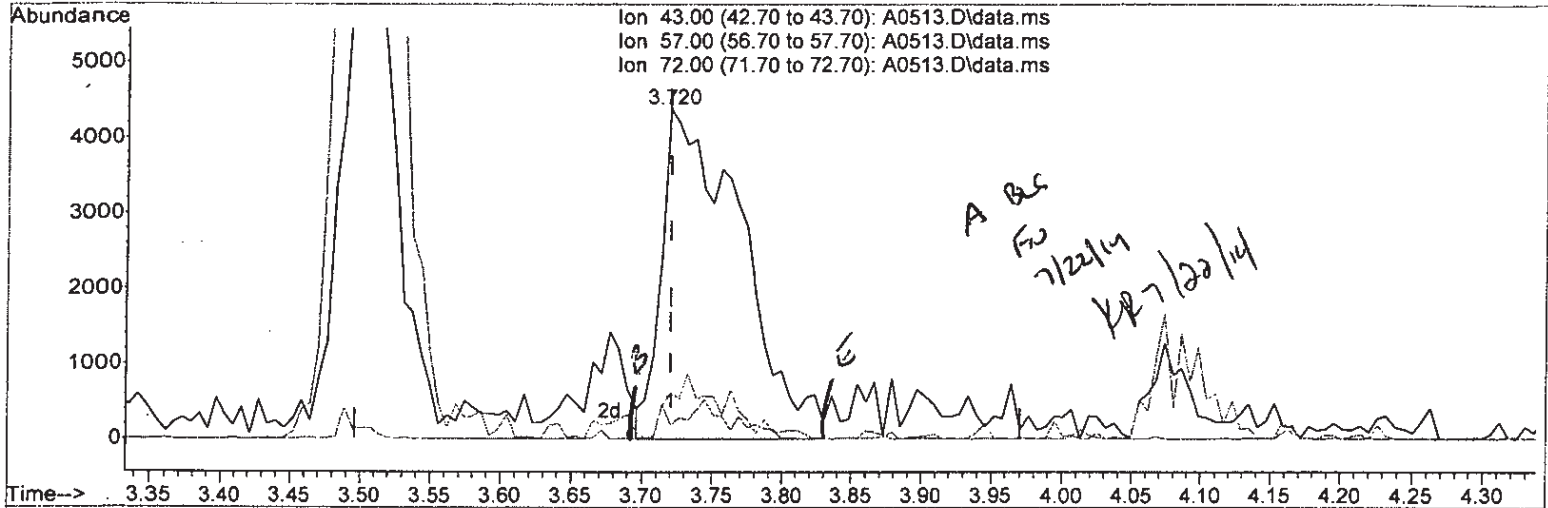
response 14346

Ion	Exp%	Act%
43.00	100	100
57.00	8.30	4.27
72.00	23.50	13.74
0.00	0.00	0.00

00273

Sample : 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0513.D Vial: 6
Acq On : 21 Jul 2014 1:23 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:32:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



(35) 2-Butanone (P)

3.720min (-0.000) 5.97 ug/L m

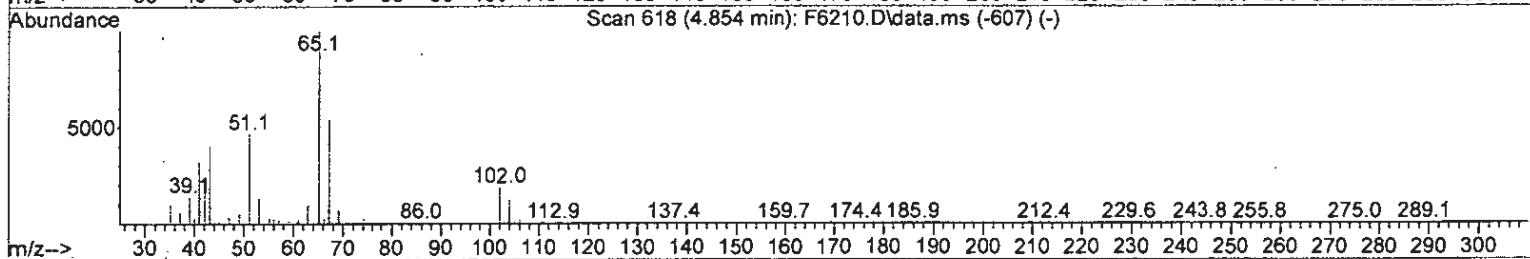
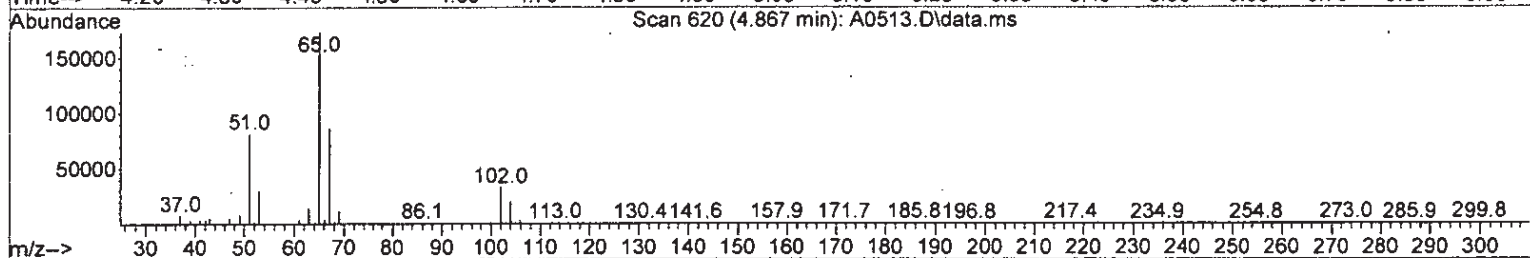
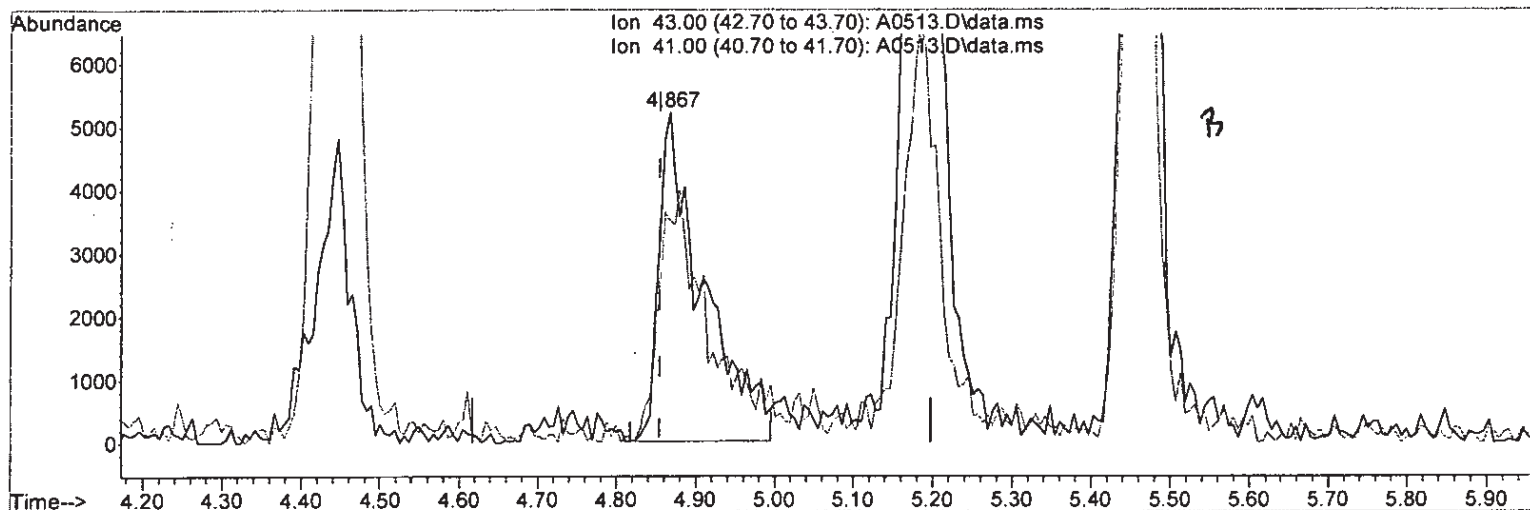
response 17230

Ion	Exp%	Act%
43.00	100	100
57.00	8.30	4.27
72.00	23.50	13.74
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0513.D Vial: 6
Acq On : 21 Jul 2014 1:23 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:32:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



TIC: A0513.D\data.ms

(51) Iso-Butyl Alcohol

4.867min (+0.012) 67.91 ug/L

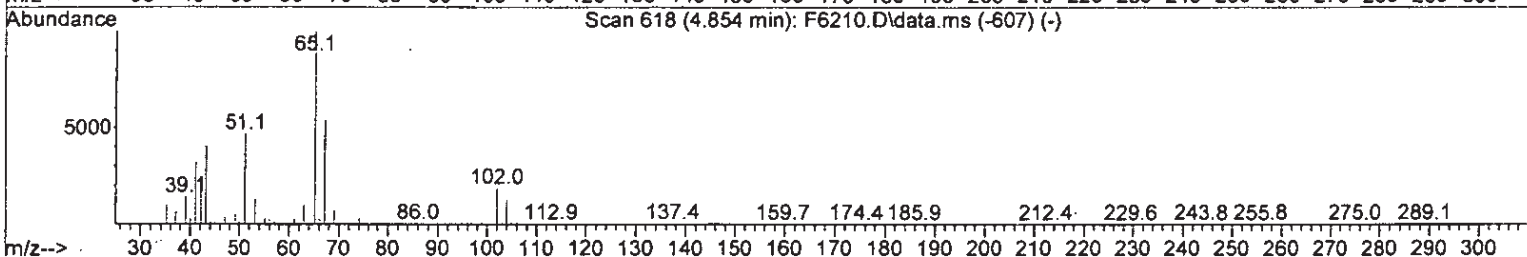
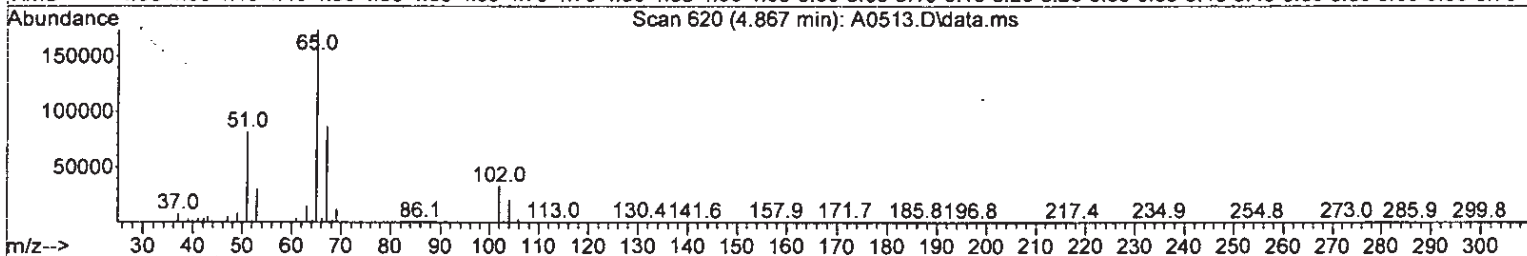
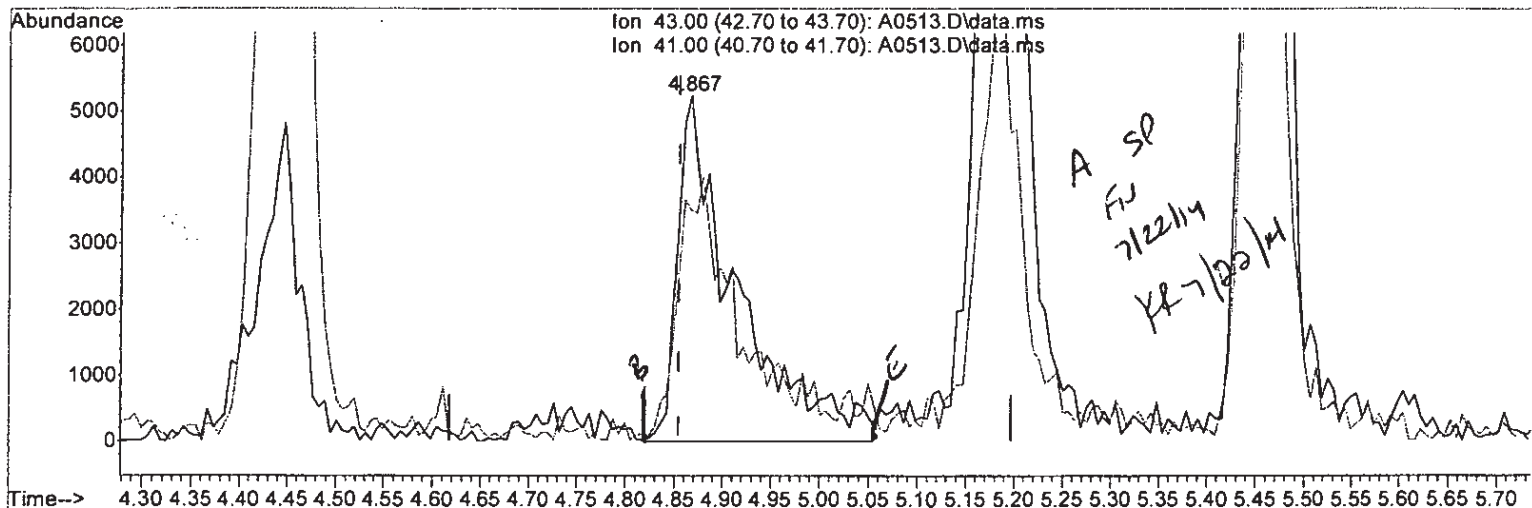
response 20139

Ion	Exp%	Act%
43.00	100	100
41.00	76.40	66.92
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 5.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0513.D Vial: 6
 Acq On : 21 Jul 2014 1:23 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 15:32:14 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0513.D\data.ms

(51) Iso-Butyl Alcohol

4.867min (+0.012) 74.68 ug/L m

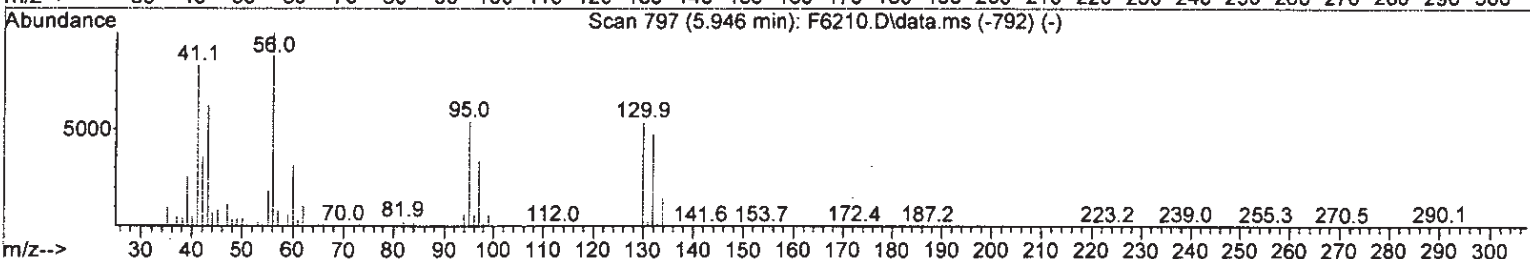
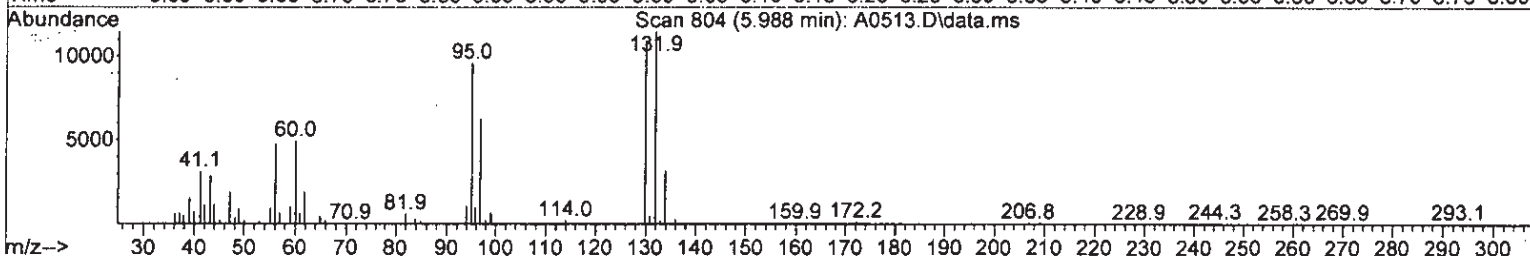
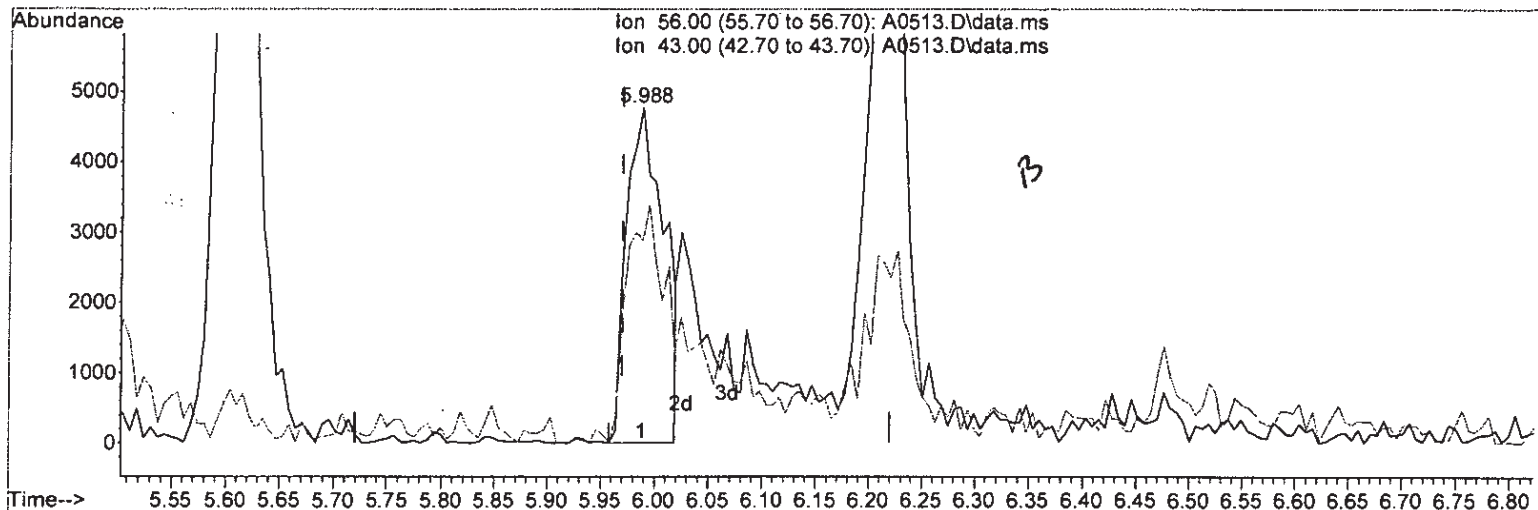
response 22147

Ion	Exp%	Act%
43.00	100	100
41.00	76.40	66.92
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 5.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0513.D Vial: 6
 Acq On : 21 Jul 2014 1:23 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 13:36:27 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0513.D\data.ms

(53) 1-Butanol

5.988min (+0.018) 82.76 ug/L

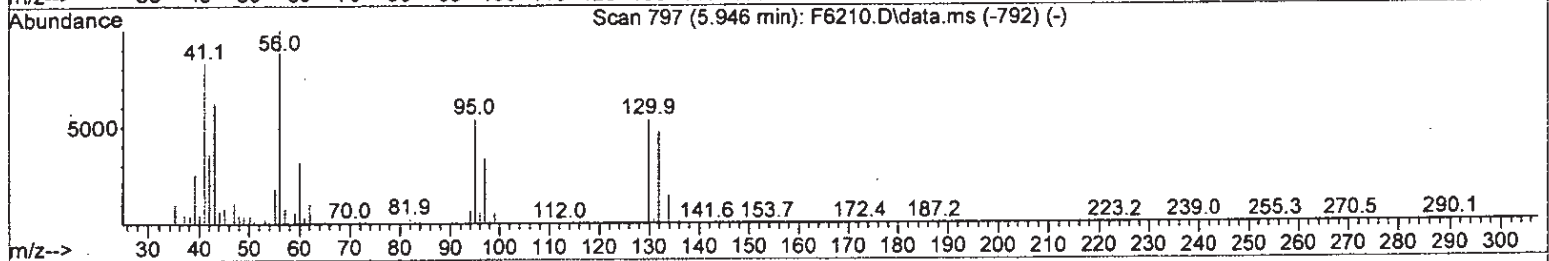
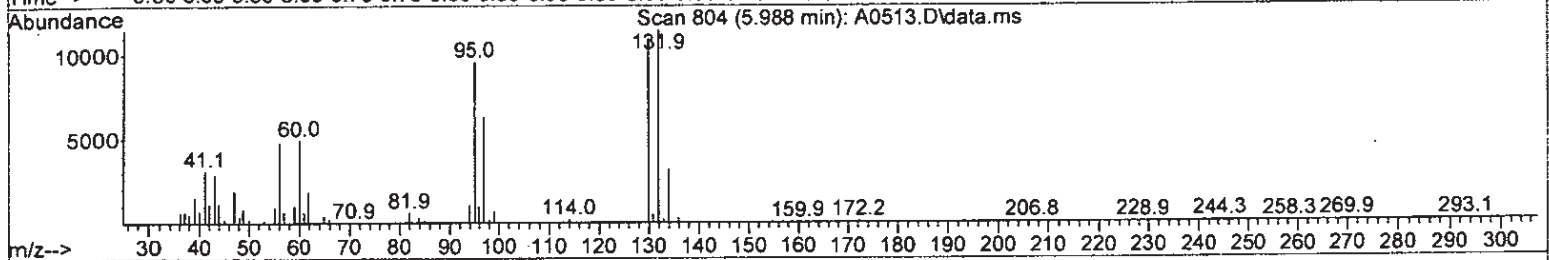
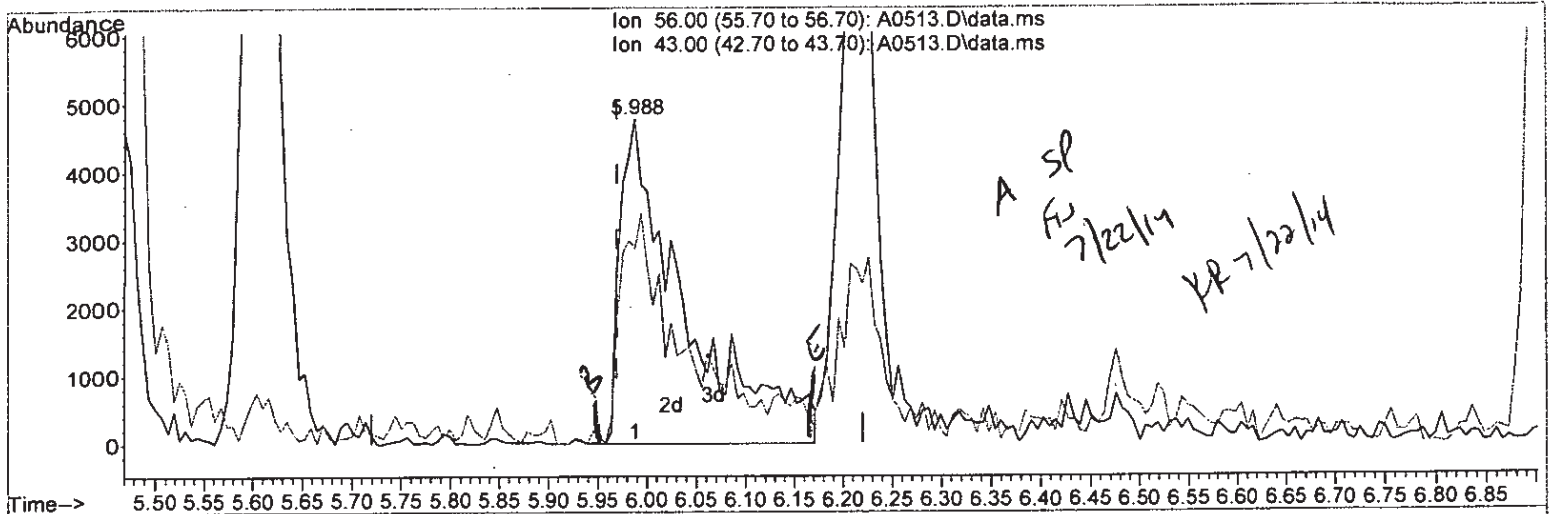
response 11488

Ion	Exp%	Act%
56.00	100	100
43.00	56.20	60.17
0.00	0.00	0.00
0.00	0.00	0.00

00277

Sample : 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0513.D Vial: 6
Acq On : 21 Jul 2014 1:23 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:32:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



TIC: A0513.D\data.ms

(53) 1-Butanol

5.988min (+0.018) 157.03 ug/L m

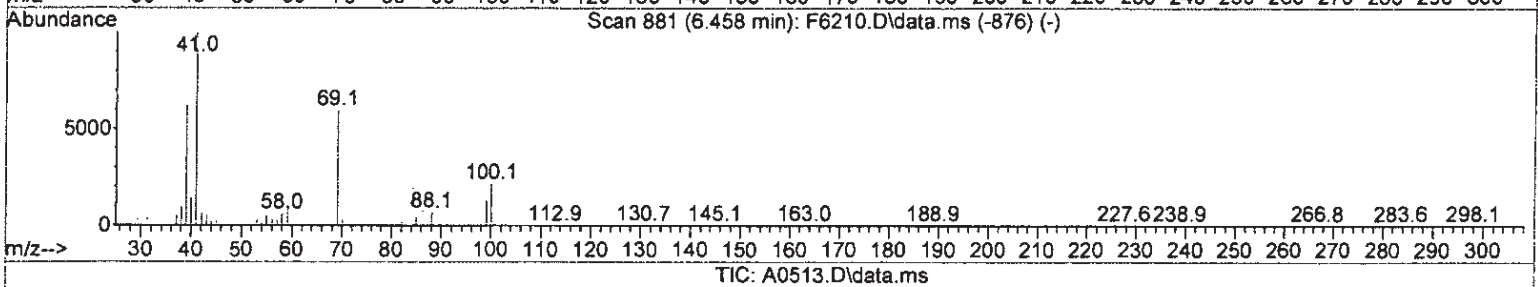
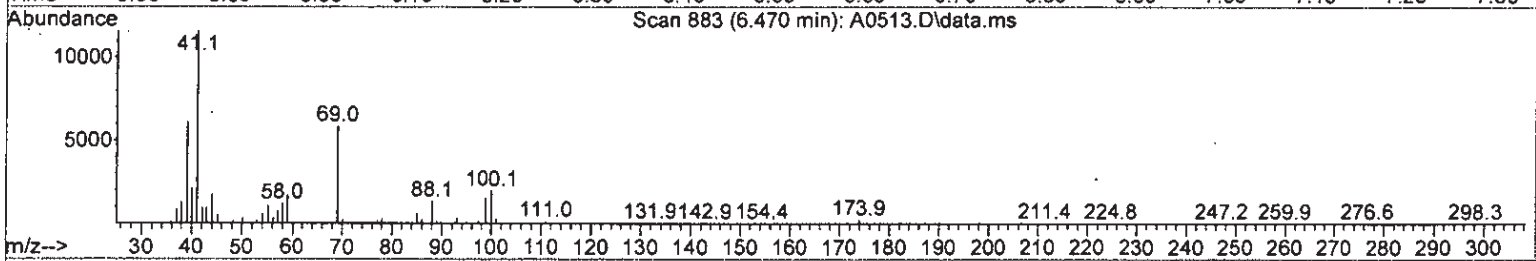
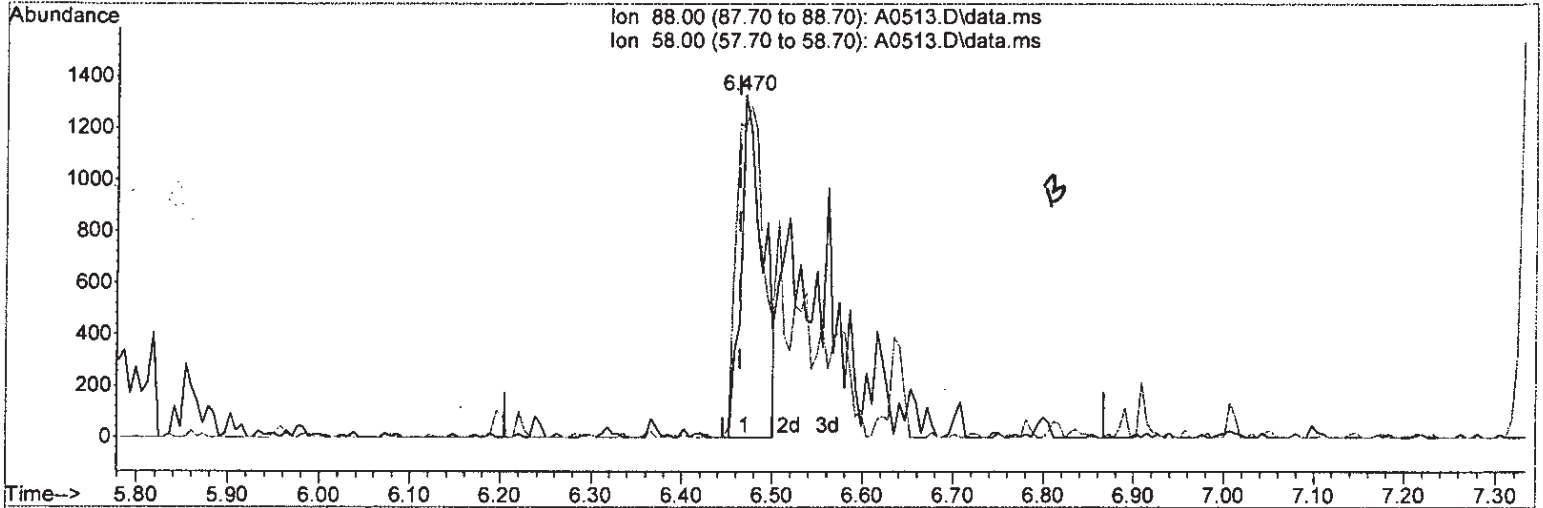
response 21799

Ion	Exp%	Act%
56.00	100	100
43.00	56.20	60.17
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 5.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0513.D Vial: 6
 Acq On : 21 Jul 2014 1:23 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 13:36:27 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(58) 1,4-Dioxane

6.470min (+0.006) 42.99 ug/L

response 2204

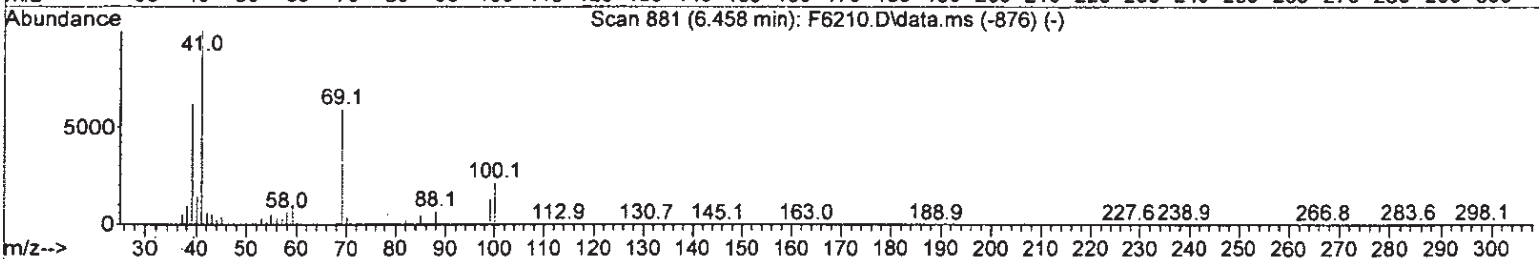
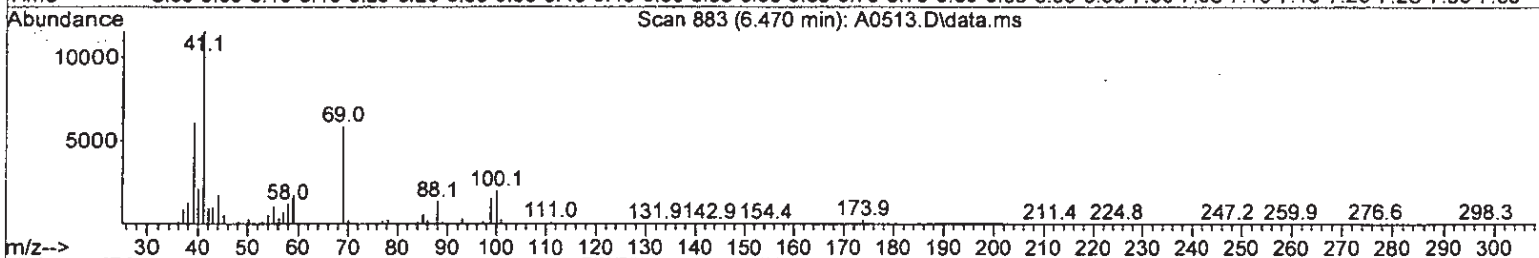
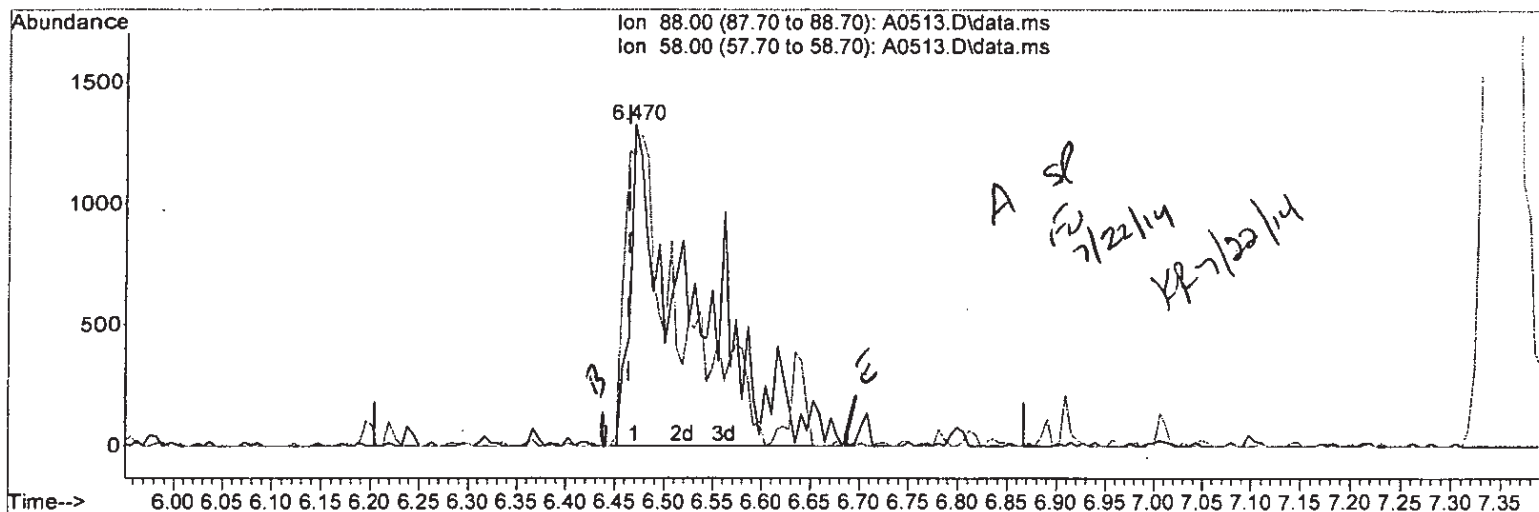
Ion	Exp%	Act%
88.00	100	100
58.00	73.00	90.42
0.00	0.00	0.00
0.00	0.00	0.00

00279

Quantitation Report (Qedit)

Sample : 5.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0513.D Vial: 6
 Acq On : 21 Jul 2014 1:23 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 13:36:27 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0513.D\data.ms

(58) 1,4-Dioxane

6.470min (+0.006) 113.50 ug/L m

response 5819

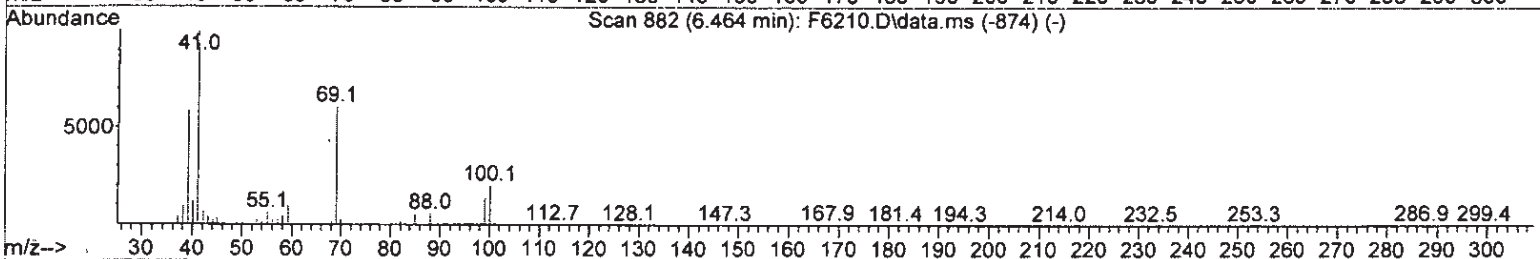
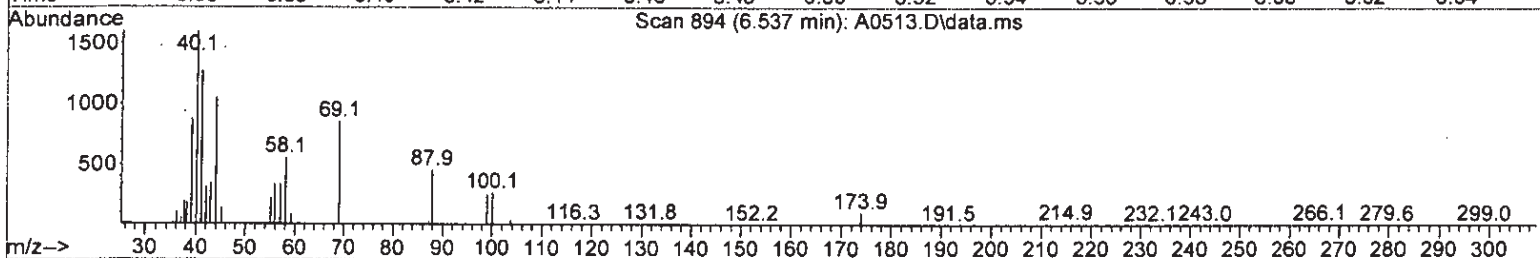
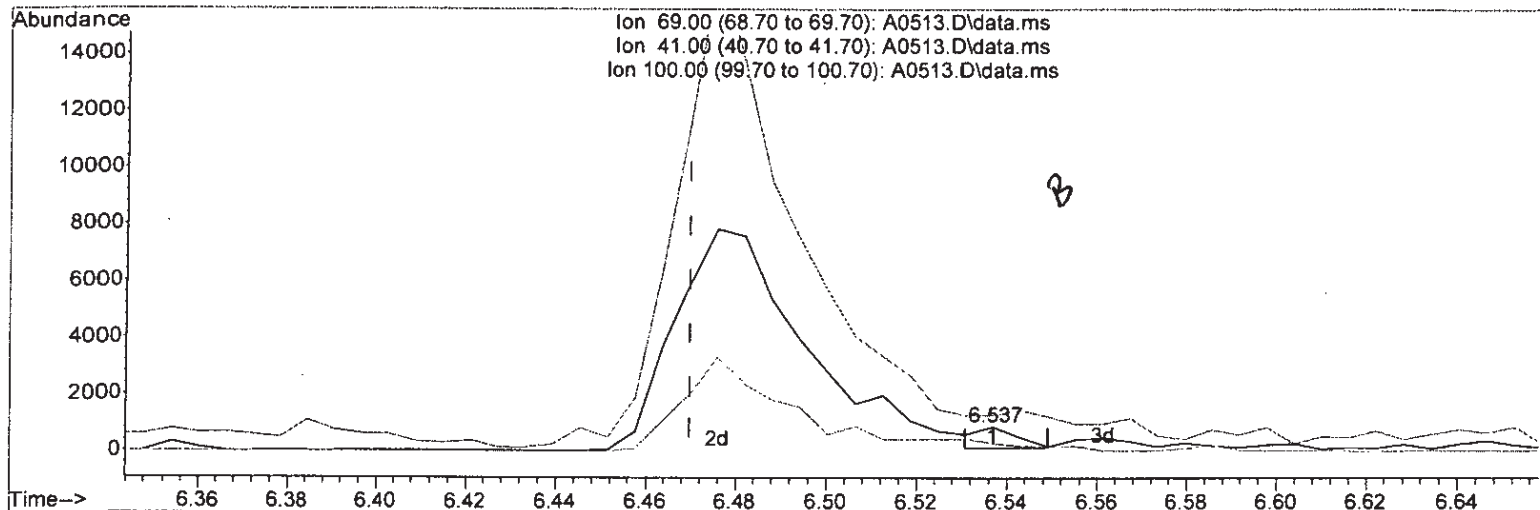
Ion	Exp%	Act%
88.00	100	100
58.00	73.00	90.42
0.00	0.00	0.00
0.00	0.00	0.00

00280

Quantitation Report (Qedit)

Sample : 5.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0513.D Vial: 6
 Acq On : 21 Jul 2014 1:23 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 13:36:27 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0513.D\data.ms

(59) Methyl Methacrylate

6.537min (+0.067) 0.10 ug/L

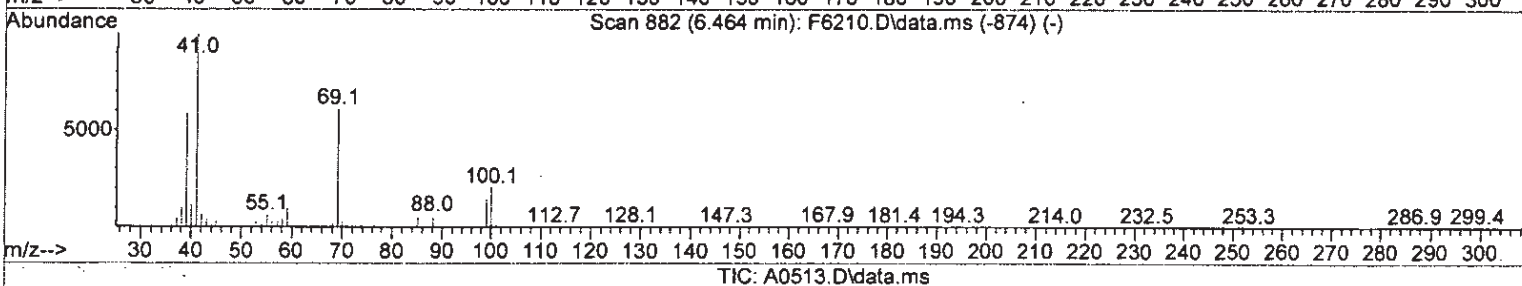
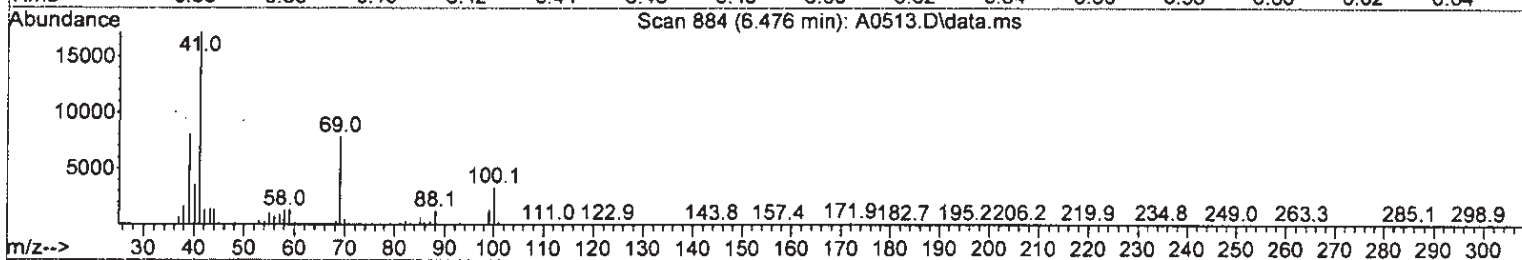
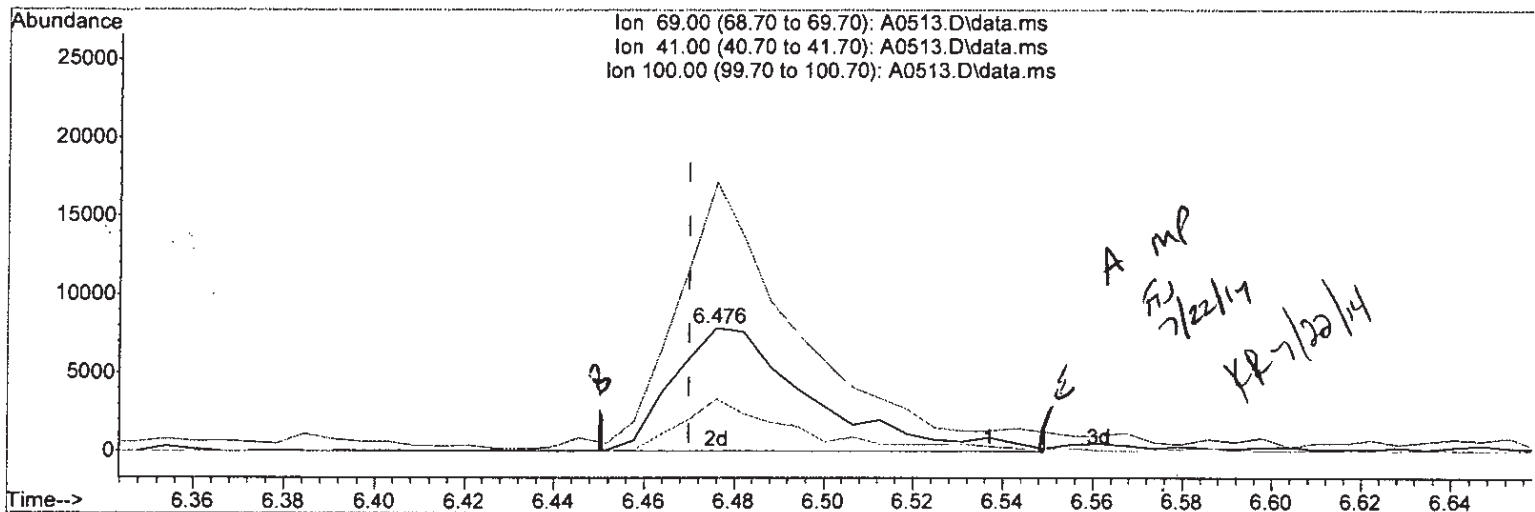
response 423

Ion	Exp%	Act%
69.00	100	100
41.00	128.90	148.83
100.00	36.90	31.57
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 5.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0513.D Vial: 6
 Acq On : 21 Jul 2014 1:23 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 13:36:27 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(59) Methyl Methacrylate

6.476min (+0.006) 3.90 ug/L m

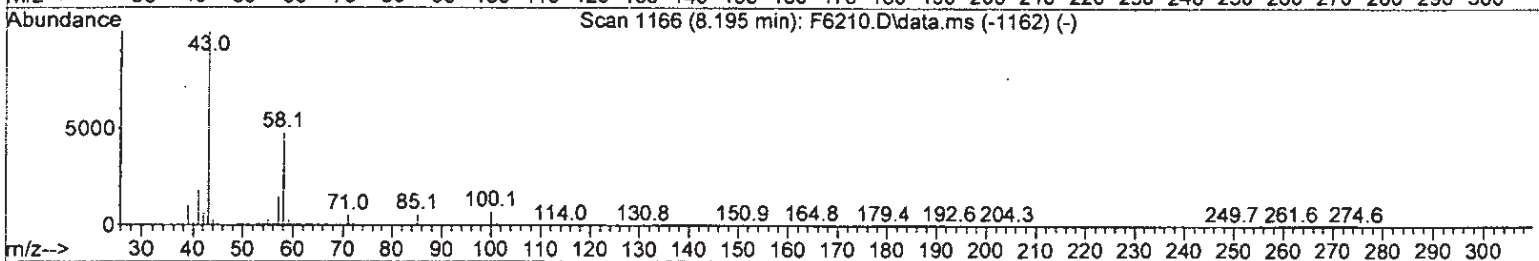
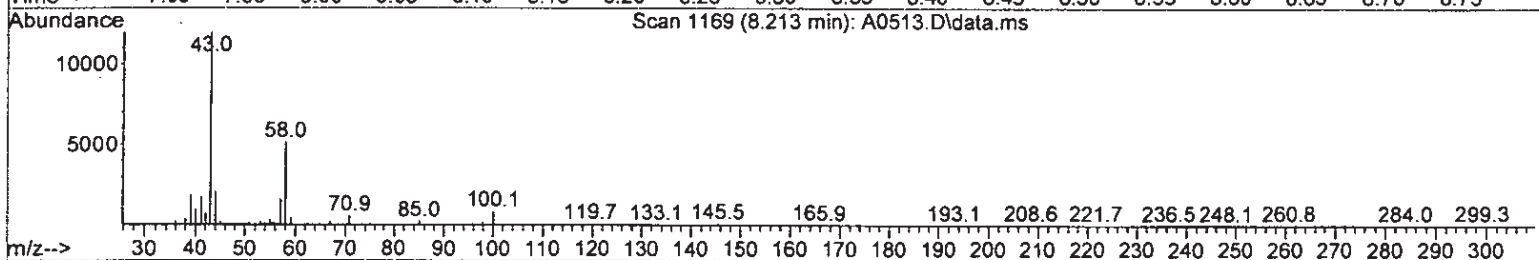
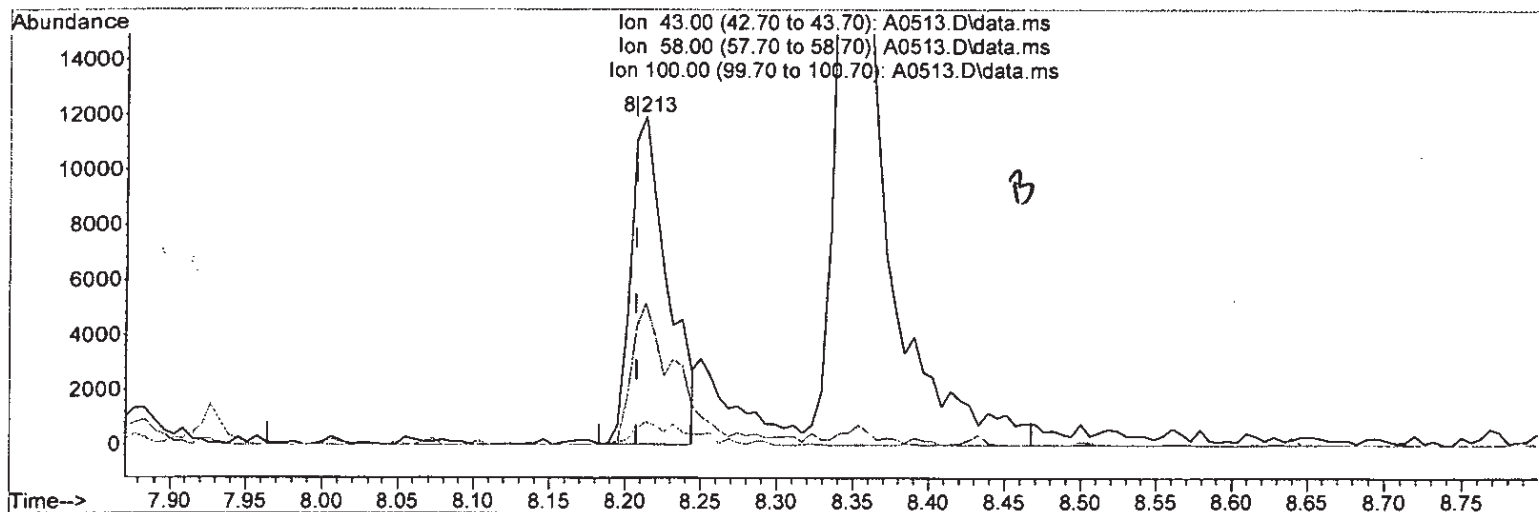
response 16483

Ion	Exp%	Act%
69.00	100	100
41.00	128.90	218.93#
100.00	36.90	42.06
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0513.D Vial: 6
Acq On : 21 Jul 2014 1:23 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 13:36:27 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



TIC: A0513.D\data.ms

(73) 2-Hexanone (P)

8.213min (+0.006) 4.06 ug/L

response 20043

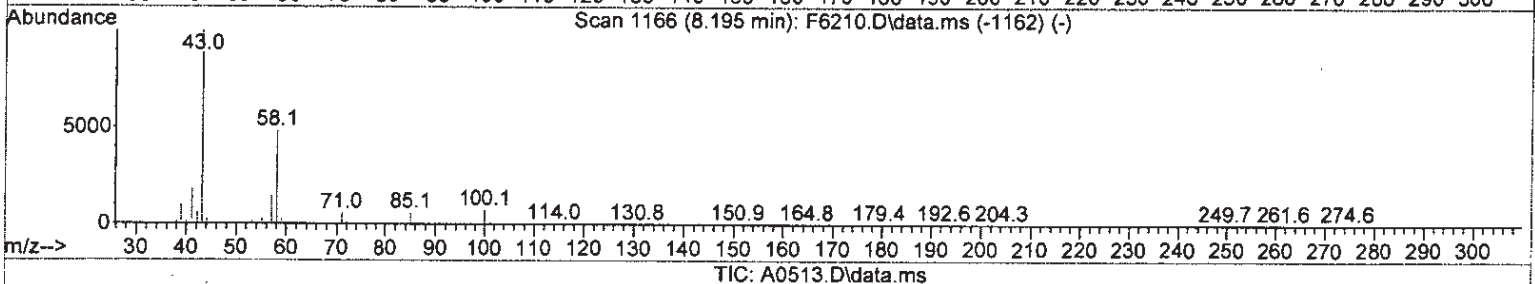
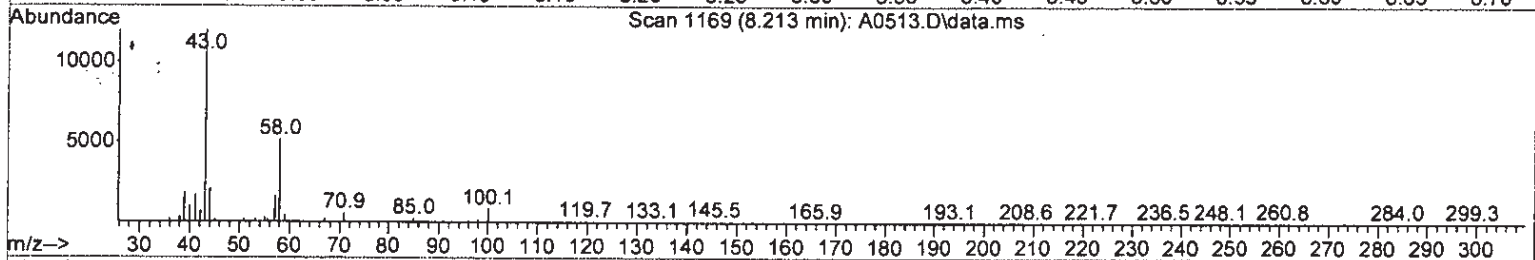
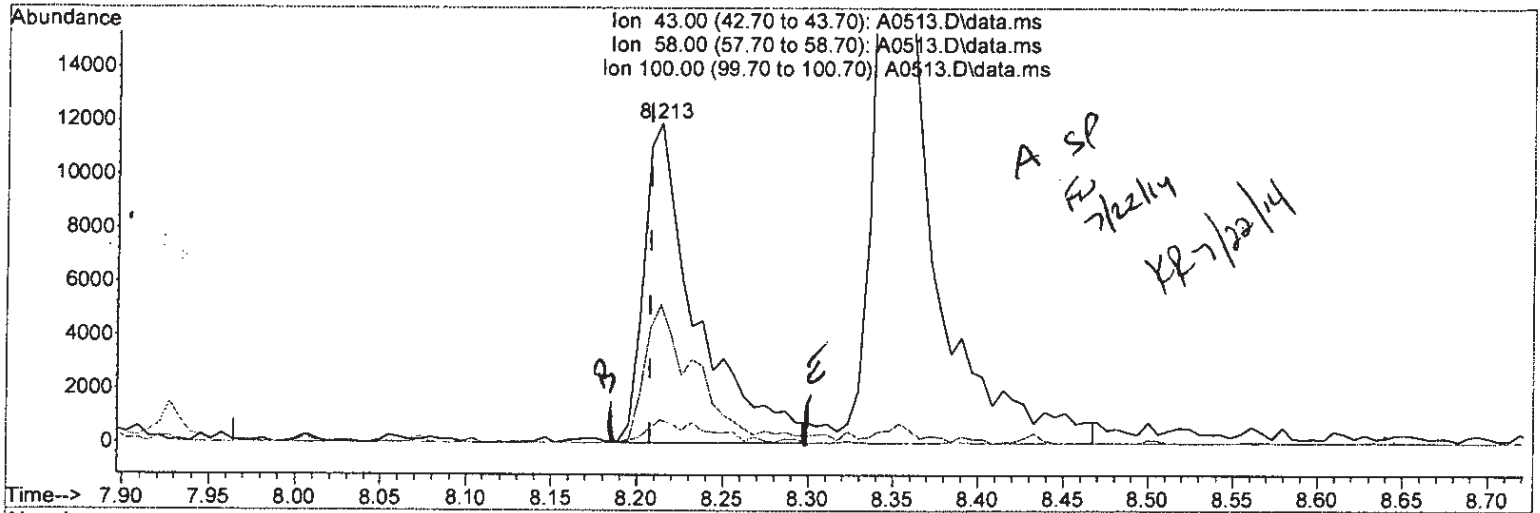
Ion	Exp%	Act%
43.00	100	100
58.00	50.80	43.02
100.00	10.10	7.05
0.00	0.00	0.00

00283

Quantitation Report (Qedit)

Sample : 5.0 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0513.D Vial: 6
 Acq On : 21 Jul 2014 1:23 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 13:36:27 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(73) 2-Hexanone (P)

8.213min (+0.006) 5.12 ug/L m

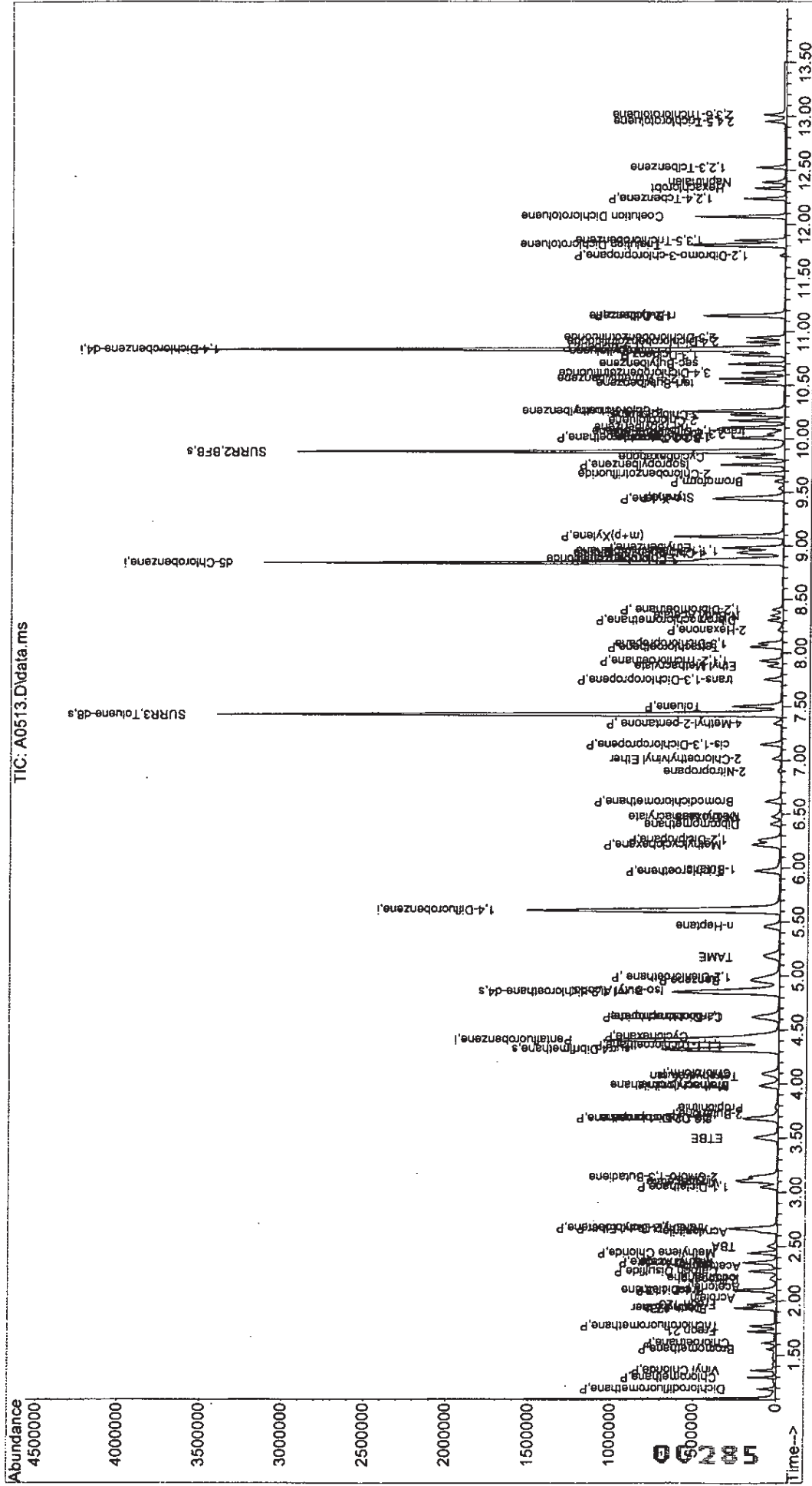
response: 25252

Ion	Exp%	Act%
43.00	100	100
58.00	50.80	43.02
100.00	10.10	7.05
0.00	0.00	0.00

(QT Reviewed)

msvoal0\data\072114\A0513.D
1:23 pm

10\METHODS\W072114.M
ERS 10mL Purge
04 2014
on



Sample : 10 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0514.D Vial: 7
 Acq On : 21 Jul 2014 1:53 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 15:34:12 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration

FW
7/22/14

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	921376	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1385793	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1266668	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	685970	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.318	113	631137	76.42	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery	=	152.84%#	
48) surr1,1,2-dichloroetha...	4.854	65	677471	82.76	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery	=	165.52%#	
65) SURR3,Toluene-d8	7.427	98	2211126	69.31	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery	=	138.62%#	
70) SURR2,BFB	9.878	95	870086	69.28	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery	=	138.56%#	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.190	85	104190	12.09	ug/L	94
3) Chloromethane	1.294	50	141375	13.24	ug/L	98
4) Vinyl Chloride	1.361	62	118631	10.59	ug/L	99
5) Bromomethane	1.556	94	34536	8.54	ug/L	95
6) Chloroethane	1.611	64	62253	10.22	ug/L	88
7) Freon 21	1.721	67	170036	10.48	ug/L	99
8) Trichlorofluoromethane	1.770	101	129293	10.75	ug/L	99
9) Diethyl Ether	1.934	59	73589	10.65	ug/L #	78
10) Freon 123a	1.928	67	103181	9.88	ug/L	91
11) Freon 123	1.965	83	104630	9.41	ug/L	98
12) Acrolein	2.026	56	52503	49.07	ug/L	97
13) 1,1-Dicethene	2.099	96	58707	9.56	ug/L #	77
14) Freon 113	2.093	101	72170	10.30	ug/L	93
15) Acetone	2.123	43	30164	14.52	ug/L	99
16) 2-Propanol	2.196	45	81516	226.63	ug/L	96
17) Iodomethane	2.215	142	28095	4.37	ug/L	96
18) Carbon Disulfide	2.270	76	259118	9.91	ug/L	99
19) Acetonitrile	2.324	40	16761	60.07	ug/L	89
20) Allyl Chloride	2.349	76	39299	8.85	ug/L #	7
21) Methyl Acetate	2.355	43	59297	13.31	ug/L	89
22) Methylene Chloride	2.440	84	82135	8.88	ug/L #	77
23) TBA	2.501	59	97257	171.60	ug/L	65
24) Acrylonitrile	2.635	53	135423	59.67	ug/L	100
25) Methyl-t-Butyl Ether	2.660	73	183659	9.43	ug/L	90
26) trans-1,2-Dichloroethene	2.666	96	84655	10.85	ug/L #	86
28) 1,1-Dicethane	3.050	63	175839	10.96	ug/L	100
29) Vinyl Acetate	3.093	86	10752	9.46	ug/L #	1
30) DIPE	3.111	45	441073	13.58	ug/L	94
31) 2-Chloro-1,3-Butadiene	3.147	53	168015	10.89	ug/L	86
32) ETBE	3.501	59	286967	10.39	ug/L	89
33) 2,2-Dichloropropane	3.684	77	98220	8.36	ug/L	99
34) cis-1,2-Dichloroethene	3.678	96	93822	10.61	ug/L #	84
35) 2-Butanone	3.714	43	37066	13.09	ug/L	86
36) Propionitrile	3.775	54	40883	55.89	ug/L	98
37) Bromochloromethane	3.983	130	56348	10.86	uq/L #	74

Sample : 10 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0514.D Vial: 7
 Acq On : 21 Jul 2014 1:53 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 15:34:12 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Methacrylonitrile	3.977	67	19845	8.63	ug/L #	31
39) Tetrahydrofuran	4.062	42	19308	11.45	ug/L #	61
40) Chloroform	4.098	83	155755	10.86	ug/L	94
41) 1,1,1-Trichloroethane	4.355	97	120740	9.59	ug/L	88
42) TAME	5.184	73	192278	9.26	ug/L	88
44) Cyclohexane	4.440	41	114753	11.13	ug/L	87
46) Carbontetrachloride	4.611	121	32688	8.77	ug/L	89
47) 1,1-Dichloropropene	4.617	75	101099	9.02	ug/L	92
49) Benzene	4.958	78	345251	9.65	ug/L	88
50) 1,2-Dichloroethane	4.989	62	119098	10.15	ug/L	90
51) Iso-Butyl Alcohol	4.867	43	48616	167.26	ug/L	90
52) n-Heptane	5.452	43	113284	11.30	ug/L #	78
53) 1-Butanol	5.964	56	52550m	386.23	ug/L	
54) Trichloroethene	5.970	130	91084	9.48	ug/L	91
55) Methylcyclohexane	6.214	55	115416	9.15	ug/L #	72
56) 1,2-Dicloropropene	6.257	63	96996	9.48	ug/L	98
57) Dibromomethane	6.403	93	46430	9.91	ug/L	93
58) 1,4-Dioxane	6.464	88	12384m	246.46	ug/L	
59) Methyl Methacrylate	6.470	69	35127	8.49	ug/L #	65
60) Bromodichloromethane	6.616	83	106974	9.51	ug/L	95
61) 2-Nitropropane	6.897	41	23618	14.76	ug/L	85
62) 2-Chloroethylvinyl Ether	7.013	63	38653	8.19	ug/L	91
63) cis-1,3-Dichloropropene	7.147	75	113333	8.35	ug/L	97
64) 4-Methyl-2-pentanone	7.342	43	69717	10.21	ug/L	90
66) Toluene	7.500	91	347224	9.03	ug/L	99
67) trans-1,3-Dichloropropene	7.750	75	85906	7.74	ug/L	94
68) Ethyl Methacrylate	7.872	69	68722	7.96	ug/L #	57
69) 1,1,2-Trichloroethane	7.927	97	63051	9.46	ug/L	91
72) Tetrachloroethene	8.055	164	68499	8.71	ug/L	94
73) 2-Hexanone	8.207	43	46361	9.36	ug/L	98
74) 1,3-Dichloropropene	8.085	76	106963	9.14	ug/L #	78
75) Dibromochloromethane	8.305	129	73000	8.72	ug/L	97
76) N-Butyl Acetate	8.342	43	117501	9.02	ug/L	90
77) 1,2-Dibromoethane	8.402	107	58425	8.60	ug/L	88
78) 3-Chlorobenzotrifluoride	8.878	180	123086	8.45	ug/L	93
79) Chlorobenzene	8.866	112	239952	9.14	ug/L	99
80) 4-Chlorobenzotrifluoride	8.927	180	116985	8.68	ug/L	97
81) 1,1,1,2-Tetrachloroethane	8.945	131	85303	8.92	ug/L	97
82) Ethylbenzene	8.982	106	120391	8.88	ug/L #	87
83) (m+p)Xylene	9.085	106	299073	18.01	ug/L	97
84) o-Xylene	9.433	106	145762	8.69	ug/L	96
85) Styrene	9.451	104	245705	8.67	ug/L	96
86) Bromoform	9.597	173	42572	8.49	ug/L	90
87) 2-Chlorobenzotrifluoride	9.671	180	129130	8.95	ug/L	89
88) Isopropylbenzene	9.756	105	353731	8.62	ug/L	98
89) Cyclohexanone	9.823	55	253052	255.64	ug/L	88
90) trans-1,4-Dichloro-2-B...	10.061	53	16823	7.72	ug/L #	70
92) 1,1,2,2-Tetrachloroethane	10.012	83	76869	9.74	ug/L	98
93) Bromobenzene	10.006	156	101855	8.90	ug/L	95
94) 1,2,3-Trichloropropene	10.042	110	19707	9.39	ug/L #	90
95) n-Propylbenzene	10.103	91	430055	9.24	ug/L	99
96) 2-Chlorotoluene	10.170	91	266087	9.31	ug/L	94

Sample : 10 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0514.D Vial: 7
 Acq On : 21 Jul 2014 1:53 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 15:34:12 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration

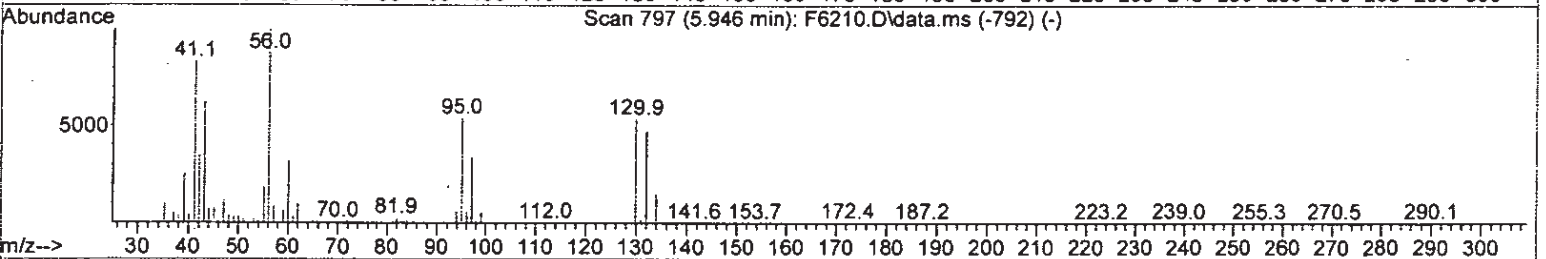
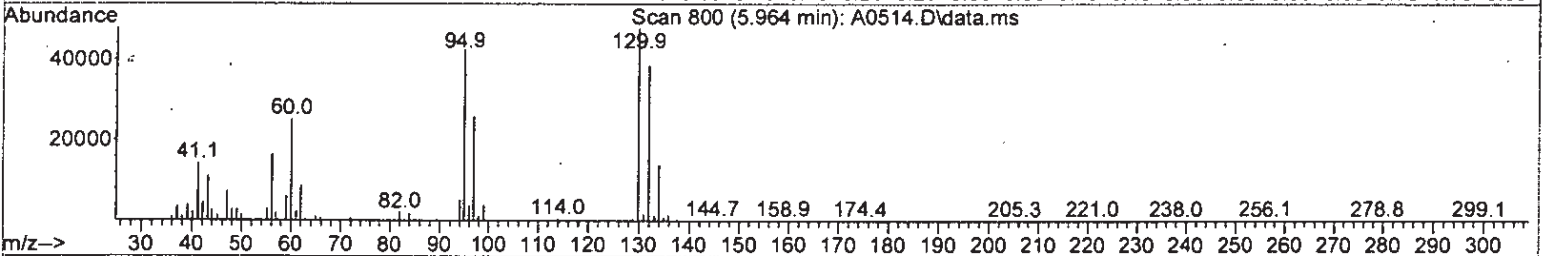
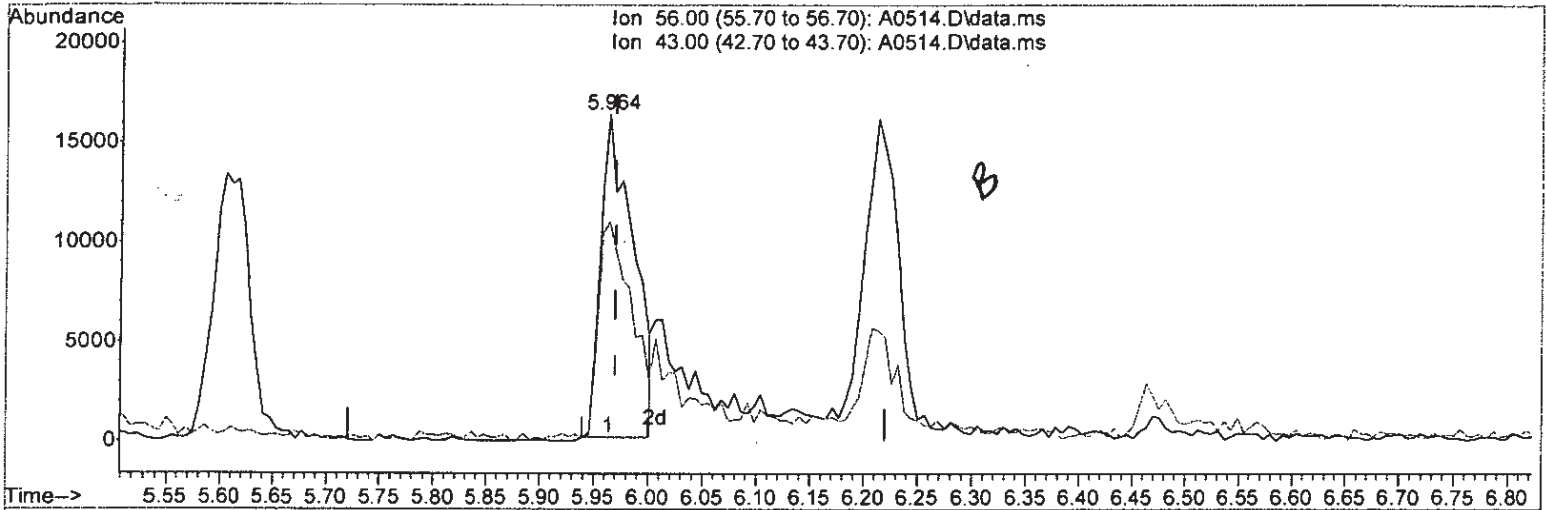
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97) 3-Chlorotoluene	10.219	91	294016	10.15	ug/L	97
98) 4-Chlorotoluene	10.262	91	304788	8.80	ug/L	93
99) 1,3,5-Trimethylbenzene	10.256	105	302748	8.86	ug/L	96
100) tert-Butylbenzene	10.518	119	247046	8.70	ug/L	97
101) 1,2,4-Trimethylbenzene	10.561	105	316834	9.17	ug/L	99
102) 3,4-Dichlorobenzotrifl...	10.615	214	87518	8.54	ug/L	100
103) sec-Butylbenzene	10.701	105	351518	8.98	ug/L	98
104) p-Isopropyltoluene	10.817	119	313952	9.17	ug/L	98
105) 1,3-Dclbenz	10.786	146	197860	9.35	ug/L	97
106) 1,4-Dclbenz	10.853	146	203572	9.49	ug/L	96
107) 2,4-Dichlorobenzotrifl...	10.902	214	81472	8.87	ug/L	93
108) 2,5-Dichlorobenzotrifl...	10.945	214	91215	8.64	ug/L	95
109) n-Butylbenzene	11.146	91	266276	9.00	ug/L	97
110) 1,2-Dclbenz	11.152	146	184491	9.53	ug/L	98
111) 1,2-Dibromo-3-chloropr...	11.707	157	10748	8.86	ug/L #	82
112) Trielution Dichlorotol...	11.804	125	482469	30.84	ug/L	97
113) 1,3,5-Trichlorobenzene	11.847	180	130979	9.96	ug/L	99
114) Coelution Dichlorotoluene	12.066	125	343281	21.61	ug/L	95
115) 1,2,4-Tcbenzene	12.237	180	105016	9.79	ug/L	96
116) Hexachlorobt	12.335	225	41434	8.06	ug/L	97
117) Naphthalen	12.383	128	176873	10.76	ug/L	100
118) 1,2,3-Tclbenzene	12.524	180	78405	10.75	ug/L	97
119) 2,4,5-Trichlorotoluene	12.944	159	49008	12.24	ug/L	94
120) 2,3,6-Trichlorotoluene	13.011	159	49047	12.36	ug/L	97

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

Quantitation Report (Qedit)

Sample : 10 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0514.D Vial: 7
 Acq On : 21 Jul 2014 1:53 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 14:06:48 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0514.D\data.ms

(53) 1-Butanol

5.964min (-0.006) 246.99 ug/L

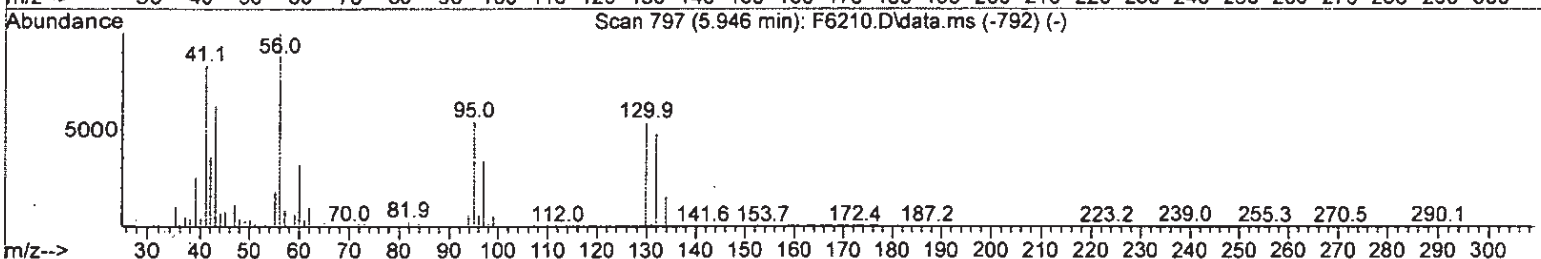
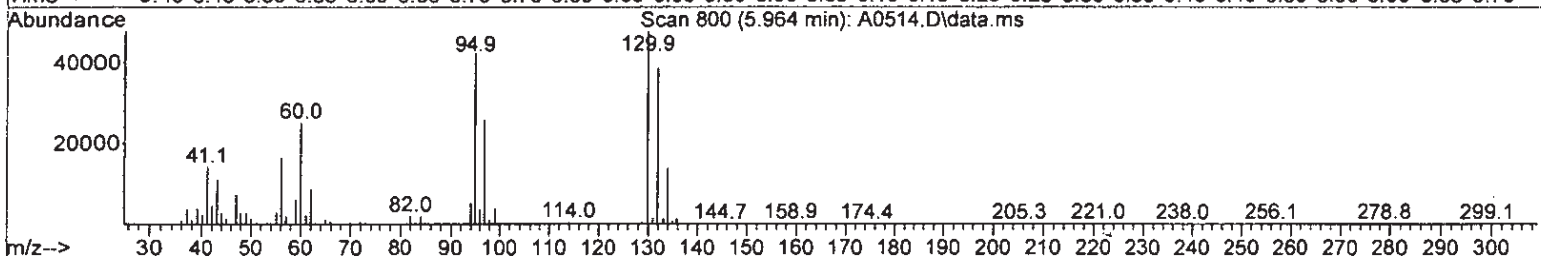
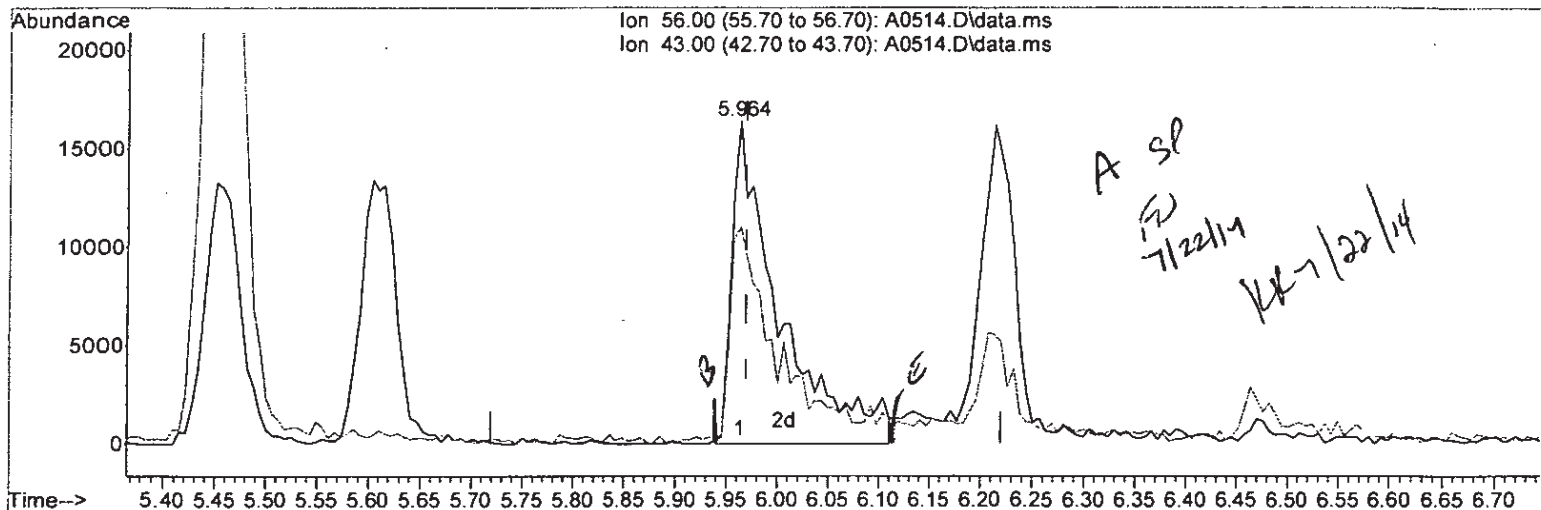
response 33606

Ion	Exp%	Act%
56.00	100	100
43.00	56.20	67.05
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 10 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0514.D Vial: 7
 Acq On : 21 Jul 2014 1:53 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 14:06:48 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0514.D\data.ms

(53) 1-Butanol

5.964min (-0.006) 386.23 ug/L m

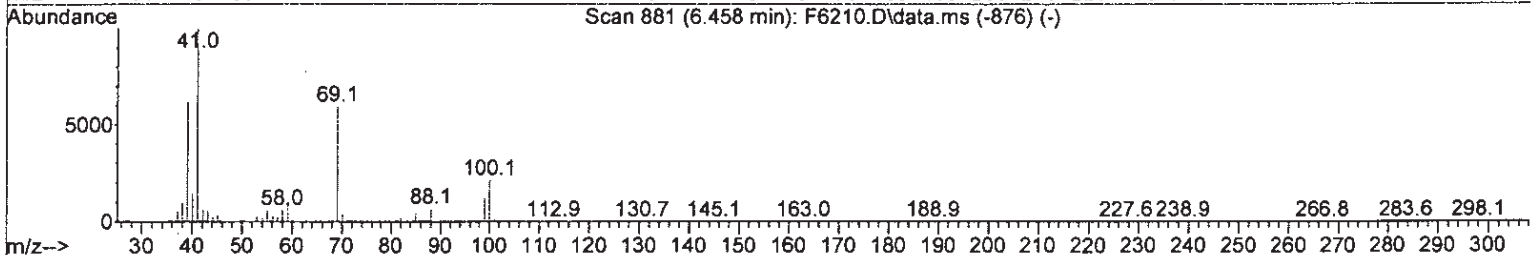
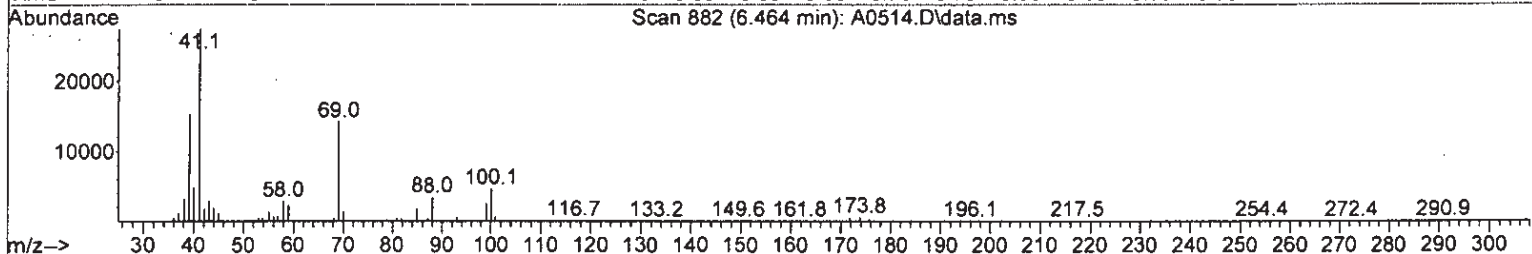
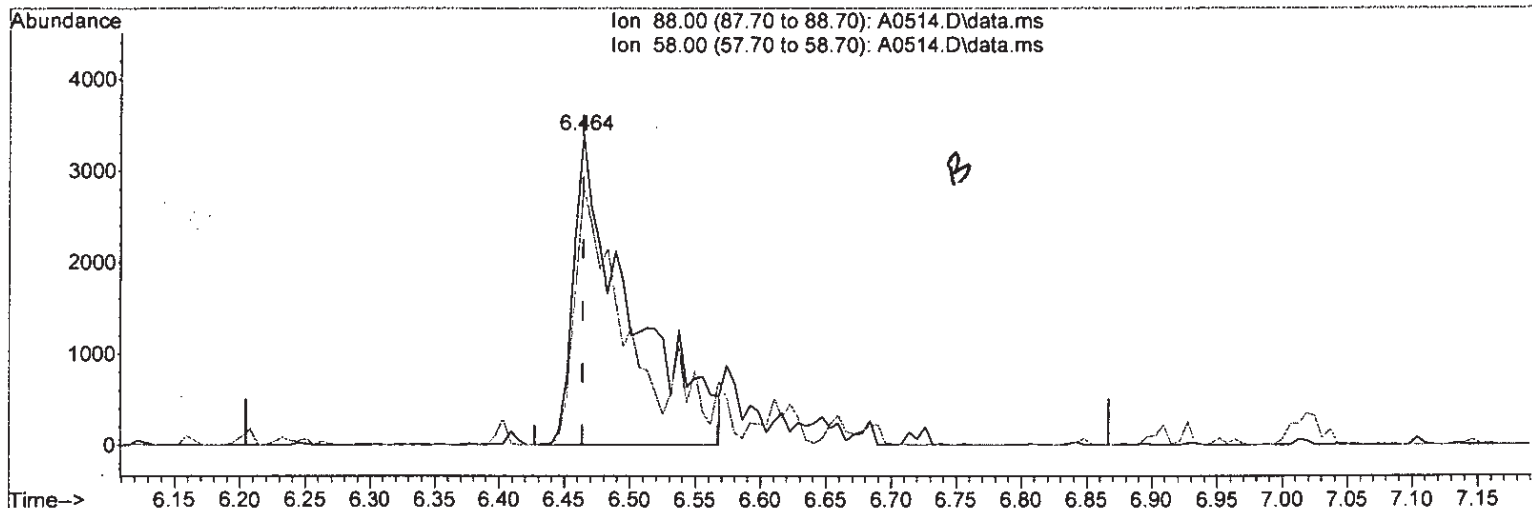
response 52550

Ion	Exp%	Act%
56.00	100	100
43.00	56.20	67.05
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 10 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0514.D Vial: 7
 Acq On : 21 Jul 2014 1:53 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 14:06:48 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0514.D\data.ms

(58) 1,4-Dioxane

6.464min (+0.000) 203.67 ug/L

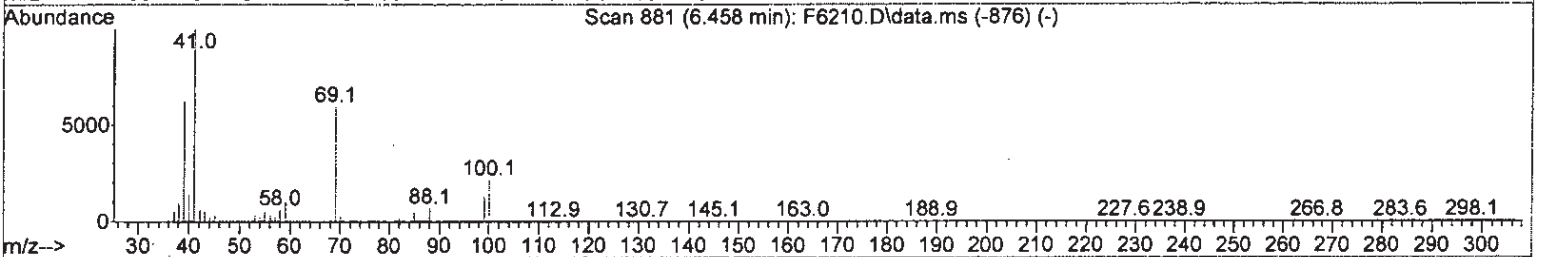
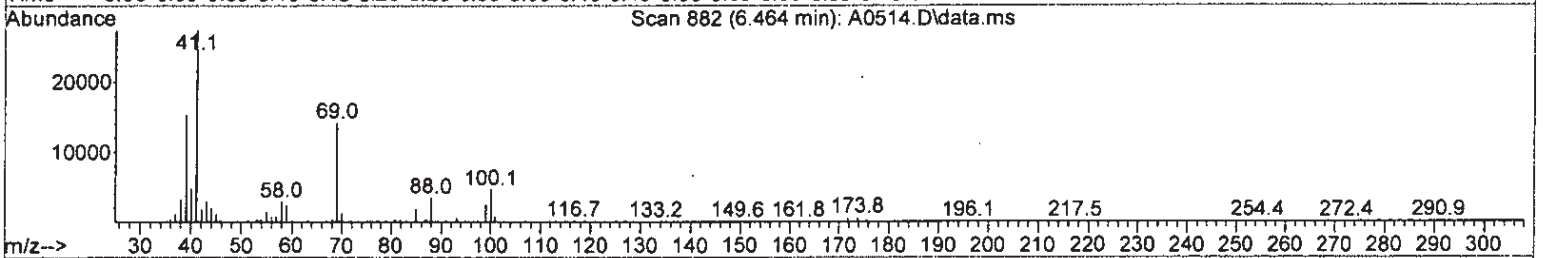
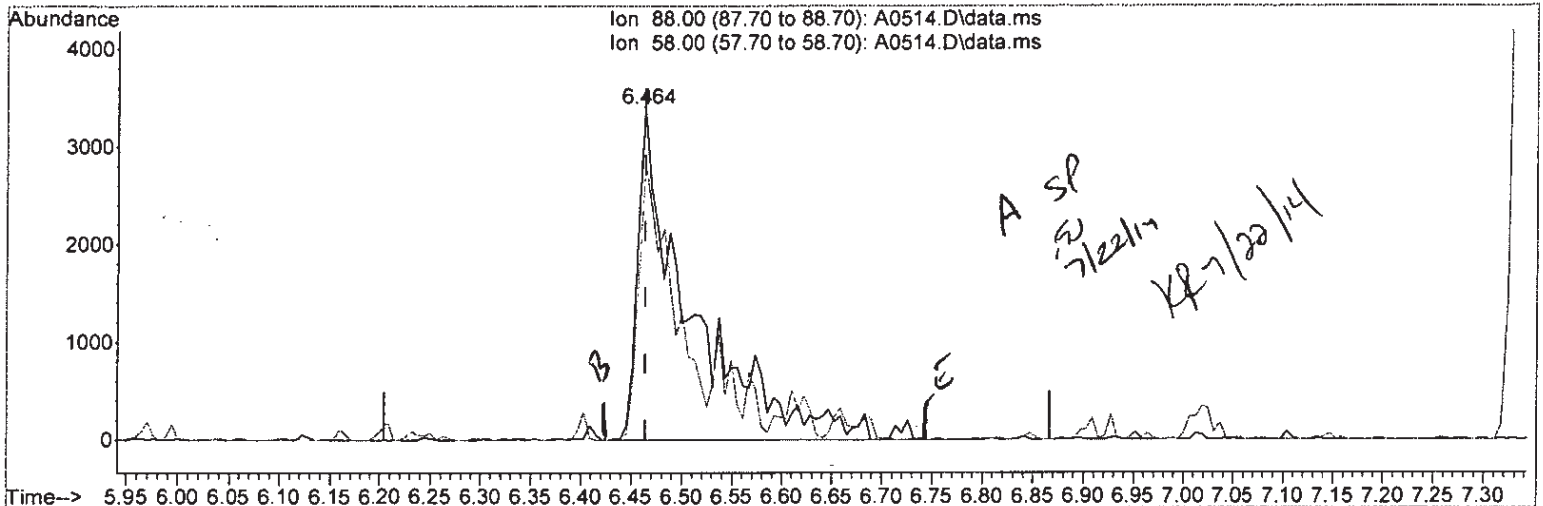
response 10234

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	83.66
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 10 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0514.D Vial: 7
 Acq On : 21 Jul 2014 1:53 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 14:06:48 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0514.D\data.ms

(58) 1,4-Dioxane

6.464min (+0.000) 246.46 ug/L m

response 12384

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	83.66
0.00	0.00	0.00
0.00	0.00	0.00

Misc ::

Response via : Initial Calibration



Page: 4

Sample : 50 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0515.D Vial: 8
 Acq On : 21 Jul 2014 2:23 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 15:37:10 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration

FW
7/22/14

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	949160	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1398556	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1270603	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	701453	50.00	ug/L	0.00

System Monitoring Compounds

45) surr4,Dibrflmethane	50.000	4.324	113	454971	54.58	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	109.16%	
48) surr1,1,2-dichloroetha...	50.000	4.854	65	477641	57.82	ug/L	0.00
Spiked Amount	50.000	Range	78 - 122	Recovery	=	115.64%	
65) SURR3,Toluene-d8	50.000	7.427	98	1621400	50.36	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	100.72%	
70) SURR2,BFB	50.000	9.878	95	630157	49.72	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	99.44%	

Target Compounds

							Qvalue
2) Dichlorodifluoromethane	1.190	85	545182	61.41	ug/L		97
3) Chloromethane	1.294	50	701881	63.81	ug/L		100
4) Vinyl Chloride	1.361	62	624729	54.13	ug/L		99
5) Bromomethane	1.556	94	193829	46.51	ug/L		98
6) Chloroethane	1.611	64	315747	50.30	ug/L		93
7) Freon 21	1.721	67	893319	53.43	ug/L		99
8) Trichlorofluoromethane	1.770	101	701988	56.65	ug/L		99
9) Diethyl Ether	1.934	59	356589	50.08	ug/L #		80
10) Freon 123a	1.928	67	579067	53.82	ug/L		91
11) Freon 123	1.965	83	591348	51.61	ug/L		98
12) Acrolein	2.026	56	287632	260.96	ug/L		100
13) 1,1-Dicethene	2.099	96	314561	49.73	ug/L #		77
14) Freon 113	2.093	101	401072	55.58	ug/L		99
15) Acetone	2.123	43	130151	60.81	ug/L		94
16) 2-Propanol	2.196	45	423594	1143.17	ug/L		98
17) Iodomethane	2.215	142	303620	45.84	ug/L		100
18) Carbon Disulfide	2.269	76	1385880	51.47	ug/L		98
19) Acetonitrile	2.318	40	75724	263.45	ug/L		94
20) Allyl Chloride	2.349	76	220579	48.20	ug/L #		27
21) Methyl Acetate	2.355	43	308066	67.13	ug/L		87
22) Methylene Chloride	2.440	84	412593	43.29	ug/L #		73
23) TBA	2.501	59	509556	872.76	ug/L		68
24) Acrylonitrile	2.629	53	672980	287.84	ug/L		100
25) Methyl-t-Butyl Ether	2.660	73	958922	47.78	ug/L		90
26) trans-1,2-Dichloroethene	2.666	96	419320m	52.16	ug/L		
28) 1,1-Dicethene	3.044	63	890219	53.87	ug/L		95
29) Vinyl Acetate	3.092	86	56045	47.88	ug/L #		1
30) DIPE	3.105	45	2169226	64.85	ug/L		92
31) 2-Chloro-1,3-Butadiene	3.141	53	920805	57.91	ug/L		81
32) ETBE	3.501	59	1410811	49.59	ug/L		92
33) 2,2-Dichloropropane	3.678	77	570611	47.14	ug/L		96
34) cis-1,2-Dichloroethene	3.678	96	462521	50.75	ug/L #		77
35) 2-Butanone	3.696	43	208936	71.60	ug/L		90
36) Propionitrile	3.769	54	231929	307.78	ug/L		95
37) Bromochloromethane	3.983	130	275977	51.62	ug/L #		78

Sample : 50 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0515.D Vial: 8
 Acq On : 21 Jul 2014 2:23 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 15:37:10 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Methacrylonitrile	3.970	67	112594	47.52	ug/L #	40
39) Tetrahydrofuran	4.056	42	108322	62.38	ug/L	72
40) Chloroform	4.092	83	746181	50.51	ug/L	92
41) 1,1,1-Trichloroethane	4.361	97	636305	49.06	ug/L	94
42) TAME	5.184	73	981058	45.85	ug/L	89
44) Cyclohexane	4.446	41	652292	62.68	ug/L	92
46) Carbontetrachloride	4.617	121	173149	46.04	ug/L	98
47) 1,1-Dichloropropene	4.617	75	533535	47.17	ug/L	99
49) Benzene	4.958	78	1706240	47.27	ug/L	90
50) 1,2-Dichloroethane	4.988	62	588037	49.65	ug/L	92
51) Iso-Butyl Alcohol	4.860	43	287576	980.36	ug/L	99
52) n-Heptane	5.458	43	675415	66.73	ug/L	82
53) 1-Butanol	5.946	56	308102	2243.80	ug/L	85
54) Trichloroethene	5.970	130	464772	47.94	ug/L	97
55) Methylcyclohexane	6.214	55	692960	54.44	ug/L #	77
56) 1,2-Dichloropropane	6.257	63	497491	48.16	ug/L	97
57) Dibromomethane	6.403	93	231776	49.04	ug/L	95
58) 1,4-Dioxane	6.458	88	55119m	1086.93	ug/L	
59) Methyl Methacrylate	6.464	69	187676	44.94	ug/L #	49
60) Bromodichloromethane	6.616	83	542774	47.83	ug/L	97
61) 2-Nitropropane	6.897	41	129763	80.33	ug/L	92
62) 2-Chloroethylvinyl Ether	7.006	63	232844	48.91	ug/L	92
63) cis-1,3-Dichloropropene	7.147	75	615269	44.94	ug/L	99
64) 4-Methyl-2-pentanone	7.336	43	393405	57.07	ug/L	91
66) Toluene	7.500	91	1776654	45.79	ug/L	99
67) trans-1,3-Dichloropropene	7.750	75	487933	43.54	ug/L	95
68) Ethyl Methacrylate	7.872	69	388954	44.64	ug/L #	64
69) 1,1,2-Trichloroethane	7.927	97	311576	46.30	ug/L	97
72) Tetrachloroethene	8.055	164	362185	45.91	ug/L	93
73) 2-Hexanone	8.195	43	289001	58.15	ug/L	85
74) 1,3-Dichloropropene	8.085	76	543624m	46.30	ug/L	
75) Dibromochloromethane	8.299	129	404866	48.21	ug/L	98
76) N-Butyl Acetate	8.335	43	671394	51.37	ug/L	91
77) 1,2-Dibromoethane	8.396	107	318006	46.65	ug/L	97
78) 3-Chlorobenzotrifluoride	8.878	180	707477	48.41	ug/L	97
79) Chlorobenzene	8.866	112	1203777	45.69	ug/L	96
80) 4-Chlorobenzotrifluoride	8.927	180	646387	47.78	ug/L	96
81) 1,1,1,2-Tetrachloroethane	8.945	131	438317	45.71	ug/L	97
82) Ethylbenzene	8.976	106	616548	45.32	ug/L	96
83) (m+p)Xylene	9.085	106	1536086	92.21	ug/L	99
84) o-Xylene	9.433	106	768843	45.71	ug/L	94
85) Styrene	9.445	104	1299709	45.75	ug/L	97
86) Bromoform	9.597	173	227367	45.21	ug/L	99
87) 2-Chlorobenzotrifluoride	9.670	180	695435	48.07	ug/L	95
88) Isopropylbenzene	9.756	105	1923423	46.72	ug/L	99
89) Cyclohexanone	9.823	55	1284304	1293.43	ug/L	94
90) trans-1,4-Dichloro-2-B...	10.061	53	103183	47.20	ug/L	84
92) 1,1,2,2-Tetrachloroethane	10.012	83	372312	44.14	ug/L	96
93) Bromobenzene	10.000	156	515276	46.02	ug/L	96
94) 1,2,3-Trichloropropane	10.042	110	99478	46.36	ug/L	98
95) n-Propylbenzene	10.103	91	2298713	48.30	ug/L	99
96) 2-Chlorotoluene	10.170	91	1355725	46.38	ug/L	94

Sample : 50 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0515.D Vial: 8
 Acq On : 21 Jul 2014 2:23 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 15:37:10 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration

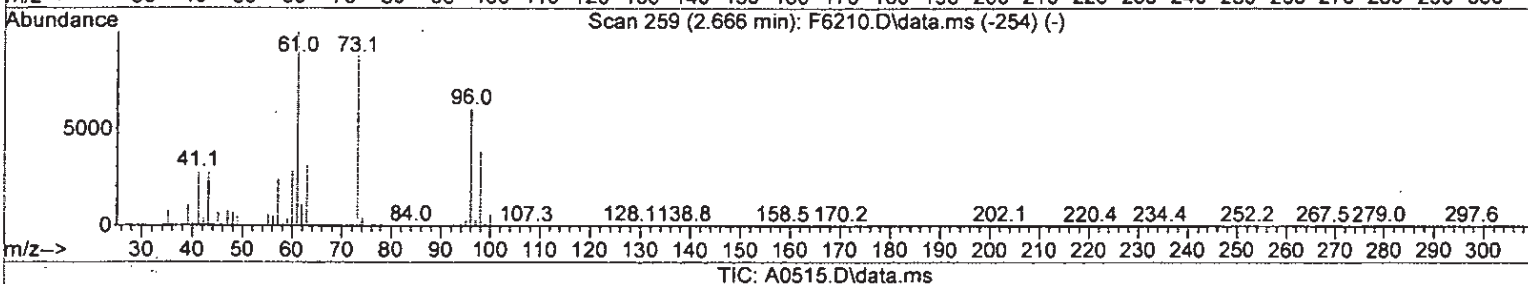
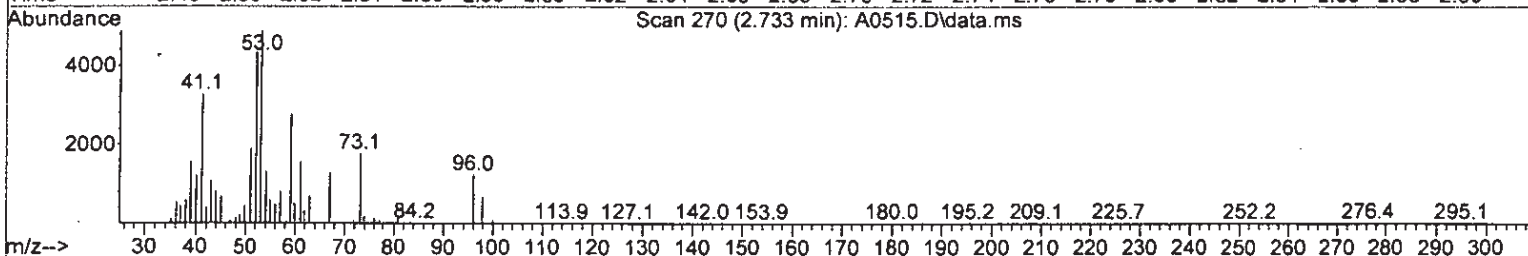
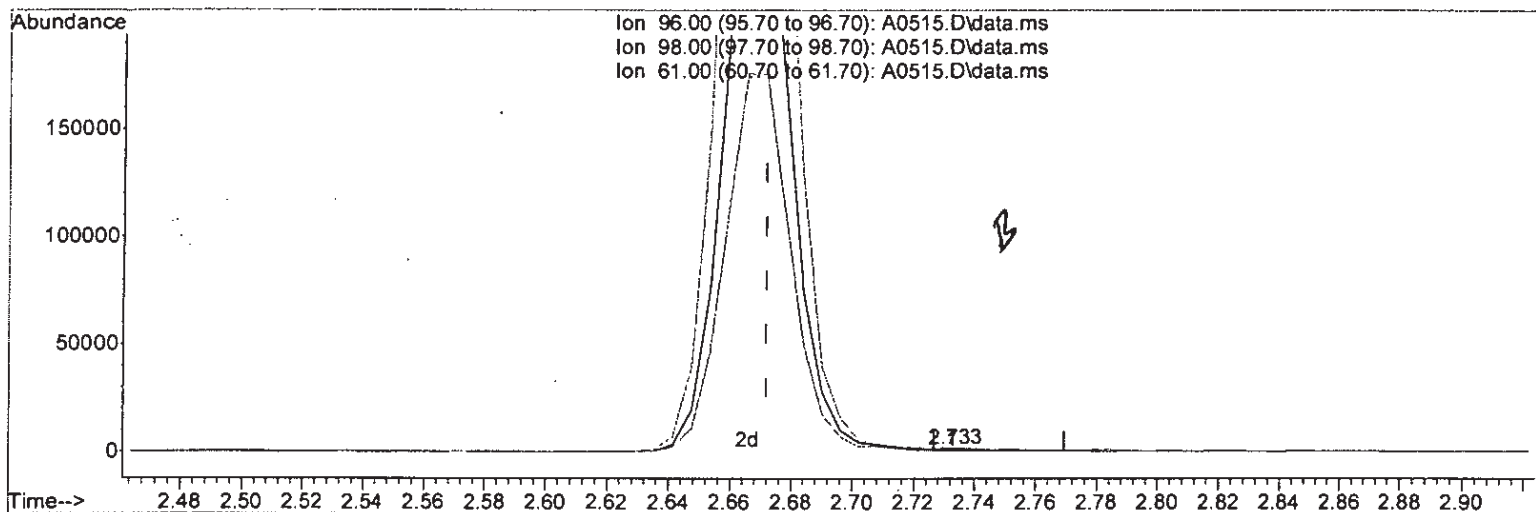
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97) 3-Chlorotoluene	10.219	91	1476462	49.85	ug/L	96
98) 4-Chlorotoluene	10.262	91	1595818	45.07	ug/L	91
99) 1,3,5-Trimethylbenzene	10.250	105	1631363	46.68	ug/L	97
100) tert-Butylbenzene	10.518	119	1373703	47.32	ug/L	100
101) 1,2,4-Trimethylbenzene	10.561	105	1666349	47.16	ug/L	96
102) 3,4-Dichlorobenzotrifl...	10.615	214	492586	47.03	ug/L	96
103) sec-Butylbenzene	10.701	105	1959431	48.97	ug/L	98
104) p-Isopropyltoluene	10.817	119	1715812	49.03	ug/L	97
105) 1,3-Dclbenz	10.780	146	1017540	47.00	ug/L	98
106) 1,4-Dclbenz	10.853	146	1037790	47.32	ug/L	98
107) 2,4-Dichlorobenzotrifl...	10.902	214	450439	47.96	ug/L	98
108) 2,5-Dichlorobenzotrifl...	10.945	214	510594	47.29	ug/L	98
109) n-Butylbenzene	11.140	91	1484071	49.07	ug/L	99
110) 1,2-Dclbenz	11.152	146	944412	47.73	ug/L	98
111) 1,2-Dibromo-3-chloropr...	11.707	157	63391	51.08	ug/L	95
112) Trielution Dichlorotol...	11.798	125	2617606	163.65	ug/L	90
113) 1,3,5-Trichlorobenzene	11.847	180	704265	52.35	ug/L	94
114) Coelution Dichlorotoluene	12.066	125	1819179	111.99	ug/L	96
115) 1,2,4-Tcbenzene	12.231	180	551250	50.24	ug/L	93
116) Hexachlorobt	12.329	225	223256	42.47	ug/L	99
117) Naphthalen	12.377	128	1016613	60.48	ug/L	99
118) 1,2,3-Tclbenzene	12.517	180	420593	56.38	ug/L	99
119) 2,4,5-Trichlorotoluene	12.944	159	276281	67.45	ug/L	96
120) 2,3,6-Trichlorotoluene	13.005	159	259500	63.93	ug/L	99

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

Quantitation Report (Qedit)

Sample : 50 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0515.D Vial: 8
 Acq On : 21 Jul 2014 2:23 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 14:37:05 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(26) trans-1,2-Dichloroethene (P)

2.733min (+0.061) 0.15 ug/L

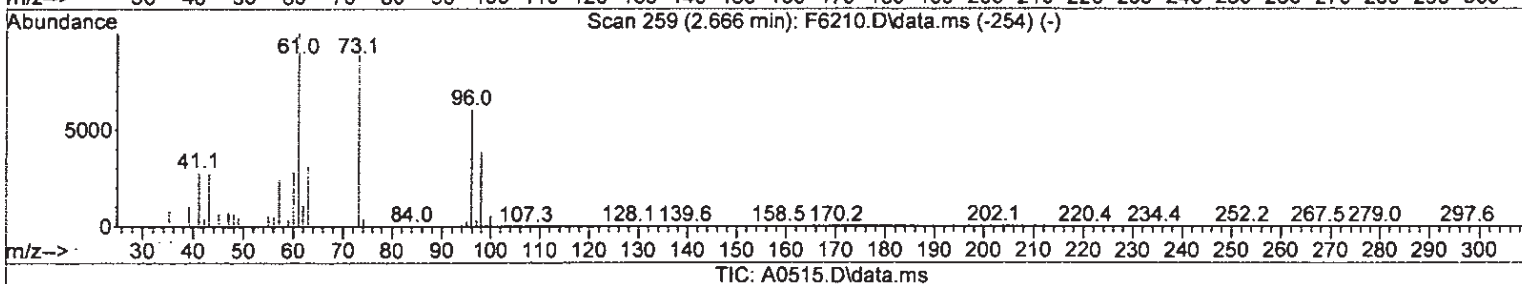
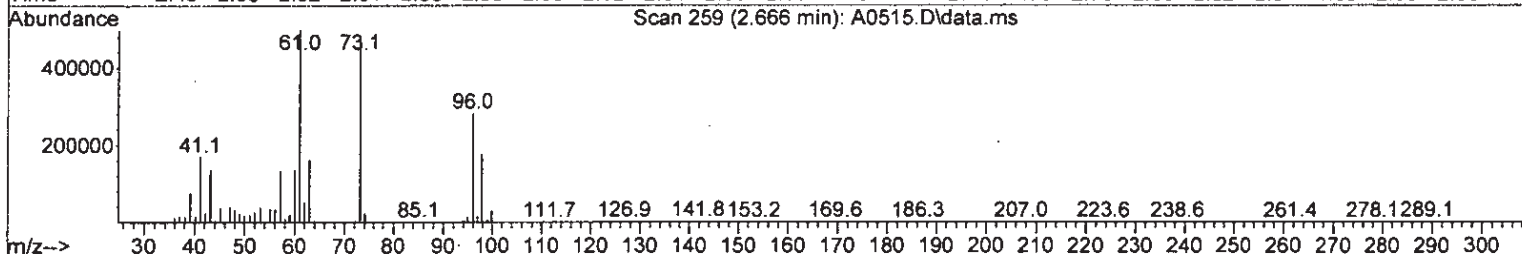
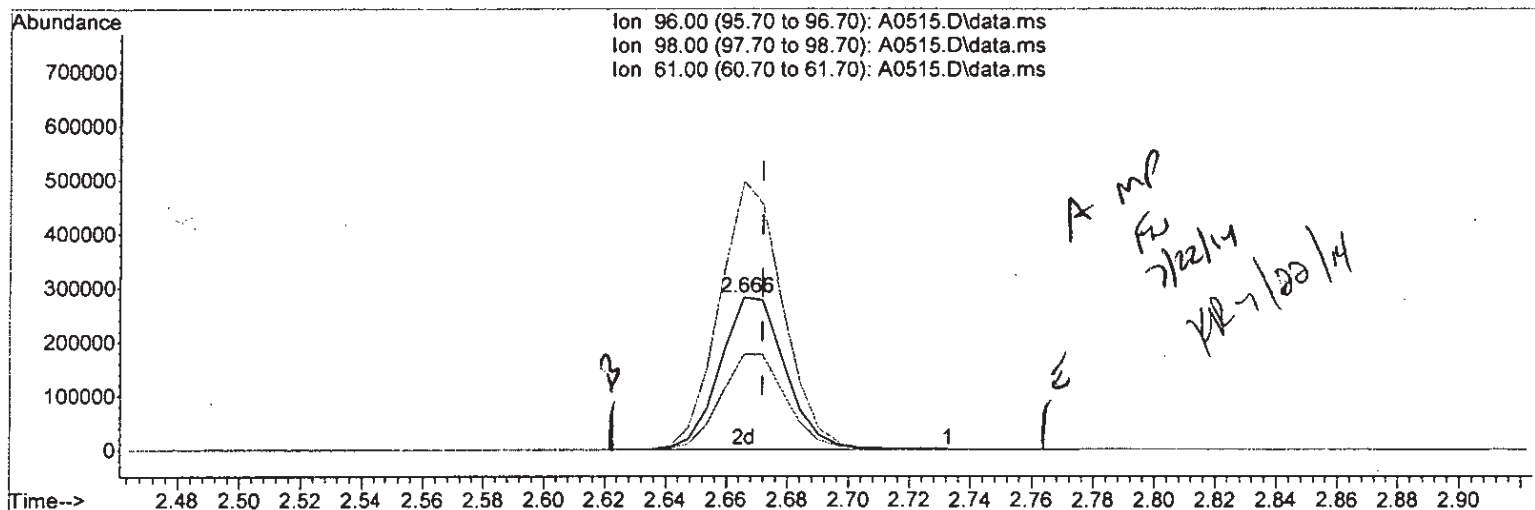
response 1179

Ion	Exp%	Act%
96.00	100	100
98.00	64.00	54.69
61.00	144.30	126.13
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 50 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0515.D Vial: 8
 Acq On : 21 Jul 2014 2:23 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 14:37:05 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



(26) trans-1,2-Dichloroethene (P)

2.666min (-0.006) 52.16 ug/L m

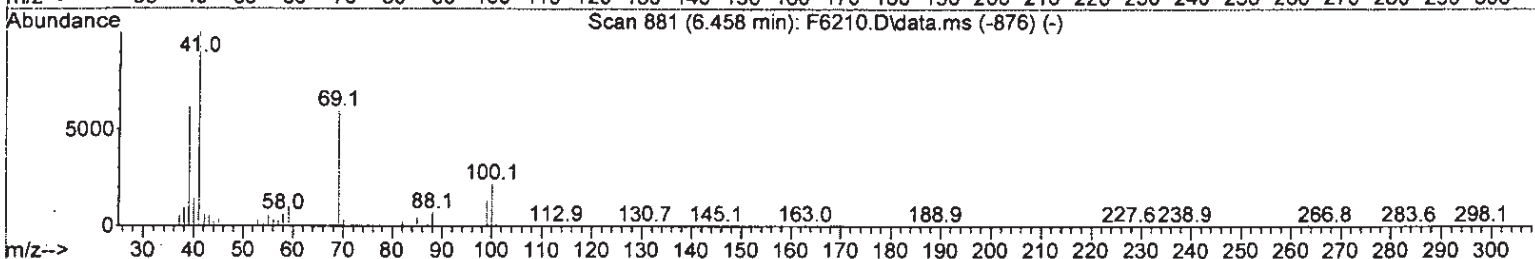
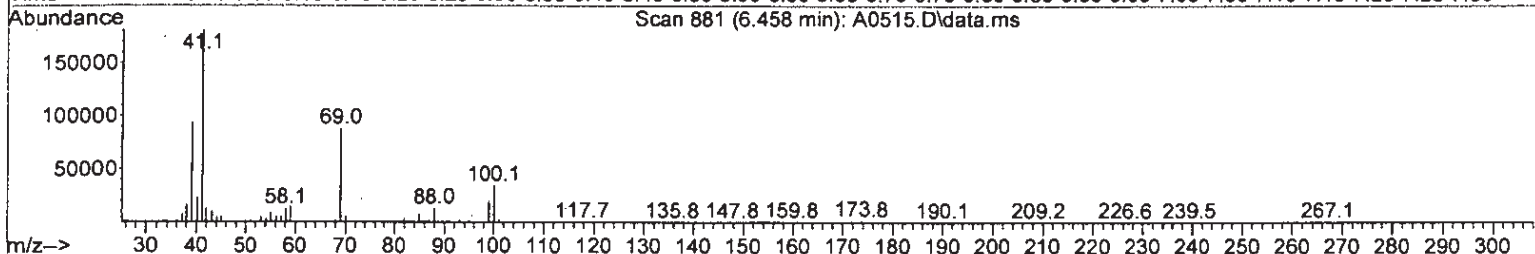
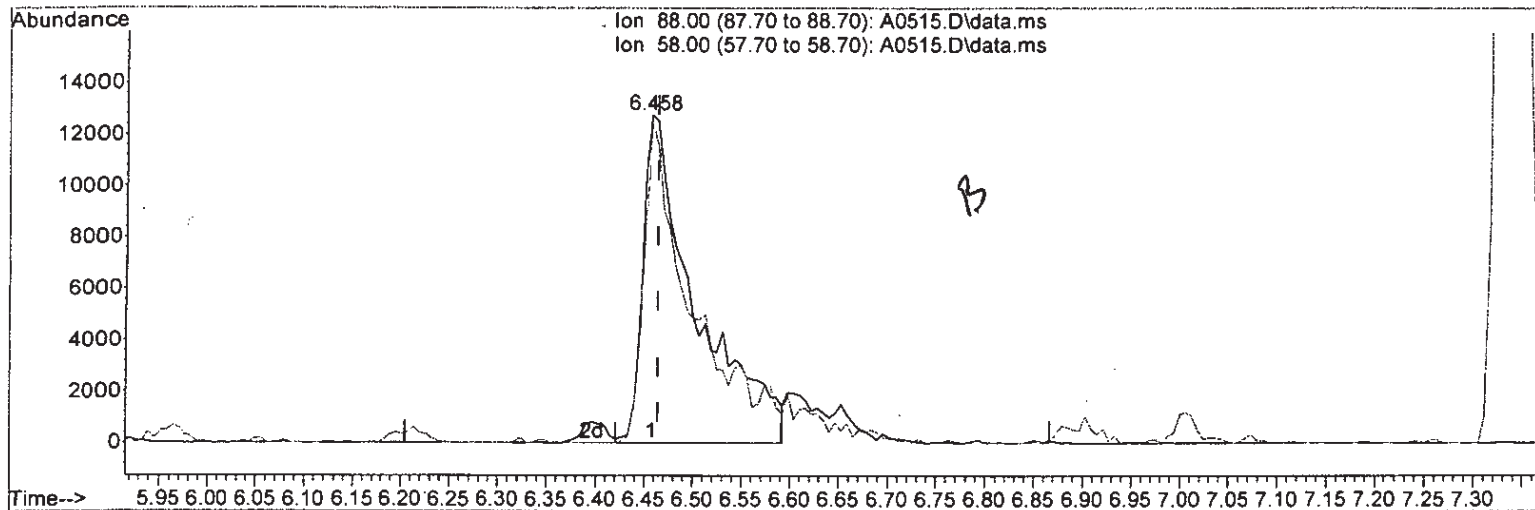
response 419320

Ion	Exp%	Act%
96.00	100	100
98.00	64.00	62.55
61.00	144.30	176.87#
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 50 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0515.D Vial: 8
 Acq On : 21 Jul 2014 2:23 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 14:37:05 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0515.D\data.ms

(58) 1,4-Dioxane

6.458min (-0.006) 949.18 ug/L

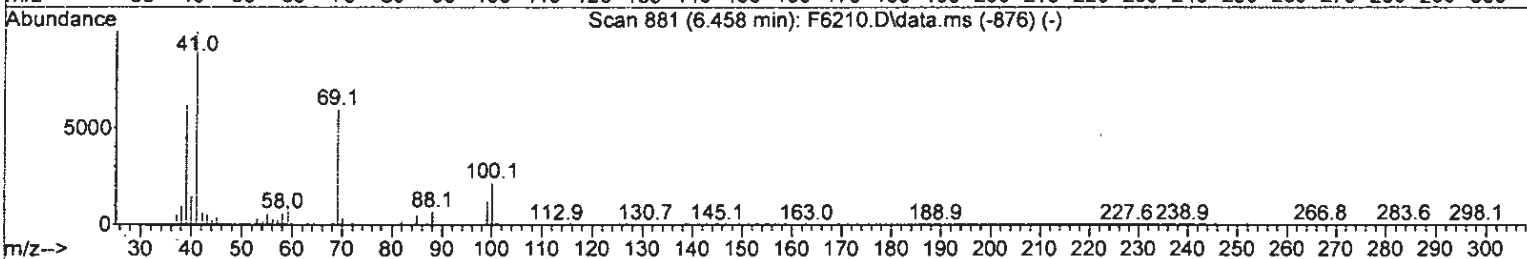
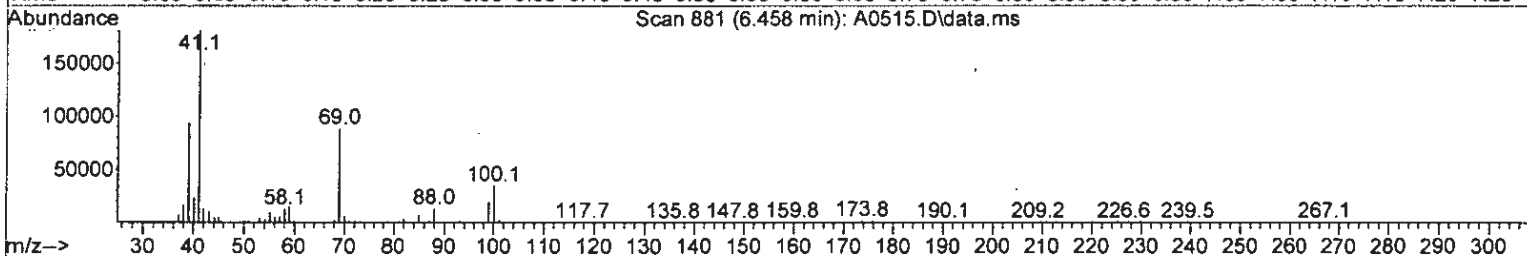
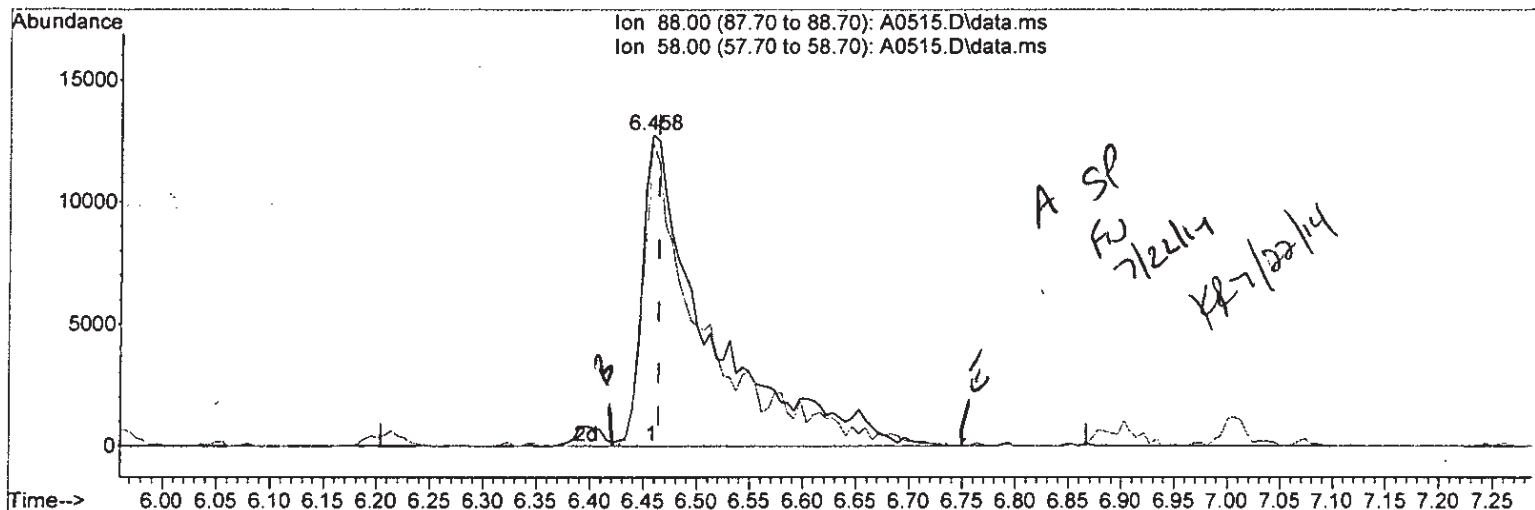
response 48134

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	97.42#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 50 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0515.D Vial: 8
 Acq On : 21 Jul 2014 2:23 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 14:37:05 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0515.D\data.ms

(58) 1,4-Dioxane

6.458min (-0.006) 1086.93 ug/L m

response 55119

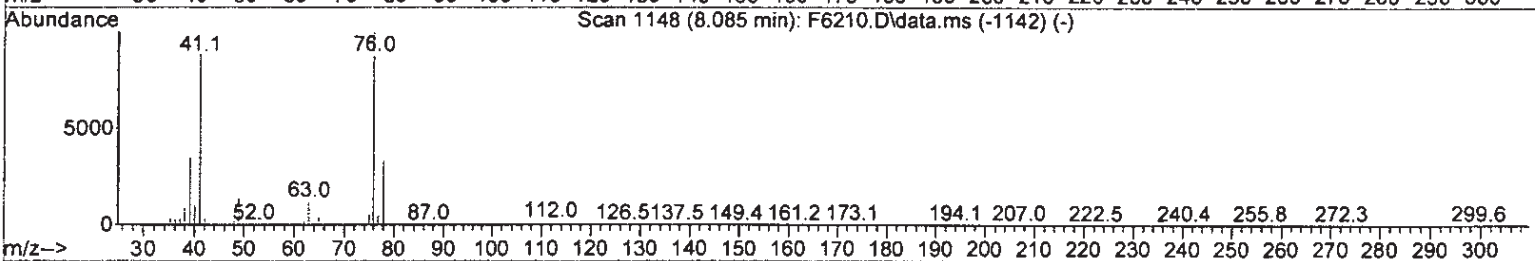
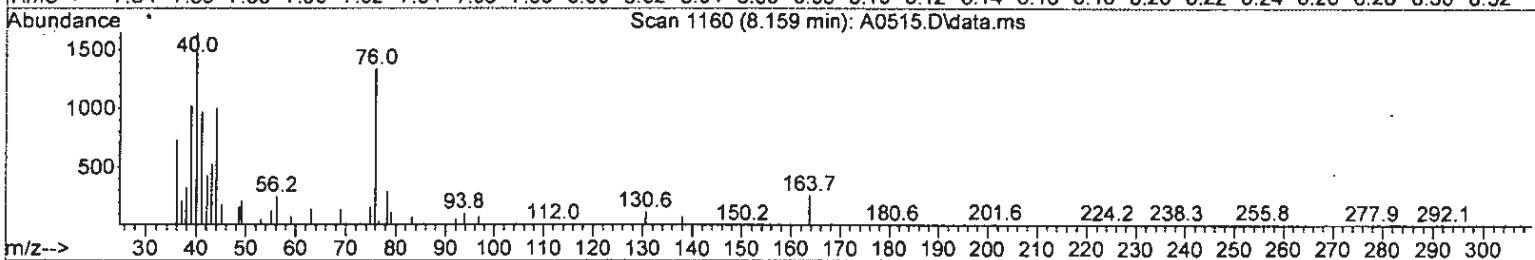
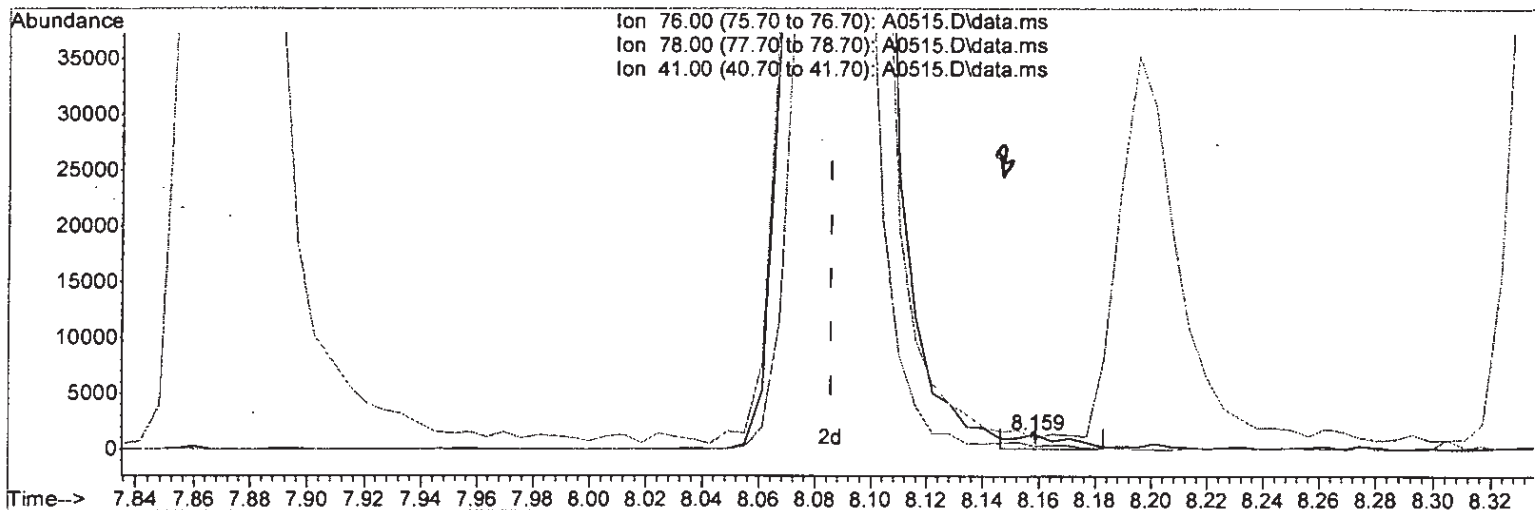
Ion	Exp%	Act%
88.00	100	100
58.00	73.00	97.42#
0.00	0.00	0.00
0.00	0.00	0.00

00300

Quantitation Report (Qedit)

Sample : 50 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0515.D Vial: 8
Acq On : 21 Jul 2014 2:23 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 14:37:05 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



TIC: A0515.D\data.ms

(74) 1,3-Dichloropropane

8.159min (+0.073) 0.14 ug/L

response 1656

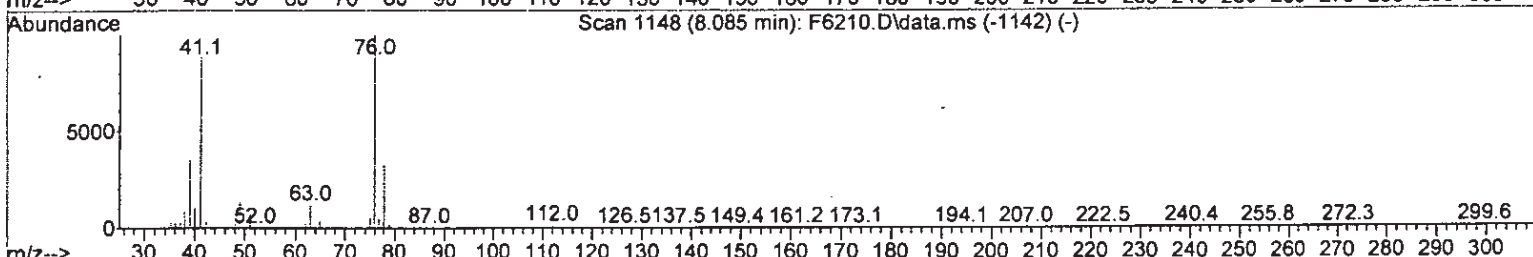
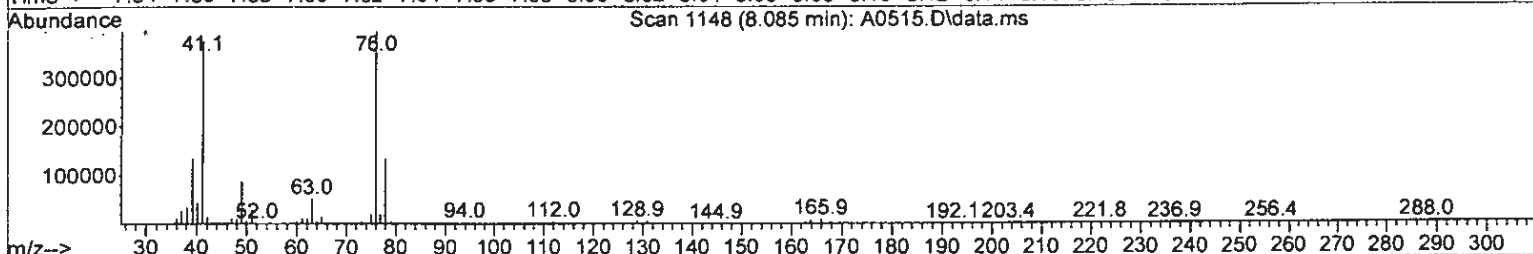
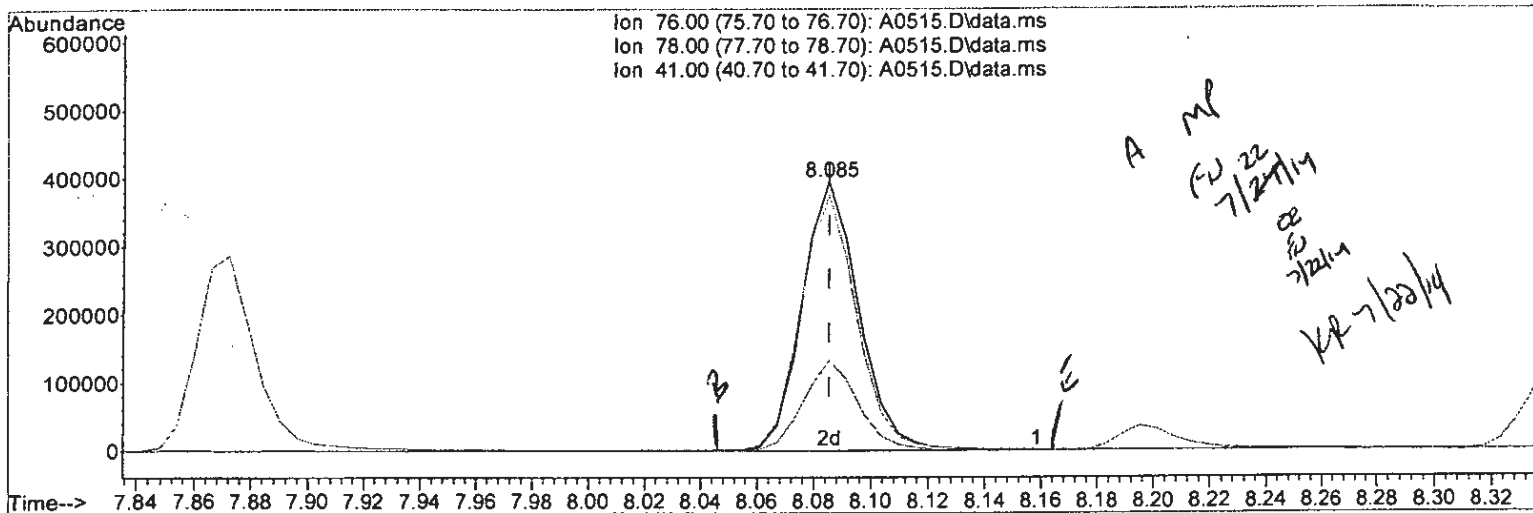
Ion	Exp%	Act%
76.00	100	100
78.00	31.70	21.85
41.00	66.30	72.45
0.00	0.00	0.00

00301

Quantitation Report (Qedit)

Sample : 50 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0515.D Vial: 8
 Acq On : 21 Jul 2014 2:23 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 14:37:05 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 10:57:04 2014
 Response via : Initial Calibration



TIC: A0515.D\data.ms

(74) 1,3-Dichloropropane

8.085min (-0.000) 46.30 ug/L m

response 543624

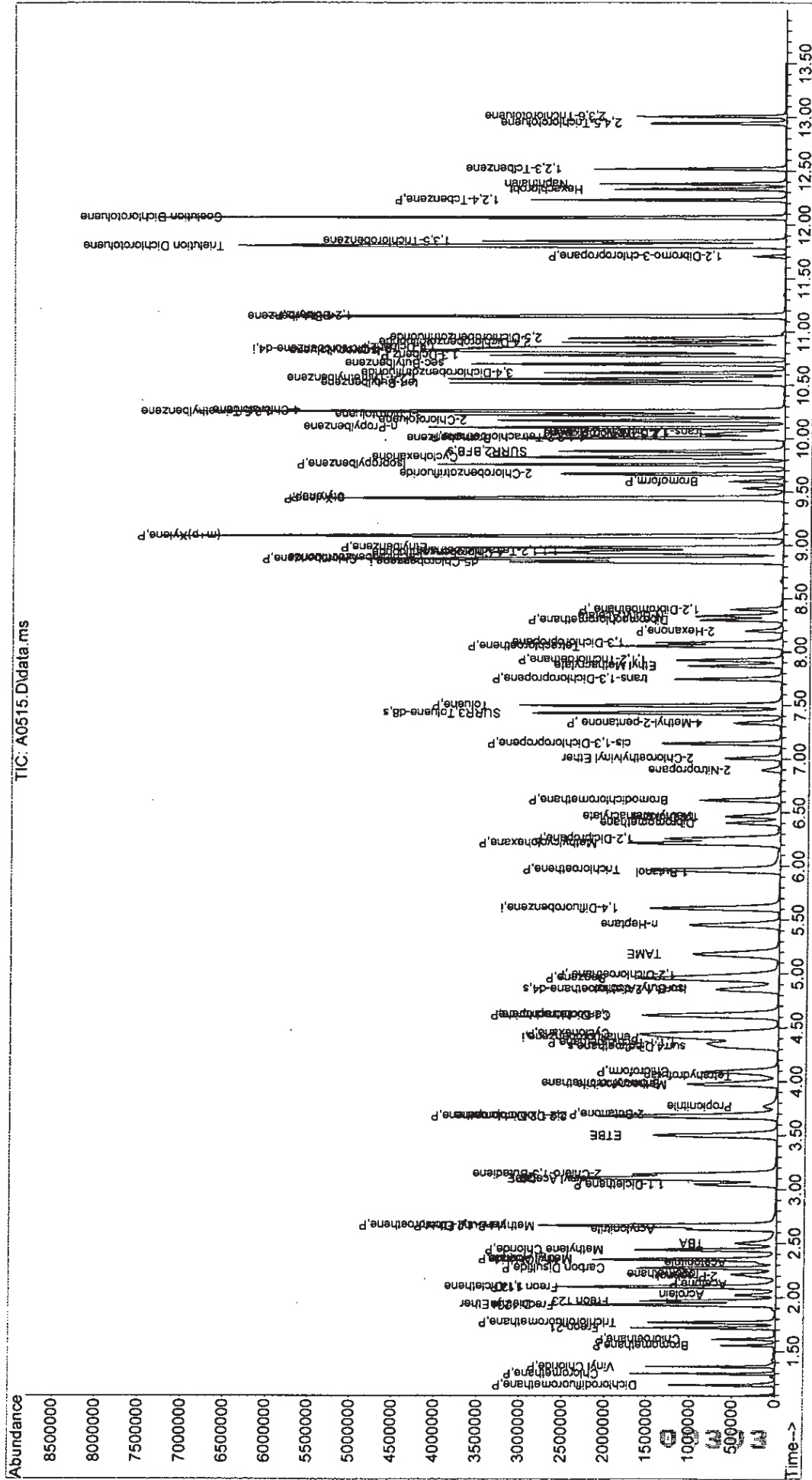
Ion	Exp%	Act%
76.00	100	100
78.00	31.70	33.49
41.00	66.30	95.00#
0.00	0.00	0.00

```

Sample      : 50 PPB STD
Data File   : I:\ACQUADATA\msvoa10\data\072114\A0515.D
Acq On      : 21 Jul 2014   2:23 pm
Operator     : F.NAEGLER
InstName    : MSVOA10
Misc        :

Quant Time: Jul 21 15:37:10 2014
Quant Method : I:\ACQUADATA\MSVOA10\METHODS\W072114.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration

```



Sample : 100 PPB STD.
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0516.D Vial: 9
 Acq On : 21 Jul 2014 2:54 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 15:07:22 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 15:07:03 2014
 Response via : Initial Calibration

FJ
7/22/14

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	1003324	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1461897	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1326464	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	731081	50.00	ug/L	0.00

System Monitoring Compounds						
45) surr4,Dibrfilmethane	4.318	113	950301	173.58	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	347.16%#
48) surr1,1,2-dichloroetha...	4.854	65	989224	114.56	ug/L	0.00
Spiked Amount	50.000	Range	78 - 122	Recovery	=	229.12%#
65) SURR3,Toluene-d8	7.427	98	3311847	98.42	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	196.84%#
70) SURR2,BFB	9.878	95	1322803	99.84	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	199.68%#

Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.190	85	1181955	125.95 ug/L	96
3) Chloromethane	1.294	50	1483867	127.62 ug/L	98
4) Vinyl Chloride	1.361	62	1357590	111.28 ug/L	97
5) Bromomethane	1.556	94	480548	109.09 ug/L	99
6) Chloroethane	1.611	64	666054	100.38 ug/L	94
7) Freon 21	1.721	67	1767840	100.04 ug/L	97
8) Trichlorofluoromethane	1.770	101	1524824	116.40 ug/L	99
9) Diethyl Ether	1.934	59	748105	99.40 ug/L	81
10) Freon 123a	1.928	67	1138311	100.09 ug/L	94
11) Freon 123	1.965	83	1178826	97.33 ug/L	98
12) Acrolein	2.019	56	590183	506.54 ug/L	95
13) 1,1-Dicethene	2.099	96	700982	104.85 ug/L #	82
14) Freon 113	2.093	101	889388	116.60 ug/L	99
15) Acetone	2.117	43	254735	112.59 ug/L	96
16) 2-Propanol	2.196	45	875214	2234.47 ug/L	96
17) Iodomethane	2.215	142	992094	141.69 ug/L	100
18) Carbon Disulfide	2.269	76	2947100	103.54 ug/L	100
19) Acetonitrile	2.318	40	168928	555.98 ug/L	99
20) Allyl Chloride	2.349	76	484787	100.21 ug/L #	36
21) Methyl Acetate	2.355	43	604659	124.64 ug/L	89
22) Methylene Chloride	2.440	84	884487	87.79 ug/L #	78
23) TBA	2.501	59	1092571	1770.31 ug/L	80
24) Acrylonitrile	2.629	53	1419211	574.25 ug/L	96
25) Methyl-t-Butyl Ether	2.660	73	2073959	97.76 ug/L	90
26) trans-1,2-Dichloroethene	2.666	96	905498	106.56 ug/L #	83
28) 1,1-Dicethane	3.044	63	1903812	108.99 ug/L	98
29) Vinyl Acetate	3.086	86	131689	106.43 ug/L #	45
30) DIPE	3.105	45	4429902	125.28 ug/L	94
31) 2-Chloro-1,3-Butadiene	3.141	53	1969989	117.21 ug/L	83
32) ETBE	3.501	59	2976321	98.96 ug/L	91
33) 2,2-Dichloropropane	3.684	77	1288819	100.72 ug/L	98
34) cis-1,2-Dichloroethene	3.678	96	991164	102.89 ug/L #	75
35) 2-Butanone	3.696	43	410469	133.07 ug/L	89
36) Propionitrile	3.763	54	469239	589.08 ug/L	89
37) Bromochloromethane	3.983	130	580032	102.63 ug/L #	80

