PERIODIC REVIEW REPORT (2014)
PRIMOSHIELD INC.
NYSDEC SITE NO. 633027

WORK ASSIGNMENT NO. D007619-18

Prepared for:

New York State Department of Environmental Conservation
Albany, New York

Prepared by:

MACTEC Engineering and Consulting, P.C.
Portland, Maine

MACTEC: 3612122251

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GLOSSARY OF ACRONYMS AND ABBREVIATIONS

bgs	below ground surface
EC	engineering controls
GWCS	groundwater treatment collection system
IC	institutional controls
LTM	long term monitoring
MACTEC	MACTEC Engineering and Consulting, P.C.
mg/L	milligram(s) per liter
NYSDEC	New York State Department of Environmental Conservation
POTW	Publicly Owned Treatment Works
PRR	Periodic Review Report
RAO	remedial action objective
RI	remedial investigation
ROD	Record of Decision
Site	Primoshield site
SM	site management
SMP	site management plan
USEPA	United States Environmental Protection Agency
VOC	volatile organic compound

EXECUTIVE SUMMARY

The Primoshield Inc. Site (Site No. 633027; hereinafter referred to as the Site) is a former metal electroplating facility located at 1212 St. Vincent Street in Utica, Oneida County, New York (Figure ES.1). In March 1995 a Record of Decision (ROD) was signed for the Site; the ROD established the following Remedial Action Objectives (RAOs):

- Reduce, control, or eliminate the contamination present within the soils on Site.
- Eliminate the threat to surface waters by eliminating any future contaminated surface water run-off from the contaminated soils on Site, and any potential future discharge from site sewer lines to the Oneida County Sewer System.
- Eliminate the potential for direct human contact with the contaminated soils onsite.
- Mitigate the impacts of contaminated groundwater to the environment and to nearby residents.
- Prevent to the extent possible migration of contaminants in the soils to groundwater.
- Provide for attainment of standards, criteria, and guidance values for groundwater quality at the limits of the area of concern.
- Remediate the Site and adjoining property to provide for future delisting and unrestricted use.

A Site Management (SM) Plan (SMP) has been created which outlines the controls established to meet the RAOs. Because remaining contaminated groundwater exists beneath the Site, engineering controls (ECs)/institutional controls are required to protect human health and the environment. EC systems at the Site include: the groundwater collection system, site access controls, and groundwater monitoring wells. The SMP includes a soil excavation plan because post remediation sampling was not conducted to document remaining soil conditions; therefore, contaminant concentrations greater than the Soil Cleanup Objectives may be present at the Site. The remedial processes will be considered to be completed when effectiveness monitoring indicates that the remedy has achieved the RAOs identified by the ROD.

This Periodic Review Report summarizes the SM activities completed at the Site during 2014 including long term monitoring, semiannual inspections and discharge monitoring. Additional activities conducted during the reporting period included: the installation of a temporary groundwater monitoring point to evaluate groundwater quality downgradient of the collection

trench, repairs to the site fence, and a property boundary survey. During the reporting period, SM requirements were met. Contaminants of concern at the Site include volatile organic compounds (VOCs), cadmium, chromium, lead, nickel and cyanide. The groundwater collection system discharge monitoring sample results from June 2014 showed detections of VOCs, nickel, zinc, and copper all below the discharge criteria. MACTEC Engineering and Consulting P.C. concludes that the remedy for the Site is effective.

1.0 SITE HISTORY

Primoshield Inc. (the Site), a former metal electroplating facility, is located at 1212 St. Vincent Street, Utica, New York. The 2.4 acre Site is comprised of four parcels located between Conkling Avenue and St. Vincent Street The City of Utica owns two parcels totaling approximately 0.82 acres which are enclosed by a chain link fence. The fenced portion of the Site is designated as 1223 Conkling Avenue (tax map parcel number 41) and 1212 St. Vincent Street (tax map parcel number 33) and is located in a mixed commercial/residential area. The St. Agnes R.C. cemetery is located immediately to the southeast of the Site. The Mohawk River is located down-gradient, approximately one and one half miles to the north of the Site. Figure 1.1 shows the current site features.

Primoshield Inc. operated a metal electroplating facility from the early 1970's until August 1985. The property consisted of a factory (production building), a small laboratory and a small storage trailer, all of which were in an advanced state of disrepair at the time the Site was abandoned in 1985. Additionally, a large number of drums and open vats containing chemicals were left behind. Later in that year there was a fire at the facility. The local citizens communicated their health concerns to the New York State Department of Environmental Conservation (NYSDEC), and samples collected in December 1985 showed a high risk to the public from the Site. Consequently, on March 12, 1986, NYSDEC formally petitioned the United States Environmental Protection Agency (USEPA) to remediate the Site, including but not limited to the cleanup and removal of all the surficial and containerized hazardous wastes as well as the installation of a fence and gate system to secure the Site.

Following the fire in 1985, the facility was abandoned by its owners, and the City of Utica assumed ownership of the Site through tax foreclosure. In December 1989, NYSDEC signed a negotiated Consent Order with the City of Utica in which the city agreed to perform a Remedial Investigation (RI)/Feasibility Study to further investigate and remediate residual hazardous waste contamination remaining at the Site. The RI identified cadmium, chromium, nickel, and cyanide in surficial soils and trichloroethene, 1,1,1-trichloroethane, 1,1-dichloroethane, and chromium in groundwater at the Site. The site was re-assigned by NYSDEC as a State Superfund project in November 1996 because the City of Utica had inadequate funds to complete the remediation.

According to the Record of Decision (ROD) (NYSDEC, 1995), signed on March 30, 1995, the preferred remedy was:

- Excavation and disposal of hazardous and non-hazardous soils
- Building demolition,
- Groundwater collection trench installation
- Operation, maintenance and monitoring of a groundwater collection system, the purpose of which is to intercept, collect, and discharge contaminated groundwater.

The originally installed groundwater treatment system was designed to intercept and collect the plume of contaminated groundwater and treat the water by carbon filtration, with effluent discharged to the Publicly Owned Treatment Works (POTW). However, because contaminated groundwater concentrations decreased to levels below the discharge criteria, the carbon filters have not been in use since 2001 and the groundwater treatment system continues to be used for groundwater collection to intercept and collect contaminated groundwater. Site Management (SM) is currently underway and consists of:

- Semi-annual site inspections
- Semi-annual POTW discharge monitoring
- Long term monitoring (LTM) consisting of groundwater monitoring every 15 months.

In 2014, two site inspections were preformed, LTM sampling was conducted, the Site fence was repaired, and a property boundary survey was completed.

2.0 SITE MANAGMENT STATUS

This Periodic Review Report (PRR) documents SM activities from January 2014 through December 2014 and includes:

- Inspection, Discharge Monitoring, and Maintenance - May
- LTM - June
- Fence repairs - June
- Property boundary survey - June
- Inspection, Discharge Monitoring, and Maintenance - November.

This report was completed using site-specific documentation including the Site's ROD (NYSDEC, 1995), the SM Plan (SMP) (MACTEC Engineering and Consulting, P.C. [MACTEC], 2013), periodic site inspection and environmental monitoring reports (MACTEC, 2014a and MACTEC, 2014b). This review was conducted to confirm that controls established according to the SMP are operational and effective, that the SM requirements are being implemented and conducted accordingly, and that the remedy remains protective of the environment and/or public health.

SM requirements, as described in the SMP, are outlined in Table 2.1. These include:

- Semi-annual inspections of institutional/engineering controls (IC/ECs)
- Semi-annual discharge monitoring
- LTM of groundwater from existing monitoring wells, see Figure 2.1.

Existing wells are monitored to evaluate contaminant of concern concentrations (i.e., cadmium, chromium, lead, nickel, cyanide and volatile organic compounds [VOCs]) in groundwater compared to the Site cleanup goals (New York State Class GA Standards [6 New York Codes, Rules and Regulations Parts 700-705].

A summary of SM activities completed during the reporting period and an evaluation of the performance, protectiveness, and effectiveness of the remedy is provided below.

2.1 INSTITUTIONAL CONTROLS/ENGINEERING CONTROLS PLAN

Because contaminated groundwater exists beneath the ground surface, IC/ECs are required to protect human health and the environment. EC systems at the Site include: the groundwater collection system, site access controls, and groundwater monitoring wells.

Restrictions are imposed pursuant to the SMP and include:

- Allow access to the Site for operation of the groundwater collection system (GWCS)
- Groundwater extraction, for anything other than collection at the GWCS, is prohibited
- Animal production for human consumption is prohibited
- Vegetable gardens are prohibited onsite unless planted in gardens where soil achieves the residential use soil clean-up objectives
- Site use is limited to industrial uses only
- Site owner(s) must follow the requirements of this SMP
- Excavation on the property is prohibited without written permission from the NYSDEC.