Sample : 100 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0516.D Vial: 9
 Acq On : 21 Jul 2014 2:54 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 15:07:22 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 15:07:03 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Methacrylonitrile	3.964	67	243819	97.35	ug/L #	44
39) Tetrahydrofuran	4.056	42	225768	122.99	ug/L	74
40) Chloroform	4.092	83	1607663	102.95	ug/L	93
41) 1,1,1-Trichloroethane	4.360	97	1412570	103.03	ug/L	94
42) TAME	5.184	73	2074906	91.74	ug/L	90
44) Cyclohexane	4.446	41	1281670	117.82	ug/L	90
46) Carbontetrachloride	4.617	121	402990	102.51	ug/L	91
47) 1,1-Dichloropropene	4.617	75	1190936	100.74	ug/L	99
49) Benzene	4.952	78	3701767	98.11	ug/L	91
50) 1,2-Dichloroethane	4.988	62	1248188	100.81	ug/L	94
51) Iso-Butyl Alcohol	4.848	43	635882	2073.84	ug/L	97
52) n-Heptane	5.452	43	1449514	137.01	ug/L	82
53) 1-Butanol	5.946	56	698177	4864.28	ug/L	86
54) Trichloroethene	5.964	130	1027820	101.42	ug/L	96
55) Methylcyclohexane	6.214	55	1395178	104.86	ug/L #	80
56) 1,2-Dicloropropane	6.256	63	1074490	99.52	ug/L	100
57) Dibromomethane	6.403	93	497593	100.72	ug/L	98
58) 1,4-Dioxane	6.458	88	112988	2131.54	ug/L	77
59) Methyl Methacrylate	6.464	69	413172	94.65	ug/L #	61
60) Bromodichloromethane	6.616	83	1186157	100.00	ug/L	98
61) 2-Nitropropane	6.890	41	293666	173.91	ug/L	94
62) 2-Chloroethylvinyl Ether	7.006	63	512039	102.89	ug/L	92
63) cis-1,3-Dichloropropene	7.140	75	1369756	95.71	ug/L	99
64) 4-Methyl-2-pentanone	7.336	43	831641	115.41	ug/L	93
66) Toluene	7.500	91	3866771	95.34	ug/L	99
67) trans-1,3-Dichloropropene	7.744	75	1120753	95.68	ug/L	97
68) Ethyl Methacrylate	7.872	69	868062	95.31	ug/L #	62
69) 1,1,2-Trichloroethane	7.921	97	675419	96.02	ug/L	99
72) Tetrachloroethene	8.055	164	804106	97.64	ug/L	96
73) 2-Hexanone	8.195	43	593948	114.48	ug/L	94
74) 1,3-Dichloropropane	8.085	76	1151644	93.95	ug/L #	77
75) Dibromochloromethane	8.299	129	898909	102.54	ug/L	98
76) N-Butyl Acetate	8.335	43	1386271	101.60	ug/L	92
77) 1,2-Dibromoethane	8.396	107	683507	96.05	ug/L	95
78) 3-Chlorobenzotrifluoride	8.878	180	1506496	98.75	ug/L	96
79) Chlorobenzene	8.866	112	2644424	96.14	ug/L	98
80) 4-Chlorobenzotrifluoride	8.927	180	1378153	97.59	ug/L	95
81) 1,1,1,2-Tetrachloroethane	8.945	131	987238	98.61	ug/L	98
82) Ethylbenzene	8.982	106	1381893	97.29	ug/L #	90
83) (m+p)Xylene	9.085	106	3447083	198.21	ug/L	91
84) o-Xylene	9.433	106	1676553	95.47	ug/L	92
85) Styrene	9.445	104	2905894	97.97	ug/L	99
86) Bromoform	9.597	173	517868	98.65	ug/L	99
87) 2-Chlorobenzotrifluoride	9.670	180	1475162	97.67	ug/L	95
88) Isopropylbenzene	9.756	105	4316620	100.43	ug/L	100
89) Cyclohexanone	9.823	55	2599915	2508.12	ug/L	94
90) trans-1,4-Dichloro-2-B...	10.061	53	230169	100.85	ug/L	95
92) 1,1,2,2-Tetrachloroethane	10.012	83	807754	96.05	ug/L	97
93) Bromobenzene	10.000	156	1135765	93.09	ug/L	99
94) 1,2,3-Trichloropropane	10.042	110	215252	96.25	ug/L	94
95) n-Propylbenzene	10.103	91	5016897	101.15	ug/L	99
96) 2-Chlorotoluene	10.170	91	3006883	98.69	ug/L	93

Sample : 100 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0516.D Vial: 9
 Acq On : 21 Jul 2014 2:54 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 15:07:22 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 15:07:03 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97) 3-Chlorotoluene	10.219	91	3120274	101.07	ug/L	96
98) 4-Chlorotoluene	10.262	91	3557954	96.42	ug/L	91
99) 1,3,5-Trimethylbenzene	10.250	105	3627138	99.59	ug/L	97
100) tert-Butylbenzene	10.518	119	3037197	100.39	ug/L	100
101) 1,2,4-Trimethylbenzene	10.560	105	3663264	99.48	ug/L	95
102) 3,4-Dichlorobenzotrifl...	10.615	214	1054354	96.58	ug/L	97
103) sec-Butylbenzene	10.701	105	4281932	102.67	ug/L	97
104) p-Isopropyltoluene	10.817	119	3789549	103.89	ug/L	97
105) 1,3-Dclbenz	10.780	146	2233047	98.97	ug/L	99
106) 1,4-Dclbenz	10.853	146	2236383	97.85	ug/L	98
107) 2,4-Dichlorobenzotrifl...	10.902	214	936160	95.64	ug/L	99
108) 2,5-Dichlorobenzotrifl...	10.945	214	1076850	95.69	ug/L	98
109) n-Butylbenzene	11.140	91	3233837	102.59	ug/L	99
110) 1,2-Dclbenz	11.152	146	2040191	98.93	ug/L	99
111) 1,2-Dibromo-3-chloropr...	11.707	157	142822	110.42	ug/L	94
112) Trielution Dichlorotol...	11.804	125	5413820	324.75	ug/L	95
113) 1,3,5-Trichlorobenzene	11.847	180	1443714	102.97	ug/L	97
114) Coelution Dichlorotoluene	12.066	125	3746451	221.29	ug/L	96
115) 1,2,4-Tcbenzene	12.231	180	1180455	103.23	ug/L	97
116) Hexachlorobt	12.335	225	467533	85.34	ug/L	98
117) Naphthalen	12.377	128	2179772	124.42	ug/L	98
118) 1,2,3-Tclbenzene	12.517	180	888845	114.32	ug/L	98
119) 2,4,5-Trichlorotoluene	12.944	159	577481	135.28	ug/L	98
120) 2,3,6-Trichlorotoluene	13.005	159	543206	128.41	ug/L	96

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

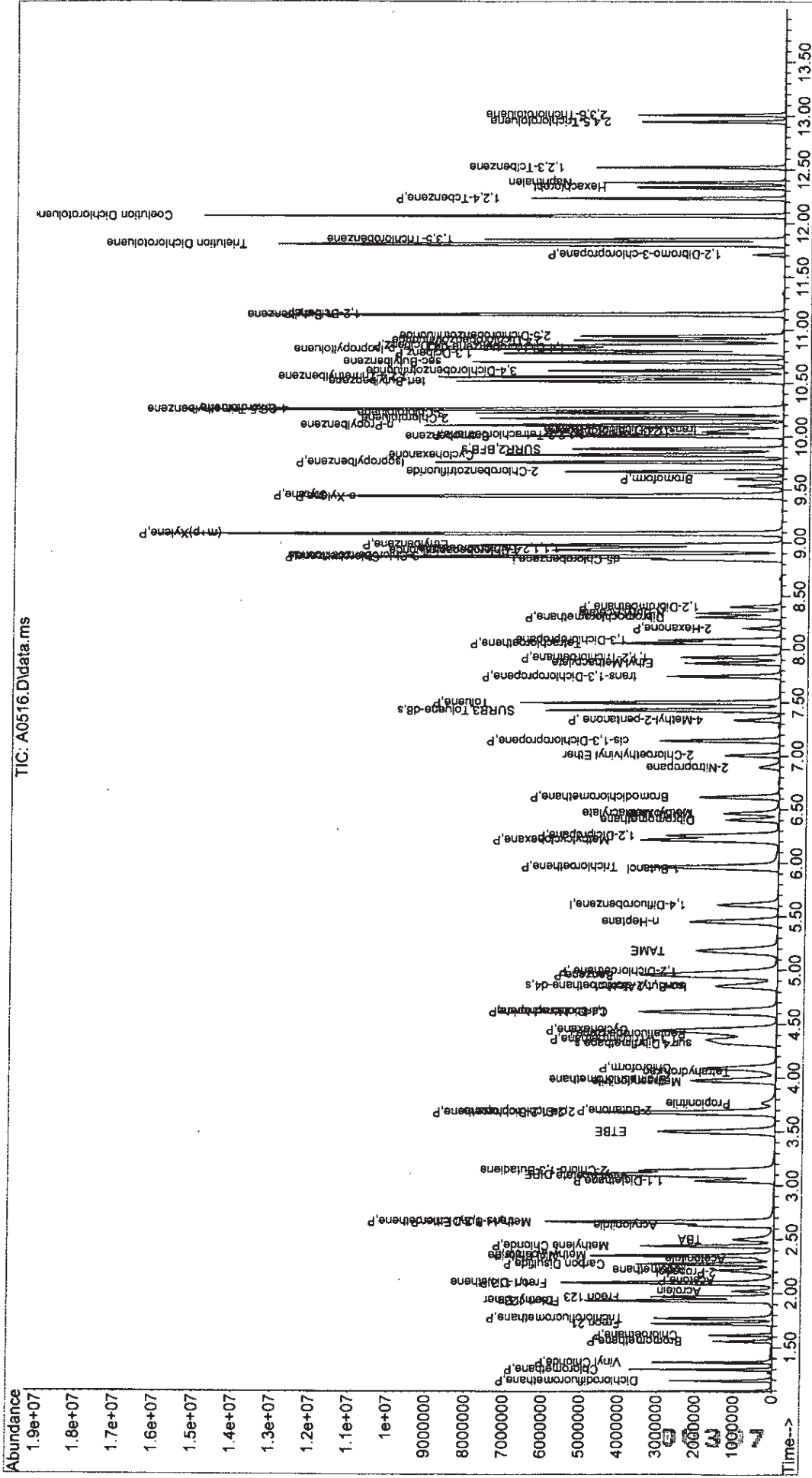
(QT Reviewed)

```

Sample      : 100 PPB STD
Data File   : I:\ACQUDATA\msvoa10\data\072114\A0516.D
Acq On      : 21 Jul 2014 2:54 pm
Operator     : F.NAEGLER
InstName    : MSVOA10
Misc        :

```

Quant Time: Jul 21 15:07:22 2014
Quant Method : I:\ACQDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
Quant Update : Mon Jul 21 15:07:03 2014
Response via : Initial Calibration



Sample : 150 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0517.D Vial: 10
 Acq On : 21 Jul 2014 3:24 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 15:37:52 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 15:12:44 2014
 Response via : Initial Calibration

fu
7/22/14

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	1000347	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1449804	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1355583	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	763740	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4, Dibrflmethane	4.318	113	1127768	207.72	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery =	415.44%	#	
48) surr1, 1,2-dichloroetha...	4.854	65	1182408	218.47	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery =	436.94%	#	
65) SURR3, Toluene-d8	7.427	98	4010198	190.82	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery =	381.64%	#	
70) SURR2, BFB	9.878	95	1617321	195.46	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery =	390.92%	#	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.190	85	1745672	186.58	ug/L	97
3) Chloromethane	1.294	50	2172696	187.42	ug/L	98
4) Vinyl Chloride	1.361	62	2014643	165.63	ug/L	98
5) Bromomethane	1.556	94	749393	170.62	ug/L	99
6) Chloroethane	1.611	64	980779	148.26	ug/L	96
7) Freon 21	1.721	67	2733469	155.14	ug/L	98
8) Trichlorofluoromethane	1.770	101	2273309	174.06	ug/L	99
9) Diethyl Ether	1.934	59	1137898	151.64	ug/L	81
10) Freon 123a	1.928	67	1730057	152.57	ug/L	96
11) Freon 123	1.965	83	1817198	150.49	ug/L	99
12) Acrolein	2.020	56	892129	767.98	ug/L	95
13) 1,1-Dicethene	2.099	96	1076195	161.45	ug/L #	82
14) Freon 113	2.093	101	1339413	176.13	ug/L	99
15) Acetone	2.123	43	436269	193.40	ug/L	96
16) 2-Propanol	2.196	45	1425602	3650.48	ug/L	92
17) Iodomethane	2.215	142	1618465	231.84	ug/L	99
18) Carbon Disulfide	2.269	76	4362093	153.70	ug/L	100
19) Acetonitrile	2.318	40	267302	882.37	ug/L	94
20) Allyl Chloride	2.349	76	708296	146.85	ug/L #	44
21) Methyl Acetate	2.355	43	900393	186.16	ug/L	89
22) Methylene Chloride	2.440	84	1320013	131.40	ug/L #	78
23) TBA	2.501	59	1871165	3040.90	ug/L	84
24) Acrylonitrile	2.629	53	2120253	860.46	ug/L	97
25) Methyl-t-Butyl Ether	2.660	73	3157239	149.27	ug/L	90
26) trans-1,2-Dichloroethene	2.666	96	1363562	160.94	ug/L #	83
28) 1,1-Dicethane	3.044	63	2825563	162.23	ug/L	98
29) Vinyl Acetate	3.086	86	188099	152.48	ug/L #	39
30) DIPE	3.105	45	6531249	185.25	ug/L	96
31) 2-Chloro-1,3-Butadiene	3.141	53	2910350	173.68	ug/L	85
32) ETBE	3.501	59	4558222	152.01	ug/L	92
33) 2,2-Dichloropropane	3.684	77	2012651	157.76	ug/L	98
34) cis-1,2-Dichloroethene	3.678	96	1503050	156.49	ug/L #	80
35) 2-Butanone	3.696	43	622044	202.27	ug/L	89
36) Propionitrile	3.763	54	751044	945.66	ug/L	94
37) Bromochloromethane	3.983	130	863926	153.32	ug/L #	82

Sample : 150 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0517.D Vial: 10
 Acq On : 21 Jul 2014 3:24 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 15:37:52 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 15:12:44 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Methacrylonitrile	3.964	67	368489	147.56	ug/L #	46
39) Tetrahydrofuran	4.056	42	347147	189.68	ug/L	74
40) Chloroform	4.092	83	2423513	155.65	ug/L	93
41) 1,1,1-Trichloroethane	4.361	97	2126300	155.55	ug/L	97
42) TAME	5.184	73	3221737	142.87	ug/L	91
44) Cyclohexane	4.446	41	1951463	180.89	ug/L	89
46) Carbontetrachloride	4.617	121	617794	158.47	ug/L	89
47) 1,1-Dichloropropene	4.617	75	1777604	151.61	ug/L	99
49) Benzene	4.958	78	5562553	148.66	ug/L	92
50) 1,2-Dichloroethane	4.988	62	1867153	152.06	ug/L	93
51) Iso-Butyl Alcohol	4.854	43	1058766	3481.81	ug/L	97
52) n-Heptane	5.452	43	2210564	210.69	ug/L	81
53) 1-Butanol	5.946	56	1187594	8343.12	ug/L	91
54) Trichloroethene	5.964	130	1574175	156.63	ug/L	97
55) Methylcyclohexane	6.214	55	2151246	163.03	ug/L #	80
56) 1,2-Dichloropropane	6.257	63	1620374	151.33	ug/L	99
57) Dibromomethane	6.403	93	743108	151.67	ug/L	99
58) 1,4-Dioxane	6.458	88	187140	3559.88	ug/L	90
59) Methyl Methacrylate	6.464	69	650239	150.20	ug/L #	61
60) Bromodichloromethane	6.616	83	1794305	152.54	ug/L	97
61) 2-Nitropropane	6.891	41	459531	274.41	ug/L	89
62) 2-Chloroethylvinyl Ether	7.006	63	771518	156.32	ug/L	92
63) cis-1,3-Dichloropropene	7.140	75	2107430	148.48	ug/L	98
64) 4-Methyl-2-pentanone	7.336	43	1268560	177.51	ug/L	94
66) Toluene	7.500	91	5820810	144.72	ug/L	99
67) trans-1,3-Dichloropropene	7.744	75	1741960	149.96	ug/L	96
68) Ethyl Methacrylate	7.872	69	1371387	151.82	ug/L #	62
69) 1,1,2-Trichloroethane	7.921	97	1031454	147.86	ug/L	99
72) Tetrachloroethene	8.055	164	1229639	146.10	ug/L	96
73) 2-Hexanone	8.195	43	929552	175.32	ug/L	94
74) 1,3-Dichloropropane	8.085	76	1760875	140.56	ug/L #	78
75) Dibromochloromethane	8.299	129	1407445	157.09	ug/L	99
76) N-Butyl Acetate	8.335	43	2199150	157.71	ug/L	92
77) 1,2-Dibromoethane	8.396	107	1048829	144.21	ug/L	95
78) 3-Chlorobenzotrifluoride	8.878	180	2372523	152.18	ug/L	96
79) Chlorobenzene	8.866	112	4055903	144.29	ug/L	98
80) 4-Chlorobenzotrifluoride	8.927	180	2184071	151.34	ug/L	98
81) 1,1,1,2-Tetrachloroethane	8.945	131	1539883	150.51	ug/L	98
82) Ethylbenzene	8.975	106	2132265	146.90	ug/L #	88
83) (m+p)Xylene	9.085	106	5265837	296.28	ug/L #	84
84) o-Xylene	9.433	106	2593956	144.54	ug/L	90
85) Styrene	9.445	104	4491313	148.17	ug/L	98
86) Bromoform	9.597	173	833083	155.28	ug/L	97
87) 2-Chlorobenzotrifluoride	9.670	180	2351812	152.36	ug/L	93
88) Isopropylbenzene	9.756	105	6470678	147.31	ug/L	97
89) Cyclohexanone	9.823	55	4162395	3929.19	ug/L	93
90) trans-1,4-Dichloro-2-B...	10.055	53	375916	161.18	ug/L	92
92) 1,1,2,2-Tetrachloroethane	10.012	83	1264392	143.92	ug/L	95
93) Bromobenzene	10.000	156	1734010	136.05	ug/L	98
94) 1,2,3-Trichloropropane	10.042	110	328638	140.67	ug/L	95
95) n-Propylbenzene	10.103	91	7430211	143.40	ug/L	95
96) 2-Chlorotoluene	10.170	91	4601794	144.58	ug/L	94

00309

Sample : 150 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0517.D Vial: 10
 Acq On : 21 Jul 2014 3:24 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 15:37:52 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 15:12:44 2014
 Response via : Initial Calibration

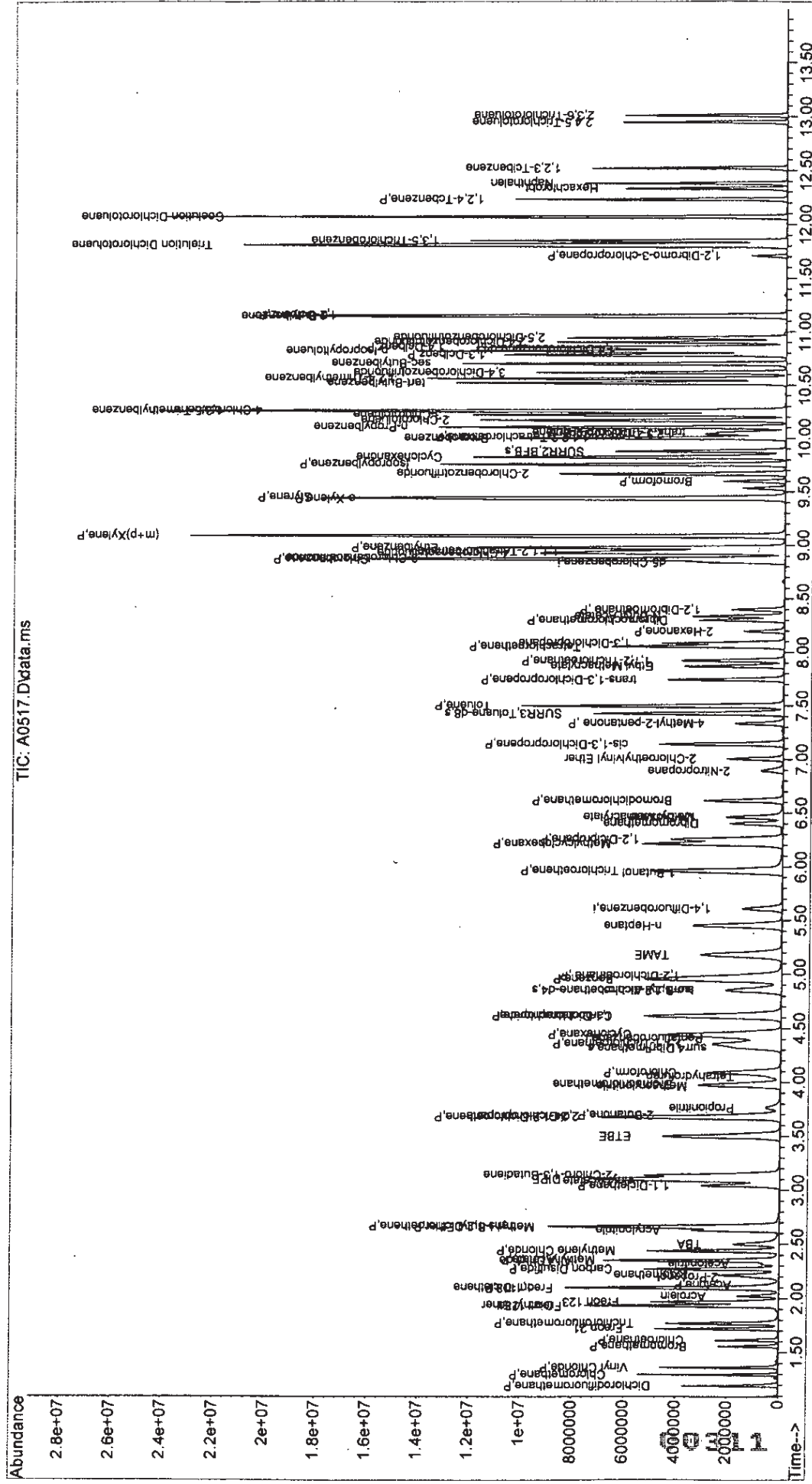
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97) 3-Chlorotoluene	10.219	91	4828281	149.71	ug/L	96
98) 4-Chlorotoluene	10.262	91	5456530	141.54	ug/L	91
99) 1,3,5-Trimethylbenzene	10.256	105	5579327	146.64	ug/L	94
100) tert-Butylbenzene	10.518	119	4716808	149.24	ug/L	99
101) 1,2,4-Trimethylbenzene	10.561	105	5632121	146.40	ug/L	94
102) 3,4-Dichlorobenzotrifl...	10.615	214	1695916	148.71	ug/L	96
103) sec-Butylbenzene	10.701	105	6554663	150.44	ug/L	96
104) p-Isopropyltoluene	10.817	119	5795450	152.09	ug/L	97
105) 1,3-Dclbenz	10.786	146	3489696	148.05	ug/L	97
106) 1,4-Dclbenz	10.853	146	3534225	148.02	ug/L	99
107) 2,4-Dichlorobenzotrifl...	10.902	214	1520576	148.71	ug/L	99
108) 2,5-Dichlorobenzotrifl...	10.945	214	1744734	148.41	ug/L	99
109) n-Butylbenzene	11.140	91	5072249	154.03	ug/L	97
110) 1,2-Dclbenz	11.152	146	3232792	150.06	ug/L	100
111) 1,2-Dibromo-3-chloropr...	11.707	157	232875	172.34	ug/L	94
112) Trielution Dichlorotol...	11.804	125	8560582	491.54	ug/L	96
113) 1,3,5-Trichlorobenzene	11.847	180	2334357	159.37	ug/L	96
114) Coelution Dichlorotoluene	12.066	125	5802655	328.09	ug/L	99
115) 1,2,4-Tcbenzene	12.231	180	1902657	159.28	ug/L	97
116) Hexachlorobt	12.335	225	762510	133.24	ug/L	98
117) Naphthalen	12.377	128	3531985	192.98	ug/L	99
118) 1,2,3-Tclbenzene	12.517	180	1459914	179.73	ug/L	98
119) 2,4,5-Trichlorotoluene	12.944	159	984355	220.73	ug/L	96
120) 2,3,6-Trichlorotoluene	13.005	159	923964	209.07	ug/L	98

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

Quantitation Report

```
Sample      : 150 PPB STD
Data File   : I:\ACQU\DATA
Acq On      : 21 Jul 2014
Operator     : F.NAEGLER
InstName    : MSVOAL0
Misc        :
```

Quant Time: Jul 21 15:37:52 2014
Quant Method : I:\ACQ\DATA\MSVOA
Quant Title : MS#10 - 8260B WAT
QLast Update : Mon Jul 21 15:12:
Response via : Initial Calibration



Sample : 200 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0518.D Vial: 11
 Acq On : 21 Jul 2014 3:55 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 16:08:08 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 15:12:44 2014
 Response via : Initial Calibration

FJ
7/22/14

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	1056657	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1542031	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1411689	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	775885	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.324	113	1438694	249.14	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery =	498.28%#		
48) surr1,1,2-dichloroetha...	4.854	65	1470598	255.46	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery =	510.92%#		
65) SURR3,Toluene-d8	7.433	98	5060528	226.40	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery =	452.80%#		
70) SURR2,BFB	9.878	95	1949995	221.57	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery =	443.14%#		
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.190	85	2326323	235.39	ug/L	97
3) Chloromethane	1.294	50	2944213	240.44	ug/L	95
4) Vinyl Chloride	1.361	62	2724597	212.06	ug/L	99
5) Bromomethane	1.556	94	1094599	235.94	ug/L	100
6) Chloroethane	1.611	64	1323737	189.44	ug/L	96
7) Freon 21	1.721	67	3748282	201.40	ug/L	99
8) Trichlorofluoromethane	1.770	101	3071129	222.61	ug/L	99
9) Diethyl Ether	1.934	59	1539316	194.20	ug/L	81
10) Freon 123a	1.928	67	2372088	198.05	ug/L	95
11) Freon 123	1.965	83	2528356	198.23	ug/L	97
12) Acrolein	2.020	56	1224493	997.91	ug/L	96
13) 1,1-Dicethene	2.099	96	1440857	204.63	ug/L #	85
14) Freon 113	2.093	101	1785623	222.29	ug/L	98
15) Acetone	2.123	43	583966	245.08	ug/L	96
16) 2-Propanol	2.196	45	1973379	4783.86	ug/L	94
17) Iodomethane	2.215	142	2240414	303.82	ug/L	99
18) Carbon Disulfide	2.270	76	5928370	197.76	ug/L	99
19) Acetonitrile	2.318	40	344806	1077.55	ug/L	96
20) Allyl Chloride	2.349	76	936059	183.73	ug/L #	39
21) Methyl Acetate	2.355	43	1267543	248.10	ug/L	89
22) Methylene Chloride	2.440	84	1816683	171.21	ug/L #	79
23) TBA	2.501	59	2618887	4029.25	ug/L	86
24) Acrylonitrile	2.629	53	2916963	1120.70	ug/L	96
25) Methyl-t-Butyl Ether	2.660	73	4384490	196.25	ug/L	90
26) trans-1,2-Dichloroethene	2.666	96	1858859	207.71	ug/L #	83
28) 1,1-Dicethane	3.050	63	3897348	211.85	ug/L	99
29) Vinyl Acetate	3.086	86	264182	202.74	ug/L #	52
30) DIPE	3.111	45	8883421	238.54	ug/L	90
31) 2-Chloro-1,3-Butadiene	3.141	53	4013826	226.77	ug/L	86
32) ETBE	3.501	59	6390766	201.77	ug/L	92
33) 2,2-Dichloropropane	3.678	77	2781992	206.44	ug/L	99
34) cis-1,2-Dichloroethene	3.678	96	2077959	204.82	ug/L #	83
35) 2-Butanone	3.696	43	835984	257.35	ug/L	90
36) Propionitrile	3.763	54	1029573	1227.28	ug/L	93
37) Bromochloromethane	3.983	130	1197093	201.12	ug/L #	84

00312

Sample : 200 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0518.D Vial: 11
 Acq On : 21 Jul 2014 3:55 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 16:08:08 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 15:12:44 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Methacrylonitrile	3.970	67	522821	198.20	ug/L #	64
39) Tetrahydrofuran	4.056	42	482095	249.38	ug/L	77
40) Chloroform	4.092	83	3351600	203.79	ug/L	95
41) 1,1,1-Trichloroethane	4.361	97	2939998	203.61	ug/L	98
42) TAME	5.184	73	4535844	190.42	ug/L	92
44) Cyclohexane	4.446	41	2704168	235.67	ug/L	89
46) Carbontetrachloride	4.617	121	848608	204.65	ug/L	91
47) 1,1-Dichloropropene	4.617	75	2440084	195.67	ug/L	99
49) Benzene	4.958	78	7670644	192.73	ug/L	93
50) 1,2-Dichloroethane	4.989	62	2546669	195.00	ug/L	93
51) Iso-Butyl Alcohol	4.854	43	1489735	4606.07	ug/L	93
52) n-Heptane	5.452	43	2969236	266.07	ug/L	83
53) 1-Butanol	5.952	56	1762065	11638.54	ug/L	85
54) Trichloroethene	5.964	130	2175018	203.48	ug/L	97
55) Methylcyclohexane	6.214	55	2990525	213.08	ug/L #	81
56) 1,2-Dicloropropane	6.257	63	2248319	197.42	ug/L	99
57) Dibromomethane	6.403	93	1033700	198.37	ug/L	97
58) 1,4-Dioxane	6.464	88	257788	4610.50	ug/L	87
59) Methyl Methacrylate	6.458	69	897094	194.83	ug/L #	61
60) Bromodichloromethane	6.616	83	2490675	199.07	ug/L	97
61) 2-Nitropropane	6.891	41	647409	363.48	ug/L	91
62) 2-Chloroethylvinyl Ether	7.006	63	1082107	206.13	ug/L	92
63) cis-1,3-Dichloropropene	7.147	75	2939297	194.71	ug/L	99
64) 4-Methyl-2-pentanone	7.336	43	1763669	232.03	ug/L	96
66) Toluene	7.500	91	7886383	184.35	ug/L	96
67) trans-1,3-Dichloropropene	7.744	75	2451320	198.40	ug/L	96
68) Ethyl Methacrylate	7.872	69	1911846	199.00	ug/L #	64
69) 1,1,2-Trichloroethane	7.927	97	1423574	191.86	ug/L	98
72) Tetrachloroethene	8.055	164	1676937	191.32	ug/L	95
73) 2-Hexanone	8.195	43	1264116	228.95	ug/L	94
74) 1,3-Dichloropropane	8.085	76	2399551	183.93	ug/L #	77
75) Dibromochloromethane	8.299	129	1960903	210.17	ug/L	99
76) N-Butyl Acetate	8.335	43	3003263	206.82	ug/L	92
77) 1,2-Dibromomethane	8.396	107	1437206	189.76	ug/L	96
78) 3-Chlorobenzotrifluoride	8.878	180	3226988	198.76	ug/L	95
79) Chlorobenzene	8.866	112	5461177	186.56	ug/L	99
80) 4-Chlorobenzotrifluoride	8.933	180	2962526	197.12	ug/L	99
81) 1,1,1,2-Tetrachloroethane	8.951	131	2110323	198.07	ug/L	98
82) Ethylbenzene	8.982	106	2886377	190.95	ug/L #	75
83) (m+p)Xylene	9.091	106	6860660	370.67	ug/L #	73
84) o-Xylene	9.433	106	3466224	185.46	ug/L #	86
85) Styrene	9.445	104	5922556	187.62	ug/L	97
86) Bromoform	9.597	173	1141834	204.38	ug/L	98
87) 2-Chlorobenzotrifluoride	9.671	180	3133633	194.94	ug/L	92
88) Isopropylbenzene	9.756	105	8335124	182.22	ug/L	96
89) Cyclohexanone	9.823	55	5364205	4862.41	ug/L	94
90) trans-1,4-Dichloro-2-B...	10.061	53	521497	214.71	ug/L	98
92) 1,1,2,2-Tetrachloroethane	10.012	83	1673056	187.45	ug/L	97
93) Bromobenzene	10.000	156	2347383	181.29	ug/L	99
94) 1,2,3-Trichloropropane	10.042	110	458212	193.06	ug/L	95
95) n-Propylbenzene	10.103	91	9306016	176.80	ug/L	91
96) 2-Chlorotoluene	10.170	91	6041163	186.84	ug/L	92

00313

Sample : 200 PPB STD
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0518.D Vial: 11
 Acq On : 21 Jul 2014 3:55 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 21 16:08:08 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Mon Jul 21 15:12:44 2014
 Response via : Initial Calibration

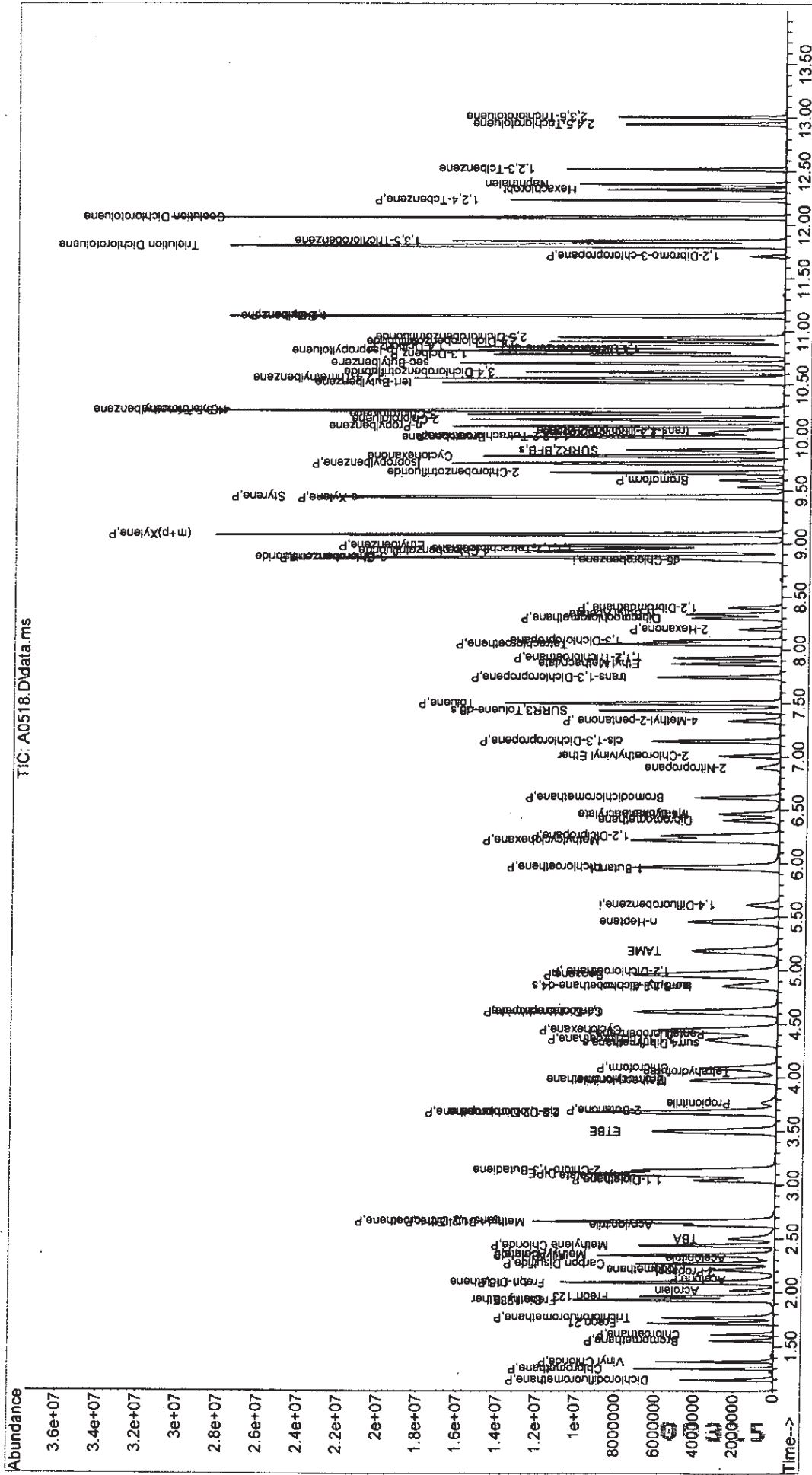
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97) 3-Chlorotoluene	10.219	91	6382306	194.80	ug/L	93
98) 4-Chlorotoluene	10.262	91	7112352	181.61	ug/L	89
99) 1,3,5-Trimethylbenzene	10.256	105	7162726	185.31	ug/L	91
100) tert-Butylbenzene	10.518	119	6173653	192.27	ug/L	97
101) 1,2,4-Trimethylbenzene	10.561	105	7328402	187.51	ug/L	90
102) 3,4-Dichlorobenzotrifl...	10.615	214	2283989	197.14	ug/L	98
103) sec-Butylbenzene	10.701	105	8353213	188.72	ug/L	93
104) p-Isopropyltoluene	10.817	119	7497962	193.69	ug/L	97
105) 1,3-Dclbenz	10.786	146	4659863	194.60	ug/L	97
106) 1,4-Dclbenz	10.853	146	4695934	193.59	ug/L	99
107) 2,4-Dichlorobenzotrifl...	10.902	214	2061581	198.46	ug/L	98
108) 2,5-Dichlorobenzotrifl...	10.945	214	2340594	195.98	ug/L	98
109) n-Butylbenzene	11.140	91	6529795	195.19	ug/L	94
110) 1,2-Dclbenz	11.152	146	4252769	194.32	ug/L	99
111) 1,2-Dibromo-3-chloropr...	11.707	157	316618	230.65	ug/L	93
112) Trielution Dichlorotol...	11.804	125	11057389	624.97	ug/L	95
113) 1,3,5-Trichlorobenzene	11.847	180	3106138	208.75	ug/L	96
114) Coelution Dichlorotoluene	12.066	125	7462351	415.33	ug/L	96
115) 1,2,4-Tcbenzene	12.231	180	2516361	207.36	ug/L	95
116) Hexachlorobt	12.329	225	1005257	172.90	ug/L	100
117) Naphthalen	12.377	128	4613155	248.11	ug/L	99
118) 1,2,3-Tclbenzene	12.518	180	1938703	234.94	ug/L	97
119) 2,4,5-Trichlorotoluene	12.938	159	1326030	292.69	ug/L	94
120) 2,3,6-Trichlorotoluene	13.005	159	1270584	283.01	ug/L	99

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

(QT Reviewed)

Sample : 200 PPB STD
Data File : I:\ACQDATA\msvoa10\data\072114\A0518.D
Acq On : 21 Jul 2014 3:55 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 16:08:08 2014
Quant Method : I:\ACQDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
Quant Update : Mon Jul 21 15:12:44 2014
Response via : Initial Calibration



Initial Calibration Verification Summary Report

Calibration ID: RC1400062

Instrument ID: R-MS-10

Column Name: 1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
1,1,1,2-Tetrachloroethane	RC1400062-10	T	Average RF	50	53.36	ppm	6.7	<=30
1,1,1-Trichloroethane (TCA)	RC1400062-10	T	Average RF	50	51.41	ppm	2.8	<=30
1,1,2,2-Tetrachloroethane	RC1400062-10	T	Average RF	50	52.00	ppm	4.0	<=30
1,1,2-Trichloroethane	RC1400062-10	T	Average RF	50	51.62	ppm	3.2	<=30
1,1,2-Trichlorotrifluoroethane	RC1400062-10	T	Average RF	50	49.58	ppm	-0.8	<=30
1,1-Dichloroethane (1,1-DCA)	RC1400062-10	T	Average RF	50	50.26	ppm	0.5	<=30
1,1-Dichloroethene (1,1-DCE)	RC1400062-10	T	Average RF	50	55.79	ppm	11.6	<=30
1,1-Dichloropropene	RC1400062-10	T	Average RF	50	53.16	ppm	6.3	<=30
1,2,3-Trichlorobenzene	RC1400062-10	T	Average RF	50	57.27	ppm	14.5	<=30
1,2,3-Trichloropropane	RC1400062-10	T	Average RF	50	51.15	ppm	2.3	<=30
1,2,4-Trichlorobenzene	RC1400062-10	T	Average RF	50	55.42	ppm	10.8	<=30
1,2,4-Trimethylbenzene	RC1400062-10	T	Average RF	50	53.74	ppm	7.5	<=30
1,2-Dibromo-3-chloropropane (DBCP)	RC1400062-10	T	Average RF	50	59.40	ppm	18.8	<=30
1,2-Dibromoethane	RC1400062-10	T	Average RF	50	54.56	ppm	9.1	<=30
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123)	RC1400062-10	T	Average RF	50	61.08	ppm	22.2	<=30
1,2-Dichlorobenzene	RC1400062-10	T	Average RF	50	51.83	ppm	3.7	<=30
1,2-Dichloroethane	RC1400062-10	T	Average RF	50	51.76	ppm	3.5	<=30
1,2-Dichloropropane	RC1400062-10	T	Average RF	50	52.65	ppm	5.3	<=30
1,3,5-Trichlorobenzene	RC1400062-10	T	Average RF	50	49.33	ppm	-1.3	<=30
1,3,5-Trimethylbenzene	RC1400062-10	T	Average RF	50	53.41	ppm	6.8	<=30
1,3-Dichlorobenzene	RC1400062-10	T	Average RF	50	52.75	ppm	5.5	<=30
1,3-Dichloropropane	RC1400062-10	T	Average RF	50	51.90	ppm	3.8	<=30
1,4-Dichlorobenzene	RC1400062-10	T	Average RF	50	52.13	ppm	4.3	<=30
1,4-Dioxane	RC1400062-10	T	Average RF	1000	963.0	ppm	-3.7	<=30
1-Butanol	RC1400062-10	T	Quadratic	2500	2629	ppm	5.2	<=30
1-Chloro-4-(trifluoromethyl)benzene	RC1400062-10	T	Average RF	50	49.49	ppm	-1.0	<=30
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	RC1400062-10	T	Average RF	50	52.03	ppm	4.1	<=30
2,2-Dichloropropane	RC1400062-10	T	Average RF	50	54.34	ppm	8.7	<=30
2,3,6-Trichlorotoluene	RC1400062-10	T	Average RF	50	51.45	ppm	2.9	<=30
2,4,5-Trichlorotoluene	RC1400062-10	T	Average RF	50	55.00	ppm	10.0	<=30
2,4-, 2,5-, and 2,6-Dichlorotoluene Coelution	RC1400062-10	T	Average RF	150	155.9	ppm	3.9	<=30
2,4-Dichlorobenzotrifluoride	RC1400062-10	T	Average RF	50	49.90	ppm	-0.2	<=30
2,5-Dichlorobenzotrifluoride	RC1400062-10	T	Average RF	50	47.52	ppm	-5.0	<=30
2-Butanone (MEK)	RC1400062-10	T	Average RF	50	57.03	ppm	14.1	<=30
2-Chloro-1,3-butadiene	RC1400062-10	T	Average RF	50	47.42	ppm	-5.2	<=30
2-Chlorobenzotrifluoride	RC1400062-10	T	Average RF	50	49.41	ppm	-1.2	<=30
2-Chloroethyl Vinyl Ether	RC1400062-10	T	Average RF	50	43.55	ppm	-12.9	<=30
2-Chlorotoluene	RC1400062-10	T	Average RF	50	52.32	ppm	4.6	<=30
2-Hexanone	RC1400062-10	T	Average RF	50	57.49	ppm	15.0	<=30
2-Methyl-1-propanol	RC1400062-10	T	Average RF	1000	1064	ppm	6.4	<=30
2-Methyl-2-propanol	RC1400062-10	T	Average RF	1000	1132	ppm	13.2	<=30
2-Nitropropane	RC1400062-10	T	Average RF	100	105.2	ppm	5.2	<=30
2-Propanol	RC1400062-10	T	Average RF	1000	1138	ppm	13.8	<=30
3,4- and 2,3-Dichlorotoluene Coelution	RC1400062-10	T	Average RF	100	104.3	ppm	4.3	<=30
3,4-Dichlorobenzotrifluoride	RC1400062-10	T	Average RF	50	49.79	ppm	-0.4	<=30
3-Chloro-1-propene	RC1400062-10	T	Average RF	50	52.82	ppm	5.6	<=30
3-Chlorobenzotrifluoride	RC1400062-10	T	Average RF	50	50.30	ppm	0.6	<=30
3-Chlorotoluene	RC1400062-10	T	Average RF	50	48.05	ppm	-3.9	<=30
4-Chlorotoluene	RC1400062-10	T	Average RF	50	52.47	ppm	4.9	<=30
4-Isopropyltoluene	RC1400062-10	T	Average RF	50	54.90	ppm	9.8	<=30
4-Methyl-2-pentanone	RC1400062-10	T	Average RF	50	51.88	ppm	3.8	<=30

Initial Calibration Verification Summary Report

Calibration ID: RC1400062

Instrument ID: R-MS-10

Column Name: 1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Acetone	RC1400062-10	T	Average RF	50	62.84	ppm	25.7	<=30
Acetonitrile	RC1400062-10	T	Average RF	250	286.5	ppm	14.6	<=30
Acrolein	RC1400062-10	T	Average RF	100	78.86	ppm	-21.1	<=30
Acrylonitrile	RC1400062-10	T	Average RF	250	266.6	ppm	6.6	<=30
Benzene	RC1400062-10	T	Average RF	50	51.62	ppm	3.2	<=30
Bromobenzene	RC1400062-10	T	Average RF	50	51.12	ppm	2.2	<=30
Bromochloromethane	RC1400062-10	T	Average RF	50	50.30	ppm	0.6	<=30
Bromodichloromethane	RC1400062-10	T	Average RF	50	52.29	ppm	4.6	<=30
Bromoform	RC1400062-10	T	Average RF	50	54.36	ppm	8.7	<=30
Bromomethane	RC1400062-10	T	Quadratic	50	58.00	ppm	16.0	<=30
Carbon Disulfide	RC1400062-10	T	Average RF	50	45.13	ppm	-9.7	<=30
Carbon Tetrachloride	RC1400062-10	T	Average RF	50	53.22	ppm	6.4	<=30
Chlorobenzene	RC1400062-10	T	Average RF	50	52.78	ppm	5.6	<=30
Chloroethane	RC1400062-10	T	Average RF	50	50.65	ppm	1.3	<=30
Chloroform	RC1400062-10	T	Average RF	50	49.62	ppm	-0.8	<=30
Chloromethane	RC1400062-10	T	Average RF	50	51.97	ppm	3.9	<=30
Cyclohexane	RC1400062-10	T	Average RF	50	48.93	ppm	-2.1	<=30
Cyclohexanone	RC1400062-10	T	Average RF	1000	798.6	ppm	-20.1	<=30
Dibromochloromethane	RC1400062-10	T	Average RF	50	55.32	ppm	10.6	<=30
Dibromomethane	RC1400062-10	T	Average RF	50	50.09	ppm	0.2	<=30
Dichlorodifluoromethane (CFC 12)	RC1400062-10	T	Average RF	50	54.51	ppm	9.0	<=30
Dichlorofluoromethane (CFC 21)	RC1400062-10	T	Average RF	50	44.90	ppm	-10.2	<=30
Dichloromethane	RC1400062-10	T	Average RF	50	51.22	ppm	2.4	<=30
Diethyl Ether	RC1400062-10	T	Average RF	50	52.01	ppm	4.0	<=30
Diisopropyl Ether	RC1400062-10	T	Average RF	50	43.90	ppm	-12.2	<=30
Ethyl Methacrylate	RC1400062-10	T	Average RF	50	58.15	ppm	16.3	<=30
Ethyl tert-Butyl Ether	RC1400062-10	T	Average RF	50	44.80	ppm	-10.4	<=30
Ethylbenzene	RC1400062-10	T	Average RF	50	49.48	ppm	-1.0	<=30
Hexachlorobutadiene	RC1400062-10	T	Average RF	50	51.68	ppm	3.4	<=30
Iodomethane	RC1400062-10	T	Quadratic	50	38.33	ppm	-23.3	<=30
Isopropylbenzene (Cumene)	RC1400062-10	T	Average RF	50	55.16	ppm	10.3	<=30
Methacrylonitrile	RC1400062-10	T	Average RF	50	60.10	ppm	20.2	<=30
Methyl Acetate	RC1400062-10	T	Average RF	50	53.57	ppm	7.1	<=30
Methyl Methacrylate	RC1400062-10	T	Average RF	50	59.67	ppm	19.3	<=30
Methyl tert-Butyl Ether	RC1400062-10	T	Average RF	50	55.65	ppm	11.3	<=30
Methylcyclohexane	RC1400062-10	T	Average RF	50	52.25	ppm	4.5	<=30
Naphthalene	RC1400062-10	T	Average RF	50	58.99	ppm	18.0	<=30
Propionitrile	RC1400062-10	T	Linear	250	271.2	ppm	8.5	<=30
Styrene	RC1400062-10	T	Average RF	50	56.40	ppm	12.8	<=30
Tetrachloroethene (PCE)	RC1400062-10	T	Average RF	50	51.96	ppm	3.9	<=30
Tetrahydrofuran (THF)	RC1400062-10	T	Average RF	50	55.43	ppm	10.9	<=30
Toluene	RC1400062-10	T	Average RF	50	51.68	ppm	3.4	<=30
Trichloroethene (TCE)	RC1400062-10	T	Average RF	50	51.46	ppm	2.9	<=30
Trichlorofluoromethane (CFC 11)	RC1400062-10	T	Average RF	50	49.56	ppm	-0.9	<=30
Vinyl Acetate	RC1400062-10	T	Average RF	50	53.90	ppm	7.8	<=30
Vinyl Chloride	RC1400062-10	T	Average RF	50	50.11	ppm	0.2	<=30
cis-1,2-Dichloroethene	RC1400062-10	T	Average RF	50	51.21	ppm	2.4	<=30
cis-1,3-Dichloropropene	RC1400062-10	T	Average RF	50	57.20	ppm	14.4	<=30
m,p-Xylenes	RC1400062-10	T	Average RF	100	108.1	ppm	8.1	<=30
n-Butyl Acetate	RC1400062-10	T	Average RF	50	60.99	ppm	22.0	<=30
n-Butylbenzene	RC1400062-10	T	Average RF	50	55.69	ppm	11.4	<=30

Initial Calibration Verification Summary Report

Calibration ID: RC1400062

Instrument ID: R-MS-10

Column Name: 1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
n-Heptane	RC1400062-10	T	Average RF	50	52.06	ppm	4.1	<=30
n-Propylbenzene	RC1400062-10	T	Average RF	50	54.48	ppm	9.0	<=30
o-Xylene	RC1400062-10	T	Average RF	50	53.84	ppm	7.7	<=30
sec-Butylbenzene	RC1400062-10	T	Average RF	50	53.28	ppm	6.6	<=30
tert-Amyl Methyl Ether	RC1400062-10	T	Average RF	50	47.94	ppm	-4.1	<=30
tert-Butylbenzene	RC1400062-10	T	Average RF	50	53.79	ppm	7.6	<=30
trans-1,2-Dichloroethene	RC1400062-10	T	Average RF	50	50.71	ppm	1.4	<=30
trans-1,3-Dichloropropene	RC1400062-10	T	Average RF	50	59.10	ppm	18.2	<=30
trans-1,4-Dichloro-2-butene	RC1400062-10	T	Quadratic	50	54.49	ppm	9.0	<=30
1,2-Dichloroethane-d4	RC1400062-10	S	Average RF	50	50.26	ppm	0.5	<=30
4-Bromofluorobenzene	RC1400062-10	S	Average RF	50	51.65	ppm	3.3	<=30
Dibromofluoromethane	RC1400062-10	S	Average RF	50	50.70	ppm	1.4	<=30
Toluene-d8	RC1400062-10	S	Average RF	50	51.10	ppm	2.2	<=30

Sample : 50 PPB ICV
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0521.D Vial: 14
 Acq On : 21 Jul 2014 5:26 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 22 13:19:45 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

FU
7/22/14

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

Internal Standards						
1) Pentafluorobenzene	4.409	168	1019728	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1497671	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1350672	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	747880	50.00	ug/L	0.00

System Monitoring Compounds

45) surr4,Dibrfmethane	4.318	113	484172	50.70	ug/L	0.00
Spiked Amount	50.000	Range 89 - 119	Recovery	=	101.40%	
48) surr1,1,2-dichloroetha...	4.854	65	506535	50.26	ug/L	0.00
Spiked Amount	50.000	Range 78 - 122	Recovery	=	100.52%	
65) SURR3,Toluene-d8	7.427	98	1718815	51.10	ug/L	0.00
Spiked Amount	50.000	Range 87 - 121	Recovery	=	102.20%	
70) SURR2,BFB	9.878	95	683596	51.65	ug/L	0.00
Spiked Amount	50.000	Range 85 - 122	Recovery	=	103.30%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.190	85	598254	54.51	ug/L	97
3) Chloromethane	1.294	50	760460	51.97	ug/L	100
4) Vinyl Chloride	1.361	62	669706	50.11	ug/L	97
5) Bromomethane	1.556	94	234295	58.00	ug/L	97
6) Chloroethane	1.611	64	343026	50.65	ug/L	92
7) Freon 21	1.721	67	844548	44.90	ug/L	98
8) Trichlorofluoromethane	1.770	101	750297	49.56	ug/L	98
9) Diethyl Ether	1.934	59	414709	52.01	ug/L #	79
10) Freon 123a	1.928	67	723411	61.08	ug/L	93
11) Freon 123	1.965	83	655809	52.03	ug/L	98
12) Acrolein	2.026	56	98352	78.86	ug/L	94
13) 1,1-Dicethene	2.099	96	396468	55.79	ug/L #	79
14) Freon 113	2.093	101	445223	49.58	ug/L	98
15) Acetone	2.123	43	195141	62.84	ug/L	96
16) 2-Propanol	2.196	45	499512	1137.68	ug/L	99
17) Iodomethane	2.215	142	293464	38.33	ug/L	99
18) Carbon Disulfide	2.270	76	1356772	45.13	ug/L	99
19) Acetonitrile	2.318	40	95361	286.50	ug/L	94
20) Allyl Chloride	2.349	76	235991	52.82	ug/L #	33
21) Methyl Acetate	2.355	43	329987	53.57	ug/L	88
22) Methylene Chloride	2.440	84	477698	51.22	ug/L #	77
23) TBA	2.501	59	598507	1132.32	ug/L	75
24) Acrylonitrile	2.629	53	760781	266.62	ug/L	97
25) Methyl-t-Butyl Ether	2.660	73	1133096	55.65	ug/L	92
26) trans-1,2-Dichloroethene	2.666	96	464705	50.71	ug/L #	85
28) 1,1-Dicethane	3.044	63	973808	50.26	ug/L	96
29) Vinyl Acetate	3.086	86	61437	53.90	ug/L #	37
30) DIPE	3.105	45	1952692	43.90	ug/L	88
31) 2-Chloro-1,3-Butadiene	3.141	53	903755	47.42	ug/L	85
32) ETBE	3.501	59	1336321	44.80	ug/L	91
33) 2,2-Dichloropropane	3.684	77	652245	54.34	ug/L	97
34) cis-1,2-Dichloroethene	3.678	96	513165	51.21	ug/L #	72
35) 2-Butanone	3.696	43	233390	57.03	ug/L	89
36) Propionitrile	3.763	54	268024	271.21	ug/L	90
37) Bromochloromethane	3.983	130	309927	50.30	ug/L #	80

00319

Sample : 50 PPB ICV
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0521.D Vial: 14
 Acq On : 21 Jul 2014 5:26 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 22 13:19:45 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
38) Methacrylonitrile	3.970	67	133092	60.10	ug/L #	54
39) Tetrahydrofuran	4.056	42	125622	55.43	ug/L	71
40) Chloroform	4.092	83	837849	49.62	ug/L	93
41) 1,1,1-Trichloroethane	4.361	97	718139	51.41	ug/L	97
42) TAME	5.184	73	964917	47.94	ug/L	91
44) Cyclohexane	4.446	41	663488	48.93	ug/L	92
46) Carbontetrachloride	4.617	121	203037	53.22	ug/L	91
47) 1,1-Dichloropropene	4.617	75	622717	53.16	ug/L	97
49) Benzene	4.958	78	1889711	51.62	ug/L	92
50) 1,2-Dichloroethane	4.989	62	657410	51.76	ug/L	92
51) Iso-Butyl Alcohol	4.861	43	316611	1064.28	ug/L	99
52) n-Heptane	5.452	43	718722	52.06	ug/L #	81
53) 1-Butanol	5.946	56	337543	2629.19	ug/L	86
54) Trichloroethene	5.964	130	525265	51.46	ug/L	95
55) Methylcyclohexane	6.214	55	735108	52.25	ug/L #	79
56) 1,2-Dicloropropane	6.257	63	561837	52.65	ug/L	99
57) Dibromomethane	6.403	93	257664	50.09	ug/L	98
58) 1,4-Dioxane	6.458	88	58472	962.98	ug/L	79
59) Methyl Methacrylate	6.464	69	226176	59.67	ug/L #	58
60) Bromodichloromethane	6.616	83	610796	52.29	ug/L	98
61) 2-Nitropropane	6.891	41	154977	105.18	ug/L	91
62) 2-Chloroethylvinyl Ether	7.006	63	194305	43.55	ug/L	93
63) cis-1,3-Dichloropropene	7.141	75	705840	57.20	ug/L	96
64) 4-Methyl-2-pentanone	7.336	43	414023	51.88	ug/L	94
66) Toluene	7.500	91	1982495	51.68	ug/L	98
67) trans-1,3-Dichloropropene	7.744	75	577114	59.10	ug/L	96
68) Ethyl Methacrylate	7.872	69	462782	58.15	ug/L #	65
69) 1,1,2-Trichloroethane	7.921	97	349365	51.62	ug/L	97
72) Tetrachloroethene	8.055	164	405857	51.96	ug/L	94
73) 2-Hexanone	8.195	43	328208	57.49	ug/L	88
74) 1,3-Dichloropropane	8.085	76	600646	51.90	ug/L #	79
75) Dibromochloromethane	8.299	129	456297	55.32	ug/L	98
76) N-Butyl Acetate	8.335	43	774720	60.99	ug/L	93
77) 1,2-Dibromoethane	8.396	107	358035	54.56	ug/L	95
78) 3-Chlorobenzotrifluoride	8.878	180	721765	50.30	ug/L	99
79) Chlorobenzene	8.866	112	1374523	52.78	ug/L	96
80) 4-Chlorobenzotrifluoride	8.927	180	654021	49.49	ug/L	96
81) 1,1,1,2-Tetrachloroethane	8.945	131	486316	53.36	ug/L	100
82) Ethylbenzene	8.976	106	642108	49.48	ug/L	93
83) (m+p)Xylene	9.085	106	1730572	108.14	ug/L	98
84) o-Xylene	9.433	106	842492	53.84	ug/L	95
85) Styrene	9.445	104	1466039	56.40	ug/L	97
86) Bromoform	9.597	173	257594	54.36	ug/L	100
87) 2-Chlorobenzotrifluoride	9.671	180	702598	49.41	ug/L	95
88) Isopropylbenzene	9.756	105	2170611	55.16	ug/L	100
89) Cyclohexanone	9.823	55	992892	798.56	ug/L	95
90) trans-1,4-Dichloro-2-B...	10.055	53	111508	54.49	ug/L	84
92) 1,1,2,2-Tetrachloroethane	10.006	83	426726	52.00	ug/L	96
93) Bromobenzene	10.000	156	577121	51.12	ug/L	98
94) 1,2,3-Trichloropropane	10.042	110	117363	51.15	ug/L	98
95) n-Propylbenzene	10.103	91	2542428	54.48	ug/L	99
96) 2-Chlorotoluene	10.170	91	1506478	52.32	ug/L	95

00320

Sample : 50 PPB ICV
 Data File : I:\ACQUDATA\msvoa10\data\072114\A0521.D Vial: 14
 Acq On : 21 Jul 2014 5:26 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Jul 22 13:19:45 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97) 3-Chlorotoluene	10.219	91	1470088	48.05	ug/L	97
98) 4-Chlorotoluene	10.256	91	1817579	52.47	ug/L	99
99) 1,3,5-Trimethylbenzene	10.250	105	1812475	53.41	ug/L	98
100) tert-Butylbenzene	10.518	119	1530013	53.79	ug/L	99
101) 1,2,4-Trimethylbenzene	10.555	105	1843596	53.74	ug/L	99
102) 3,4-Dichlorobenzotrifl...	10.615	214	509773	49.79	ug/L	100
103) sec-Butylbenzene	10.695	105	2124806	53.28	ug/L	99
104) p-Isopropyltoluene	10.817	119	1899048	54.90	ug/L	97
105) 1,3-Dclbenz	10.780	146	1139413	52.75	ug/L	99
106) 1,4-Dclbenz	10.853	146	1166221	52.13	ug/L	98
107) 2,4-Dichlorobenzotrifl...	10.902	214	455217	49.90	ug/L	99
108) 2,5-Dichlorobenzotrifl...	10.945	214	517830	47.52	ug/L	97
109) n-Butylbenzene	11.140	91	1632620	55.69	ug/L	99
110) 1,2-Dclbenz	11.152	146	1051907	51.83	ug/L	99
111) 1,2-Dibromo-3-chloropr...	11.707	157	74213	59.40	ug/L	94
112) Trielution Dichlorotol...	11.798	125	2650784	155.89	ug/L	90
113) 1,3,5-Trichlorobenzene	11.847	180	715893	49.33	ug/L	97
114) Coelution Dichlorotoluene	12.066	125	1838099	104.26	ug/L	96
115) 1,2,4-Tcbenzene	12.231	180	637184	55.42	ug/L	96
116) Hexachlorobt	12.329	225	243231	51.68	ug/L	98
117) Naphthalen	12.377	128	1165493	58.99	ug/L	98
118) 1,2,3-Tclbenzene	12.518	180	482655	57.27	ug/L	99
119) 2,4,5-Trichlorotoluene	12.944	159	289114	55.00	ug/L	98
120) 2,3,6-Trichlorotoluene	13.005	159	273712	51.45	ug/L	98

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

Quantitation Report

```
Sample      : 50 PPB ICV
Data File   : I:\ACQUDAT
Acq On      : 21 Jul 201
Operator    : F.NAEGLER
InstName    : MSVOA10
Misc        :
```

Quant Time: Jul 22 13:19:45 2014
Quant Method : I:\ACQDATA\MSVOA
Quant Title : MS#10 - 8260B WAT
QLast Update : Tue Jul 22 13:18:
Response via : Initial Calibration



ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003

Service Request: R1407422
Date Analyzed: 9/24/14

**Continuing Calibration Verification Summary
 Volatile Organic Compounds by GC/MS, Unpreserved**

Analytical Method: 8260C

Calibration Date: 7/21/14
Calibration ID: RC1400062
Analysis Lot: 412875
Units: µg/L

File ID: I:\ACQUDATA\msvoa10\data\092414\A2326.D\

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,1,1-Trichloroethane (TCA)	50.0	42.7	0.6850	0.5851	-14.6	NA	± 20 %	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	40.0	0.9501	0.7605	-20.0	NA	± 20 %	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	47.4	0.3485	0.3304	-5.2	NA	± 20 %	Average RF
Tetrachloroethene (PCE)	50.0	50.0	0.2891	0.2892	0.0	NA	± 20 %	Average RF
Trichloroethene (TCE)	50.0	57.2	0.3407	0.3896	14.3	NA	± 20 %	Average RF
Vinyl Chloride	50.0	48.3	0.6553	0.6336	-3.3	NA	± 20 %	Average RF
cis-1,2-Dichloroethene	50.0	44.3	0.4913	0.4350	-11.5	NA	± 20 %	Average RF
trans-1,2-Dichloroethene	50.0	43.3	0.4493	0.3895	-13.3	NA	± 20 %	Average RF
4-Bromofluorobenzene	50.0	50.4	0.4419	0.4455	0.8	NA	± 20 %	Average RF
Dibromofluoromethane	50.0	48.8	0.3188	0.3111	-2.4	NA	± 20 %	Average RF
Toluene-d8	50.0	48.8	1.123	1.096	-2.4	NA	± 20 %	Average RF

Sample : CCV
 Data File : I:\ACQUDATA\msvoa10\data\092414\A2326.D Vial: 27
 Acq On : 24 Sep 2014 10:47 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Sep 25 09:13:00 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial 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)
1 i	Pentafluorobenzene	1.0000	1.0000	0.0	99	0.00
2 P	Dichlorodifluoromethane	0.5381	0.5582	-3.7	96	0.00
3 P	Chloromethane	0.7175	0.7397	-3.1	99	0.00
4 P	Vinyl Chloride	0.6553	0.6336	3.3	95	0.00
5 P	Bromomethane	0.1903	0.2178	-10.7 -14.5	105	0.00
6 P	Chloroethane	0.3320	0.3122	6.0	93	0.00
7	Freon 21	0.9222	0.7711	16.4	81	0.00
8 P	Trichlorofluoromethane	0.7423	0.6805	8.3	91	0.00
9	Diethyl Ether	0.3910	0.3685	5.8	97	0.00
10	Freon 123a	0.5807	0.4823	16.9	78	0.00
11	Freon 123	0.6180	0.5406	12.5	86	0.00
12	Acrolein	0.0612	0.0620	-1.3	101	0.00
13	1,1-Dicethene	0.3485	0.3304	5.2	98	0.00
14 P	Freon 113	0.4403	0.4123	6.4	96	0.00
15 P	Acetone	0.1523	0.1158	24.0#	83	0.00
16	2-Propanol	0.0215	0.0220	-2.3	97	0.00
17	Iodomethane	0.3548	0.3450	2.8	106	0.00
18 P	Carbon Disulfide	1.4741	1.1794	20.0	80	0.00
19	Acetonitrile	0.0163	0.0151	11.0 7.4	93	0.00
20	Allyl Chloride	0.2191	0.1781	18.7	76	0.00
21 P	Methyl Acetate	0.3020	0.2932	2.9	89	0.00
22 P	Methylene Chloride	0.4573	0.3905	14.6	89	0.00
23	TBA	0.0259	0.0303	-17.0	111	0.00
24	Acrylonitrile	0.1399	0.1458	-4.2	101	0.00
25 P	Methyl-t-Butyl Ether	0.9984	0.9380	6.0	92	0.00
26 P	trans-1,2-Dichloroethene	0.4493	0.3895	13.3	87	0.00
27	Halothane	0.0000	0.0000	0.0	0#	-3.03#
28 P	1,1-Dicethane	0.9501	0.7605	20.0	80	0.00
29	Vinyl Acetate	0.0559	0.0214	61.7#	36#	0.00 NT
30	DIPE	2.1811	0.0006	100.0#	0#	0.02
31	2-Chloro-1,3-Butadiene	0.9344	0.7547	19.2	77	0.00
32	ETBE	1.4626	0.0003	100.0#	0#	0.07
33	2,2-Dichloropropane	0.5885	0.3859	34.4#	63	0.00 NT
34 P	cis-1,2-Dichloroethene	0.4913	0.4350	11.5	88	0.00
35 P	2-Butanone	0.2007	0.1875	6.6	84	0.00
36	Propionitrile	0.0412	0.0519	-7.2 -26.0#	105	0.00
37	Bromochloromethane	0.3021	0.3015	0.2	102	0.00
38	Methacrylonitrile	0.1086	0.1265	-16.5	105	0.00
39	Tetrahydrofuran	0.1111	0.1178	-6.0	102	0.00
40 P	Chloroform	0.8279	0.6930	16.3	87	0.00
41 P	1,1,1-Trichloroethane	0.6850	0.5851	14.6	86	0.00
42	TAME	0.9868	0.0000	100.0#	0#	-5.18#
43 i	1,4-Difluorobenzene	1.0000	1.0000	0.0	94	0.00
44 P	Cyclohexane	0.4527	0.3371	25.5#	68	0.00 NT
45 s	surr4,Dibrflmethane	0.3188	0.3111	2.4	90	0.00
46 P	Carbontetrachloride	0.1274	0.1214	4.7	92	0.00
47	1,1-Dichloropropene	0.3911	0.3334	14.8	82	0.00

FL
9/28/14

①

NT

NT

NT

Evaluate Continuing Calibration Report

Sample : CCV
 Data File : I:\ACQUDATA\msvoa10\data\092414\A2326.D Vial: 27
 Acq On : 24 Sep 2014 10:47 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Sep 25 09:13:00 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial 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)
48 s	surrl,1,2-dichloroethane-d4	0.3365	0.3009	10.6	83	0.00
49 P	Benzene	1.2222	1.0900	10.8	84	0.00
50 P	1,2-Dichloroethane	0.4240	0.3825	9.8	85	0.00
51	Iso-Butyl Alcohol	0.0099	0.0109	-10.1	99	0.00
52	n-Heptane	0.4609	0.3640	21.0#	71	0.00
53	1-Butanol	0.0040	0.0000	100.0#	0#	5.95#
54 P	Trichloroethene	0.3407	0.3896	-14.4	110	0.00
55 P	Methylcyclohexane	0.4697	0.3873	17.5	73	0.00
56 P	1,2-Dichloropropane	0.3562	0.3230	9.3	85	0.00
57	Dibromomethane	0.1717	0.1701	0.9	96	0.00
58	1,4-Dioxane	0.0020	0.0022	-10.0	104	0.00
59	Methyl Methacrylate	0.1265	0.1407	-11.2	98	0.00
60 P	Bromodichloromethane	0.3900	0.3650	6.4	88	0.00
61	2-Nitropropane	0.0492	0.0506	-2.8	102	0.00
62	2-Chloroethylvinyl Ether	0.1490	0.1398	6.2	79	0.00
63 P	cis-1,3-Dichloropropene	0.4120	0.3860	6.3	82	0.00
64 P	4-Methyl-2-pentanone	0.2664	0.2891	-8.5	96	0.00
65 s	SURR3,Toluene-d8	1.1229	1.0957	2.4	89	0.00
66 P	Toluene	1.2807	1.1918	6.9	88	0.00
67 P	trans-1,3-Dichloropropene	0.3260	0.3199	1.9	86	0.00
68	Ethyl Methacrylate	0.2657	0.2931	-10.3	99	0.00
69 P	1,1,2-Trichloroethane	0.2259	0.2422	-7.2	102	0.00
70 s	SURR2,BFB	0.4419	0.4455	-0.8	93	0.00
71 i	d5-Chlorobenzene	1.0000	1.0000	0.0	94	0.00
72 P	Tetrachloroethene	0.2891	0.2892	-0.0	95	0.00
73 P	2-Hexanone	0.2113	0.2246	-6.3	93	0.00
74	1,3-Dichloropropene	0.4284	0.4338	-1.3	95	0.00
75 P	Dibromochloromethane	0.3054	0.3453	-13.1	102	0.00
76	N-Butyl Acetate	0.4703	0.5078	-8.0	90	0.00
77 P	1,2-Dibromoethane	0.2429	0.2824	-16.3	106	0.00
78	3-Chlorobenzotrifluoride	0.5312	0.0006	99.9#	0#	0.00
79 P	Chlorobenzene	0.9640	0.9378	2.7	93	0.00
80	4-Chlorobenzotrifluoride	0.4092	0.0006	99.9#	0#	0.00
81	1,1,1,2-Tetrachloroethane	0.3374	0.3461	-2.6	94	0.00
82 P	Ethylbenzene	0.4804	0.4708	2.0	91	0.00
83 P	(m+p)Xylene	0.5924	0.5861	1.1	91	0.00
84 P	o-Xylene	0.5792	0.5690	1.8	88	0.00
85 P	Styrene	0.9623	1.0166	-5.6	93	0.00
86 P	Bromoform	0.1754	0.2210	-26.0#	116	0.00
87	2-Chlorobenzotrifluoride	0.5264	0.0005	99.9#	0#	0.00
88 P	Isopropylbenzene	1.4567	1.4281	2.0	89	0.00
89	Cyclohexanone	0.0460	0.0162	64.8#	30#	0.00
90	trans-1,4-Dichloro-2-Butene	0.0721	0.0688	7.6	80	0.00
91 i	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	100	0.00
92 P	1,1,2,2-Tetrachloroethane	0.5487	0.4890	10.9	92	0.00
93	Bromobenzene	0.7548	0.7527	0.3	103	0.00

Evaluate Continuing Calibration Report

Sample : CCV
 Data File : I:\ACQUDATA\msvoa10\data\092414\A2326.D Vial: 27
 Acq On : 24 Sep 2014 10:47 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Sep 25 09:13:00 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial 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)
94	1,2,3-Trichloropropane	0.1534	0.1553	-1.2	110	0.00
95	n-Propylbenzene	3.1202	2.8524	8.6	87	0.00
96	2-Chlorotoluene	1.9252	1.7006	11.7	88	0.00
97	3-Chlorotoluene	2.0456	0.0000	100.0#	0#	10.22#
98	4-Chlorotoluene	2.3159	2.0284	12.4	89	0.00
99	1,3,5-Trimethylbenzene	2.2689	2.0674	8.9	89	0.00
100	tert-Butylbenzene	1.9017	1.7686	7.0	90	0.00
101	1,2,4-Trimethylbenzene	2.2937	2.1428	6.6	90	0.00
102	3,4-Dichlorobenzotrifluorid	0.6845	0.0015	99.8#	0#	0.00
103	sec-Butylbenzene	2.6661	2.4738	7.2	89	0.00
104	p-Isopropyltoluene	2.3128	2.1996	4.9	90	0.00
105 P	1,3-Dclbenz	1.4440	1.3884	3.9	96	0.00
106 P	1,4-Dclbenz	1.4958	1.4303	4.4	97	0.00
107	2,4-Dichlorobenzotrifluorid	0.6099	0.0015	99.8#	0#	0.00
108	2,5-Dichlorobenzotrifluorid	0.7285	0.0015	99.8#	0#	0.00
109	n-Butylbenzene	1.9600	1.7948	8.4	85	0.00
110 P	1,2-Dclbenz	1.3568	1.3413	1.1	100	0.00
111 P	1,2-Dibromo-3-chloropropane	0.0835	0.1118	-33.9#	124	0.00 NT
112	Trielution Dichlorotoluene	1.1360	0.0025	99.8#	0#	0.01
113	1,3,5-Trichlorobenzene	0.9702	0.0024	99.8#	0#	0.01
114	Coelution Dichlorotoluene	1.1787	0.0031	99.7#	0#	0.00
115 P	1,2,4-Tcbenzene	0.7687	0.8361	-8.8	107	0.00
116	Hexachlorobt	0.3147	0.3162	-0.5	99	0.00
117	Naphthalen	1.3209	1.7057	-29.1#	118	0.00 NT
118	1,2,3-Tclbenzene	0.5634	0.6936	-23.1#	116	-0.01 NT
119	2,4,5-Trichlorotoluene	0.3514	0.0051	98.5#	1#	-0.01
120	2,3,6-Trichlorotoluene	0.3556	0.0056	98.4#	2#	-0.02