Based on the inspections conducted in 2014, there has not been a change in property use and the Site is in compliance with these ICs. Inspections of the ECs were conducted in May, June, and November; semi-annual discharge monitoring was conducted in May and November. The ECs are in place; EC observations made during 2014 include:

- During the May inspection it was noted that the perimeter fence was in need of repair and vegetation removal. Repair and vegetation removal were conducted in June. During the November inspection one new additional area of fence repair was noted.
- During the November inspection it was noted that the treatment system pump was not functioning properly. On November 21, the low water float switch was replaced, the treatment system was put back into operational mode, and an effluent sample was collected.
- Covers for the five collection trench cleanouts need to be replaced. The adjustment screws are rusted and cannot be turned and the entire plugs must be replaced.

Inspection forms, photos, field data records, and laboratory results are provided in Appendix A (May 2014), Appendix B (June 2014), and Appendix C (November 2014).

2.2 LONG TERM MONITORING PLAN

The requirement for the groundwater monitoring program in the SMP includes groundwater elevation monitoring, monitoring well inventory and repair, and groundwater sampling and analysis. Monitoring locations have been sampled since 1999 and are currently scheduled for sampling at 15 month intervals. The Site monitoring locations are shown on Figure 2.1; Table 2.2 summarizes the LTM sampling and analysis plan.

2.2.1 Groundwater Elevation Monitoring

Groundwater elevations were measured in June 2014 and compared to water level measurements from previous years (Table 2.3). Interpreted groundwater flow direction based on the June elevations is to the northeast, and measurements are consistent with those reported previously.

2.2.2 Monitoring Well Inventory and Repair

Monitoring well inspections were conducted in June 2014. The majority of the monitoring wells were observed to be in good condition (see Appendix B).

2.2.3 LTM Sampling and Analysis

Environmental samples were collected in June 2014 as part of the LTM program. Shallow groundwater contamination at concentrations exceeding Class GA standards was observed in monitoring wells P-103 and P-107S shown on Figure 2.1. Results of the June 2014 LTM are provided in Appendix B and summarized on Table 2.4.

2.2.4 Performance Monitoring

Discharge of effluent from the groundwater collection system is permitted by the Oneida County Department of Water Quality & Water Pollution Control. Groundwater Remediation Discharge Permit No. GW-040 establishes semiannual monitoring requirements and discharge criteria. During the reporting period, effluent samples were collected (in May and November) and analyzed by USEPA Methods: VOCs by 624; copper, nickel and zinc by 200.7, cyanide by 9012B, and pH

by SM4500-H+. The following compounds were detected; as shown, none of the concentrations exceeded the discharge criteria.

POLLUTANT/PARAMETER	PERMITTED LIMIT	May 2014 Results	November 2014 Results
pH (units)	5.0-12.5	**7.20**	**7.40**
Cadmium, mg/L	1	0.005U	0.005 U
Chromium, mg/L	5	0.010U	0.010 U
Copper, mg/L	3	0.020U	0.020 U
Lead, mg/L	5	0.050U	0.050 U
Nickel, mg/L	2	**0.043**	**0.0574**
Zinc, mg/L	4	0.020U	0.020 U
Cyanide, mg/L	3	0.01U	0.01 U
Total VOCs, mg/L	2.0*	**0.0215**	**0.0165**

*Total Volatile Organics is the sum of all detectable VOCs substances as determined using the USEPA Method 624.

U= Not Detected; value represents quantization limit.

Bold values indicate a detected pollutant/parameter

mg/L = milligrams per liter

2.3 OPERATION AND MAINTENANCE PLAN

According to the SMP, site wide inspections are to be conducted semi-annually. The semi-annual inspections include the inspection and maintenance of the perimeter fence, and inspection and monitoring of the groundwater collection system. Inspections were conducted in May and November, and LTM was conducted in June as described above.

The reading from the flow totalizer was 1,166,300 gallons in May and 1,412,640 gallons in November. The Operations and Maintenance Tracking Log is included in Appendix A and in Appendix C.

2.4 ADDITIONAL ACTIVITIES

On Tuesday November 14, one hand boring (GW-01) was conducted downgradient from the groundwater collection trench. The boring was advanced to 8 ft below ground surface (bgs) approximately ten feet from the trench, with the objective to evaluate groundwater quality

downgradient from the collection trench. A groundwater grab sample was unable to be collected after advancing a hand probe to 8 ft bgs where refusal was encountered on a cobble. The boring was logged utilizing the Unified Soil Classification System (see Appendix C).

A temporary 1 inch well with a 5 ft screen was installed at this boring (GW-01). The temporary well was left for two hours to allow groundwater to infiltrate into the well. No groundwater entered the temporary well. Upon further investigation, groundwater was not observed within the cutoff collection trench at 8 ft bgs during this Site visit; therefore, groundwater elevation at the time of installing this boring was lower than expected. The temporary well casing was removed and the boring was backfilled with GW-01 soil removed during the initial hand boring.

Due to the observed lack of groundwater at location GW-01 and within the collection trench, the five cleanouts of the groundwater collection trench were also opened and visually checked for water. Water was not observed in any of the five cleanouts. It is surmised that constant operation of the collection trench extraction pump likely caused a lowering of the groundwater surface elevation in the area, and thus prevented water from collecting in the groundwater collection trench as the trench was continually draining..

3.0 CONCLUSIONS AND RECOMMENDATIONS

Current SM activities being conducted are in compliance with the requirements of the Site's SMP. Based on a review of the data collected during this reporting period, the remedy continues to be protective of public health and the environment and is in compliance with the RAOs established in the ROD.

Results of sample analyses shows that effluent from the groundwater collection system met the requirements of the Oneida County Department of Water Quality & Pollution Control discharge permit at the time of sample collection. Site inspections conducted in 2014 indicate that the collection system is functioning properly when the pump is operational, and that ICs are in place and effective.

The groundwater collection system is currently operating and achieving its objective of intercepting, collecting, and discharging contaminated groundwater.

Based on the findings presented in this PRR, the following recommendations are provided:

ICs/ECs Plan

- Continue to conduct inspections of the facility as required by the SMP to ensure the EC/ICs are in place and are effective.

Monitoring Plan

- Continue to conduct performance monitoring of the groundwater collection system discharge as required by the POTW permit.
- Conduct LTM to evaluate the effectiveness of the groundwater collection system as required by the SMP.

ROD Remedial Action Objectives:

Based on a review of available historical documentation, the following RAOs for the Site have been achieved:

- Reduce, control or eliminate the contamination present within the soils on site.

- Eliminate the threat to surface waters by eliminating any future contaminated surface water run-off from the contaminated soils on site, and any potential future discharge from site sewer lines to the Oneida County Sewer System.
- Prevent, to the extent possible, migration of contaminants in the soils to groundwater.

Based on the findings presented herein, adherence to the SMP for the Site is effective in monitoring the status of the following RAOs:

- Eliminate the potential for direct human contact with the contaminated soils onsite.
- Mitigate the impacts of contaminated groundwater to the environment and to nearby residents.

Based on a review of available historical data the following RAOs have not been achieved:

- Provide for attainment of standards, criteria, and guidance values for groundwater quality at the limits of the area of concern (see Table 2.4).
- Remediate the Site and adjoining property to provide for future delisting and unrestricted use.

To meet these RAOs, the following is recommended:

- Collect soil samples onsite to evaluate if the current concentrations of site contaminants of concern meet the Soil Clean-up Objectives for unrestricted use.
- Effectiveness evaluation should continue in 2015 now that the treatment system has been repaired and is back in operation. Evaluate contaminant of concern concentrations in groundwater relative to nearby receptors to determine if there is exposure from groundwater or soil vapor intrusion. Groundwater samples should be collected from the collection trench, and a groundwater sample collected from an additional downgradient boring should be considered to evaluate the effectiveness of the cutoff trench.