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Sample : CCV
 Data File : I:\ACQUDATA\msvoa10\data\092414\A2326.D Vial: 27
 Acq On : 24 Sep 2014, 10:47 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Sep 25 09:13:00 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

R2411595-05
 08/24/14

FU
 9/28/14

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	936004	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1310463	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1194458	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	702471	50.00	ug/L	0.00

System Monitoring Compounds						
45) surr4, Dibrflmethane	4.318	113	407661	48.79	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	97.58%
48) surr1, 1,2-dichloroetha...	4.854	65	394328	44.72	ug/L	0.00
Spiked Amount	50.000	Range	78 - 122	Recovery	=	89.44%
65) SURR3, Toluene-d8	7.427	98	1435834	48.79	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	97.58%
70) SURR2, BFB	9.878	95	583755	50.41	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	100.82%

Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.190	85	522517	51.87 ug/L	97
3) Chloromethane	1.294	50	692363	51.55 ug/L	97
4) Vinyl Chloride	1.361	62	593096	48.34 ug/L	97
5) Bromomethane	1.556	94	203822	55.37 ug/L	100
6) Chloroethane	1.611	64	292235	47.01 ug/L	94
7) Freon 21	1.721	67	721761	41.81 ug/L	99
8) Trichlorofluoromethane	1.770	101	636965	45.84 ug/L	99
9) Diethyl Ether	1.934	59	344942	47.13 ug/L	82
10) Freon 123a	1.928	67	451411	41.52 ug/L	100
11) Freon 123	1.965	83	506009	43.74 ug/L	99
12) Acrolein	2.020	56	290222	253.53 ug/L	99
13) 1,1-Dicethene	2.099	96	309295	47.41 ug/L	95
14) Freon 113	2.093	101	385949	46.83 ug/L	94
15) Acetone	2.123	43	108363	38.02 ug/L	98
16) 2-Propanol	2.196	45	411806	1021.82 ug/L	97
17) Iodomethane	2.215	142	322951	44.50 ug/L	96
18) Carbon Disulfide	2.269	76	1103928	40.00 ug/L	99
19) Acetonitrile	2.318	40	70695	231.40 ug/L	94
20) Allyl Chloride	2.349	76	166703	40.65 ug/L #	44
21) Methyl Acetate	2.355	43	274448	48.54 ug/L	88
22) Methylene Chloride	2.440	84	365487	42.69 ug/L #	83
23) TBA	2.501	59	566693	1168.03 ug/L	80
24) Acrylonitrile	2.629	53	682259	260.49 ug/L	99
25) Methyl-t-Butyl Ether	2.660	73	877996	46.97 ug/L	91
26) trans-1,2-Dichloroethene	2.666	96	364539	43.34 ug/L	90
28) 1,1-Dicethane	3.044	63	711818	40.02 ug/L	99
29) Vinyl Acetate	3.092	86	20044	19.16 ug/L #	77
31) 2-Chloro-1,3-Butadiene	3.141	53	706408	40.38 ug/L	89
33) 2,2-Dichloropropane	3.678	77	361248	32.79 ug/L	96
34) cis-1,2-Dichloroethene	3.678	96	407186	44.27 ug/L	92
35) 2-Butanone	3.696	43	175495	46.72 ug/L	90
36) Propionitrile	3.769	54	243107	268.02 ug/L	99
37) Bromochloromethane	3.983	130	282215	49.90 ug/L	96
38) Methacrylonitrile	3.970	67	118413	58.26 ug/L #	64
39) Tetrahydrofuran	4.056	42	110260	53.00 ug/L	84

Sample : CCV
 Data File : I:\ACQUDATA\msvoa10\data\092414\A2326.D Vial: 27
 Acq On : 24 Sep 2014 10:47 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Sep 25 09:13:00 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chloroform	4.092	83	648633	41.85	ug/L	95
41) 1,1,1-Trichloroethane	4.354	97	547654	42.71	ug/L	96
44) Cyclohexane	4.440	41	441713	37.23	ug/L	90
46) Carbontetrachloride	4.617	121	159067	47.65	ug/L	84
47) 1,1-Dichloropropene	4.617	75	436855	42.62	ug/L	98
49) Benzene	4.952	78	1428468	44.59	ug/L	93
50) 1,2-Dichloroethane	4.982	62	501306	45.11	ug/L	93
51) Iso-Butyl Alcohol	4.854	43	284889	1094.45	ug/L	91
52) n-Heptane	5.452	43	476972	39.48	ug/L	83
54) Trichloroethene	5.964	130	510497	57.16	ug/L	92
55) Methylcyclohexane	6.214	55	507570	41.23	ug/L	85
56) 1,2-Dichloropropane	6.256	63	423236	45.33	ug/L	98
57) Dibromomethane	6.403	93	222887	49.52	ug/L	84
58) 1,4-Dioxane	6.470	88	57092m	1074.57	ug/L	
59) Methyl Methacrylate	6.464	69	184323	55.58	ug/L #	65
60) Bromodichloromethane	6.616	83	478305	46.79	ug/L	94
61) 2-Nitropropane	6.891	41	132722	102.94	ug/L	99
62) 2-Chloroethylvinyl Ether	7.006	63	183263	46.94	ug/L	94
63) cis-1,3-Dichloropropene	7.140	75	505841	46.85	ug/L	98
64) 4-Methyl-2-pentanone	7.336	43	378790	54.24	ug/L	98
66) Toluene	7.500	91	1561785	46.53	ug/L	99
67) trans-1,3-Dichloropropene	7.744	75	419255	49.06	ug/L	94
68) Ethyl Methacrylate	7.872	69	384081m	55.16	ug/L	
69) 1,1,2-Trichloroethane	7.921	97	317417	53.60	ug/L	99
72) Tetrachloroethene	8.055	164	345446	50.01	ug/L	98
73) 2-Hexanone	8.195	43	268308	53.15	ug/L	94
74) 1,3-Dichloropropane	8.085	76	518154	50.63	ug/L	85
75) Dibromochloromethane	8.299	129	412476	56.54	ug/L	98
76) N-Butyl Acetate	8.335	43	606546	53.99	ug/L	94
77) 1,2-Dibromoethane	8.396	107	337260	58.12	ug/L	96
79) Chlorobenzene	8.866	112	1120200	48.64	ug/L	94
81) 1,1,1,2-Tetrachloroethane	8.945	131	413418	51.29	ug/L	99
82) Ethylbenzene	8.975	106	562375	49.01	ug/L #	90
83) (m+p)Xylene	9.085	106	1400071	98.93	ug/L	91
84) o-Xylene	9.433	106	679694	49.12	ug/L	91
85) Styrene	9.445	104	1214296	52.82	ug/L	96
86) Bromoform	9.597	173	263986	63.00	ug/L	94
88) Isopropylbenzene	9.756	105	1705788	49.02	ug/L	99
89) Cyclohexanone	9.823	55	387660	352.56	ug/L	99
90) trans-1,4-Dichloro-2-B...	10.055	53	82216	46.20	ug/L	93
92) 1,1,2,2-Tetrachloroethane	10.006	83	343542	44.57	ug/L	97
93) Bromobenzene	10.000	156	528773	49.86	ug/L #	88
94) 1,2,3-Trichloropropane	10.042	110	109088	50.62	ug/L #	87
95) n-Propylbenzene	10.103	91	2003723	45.71	ug/L	97
96) 2-Chlorotoluene	10.164	91	1194607	44.17	ug/L	93
98) 4-Chlorotoluene	10.256	91	1424863	43.79	ug/L	94
99) 1,3,5-Trimethylbenzene	10.250	105	1452260	45.56	ug/L	95
100) tert-Butylbenzene	10.518	119	1242383	46.50	ug/L	98
101) 1,2,4-Trimethylbenzene	10.554	105	1505255	46.71	ug/L	95
103) sec-Butylbenzene	10.695	105	1737770	46.39	ug/L	98
104) p-Isopropyltoluene	10.817	119	1545165	47.55	ug/L	95
105) 1,3-Dichlorobenz	10.780	146	975325	48.08	ug/L	97

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\092414\A2326.D Vial: 27
Acq On : 24 Sep 2014 10:47 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

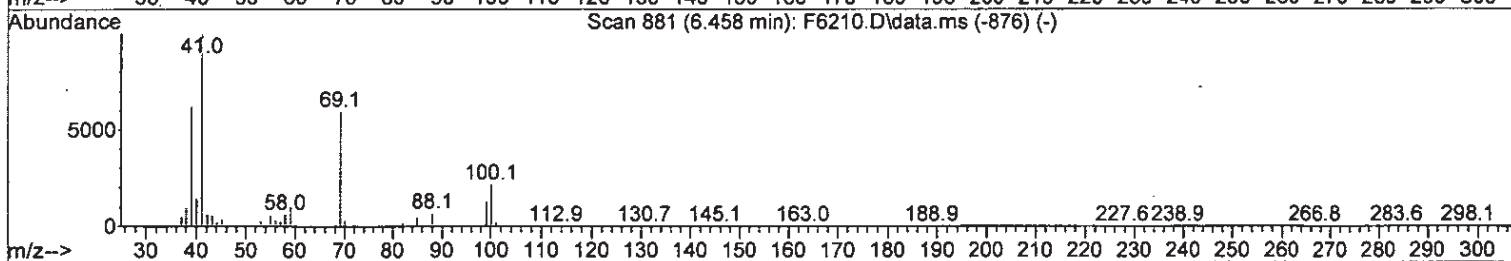
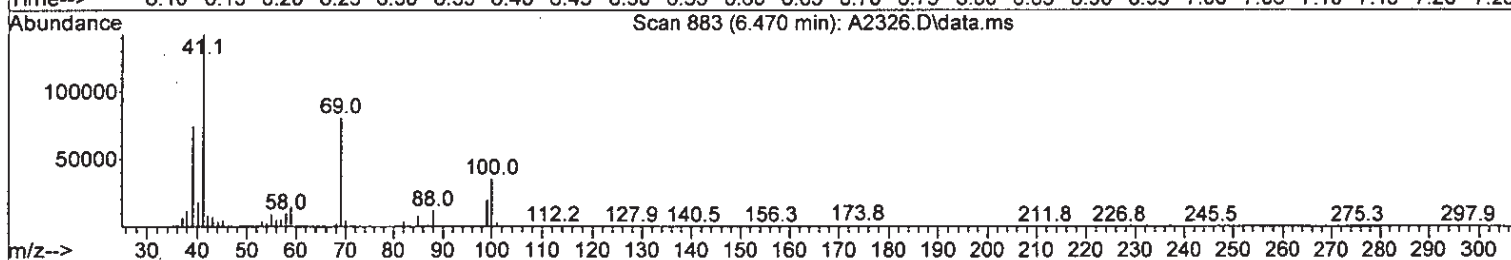
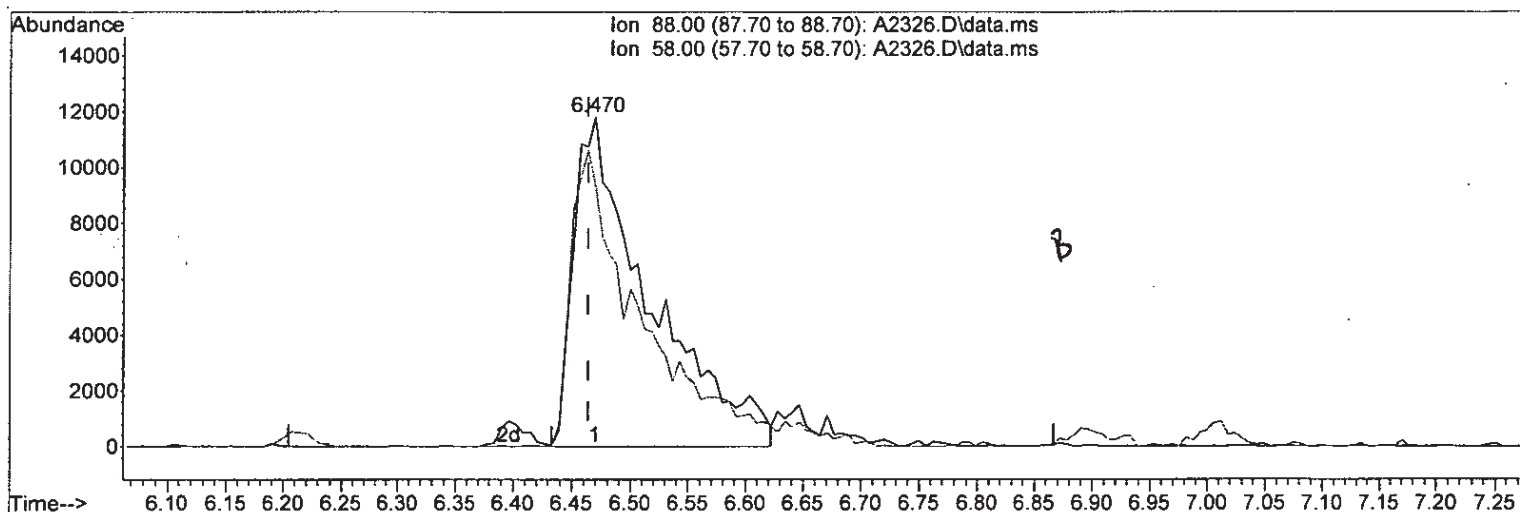
Quant Time: Sep 25 09:13:00 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	10.853	146	1004771	47.81	ug/L	99
109) n-Butylbenzene	11.140	91	1260792	45.79	ug/L	97
110) 1,2-Dclbenz	11.152	146	942214	49.43	ug/L	97
111) 1,2-Dibromo-3-chloropr...	11.707	157	78530	66.92	ug/L	92
112) Trielution Dichlorotol...	11.816	125	5338	0.33	ug/L	76
114) Coelution Dichlorotoluene	12.072	125	4303	0.26	ug/L	93
115) 1,2,4-Tcbenzene	12.225	180	587352	54.39	ug/L	97
116) Hexachlorobt	12.322	225	222089	50.24	ug/L	99
117) Naphthalen	12.371	128	1198212	64.57	ug/L	98
118) 1,2,3-Tclbenzene	12.505	180	487258	61.56	ug/L	98
119) 2,4,5-Trichlorotoluene	12.926	159	3554	0.72	ug/L	97
120) 2,3,6-Trichlorotoluene	12.987	159	3946	0.79	ug/L	85

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

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\092414\A2326.D Vial: 27
Acq On : 24 Sep 2014 10:47 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Sep 25 08:31:06 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



TIC: A2326.D\data.ms

(58) 1,4-Dioxane

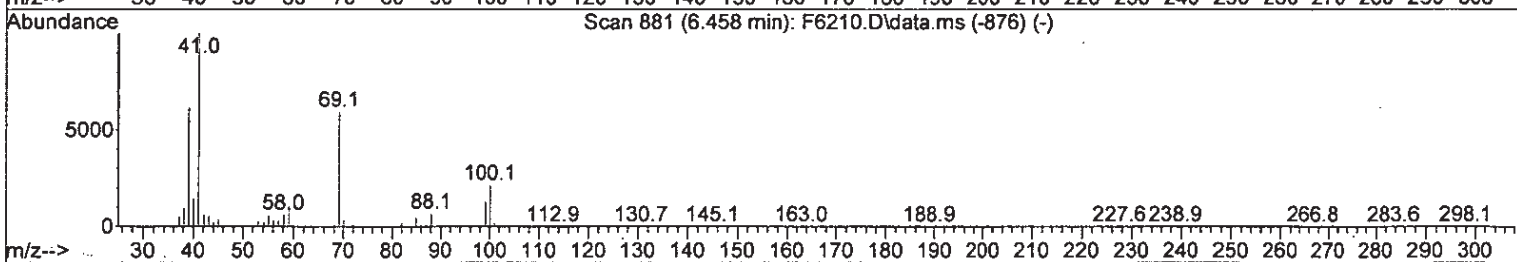
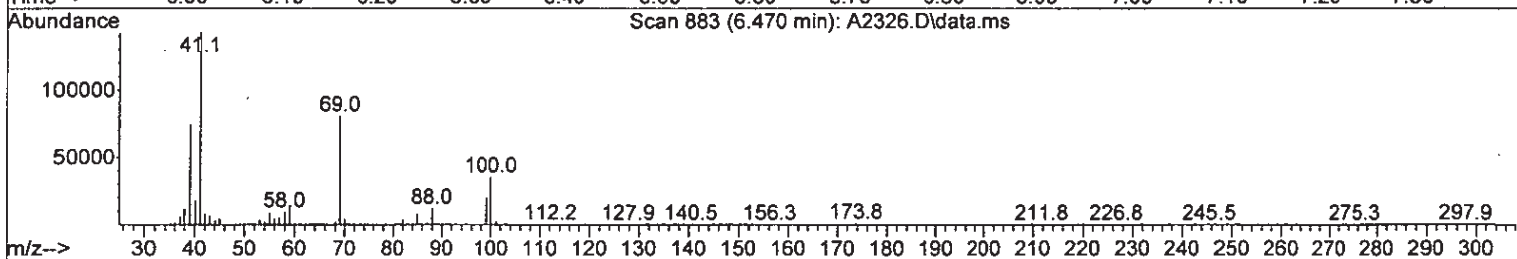
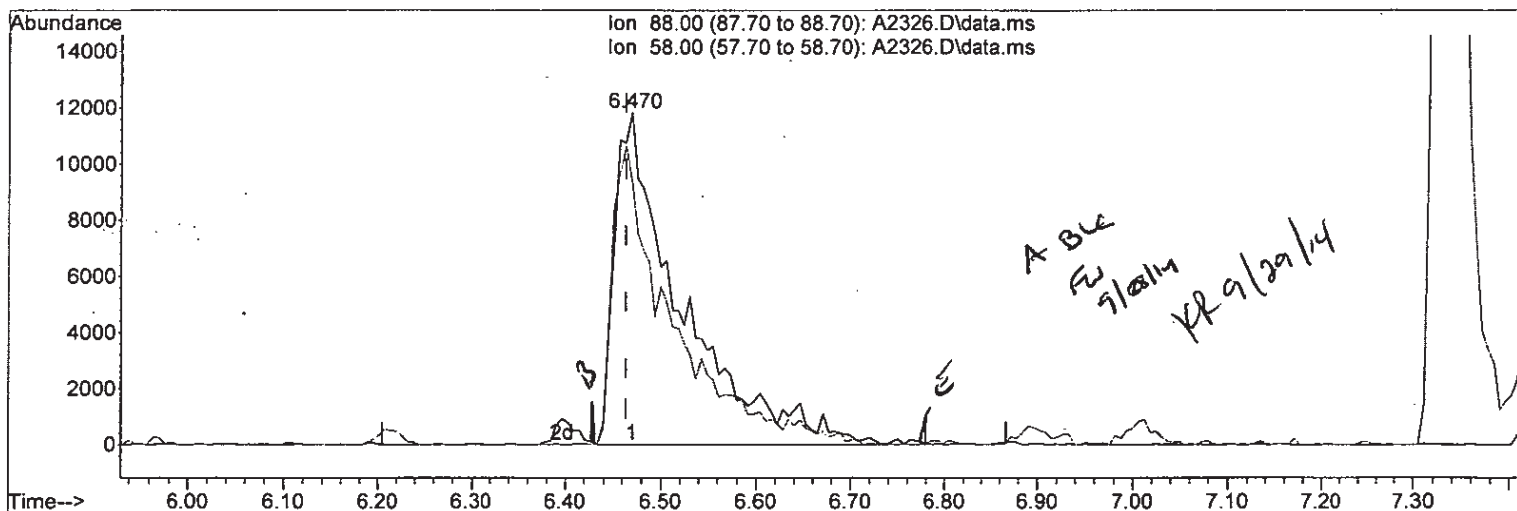
6.470min (+0.006) 998.74 ug/L

response 53063

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	79.01
0.00	0.00	0.00
0.00	0.00	0.00

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\092414\A2326.D Vial: 27
Acq On : 24 Sep 2014 10:47 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Sep 25 08:31:06 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



TIC: A2326.D\data.ms

(58) 1,4-Dioxane

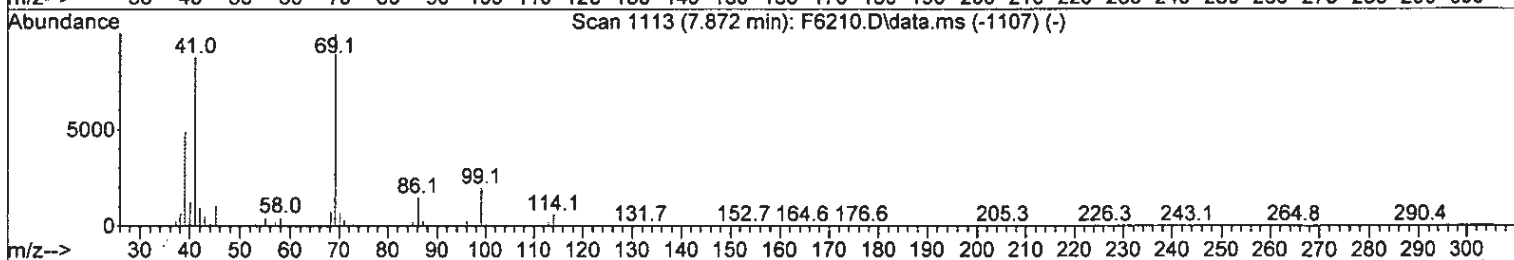
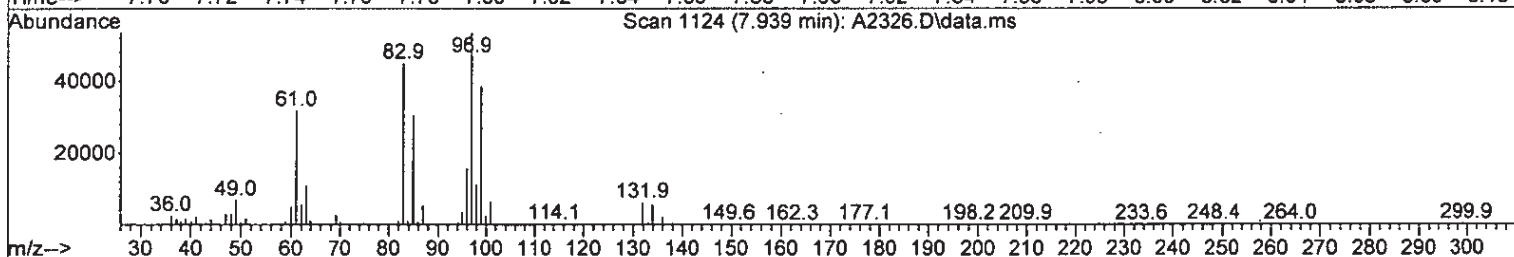
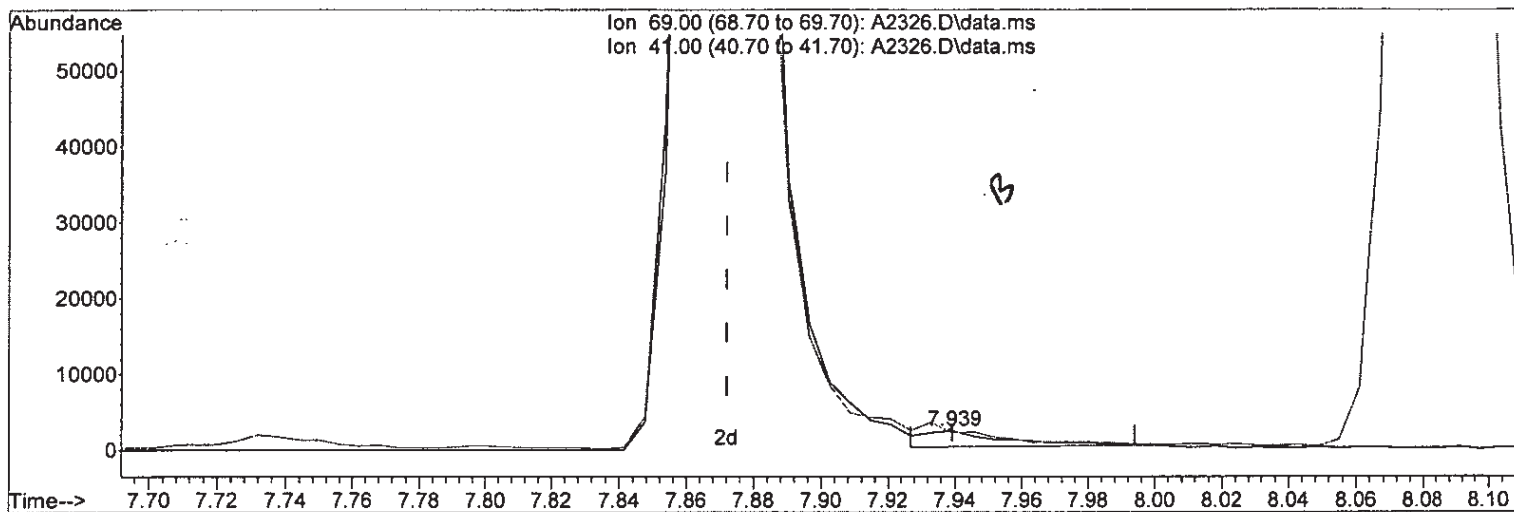
6.470min (+0.006) 1074.57 ug/L m

response 57092

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	79.01
0.00	0.00	0.00
0.00	0.00	0.00

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\092414\A2326.D Vial: 27
Acq On : 24 Sep 2014 10:47 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Sep 25 08:31:06 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



TIC: A2326.D\data.ms

(68) Ethyl Methacrylate

7.939min (+0.067) 0.48 ug/L

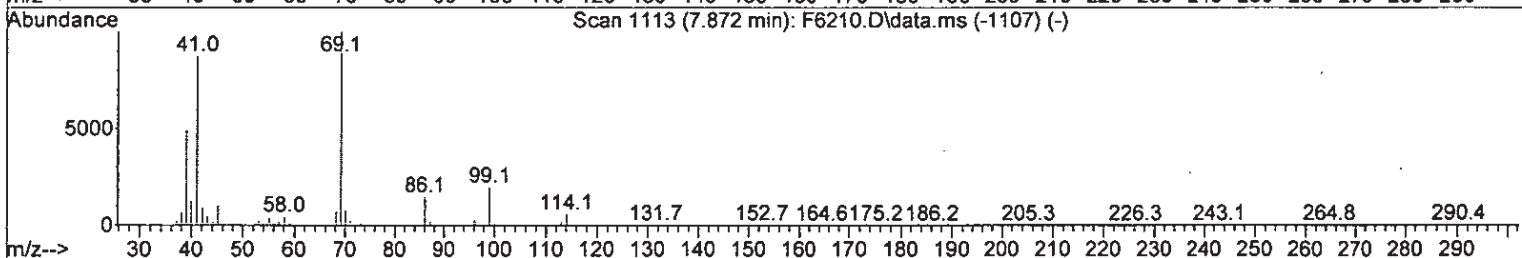
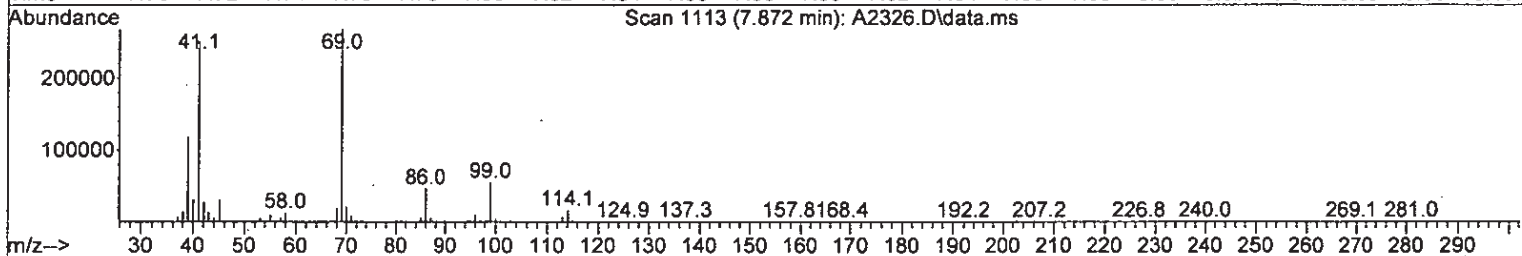
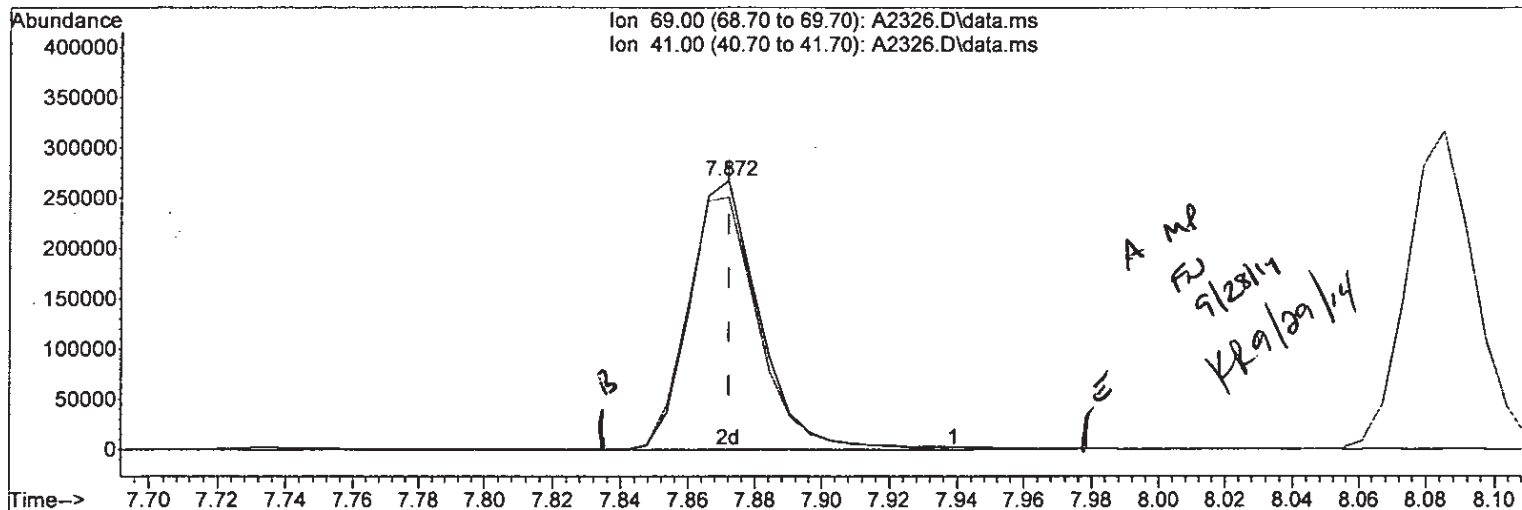
response 3336

Ion	Exp%	Act%
69.00	100	100
41.00	71.50	87.63
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : CCV
 Data File : I:\ACQUDATA\msvoa10\data\092414\A2326.D Vial: 27
 Acq On : 24 Sep 2014 10:47 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Sep 25 08:31:06 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration



TIC: A2326.D\data.ms

(68) Ethyl Methacrylate

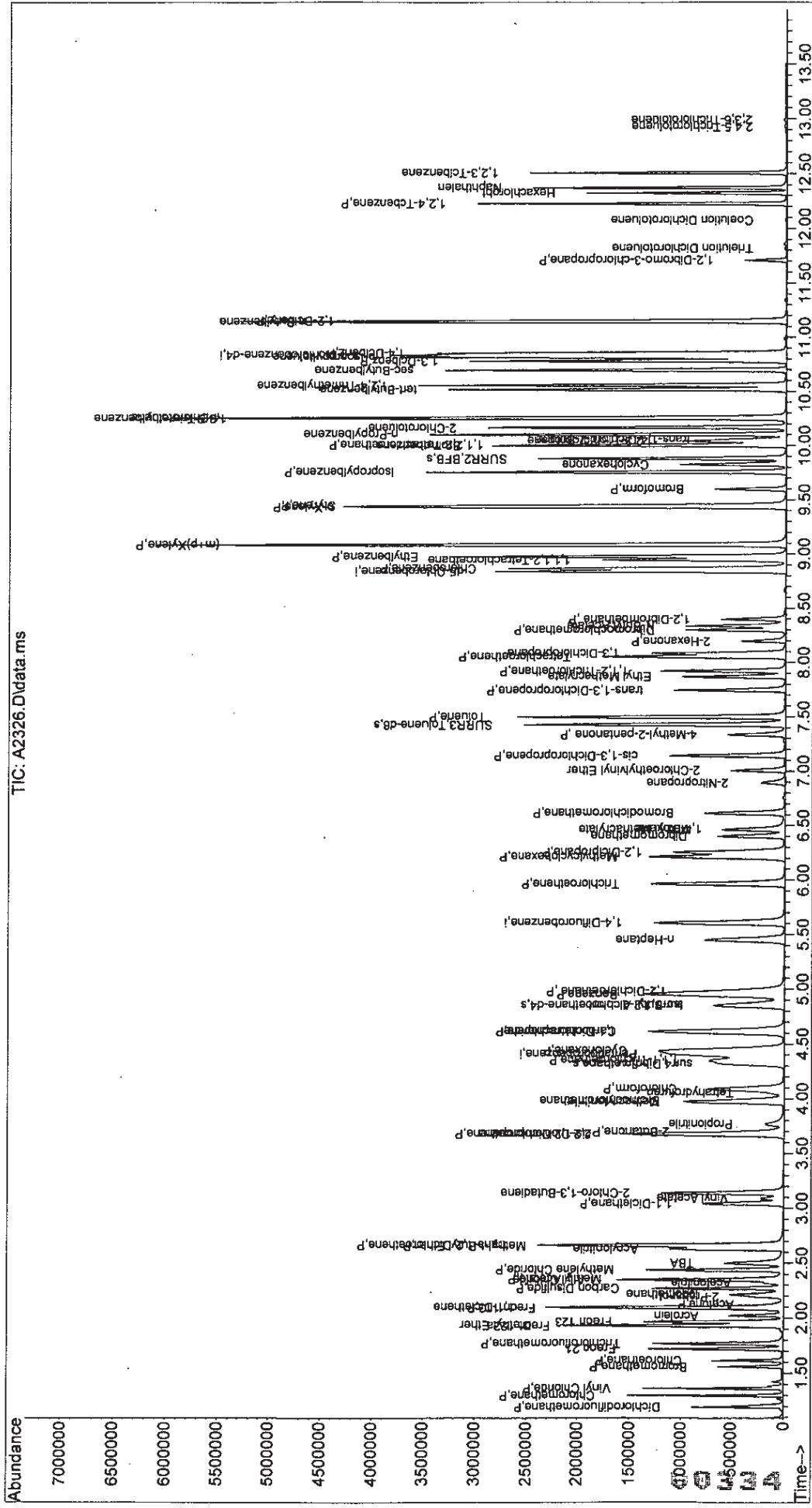
7.872min (-0.000) 55.16 ug/L m

response 384081

Ion	Exp%	Act%
69.00	100	100
41.00	71.50	93.66#
0.00	0.00	0.00
0.00	0.00	0.00

```
Sample      : CCV
Data File   : I:\ACQUDATA\msvoa10\data\092414\A2326.D
Acq On      : 24 Sep 2014 10:47 pm
Operator     : F.NAEGLER
InstName     : MSVOA10
Misc         :
Vial: 27
```

Quant Time: Sep 25 09:13:00 2014
Quant Method : I:\ACQDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003

Service Request: R1407422
Date Analyzed: 9/29/14

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Calibration Date: 7/21/14
Calibration ID: RC1400062
Analysis Lot: 413648
Units: µg/L

File ID: I:\ACQUDATA\msvoa10\data\092914\A2420.D\

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,1,1-Trichloroethane (TCA)	50.0	46.9	0.6850	0.6420	-6.3	NA	± 20 %	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	48.4	0.9501	0.9194	-3.2	NA	± 20 %	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	41.4	0.3485	0.2883	-17.3	NA	± 20 %	Average RF
Tetrachloroethene (PCE)	50.0	45.4	0.2891	0.2623	-9.3	NA	± 20 %	Average RF
Trichloroethene (TCE)	50.0	45.7	0.3407	0.3114	-8.6	NA	± 20 %	Average RF
Vinyl Chloride	50.0	54.6	0.6553	0.7152	9.1	NA	± 20 %	Average RF
cis-1,2-Dichloroethene	50.0	50.8	0.4913	0.4989	1.5	NA	± 20 %	Average RF
trans-1,2-Dichloroethene	50.0	44.5	0.4493	0.4001	-10.9	NA	± 20 %	Average RF
4-Bromofluorobenzene	50.0	49.3	0.4419	0.4356	-1.4	NA	± 20 %	Average RF
Dibromofluoromethane	50.0	51.3	0.3188	0.3272	2.6	NA	± 20 %	Average RF
Toluene-d8	50.0	44.8	1.123	1.005	-10.5	NA	± 20 %	Average RF

Sample : CCV
 Data File : I:\ACQUDATA\msvoa10\data\092914\A2420.D Vial: 2
 Acq On : 29 Sep 2014 11:50 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Sep 29 12:06:25 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

FW
9/29/14

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)
1 i	Pentafluorobenzene	1.0000	1.0000	0.0	129	0.00
2 P	Dichlorodifluoromethane	0.5381	0.5388	-0.1	121	0.00
3 P	Chloromethane	0.7175	0.8130	-13.3	142	0.00
4 P	Vinyl Chloride	0.6553	0.7152	-9.1	140	0.00
5 P	Bromomethane	0.1903	0.2316	-16.8	146	0.00
6 P	Chloroethane	0.3320	0.3029	8.8	117	0.00
7	Freon 21	0.9222	0.8391	9.0	115	0.00
8 P	Trichlorofluoromethane	0.7423	0.6511	12.3	114	0.00
9	Diethyl Ether	0.3910	0.3285	16.0	113	0.00
10	Freon 123a	0.5807	0.5193	10.6	110	0.00
11	Freon 123	0.6180	0.5100	17.5	106	0.00
12	Acrolein	0.0612	0.0560	8.5	119	0.00
13	1,1-Dichlethene	0.3485	0.2883	17.3	112	0.00
14 P	Freon 113	0.4403	0.3651	17.1	111	0.00
15 P	Acetone	0.1523	0.1299	14.7	122	0.00
16	2-Propanol	0.0215	0.0158	26.5#	91	0.00
17	Iodomethane	0.3548	0.3455	10.9	139	0.00
18 P	Carbon Disulfide	1.4741	1.3467	8.6	119	0.00
19	Acetonitrile	0.0163	0.0173	-6.1	140	0.00
20	Allyl Chloride	0.2191	0.2011	8.2	112	0.00
21 P	Methyl Acetate	0.3020	0.2681	11.2	107	0.00
22 P	Methylene Chloride	0.4573	0.4247	7.1	126	0.00
23	TBA	0.0259	0.0218	15.8	105	0.00
24	Acrylonitrile	0.1399	0.1336	4.5	122	0.00
25 P	Methyl-t-Butyl Ether	0.9984	0.8931	10.5	114	0.00
26 P	trans-1,2-Dichloroethene	0.4493	0.4001	11.0	117	0.00
27	Halothane	0.0000	0.0000	0.0	0#	-3.03#
28 P	1,1-Dichlethane	0.9501	0.9194	3.2	126	0.00
29	Vinyl Acetate	0.0559	0.0547	2.1	120	0.00
30	DIPE	2.1811	2.2089	-1.3	125	0.00
31	2-Chloro-1,3-Butadiene	0.9344	1.0094	-8.0	134	0.00
32	ETBE	1.4626	1.3761	5.9	119	0.00
33	2,2-Dichloropropane	0.5885	0.6042	-2.7	130	0.00
34 P	cis-1,2-Dichloroethene	0.4913	0.4989	-1.5	132	0.00
35 P	2-Butanone	0.2007	0.2027	-1.0	119	0.00
36	Propionitrile	0.0412	0.0465	3.9	123	0.00
37	Bromochloromethane	0.3021	0.2894	4.2	128	0.00
38	Methacrylonitrile	0.1086	0.1124	-3.5	122	0.00
39	Tetrahydrofuran	0.1111	0.1106	0.5	125	0.00
40 P	Chloroform	0.8279	0.8328	-0.6	137	0.00
41 P	1,1,1-Trichloroethane	0.6850	0.6420	6.3	124	0.00
42	TAME	0.9868	0.9163	7.1	114	0.00
43 i	1,4-Difluorobenzene	1.0000	1.0000	0.0	130	0.00
44 P	Cyclohexane	0.4527	0.4442	1.9	124	0.00
45 s	surr4, Dibrflmethane	0.3188	0.3272	-2.6	131	0.00
46 P	Carbontetrachloride	0.1274	0.1222	4.1	128	0.00
47	1,1-Dichloropropene	0.3911	0.3825	2.2	130	0.00

NT

Sample : CCV
 Data File : I:\ACQUDATA\msvoa10\data\092914\A2420.D Vial: 2
 Acq On : 29 Sep 2014 11:50 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Sep 29 12:06:25 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial 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)
48 s	surrl,1,2-dichloroethane-d4	0.3365	0.3318	1.4	126	0.00
49 P	Benzene	1.2222	1.2416	-1.6	132	0.00
50 P	1,2-Dichloroethane	0.4240	0.4360	-2.8	135	0.00
51	Iso-Butyl Alcohol	0.0099	0.0091	8.1	114	0.00
52	n-Heptane	0.4609	0.5279	-14.5	142	0.00
53	1-Butanol	0.0040	0.0040	4.7	0.0 119	0.00
54 P	Trichloroethene	0.3407	0.3114	8.6	122	0.00
55 P	Methylcyclohexane	0.4697	0.4585	2.4	120	0.00
56 P	1,2-Diclp propane	0.3562	0.3364	5.6	123	0.00
57	Dibromomethane	0.1717	0.1417	17.5	111	0.00
58	1,4-Dioxane	0.0020	0.0015	25.0#	100	-0.01
59	Methyl Methacrylate	0.1265	0.1078	14.8	104	0.00
60 P	Bromodichloromethane	0.3900	0.3596	7.8	120	0.00
61	2-Nitropropane	0.0492	0.0462	6.1	129	0.00
62	2-Chloroethylvinyl Ether	0.1490	0.1110	25.5#	87	0.00
63 P	cis-1,3-Dichloropropene	0.4120	0.4027	2.3	119	0.00
64 P	4-Methyl-2-pentanone	0.2664	0.2169	18.6	100	0.00
65 s	SURR3,Toluene-d8	1.1229	1.0051	10.5	113	0.00
66 P	Toluene	1.2807	1.0889	15.0	111	0.00
67 P	trans-1,3-Dichloropropene	0.3260	0.3175	2.6	118	0.00
68	Ethyl Methacrylate	0.2657	0.2351	11.5	110	0.00
69 P	1,1,2-Trichloroethane	0.2259	0.1951	13.6	114	0.00
70 s	SURR2,BFB	0.4419	0.4356	1.4	126	0.00
71 i	d5-Chlorobenzene	1.0000	1.0000	0.0	124	0.00
72 P	Tetrachloroethene	0.2891	0.2623	9.3	114	0.00
73 P	2-Hexanone	0.2113	0.2053	2.8	112	0.00
74	1,3-Dichloropropane	0.4284	0.4105	4.2	119	0.00
75 P	Dibromochloromethane	0.3054	0.3270	-7.1	127	0.00
76	N-Butyl Acetate	0.4703	0.4635	1.4	109	0.00
77 P	1,2-Dibromoethane	0.2429	0.2496	-2.8	124	0.00
78	3-Chlorobenzotrifluoride	0.5312	0.5747	-8.2	128	0.00
79 P	Chlorobenzene	0.9640	0.9566	0.8	125	0.00
80	4-Chlorobenzotrifluoride	0.4892	0.5235	-7.0	128	0.00
81	1,1,1,2-Tetrachloroethane	0.3374	0.3507	-3.9	126	0.00
82 P	Ethylbenzene	0.4804	0.4887	-1.7	125	0.00
83 P	(m+p)Xylene	0.5924	0.6068	-2.4	125	0.00
84 P	o-Xylene	0.5792	0.6100	-5.3	125	0.00
85 P	Styrene	0.9623	1.0531	-9.4	128	0.00
86 P	Bromoform	0.1754	0.1938	-10.5	134	0.00
87	2-Chlorobenzotrifluoride	0.5264	0.5828	-10.7	132	0.00
88 P	Isopropylbenzene	1.4567	1.4883	-2.2	122	0.00
89	Cyclohexanone	0.0460	0.0475	-3.3	117	0.00
90	trans-1,4-Dichloro-2-Butene	0.0721	0.0675	9.2	6.4 103	0.00
91 i	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	127	0.00
92 P	1,1,2,2-Tetrachloroethane	0.5487	0.5312	3.2	128	0.00
93	Bromobenzene	0.7548	0.7416	1.7	129	0.00

Sample : CCV
 Data File : I:\ACQUDATA\msvoa10\data\092914\A2420.D Vial: 2
 Acq On : 29 Sep 2014 11:50 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Sep 29 12:06:25 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial 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)
94	1,2,3-Trichloropropane	0.1534	0.1279	16.6	115	0.00
95	n-Propylbenzene	3.1202	3.2742	-4.9	127	0.00
96	2-Chlorotoluene	1.9252	1.9930	-3.5	131	0.00
97	3-Chlorotoluene	2.0456	2.2275	-8.9	135	0.00
98	4-Chlorotoluene	2.3159	2.3807	-2.8	133	0.00
99	1,3,5-Trimethylbenzene	2.2689	2.3143	-2.0	127	0.00
100	tert-Butylbenzene	1.9017	1.8859	0.8	123	0.00
101	1,2,4-Trimethylbenzene	2.2937	2.3943	-4.4	129	0.00
102	3,4-Dichlorobenzotrifluorid	0.6845	0.7891	-15.3	143	0.00
103	sec-Butylbenzene	2.6661	2.8189	-5.7	129	0.00
104	p-Isopropyltoluene	2.3128	2.3982	-3.7	125	0.00
105 P	1,3-Dclbenz	1.4440	1.4438	0.0	127	0.00
106 P	1,4-Dclbenz	1.4958	1.4512	3.0	125	0.00
107	2,4-Dichlorobenzotrifluorid	0.6099	0.7241	-18.7	144	0.00
108	2,5-Dichlorobenzotrifluorid	0.7285	0.7994	-9.7	140	0.00
109	n-Butylbenzene	1.9600	2.2430	-14.4	135	0.00
110 P	1,2-Dclbenz	1.3568	1.3088	3.5	124	0.00
111 P	1,2-Dibromo-3-chloropropane	0.0835	0.0813	2.6	115	0.00
112	Trielution Dichlorotoluene	1.1368	1.3278	-16.8	136	0.00
113	1,3,5-Trichlorobenzene	0.9702	1.1050	-13.9	140	0.00
114	Coelution Dichlorotoluene	1.1787	1.3351	-13.3	131	0.00
115 P	1,2,4-Tcbenzene	0.7687	0.7739	-0.7	126	0.00
116	Hexachlorobt	0.3147	0.3592	-14.1	144	0.00
117	Naphthalen	1.3209	1.2014	9.0	106	0.00
118	1,2,3-Tclbenzene	0.5634	0.5319	5.6	113	0.00
119	2,4,5-Trichlorotoluene	0.3514	0.3350	4.7	108	0.00
120	2,3,6-Trichlorotoluene	0.3556	0.3315	6.8	114	-0.01

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\092914\A2420.D Vial: 2
Acq On : 29 Sep 2014 11:50 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

RQ1411994-04

FV
9/29/14

Quant Time: Sep 29 12:06:25 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.403	168	1224634	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1817382	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1577455	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	894324	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.318	113	594642	51.31	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	102.62%
48) surr1,1,2-dichloroetha...	4.848	65	603098	49.31	ug/L	0.00
Spiked Amount	50.000	Range	78 - 122	Recovery	=	98.62%
65) SURR3,Toluene-d8	7.427	98	1826646	44.75	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	89.50%
70) SURR2,BFB	9.878	95	791705	49.29	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	98.58%
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.184	85	659775	50.06	ug/L	94
3) Chloromethane	1.294	50	995681	56.66	ug/L	100
4) Vinyl Chloride	1.355	62	875869	54.57	ug/L	99
5) Bromomethane	1.556	94	283628	58.40	ug/L	99
6) Chloroethane	1.611	64	370992	45.62	ug/L	96
7) Freon 21	1.715	67	1027563	45.49	ug/L	98
8) Trichlorofluoromethane	1.764	101	797338	43.85	ug/L	99
9) Diethyl Ether	1.934	59	402339	42.02	ug/L #	78
10) Freon 123a	1.928	67	636005	44.72	ug/L	96
11) Freon 123	1.965	83	624565	41.26	ug/L	99
12) Acrolein	2.020	56	342601	228.75	ug/L	92
13) 1,1-Dicethene	2.099	96	353108	41.37	ug/L #	78
14) Freon 113	2.087	101	447167	41.47	ug/L	97
15) Acetone	2.117	43	159089	42.66	ug/L	98
16) 2-Propanol	2.190	45	386139	732.31	ug/L	97
17) Iodomethane	2.209	142	423121	44.55	ug/L	96
18) Carbon Disulfide	2.270	76	1649217	45.68	ug/L	99
19) Acetonitrile	2.318	40	105743	264.54	ug/L	92
20) Allyl Chloride	2.349	76	246311	45.91	ug/L #	40
21) Methyl Acetate	2.349	43	328323	44.38	ug/L	86
22) Methylene Chloride	2.434	84	520061	46.43	ug/L #	66
23) TBA	2.495	59	533279	840.10	ug/L	72
24) Acrylonitrile	2.623	53	817881	238.67	ug/L	97
25) Methyl-t-Butyl Ether	2.660	73	1093777	44.73	ug/L	89
26) trans-1,2-Dichloroethene	2.666	96	489978	44.53	ug/L #	81
28) 1,1-Dicethane	3.044	63	1125880	48.38	ug/L	98
29) Vinyl Acetate	3.087	86	67008	48.95	ug/L #	1
30) DIPE	3.105	45	2705058	50.64	ug/L	93
31) 2-Chloro-1,3-Butadiene	3.141	53	1236134	54.01	ug/L	83
32) ETBE	3.495	59	1685182	47.04	ug/L	91
33) 2,2-Dichloropropane	3.678	77	739908	51.33	ug/L	97
34) cis-1,2-Dichloroethene	3.678	96	610949	50.77	ug/L #	83
35) 2-Butanone	3.696	43	248178	50.49	ug/L	88
36) Propionitrile	3.763	54	284808	240.19	ug/L	91
37) Bromochloromethane	3.977	130	354353	47.89	ug/L #	60

Sample : CCV
 Data File : I:\ACQUDATA\msvoa10\data\092914\A2420.D Vial: 2
 Acq On : 29 Sep 2014 11:50 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Sep 29 12:06:25 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Methacrylonitrile	3.964	67	137591	51.74	ug/L #	30
39) Tetrahydrofuran	4.056	42	135463	49.77	ug/L	72
40) Chloroform	4.086	83	1019901	50.30	ug/L	91
41) 1,1,1-Trichloroethane	4.355	97	786244	46.87	ug/L	95
42) TAME	5.178	73	1122102	46.43	ug/L	87
44) Cyclohexane	4.440	41	807257	49.06	ug/L	86
46) Carbontetrachloride	4.611	121	222171	47.99	ug/L	99
47) 1,1-Dichloropropene	4.617	75	695133	48.90	ug/L	95
49) Benzene	4.952	78	2256463	50.79	ug/L	91
50) 1,2-Dichloroethane	4.982	62	792352	51.41	ug/L	91
51) Iso-Butyl Alcohol	4.848	43	329095	911.63	ug/L	99
52) n-Heptane	5.452	43	959331	57.26	ug/L #	77
53) 1-Butanol	5.946	56	366265	2381.87	ug/L	89
54) Trichloroethene	5.964	130	565913	45.69	ug/L	97
55) Methylcyclohexane	6.214	55	833219	48.80	ug/L #	77
56) 1,2-Dicloropropane	6.257	63	611329	47.21	ug/L	99
57) Dibromomethane	6.397	93	257448	41.24	ug/L	98
58) 1,4-Dioxane	6.452	88	55153m	748.53	ug/L	
59) Methyl Methacrylate	6.464	69	195846	42.58	ug/L #	59
60) Bromodichloromethane	6.616	83	653496	46.10	ug/L	97
61) 2-Nitropropane	6.891	41	167858	93.88	ug/L	93
62) 2-Chloroethylvinyl Ether	7.000	63	201643	37.24	ug/L	91
63) cis-1,3-Dichloropropene	7.141	75	731872	48.88	ug/L	98
64) 4-Methyl-2-pentanone	7.336	43	394123	40.70	ug/L	91
66) Toluene	7.500	91	1978906	42.51	ug/L	98
67) trans-1,3-Dichloropropene	7.744	75	576950	48.69	ug/L	99
68) Ethyl Methacrylate	7.872	69	427343	44.25	ug/L #	62
69) 1,1,2-Trichloroethane	7.921	97	354661	43.19	ug/L	95
72) Tetrachloroethene	8.055	164	413809	45.36	ug/L	99
73) 2-Hexanone	8.195	43	323828	48.57	ug/L	93
74) 1,3-Dichloropropene	8.086	76	647565m	47.91	ug/L	
75) Dibromochloromethane	8.299	129	515855	53.54	ug/L	99
76) N-Butyl Acetate	8.335	43	731100	49.28	ug/L	89
77) 1,2-Dibromoethane	8.396	107	393776	51.38	ug/L	99
78) 3-Chlorobenzotrifluoride	8.872	180	906563	54.10	ug/L	97
79) Chlorobenzene	8.866	112	1509022	49.62	ug/L	99
80) 4-Chlorobenzotrifluoride	8.927	180	825734	53.50	ug/L	98
81) 1,1,1,2-Tetrachloroethane	8.945	131	553185	51.97	ug/L	99
82) Ethylbenzene	8.976	106	770824	50.86	ug/L	97
83) (m+p)Xylene	9.085	106	1914541	102.43	ug/L	96
84) o-Xylene	9.433	106	962228	52.66	ug/L	94
85) Styrene	9.445	104	1661246	54.72	ug/L	99
86) Bromoform	9.597	173	305786	55.26	ug/L	100
87) 2-Chlorobenzotrifluoride	9.665	180	919299	55.35	ug/L	90
88) Isopropylbenzene	9.756	105	2347690	51.08	ug/L	99
89) Cyclohexanone	9.823	55	1497571	1031.31	ug/L	96
90) trans-1,4-Dichloro-2-B...	10.055	53	106523	45.40	ug/L	83
92) 1,1,2,2-Tetrachloroethane	10.006	83	475040	48.41	ug/L	99
93) Bromobenzene	10.000	156	663200	49.12	ug/L	94
94) 1,2,3-Trichloropropene	10.042	110	114345	41.68	ug/L	97
95) n-Propylbenzene	10.103	91	2928178	52.47	ug/L	100
96) 2-Chlorotoluene	10.164	91	1782378	51.76	ug/L	99

Sample : CCV
 Data File : I:\ACQUDATA\msvoa10\data\092914\A2420.D Vial: 2
 Acq On : 29 Sep 2014 11:50 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

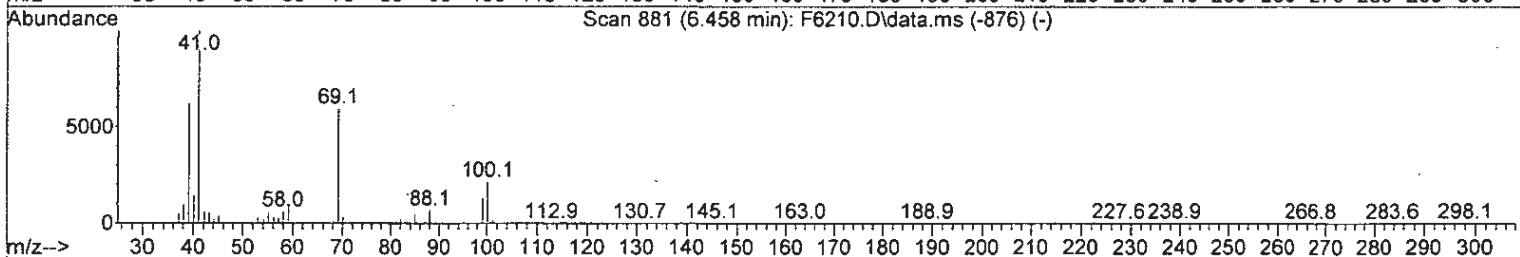
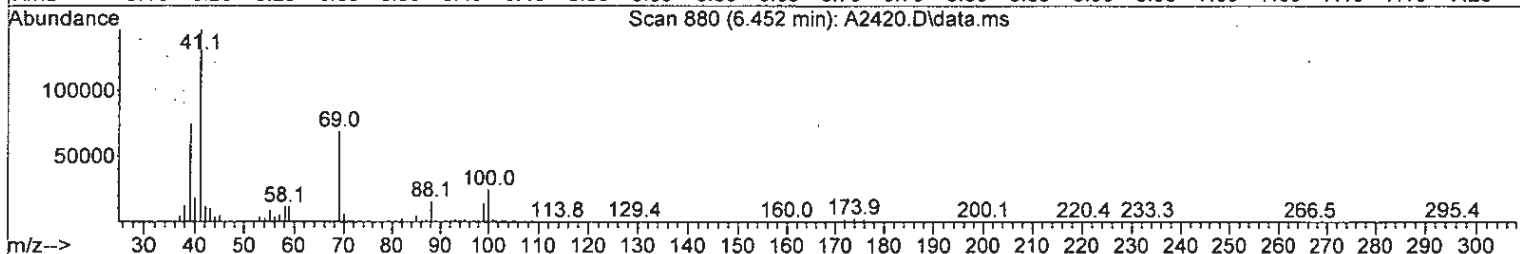
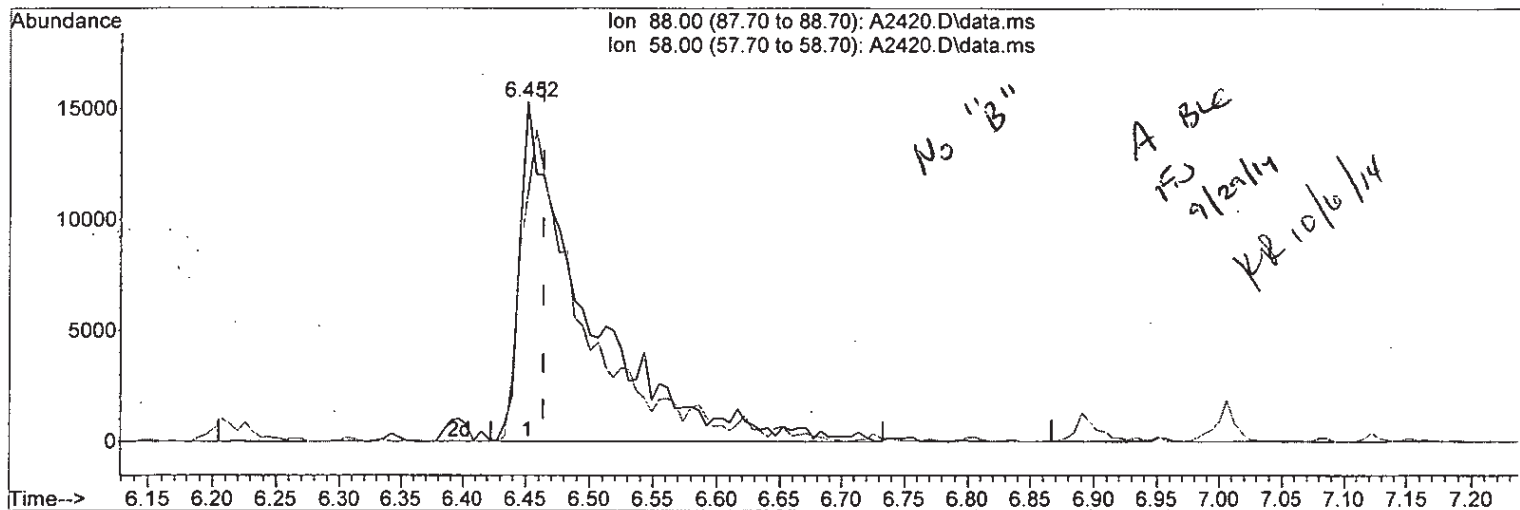
Quant Time: Sep 29 12:06:25 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97) 3-Chlorotoluene	10.219	91	1992091	54.44	ug/L	97
98) 4-Chlorotoluene	10.256	91	2129128	51.40	ug/L	98
99) 1,3,5-Trimethylbenzene	10.250	105	2069732	51.00	ug/L	100
100) tert-Butylbenzene	10.518	119	1686620	49.58	ug/L	100
101) 1,2,4-Trimethylbenzene	10.561	105	2141282	52.19	ug/L	96
102) 3,4-Dichlorobenzotrifl...	10.616	214	705684	57.64	ug/L	99
103) sec-Butylbenzene	10.695	105	2521039	52.87	ug/L	99
104) p-Isopropyltoluene	10.817	119	2144767	51.85	ug/L	97
105) 1,3-Dclbenz	10.780	146	1291266	49.99	ug/L	99
106) 1,4-Dclbenz	10.853	146	1297858	48.51	ug/L	99
107) 2,4-Dichlorobenzotrifl...	10.902	214	647544	59.36	ug/L	96
108) 2,5-Dichlorobenzotrifl...	10.939	214	714889	54.86	ug/L	98
109) n-Butylbenzene	11.140	91	2005973	57.22	ug/L	99
110) 1,2-Dclbenz	11.152	146	1170524	48.23	ug/L	100
111) 1,2-Dibromo-3-chloropr...	11.707	157	72736	48.68	ug/L	94
112) Trielution Dichlorotol...	11.804	125	3562458	175.20	ug/L	98
113) 1,3,5-Trichlorobenzene	11.847	180	988271	56.95	ug/L	96
114) Coelution Dichlorotoluene	12.066	125	2388020	113.27	ug/L	97
115) 1,2,4-Tcbenzene	12.231	180	692102	50.34	ug/L	94
116) Hexachlorobt	12.329	225	321230	57.07	ug/L	99
117) Naphthalen	12.377	128	1074476	45.48	ug/L	97
118) 1,2,3-Tclbenzene	12.512	180	475698	47.20	ug/L	99
119) 2,4,5-Trichlorotoluene	12.932	159	299561	47.66	ug/L	96
120) 2,3,6-Trichlorotoluene	12.993	159	296507	46.61	ug/L	98

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

Sample : CCV
 Data File : I:\ACQUDATA\msvoa10\data\092914\A2420.D Vial: 2
 Acq On : 29 Sep 2014 11:50 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Sep 29 12:04:02 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration



TIC: A2420.D\data.ms

(58) 1,4-Dioxane

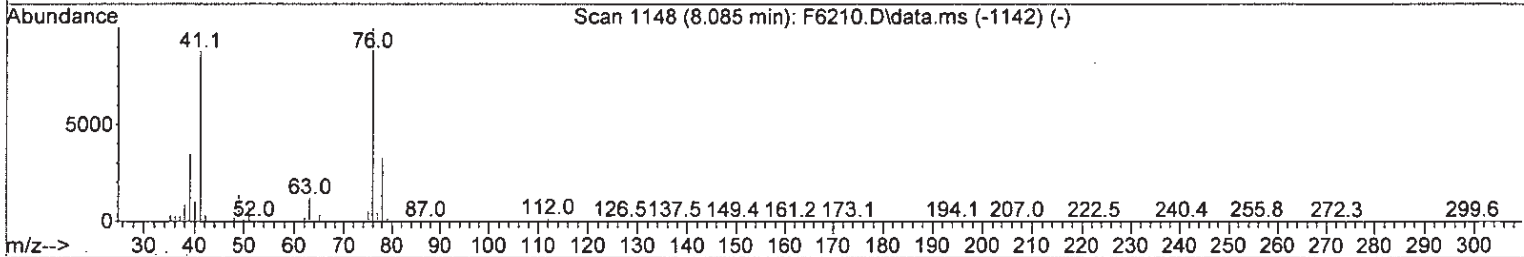
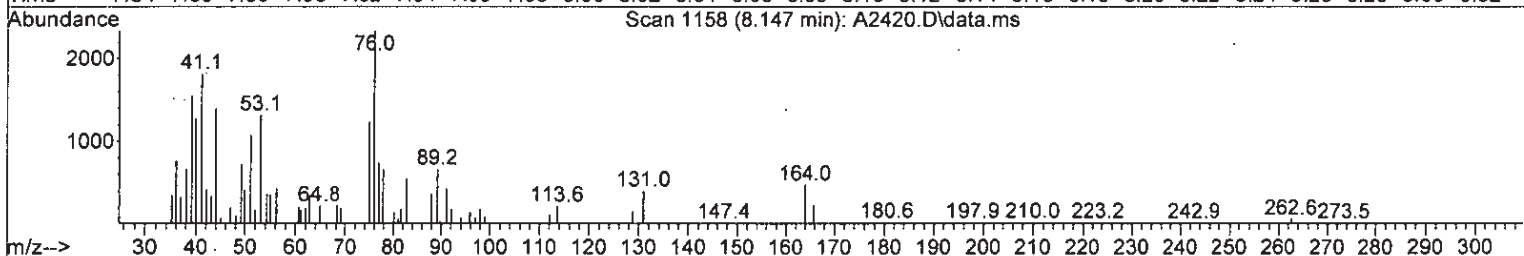
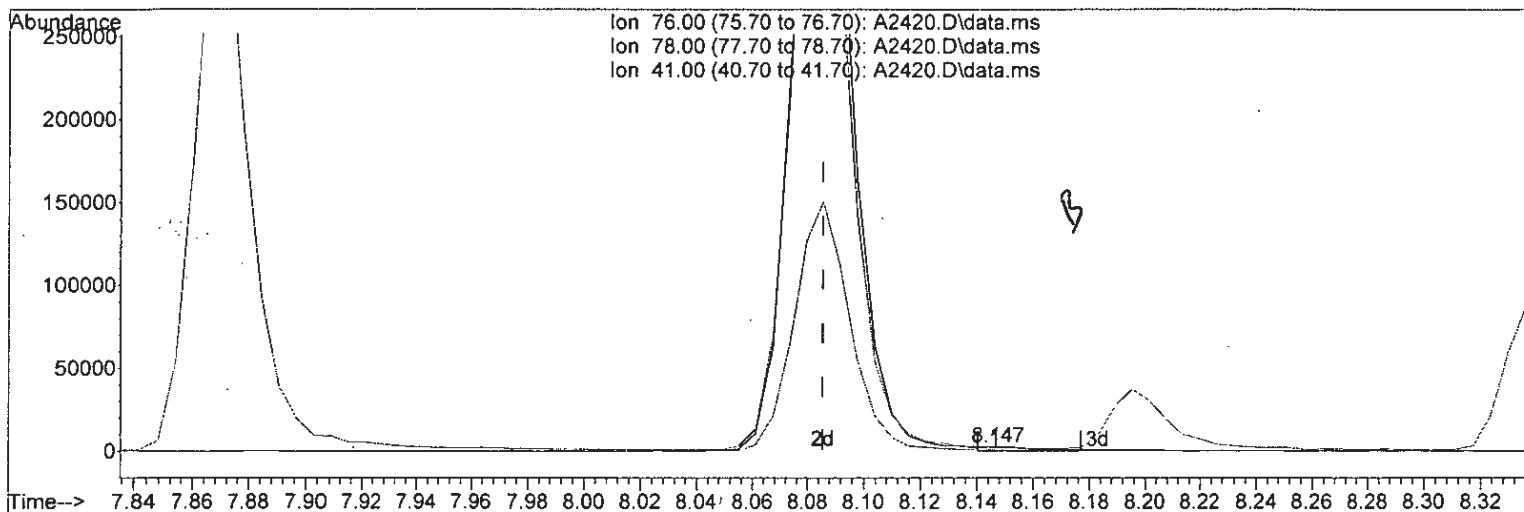
6.452min (-0.012) 748.53 ug/L m

response 55153

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	73.10
0.00	0.00	0.00
0.00	0.00	0.00

Sample : CCV
 Data File : I:\ACQUDATA\msvoa10\data\092914\A2420.D Vial: 2
 Acq On : 29 Sep 2014 11:50 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Sep 29 12:04:02 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration



TIC: A2420.D\data.ms

(74) 1,3-Dichloropropane

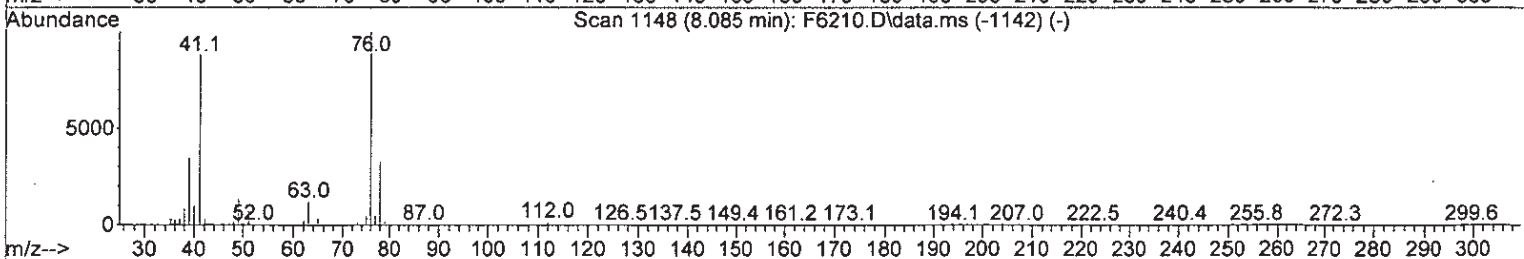
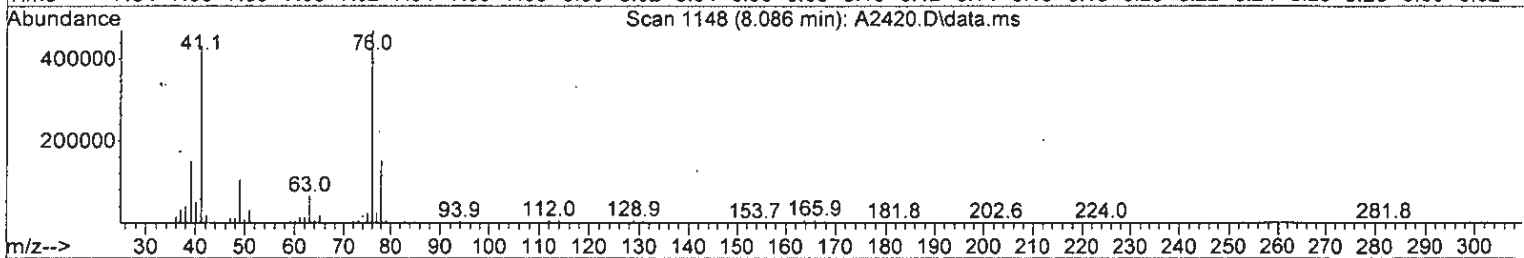
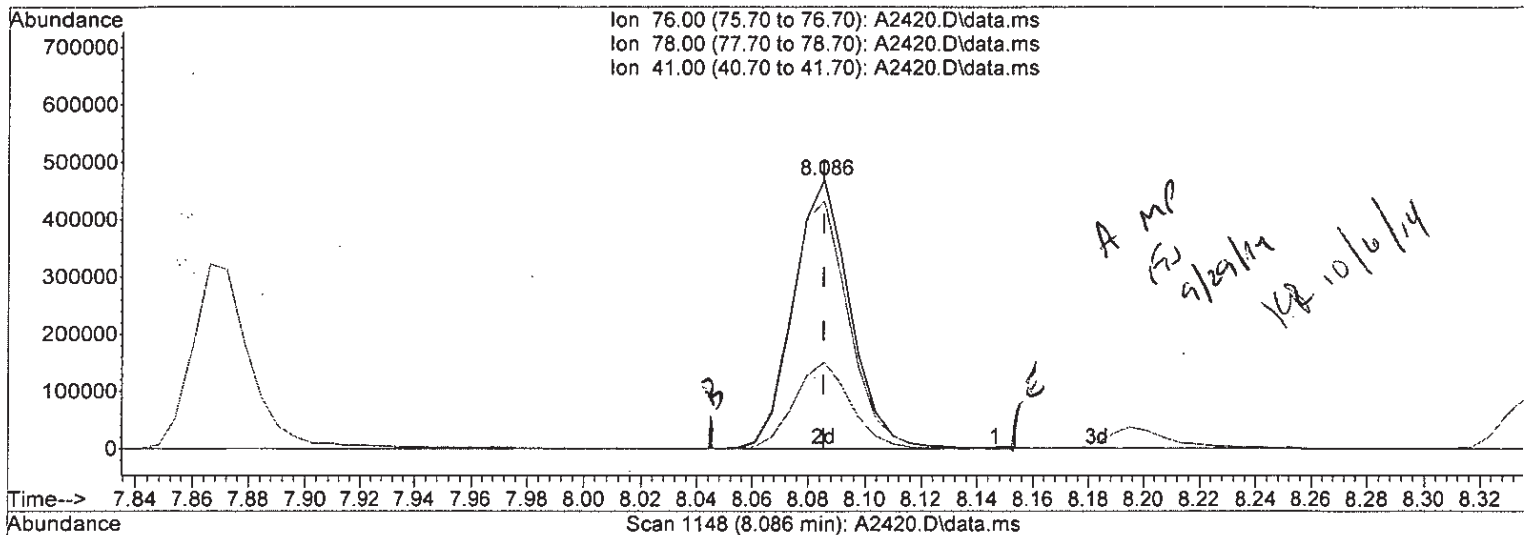
8.147min (+0.061) 0.20 ug/L

response 2691

Ion	Exp%	Act%
76.00	100	100
78.00	31.70	28.21
41.00	66.30	77.67
0.00	0.00	0.00

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\092914\A2420.D Vial: 2
Acq On : 29 Sep 2014 11:50 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Sep 29 12:04:02 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