4.0 REFERENCES

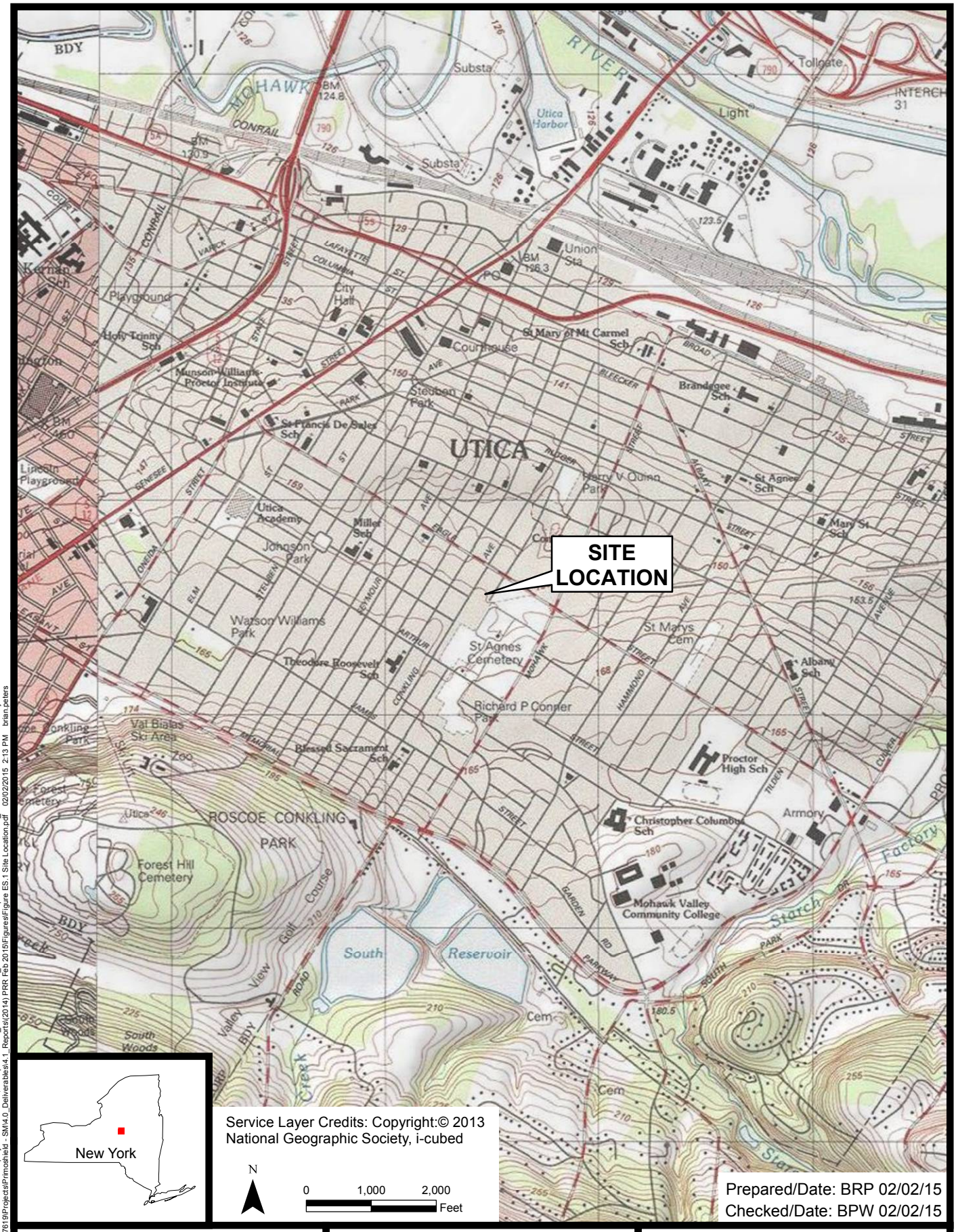
MACTEC Engineering and Consulting, P.C. (MACTEC), 2014a. Site Inspection and Discharge Monitoring Report, Primoshield Inc. – May 2014.

MACTEC, 2014b. Site Inspection and Discharge Monitoring Report, Primoshield Inc. – November 2014.

MACTEC, 2013. Site Management Plan, Primoshield Inc. – August 2013.

New York State Department of Environmental Conservation, 1995. Record of Decision, Primoshield Plating Site, Site Number 633027, City of Utica Oneida County, New York. March, 1995.