TIC: A2420.D\data.ms

(74) 1,3-Dichloropropane

8.086min (+0.000) 47.91 ug/L m

response 647565

Ion	Exp%	Act%
76.00	100	100
78.00	31.70	32.06
41.00	66.30	92.18#
0.00	0.00	0.00

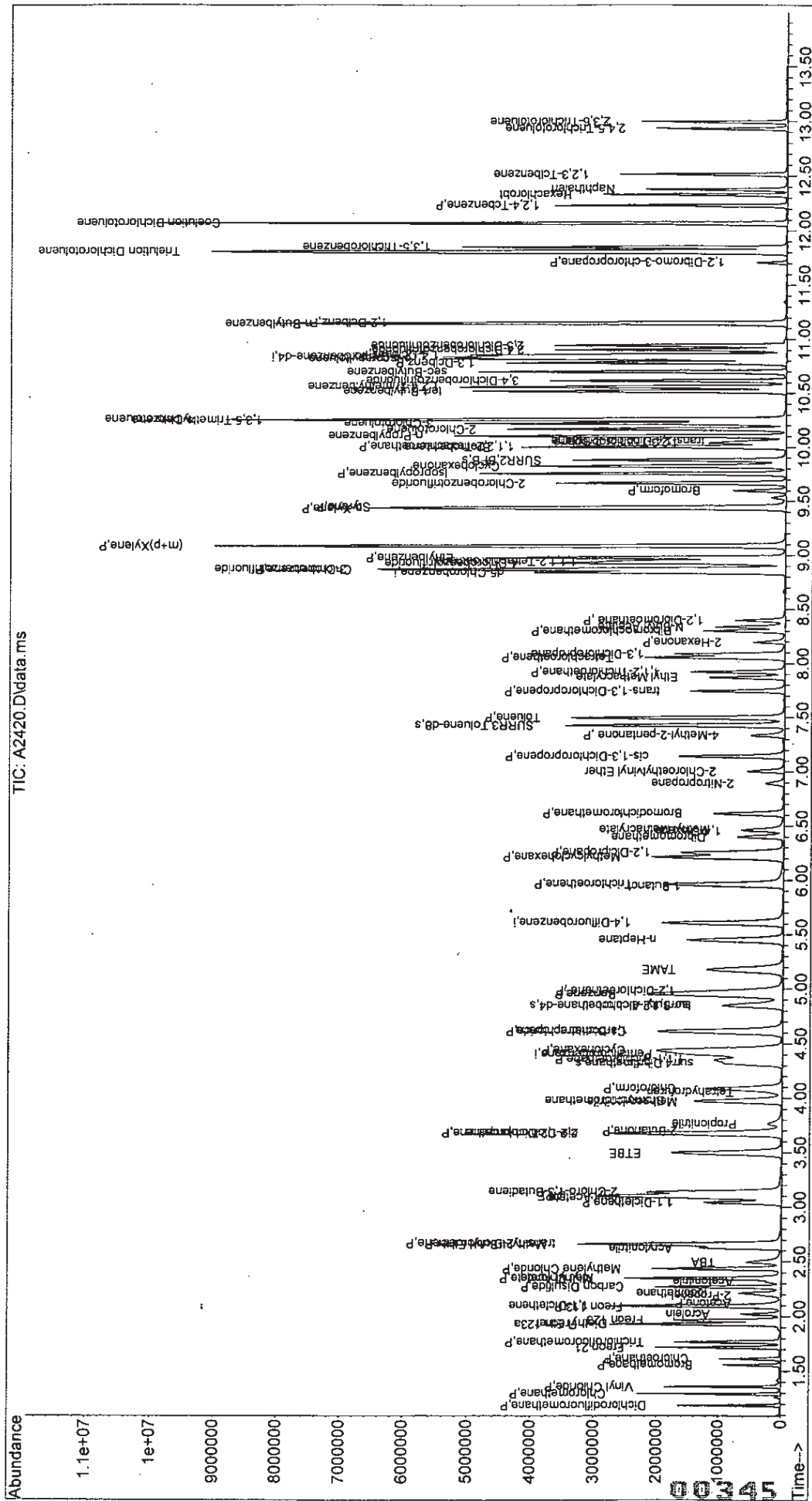
(QT Reviewed)

```

Sample      : CCV
Data File   : I:\ACQUDATA\msvoa10\data\092914\A2420.D
Acq On      : 29 Sep 2014 11:50 am
Operator     : F.NAEGLER
InstName     : MSVOA10
Misc        :
Vial: 2

```

Quant Time: Sep 29 12:06:25 2014
Quant Method : I:\ACQDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003

Service Request: R1407422
Date Analyzed: 9/30/14

**Continuing Calibration Verification Summary
 Volatile Organic Compounds by GC/MS**

Analytical Method: 8260C

Calibration Date: 7/21/14
Calibration ID: RC1400062
Analysis Lot: 413884
Units: µg/L

File ID: I:\ACQUDATA\msvoa10\data\093014\A2473.D\

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,1,1-Trichloroethane (TCA)	50.0	46.9	0.6850	0.6418	-6.3	NA	± 20 %	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	53.0	0.9501	1.007	6.0	NA	± 20 %	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	44.4	0.3485	0.3094	-11.2	NA	± 20 %	Average RF
Tetrachloroethene (PCE)	50.0	53.6	0.2891	0.3100	7.2	NA	± 20 %	Average RF
Trichloroethene (TCE)	50.0	48.9	0.3407	0.3335	-2.1	NA	± 20 %	Average RF
Vinyl Chloride	50.0	55.0	0.6553	0.7205	9.9	NA	± 20 %	Average RF
cis-1,2-Dichloroethene	50.0	54.6	0.4913	0.5363	9.2	NA	± 20 %	Average RF
trans-1,2-Dichloroethene	50.0	53.6	0.4493	0.4818	7.2	NA	± 20 %	Average RF
4-Bromofluorobenzene	50.0	52.9	0.4419	0.4677	5.8	NA	± 20 %	Average RF
Dibromofluoromethane	50.0	49.0	0.3188	0.3122	-2.1	NA	± 20 %	Average RF
Toluene-d8	50.0	52.3	1.123	1.175	4.6	NA	± 20 %	Average RF

Evaluate Continuing Calibration Report

Sample : CCV
 Data File : I:\ACQUDATA\msvoa10\data\093014\A2473.D Vial: 2
 Acq On : 30 Sep 2014 3:44 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Oct 01 09:05:18 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

FU
10/6/14

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)	
1 i	Pentafluorobenzene	1.0000	1.0000	0.0	101	0.00	
2 P	Dichlorodifluoromethane	0.5381	0.5873	-9.1	103	0.00	
3 P	Chloromethane	0.7175	0.8627	-20.2#	118	0.00	①
4 P	Vinyl Chloride	0.6553	0.7205	-9.9	111	0.00	
5 P	Bromomethane	0.1903	0.2120	-8.2	105	0.00	
6 P	Chloroethane	0.3320	0.3208	3.4	98	0.00	
7	Freon 21	0.9222	0.8517	7.6	92	0.00	
8 P	Trichlorofluoromethane	0.7423	0.6876	7.4	94	0.00	
9	Diethyl Ether	0.3910	0.3674	6.0	99	0.00	
10	Freon 123a	0.5807	0.5264	9.4	87	0.00	
11	Freon 123	0.6180	0.5309	14.1	86	0.00	
12	Acrolein	0.0612	0.0644	-5.2	107	0.00	
13	1,1-Dicethene	0.3485	0.3094	11.2	94	0.00	
14 P	Freon 113	0.4403	0.3850	12.6	92	0.00	
15 P	Acetone	0.1523	0.1967	-29.2#	145	0.00	②
16	2-Propanol	0.0215	0.0240	-11.6	109	0.00	
17	Iodomethane	0.3548	0.3515	9.6	111	0.00	
18 P	Carbon Disulfide	1.4741	1.6416	-11.4	114	0.00	
19	Acetonitrile	0.0163	0.0147	9.8	93	0.00	
20	Allyl Chloride	0.2191	0.2484	-13.4	108	0.00	
21 P	Methyl Acetate	0.3020	0.3717	-23.1#	116	0.00	NT
22 P	Methylene Chloride	0.4573	0.5007	-9.5	117	0.00	
23	TBA	0.0259	0.0326	-25.9#	123	0.00	NT
24	Acrylonitrile	0.1399	0.1717	-22.7#	123	0.00	NT
25 P	Methyl-t-Butyl Ether	0.9984	1.1717	-17.4	117	0.00	
26 P	trans-1,2-Dichloroethene	0.4493	0.4818	-7.2	110	0.00	
27	Halothane	0.0000	0.0000	0.0	0#	-3.03#	
28 P	1,1-Dicethane	0.9501	1.0066	-5.9	109	0.00	
29	Vinyl Acetate	0.0559	0.0685	-22.5#	117	0.00	NT
30	DIPE	2.1811	2.4431	-12.0	108	0.00	
31	2-Chloro-1,3-Butadiene	0.9344	1.0696	-14.5	112	0.00	
32	ETBE	1.4626	1.6285	-11.3	111	0.00	
33	2,2-Dichloropropane	0.5885	0.6374	-8.3	107	0.00	
34 P	cis-1,2-Dichloroethene	0.4913	0.5363	-9.2	111	0.00	
35 P	2-Butanone	0.2007	0.2631	-31.1#	121	0.00	③
36	Propionitrile	0.0412	0.0558	-15.1	115	0.00	
37	Bromochloromethane	0.3021	0.3120	-3.3	109	0.00	
38	Methacrylonitrile	0.1086	0.1404	-29.3#	120	0.00	NT
39	Tetrahydrofuran	0.1111	0.1376	-23.9#	122	0.00	NT
40 P	Chloroform	0.8279	0.8099	2.2	104	0.00	
41 P	1,1,1-Trichloroethane	0.6850	0.6418	6.3	97	0.00	
42	TAME	0.9868	1.0516	-6.6	103	0.00	
43 i	1,4-Difluorobenzene	1.0000	1.0000	0.0	101	0.00	
44 P	Cyclohexane	0.4527	0.4448	1.7	96	0.00	
45 s	surr4,Dibrflmethane	0.3188	0.3122	2.1	97	0.00	
46 P	Carbontetrachloride	0.1274	0.1250	1.9	102	0.00	
47	1,1-Dichloropropene	0.3911	0.3875	0.9	103	0.00	

Evaluate Continuing Calibration Report

Sample : CCV
 Data File : I:\ACQUDATA\msvoa10\data\093014\A2473.D Vial: 2
 Acq On : 30 Sep 2014 3:44 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Oct 01 09:05:18 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial 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)
48 s	surrl,1,2-dichloroethane-d4	0.3365	0.3466	-3.0	102	0.00
49 P	Benzene	1.2222	1.2416	-1.6	103	0.00
50 P	1,2-Dichloroethane	0.4240	0.4472	-5.5	107	0.00
51	Iso-Butyl Alcohol	0.0099	0.0118	-19.2	116	0.00
52	n-Heptane	0.4609	0.5351	-16.1	112	0.00
53	1-Butanol	0.0040	0.0057	-29.5	131	0.00 NT
54 P	Trichloroethene	0.3407	0.3335	2.1	101	0.00
55 P	Methylcyclohexane	0.4697	0.5004	-6.5	102	0.00
56 P	1,2-Diclp propane	0.3562	0.3662	-2.8	104	0.00
57	Dibromomethane	0.1717	0.1703	0.8	104	0.00
58	1,4-Dioxane	0.0020	0.0019	5.0	99	0.00
59	Methyl Methacrylate	0.1265	0.1474	-16.5	111	0.00
60 P	Bromodichloromethane	0.3900	0.3863	0.9	101	0.00
61	2-Nitropropane	0.0492	0.0591	-20.1	129	0.00 NT
62	2-Chloroethylvinyl Ether	0.1490	0.1462	1.9	89	0.00
63 P	cis-1,3-Dichloropropene	0.4120	0.4498	-9.2	103	0.00
64 P	4-Methyl-2-pentanone	0.2664	0.3206	-20.3	115	0.00 (4)
65 s	SURR3,Toluene-d8	1.1229	1.1749	-4.6	102	0.00
66 P	Toluene	1.2807	1.2420	3.0	99	0.00
67 P	trans-1,3-Dichloropropene	0.3260	0.3802	-16.6	110	0.00
68	Ethyl Methacrylate	0.2657	0.2895	-9.0	105	0.00
69 P	1,1,2-Trichloroethane	0.2259	0.2303	-1.9	104	0.00
70 s	SURR2,BFB	0.4419	0.4677	-5.8	105	0.00
71 i	d5-Chlorobenzene	1.0000	1.0000	0.0	96	0.00
72 P	Tetrachloroethene	0.2891	0.3100	-7.2	104	0.00
73 P	2-Hexanone	0.2113	0.2762	-30.7	116	0.00 (5)
74	1,3-Dichloropropene	0.4284	0.4940	-15.3	111	0.00
75 P	Dibromochloromethane	0.3054	0.3567	-16.8	107	0.00
76	N-Butyl Acetate	0.4703	0.5965	-26.8	108	0.00 NT
77 P	1,2-Dibromoethane	0.2429	0.2792	-14.9	107	0.00
78	3-Chlorobenzotrifluoride	0.5312	0.5924	-11.5	102	0.00
79 P	Chlorobenzene	0.9640	0.9949	-3.2	101	0.00
80	4-Chlorobenzotrifluoride	0.4892	0.5648	-15.5	106	0.00
81	1,1,1,2-Tetrachloroethane	0.3374	0.3777	-11.9	105	0.00
82 P	Ethylbenzene	0.4804	0.5234	-9.0	103	0.00
83 P	(m+p)Xylene	0.5924	0.6790	-14.6	108	0.00
84 P	o-Xylene	0.5792	0.6297	-8.7	100	0.00
85 P	Styrene	0.9623	1.1058	-14.9	103	0.00
86 P	Bromoform	0.1754	0.2282	-30.1	122	0.00 (6)
87	2-Chlorobenzotrifluoride	0.5264	0.5853	-11.2	102	0.00
88 P	Isopropylbenzene	1.4567	1.5481	-6.3	98	0.00
89	Cyclohexanone	0.0460	0.0628	-36.5	119	0.00 NT
90	trans-1,4-Dichloro-2-Butene	0.0721	0.0863	-13.5	102	0.00
91 i	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	96	0.00
92 P	1,1,2,2-Tetrachloroethane	0.5487	0.6755	-23.1	123	0.00 (7)
93	Bromobenzene	0.7548	0.8172	-8.3	107	0.00

Sample : CCV
 Data File : I:\ACQUDATA\msvoa10\data\093014\A2473.D Vial: 2
 Acq On : 30 Sep 2014 3:44 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Oct 01 09:05:18 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial 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)
94	1,2,3-Trichloropropane	0.1534	0.1639	-6.8	111	0.00
95	n-Propylbenzene	3.1202	3.3937	-8.8	100	0.00
96	2-Chlorotoluene	1.9252	1.8317	4.9	91	0.00
97	3-Chlorotoluene	2.0456	2.0233	1.1	93	0.00
98	4-Chlorotoluene	2.3159	2.1751	6.1	92	0.00
99	1,3,5-Trimethylbenzene	2.2689	2.1668	4.5	90	0.00
100	tert-Butylbenzene	1.9017	2.0456	-7.6	101	0.00
101	1,2,4-Trimethylbenzene	2.2937	2.4715	-7.8	100	0.00
102	3,4-Dichlorobenzotrifluorid	0.6845	0.8390	-22.6#	115	0.00 NT
103	sec-Butylbenzene	2.6661	2.6817	-0.6	92	0.00
104	p-Isopropyltoluene	2.3128	2.3640	-2.2	93	0.00
105 P	1,3-Dclbenz	1.4440	1.4366	0.5	95	0.00
106 P	1,4-Dclbenz	1.4958	1.4814	1.0	96	0.00
107	2,4-Dichlorobenzotrifluorid	0.6099	0.7491	-22.8#	112	0.00 NT
108	2,5-Dichlorobenzotrifluorid	0.7285	0.8173	-12.2	108	0.00
109	n-Butylbenzene	1.9600	2.3741	-21.1#	108	0.00 NT
110 P	1,2-Dclbenz	1.3568	1.4415	-6.2	103	0.00
111 P	1,2-Dibromo-3-chloropropane	0.0835	0.1021	-22.3#	109	0.00 NT
112	Trielution Dichlorotoluene	1.1368	1.3842	-21.8#	107	0.00 NT
113	1,3,5-Trichlorobenzene	0.9702	1.1821	-21.8#	113	0.00
114	Coelution Dichlorotoluene	1.1787	1.3985	-18.6	104	0.00
115 P	1,2,4-Tcbenzene	0.7687	0.9086	-18.2	111	0.00
116	Hexachlorobt	0.3147	0.3783	-20.2#	115	0.00 NT
117	Naphthalen.	1.3209	1.5948	-20.7#	106	0.00 NT
118	1,2,3-Tclbenzene	0.5634	0.7157	-27.0#	115	0.00 (S)
119	2,4,5-Trichlorotoluene	0.3514	0.5024	-43.0#	123	0.00 NT
120	2,3,6-Trichlorotoluene	0.3556	0.5204	-46.3#	136	-0.01 NT

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Sample : CCV
 Data File : I:\ACQUDATA\msvoa10\data\093014\A2473.D Vial: 2
 Acq On : 30 Sep 2014 3:44 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Oct 01 09:05:18 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

Re 14/12/2017-04

Fu
10/6/14

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	960198	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1412648	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1216339	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	675675	50.00	ug/L	0.00

System Monitoring Compounds						
45) surr4, Dibromomethane	4.318	113	441056	48.96	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	97.92%
48) surr1, 1,2-dichloroetha...	4.848	65	489563	51.50	ug/L	0.00
Spiked Amount	50.000	Range	78 - 122	Recovery	=	103.00%
65) SURR3, Toluene-d8	7.427	98	1659670	52.31	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	104.62%
70) SURR2, BFB	9.878	95	660661	52.92	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	105.84%

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.190	85	563969	54.57	ug/L	97
3) Chloromethane	1.294	50	828339	60.12	ug/L	99
4) Vinyl Chloride	1.361	62	691806	54.97	ug/L	97
5) Bromomethane	1.556	94	203581	54.10	ug/L	99
6) Chloroethane	1.611	64	308036	48.31	ug/L	98
7) Freon 21	1.715	67	817799	46.18	ug/L	98
8) Trichlorofluoromethane	1.763	101	660220	46.31	ug/L	99
9) Diethyl Ether	1.934	59	352805	46.99	ug/L #	77
10) Freon 123a	1.928	67	505491	45.33	ug/L	90
11) Freon 123	1.965	83	509752	42.95	ug/L	98
12) Acrolein	2.019	56	308992	263.12	ug/L	96
13) 1,1-Dichloroethene	2.099	96	297119	44.40	ug/L #	79
14) Freon 113	2.093	101	369640	43.72	ug/L	98
15) Acetone	2.117	43	188857	64.59	ug/L	95
16) 2-Propanol	2.190	45	460573	1114.03	ug/L	97
17) Iodomethane	2.215	142	337474	45.18	ug/L	100
18) Carbon Disulfide	2.269	76	1576233	55.68	ug/L	99
19) Acetonitrile	2.318	40	70779	225.83	ug/L #	86
20) Allyl Chloride	2.349	76	238499	56.69	ug/L #	31
21) Methyl Acetate	2.355	43	356878	61.53	ug/L	87
22) Methylene Chloride	2.440	84	480730	54.74	ug/L #	79
23) TBA	2.501	59	625811	1257.38	ug/L	79
24) Acrylonitrile	2.629	53	824428	306.84	ug/L	99
25) Methyl-t-Butyl Ether	2.660	73	1125105	58.68	ug/L	90
26) trans-1,2-Dichloroethene	2.666	96	462591	53.61	ug/L #	83
28) 1,1-Dichloroethane	3.044	63	966580	52.98	ug/L	98
29) Vinyl Acetate	3.086	86	65746	61.25	ug/L #	10
30) DIPE	3.105	45	2345813	56.01	ug/L	95
31) 2-Chloro-1,3-Butadiene	3.141	53	1027051	57.23	ug/L	83
32) ETBE	3.501	59	1563665	55.67	ug/L	92
33) 2,2-Dichloropropane	3.678	77	611994	54.15	ug/L	99
34) cis-1,2-Dichloroethene	3.678	96	514994	54.58	ug/L #	77
35) 2-Butanone	3.696	43	252616	65.55	ug/L	88
36) Propionitrile	3.763	54	267827	287.70	ug/L	87
37) Bromochloromethane	3.983	130	299619	51.64	ug/L #	73

Sample : CCV
 Data File : I:\ACQUDATA\msvoa10\data\093014\A2473.D Vial: 2
 Acq On : 30 Sep 2014 3:44 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Oct 01 09:05:18 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Methacrylonitrile	3.970	67	134838	64.67	ug/L #	57
39) Tetrahydrofuran	4.056	42	132094	61.89	ug/L	71
40) Chloroform	4.086	83	777647	48.91	ug/L	95
41) 1,1,1-Trichloroethane	4.354	97	616222	46.85	ug/L	92
42) TAME	5.184	73	1009791	53.28	ug/L	88
44) Cyclohexane	4.446	41	628350	49.12	ug/L	90
46) Carbontetrachloride	4.610	121	176537	49.06	ug/L	96
47) 1,1-Dichloropropene	4.610	75	547412	49.55	ug/L	97
49) Benzene	4.958	78	1753972	50.80	ug/L	89
50) 1,2-Dichloroethane	4.982	62	631706	52.73	ug/L	89
51) Iso-Butyl Alcohol	4.854	43	333176	1187.37	ug/L	93
52) n-Heptane	5.452	43	755863	58.04	ug/L #	79
53) 1-Butanol	5.946	56	403483	3232.01	ug/L	89
54) Trichloroethene	5.964	130	471112	48.94	ug/L	97
55) Methylcyclohexane	6.214	55	706850m	53.26	ug/L	
56) 1,2-Diclpropane	6.256	63	517300	51.40	ug/L	98
57) Dibromomethane	6.403	93	240603	49.58	ug/L	90
58) 1,4-Dioxane	6.458	88	54610m	953.51	ug/L	
59) Methyl Methacrylate	6.458	69	208158m	58.23	ug/L	
60) Bromodichloromethane	6.616	83	545705	49.53	ug/L	95
61) 2-Nitropropane	6.891	41	166974	120.14	ug/L	98
62) 2-Chloroethylvinyl Ether	7.006	63	206590	49.09	ug/L	88
63) cis-1,3-Dichloropropene	7.140	75	635373	54.59	ug/L	98
64) 4-Methyl-2-pentanone	7.336	43	452863	60.16	ug/L	91
66) Toluene	7.500	91	1754474	48.49	ug/L	97
67) trans-1,3-Dichloropropene	7.744	75	537126	58.31	ug/L	97
68) Ethyl Methacrylate	7.872	69	408957	54.48	ug/L #	57
69) 1,1,2-Trichloroethane	7.921	97	325279	50.96	ug/L	97
72) Tetrachloroethene	8.055	164	377056	53.60	ug/L	98
73) 2-Hexanone	8.195	43	335951	65.35	ug/L	88
74) 1,3-Dichloropropane	8.085	76	600904	57.65	ug/L #	75
75) Dibromochloromethane	8.299	129	433838	58.40	ug/L	98
76) N-Butyl Acetate	8.335	43	725546	63.42	ug/L	90
77) 1,2-Dibromoethane	8.396	107	339588	57.46	ug/L	99
78) 3-Chlorobenzotrifluoride	8.872	180	720584	55.77	ug/L	96
79) Chlorobenzene	8.866	112	1210181	51.60	ug/L	99
80) 4-Chlorobenzotrifluoride	8.927	180	686932	57.72	ug/L	99
81) 1,1,1,2-Tetrachloroethane	8.945	131	459465	55.98	ug/L	97
82) Ethylbenzene	8.975	106	636647	54.48	ug/L	98
83) (m+p)Xylene	9.085	106	1651810	114.62	ug/L	96
84) o-Xylene	9.433	106	765907	54.36	ug/L	92
85) Styrene	9.445	104	1345084	57.46	ug/L	98
86) Bromoform	9.597	173	277588	65.05	ug/L	97
87) 2-Chlorobenzotrifluoride	9.664	180	711980	55.60	ug/L	92
88) Isopropylbenzene	9.756	105	1882966	53.13	ug/L	99
89) Cyclohexanone	9.823	55	1527992	1364.66	ug/L	94
90) trans-1,4-Dichloro-2-B...	10.055	53	105009	56.73	ug/L	82
92) 1,1,2,2-Tetrachloroethane	10.006	83	456420	61.56	ug/L	100
93) Bromobenzene	10.000	156	552187	54.14	ug/L	98
94) 1,2,3-Trichloropropane	10.036	110	110719	53.41	ug/L	92
95) n-Propylbenzene	10.103	91	2293042	54.38	ug/L	99
96) 2-Chlorotoluene	10.164	91	1237602	47.57	ug/L	98

Sample : CCV
 Data File : I:\ACQUDATA\msvoa10\data\093014\A2473.D Vial: 2
 Acq On : 30 Sep 2014 3:44 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Oct 01 09:05:18 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

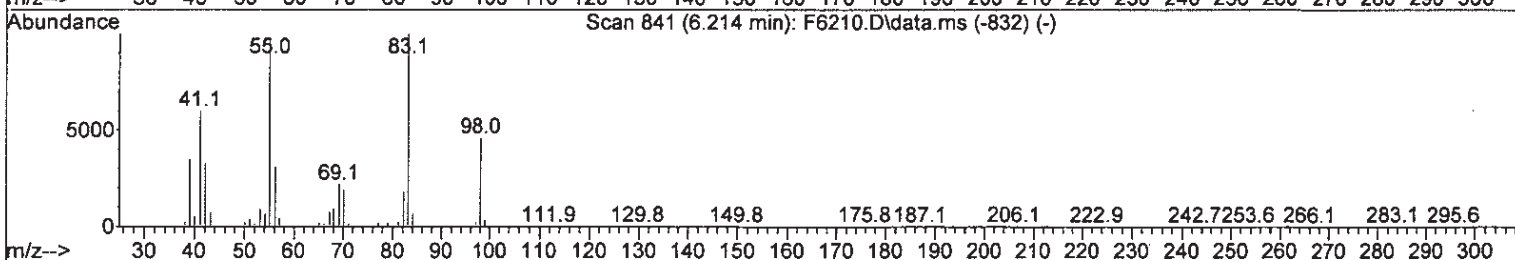
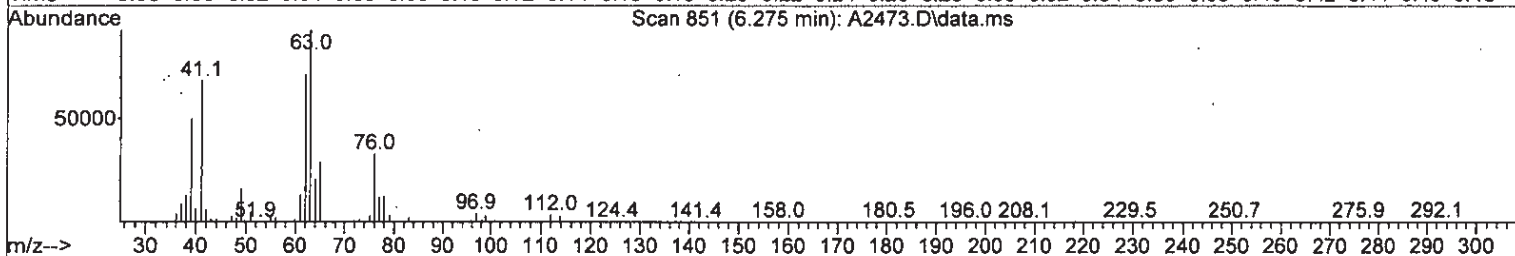
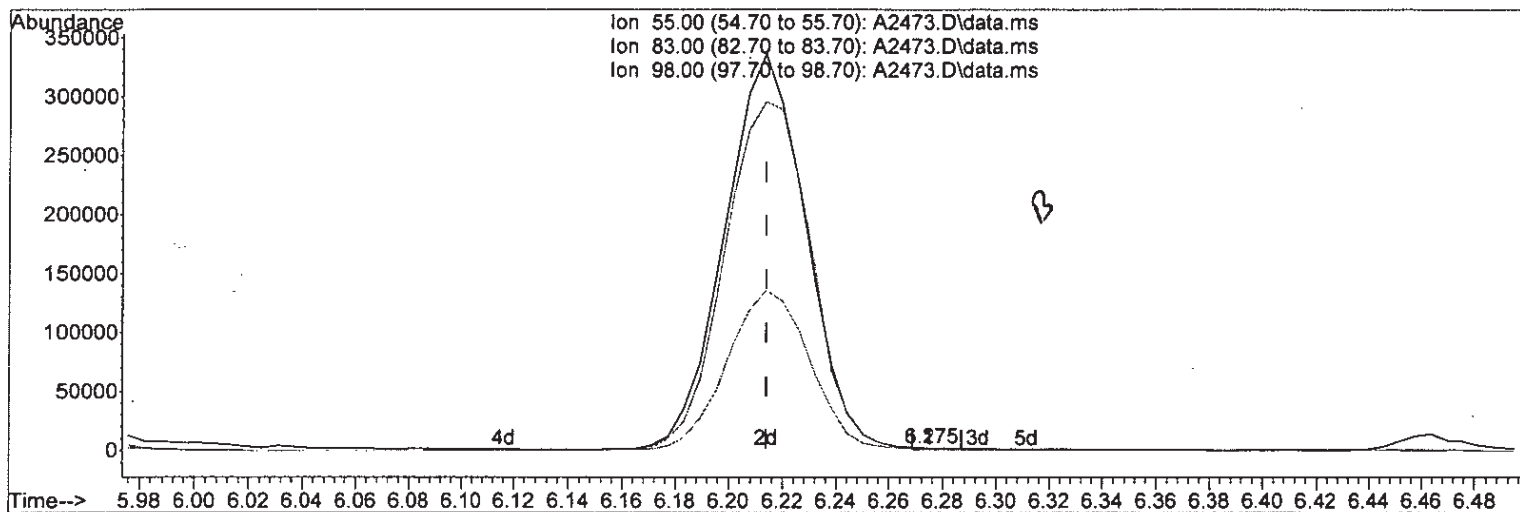
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97) 3-Chlorotoluene	10.219	91	1367100	49.45	ug/L	96
98) 4-Chlorotoluene	10.256	91	1469666	46.96	ug/L	97
99) 1,3,5-Trimethylbenzene	10.250	105	1464083	47.75	ug/L	99
100) tert-Butylbenzene	10.518	119	1382168	53.78	ug/L	100
101) 1,2,4-Trimethylbenzene	10.554	105	1669926	53.88	ug/L	99
102) 3,4-Dichlorobenzotrifl...	10.615	214	566880	61.28	ug/L	98
103) sec-Butylbenzene	10.695	105	1811961	50.29	ug/L	99
104) p-Isopropyltoluene	10.817	119	1597318	51.11	ug/L	97
105) 1,3-Dclbenz	10.780	146	970707	49.75	ug/L	99
106) 1,4-Dclbenz	10.853	146	1000939	49.52	ug/L	99
107) 2,4-Dichlorobenzotrifl...	10.902	214	506130	61.41	ug/L	97
108) 2,5-Dichlorobenzotrifl...	10.938	214	552213	56.09	ug/L	98
109) n-Butylbenzene	11.140	91	1604102	60.56	ug/L	100
110) 1,2-Dclbenz	11.152	146	974012	53.12	ug/L	98
111) 1,2-Dibromo-3-chloropr...	11.707	157	69014	61.14	ug/L	92
112) Trielution Dichlorotol...	11.798	125	2805826	182.65	ug/L	93
113) 1,3,5-Trichlorobenzene	11.847	180	798742	60.92	ug/L	94
114) Coelution Dichlorotoluene	12.066	125	1889899	118.65	ug/L	97
115) 1,2,4-Tclbenzene	12.231	180	613893	59.10	ug/L	93
116) Hexachlorobt	12.328	225	255641	60.12	ug/L	99
117) Naphthalen	12.377	128	1077546	60.37	ug/L	99
118) 1,2,3-Tclbenzene	12.511	180	483596	63.52	ug/L	99
119) 2,4,5-Trichlorotoluene	12.932	159	339450	71.48	ug/L	98
120) 2,3,6-Trichlorotoluene	12.993	159	351633	73.17	ug/L	98

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

Quantitation Report (Qedit)

Sample : CCV
 Data File : I:\ACQUDATA\msvoa10\data\093014\A2473.D Vial: 2
 Acq On : 30 Sep 2014 3:44 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Sep 30 15:57:43 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration



TIC: A2473.D\data.ms

(55) Methylcyclohexane (P)

6.275min (+0.061) 0.07 ug/L

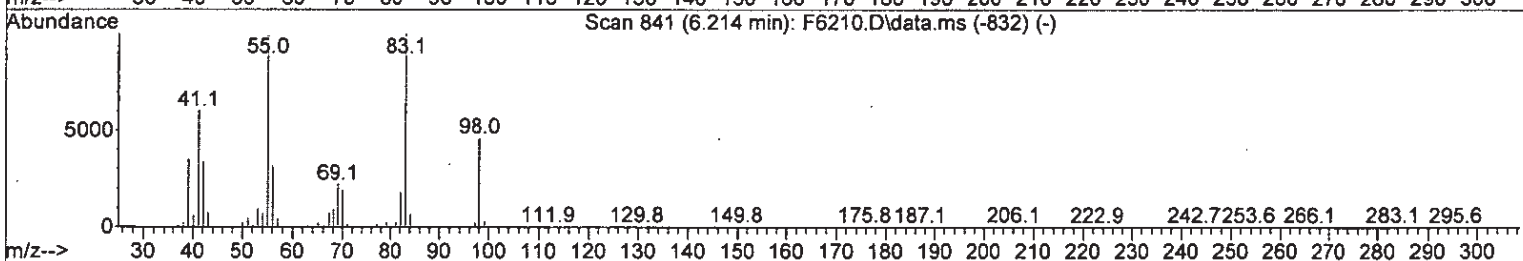
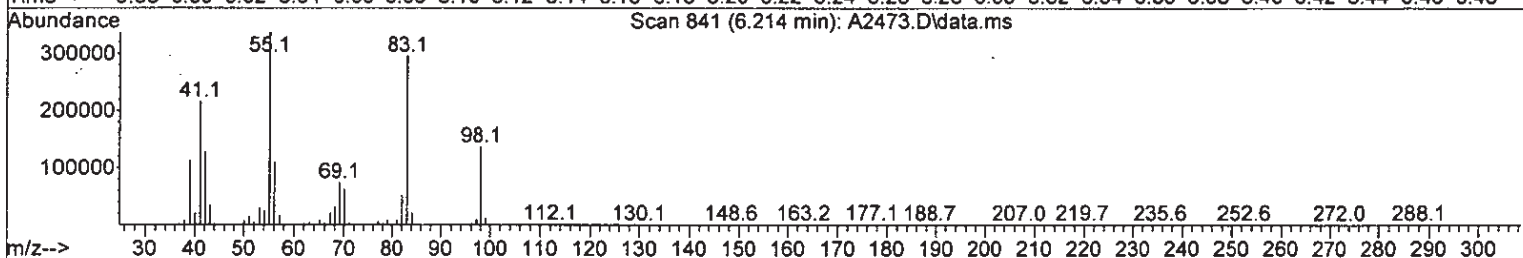
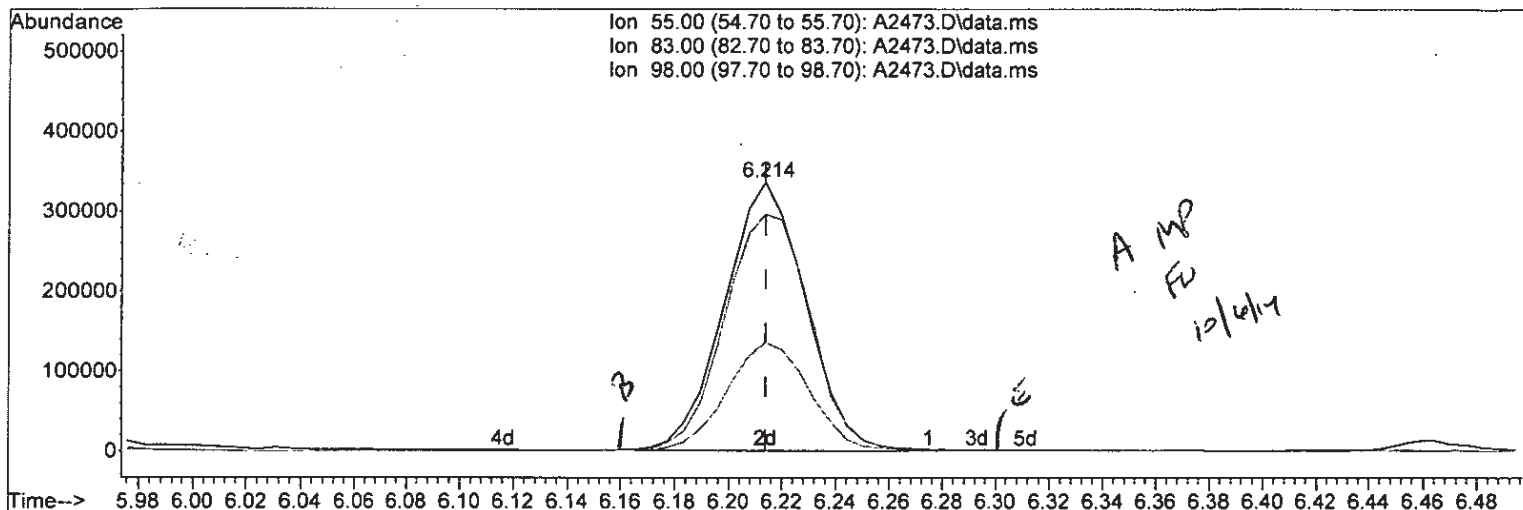
response 904

Ion	Exp%	Act%
55.00	100	100
83.00	120.80	114.63
98.00	52.70	53.80
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : CCV
 Data File : I:\ACQUDATA\msvoa10\data\093014\A2473.D Vial: 2
 Acq On : 30 Sep 2014 3:44 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Sep 30 15:57:43 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration



(55) Methylcyclohexane (P)

6.214min (-0.000) 53.26 ug/L m

response 706850

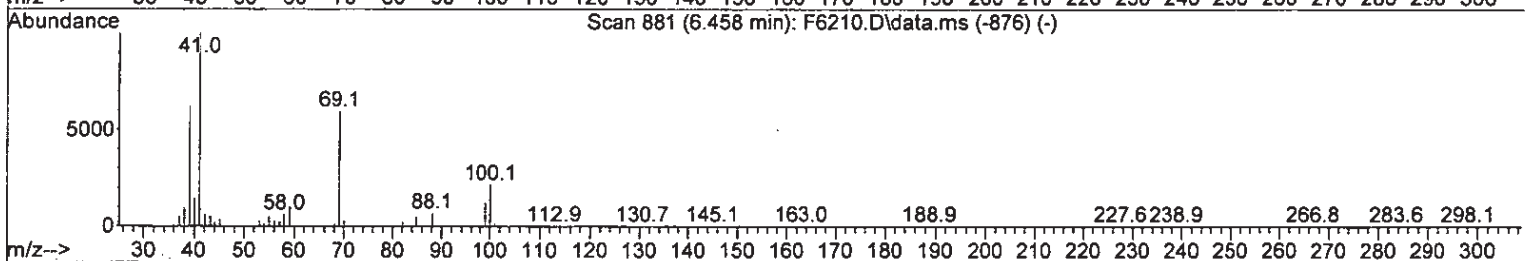
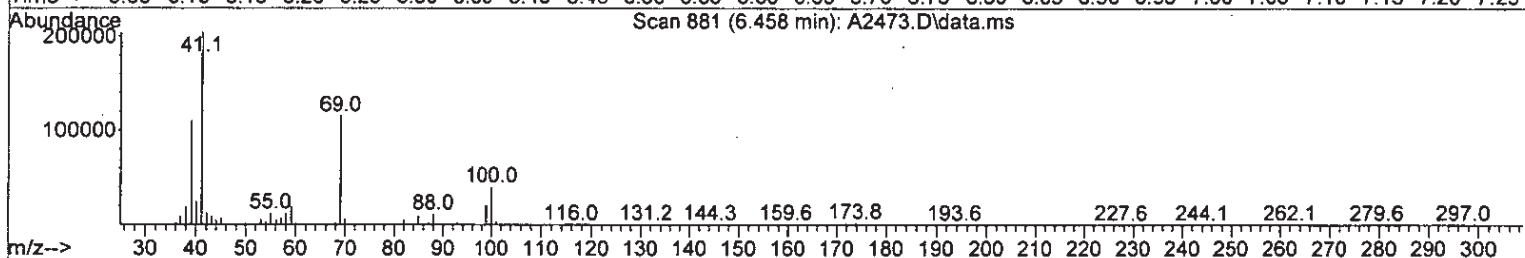
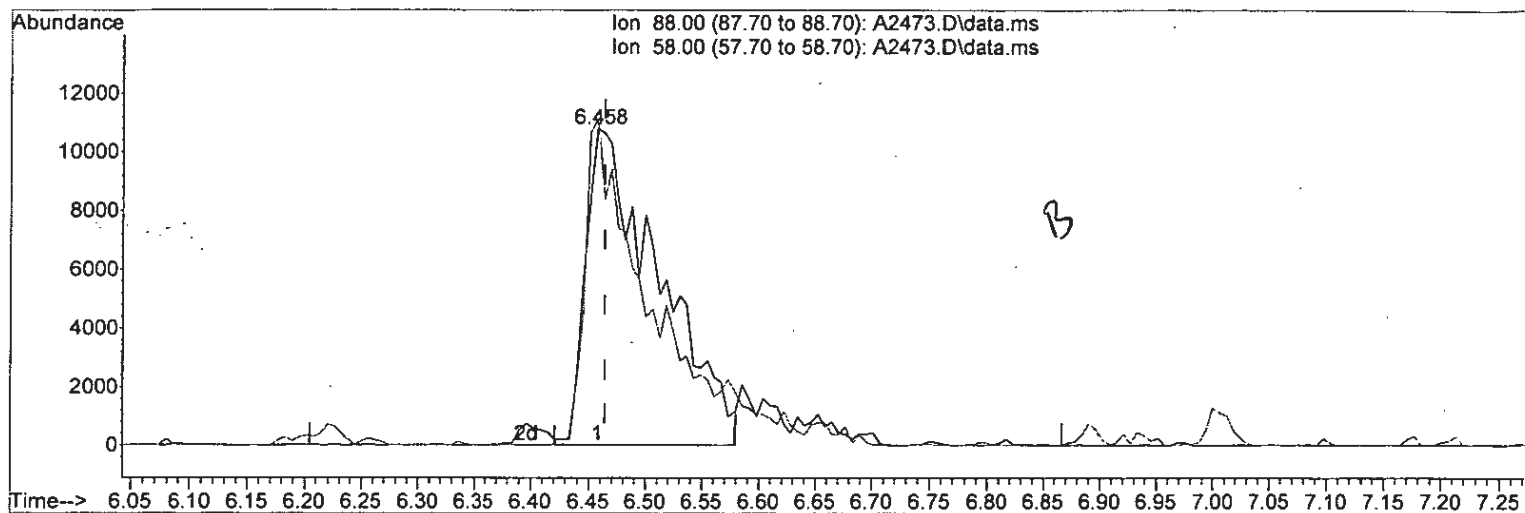
Ion	Exp%	Act%
55.00	100	100
83.00	120.80	87.95#
98.00	52.70	40.31
0.00	0.00	0.00

mv
1/7

Quantitation Report (Qedit)

Sample : CCV
 Data File : I:\ACQUDATA\msvoa10\data\093014\A2473.D Vial: 2
 Acq On : 30 Sep 2014 3:44 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Sep 30 15:57:43 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration



TIC: A2473.D\data.ms

(58) 1,4-Dioxane

6.458min (-0.006) 844.29 ug/L

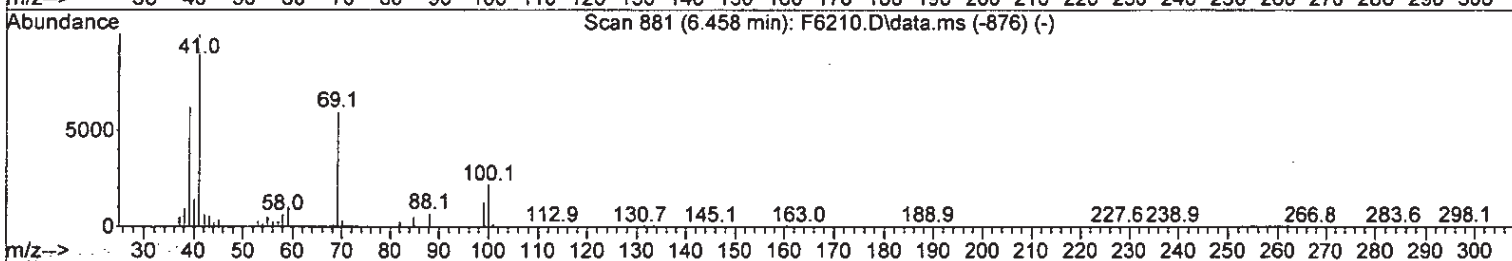
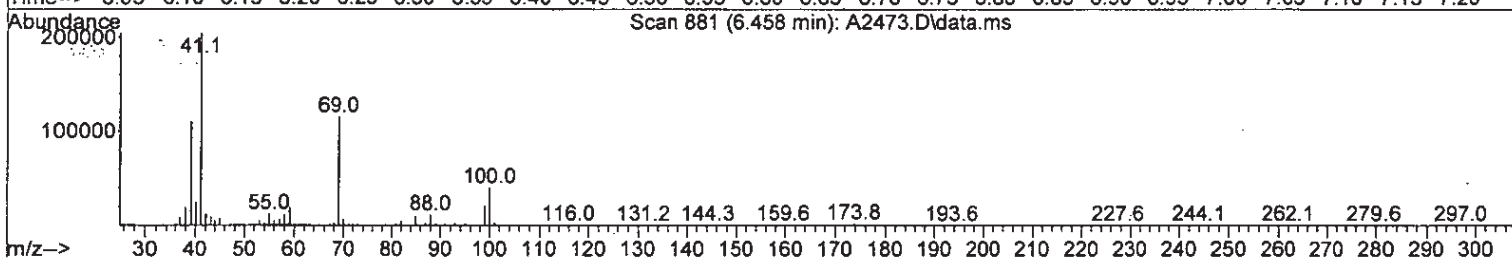
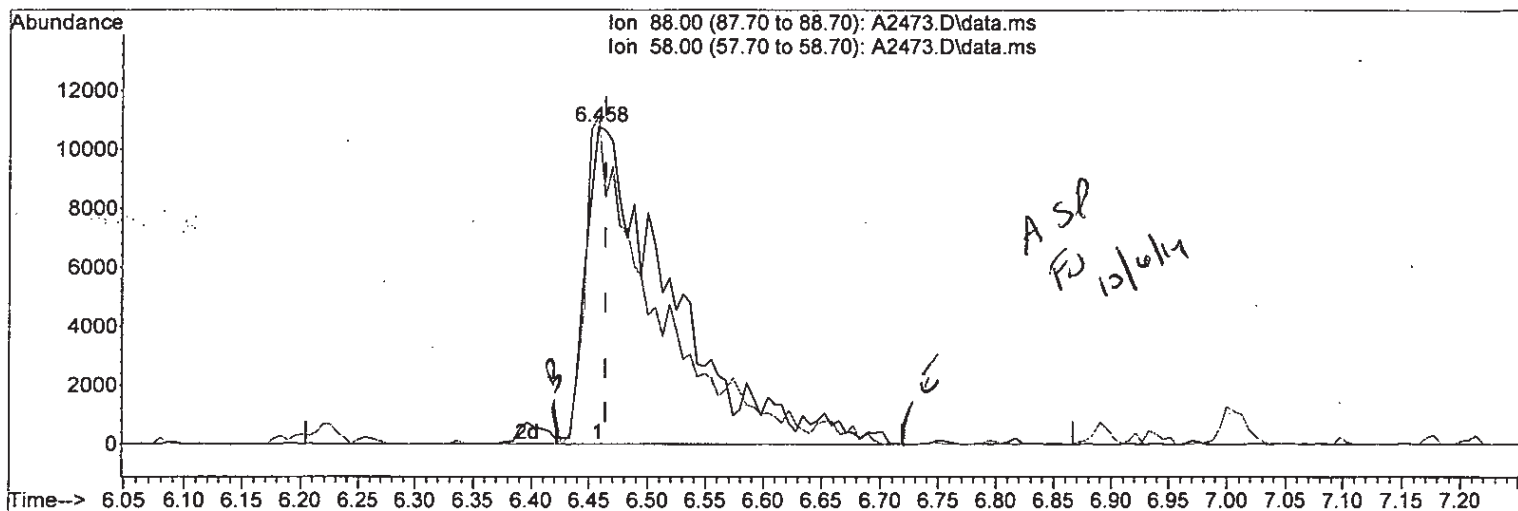
response 48355

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	103.08#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : CCV
 Data File : I:\ACQUDATA\msvoa10\data\093014\A2473.D Vial: 2
 Acq On : 30 Sep 2014 3:44 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Sep 30 15:57:43 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration



(58) 1,4-Dioxane

6.458min (-0.006) 953.51 ug/L m

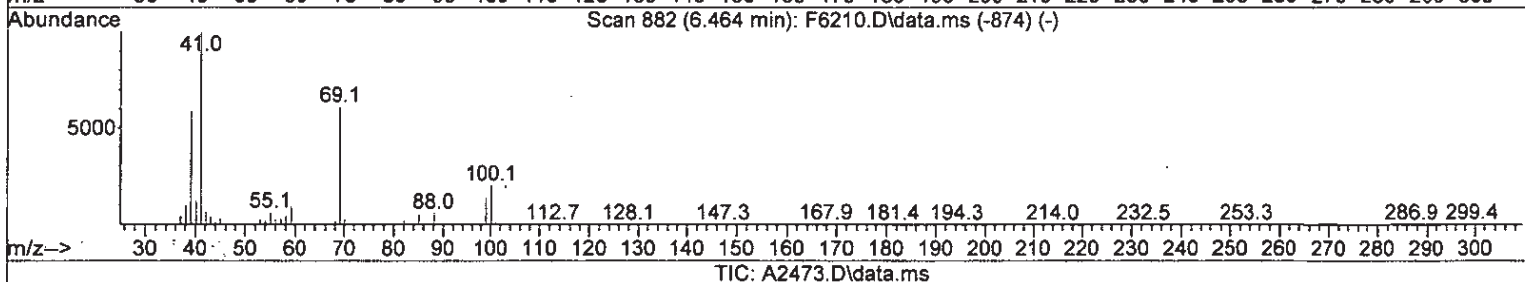
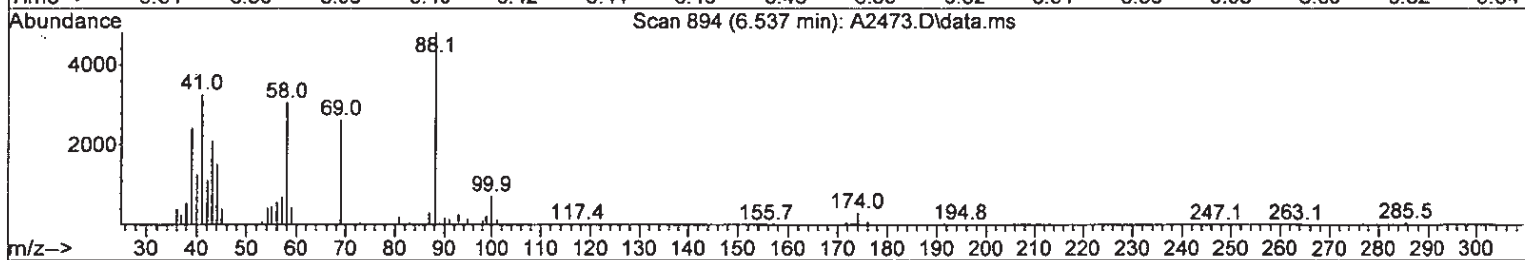
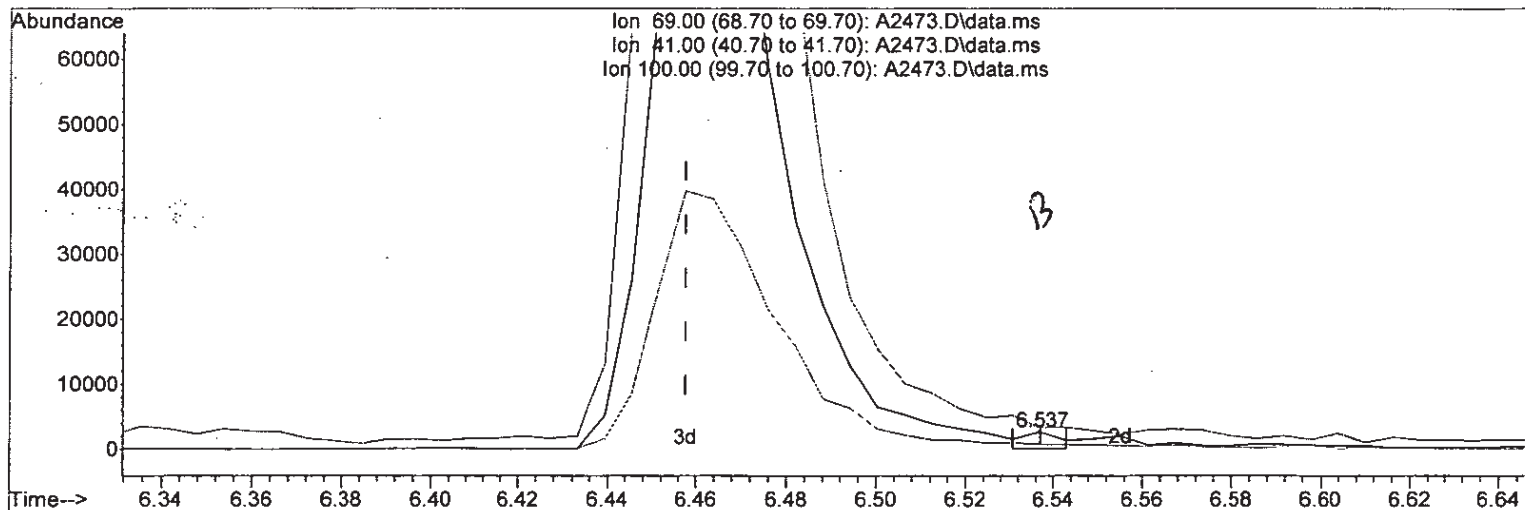
response 54610

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	103.08#
0.00	0.00	0.00
0.00	0.00	0.00

m
ch

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\093014\A2473.D Vial: 2
Acq On : 30 Sep 2014 3:44 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Sep 30 15:57:43 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



(59) Methyl Methacrylate

6.537min (+0.079) 0.38 ug/L

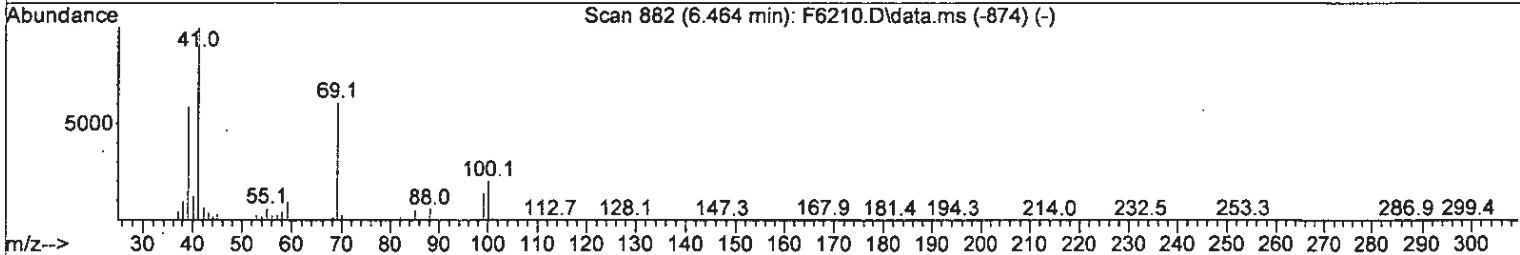
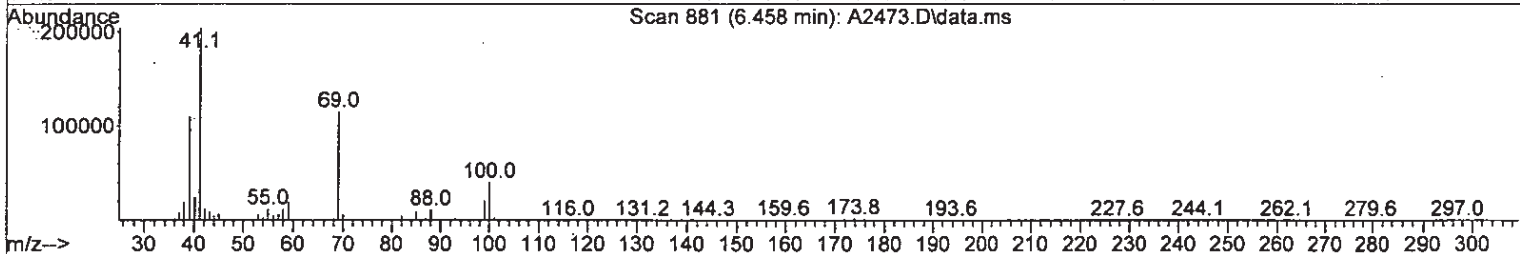
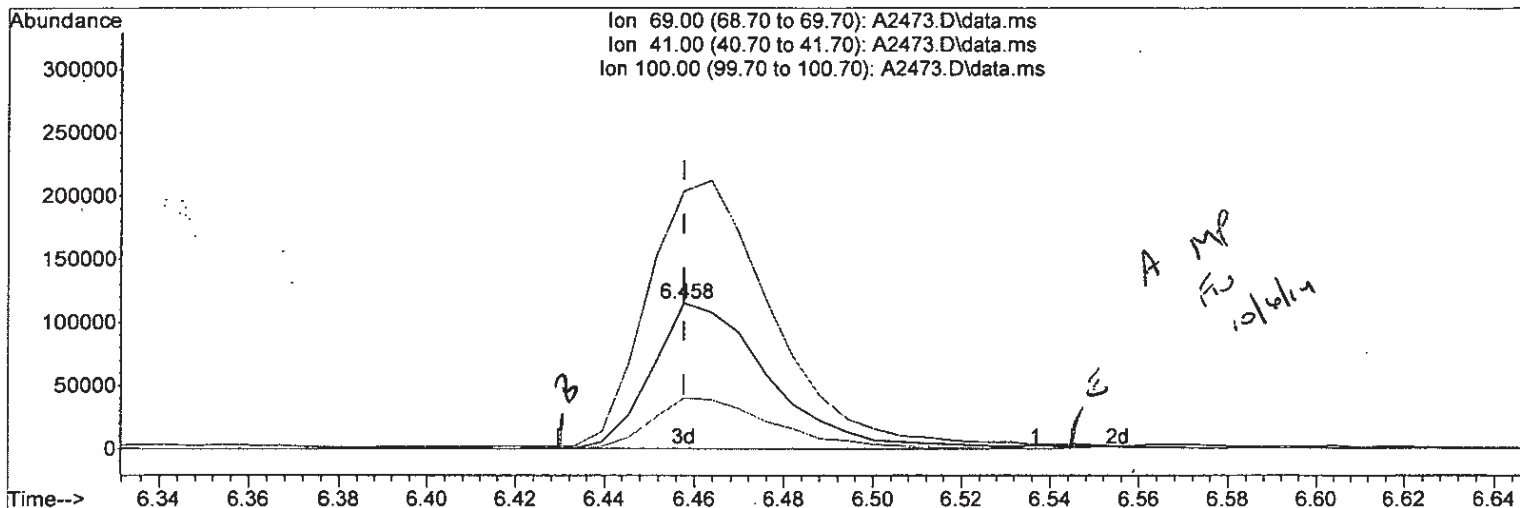
response 1370

Ion	Exp%	Act%
69.00	100	100
41.00	128.90	124.35
100.00	36.90	27.52
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : CCV
 Data File : I:\ACQUDATA\msvoa10\data\093014\A2473.D Vial: 2
 Acq On : 30 Sep 2014 3:44 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Sep 30 15:57:43 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration



(59) Methyl Methacrylate

6.458min (-0.000) 58.23 ug/L m

response 208158

Ion	Exp%	Act%
69.00	100	100
41.00	128.90	177.15#
100.00	36.90	34.58
0.00	0.00	0.00

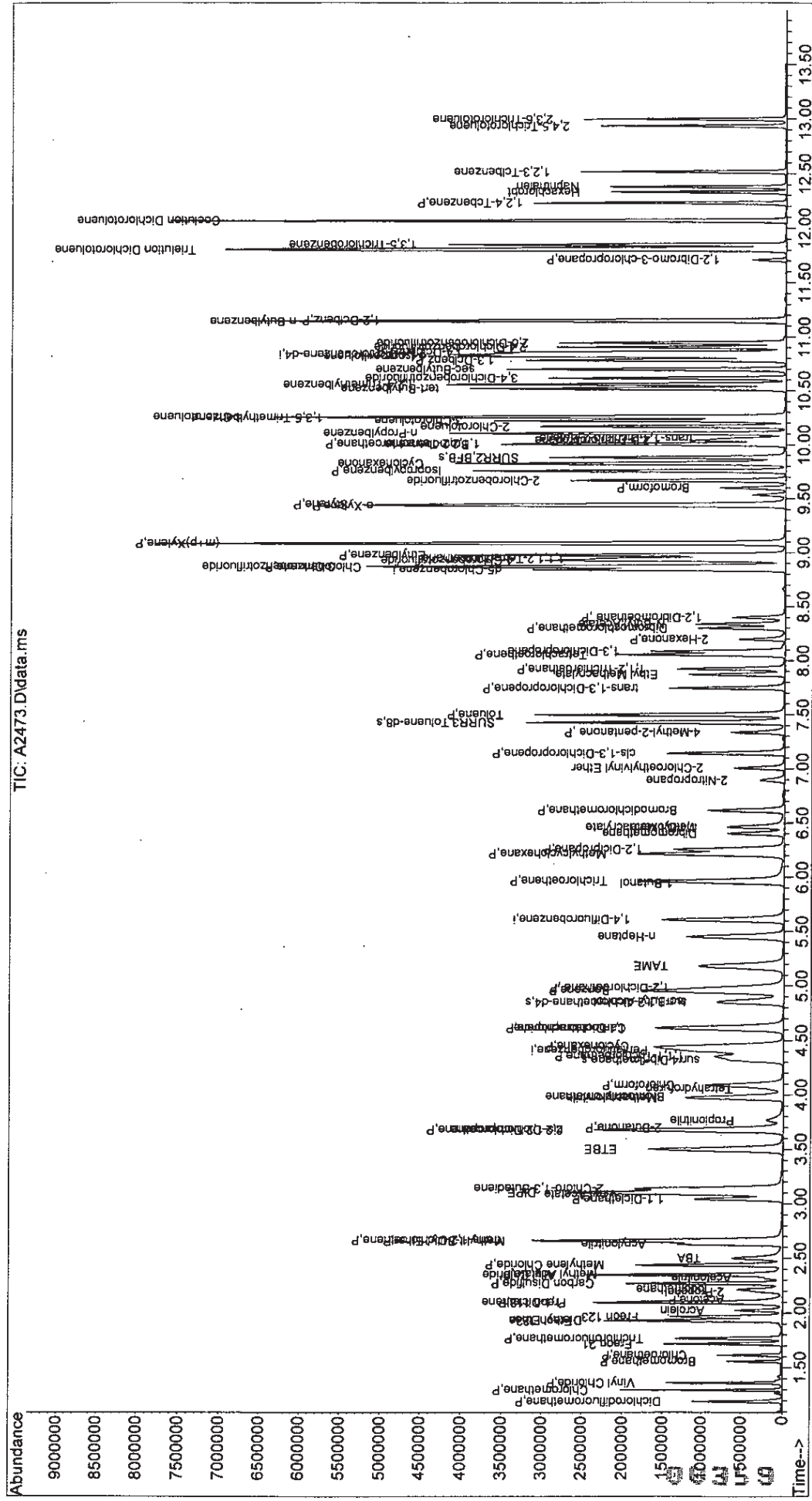
Mr 141

```

Sample      : CCV
Data File   : I:\ACQUDATA\msvoa10\data\093014\A2473.D
Acq On      : 30 Sep 2014   3:44 pm
Operator     : F.NAEGLER
InstName     : MSVOA10
Misc         :
Vial: 2

```

Quant Time: Oct 01 09:05:18 2014
Quant Method : I:\ACQDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration





VOLATILE ORGANICS RAW QC DATA

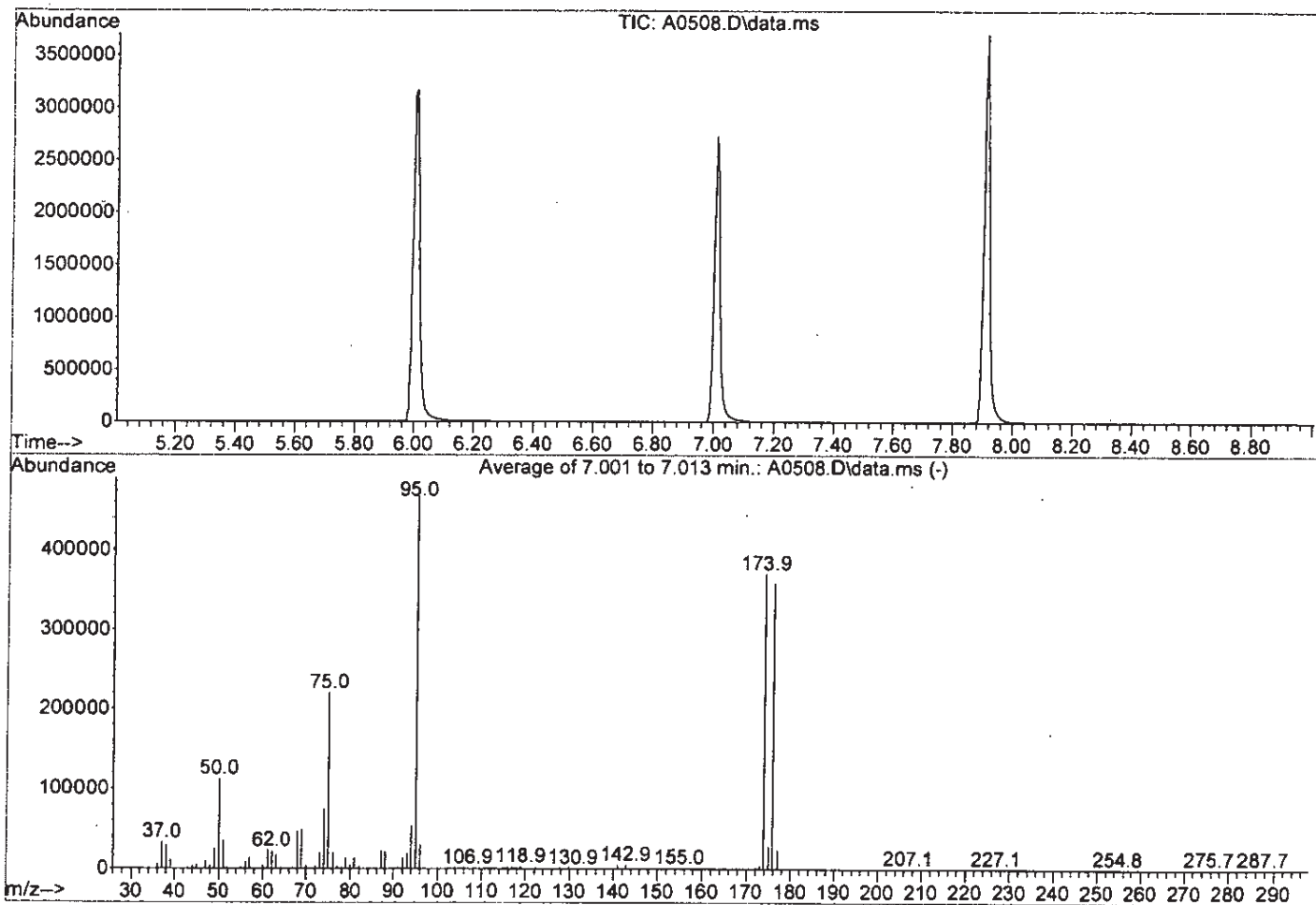
ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Data Path : I:\ACQUDATA\msvoa10\data\072114\
 Data File : A0508.D
 Acq On : 21 Jul 2014 10:55 am
 Operator : F.NAEGLER
 Sample : TUNE
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

Integration File: CPD4.P

Method : I:\ACQUDATA\MSVOA10\METHODS\T072114.M
 Title : 8260B WATERS
 Last Update : Wed Sep 27 14:33:13 2006

FJ
7/22/14



AutoFind: Scans 314, 315, 316; Background Corrected with Scan 309

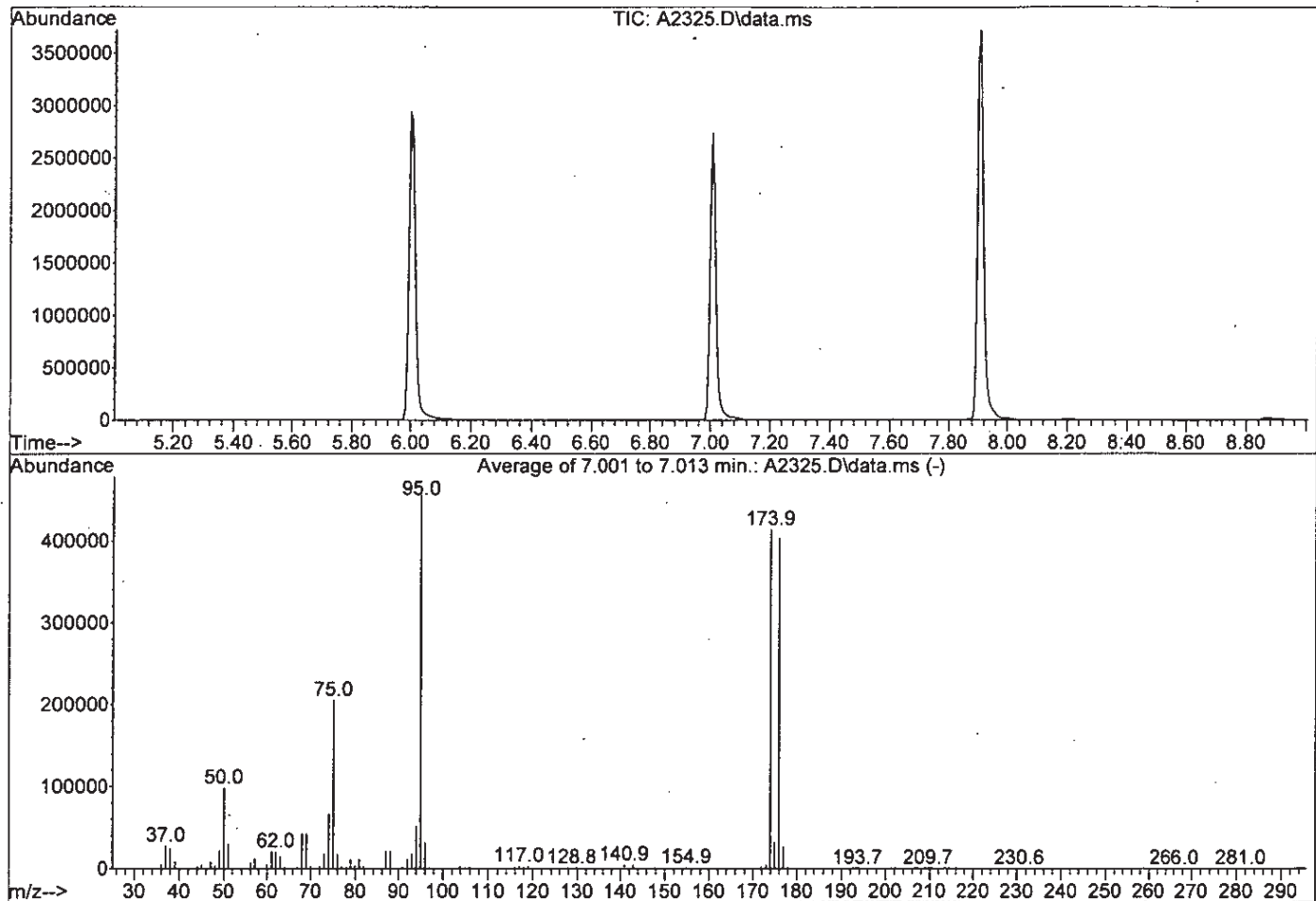
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	24.0	112021	PASS
75	95	30	60	47.1	219883	PASS
95	95	100	100	100.0	466859	PASS
96	95	5	9	6.4	29771	PASS
173	174	0.00	2	1.0	3689	PASS
174	95	50	120	79.2	369941	PASS
175	174	5	9	7.6	28299	PASS
176	174	95	101	96.8	358208	PASS
177	176	5	9	6.4	23022	PASS

Data Path : I:\ACQUDATA\msvoa10\data\092414\
 Data File : A2325.D
 Acq On : 24 Sep 2014 10:22 pm
 Operator : F.NAEGLER
 Sample : TUNE
 Misc :
 ALS Vial : 26 Sample Multiplier: 1

RQ1411515-01
9/28/14

Integration File: CPD4.P

Method : I:\ACQUDATA\msvoa10\Methods\T072114.M
 Title : 8260B WATERS
 Last Update : Wed Sep 27 14:33:13 2006



AutoFind: Scans 314, 315, 316; Background Corrected with Scan 309

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.5	97960	PASS
75	95	30	60	45.0	204779	PASS
95	95	100	100	100.0	455424	PASS
96	95	5	9	6.8	31024	PASS
173	174	0.00	2	1.0	4026	PASS
174	95	50	120	90.8	413440	PASS
175	174	5	9	7.7	31792	PASS
176	174	95	101	97.4	402752	PASS
177	176	5	9	6.5	26317	PASS

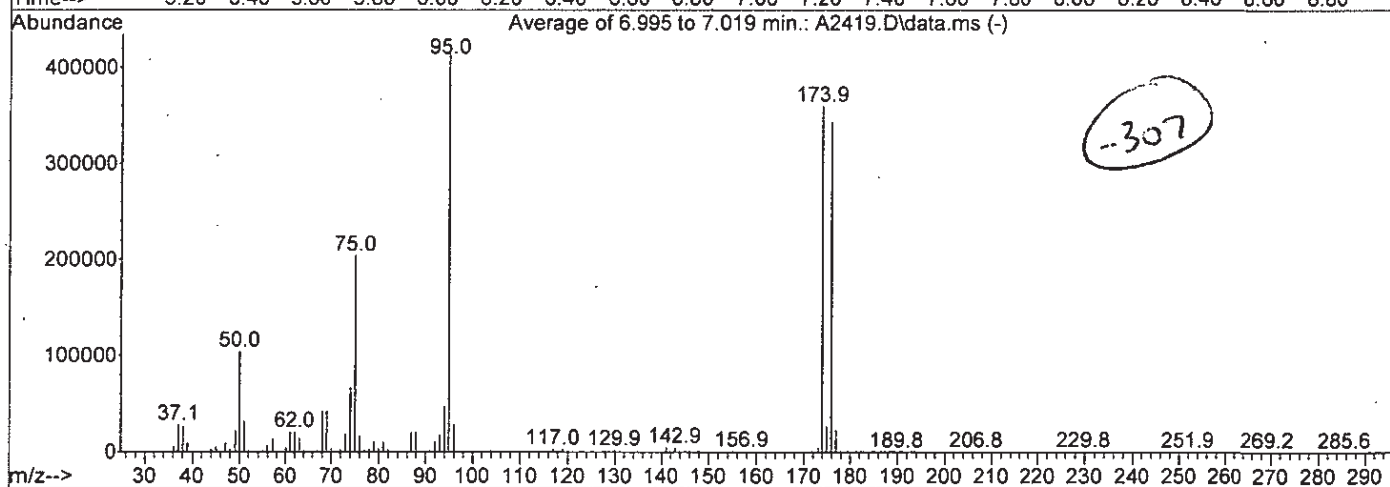
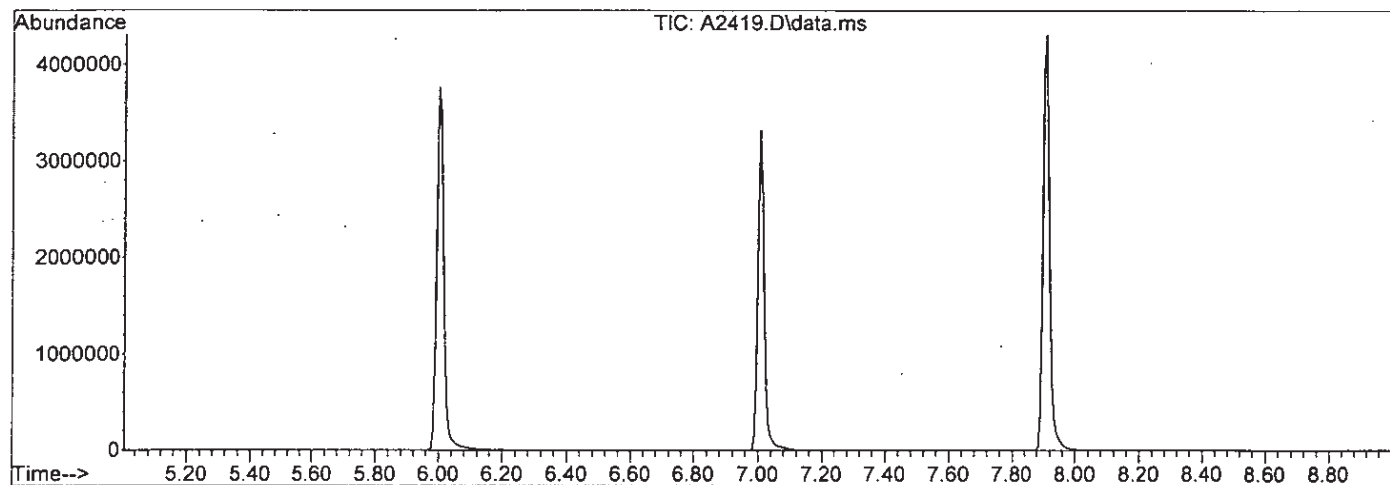
Data Path : I:\ACQUDATA\msvoa10\data\092914\
 Data File : A2419.D
 Acq On : 29 Sep 2014 11:16 am
 Operator : F.NAEGLER
 Sample : TUNE
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

A2419A99-03

*FJ
9/29/14*

Integration File: CPD4.P

Method : I:\ACQUDATA\MSVOA10\METHODS\T072114.M
 Title : 8260B WATERS
 Last Update : Wed Sep 27 14:33:13 2006



Spectrum Information: Average of 6.995 to 7.019 min.

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
Mass	Mass	Limit%	Limit%	Abn%	Abn	Pass/Fail
50	95	15	40	25.2	104069	PASS
75	95	30	60	49.3	203691	PASS
95	95	100	100	100.0	413583	PASS
96	95	5	9	6.7	27715	PASS
173	174	0.00	2	1.2	4323	PASS
174	95	50	120	86.9	359530	PASS
175	174	5	9	7.4	26775	PASS
176	174	95	101	95.5	343230	PASS
177	176	5	9	6.6	22585	PASS

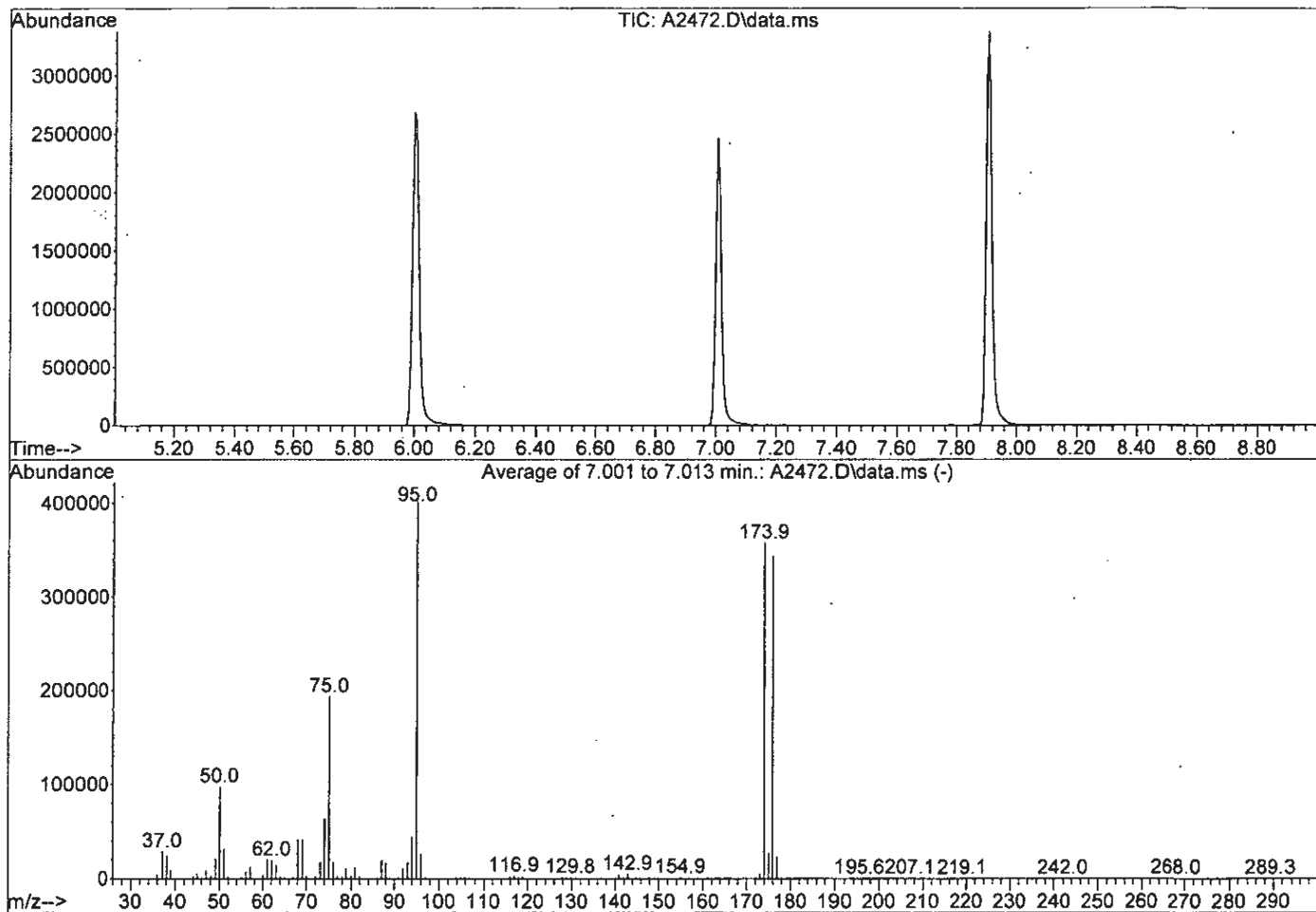
Data Path : I:\ACQUDATA\msvoa10\data\093014\
 Data File : A2472.D
 Acq On : 30 Sep 2014 3:18 pm
 Operator : F.NAEGLER
 Sample : TUNE
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

RQ112027-03

Integration File: CPD4.P

Method : I:\ACQUDATA\MSVOA10\METHODS\T072114.M
 Title : 8260B WATERS
 Last Update : Wed Sep 27 14:33:13 2006

Fu 10/6/14



AutoFind: Scans 314, 315, 316; Background Corrected with Scan 309

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	24.2	97243	PASS
75	95	30	60	48.1	193216	PASS
95	95	100	100	100.0	401451	PASS
96	95	5	9	6.5	26251	PASS
173	174	0.00	2	1.3	4801	PASS
174	95	50	120	89.0	357141	PASS
175	174	5	9	7.5	26768	PASS
176	174	95	101	96.0	342987	PASS
177	176	5	9	6.5	22392	PASS

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: NA
Date Received: NA
Date Analyzed: 9/25/14 00:47

Sample Name: Method Blank
Lab Code: RQ1411595-01

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msv0a10\data\092414\A2330.D\

Analysis Lot: 412875
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	5.0	U	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	5.0	U	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0	U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	5.0	U	5.0	0.22	
75-01-4	Vinyl Chloride	5.0	U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	106	85-122	9/25/14 00:47	
Dibromofluoromethane	98	89-119	9/25/14 00:47	
Toluene-d8	100	87-121	9/25/14 00:47	

Sample : MBLK
 Data File : I:\ACQUDATA\msvoa10\data\092414\A2330.D Vial: 31
 Acq On : 25 Sep 2014 12:47 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Sep 25 08:31:44 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

R21411595-21

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	925308	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1366072	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1314341	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	708951	50.00	ug/L	0.00

System Monitoring Compounds

45) surr4, Dibrflmethane	4.324	113	427115	49.03	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	98.06%
48) surr1, 1,2-dichloroetha...	4.854	65	423415	46.06	ug/L	0.00
Spiked Amount	50.000	Range	78 - 122	Recovery	=	92.12%
65) SURR3, Toluene-d8	7.427	98	1535045	50.04	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	100.08%
70) SURR2, BFB	9.878	95	638239	52.87	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	105.74%

Target Compounds

					Qvalue	
5) Bromomethane	1.562	94	1100	0.46	ug/L	90
15) Acetone	2.129	43	716	0.25	ug/L	69
16) 2-Propanol	2.208	45	373	0.94	ug/L	96
17) Iodomethane	2.227	142	561	4.99	ug/L	69
20) Allyl Chloride	2.269	76	1500	0.37	ug/L #	1
89) Cyclohexanone	9.835	55	953	0.79	ug/L	90
116) Hexachlorobt	12.328	225	1192	0.27	ug/L #	66
118) 1,2,3-Tclbenzene	12.536	180	2442	0.31	ug/L #	78

115) 1,2,4-TCB - NT (SP)

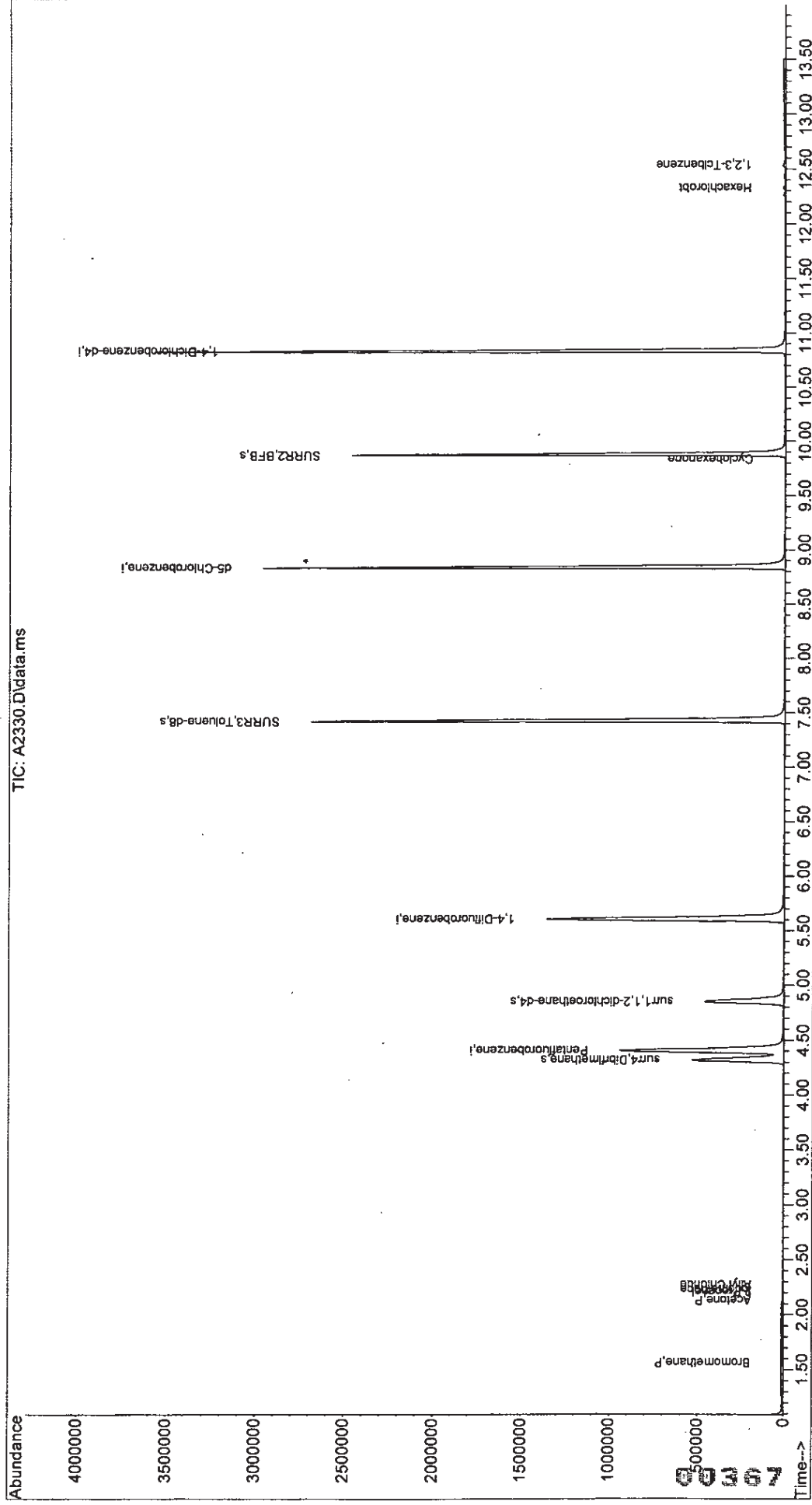
(#)=qualifier out of range (m)=manual integration (+)=signals summed

FU
9/25/14

Quantitation Report (Not Reviewed)

Sample : MBLK
 Data File : I:\ACQUDATA\msvoa10\data\092414\A2330.D Vial: 31
 Acq On : 25 Sep 2014 12:47 am
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Sep 25 08:31:44 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: NA
Date Received: NA
Date Analyzed: 9/29/14 13:36

Sample Name: Method Blank
Lab Code: RQ1411994-01

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\092914\A2423.D\

Analysis Lot: 413648
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	5.0	U	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	5.0	U	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0	U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	5.0	U	5.0	0.22	
75-01-4	Vinyl Chloride	5.0	U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	85-122	9/29/14 13:36	
Dibromofluoromethane	108	89-119	9/29/14 13:36	
Toluene-d8	97	87-121	9/29/14 13:36	

Sample : MBLK
 Data File : I:\ACQUDATA\MSVOA10\DATA\092914\A2423.D Vial: 5
 Acq On : 29 Sep 2014 1:36 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

R214111994-01

Quant Time: Sep 29 13:49:36 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	1091801	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1458461	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1317507	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	703025	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.318	113	501353	53.91	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	= 107.82%	
48) surr1,1,2-dichloroetha...	4.854	65	513671	52.34	ug/L	0.00
Spiked Amount	50.000	Range	78 - 122	Recovery	= 104.68%	
65) SURR3,Toluene-d8	7.427	98	1581408	48.28	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	= 96.56%	
70) SURR2,BFB	9.878	95	650699	50.48	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	= 100.96%	
Target Compounds						
					Qvalue	
5) Bromomethane	1.562	94	1006	0.38	ug/L	83
12) Acrolein	2.032	56	316	0.24	ug/L #	20
15) Acetone	2.123	43	1439	0.43	ug/L	63
16) 2-Propanol	2.196	45	926	1.97	ug/L #	53
17) Iodomethane	2.209	142	501	4.97	ug/L #	57
19) Acetonitrile	2.276	40	619	1.74	ug/L #	1
20) Allyl Chloride	2.263	76	1869	0.39	ug/L #	1
23) TBA	2.501	59	666	1.18	ug/L	65
89) Cyclohexanone	9.841	55	495	0.41	ug/L #	41
112) Trielution Dichlorotol...	11.835	125	4881	0.31	ug/L	79
114) Coelution Dichlorotoluene	12.103	125	3981	0.24	ug/L	85
116) Hexachlorobt	12.341	225	1162	0.26	ug/L	89
118) 1,2,3-Tclbenzene	12.548	180	2219	0.28	ug/L #	53
119) 2,4,5-Trichlorotoluene	12.956	159	3572	0.72	ug/L	77
120) 2,3,6-Trichlorotoluene	13.017	159	4468	0.89	ug/L	81

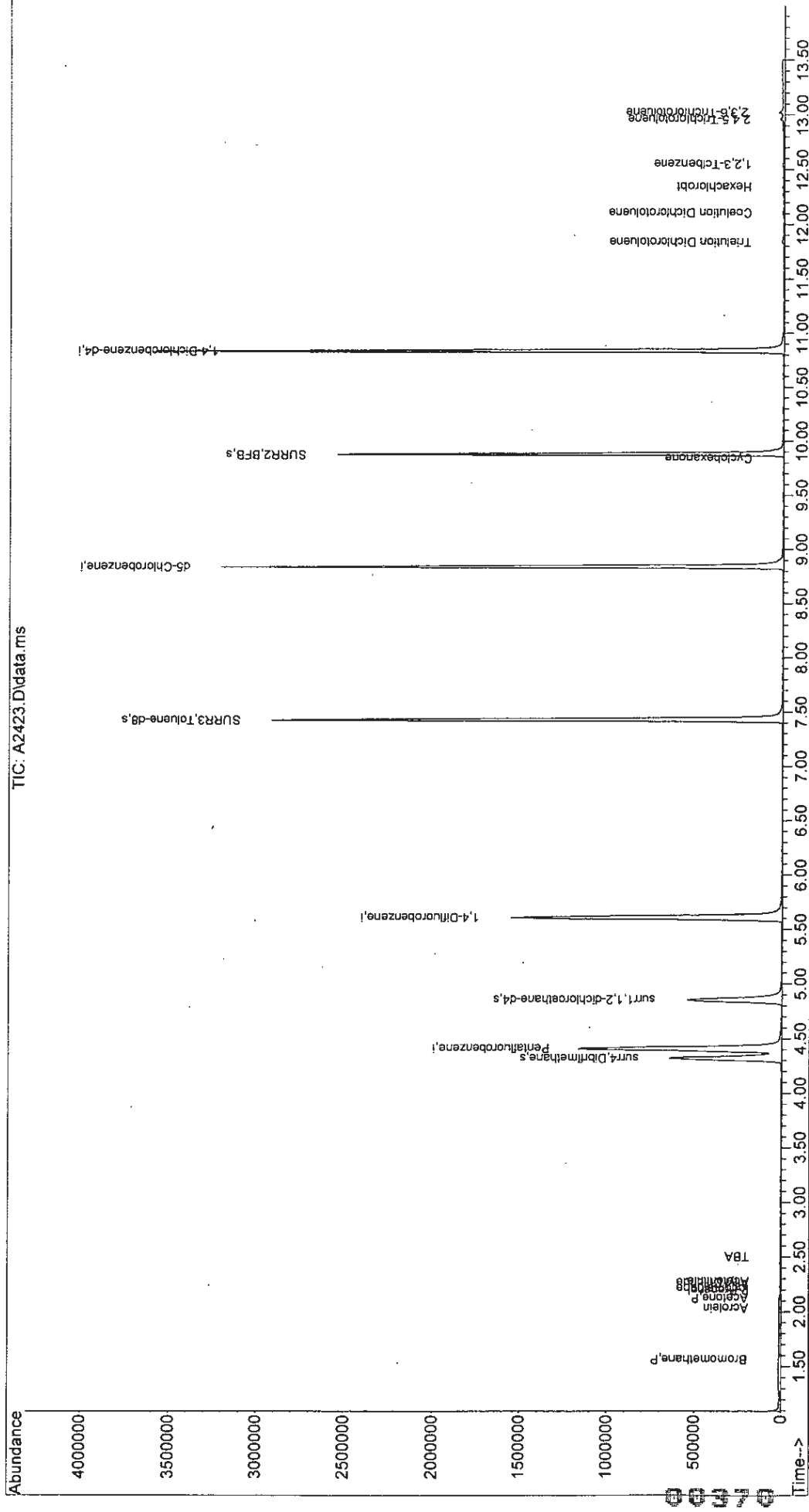
NT(OR)
 NT(OR)

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

FJ
 9/29/14

Sample : MBLK
 Data File : I:\ACQDATA\MSVOA10\DATA\092914\A2423.D Vial: 5
 Acq On : 29 Sep 2014 1:36 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Sep 29 13:49:36 2014
 Quant Method : I:\ACQDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: NA
Date Received: NA
Date Analyzed: 9/30/14 17:14

Sample Name: Method Blank
Lab Code: RQ1412027-01

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvov10\data\093014\A2476.D\

Analysis Lot: 413884
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	5.0	U	5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	5.0	U	5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	5.0	U	5.0	0.30	
79-01-6	Trichloroethene (TCE)	5.0	U	5.0	0.22	
75-01-4	Vinyl Chloride	5.0	U	5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	85-122	9/30/14 17:14	
Dibromofluoromethane	106	89-119	9/30/14 17:14	
Toluene-d8	100	87-121	9/30/14 17:14	

Sample : MBLK
 Data File : I:\ACQUDATA\MSVOA10\DATA\093014\A2476.D Vial: 5
 Acq On : 30 Sep 2014 5:14 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Sep 30 17:27:07 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

20141207-01

FJ
12/6/14

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	887209	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1338420	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.842	117	1151923	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	638785	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.318	113	453417	53.13	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	= 106.26%	
48) surr1,1,2-dichloroetha...	4.854	65	489292	54.32	ug/L	0.00
Spiked Amount	50.000	Range	78 - 122	Recovery	= 108.64%	
65) SURR3,Toluene-d8	7.427	98	1509558	50.22	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	= 100.44%	
70) SURR2,BFB	9.878	95	552290	46.69	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	= 93.38%	
Target Compounds						
					Qvalue	
5) Bromomethane	1.556	94	689	0.34	ug/L	93
12) Acrolein	2.020	56	348	0.32	ug/L #	47
15) Acetone	2.123	43	1159	0.43	ug/L #	64
16) 2-Propanol	2.251	45	304	0.80	ug/L	89
17) Iodomethane	2.270	142	280	4.95	ug/L #	34
20) Allyl Chloride	2.270	76	1971	0.51	ug/L #	1
58) 1,4-Dioxane	6.555	88	304	5.60	ug/L #	13
89) Cyclohexanone	9.841	55	1123	1.06	ug/L #	60
112) Trielution Dichlorotol...	11.835	125	4879	0.34	ug/L	88
114) Coelution Dichlorotoluene	12.091	125	3927	0.26	ug/L #	80
115) 1,2,4-Tcbenzene	12.268	180	2151	0.22	ug/L #	76
116) Hexachlorobt	12.335	225	1289	0.32	ug/L #	49
118) 1,2,3-Tclbenzene	12.536	180	2516	0.35	ug/L #	50
119) 2,4,5-Trichlorotoluene	12.944	159	2797	0.62	ug/L	86
120) 2,3,6-Trichlorotoluene	12.944	159	2797	0.62	ug/L	86

< MDL

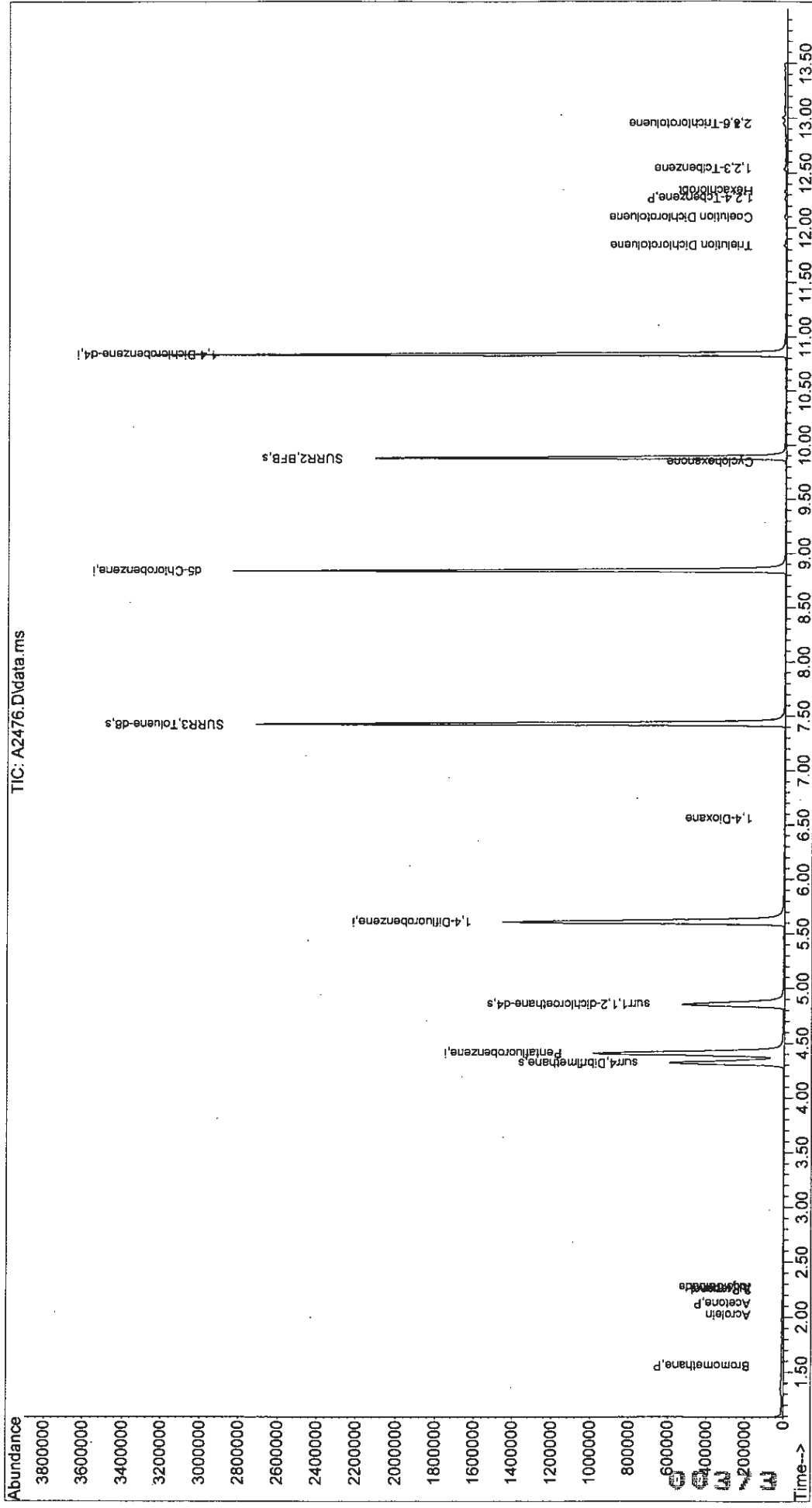
NT(WP)

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

2014
12/6/14

Sample : MBLK
 Data File : I:\ACQDATA\MSVOA10\DATA\093014\A2476.D Vial: 5
 Acq On : 30 Sep 2014 5:14 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Sep 30 17:27:07 2014
 Quant Method : I:\ACQDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: NA
Date Received: NA
Date Analyzed: 9/24/14 23:17

Sample Name: Lab Control Sample
Lab Code: RQ1411595-02

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvov10\data\092414\A2327.D\

Analysis Lot: 412875
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	18.2		5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	16.9		5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	22.4		5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	21.1		5.0	0.30	
79-01-6	Trichloroethene (TCE)	22.5		5.0	0.22	
75-01-4	Vinyl Chloride	19.1		5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	18.6		5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	19.1		5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	85-122	9/24/14 23:17	
Dibromofluoromethane	98	89-119	9/24/14 23:17	
Toluene-d8	98	87-121	9/24/14 23:17	

Sample : LCS
 Data File : I:\ACQUDATA\msvoa10\data\092414\A2327.D Vial: 28
 Acq On : 24 Sep 2014 11:17 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Sep 25 09:14:28 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

201411595-02

FU
9/28/14

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	929850	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1343605	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1238523	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	720253	50.00	ug/L	0.00

System Monitoring Compounds

45) surr4,Dibrfilmethane	4.318	113	418899	48.89	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	97.78%
48) surr1,1,2-dichloroetha...	4.854	65	409430	45.28	ug/L	0.00
Spiked Amount	50.000	Range	78 - 122	Recovery	=	90.56%
65) SURR3,Toluene-d8	7.427	98	1480923	49.08	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	98.16%
70) SURR2,BFB	9.878	95	613009	51.63	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	103.26%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.191	85	201029	20.09	ug/L	98
3) Chloromethane	1.294	50	279873	20.98	ug/L	100
4) Vinyl Chloride	1.361	62	232650	19.09	ug/L	95
5) Bromomethane	1.556	94	83361	24.89	ug/L	96
6) Chloroethane	1.611	64	122834	19.89	ug/L	96
7) Freon 21	1.721	67	306866	17.89	ug/L	97
8) Trichlorofluoromethane	1.770	101	266334	19.29	ug/L	98
9) Diethyl Ether	1.934	59	154644	21.27	ug/L	81
10) Freon 123a	1.928	67	196195	18.17	ug/L	97
11) Freon 123	1.965	83	210841	18.34	ug/L	98
12) Acrolein	2.026	56	53370	46.93	ug/L	97
13) 1,1-Dicethene	2.099	96	145207	22.41	ug/L	94
14) Freon 113	2.093	101	156861	19.16	ug/L	100
15) Acetone	2.123	43	58316	20.60	ug/L	96
16) 2-Propanol	2.196	45	187770	469.00	ug/L	100
17) Iodomethane	2.215	142	122911	20.80	ug/L	93
18) Carbon Disulfide	2.270	76	485949	17.73	ug/L	100
19) Acetonitrile	2.331	40	32934	108.51	ug/L #	86
20) Allyl Chloride	2.349	76	70161	17.22	ug/L #	46
21) Methyl Acetate	2.355	43	118023	21.01	ug/L	90
22) Methylene Chloride	2.440	84	160423	18.86	ug/L #	83
23) TBA	2.501	59	257999	535.29	ug/L	77
24) Acrylonitrile	2.635	53	293749	112.90	ug/L	97
25) Methyl-t-Butyl Ether	2.660	73	384692	20.72	ug/L	89
26) trans-1,2-Dichloroethene	2.672	96	159322	19.07	ug/L	97
28) 1,1-Dicethane	3.044	63	298475	16.89	ug/L	96
29) Vinyl Acetate	3.093	86	10358	9.96	ug/L #	93
31) 2-Chloro-1,3-Butadiene	3.141	53	293005	16.86	ug/L	88
33) 2,2-Dichloropropane	3.684	77	145317	13.28	ug/L	96
34) cis-1,2-Dichloroethene	3.678	96	169932	18.60	ug/L	98
35) 2-Butanone	3.708	43	81937	21.96	ug/L	88
36) Propionitrile	3.769	54	105956	118.61	ug/L	98
37) Bromochloromethane	3.983	130	120803	21.50	ug/L	90
38) Methacrylonitrile	3.977	67	50986	25.25	ug/L #	58
39) Tetrahydrofuran	4.062	42	44917	21.73	ug/L	71

Sample : LCS
 Data File : I:\ACQUDATA\msvoa10\data\092414\A2327.D Vial: 28
 Acq On : 24 Sep 2014 11:17 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Sep 25 09:14:28 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chloroform	4.092	83	283988	18.45	ug/L	96
41) 1,1,1-Trichloroethane	4.361	97	231790	18.20	ug/L	95
44) Cyclohexane	4.446	41	170407	14.01	ug/L	91
46) Carbontetrachloride	4.623	121	67095	19.60	ug/L	87
47) 1,1-Dichloropropene	4.617	75	191685	18.24	ug/L	97
49) Benzene	4.958	78	610377	18.58	ug/L	93
50) 1,2-Dichloroethane	4.989	62	220380	19.34	ug/L	96
51) Iso-Butyl Alcohol	4.861	43	128046	479.78	ug/L	100
52) n-Heptane	5.452	43	190648	15.39	ug/L #	82
54) Trichloroethene	5.970	130	206084	22.51	ug/L	91
55) Methylcyclohexane	6.214	55	198247	15.71	ug/L #	85
56) 1,2-Dichloropropane	6.257	63	176009	18.39	ug/L	96
57) Dibromomethane	6.403	93	97572	21.14	ug/L	90
58) 1,4-Dioxane	6.470	88	31909m	585.77	ug/L	
59) Methyl Methacrylate	6.464	69	80729	23.74	ug/L #	77
60) Bromodichloromethane	6.616	83	211653	20.20	ug/L	97
61) 2-Nitropropane	6.897	41	58656	44.37	ug/L	92
62) 2-Chloroethylvinyl Ether	7.006	63	83392	20.83	ug/L	92
63) cis-1,3-Dichloropropene	7.147	75	217727	19.67	ug/L	98
64) 4-Methyl-2-pentanone	7.336	43	166974	23.32	ug/L	94
66) Toluene	7.500	91	678219	19.71	ug/L	99
67) trans-1,3-Dichloropropene	7.750	75	183267	20.92	ug/L	94
68) Ethyl Methacrylate	7.872	69	156837	21.97	ug/L #	71
69) 1,1,2-Trichloroethane	7.927	97	140918	23.21	ug/L	94
72) Tetrachloroethene	8.055	164	151158	21.10	ug/L	98
73) 2-Hexanone	8.201	43	120116	22.95	ug/L	95
74) 1,3-Dichloropropane	8.086	76	224719	21.17	ug/L	84
75) Dibromochloromethane	8.299	129	171408	22.66	ug/L	99
76) N-Butyl Acetate	8.342	43	240800	20.67	ug/L	94
77) 1,2-Dibromoethane	8.396	107	148140	24.62	ug/L	98
79) Chlorobenzene	8.866	112	487687	20.42	ug/L	94
81) 1,1,1,2-Tetrachloroethane	8.945	131	174362	20.86	ug/L	98
82) Ethylbenzene	8.982	106	217045	18.24	ug/L #	87
83) (m+p)Xylene	9.085	106	607438	41.39	ug/L	95
84) o-Xylene	9.433	106	291133	20.29	ug/L	90
85) Styrene	9.445	104	515997	21.65	ug/L	95
86) Bromoform	9.597	173	109928	25.30	ug/L	96
88) Isopropylbenzene	9.756	105	733535	20.33	ug/L	100
89) Cyclohexanone	9.823	55	346517	303.93	ug/L	99
90) trans-1,4-Dichloro-2-B...	10.061	53	31252	18.04	ug/L	81
92) 1,1,2,2-Tetrachloroethane	10.006	83	161555	20.44	ug/L	97
93) Bromobenzene	10.000	156	227495	20.92	ug/L	93
94) 1,2,3-Trichloropropane	10.036	110	49089	22.22	ug/L	96
95) n-Propylbenzene	10.103	91	850821	18.93	ug/L	97
96) 2-Chlorotoluene	10.164	91	518504	18.70	ug/L	95
98) 4-Chlorotoluene	10.262	91	619084	18.56	ug/L	90
99) 1,3,5-Trimethylbenzene	10.250	105	613250	18.76	ug/L	95
100) tert-Butylbenzene	10.518	119	525432	19.18	ug/L	99
101) 1,2,4-Trimethylbenzene	10.561	105	635510	19.23	ug/L	94
103) sec-Butylbenzene	10.695	105	739135	19.25	ug/L	99
104) p-Isopropyltoluene	10.817	119	660469	19.82	ug/L	95
105) 1,3-Dichlorobenz	10.780	146	425531	20.46	ug/L	98

Sample : LCS
Data File : I:\ACQUDATA\msvoa10\data\092414\A2327.D Vial: 28
Acq On : 24 Sep 2014 11:17 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Sep 25 09:14:28 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration

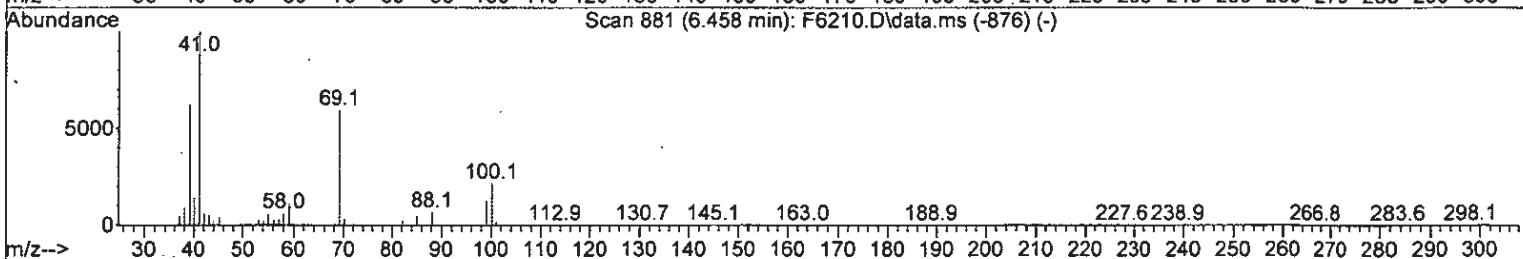
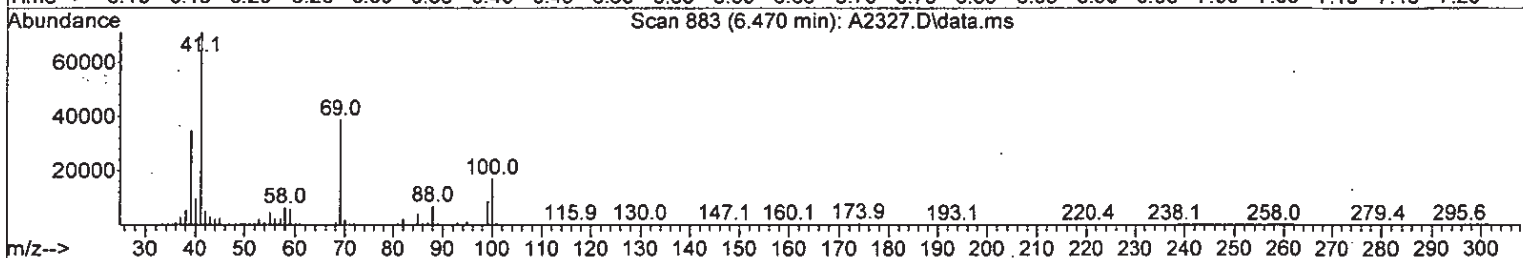
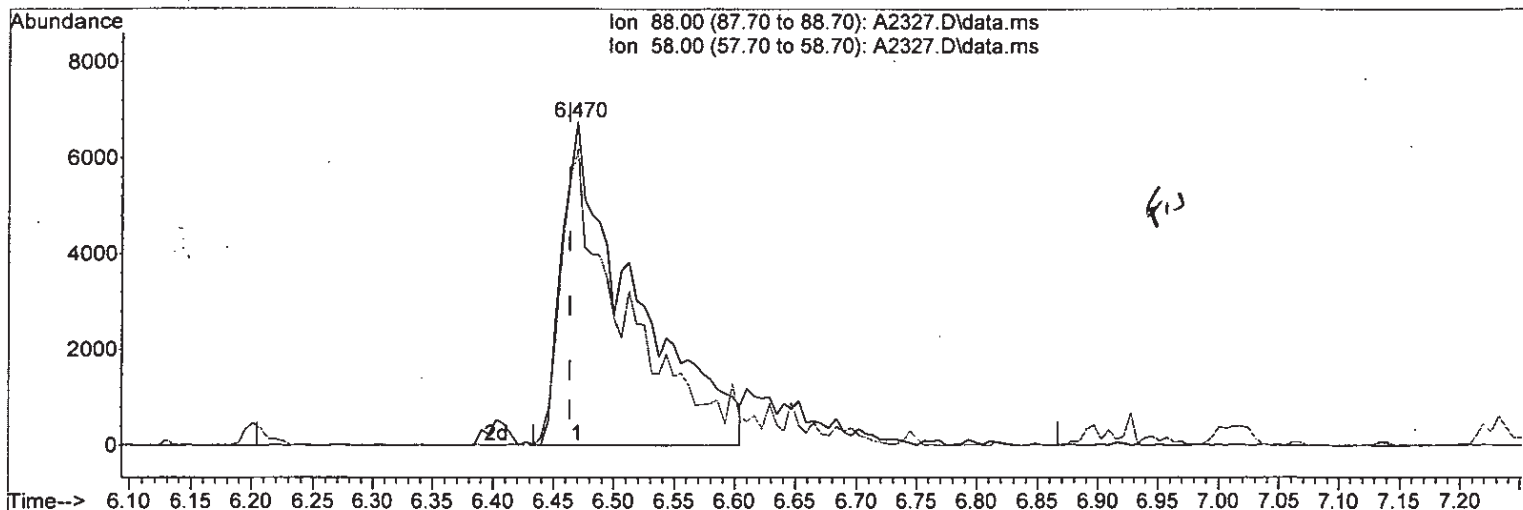
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106)	1,4-Dclbenz	10.853	146	445313	20.67	ug/L	98
109)	n-Butylbenzene	11.140	91	542135	19.20	ug/L	97
110)	1,2-Dclbenz	11.152	146	408400	20.90	ug/L	98
111)	1,2-Dibromo-3-chloropr...	11.707	157	32855	27.31	ug/L	92
115)	1,2,4-Tcbenzene	12.225	180	248627	22.45	ug/L	94
116)	Hexachlorobt	12.323	225	101058	22.30	ug/L	98
117)	Naphthalen	12.371	128	517036	27.17	ug/L	98
118)	1,2,3-Tclbenzene	12.505	180	215867	26.60	ug/L	95
119)	2,4,5-Trichlorotoluene	12.938	159	1498	0.30	ug/L	83
120)	2,3,6-Trichlorotoluene	12.993	159	1899	0.37	ug/L	86

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

Quantitation Report (Qedit)

Sample : LCS
 Data File : I:\ACQUDATA\msvoa10\data\092414\A2327.D Vial: 28
 Acq On : 24 Sep 2014 11:17 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Sep 25 08:31:16 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration



TIC: A2327.D\data.ms

(58) 1,4-Dioxane

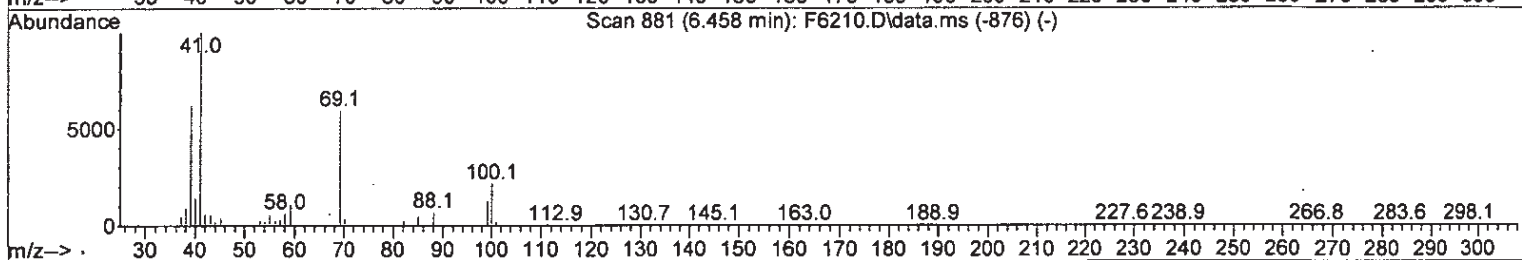
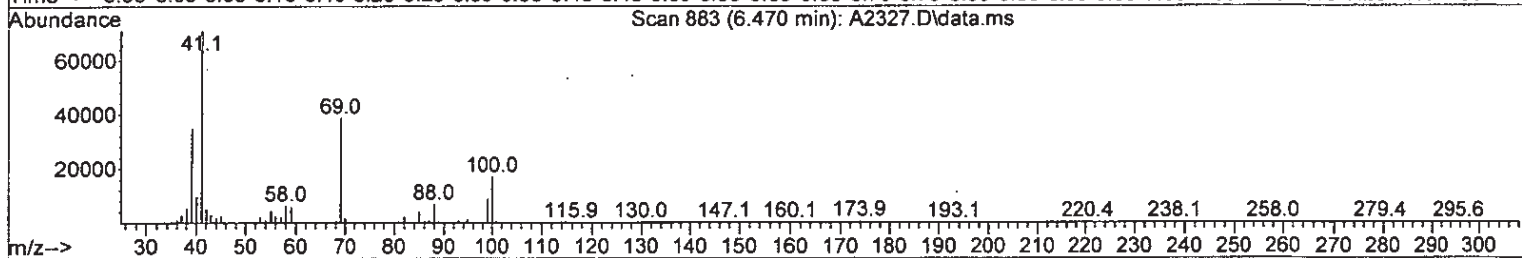
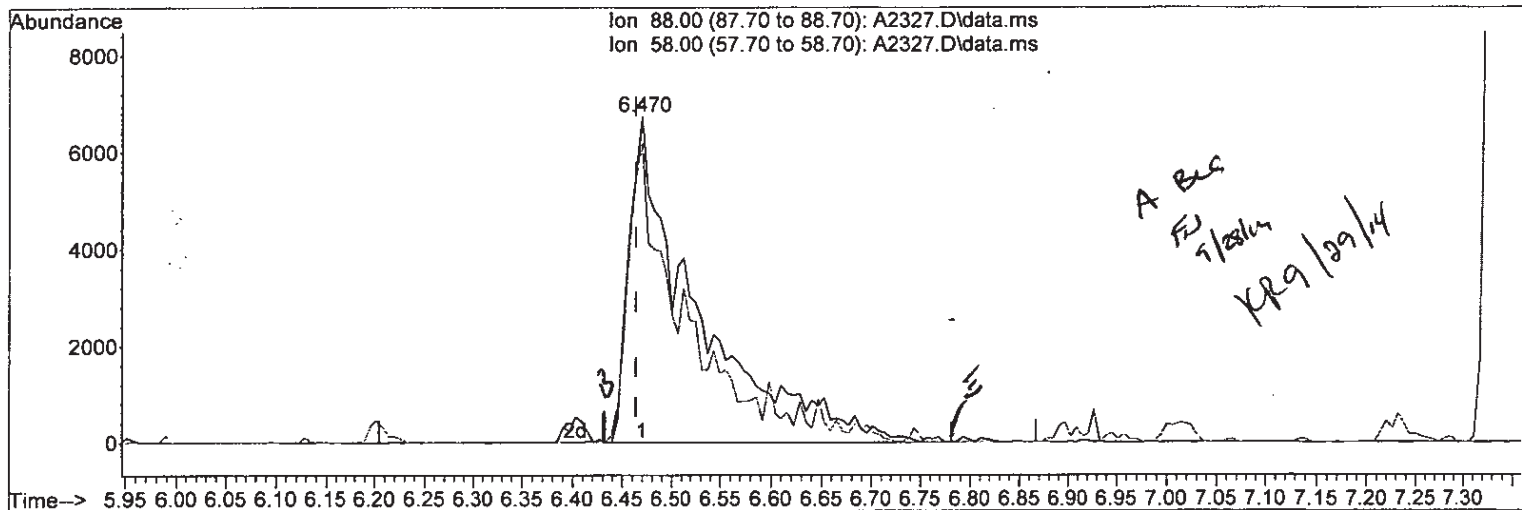
6.470min (+0.006) 507.31 ug/L

response 27635

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	91.71
0.00	0.00	0.00
0.00	0.00	0.00

Sample : LCS
Data File : I:\ACQUDATA\msvoa10\data\092414\A2327.D Vial: 28
Acq On : 24 Sep 2014 11:17 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Sep 25 08:31:16 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



TIC: A2327.D\data.ms

(58) 1,4-Dioxane

6.470min (+0.006) 585.77 ug/L m

response 31909

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	91.71
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report

InstName :

Response via : Initial Calibration



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: NA
Date Received: NA
Date Analyzed: 9/24/14 23:47

Sample Name: Duplicate Lab Control Sample
Lab Code: RQ1411595-03

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\092414\A2328.D\

Analysis Lot: 412875
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	19.3		5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	17.8		5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	22.9		5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	20.7		5.0	0.30	
79-01-6	Trichloroethene (TCE)	24.2		5.0	0.22	
75-01-4	Vinyl Chloride	20.0		5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	20.0		5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	20.1		5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	85-122	9/24/14 23:47	
Dibromofluoromethane	98	89-119	9/24/14 23:47	
Toluene-d8	100	87-121	9/24/14 23:47	

Sample : LCSD
 Data File : I:\ACQUDATA\msvoa10\data\092414\A2328.D Vial: 29
 Acq On : 24 Sep 2014 11:47 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Sep 25 09:17:28 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

R2144555-3

FJ
9/28/14

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	990069	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1457217	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1347115	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	764156	50.00	ug/L	0.00

System Monitoring Compounds						
45) surr4, Dibromomethane	4.318	113	455299	49.00	ug/L	0.00
Spiked Amount	50.000	Range	89 - 119	Recovery	=	98.00%
48) surr1, 1,2-dichloroetha...	4.854	65	451686	46.06	ug/L	0.00
Spiked Amount	50.000	Range	78 - 122	Recovery	=	92.12%
65) SURR3, Toluene-d8	7.427	98	1629797	49.80	ug/L	0.00
Spiked Amount	50.000	Range	87 - 121	Recovery	=	99.60%
70) SURR2, BFB	9.878	95	665493	51.68	ug/L	0.00
Spiked Amount	50.000	Range	85 - 122	Recovery	=	103.36%

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.191	85	219982	20.64	ug/L	98
3) Chloromethane	1.294	50	302278	21.28	ug/L	97
4) Vinyl Chloride	1.361	62	259084	19.97	ug/L	96
5) Bromomethane	1.556	94	84733	23.84	ug/L	98
6) Chloroethane	1.611	64	138473	21.06	ug/L	93
7) Freon 21	1.721	67	333096	18.24	ug/L	100
8) Trichlorofluoromethane	1.770	101	294266	20.02	ug/L	97
9) Diethyl Ether	1.934	59	174287	22.51	ug/L	82
10) Freon 123a	1.928	67	214895	18.69	ug/L	98
11) Freon 123	1.965	83	231416	18.91	ug/L	99
12) Acrolein	2.026	56	53198	43.93	ug/L	93
13) 1,1-Dicethene	2.099	96	157919	22.89	ug/L #	87
14) Freon 113	2.093	101	172237	19.76	ug/L	98
15) Acetone	2.123	43	64602	21.43	ug/L	95
16) 2-Propanol	2.196	45	195812	459.34	ug/L	97
17) Iodomethane	2.215	142	122829	19.86	ug/L	99
18) Carbon Disulfide	2.270	76	465168	15.94	ug/L	98
19) Acetonitrile	2.337	40	33327m	103.13	ug/L	
20) Allyl Chloride	2.349	76	78037	17.99	ug/L #	49
21) Methyl Acetate	2.355	43	124325	20.79	ug/L	86
22) Methylene Chloride	2.440	84	178510	19.71	ug/L #	82
23) TBA	2.501	59	278132	541.96	ug/L	72
24) Acrylonitrile	2.635	53	329654	118.99	ug/L	94
25) Methyl-t-Butyl Ether	2.660	73	424927	21.49	ug/L	90
26) trans-1,2-Dichloroethene	2.666	96	178571	20.07	ug/L	93
28) 1,1-Dicethane	3.050	63	335140	17.81	ug/L	99
29) Vinyl Acetate	3.093	86	6121	5.53	ug/L #	55
31) 2-Chloro-1,3-Butadiene	3.141	53	283640	15.33	ug/L	85
33) 2,2-Dichloropropane	3.684	77	162643	13.96	ug/L	99
34) cis-1,2-Dichloroethene	3.678	96	194102	19.95	ug/L	96
35) 2-Butanone	3.708	43	88979	22.39	ug/L	92
36) Propionitrile	3.775	54	118729	124.73	ug/L	98
37) Bromochloromethane	3.983	130	130361	21.79	ug/L	93
38) Methacrylonitrile	3.977	67	56684	26.36	ug/L #	55
39) Tetrahydrofuran	4.068	42	54962	24.98	ug/L	73

Sample : LCSD
 Data File : I:\ACQUDATA\msvoa10\data\092414\A2328.D Vial: 29
 Acq On : 24 Sep 2014 11:47 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Sep 25 09:17:28 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chloroform	4.092	83	315772	19.26	ug/L	97
41) 1,1,1-Trichloroethane	4.355	97	261557	19.28	ug/L	94
44) Cyclohexane	4.446	41	191321	14.50	ug/L	89
46) Carbontetrachloride	4.611	121	70986	19.12	ug/L	84
47) 1,1-Dichloropropene	4.617	75	217289	19.06	ug/L	96
49) Benzene	4.958	78	689306	19.35	ug/L	94
50) 1,2-Dichloroethane	4.989	62	244314	19.77	ug/L	92
51) Iso-Butyl Alcohol	4.861	43	137990	476.73	ug/L	99
52) n-Heptane	5.458	43	213518	15.89	ug/L #	80
53) 1-Butanol	5.915	56	315	31.44	ug/L #	20
54) Trichloroethene	5.964	130	239928	24.16	ug/L	95
55) Methylcyclohexane	6.214	55	216317	15.80	ug/L	87
56) 1,2-Dichloropropane	6.257	63	200968	19.36	ug/L	98
57) Dibromomethane	6.403	93	108679	21.71	ug/L	94
58) 1,4-Dioxane	6.470	88	30817m	521.62	ug/L	
59) Methyl Methacrylate	6.470	69	89495	24.27	ug/L #	66
60) Bromodichloromethane	6.616	83	233425	20.54	ug/L	96
61) 2-Nitropropane	6.897	41	62484	43.58	ug/L	90
62) 2-Chloroethylvinyl Ether	7.007	63	87662	20.19	ug/L	98
63) cis-1,3-Dichloropropene	7.147	75	248714	20.72	ug/L	96
64) 4-Methyl-2-pentanone	7.336	43	177265	22.83	ug/L	95
66) Toluene	7.500	91	762977	20.44	ug/L	100
67) trans-1,3-Dichloropropene	7.750	75	205475	21.62	ug/L	94
68) Ethyl Methacrylate	7.872	69	179371	23.17	ug/L #	65
69) 1,1,2-Trichloroethane	7.921	97	153787	23.35	ug/L	97
72) Tetrachloroethene	8.055	164	161138	20.68	ug/L	96
73) 2-Hexanone	8.201	43	129185	22.69	ug/L	93
74) 1,3-Dichloropropane	8.086	76	256440m	22.22	ug/L	
75) Dibromochloromethane	8.299	129	188657	22.93	ug/L	100
76) N-Butyl Acetate	8.342	43	261219	20.62	ug/L	94
77) 1,2-Dibromoethane	8.403	107	164745	25.17	ug/L	94
79) Chlorobenzene	8.866	112	535660	20.62	ug/L	96
81) 1,1,1,2-Tetrachloroethane	8.945	131	184861	20.34	ug/L	98
82) Ethylbenzene	8.976	106	244711	18.91	ug/L	98
83) (m+p)Xylene	9.085	106	660061	41.35	ug/L	95
84) o-Xylene	9.433	106	322463	20.66	ug/L	93
85) Styrene	9.445	104	559226	21.57	ug/L	96
86) Bromoform	9.597	173	117347	24.83	ug/L	98
88) Isopropylbenzene	9.756	105	799451	20.37	ug/L	99
89) Cyclohexanone	9.823	55	409077	329.88	ug/L	98
90) trans-1,4-Dichloro-2-B...	10.061	53	34539	18.31	ug/L	86
92) 1,1,2,2-Tetrachloroethane	10.006	83	168751	20.12	ug/L	99
93) Bromobenzene	10.000	156	244148	21.16	ug/L	96
94) 1,2,3-Trichloropropane	10.042	110	53936	23.01	ug/L	96
95) n-Propylbenzene	10.103	91	953299	19.99	ug/L	99
96) 2-Chlorotoluene	10.171	91	569440	19.35	ug/L	93
98) 4-Chlorotoluene	10.256	91	682258	19.28	ug/L	96
99) 1,3,5-Trimethylbenzene	10.250	105	669796	19.32	ug/L	96
100) tert-Butylbenzene	10.518	119	564575	19.43	ug/L	97
101) 1,2,4-Trimethylbenzene	10.561	105	683926	19.51	ug/L	94
103) sec-Butylbenzene	10.695	105	805324	19.76	ug/L	100
104) p-Isopropyltoluene	10.817	119	711894	20.14	ug/L	96

Sample : LCSD
Data File : I:\ACQUDATA\msvoa10\data\092414\A2328.D Vial: 29
Acq On : 24 Sep 2014 11:47 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

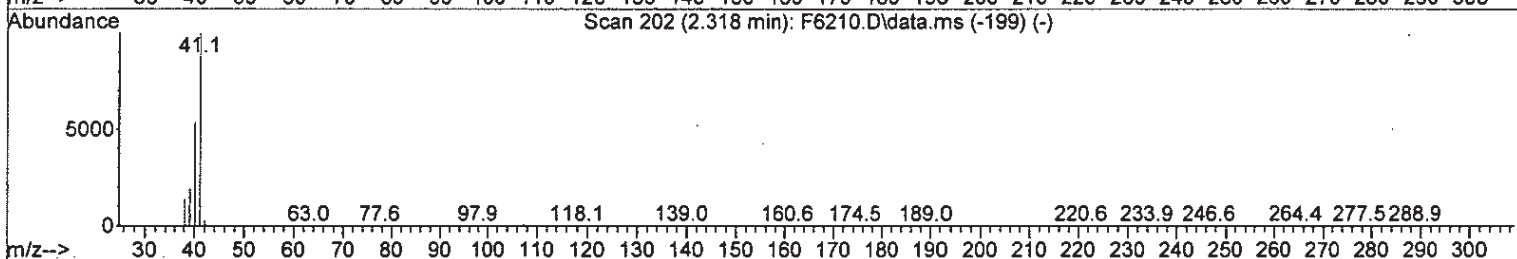
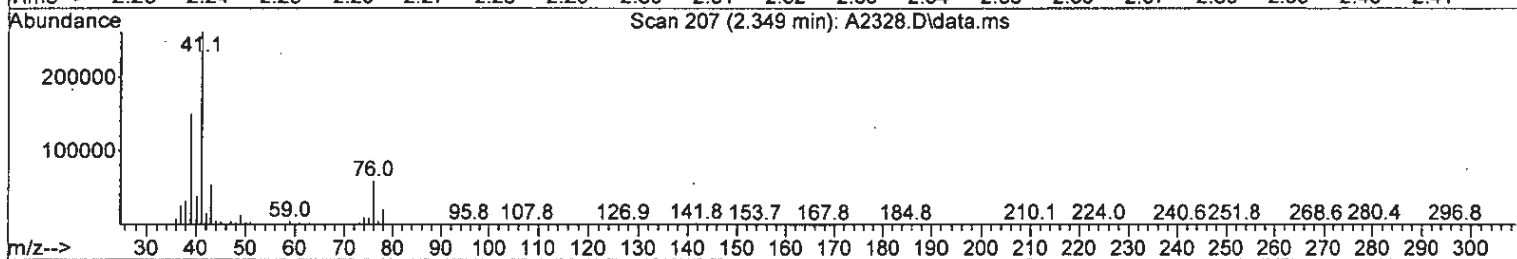
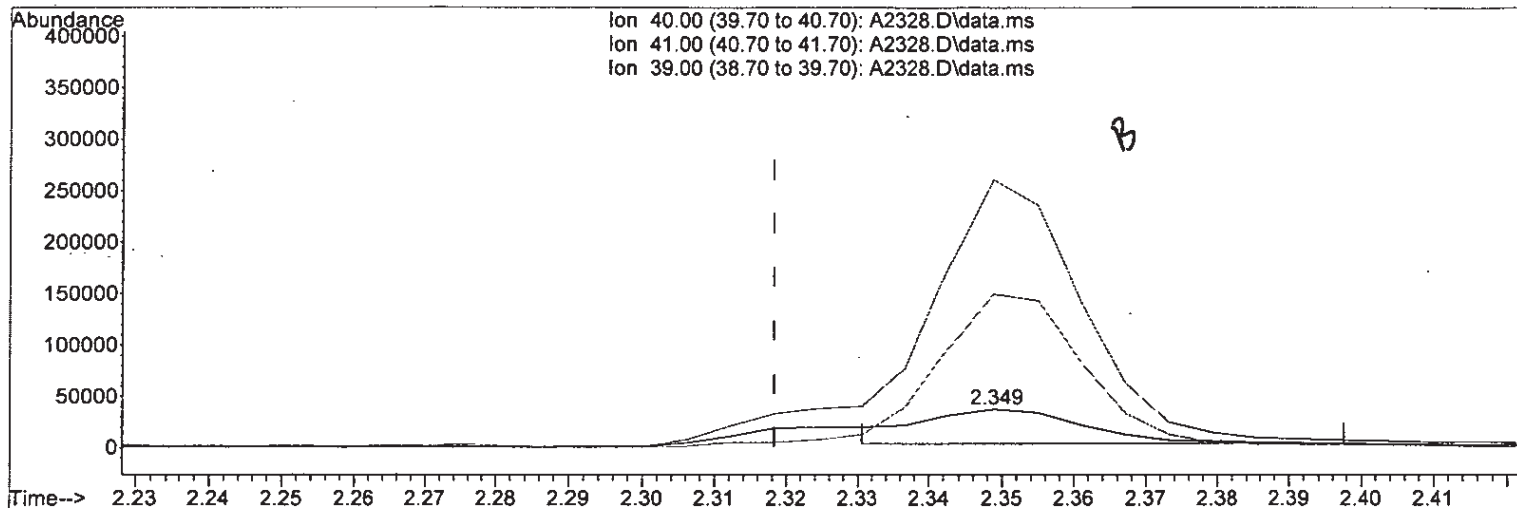
Quant Time: Sep 25 09:17:28 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) 1,3-Dclbenz	10.780	146	446462	20.23	ug/L	96
106) 1,4-Dclbenz	10.853	146	469979	20.56	ug/L	99
109) n-Butylbenzene	11.140	91	597712	19.95	ug/L	98
110) 1,2-Dclbenz	11.152	146	446001	21.51	ug/L	99
111) 1,2-Dibromo-3-chloropr...	11.707	157	35038	27.45	ug/L	95
115) 1,2,4-Tcbenzene	12.225	180	268824	22.88	ug/L	96
116) Hexachlorobt	12.323	225	109523	22.77	ug/L	96
117) Naphthalen	12.371	128	547119	27.10	ug/L	98
118) 1,2,3-Tclbenzene	12.505	180	232155	26.96	ug/L	98
119) 2,4,5-Trichlorotoluene	12.938	159	1114	0.21	ug/L	87
120) 2,3,6-Trichlorotoluene	12.993	159	1405	0.26	ug/L	92

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

Sample : LCSD
Data File : I:\ACQUDATA\msvoa10\data\092414\A2328.D Vial: 29
Acq On : 24 Sep 2014 11:47 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Sep 25 08:31:26 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



TIC: A2328.D\data.ms

(19) Acetonitrile

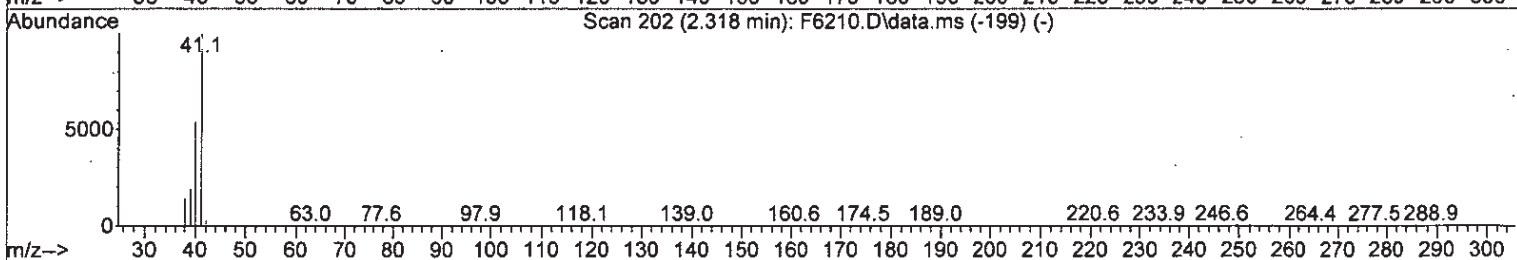
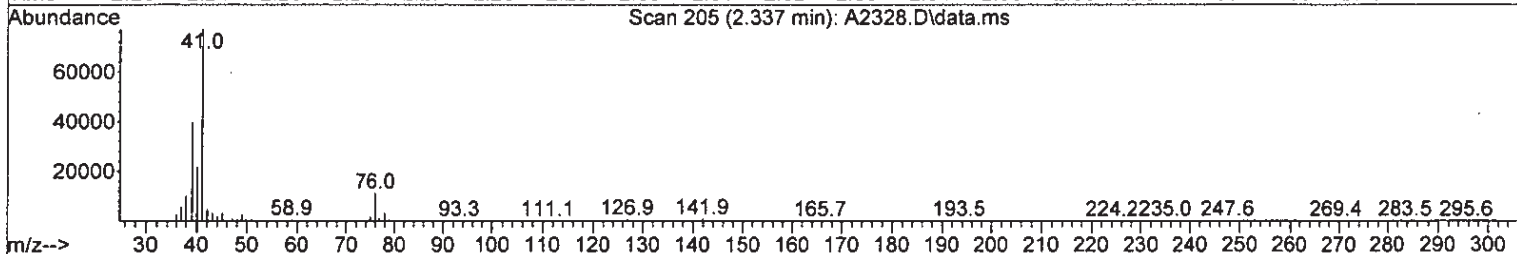
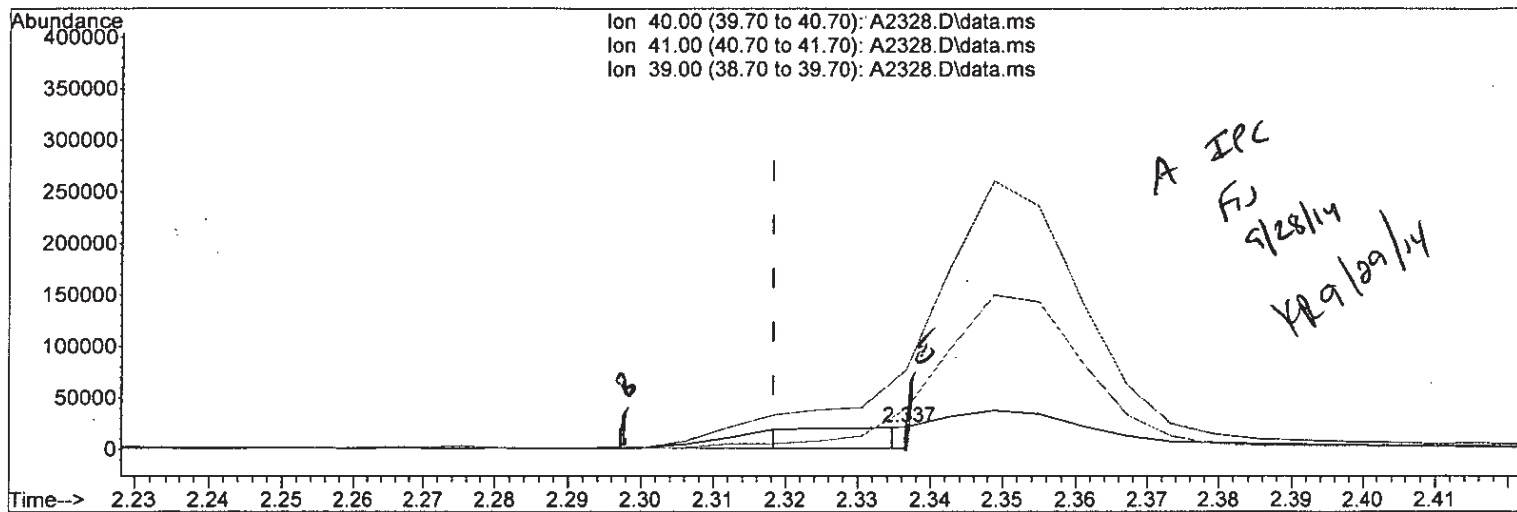
2.349min (+0.031) 158.50 ug/L

response 51222

Ion	Exp%	Act%
40.00	100	100
41.00	182.70	694.98#
39.00	36.00	398.89#
0.00	0.00	0.00

Sample : LCSD
Data File : I:\ACQUDATA\msvoa10\data\092414\A2328.D Vial: 29
Acq On : 24 Sep 2014 11:47 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Sep 25 08:31:26 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