FIGURES



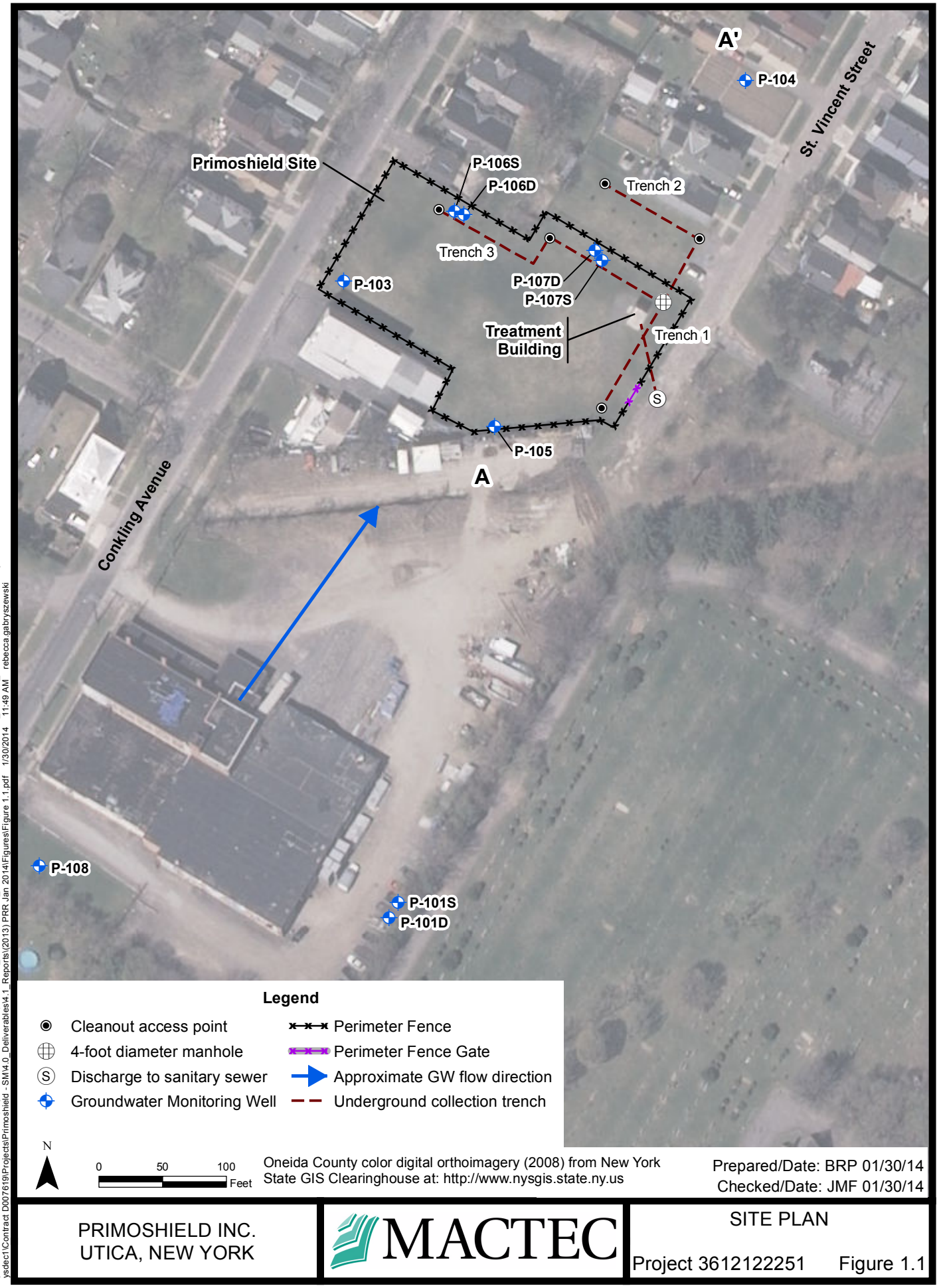
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SITE LOCATION

Project 3612122251 Figure ES.1

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ysdec1\Contract D007619\Projects\Primoshield - SW\4.0_Deliverables\4.1_Reports\(2014) FRR Feb 2015\Figures\Figure ES.1 Site Location.pdf 02/02/2015 2:13 PM brian.peters



Oneida County color digital orthoimagery (2008) from New York State GIS Clearinghouse at: http://www.nysgis.state.ny.us