TIC: A2328.D\data.ms

(19) Acetonitrile

2.337min (+0.018) 103.13 ug/L m

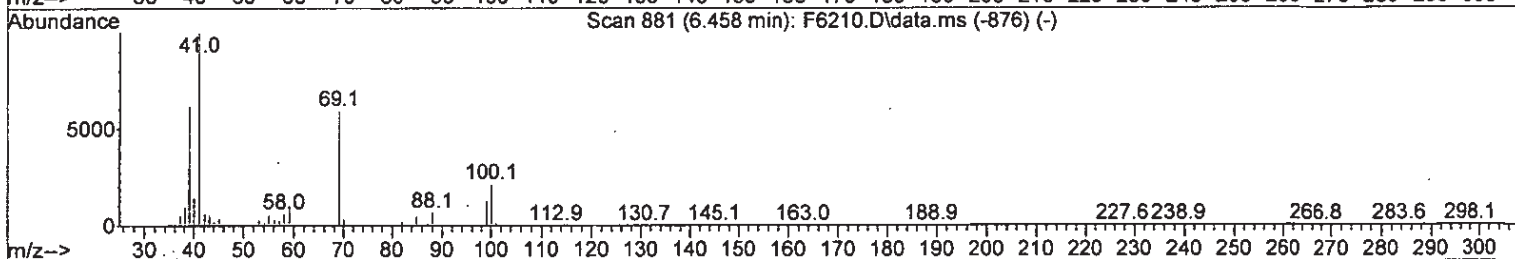
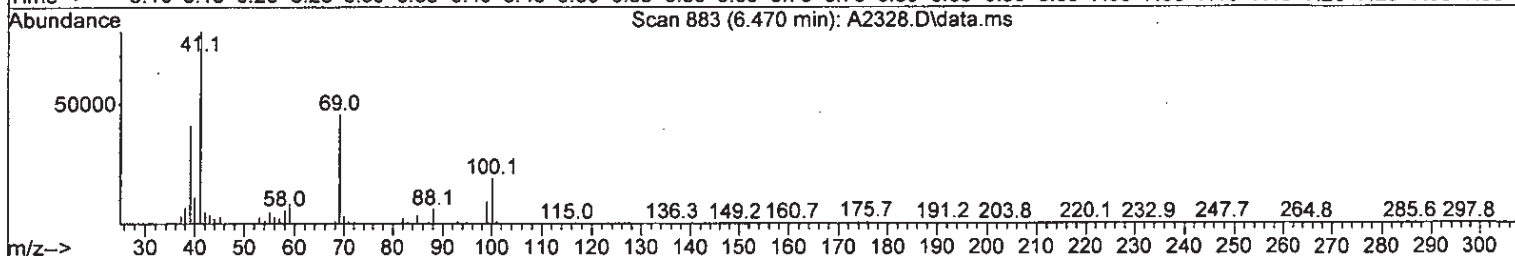
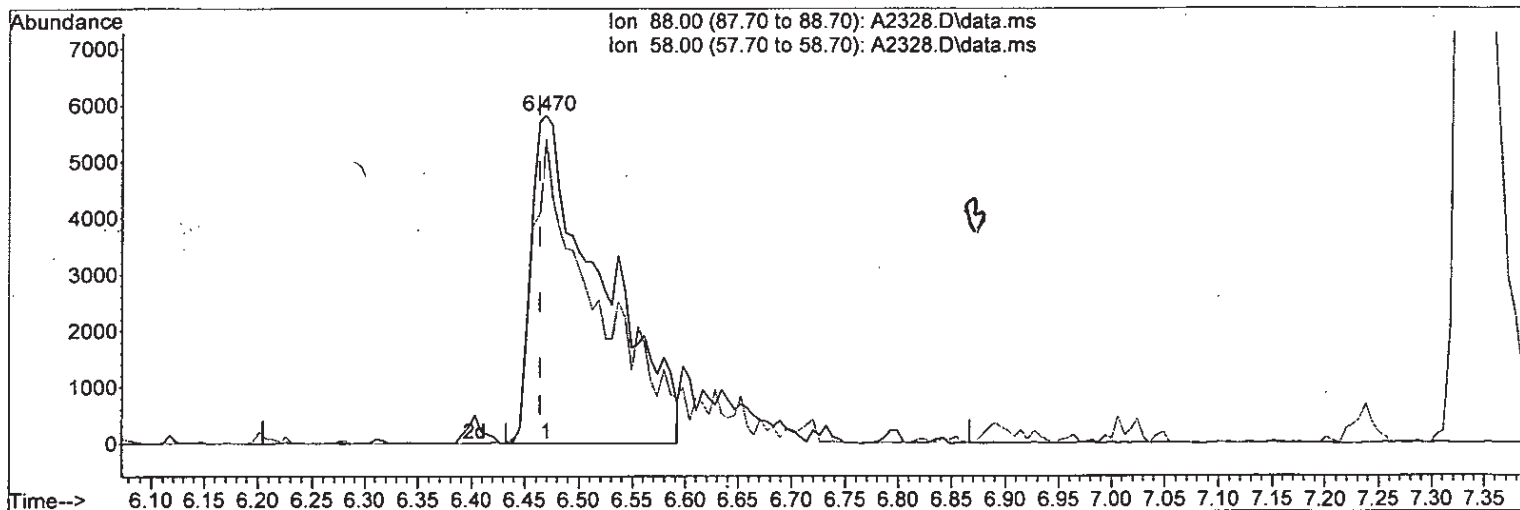
response 33327

Ion	Exp%	Act%
40.00	100	100
41.00	182.70	357.05#
39.00	36.00	182.67#
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : LCSD
 Data File : I:\ACQUDATA\msvoa10\data\092414\A2328.D Vial: 29
 Acq On : 24 Sep 2014 11:47 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Sep 25 08:31:26 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration



TIC: A2328.D\data.ms

(58) 1,4-Dioxane

6.470min (+0.006) 442.89 ug/L

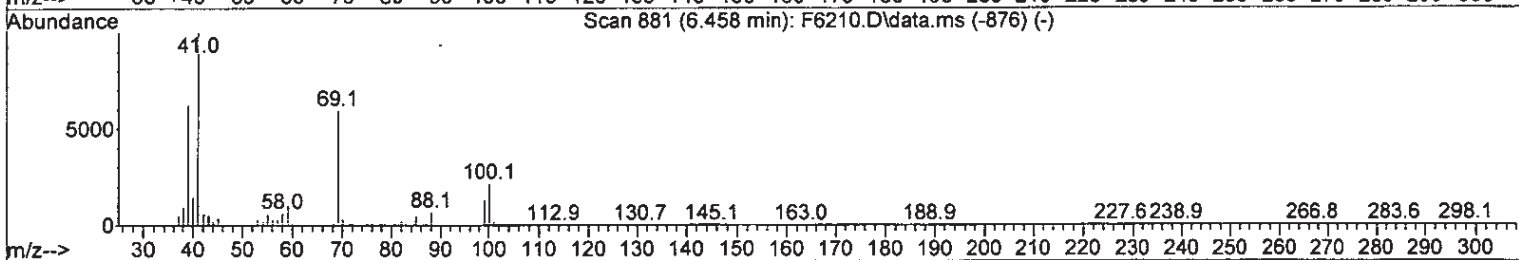
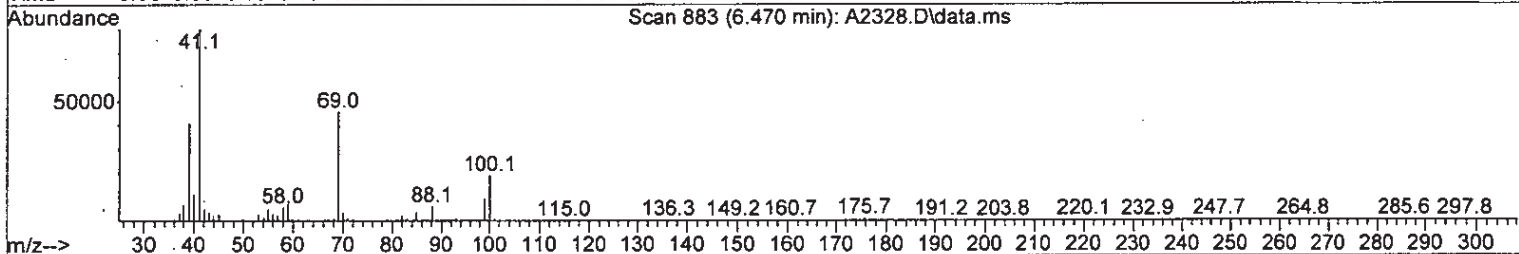
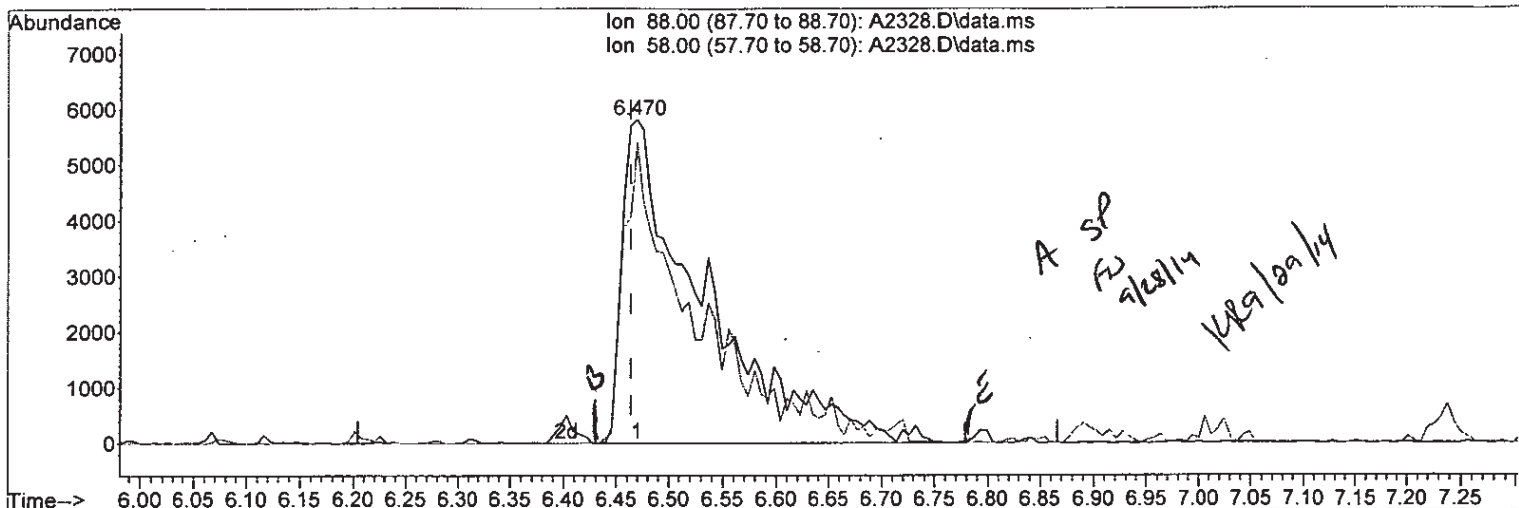
response 26166

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	92.63
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : LCSD
 Data File : I:\ACQUDATA\msvoa10\data\092414\A2328.D Vial: 29
 Acq On : 24 Sep 2014 11:47 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Sep 25 08:31:26 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration



TIC: A2328.D\data.ms

(58) 1,4-Dioxane

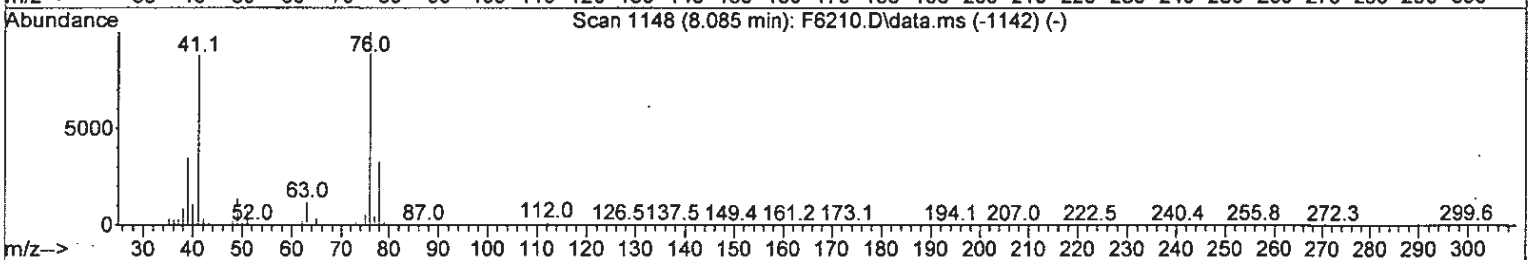
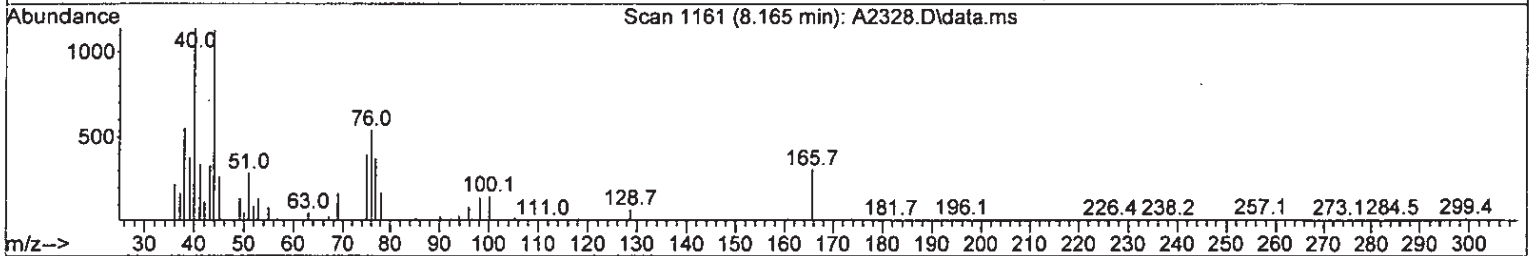
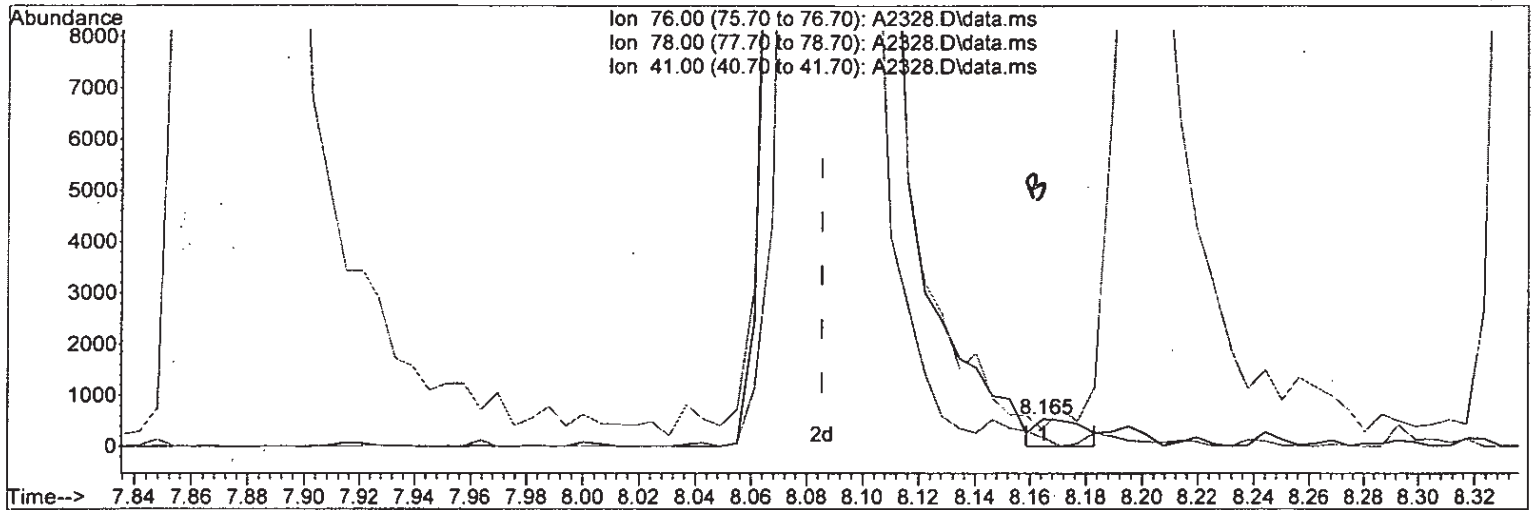
6.470min (+0.006) 521.62 ug/L m

response 30817

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	92.63
0.00	0.00	0.00
0.00	0.00	0.00

Sample : LCSD
Data File : I:\ACQUDATA\msvoa10\data\092414\A2328.D Vial: 29
Acq On : 24 Sep 2014 11:47 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Sep 25 08:31:26 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



TIC: A2328.D\data.ms

(74) 1,3-Dichloropropane

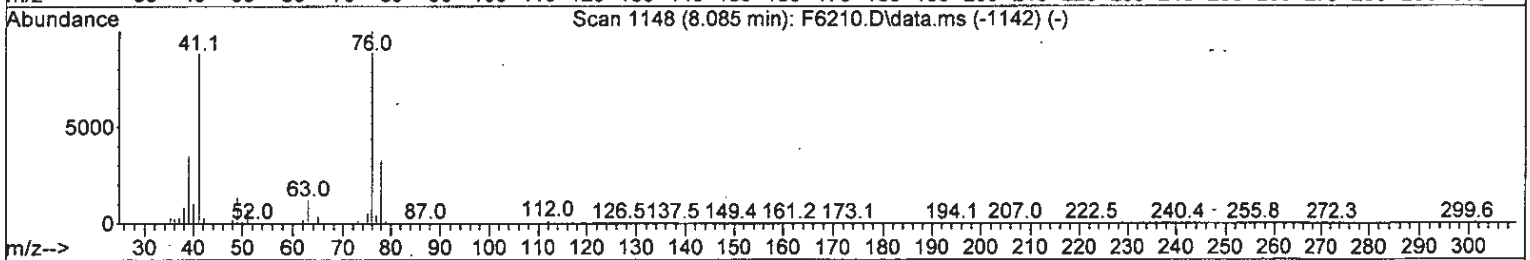
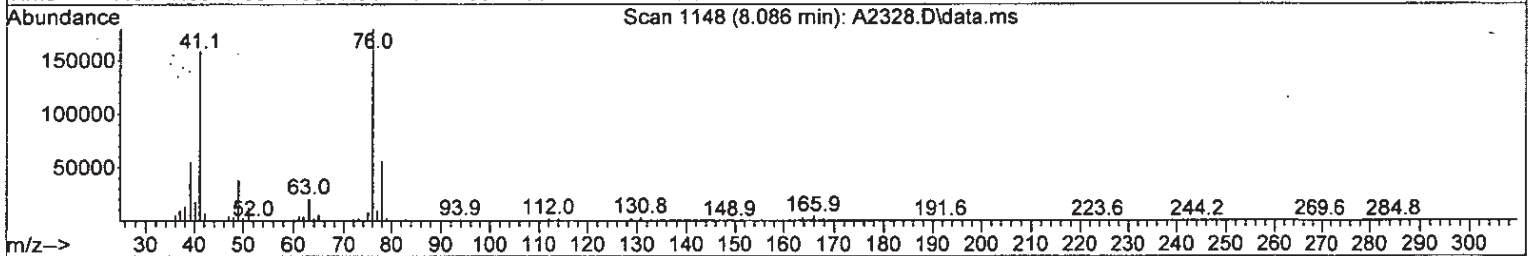
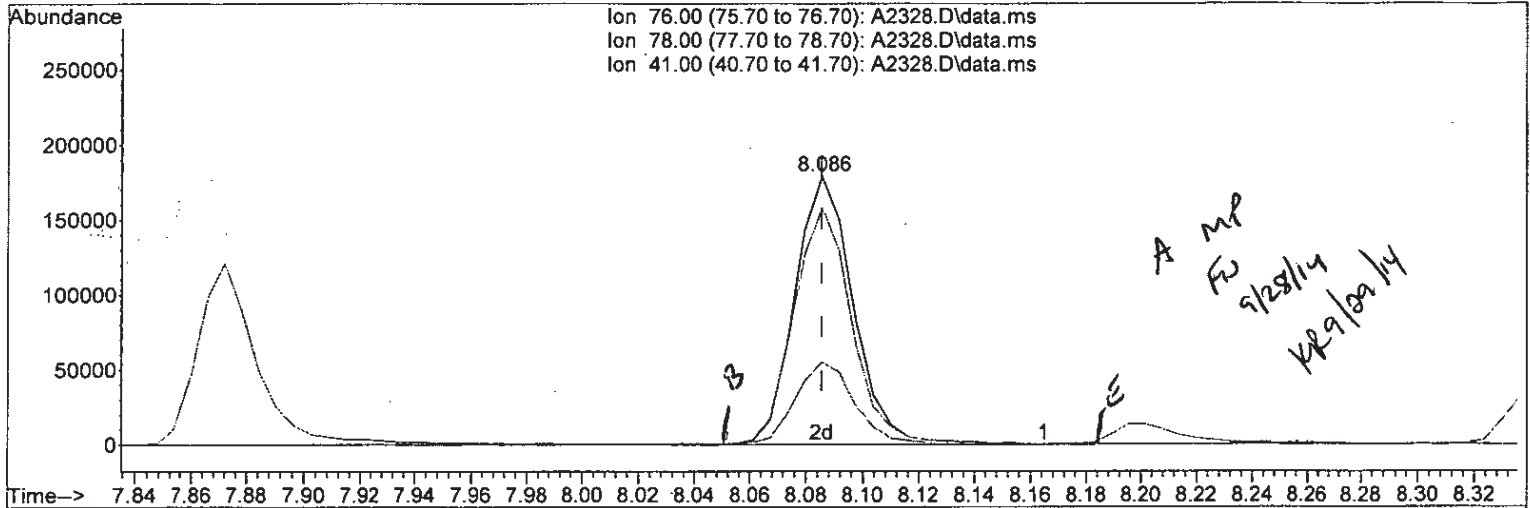
8.165min (+0.079) 0.05 ug/L

response 623

Ion	Exp%	Act%
76.00	100	100
78.00	31.70	31.60
41.00	66.30	62.45
0.00	0.00	0.00

Sample : LCSD
Data File : I:\ACQUDATA\msvoa10\data\092414\A2328.D Vial: 29
Acq On : 24 Sep 2014, 11:47 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Sep 25 08:31:26 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



TIC: A2328.D\data.ms

(74) 1,3-Dichloropropane

8.086min (+0.000) 22.22 ug/L m

response 256440

Ion	Exp%	Act%
76.00	100	100
78.00	31.70	30.76
41.00	66.30	88.20#
0.00	0.00	0.00

Misc ::

Response via : Initial Calibration



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: NA
Date Received: NA
Date Analyzed: 9/29/14 12:34

Sample Name: Lab Control Sample
Lab Code: RQ1411994-02

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvov10\data\092914\A2421.D\

Analysis Lot: 413648
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	19.9		5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	20.2		5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	20.5		5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	21.4		5.0	0.30	
79-01-6	Trichloroethene (TCE)	20.0		5.0	0.22	
75-01-4	Vinyl Chloride	24.3		5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	19.4		5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	19.9		5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	106	85-122	9/29/14 12:34	
Dibromofluoromethane	108	89-119	9/29/14 12:34	
Toluene-d8	107	87-121	9/29/14 12:34	

Sample : LCS
 Data File : I:\ACQUDATA\msvoa10\data\092914\A2421.D Vial: 3
 Acq On : 29 Sep 2014 12:34 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

RQ14/1999-02

Fu
10/3/14

Quant Time: Sep 29 12:50:54 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	1148465	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1521254	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1424323	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	776547	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.318	113	521653	53.78	ug/L	0.00
Spiked Amount	50.000	Range 89 - 119	Recovery	=	107.56%	
48) surr1,1,2-dichloroetha...	4.848	65	547306	53.46	ug/L	0.00
Spiked Amount	50.000	Range 78 - 122	Recovery	=	106.92%	
65) SURR3,Toluene-d8	7.427	98	1831431	53.61	ug/L	0.00
Spiked Amount	50.000	Range 87 - 121	Recovery	=	107.22%	
70) SURR2,BFB	9.878	95	711050	52.89	ug/L	0.00
Spiked Amount	50.000	Range 85 - 122	Recovery	=	105.78%	
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.190	85	311889	25.23	ug/L	96
3) Chloromethane	1.294	50	445939	27.06	ug/L	100
4) Vinyl Chloride	1.361	62	365955	24.31	ug/L	96
5) Bromomethane	1.556	94	117999	28.23	ug/L	97
6) Chloroethane	1.611	64	153581	20.14	ug/L	97
7) Freon 21	1.715	67	457741	21.61	ug/L	99
8) Trichlorofluoromethane	1.764	101	335006	19.65	ug/L	100
9) Diethyl Ether	1.934	59	159856	17.80	ug/L #	75
10) Freon 123a	1.928	67	277847	20.83	ug/L	100
11) Freon 123	1.965	83	272701	19.21	ug/L	99
12) Acrolein	2.020	56	51925	36.97	ug/L	99
13) 1,1-Dicethene	2.099	96	164157	20.51	ug/L #	86
14) Freon 113	2.093	101	188494	18.64	ug/L	94
15) Acetone	2.117	43	58874	16.83	ug/L	87
16) 2-Propanol	2.190	45	163885	331.42	ug/L	99
17) Iodomethane	2.215	142	144614	20.07	ug/L	98
18) Carbon Disulfide	2.270	76	615335	18.17	ug/L	99
19) Acetonitrile	2.318	40	38399	102.43	ug/L #	87
20) Allyl Chloride	2.349	76	97350	19.35	ug/L #	15
21) Methyl Acetate	2.355	43	134275	19.35	ug/L	85
22) Methylene Chloride	2.440	84	214981	20.47	ug/L #	76
23) TBA	2.501	59	216053	362.93	ug/L	75
24) Acrylonitrile	2.629	53	291487	90.70	ug/L	96
25) Methyl-t-Butyl Ether	2.660	73	442049	19.28	ug/L	85
26) trans-1,2-Dichloroethene	2.666	96	205196	19.88	ug/L #	75
28) 1,1-Dicethane	3.044	63	440672	20.19	ug/L	99
29) Vinyl Acetate	3.086	86	23394	18.22	ug/L #	1
30) DIPE	3.105	45	907184	18.11	ug/L	88
31) 2-Chloro-1,3-Butadiene	3.141	53	409313	19.07	ug/L	81
32) ETBE	3.501	59	564704	16.81	ug/L	89
33) 2,2-Dichloropropane	3.678	77	278602	20.61	ug/L	95
34) cis-1,2-Dichloroethene	3.678	96	218410	19.35	ug/L #	81
35) 2-Butanone	3.702	43	86501	18.77	ug/L	82
36) Propionitrile	3.775	54	103629	94.31	ug/L	99
37) Bromochloromethane	3.977	130	128346	18.49	ug/L #	62

Sample : LCS
 Data File : I:\ACQUDATA\msvoa10\data\092914\A2421.D Vial: 3
 Acq On : 29 Sep 2014 12:34 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Sep 29 12:50:54 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

FW
10/3/14

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
38) Methacrylonitrile	3.970	67	51464	20.64	ug/L #	45
39) Tetrahydrofuran	4.062	42	45130	17.68	ug/L	70
40) Chloroform	4.092	83	384777	20.23	ug/L	95
41) 1,1,1-Trichloroethane	4.361	97	313595	19.93	ug/L	94
42) TAME	5.184	73	384268	16.95	ug/L	89
44) Cyclohexane	4.440	41	301087	21.86	ug/L	87
46) Carbontetrachloride	4.611	121	86274	22.26	ug/L	95
47) 1,1-Dichloropropene	4.617	75	273510	22.99	ug/L	94
49) Benzene	4.952	78	820203	22.06	ug/L	89
50) 1,2-Dichloroethane	4.982	62	284455	22.05	ug/L	91
51) Iso-Butyl Alcohol	4.854	43	113607	375.97	ug/L	99
52) n-Heptane	5.452	43	327294	23.34	ug/L #	76
53) 1-Butanol	5.952	56	132755	1114.16	ug/L #	72
54) Trichloroethene	5.964	130	207253	19.99	ug/L	94
55) Methylcyclohexane	6.214	55	325344	22.77	ug/L #	80
56) 1,2-Dicloropropane	6.257	63	228405	21.07	ug/L	90
57) Dibromomethane	6.403	93	105532	20.20	ug/L	99
58) 1,4-Dioxane	6.464	88	26172m	424.35	ug/L	
59) Methyl Methacrylate	6.470	69	80919m	21.02	ug/L	
60) Bromodichloromethane	6.616	83	275294	23.20	ug/L	98
61) 2-Nitropropane	6.891	41	70991	47.43	ug/L	96
62) 2-Chloroethylvinyl Ether	7.006	63	84305	18.60	ug/L	85
63) cis-1,3-Dichloropropene	7.141	75	297435	23.73	ug/L	95
64) 4-Methyl-2-pentanone	7.336	43	158665	19.57	ug/L	95
66) Toluene	7.500	91	829968	21.30	ug/L	98
67) trans-1,3-Dichloropropene	7.744	75	230177	23.20	ug/L	98
68) Ethyl Methacrylate	7.872	69	160215	19.82	ug/L #	57
69) 1,1,2-Trichloroethane	7.921	97	140808	20.48	ug/L	99
72) Tetrachloroethene	8.055	164	176585	21.44	ug/L	92
73) 2-Hexanone	8.201	43	106603	17.71	ug/L	97
74) 1,3-Dichloropropane	8.085	76	250282	20.51	ug/L #	79
75) Dibromochloromethane	8.299	129	183441	21.09	ug/L	98
76) N-Butyl Acetate	8.342	43	269038	20.08	ug/L	92
77) 1,2-Dibromoethane	8.396	107	146203	21.13	ug/L	98
78) 3-Chlorobenzotrifluoride	8.878	180	332203	21.95	ug/L	97
79) Chlorobenzene	8.866	112	572478	20.85	ug/L	100
80) 4-Chlorobenzotrifluoride	8.927	180	301567	21.64	ug/L	97
81) 1,1,1,2-Tetrachloroethane	8.945	131	200543	20.87	ug/L	98
82) Ethylbenzene	8.976	106	273075	19.96	ug/L	98
83) (m+p)Xylene	9.085	106	723326	42.86	ug/L	99
84) o-Xylene	9.433	106	347198	21.04	ug/L	98
85) Styrene	9.445	104	595832	21.74	ug/L	98
86) Bromoform	9.597	173	106647	21.34	ug/L	93
87) 2-Chlorobenzotrifluoride	9.671	180	329559	21.98	ug/L	98
88) Isopropylbenzene	9.756	105	904186	21.79	ug/L	99
89) Cyclohexanone	9.823	55	370645	282.69	ug/L	98
90) trans-1,4-Dichloro-2-B...	10.055	53	33413	16.82	ug/L	75
92) 1,1,2,2-Tetrachloroethane	10.006	83	168707	19.80	ug/L	97
93) Bromobenzene	10.000	156	247458	21.11	ug/L	98
94) 1,2,3-Trichloropropane	10.042	110	44507	18.68	ug/L	90
95) n-Propylbenzene	10.103	91	1066238	22.00	ug/L	100
96) 2-Chlorotoluene	10.170	91	636285	21.28	ug/L	97

Sample : LCS
 Data File : I:\ACQUDATA\msvoa10\data\092914\A2421.D Vial: 3
 Acq On : 29 Sep 2014 12:34 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

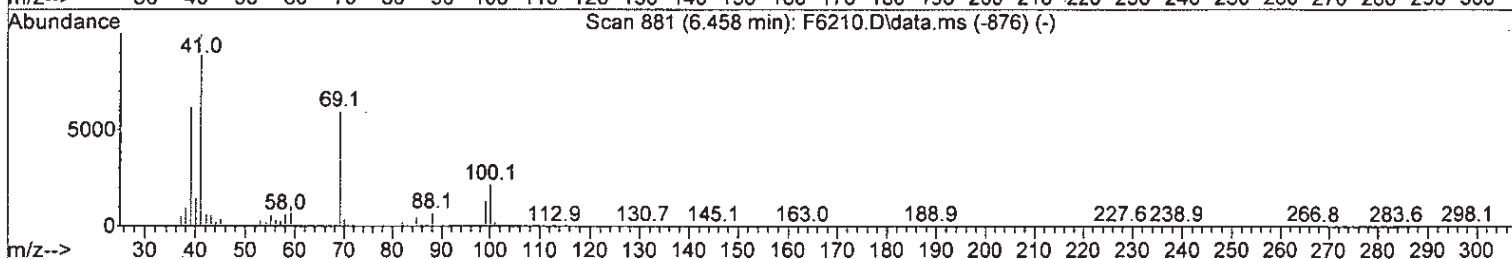
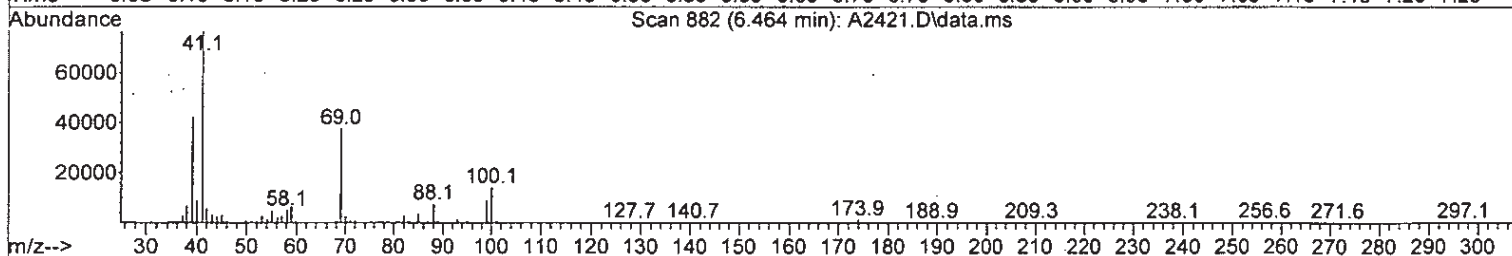
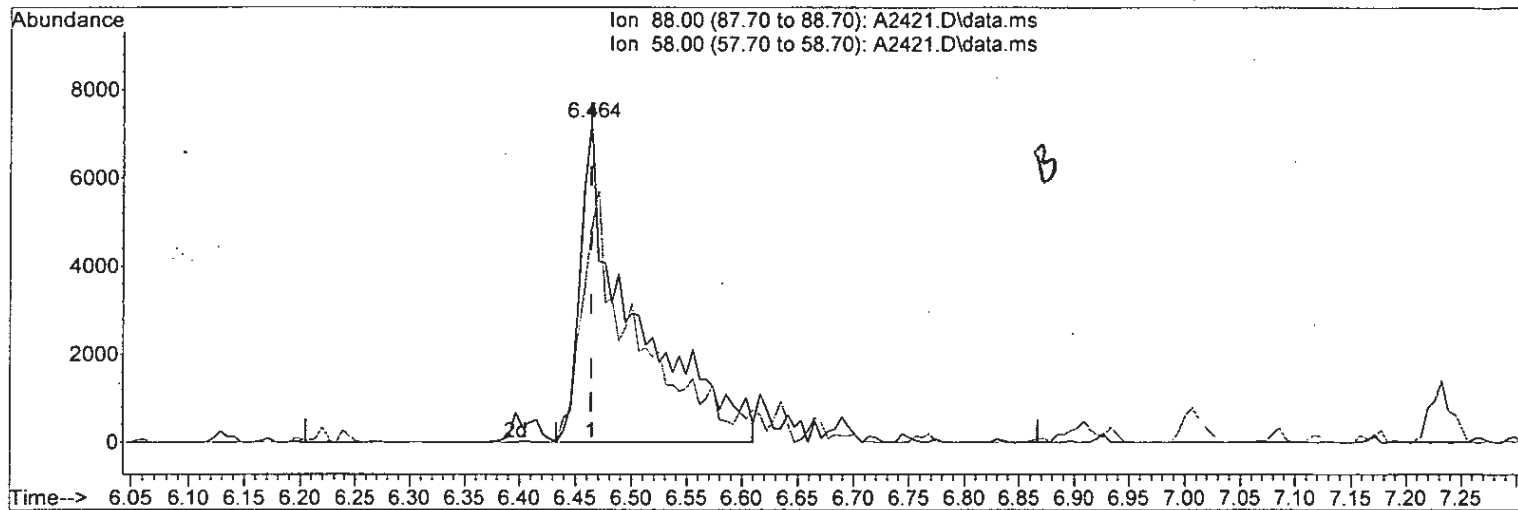
Quant Time: Sep 29 12:50:54 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97) 3-Chlorotoluene	10.219	91	689818	21.71	ug/L	99
98) 4-Chlorotoluene	10.262	91	784848	21.82	ug/L	93
99) 1,3,5-Trimethylbenzene	10.250	105	751501	21.33	ug/L	99
100) tert-Butylbenzene	10.518	119	624277	21.14	ug/L	100
101) 1,2,4-Trimethylbenzene	10.561	105	757600	21.27	ug/L	97
102) 3,4-Dichlorobenzotrifl...	10.615	214	254112	23.90	ug/L	96
103) sec-Butylbenzene	10.695	105	926819	22.38	ug/L	99
104) p-Isopropyltoluene	10.817	119	797422	22.20	ug/L	98
105) 1,3-Dclbenz	10.780	146	467268	20.84	ug/L	97
106) 1,4-Dclbenz	10.853	146	481156	20.71	ug/L	98
107) 2,4-Dichlorobenzotrifl...	10.902	214	222649	23.50	ug/L	97
108) 2,5-Dichlorobenzotrifl...	10.945	214	261676	23.13	ug/L	98
109) n-Butylbenzene	11.140	91	716224	23.53	ug/L	99
110) 1,2-Dclbenz	11.152	146	418361	19.85	ug/L	99
111) 1,2-Dibromo-3-chloropr...	11.707	157	24809	19.12	ug/L	92
112) Trielution Dichlorotol...	11.804	125	1214892	68.81	ug/L	97
113) 1,3,5-Trichlorobenzene	11.847	180	355266	23.58	ug/L	96
114) Coelution Dichlorotoluene	12.066	125	843803	46.09	ug/L	98
115) 1,2,4-Tcbenzene	12.231	180	284438	23.83	ug/L	99
116) Hexachlorobt	12.329	225	131336	26.87	ug/L	99
117) Naphthalen	12.377	128	427023	20.82	ug/L	99
118) 1,2,3-Tclbenzene	12.518	180	215846	24.67	ug/L	98
119) 2,4,5-Trichlorotoluene	12.938	159	159741	29.27	ug/L	93
120) 2,3,6-Trichlorotoluene	12.999	159	154406	27.95	ug/L	98

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

Sample : LCS
Data File : I:\ACQUDATA\msvoa10\data\092914\A2421.D Vial: 3
Acq On : 29 Sep 2014 12:34 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Sep 29 12:47:28 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



TIC: A2421.D\data.ms

(58) 1,4-Dioxane

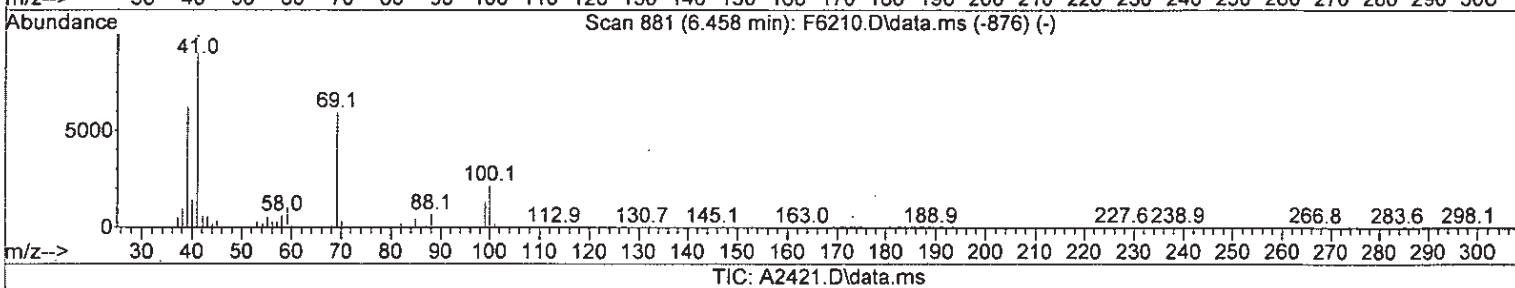
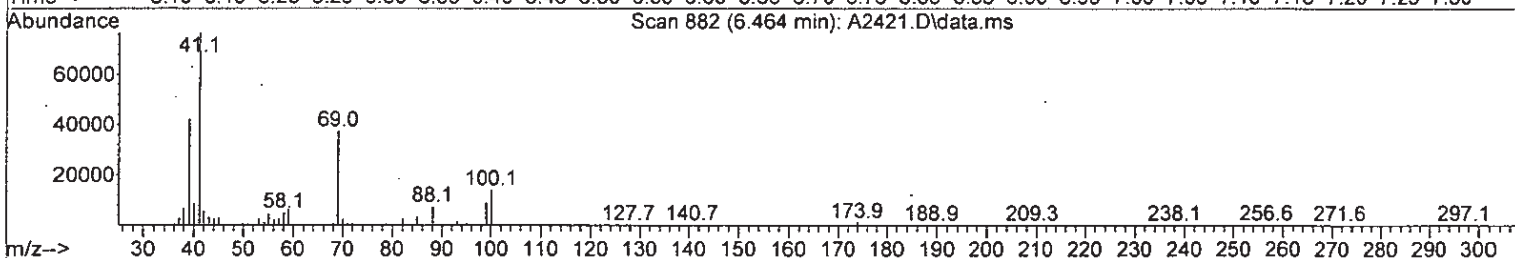
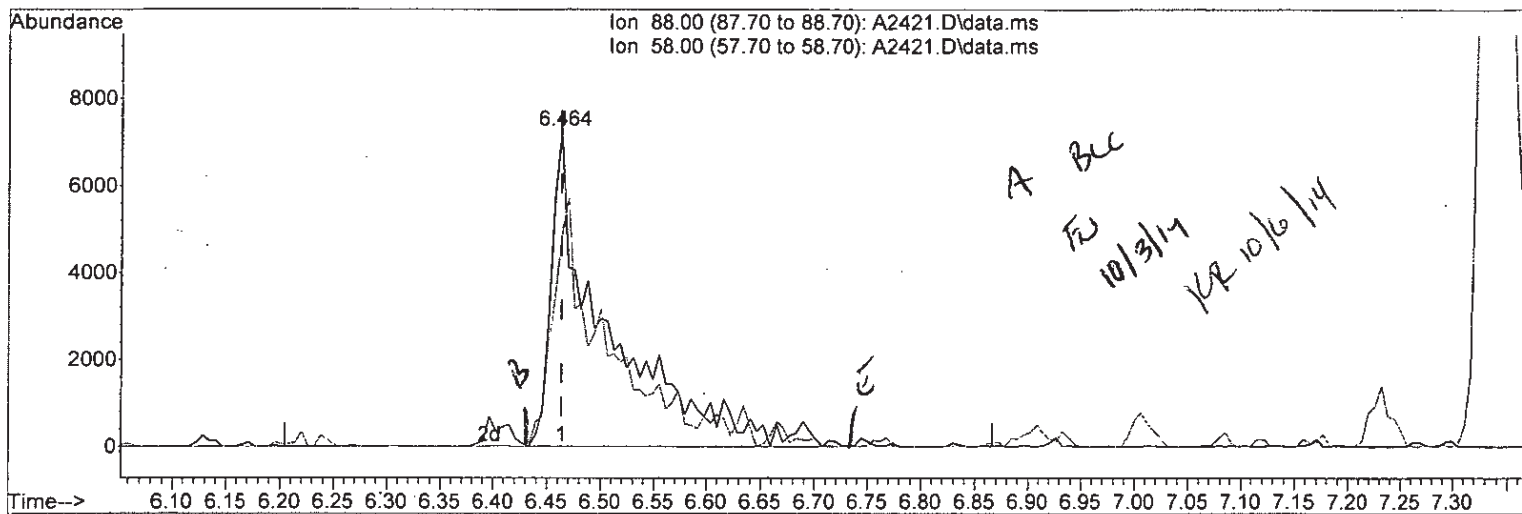
6.464min (-0.000) 386.15 ug/L

response 23816

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	66.75
0.00	0.00	0.00
0.00	0.00	0.00

Sample : LCS
Data File : I:\ACQUDATA\msvoa10\data\092914\A2421.D Vial: 3
Acq On : 29 Sep 2014 12:34 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Sep 29 12:47:28 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



(58) 1,4-Dioxane

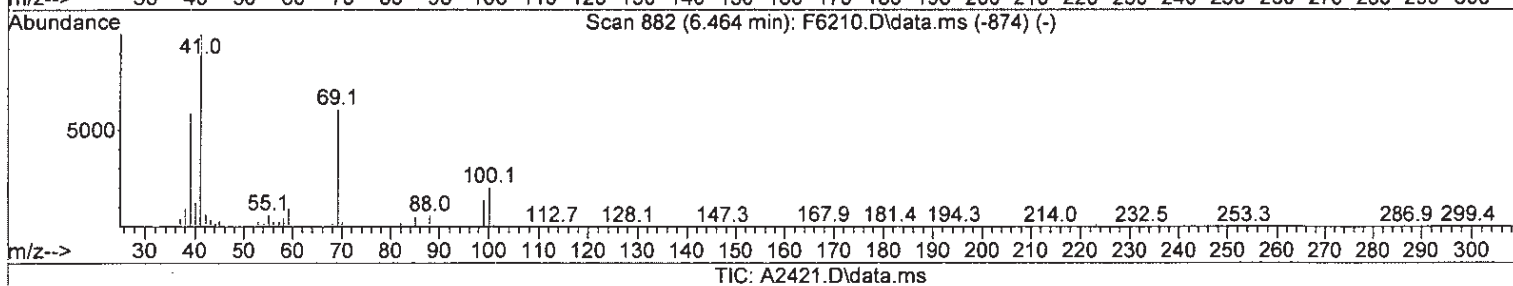
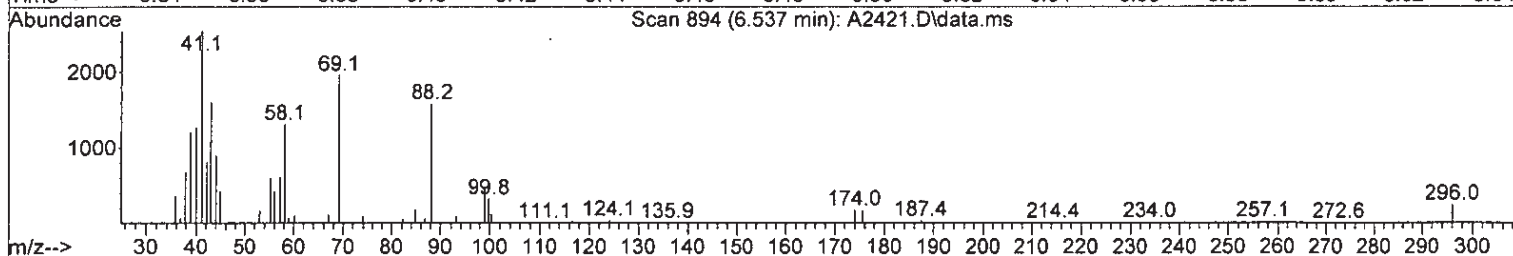
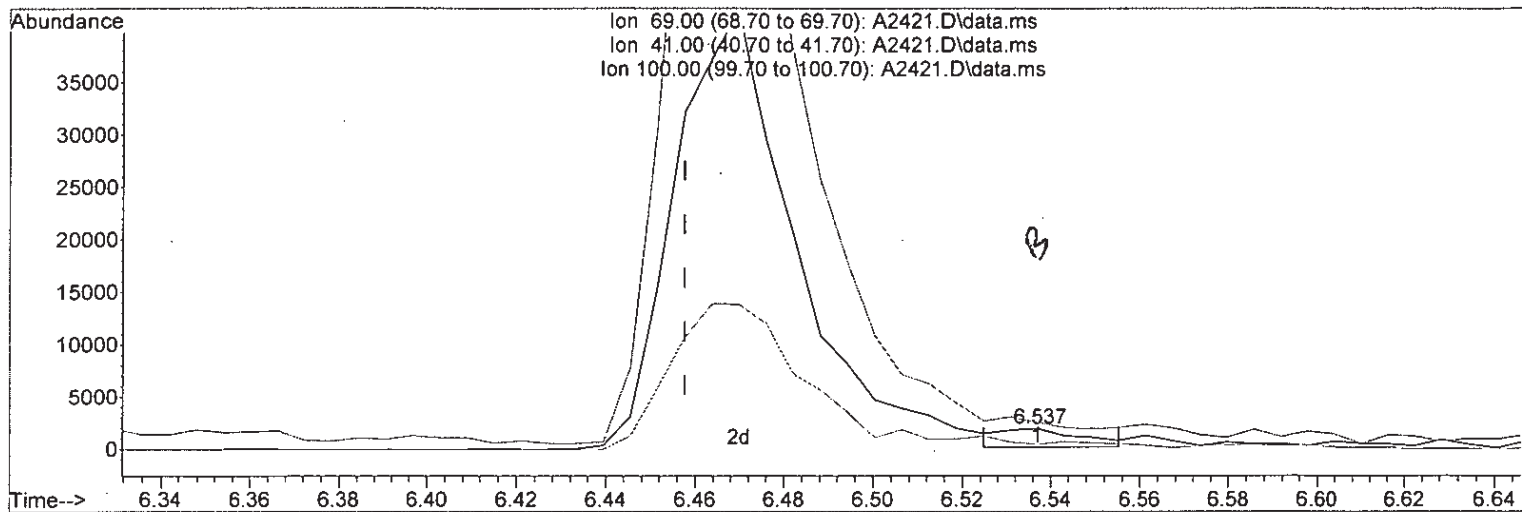
6.464min (-0.000) 424.35 ug/L m

response 26172

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	66.75
0.00	0.00	0.00
0.00	0.00	0.00

Sample : LCS
Data File : I:\ACQUDATA\msvoa10\data\092914\A2421.D Vial: 3
Acq On : 29 Sep 2014 12:34 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Sep 29 12:47:28 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



TIC: A2421.D\data.ms

(59) Methyl Methacrylate

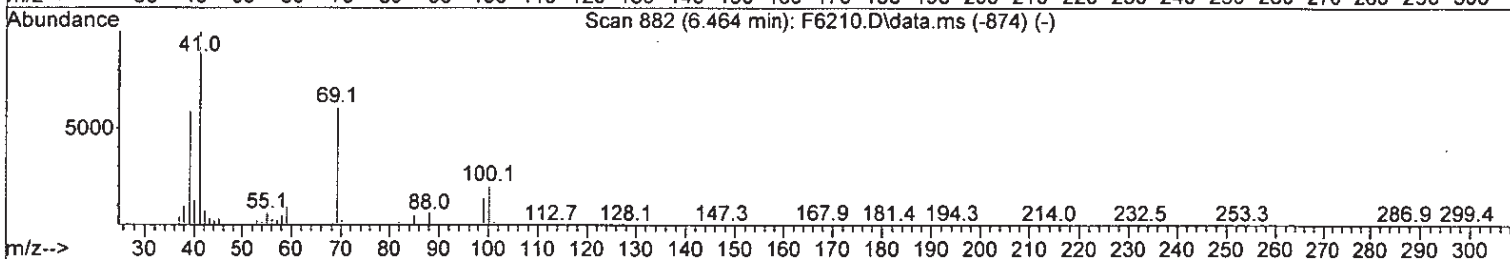
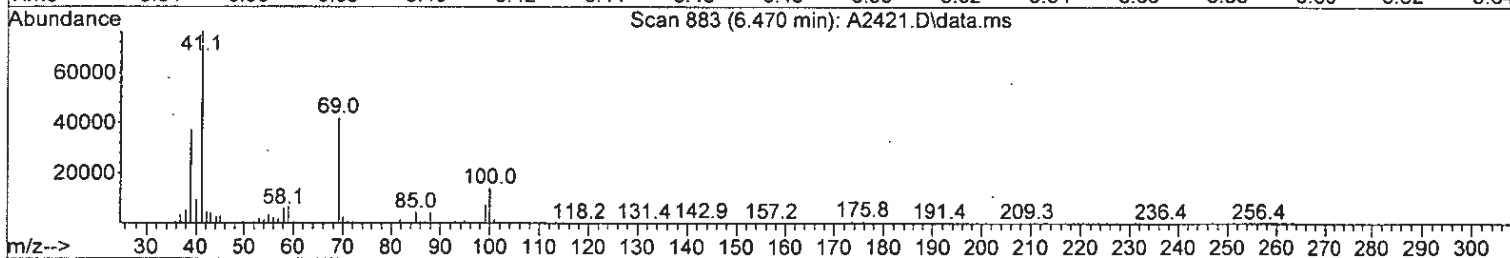
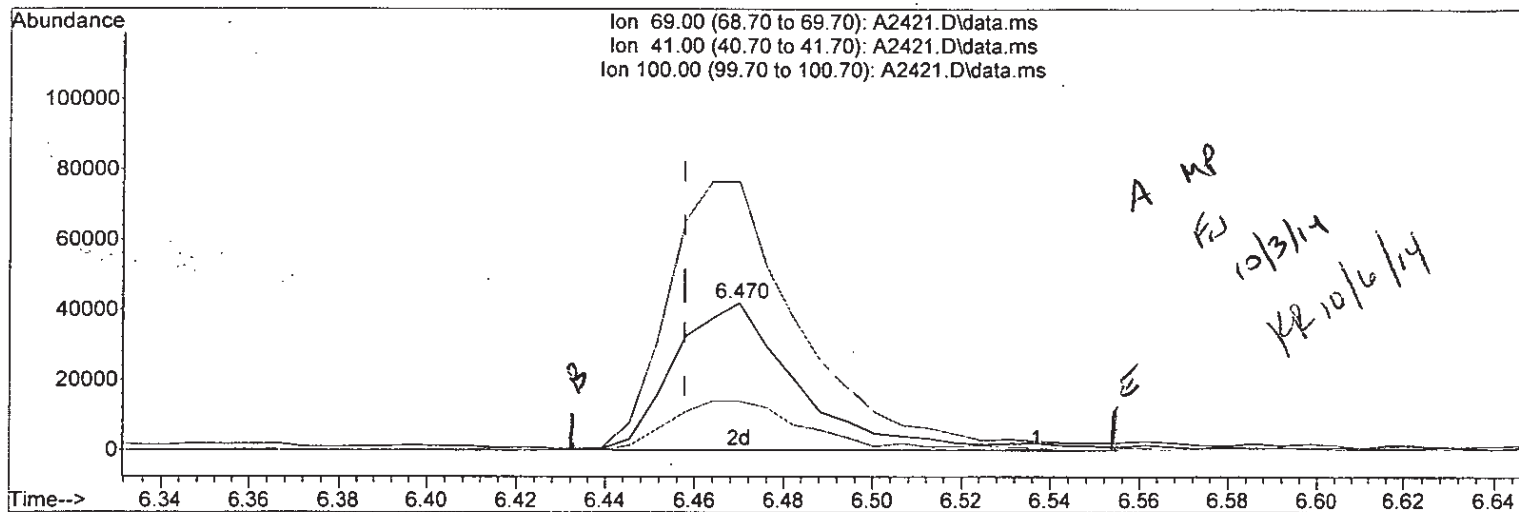
6.537min (+0.079) 0.58 ug/L

response 2214

Ion	Exp%	Act%
69.00	100	100
41.00	128.90	129.94
100.00	36.90	22.82
0.00	0.00	0.00

Sample : LCS
Data File : I:\ACQUDATA\msvoa10\data\092914\A2421.D Vial: 3
Acq On : 29 Sep 2014 12:34 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Sep 29 12:47:28 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



TIC: A2421.D\data.ms

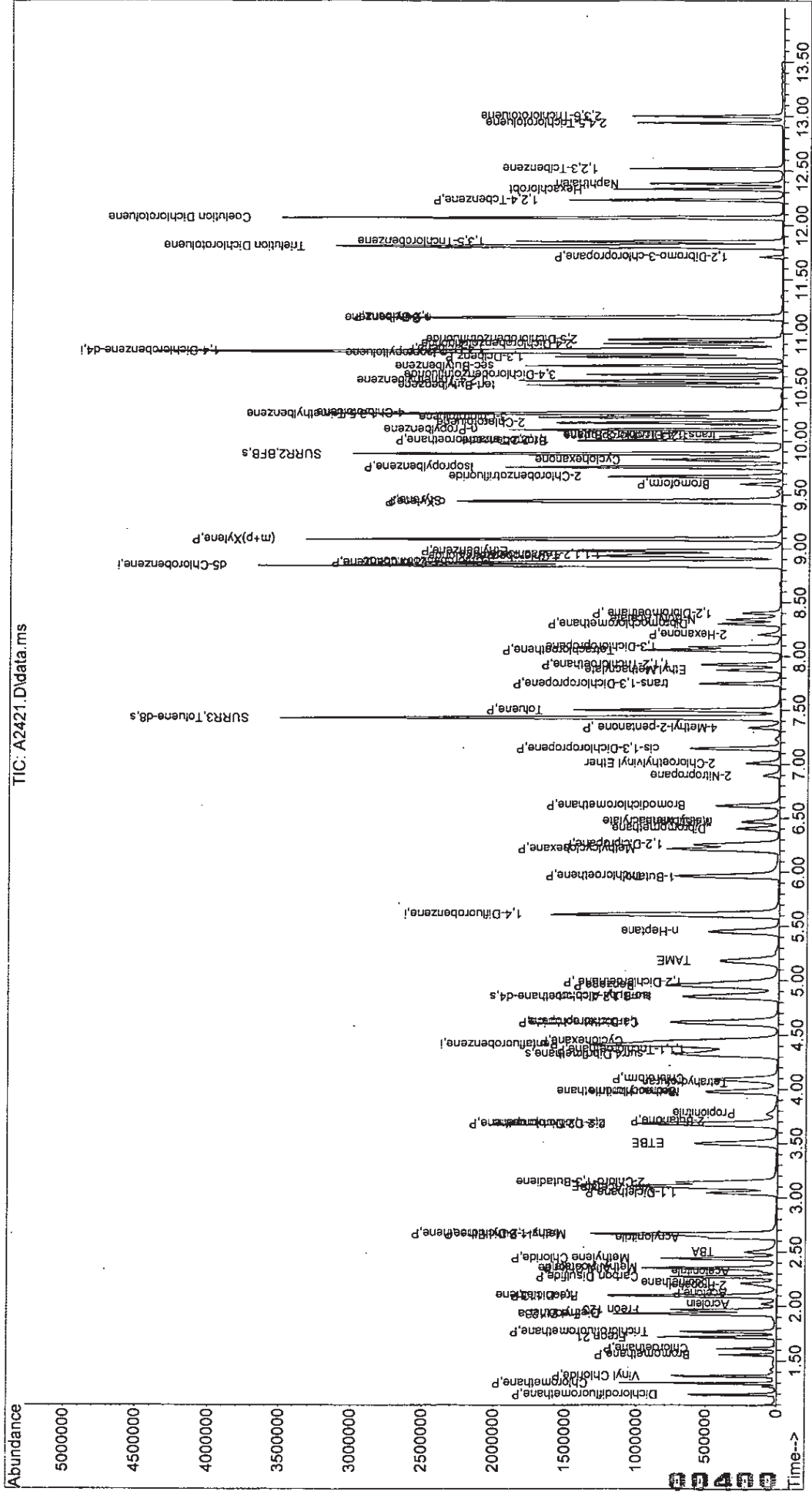
(59) Methyl Methacrylate

6.470min (+0.012) 21.02 ug/L m

response 80919

Ion	Exp%	Act%
69.00	100	100
41.00	128.90	182.73#
100.00	36.90	32.97
0.00	0.00	0.00

Sample : LCS
Data File : I:\ACQUDATA\msvoa10\data\092914\A2421.D
Acq On : 29 Sep 2014 12:34 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :
Quant Time: Sep 29 12:50:54 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:57 2014
Response via : Initial Calibration



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: NA
Date Received: NA
Date Analyzed: 9/30/14 16:14

Sample Name: Lab Control Sample
Lab Code: RQ1412027-02

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\093014\A2474.D\

Analysis Lot: 413884
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	19.6		5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	20.2		5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	18.6		5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	23.7		5.0	0.30	
79-01-6	Trichloroethene (TCE)	19.8		5.0	0.22	
75-01-4	Vinyl Chloride	22.3		5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	20.9		5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	20.3		5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	85-122	9/30/14 16:14	
Dibromofluoromethane	105	89-119	9/30/14 16:14	
Toluene-d8	106	87-121	9/30/14 16:14	

Sample : LCS
 Data File : I:\ACQUDATA\msvoa10\data\093014\A2474.D Vial: 3
 Acq On : 30 Sep 2014 4:14 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Oct 01 09:07:00 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

R2141027-02

FU
10/1/14

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) Pentafluorobenzene	4.403	168	936842	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1349355	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1044288	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	675896	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.318	113	450783	52.39	ug/L	0.00
Spiked Amount	50.000	Range 89 - 119	Recovery	=	104.78%	
48) surr1,1,2-dichloroetha...	4.848	65	435875	48.00	ug/L	0.00
Spiked Amount	50.000	Range 78 - 122	Recovery	=	96.00%	
65) SURR3,Toluene-d8	7.427	98	1602613	52.88	ug/L	0.00
Spiked Amount	50.000	Range 87 - 121	Recovery	=	105.76%	
70) SURR2,BFB	9.878	95	608324	51.01	ug/L	0.00
Spiked Amount	50.000	Range 85 - 122	Recovery	=	102.02%	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.190	85	223616	22.18	ug/L	99
3) Chloromethane	1.294	50	330509	24.59	ug/L	98
4) Vinyl Chloride	1.361	62	274350	22.34	ug/L	97
5) Bromomethane	1.556	94	82950	24.60	ug/L	98
6) Chloroethane	1.611	64	116752	18.77	ug/L	90
7) Freon 21	1.715	67	341390	19.76	ug/L	98
8) Trichlorofluoromethane	1.770	101	255264	18.35	ug/L	98
9) Diethyl Ether	1.934	59	142285	19.42	ug/L	80
10) Freon 123a	1.928	67	215123	19.77	ug/L	97
11) Freon 123	1.965	83	210857	18.21	ug/L	98
12) Acrolein	2.019	56	52862	46.14	ug/L	76
13) 1,1-Dicethene	2.099	96	121376	18.59	ug/L #	80
14) Freon 113	2.093	101	138360	16.77	ug/L	97
15) Acetone	2.117	43	60952	21.37	ug/L	94
16) 2-Propanol	2.190	45	194942	483.28	ug/L	91
17) Iodomethane	2.215	142	113528	19.52	ug/L	99
18) Carbon Disulfide	2.269	76	564202	20.43	ug/L	98
19) Acetonitrile	2.318	40	41741	136.50	ug/L	97
20) Allyl Chloride	2.349	76	84534	20.60	ug/L #	40
21) Methyl Acetate	2.355	43	136319	24.09	ug/L	91
22) Methylene Chloride	2.440	84	184062	21.48	ug/L #	79
23) TBA	2.501	59	243025	500.46	ug/L	69
24) Acrylonitrile	2.629	53	276138	105.34	ug/L	100
25) Methyl-t-Butyl Ether	2.660	73	412634	22.06	ug/L	89
26) trans-1,2-Dichloroethene	2.666	96	170854	20.30	ug/L #	80
28) 1,1-Dicethane	3.044	63	359543	20.20	ug/L	97
29) Vinyl Acetate	3.092	86	21295	20.33	ug/L #	47
30) DIPE	3.105	45	714415	17.48	ug/L	83
31) 2-Chloro-1,3-Butadiene	3.141	53	356033	20.33	ug/L	81
32) ETBE	3.501	59	469970	17.15	ug/L	91
33) 2,2-Dichloropropane	3.678	77	229628	20.82	ug/L	98
34) cis-1,2-Dichloroethene	3.678	96	191970	20.85	ug/L	86
35) 2-Butanone	3.702	43	84502	22.47	ug/L	86
36) Propionitrile	3.775	54	100681	111.97	ug/L	92
37) Bromochloromethane	3.982	130	118005	20.85	ug/L #	70

Sample : LCS
 Data File : I:\ACQUDATA\msvoa10\data\093014\A2474.D Vial: 3
 Acq On : 30 Sep 2014 4:14 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Oct 01 09:07:00 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Methacrylonitrile	3.970	67	51108	25.12	ug/L #	60
39) Tetrahydrofuran	4.062	42	49406	23.73	ug/L #	67
40) Chloroform	4.092	83	339480	21.89	ug/L	95
41) 1,1,1-Trichloroethane	4.360	97	251934	19.63	ug/L	97
42) TAME	5.183	73	335056	18.12	ug/L	92
44) Cyclohexane	4.446	41	256875	21.02	ug/L	82
46) Carbontetrachloride	4.617	121	65263	18.99	ug/L	90
47) 1,1-Dichloropropene	4.617	75	208048	19.71	ug/L	96
49) Benzene	4.952	78	650821	19.73	ug/L	89
50) 1,2-Dichloroethane	4.982	62	244640	21.38	ug/L	91
51) Iso-Butyl Alcohol	4.848	43	119721	446.67	ug/L	97
52) n-Heptane	5.452	43	261224	21.00	ug/L	80
53) 1-Butanol	5.958	56	143974	1340.57	ug/L	84
54) Trichloroethene	5.964	130	181762	19.77	ug/L	98
55) Methylcyclohexane	6.214	55	267515	21.10	ug/L #	82
56) 1,2-Dicloropropane	6.256	63	207208	21.55	ug/L	99
57) Dibromomethane	6.403	93	100483	21.68	ug/L	95
58) 1,4-Dioxane	6.464	88	28490m	520.78	ug/L	
59) Methyl Methacrylate	6.470	69	82922	24.28	ug/L #	68
60) Bromodichloromethane	6.616	83	239772	22.78	ug/L	99
61) 2-Nitropropane	6.890	41	66542	50.12	ug/L	89
62) 2-Chloroethylvinyl Ether	7.006	63	78137	19.44	ug/L	81
63) cis-1,3-Dichloropropene	7.146	75	265598	23.89	ug/L	97
64) 4-Methyl-2-pentanone	7.335	43	167404	23.28	ug/L	94
66) Toluene	7.500	91	678472	19.63	ug/L	100
67) trans-1,3-Dichloropropene	7.744	75	205181	23.32	ug/L	98
68) Ethyl Methacrylate	7.872	69	150942	21.05	ug/L #	50
69) 1,1,2-Trichloroethane	7.921	97	130921	21.47	ug/L	98
72) Tetrachloroethene	8.055	164	143147	23.70	ug/L	94
73) 2-Hexanone	8.201	43	118393	26.82	ug/L	83
74) 1,3-Dichloropropane	8.085	76	233426	26.09	ug/L #	80
75) Dibromochloromethane	8.305	129	166875	26.16	ug/L	96
76) N-Butyl Acetate	8.341	43	280800	28.59	ug/L	92
77) 1,2-Dibromoethane	8.402	107	139372	27.47	ug/L	100
78) 3-Chlorobenzotrifluoride	8.878	180	223277	20.13	ug/L	99
79) Chlorobenzene	8.866	112	402909	20.01	ug/L	99
80) 4-Chlorobenzotrifluoride	8.927	180	210861	20.64	ug/L	99
81) 1,1,1,2-Tetrachloroethane	8.945	131	149358	21.20	ug/L	98
82) Ethylbenzene	8.975	106	196843	19.62	ug/L	95
83) (m+p)Xylene	9.085	106	516117	41.71	ug/L	98
84) o-Xylene	9.433	106	262879	21.73	ug/L	94
85) Styrene	9.445	104	454572	22.62	ug/L	98
86) Bromoform	9.597	173	94423	25.77	ug/L	99
87) 2-Chlorobenzotrifluoride	9.670	180	243791	22.17	ug/L	95
88) Isopropylbenzene	9.756	105	720760	23.69	ug/L	99
89) Cyclohexanone	9.823	55	422268	439.26	ug/L	93
90) trans-1,4-Dichloro-2-B...	10.061	53	33164	22.45	ug/L	79
92) 1,1,2,2-Tetrachloroethane	10.006	83	171517	23.13	ug/L	99
93) Bromobenzene	10.000	156	214841	21.06	ug/L	97
94) 1,2,3-Trichloropropane	10.042	110	44087	21.26	ug/L	97
95) n-Propylbenzene	10.103	91	944552	22.39	ug/L	99
96) 2-Chlorotoluene	10.164	91	563930	21.67	ug/L	99

Sample : LCS
 Data File : I:\ACQUDATA\msvoa10\data\093014\A2474.D Vial: 3
 Acq On : 30 Sep 2014 4:14 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Oct 01 09:07:00 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

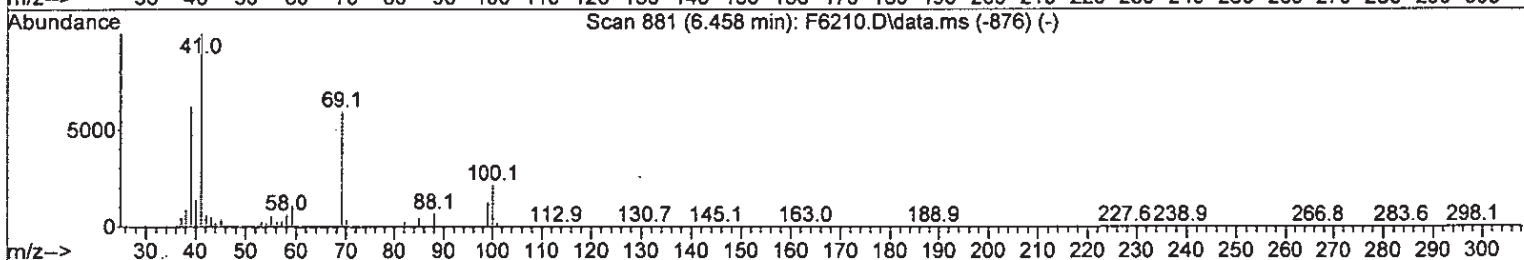
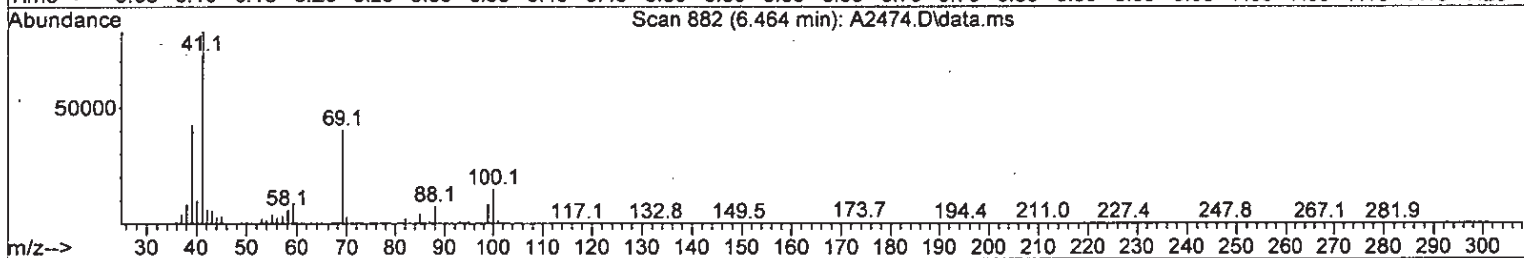
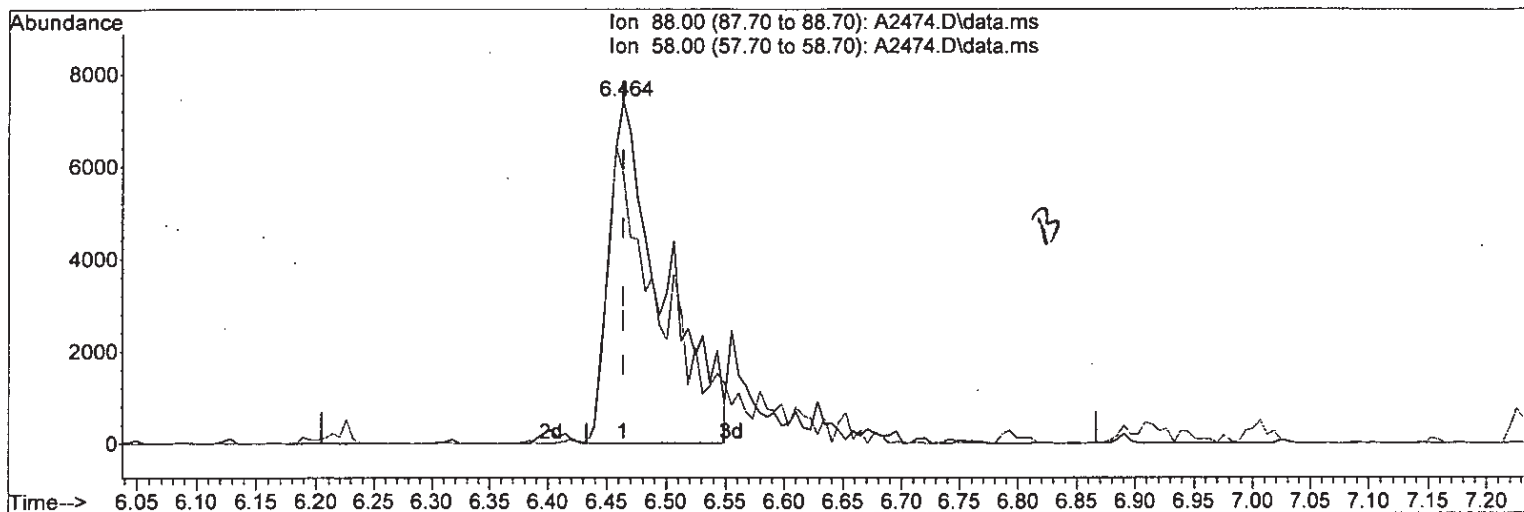
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97) 3-Chlorotoluene	10.219	91	560569	20.27	ug/L	97
98) 4-Chlorotoluene	10.262	91	686221	21.92	ug/L	94
99) 1,3,5-Trimethylbenzene	10.250	105	653436	21.30	ug/L	98
100) tert-Butylbenzene	10.518	119	498668	19.40	ug/L	98
101) 1,2,4-Trimethylbenzene	10.560	105	637146	20.55	ug/L	99
102) 3,4-Dichlorobenzotrifl...	10.615	214	176929	19.12	ug/L	98
103) sec-Butylbenzene	10.695	105	749439	20.79	ug/L	99
104) p-Isopropyltoluene	10.817	119	637276	20.38	ug/L	98
105) 1,3-Dclbenz	10.780	146	395701	20.27	ug/L	96
106) 1,4-Dclbenz	10.853	146	409218	20.24	ug/L	99
107) 2,4-Dichlorobenzotrifl...	10.902	214	164521	19.95	ug/L	98
108) 2,5-Dichlorobenzotrifl...	10.945	214	189925	19.29	ug/L	95
109) n-Butylbenzene	11.140	91	601864	22.72	ug/L	99
110) 1,2-Dclbenz	11.152	146	370980	20.23	ug/L	98
111) 1,2-Dibromo-3-chloropr...	11.707	157	25722	22.78	ug/L	99
112) Trielution Dichlorotol...	11.798	125	935343	60.87	ug/L	94
113) 1,3,5-Trichlorobenzene	11.847	180	272618	20.79	ug/L	97
114) Coelution Dichlorotoluene	12.066	125	667372	41.89	ug/L	98
115) 1,2,4-Tclbenzene	12.231	180	237284	22.84	ug/L	96
116) Hexachlorobt	12.328	225	96008	22.57	ug/L	95
117) Naphthalen	12.377	128	400264	22.42	ug/L	98
118) 1,2,3-Tclbenzene	12.511	180	185747	24.39	ug/L	96
119) 2,4,5-Trichlorotoluene	12.926	159	120790	25.43	ug/L	93
120) 2,3,6-Trichlorotoluene	12.987	159	123120	25.61	ug/L	98