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Checked/Date: JMF 01/30/14

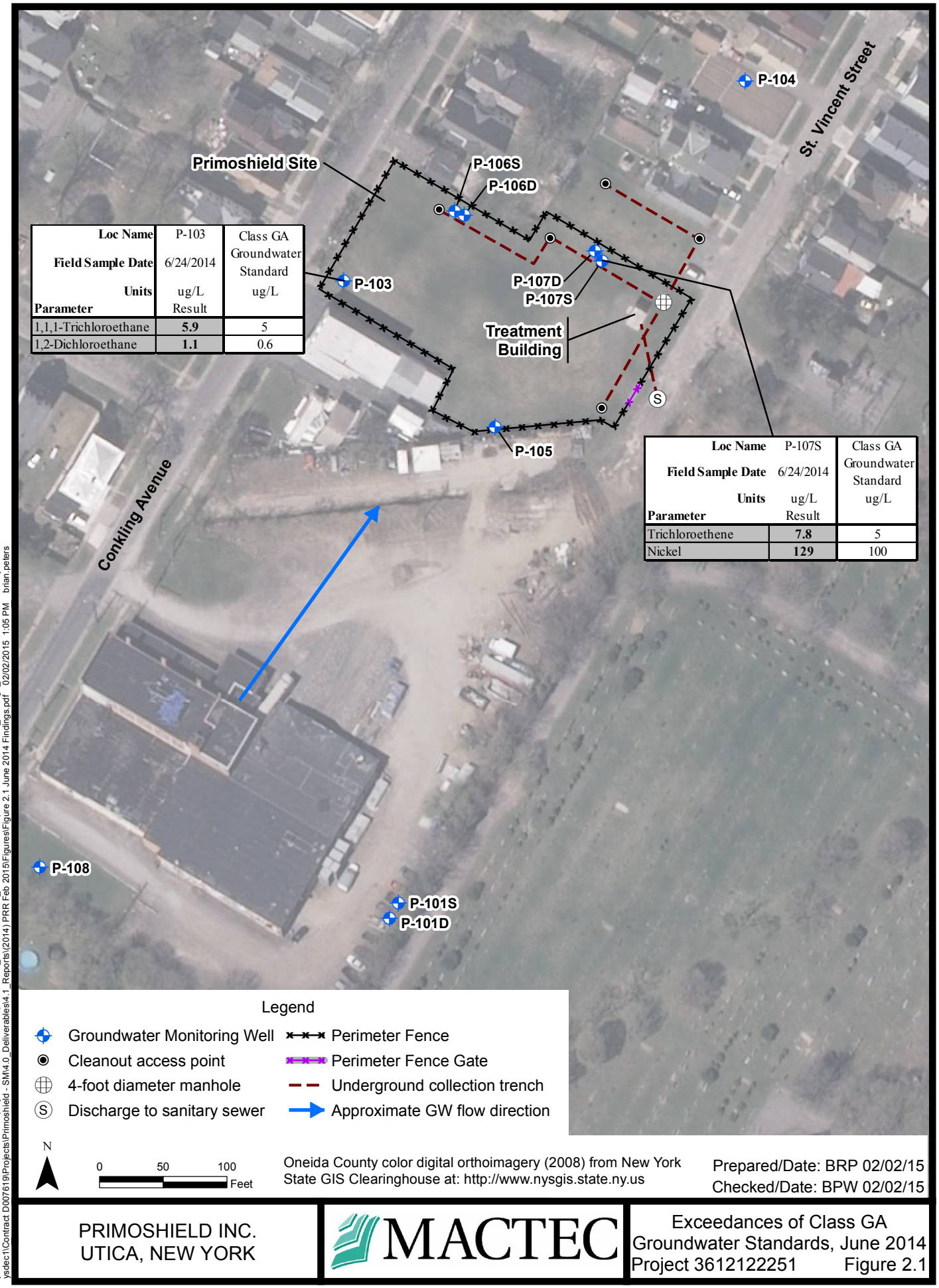
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UTICA, NEW YORK

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SITE PLAN

Project 3612122251 Figure 1.1

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ysdec1\Contract D007619\Projects\Primoshield - SMI\4.0_Deliverables\4.1_Reports\(2013) PRR Jan 2014\Figures\Figure 1.1.pdf 1/30/2014 11:49 AM rebecca.gabryszewski



Loc Name	P-103	Class GA Groundwater Standard
Field Sample Date	6/24/2014	
Units	ug/L	ug/L
Parameter	Result	
1,1,1-Trichloroethane	**5.9**	5
1,2-Dichloroethane	**1.1**	0.6

Loc Name	P-107S	Class GA Groundwater Standard
Field Sample Date	6/24/2014	
Units	ug/L	ug/L
Parameter	Result	
Trichloroethene	**7.8**	5
Nickel	**129**	100

Oneida County color digital orthoimagery (2008) from New York State GIS Clearinghouse at: http://www.nysgis.state.ny.us

Prepared/Date: BRP 02/02/15
Checked/Date: BPW 02/02/15

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Exceedances of Class GA Groundwater Standards, June 2014
Project 3612122251 Figure 2.1

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ysdec1\Contracts D004434 and D004441\projects\Primoshield, Incorporated\4.0_Deliverables\4.5_Databases\GIS\MapDocuments\June2014_Findings_8.5x11P.mxd PDF: P:\Projects
ysdec1\Contract D007619\Projects\Primoshield - SM\4.0_Deliverables\4.1_Reports\(2014) PRR Feb 2015\Figures\Figure 2.1 June 2014 Findings.pdf 02/02/2015 1:05 PM brian.peters

TABLES

Table 2.1: Site Management Plan Requirements
(Inspection and Long Term Monitoring)