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

Quantitation Report (Qedit)

Sample : LCS
 Data File : I:\ACQUDATA\msvoa10\data\093014\A2474.D Vial: 3
 Acq On : 30 Sep 2014 4:14 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Sep 30 16:27:32 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration



TIC: A2474.D\data.ms

(58) 1,4-Dioxane

6.464min (-0.000) 427.64 ug/L

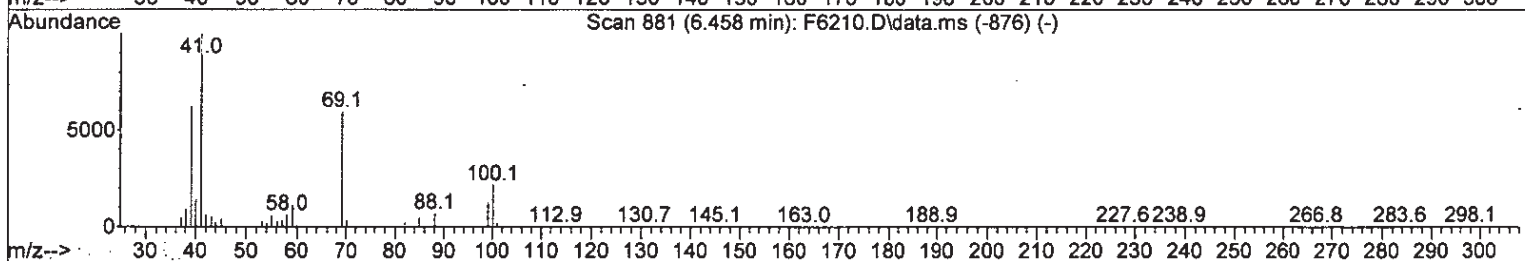
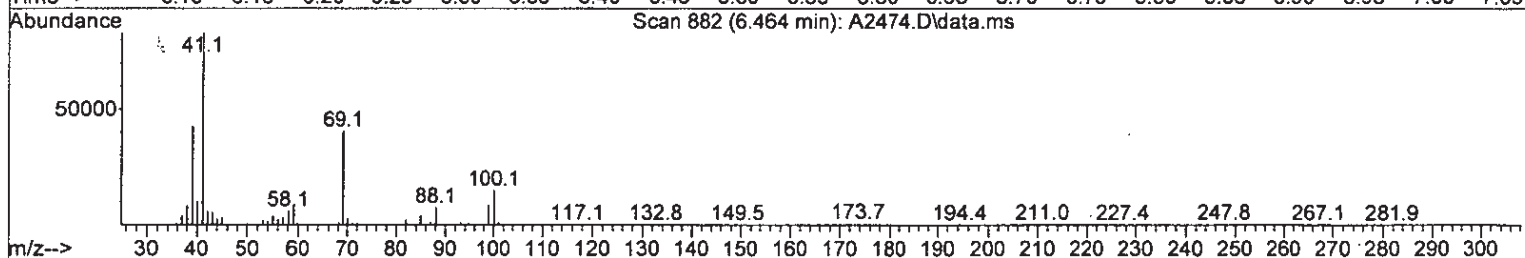
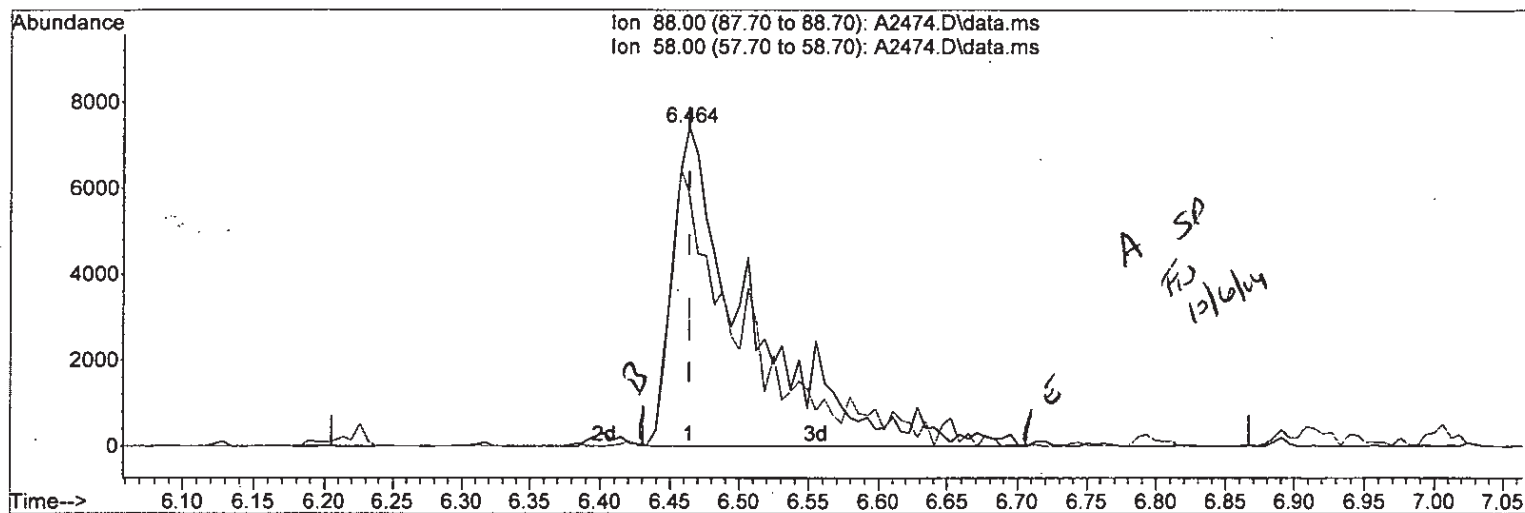
response 23395

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	78.66
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : LCS
 Data File : I:\ACQUDATA\msvoa10\data\093014\A2474.D Vial: 3
 Acq On : 30 Sep 2014 4:14 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc :

Quant Time: Sep 30 16:27:32 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge.
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration



(58) 1,4-Dioxane

6.464min (-0.000) 520.78 ug/L m

response 28490

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	78.66
0.00	0.00	0.00
0.00	0.00	0.00

mm
1/7

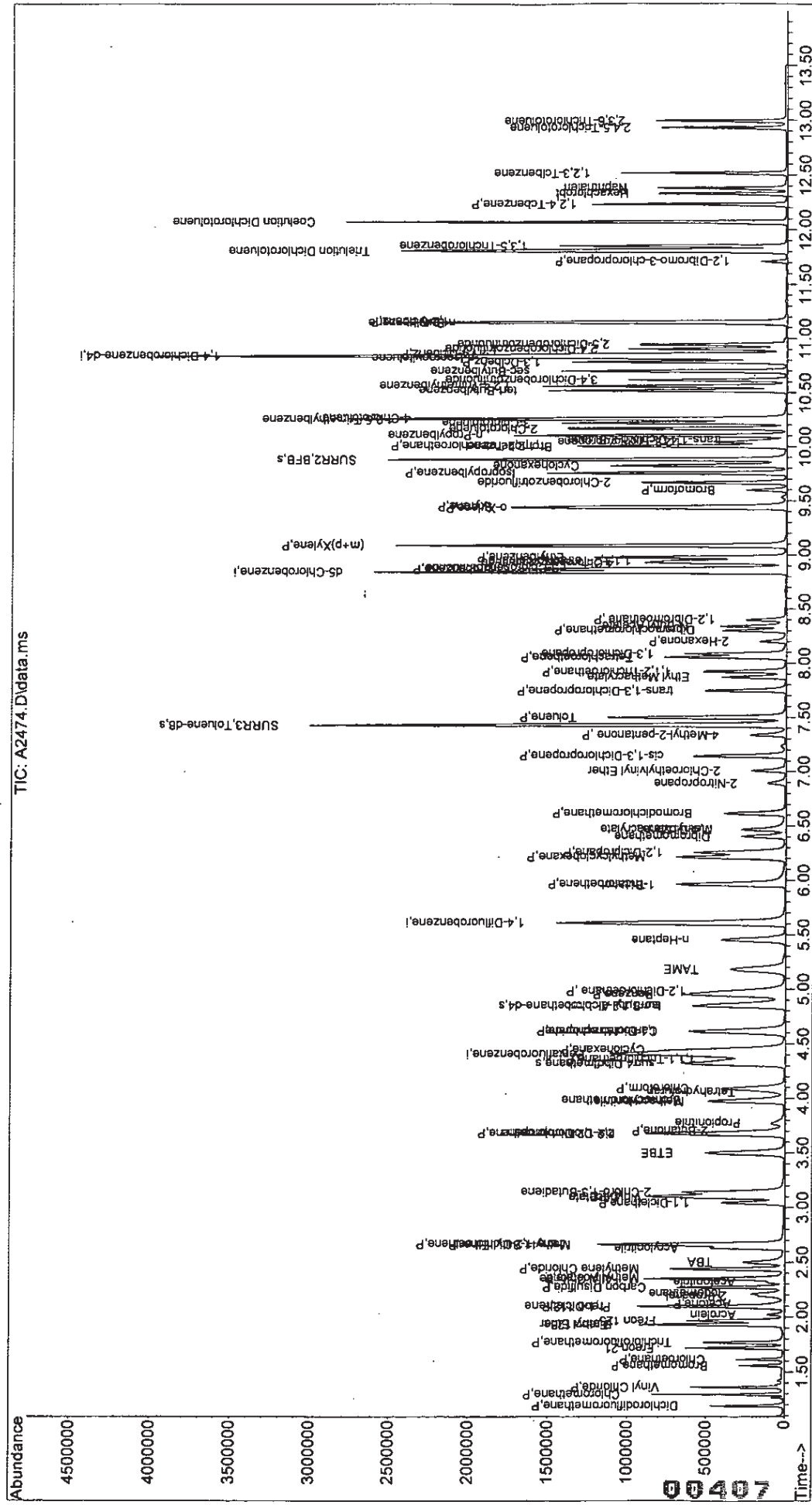
```

Sample      : LCS
Data File   : I:\ACQUIDATA\msvoa10\data\093014\A2474.D
Acq On      : 30 Sep 2014   4:14 pm
Operator     : F.NAEGLER
InstName    : MSVOA10
Misc        :

```

Vial: 3

Quant Time: Oct 01 09:07:00 2014
Quant Method : I:\ACQDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: 9/21/14 1045
Date Received: 9/23/14
Date Analyzed: 9/29/14 21:32

Sample Name: MW-10
Lab Code: RQ1411994-05
Run Type: Matrix Spike

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvov10\data\092914\A2439.D\

Analysis Lot: 413648
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	61.5		5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	59.0		5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	55.4		5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	60.3		5.0	0.30	
79-01-6	Trichloroethene (TCE)	85.2		5.0	0.22	
75-01-4	Vinyl Chloride	63.8		5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	65.0		5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	58.9		5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	89	85-122	9/29/14 21:32	
Dibromofluoromethane	102	89-119	9/29/14 21:32	
Toluene-d8	103	87-121	9/29/14 21:32	

Sample : R1407422-013MS|1.0
 Data File : I:\ACQUDATA\msvoa10\data\092914\A2439.D Vial: 21
 Acq On : 29 Sep 2014 9:32 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 6646 T4

Quant Time: Oct 06 14:49:07 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

R21411999-05
 FZ
 10/6/14

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	1223912	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1812551	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1623283	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	767356	50.00	ug/L	0.00

System Monitoring Compounds						
45) surr4, Dibrflmethane	4.318	113	589728	51.03	ug/L	0.00
Spiked Amount	50.000	Range 89 - 119	Recovery	= 102.06%		
48) surr1, 1,2-dichloroetha...	4.848	65	606312	49.71	ug/L	0.00
Spiked Amount	50.000	Range 78 - 122	Recovery	= 99.42%		
65) SURR3, Toluene-d8	7.427	98	2094775	51.46	ug/L	0.00
Spiked Amount	50.000	Range 87 - 121	Recovery	= 102.92%		
70) SURR2, BFB	9.878	95	710534	44.36	ug/L	0.00
Spiked Amount	50.000	Range 85 - 122	Recovery	= 88.72%		

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.190	85	820188	62.26	ug/L	96
3) Chloromethane	1.294	50	1171364	66.70	ug/L	100
4) Vinyl Chloride	1.361	62	1023268	63.79	ug/L	96
5) Bromomethane	1.556	94	315797	64.09	ug/L	100
6) Chloroethane	1.611	64	463607	57.04	ug/L	95
7) Freon 21	1.715	67	603323	26.73	ug/L	97
8) Trichlorofluoromethane	1.763	101	985364	54.23	ug/L	95
9) Diethyl Ether	1.934	59	495497	51.78	ug/L #	78
10) Freon 123a	1.928	67	439484	30.92	ug/L	91
11) Freon 123	1.965	83	368838	24.38	ug/L	99
12) Acrolein	2.019	56	147702	98.67	ug/L	91
13) 1,1-Dicethene	2.099	96	472805	55.43	ug/L #	74
14) Freon 113	2.093	101	621903	57.71	ug/L	97
15) Acetone	2.117	43	142215	38.16	ug/L	93
16) 2-Propanol	2.190	45	198207	376.12	ug/L	97
17) Iodomethane	2.215	142	385179	41.25	ug/L	98
18) Carbon Disulfide	2.269	76	1892928	52.46	ug/L	99
19) Acetonitrile	2.318	40	125129	313.22	ug/L	99
20) Allyl Chloride	2.349	76	305153	56.91	ug/L #	40
21) Methyl Acetate	2.355	43	181552	24.56	ug/L	83
22) Methylene Chloride	2.440	84	642000	57.35	ug/L #	75
23) TBA	2.495	59	642464	1012.70	ug/L	69
24) Acrylonitrile	2.629	53	959256	280.09	ug/L	100
25) Methyl-t-Butyl Ether	2.660	73	1372434	56.16	ug/L	89
26) trans-1,2-Dichloroethene	2.666	96	647203	58.85	ug/L #	82
28) 1,1-Dicethane	3.044	63	1371076	58.95	ug/L	97
29) Vinyl Acetate	3.086	86	72894	53.28	ug/L #	1
30) DIPE	3.105	45	2827467	52.96	ug/L	95
31) 2-Chloro-1,3-Butadiene	3.141	53	1336546	58.43	ug/L	80
32) ETBE	3.501	59	1704501	47.61	ug/L	89
33) 2,2-Dichloropropane	3.678	77	769661	53.43	ug/L	98
34) cis-1,2-Dichloroethene	3.678	96	781511	64.98	ug/L #	80
35) 2-Butanone	3.696	43	242799	49.43	ug/L	85
36) Propionitrile	3.763	54	317729	267.89	ug/L	94
37) Bromochloromethane	3.976	130	391017	52.87	ug/L #	58

Sample : R1407422-013MS11.0
 Data File : I:\ACQUDATA\msvoa10\data\092914\A2439.D Vial: 21
 Acq On : 29 Sep 2014 9:32 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 6646 T4

Quant Time: Oct 06 14:49:07 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Methacrylonitrile	3.964	67	161037	60.59	ug/L #	39
39) Tetrahydrofuran	4.056	42	162603	59.77	ug/L #	68
40) Chloroform	4.086	83	1183369	58.39	ug/L	95
41) 1,1,1-Trichloroethane	4.360	97	1030538	61.46	ug/L	93
42) TAME	5.183	73	1184815	49.05	ug/L	89
44) Cyclohexane	4.440	41	435390	26.53	ug/L	81
46) Carbontetrachloride	4.610	121	277754	60.16	ug/L	96
47) 1,1-Dichloropropene	4.616	75	884135	62.37	ug/L	97
49) Benzene	4.952	78	2631349	59.39	ug/L	91
50) 1,2-Dichloroethane	4.988	62	893660	58.13	ug/L	93
51) Iso-Butyl Alcohol	4.848	43	362178	1005.95	ug/L	94
52) n-Heptane	5.452	43	959341	57.41	ug/L	82
53) 1-Butanol	5.952	56	398829	2574.24	ug/L	84
54) Trichloroethene	5.964	130	1052621	85.22	ug/L	98
55) Methylcyclohexane	6.214	55	467617	27.46	ug/L #	80
56) 1,2-Diclp propane	6.256	63	779920	60.39	ug/L	98
57) Dibromomethane	6.403	93	345867	55.55	ug/L	99
58) 1,4-Dioxane	6.464	88	63060m	858.12	ug/L	
59) Methyl Methacrylate	6.464	69	282169	61.51	ug/L #	60
60) Bromodichloromethane	6.616	83	853543	60.37	ug/L	100
61) 2-Nitropropane	6.890	41	230550	129.28	ug/L	93
63) cis-1,3-Dichloropropene	7.140	75	948574	63.52	ug/L	98
64) 4-Methyl-2-pentanone	7.335	43	540044	55.91	ug/L	89
66) Toluene	7.500	91	2754058	59.32	ug/L	97
67) trans-1,3-Dichloropropene	7.744	75	756373	64.00	ug/L	97
68) Ethyl Methacrylate	7.872	69	567838	58.96	ug/L #	55
69) 1,1,2-Trichloroethane	7.921	97	452322	55.22	ug/L	94
72) Tetrachloroethene	8.055	164	566172	60.31	ug/L	99
73) 2-Hexanone	8.195	43	356001	51.89	ug/L	91
74) 1,3-Dichloropropane	8.085	76	828798	59.59	ug/L #	79
75) Dibromochloromethane	8.299	129	584356	58.94	ug/L	95
76) N-Butyl Acetate	8.341	43	396882	26.00	ug/L	92
77) 1,2-Dibromoethane	8.396	107	471291	59.76	ug/L	99
78) 3-Chlorobenzotrifluoride	8.878	180	1055813	61.23	ug/L	98
79) Chlorobenzene	8.866	112	1847257	59.02	ug/L	99
80) 4-Chlorobenzotrifluoride	8.927	180	930259	58.57	ug/L	99
81) 1,1,1,2-Tetrachloroethane	8.945	131	654272	59.73	ug/L	97
82) Ethylbenzene	8.975	106	901654	57.81	ug/L	95
83) (m+p)Xylene	9.085	106	2433133	126.51	ug/L	98
84) o-Xylene	9.433	106	1143403	60.80	ug/L	97
85) Styrene	9.445	104	1894513	60.64	ug/L	98
86) Bromoform	9.597	173	308272	54.13	ug/L	100
87) 2-Chlorobenzotrifluoride	9.664	180	933489	54.62	ug/L	91
88) Isopropylbenzene	9.756	105	2584943	54.66	ug/L	99
89) Cyclohexanone	9.823	55	208759	139.70	ug/L	93
90) trans-1,4-Dichloro-2-B...	10.054	53	105773	43.94	ug/L	80
92) 1,1,2,2-Tetrachloroethane	10.006	83	473428	56.22	ug/L	98
93) Bromobenzene	10.000	156	670448	57.88	ug/L	98
94) 1,2,3-Trichloropropane	10.036	110	124566	52.91	ug/L	95
95) n-Propylbenzene	10.103	91	3006708	62.79	ug/L	98
96) 2-Chlorotoluene	10.164	91	1778199	60.18	ug/L	98
97) 3-Chlorotoluene	10.219	91	1911218	60.88	ug/L	96

Sample : R1407422-013MS|1.0
 Data File : I:\ACQUDATA\msvoa10\data\092914\A2439.D Vial: 21
 Acq On : 29 Sep 2014 9:32 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 6646 T4

Quant Time: Oct 06 14:49:07 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

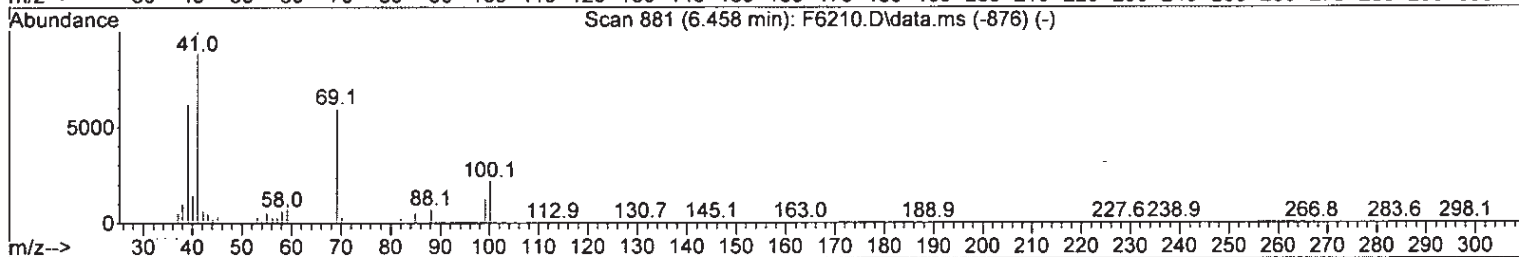
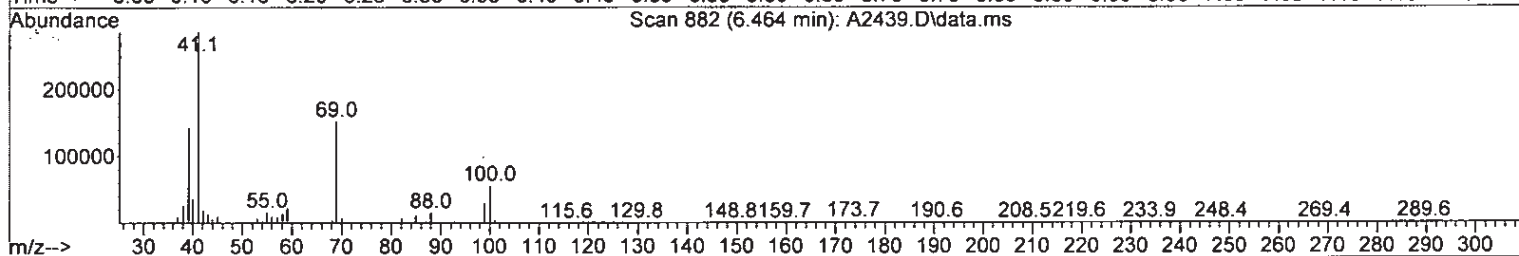
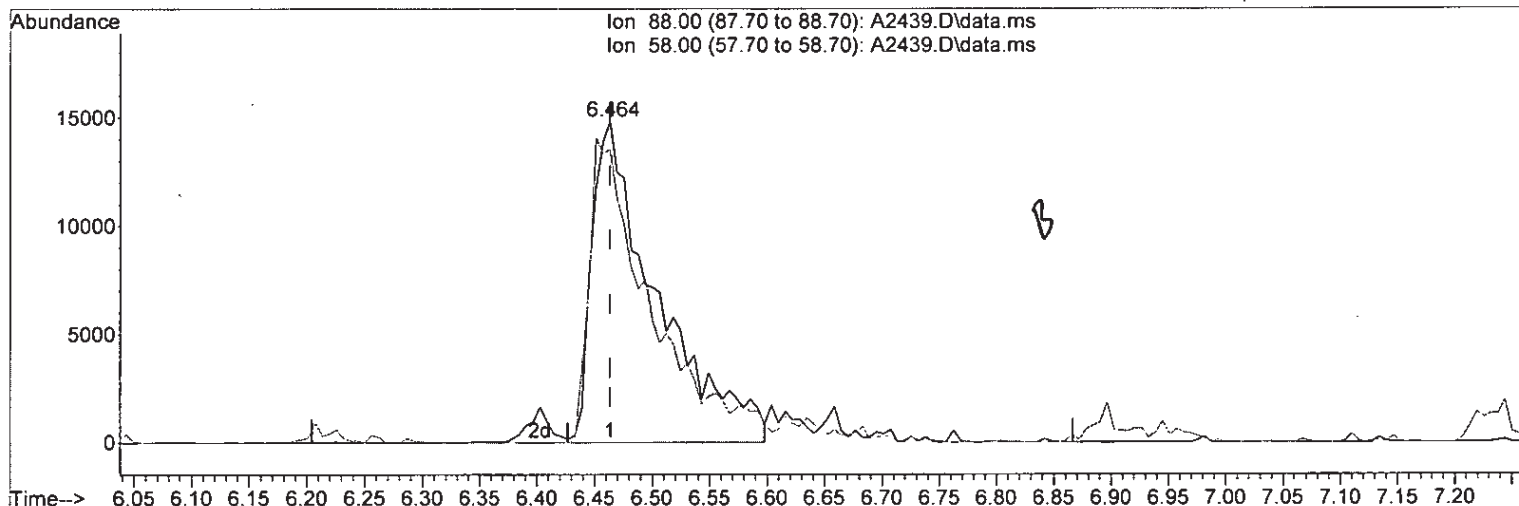
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98) 4-Chlorotoluene	10.256	91	2113166	59.45	ug/L	96
99) 1,3,5-Trimethylbenzene	10.250	105	2103565	60.41	ug/L	98
100) tert-Butylbenzene	10.518	119	1764395	60.45	ug/L	99
101) 1,2,4-Trimethylbenzene	10.554	105	2115776	60.10	ug/L	99
102) 3,4-Dichlorobenzotrifl...	10.615	214	642721	61.18	ug/L	99
103) sec-Butylbenzene	10.695	105	2545447	62.21	ug/L	99
104) p-Isopropyltoluene	10.817	119	2217804	62.48	ug/L	95
105) 1,3-Dclbenz	10.780	146	1267779	57.21	ug/L	97
106) 1,4-Dclbenz	10.853	146	1294571	56.39	ug/L	98
107) 2,4-Dichlorobenzotrifl...	10.902	214	581899	62.17	ug/L	97
108) 2,5-Dichlorobenzotrifl...	10.938	214	668787	59.82	ug/L	97
109) n-Butylbenzene	11.140	91	1954007	64.96	ug/L	99
110) 1,2-Dclbenz	11.152	146	1143178	54.90	ug/L	98
111) 1,2-Dibromo-3-chloropr...	11.707	157	83279	64.96	ug/L	97
112) Trielution Dichlorotol...	11.804	125	3431104	196.66	ug/L	98
113) 1,3,5-Trichlorobenzene	11.847	180	985202	66.17	ug/L	97
114) Coelution Dichlorotoluene	12.066	125	2360264	130.48	ug/L	98
115) 1,2,4-Tcbenzene	12.225	180	732531	62.10	ug/L	96
116) Hexachlorobt	12.322	225	314579	65.14	ug/L	98
117) Naphthalen	12.371	128	1197994	59.10	ug/L	99
118) 1,2,3-Tclbenzene	12.505	180	565079	65.35	ug/L	99
119) 2,4,5-Trichlorotoluene	12.914	159	375212	69.57	ug/L	94
120) 2,3,6-Trichlorotoluene	12.981	159	381548	69.91	ug/L	100

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

Quantitation Report (Qedit)

Sample : R1407422-013MS|1.0
 Data File : I:\ACQUDATA\msvoa10\data\092914\A2439.D Vial: 21
 Acq On : 29 Sep 2014 9:32 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 6646 T4

Quant Time: Sep 29 21:45:24 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration



TIC: A2439.D\data.ms

(58) 1,4-Dioxane

6.464min (-0.000) 783.70 ug/L

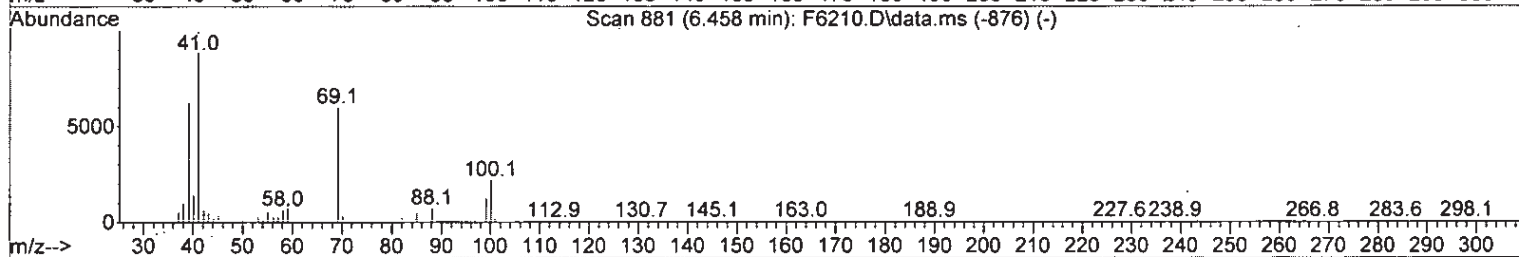
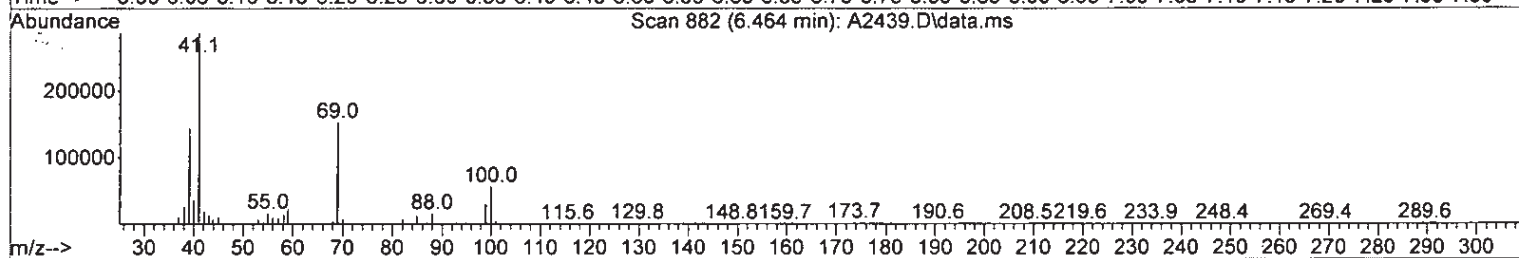
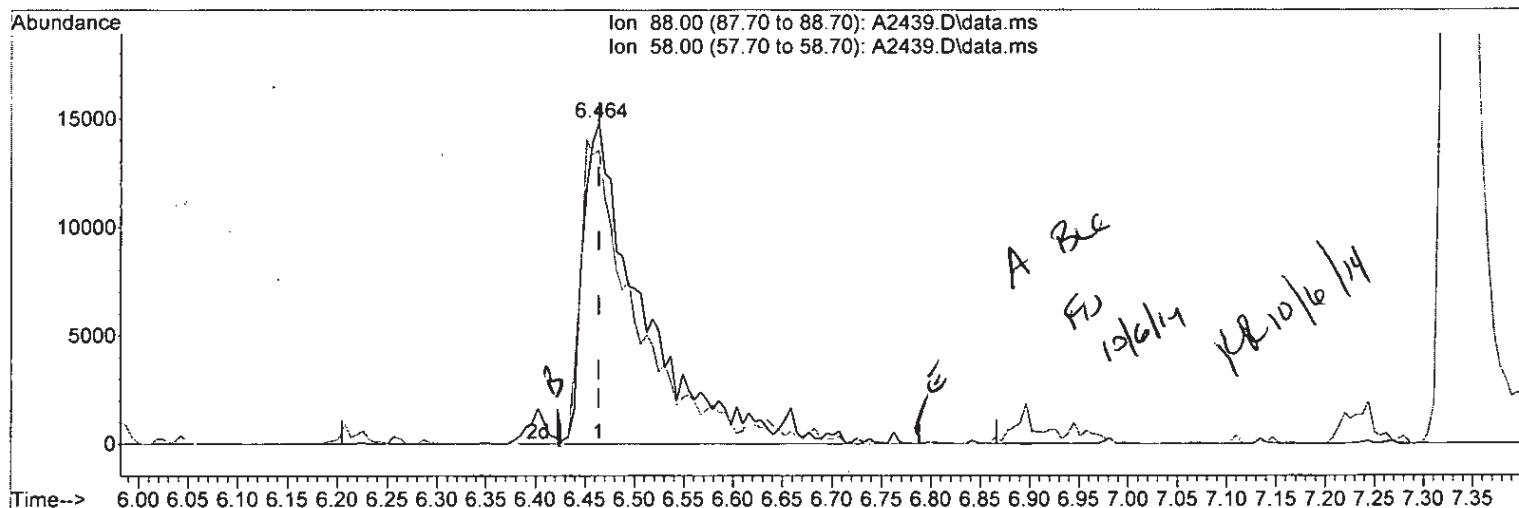
response 57591

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	91.29
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : R1407422-013MS|1.0
 Data File : I:\ACQUDATA\msvoa10\data\092914\A2439.D Vial: 21
 Acq On : 29 Sep 2014 9:32 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 6646 T4

Quant Time: Sep 29 21:45:24 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration



TIC: A2439.D\data.ms

(58) 1,4-Dioxane

6.464min (-0.000) 858.12 ug/L m

response 63060

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	91.29
0.00	0.00	0.00
0.00	0.00	0.00

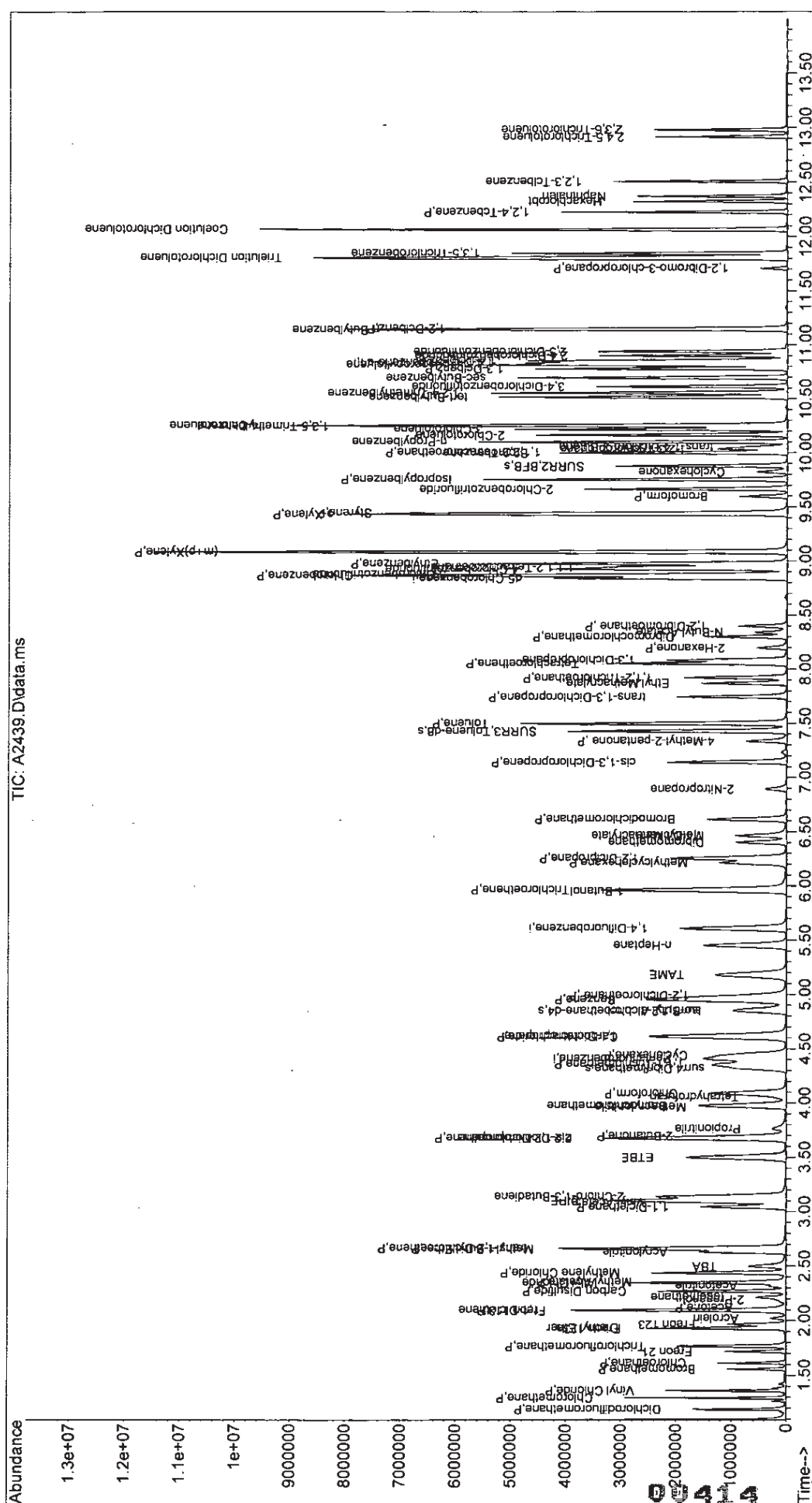
(QT Reviewed)

```

Sample      : R1407422-013MS11.0
Data File   : I:\ACQUDATA\msvoa10\data\092914\A2439.D
Acq On      : 29 Sep 2014   9:32 pm
Operator     : F.NAEGLER
InstName     : MSVOA10
Misc         : VERINA 6646 T4
Vial: 21

```

Quant Time: Oct 06 14:49:07 2014
Quant Method : I:\ACQDATA\MSV0A10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1407422
Date Collected: 9/21/14 1045
Date Received: 9/23/14
Date Analyzed: 9/29/14 22:01

Sample Name: MW-10
Lab Code: RQ1411994-06
Run Type: Duplicate Matrix Spike

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\092914\A2440.D\

Analysis Lot: 413648
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	58.1		5.0	0.36	
75-34-3	1,1-Dichloroethane (1,1-DCA)	61.8		5.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	60.8		5.0	0.57	
127-18-4	Tetrachloroethene (PCE)	58.9		5.0	0.30	
79-01-6	Trichloroethene (TCE)	85.1		5.0	0.22	
75-01-4	Vinyl Chloride	67.2		5.0	0.32	
156-59-2	cis-1,2-Dichloroethene	64.6		5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	60.1		5.0	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85-122	9/29/14 22:01	
Dibromofluoromethane	100	89-119	9/29/14 22:01	
Toluene-d8	108	87-121	9/29/14 22:01	

Sample : R1407422-013DMS|1.0
 Data File : I:\ACQUDATA\msvoa10\data\092914\A2440.D Vial: 22
 Acq On : 29 Sep 2014 10:01 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 6646 T4

Quant Time: Oct 06 14:50:13 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

RQ1411994-06

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) Pentafluorobenzene	4.403	168	1126824	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1668971	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1407968	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	767139	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4, Dibrflmethane	4.318	113	531098	49.91	ug/L	0.00
Spiked Amount	50.000	Range 89 - 119	Recovery	=	99.82%	
48) surr1, 1,2-dichloroetha...	4.848	65	567944	50.57	ug/L	0.00
Spiked Amount	50.000	Range 78 - 122	Recovery	=	101.14%	
65) SURR3, Toluene-d8	7.427	98	2030356	54.17	ug/L	0.00
Spiked Amount	50.000	Range 87 - 121	Recovery	=	108.34%	
70) SURR2, BFB	9.878	95	705154	47.81	ug/L	0.00
Spiked Amount	50.000	Range 85 - 122	Recovery	=	95.62%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.184	85	814671	67.17	ug/L	94
3) Chloromethane	1.294	50	1101558	68.13	ug/L	98
4) Vinyl Chloride	1.355	62	991941	67.16	ug/L	98
5) Bromomethane	1.556	94	337471	72.72	ug/L	99
6) Chloroethane	1.611	64	450525	60.21	ug/L	97
7) Freon 21	1.715	67	758841	36.51	ug/L	99
8) Trichlorofluoromethane	1.764	101	952191	56.92	ug/L	99
9) Diethyl Ether	1.934	59	469474	53.28	ug/L #	78
10) Freon 123a	1.928	67	536689	41.01	ug/L	92
11) Freon 123	1.965	83	466905	33.52	ug/L	97
12) Acrolein	2.020	56	141097	102.38	ug/L	94
13) 1,1-Dicethene	2.099	96	477409	60.79	ug/L #	78
14) Freon 113	2.093	101	604560	60.93	ug/L	95
15) Acetone	2.117	43	139790	40.74	ug/L	96
16) 2-Propanol	2.190	45	257339	530.40	ug/L	92
17) Iodomethane	2.215	142	545621	58.96	ug/L	97
18) Carbon Disulfide	2.270	76	1818623	54.74	ug/L	99
19) Acetonitrile	2.318	40	85743	233.12	ug/L	93
20) Allyl Chloride	2.349	76	282190	57.16	ug/L #	33
21) Methyl Acetate	2.355	43	199779	29.35	ug/L	86
22) Methylene Chloride	2.440	84	597766	58.00	ug/L #	70
23) TBA	2.495	59	608910	1042.51	ug/L	73
24) Acrylonitrile	2.629	53	902036	286.08	ug/L	95
25) Methyl-t-Butyl Ether	2.660	73	1288436	57.26	ug/L	90
26) trans-1,2-Dichloroethene	2.666	96	608632m	60.11	ug/L	
28) 1,1-Dicethane	3.044	63	1322447	61.76	ug/L	97
29) Vinyl Acetate	3.086	86	66251	52.59	ug/L #	1
30) DIPE	3.105	45	2722923	55.40	ug/L	95
31) 2-Chloro-1,3-Butadiene	3.141	53	1269869	60.30	ug/L	82
32) ETBE	3.501	59	1595434	48.40	ug/L	91
33) 2,2-Dichloropropane	3.678	77	705251	53.17	ug/L	98
34) cis-1,2-Dichloroethene	3.678	96	715784	64.64	ug/L #	80
35) 2-Butanone	3.702	43	212603	47.01	ug/L	89
36) Propionitrile	3.763	54	287289	263.13	ug/L	98
37) Bromochloromethane	3.977	130	342950	50.37	ug/L #	70

Sample : R1407422-013DMS|1.0
 Data File : I:\ACQUDATA\msvoa10\data\092914\A2440.D Vial: 22
 Acq On : 29 Sep 2014 10:01 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 6646 T4

Quant Time: Oct 06 14:50:13 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
38) Methacrylonitrile	3.970	67	139853	57.15	ug/L #	49
39) Tetrahydrofuran	4.056	42	137437	54.88	ug/L #	68
40) Chloroform	4.092	83	1054215	56.50	ug/L	93
41) 1,1,1-Trichloroethane	4.354	97	897495	58.14	ug/L	94
42) TAME	5.177	73	1002991	45.10	ug/L	88
44) Cyclohexane	4.440	41	462102	30.58	ug/L	87
46) Carbontetrachloride	4.611	121	235623	55.42	ug/L	96
47) 1,1-Dichloropropene	4.617	75	725400	55.57	ug/L	97
49) Benzene	4.952	78	2159399	52.93	ug/L	88
50) 1,2-Dichloroethane	4.982	62	727692	51.41	ug/L	93
51) Iso-Butyl Alcohol	4.860	43	311121	938.48	ug/L	99
52) n-Heptane	5.452	43	869672	56.52	ug/L #	78
53) 1-Butanol	5.946	56	376314	2630.19	ug/L	82
54) Trichloroethene	5.964	130	967682	85.08	ug/L	97
55) Methylcyclohexane	6.214	55	551934	35.20	ug/L #	79
56) 1,2-Dicloropropane	6.257	63	692273	58.22	ug/L	99
57) Dibromomethane	6.403	93	295355	51.52	ug/L	93
58) 1,4-Dioxane	6.458	88	60009	886.86	ug/L	98
59) Methyl Methacrylate	6.464	69	243282	57.60	ug/L #	65
60) Bromodichloromethane	6.610	83	755208	58.01	ug/L	99
61) 2-Nitropropane	6.891	41	198268	120.74	ug/L	92
63) cis-1,3-Dichloropropene	7.141	75	841348	61.19	ug/L	97
64) 4-Methyl-2-pentanone	7.336	43	468162	52.64	ug/L	94
66) Toluene	7.500	91	2398533	56.11	ug/L	99
67) trans-1,3-Dichloropropene	7.744	75	623559	57.30	ug/L	97
68) Ethyl Methacrylate	7.872	69	448594	50.58	ug/L #	59
69) 1,1,2-Trichloroethane	7.921	97	351577	46.62	ug/L	92
72) Tetrachloroethene	8.055	164	479279	58.86	ug/L	99
73) 2-Hexanone	8.195	43	288818	48.53	ug/L	89
74) 1,3-Dichloropropane	8.085	76	647756	53.69	ug/L #	77
75) Dibromochloromethane	8.299	129	466411	54.24	ug/L	98
76) N-Butyl Acetate	8.335	43	411321	31.06	ug/L	90
77) 1,2-Dibromoethane	8.396	107	369243	53.98	ug/L	100
78) 3-Chlorobenzotrifluoride	8.878	180	831388	55.58	ug/L	100
79) Chlorobenzene	8.866	112	1464471	53.95	ug/L	99
80) 4-Chlorobenzotrifluoride	8.927	180	761122	55.25	ug/L	98
81) 1,1,1,2-Tetrachloroethane	8.945	131	527766	55.55	ug/L	98
82) Ethylbenzene	8.976	106	707872	52.33	ug/L	96
83) (m+p)Xylene	9.085	106	1857099	111.32	ug/L	99
84) o-Xylene	9.433	106	896274	54.95	ug/L	100
85) Styrene	9.445	104	1400210	51.67	ug/L	99
86) Bromoform	9.597	173	266659	53.99	ug/L	93
87) 2-Chlorobenzotrifluoride	9.664	180	834371	56.29	ug/L	93
88) Isopropylbenzene	9.756	105	2406972	58.68	ug/L	99
89) Cyclohexanone	9.823	55	204835	158.04	ug/L	96
90) trans-1,4-Dichloro-2-B...	10.055	53	95947	45.78	ug/L	77
92) 1,1,2,2-Tetrachloroethane	10.006	83	425542	50.55	ug/L	98
93) Bromobenzene	10.000	156	631238	54.51	ug/L	99
94) 1,2,3-Trichloropropane	10.036	110	113262	48.12	ug/L	96
95) n-Propylbenzene	10.103	91	2803254	58.56	ug/L	99
96) 2-Chlorotoluene	10.164	91	1666123	56.41	ug/L	97
97) 3-Chlorotoluene	10.219	91	1731212	55.16	ug/L	97

Sample : R1407422-013DMS|1.0
 Data File : I:\ACQUDATA\msvoa10\data\092914\A2440.D Vial: 22
 Acq On : 29 Sep 2014 10:01 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 6646 T4

Quant Time: Oct 06 14:50:13 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration

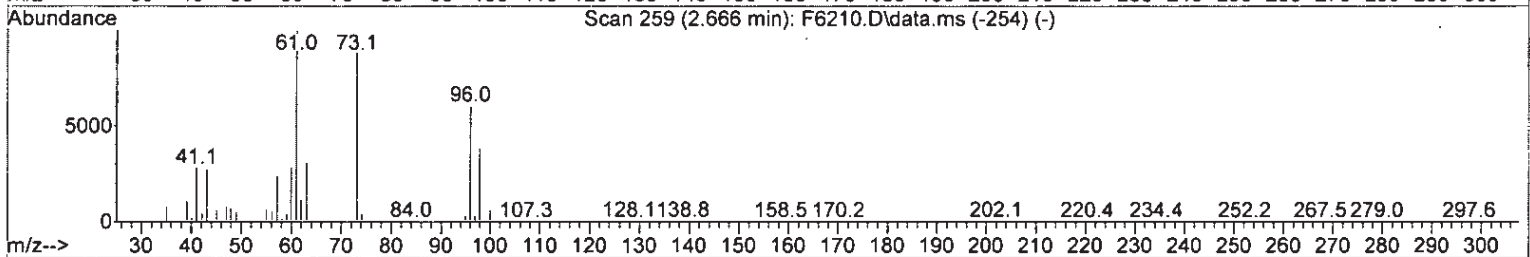
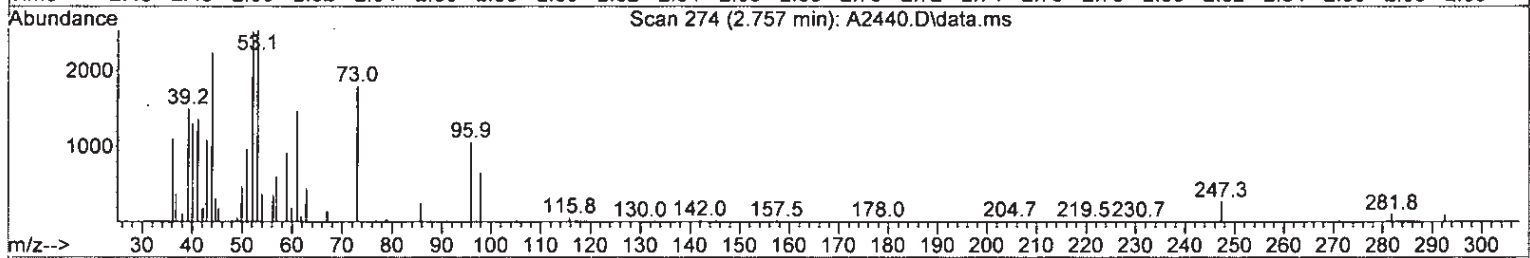
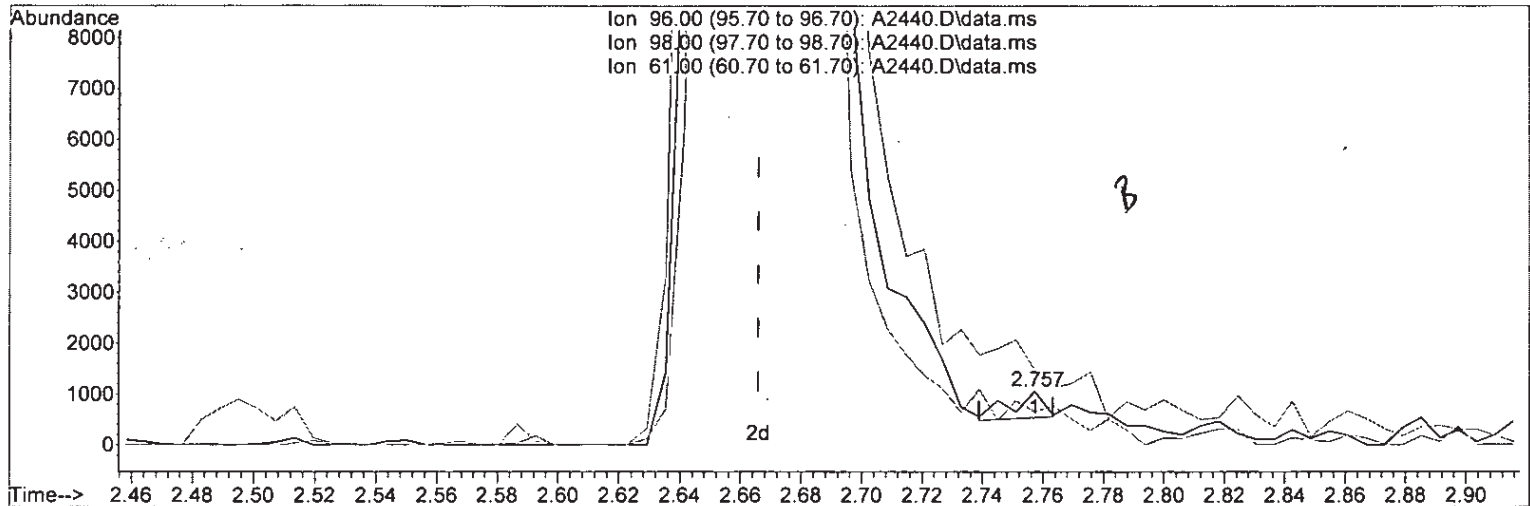
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98) 4-Chlorotoluene	10.256	91	1989739	56.00	ug/L	99
99) 1,3,5-Trimethylbenzene	10.250	105	1910578	54.88	ug/L	98
100) tert-Butylbenzene	10.518	119	1644211	56.35	ug/L	100
101) 1,2,4-Trimethylbenzene	10.554	105	1914103	54.39	ug/L	100
102) 3,4-Dichlorobenzotrifl...	10.615	214	600495	57.18	ug/L	100
103) sec-Butylbenzene	10.695	105	2356911	57.62	ug/L	99
104) p-Isopropyltoluene	10.817	119	2032628	57.28	ug/L	98
105) 1,3-Dclbenz	10.780	146	1199343	54.13	ug/L	98
106) 1,4-Dclbenz	10.853	146	1224371	53.35	ug/L	99
107) 2,4-Dichlorobenzotrifl...	10.902	214	543622	58.09	ug/L	99
108) 2,5-Dichlorobenzotrifl...	10.945	214	609617	54.54	ug/L	97
109) n-Butylbenzene	11.140	91	1856085	61.72	ug/L	99
110) 1,2-Dclbenz	11.152	146	1090412	52.38	ug/L	98
111) 1,2-Dibromo-3-chloropr...	11.707	157	77334	60.34	ug/L	92
112) Trielution Dichlorotol...	11.804	125	3220205	184.63	ug/L	98
113) 1,3,5-Trichlorobenzene	11.847	180	931694	62.59	ug/L	96
114) Coelution Dichlorotoluene	12.066	125	2216856	122.58	ug/L	97
115) 1,2,4-Tcbenzene	12.225	180	746719	63.32	ug/L	96
116) Hexachlorobt	12.322	225	324475	67.21	ug/L	98
117) Naphthalen	12.371	128	1225336	60.46	ug/L	99
118) 1,2,3-Tclbenzene	12.505	180	586186	67.81	ug/L	99
119) 2,4,5-Trichlorotoluene	12.914	159	401907	74.54	ug/L	97
120) 2,3,6-Trichlorotoluene	12.975	159	407157	74.62	ug/L	97

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

Quantitation Report (Qedit)

Sample : R1407422-013DMS|1.0
 Data File : I:\ACQUDATA\msvoa10\data\092914\A2440.D Vial: 22
 Acq On : 29 Sep 2014 10:01 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 6646 T4

Quant Time: Sep 29 22:15:00 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration



TIC: A2440.D\data.ms

(26) trans-1,2-Dichloroethene (P)

2.757min (+0.091) 0.04 ug/L

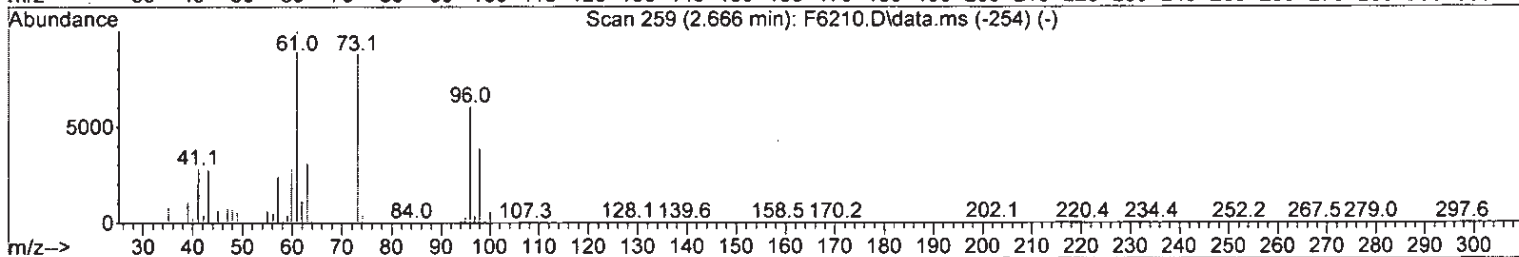
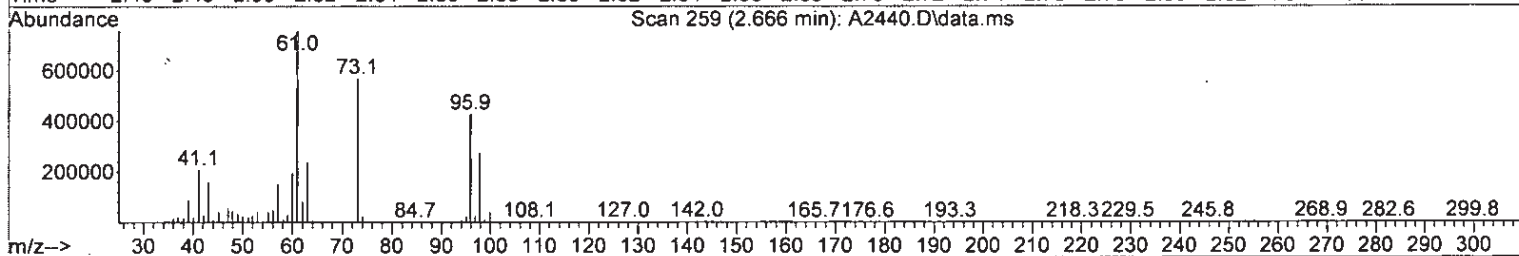
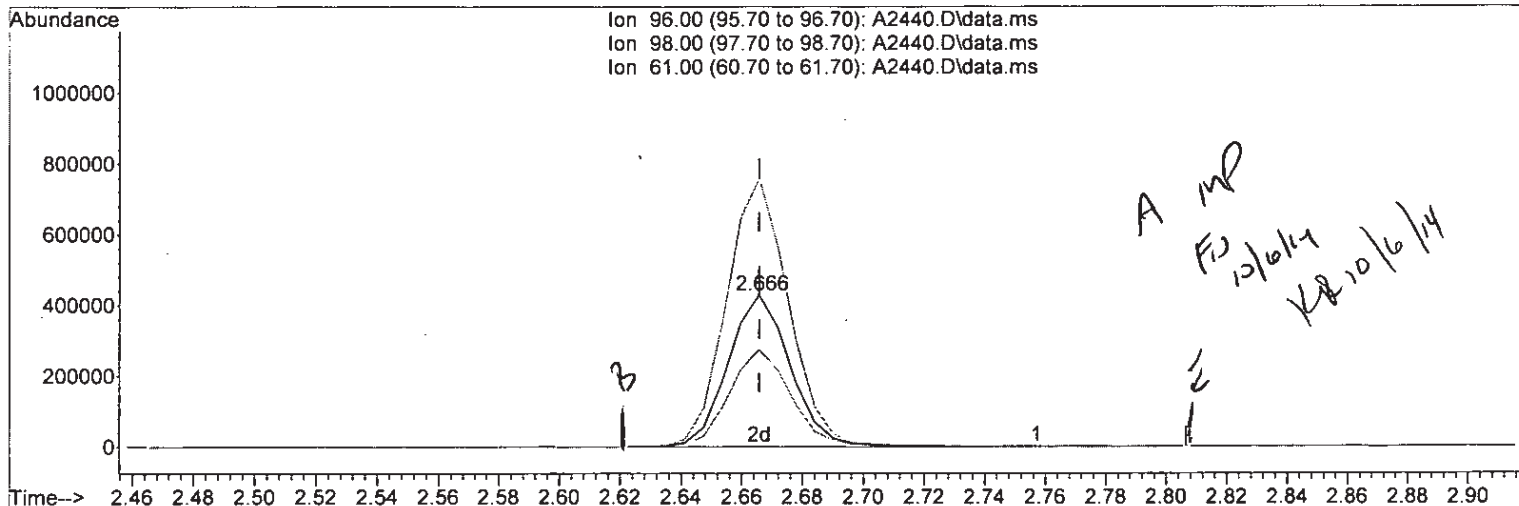
response 400

Ion	Exp%	Act%
96.00	100	100
98.00	64.00	61.21
61.00	144.30	138.79
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : R1407422-013DMS|1.0
 Data File : I:\ACQUDATA\msvoa10\data\092914\A2440.D Vial: 22
 Acq On : 29 Sep 2014 10:01 pm
 Operator : F.NAEGLER
 InstName : MSVOA10
 Misc : VERINA 6646 T4

Quant Time: Sep 29 22:15:00 2014
 Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
 Quant Title : MS#10 - 8260B WATERS 10mL Purge
 QLast Update : Tue Jul 22 13:18:57 2014
 Response via : Initial Calibration



TIC: A2440.D\data.ms

(26) trans-1,2-Dichloroethene (P)

2.666min (-0.000) 60.11 ug/L m

response 608632

Ion	Exp%	Act%
96.00	100	100
98.00	64.00	63.98
61.00	144.30	177.09#
0.00	0.00	0.00

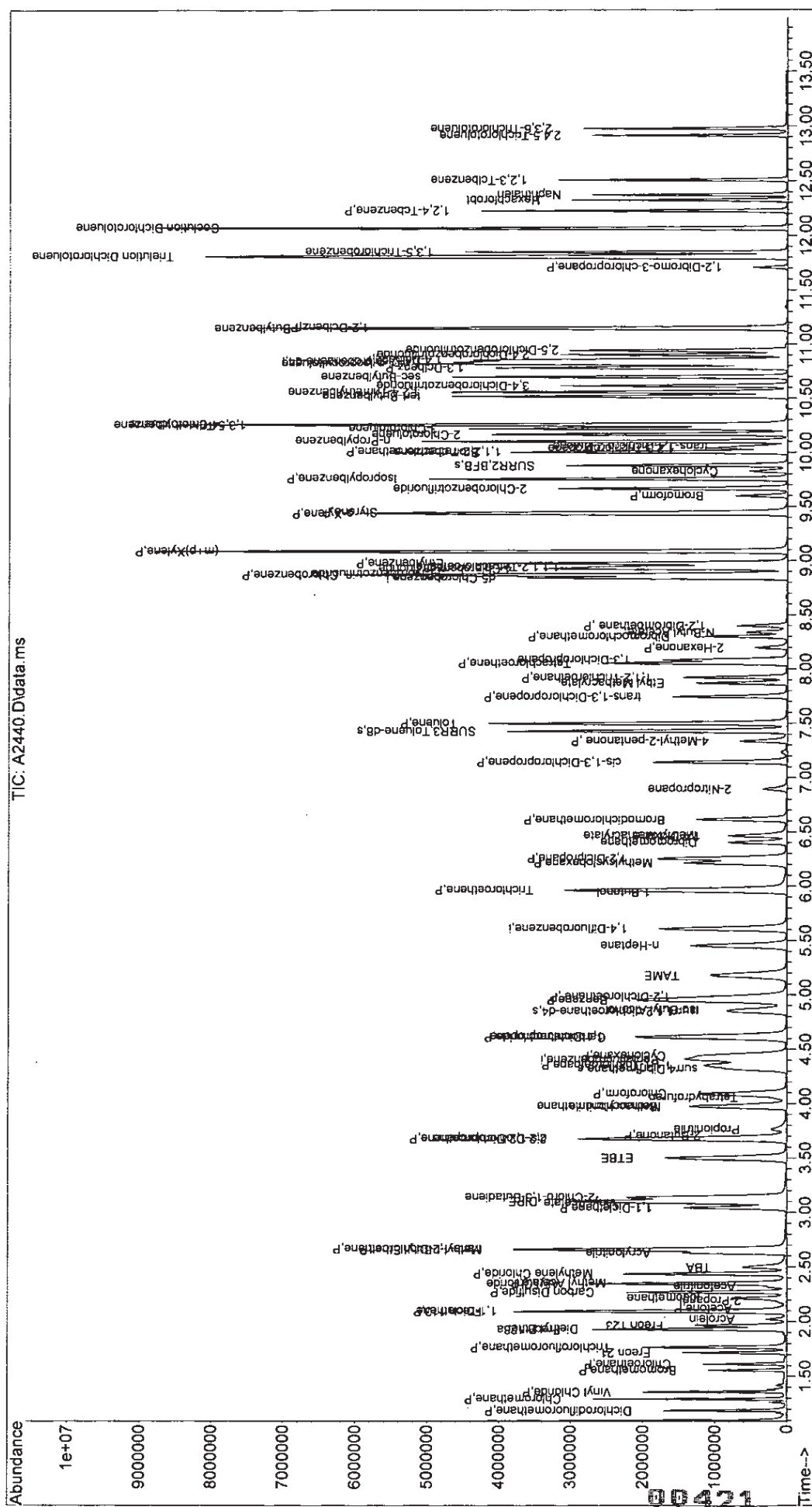
(QT Reviewed)

```

Sample      : R1407422-013DMS|1.0
Data File   : I:\ACQUDATA\msvoa10\data\092914\A2440.D
Acq On      : 29 Sep 2014 10:01 pm
Operator     : F.NAEGLER
InstName     : MSVOA10
Misc         : VERINA 6646 T4
Vial: 22

```

Quant Time: Oct 06 14:50:13 2014
Quant Method : I:\ACQDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



Analysis: 8260C Analyst: F. Nagler Tune Method: T072114.M
 Date: 7/21/14 Data Path: j:\acquadat\msvoa10\072114 Run Method: W072114.M
 Instr: MS#10 LIMS Run#:

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	BLK								A0506	Y	
2	BLK								A0507	Y	
1	TUNE								08	Y	
2	ICAL BLK								09	Y	
3	0.5ppb STD								10	Y	
4	1.0								11	Y	
5	2.0								12	Y	
6	5.0								13	Y	
7	10								14	Y	
8	50								15	Y	
9	100								16	Y	
10	150								17	Y	
11	200								18	Y	
12	BLK								19	Y	
13	BLK								20	Y	
14	50ppb ICV								21	Y	
15	BLK								22	Y	

WATER ICAL TABLE										
Conc (PPB)	0.5	1.0	2.0	5.0	10	50	100	150	200	
1° T/G = 72623	10ml/1ml 5ml/5ml	↓	↓	↓	2ml/100ml	5ml/50ml	10ml/100ml	15ml/50ml	20ml/50ml	
1° HSL = 72499	↓	↓	↓	↓	↓	↓	↓	↓	↓	
1° FC = 72625	↓	↓	↓	↓	↓	↓	↓	↓	↓	
1° HBS = 72046	↓	↓	↓	↓	↓	↓	↓	↓	↓	
1° OCC = 72130	↓	↓	↓	↓	↓	↓	↓	↓	↓	
SURR = 72622	—	—	—	1ml/50ml	9ml/100ml	—	5ml/50ml	7.5ml/50ml	10ml/50ml	

SEE ICAL TABLE
 TL6 Primary 500
 HSL Primary
 FC Primary
 HBS Primary
 OCC Primary

Fr Secondary 500 : 72454 - 12.5ml
 TL6 Secondary 200 : 72650 - 5ml
 HSL Secondary : 72064 -
 HBS Secondary : 72455 -
 OCC Secondary : 72140 - (ICV)

Combined IS/Surr 500 : 72622
 Surrogate :
 Internal Std :

Analysis: 8260C Analyst: F. Naegler Tune Method: T072114.M
 Date: 9/24/14 #2 Data Path: j:\acquadatamsvoa\1092414 Run Method: W072114.M
 Instr: MS #10 LIMS Run#: 412875

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
26	TUNE								A2325	Y	
27	CCV								26	Y	
28	LCS								27	Y	
29	LCS								28	Y	
30	MBL								29	Y	
31	MBL								30	Y	
32	R1407302-005	1.0			6368	4	1	42	31	Y	
33		1.0					1	42	32	Y	
34		2.0	25/50mL				1	42	33	Y	
35		1.0					1	42	34	Y	
36	R1407400-001	1.0			9145	2	1	42	35	Y	
37		1.0					1	42	36	Y	
38	R1407422-004	1.0			7979	4	1	42	37	Y	
39		5.0	10/50mL				1		38	Y	
40		5.0					1		39	Y	dark matrix
41		1.0					1	42	40	Y	
42		1.0					1	42	41	Y	
43		1.0					1	42	42	Y	
44	R1407501-001	1.0			6691	1	1	42	43	Y	
45	R1407303-001	5.0	10/50mL		6368	1	1	42	44	Y	fatty! POT 15 acetone h2

All samples = 10 mL + 1 uL combined IS/Surr. 1 mL purged
 Fr Primary 500 : 75017 - 5mL Fr Secondary 200 : 74518 - 5mL Combined IS/Surr 500 : 74801
 HSL Primary : 74907 - 5mL HSL Secondary 500 : 75033 - 2mL Surrogate : 5mL
 Fr Primary : 74200 - 5mL HSL Secondary 500 : 74517 - 2mL Internal Std : 5mL
 HSL Primary : CCV Secondary : (LCS) (SPK)

Analysis: 8260 Analyst: F. J. Jones Tune Method: T072114.M
 Date: 9/29/14 Data Path: j:\acqdata\msvoa 1-3\092914 Run Method: W072114.M
 Instr: MS #10 LIMS Run#: 413648

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	BLK								AZ416	Y	
2	BLK								17	Y	
1	TUNE								18 (N)	Y	
1	TUNE								19	Y	
2	CCV								20	Y	
3	LES								21	Y	
4	MBLK								22 (N)	Y	
5	MBLK								23	Y	RQ1411994-01
6	R1407597-001	1.0			6691	1	1	42		Y	
7	-002	1.0				1	1	42		Y	
8	-003	1.0				1	1	42		Y	
9	-004	1.0				1	1	42		Y	
10	-005	1.0				1	1	42		Y	
11	R1407441-003	1.0			9740	4	2	42		Y	
12	-006	1.0				1	2	42		Y	
13	R1407422-002	1.0			6646	4	1	42		Y	
14	-007	1.0				1	1	42		Y	
15	-014	1.0				1	1	42		Y	
16	-001	1.0				1	1	42		Y	
17	-003	1.0				1	1	42		Y	
18	-005	1.0				1	1	42		(N)	SURE 60+11 to confirm
19	-006	1.0				1	1	42		Y	
20	-013	1.0				1	1	42		Y	
21	-013MS	1.0				2	2	42		Y	
22	-013MSD	1.0				3	3	42		Y	
23	BLK								41	Y	

All samples = 10 mL + 1 uL combined IS/Surr. 1.0 mL purged

Primary 500: 75017 - 504 (504)
 Primary: 74907 -
 Primary: 74200 -
 Primary: 75032 -
 Primary: 74202 -
 (CCV)

Fr Secondary 200: 75142 - 504
 T16 Secondary 500: 75033 - 204
 H20 Secondary: 75084 -
 H20 Secondary: 74908 -
 O2C Secondary: 74203 -

-12.5d
 -5d
 504
 504
 504

Combined IS/Surr 500: 75098
 Surrogate: -
 Internal Std: -

Tune Method:

Data Path: j:\acq\data\msvoa\01\093014

Run Method: W072114.13

Instr. MS #10

LIMS Run#:

413884

[illegible]

All samples = 10 mL + uL combined IS/Surr. 10 mL purged

Primary Soc	: 7507	- 525	525
-------------	--------	-------	-----

Primary 520

4/26 Primary 500 : 75017 - 5

Age	Primary Sex	7507	501	502
4/6				

Primary Soc: 75017 - 526 Soc

Primary 500 : 75017 - 52175

Primary Soc: 75017 - 5th Sem

Primary Soc	75017 - 5m	5m	5m
FC Secondary Soc	75147	5m	5m

Primary Soc	75017	5th Soc	75017	5th Soc
Primary Soc	75017	5th Soc	75017	5th Soc

[illegible]

Primary Soc.	75017 - 561/562	FR Secondary Soc.	75147 - 561/562	Combined 18/19 Soc.	2000
196					

	Primary	Secondary	Combined
500	75017	75117	-19 S.41
5mL	5mL	5mL	75298

Appendix D

ACTIVE SUB-SLAB DEPRESSURIZATION (ASD) INSPECTION LOG
Former Dover Electronics Site, Binghamton, NY (5101.0003)

Date	Time	System On? (Y/N)	E-1	E-2	E-3	E-4	Comments
			Vacuum	Vacuum	Vacuum	Vacuum	
1/22/2013	11:50	Y	3.25	3.25	0.25	3.00	Measured air velocity and air flow rates: E-1 ~ 1495 ft/min, 79.93 CFM; E-2 ~ 814 ft/min, 40.96 CFM; E-3 ~ 350 ft/min, 18.19 CFM; E-4 ~ 703 ft/min, 34.90 CFM
2/20/2013	15:30	Y	3.50	3.25	0.25	3.00	
3/13/2013	15:10	Y	3.50	3.25	0.25	3.00	
4/11/2013	15:30	Y	3.50	3.50	0.25	3.10	
5/10/2013	11:00	Y	3.50	3.50	0.25	3.00	
6/12/2013	14:00	Y	3.50	3.40	0.25	3.10	
7/23/2013	16:00	Y	3.50	3.50	0.25	3.00	
8/8/2013	9:55	Y	3.45	3.30	0.25	3.10	
9/6/2013	13:00	Y	3.50	3.50	0.25	3.10	
10/1/2013	12:45	Y	3.30	3.50	0.25	3.00	
11/21/2013	12:20	Y	3.50	3.38	0.25	3.25	
12/10/2013	16:10	Y	3.70	3.75	0.25	3.25	
1/16/2014	9:00	Y	3.70	3.75	0.25	3.25	
2/20/2014	14:00	Y	3.50	3.25	0.20	3.00	
3/17/2014	10:30	Y	3.50	3.25	0.25	3.25	
4/17/2014	13:30	Y	3.50	3.30	0.25	3.00	
5/22/2014	8:30	Y	3.50	3.30	0.25	3.00	
6/16/2014	15:00	Y	3.50	3.25	0.25	3.00	
7/23/2014	16:30	Y	3.50	3.25	0.25	3.00	
8/18/2014	16:45	Y	3.50	3.16	0.25	2.80	
9/29/2014	14:05	Y	3.00	2.90	0.25	2.40	
10/31/2014	11:40	Y	3.38	3.13	0.13	2.90	
11/20/2014	16:30	Y	3.25	3.00	0.13	2.50	
12/17/2014	14:30	Y	3.25	3.00	0.13	2.75	