Component	Action	Required Frequency
TREATMENT SYSTEM		
Treatment System	Inspection	Semi-annually in spring and summer
Effluent	Grab sample	Semi-annually in spring and summer
ENVIRONMENTAL MONITORING		
Groundwater Monitoring Program		
10 monitoring locations	Low flow sampling	Every 15 months (September 2015, December 2016)
Groundwater Monitoring System	Inspection	Every 15 months (September 2015, December 2016)

Table 2.2: Sampling and Analysis Plan

Performance Monitoring - Semi-Annual		
Sample Locations	**pH (SM 4500-H+) Metals (200.7)* Cyanide (9012B)**	**VOC (624)**
Effluent	X	X
Monitoring Wells - 15 Month**		
Sample Locations	**Metals (6010B)**	**VOC (8260B)**
P-103	X	X
P-104	X	X
P-105	X	X
P-106S	X	X
P-106D	X	X
P-107S	X	X
P-107D	X	X
P-108	X	X
P-101S	X	X
P-101D	X	X

Notes:
*- Cadmium, chromium, copper, lead, nickel and zinc.
An 'X' marked in a column indicates the analysis to be performed for that sample location.
VOCs = Volatile Organic Compounds

**-Samples collected in June 2014; next monitoring event is September 2015.

Table 2.3: Summary of Monitoring Well Measurements

Primoshield Site 1212 St Vincent Street, Utica, NY.

Well ID	Ground Elevation (feet msl)	Estimated Measurement Point Elevation (feet msl)	Stickup on Casing (feet)	TOC to TOR (feet)	12/20/2011 Depth to BOW (feet TOR)	12/20/2011 Water Level (feet TOR)	12/11/2012 Water Level (feet TOR)	3/27/2013 Water Level (feet TOR)	6/23/2014 Water Level (feet TOR)	12/20/2011 Water Elevation (feet msl)	12/11/2012 Water Elevation (feet msl)	3/27/2013 Water Elevation (feet msl)	6/23/2014 Water Elevation (feet msl)
P-101-S	525.0	Unknown	NM	NM	18.5	>18.45 (DRY)	>18.45 (DRY)	>18.45 (DRY)	>18.45 (DRY)	NM	NM	NM	NM
P-101-D	525.0	527.2	2.6	0.39	86.9	28.18	28.48	28.07	28.30	499.03	498.73	499.14	498.91
P-103	521.8	524.3	2.8	0.34	18.1	7.04	6.74	6.77	7.07	517.22	517.52	517.49	517.19
P-104	516.1	518.0	2.2	0.33	17.4	6.15	4.25	5.22	6.13	511.82	513.72	512.75	511.84
P-105	522.7	525.1	2.9	0.48	18.2	4.75	3.85	4.35	4.57	520.37	521.27	520.77	520.55
P-106-S	521.1	524.8	4.0	0.27	18.5	7.38	5.81	6.62	7.92	517.45	519.02	518.21	516.91
P-106-D	520.8	524.3	3.9	0.39	77.6	28.81	29.11	28.73	28.97	495.50	495.20	495.58	495.34
P-107-S	519.4	522.1	2.9	0.21	17.2	6.43	4.89	6.43	8.11	515.66	517.20	515.66	513.98
P-107-D	519.3	522.0	3.2	0.50	77.7	29.28	29.57	29.13	29.45	492.72	492.43	492.87	492.55
P-108	530.0	532.2	2.5	0.27	18.7	5.91	5.96	5.31	6.01	526.32	526.27	526.92	526.22

Notes:

1) Ground Elevation from monitoring well logs included in Monitoring Plan for Primoshield Plating January 2004.
2) Measurement Point Elevation calculated using the ground elevation and field measurements of casing stickup and the distance from the top of riser to the top of casing; therefore, the water elevations are approximate
3) NM = Not measured

Table 2.4: Summary of Compounds Detected - June 2014

Location Name			P-101D		P-103		P-104		P-104		P-105		P-106D		P-106S		P-107D		P-107S		P-108		Trench2A	
Sample ID			633027P101DXX		633027P103XX		633027P104XX		633027P104XD		633027P105XX		633027P106DXX		633027P106SXX		633027P107DXX		633027P107SXX		633027P108XX		633027TRCHCO	
Sample Date			6/25/2014		6/24/2014		6/24/2014		6/24/2014		6/23/2014		6/24/2014		6/24/2014		6/23/2014		6/24/2014		6/25/2014		6/24/2014	
Qc Code			FS		FS		FS		FD		FS		FS		FS		FS		FS		FS		FS	
Parameter	**GA**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
Volatile Organic Compounds 8260																								
1,1,1-Trichloroethane	5	µg/L	1	U	**5.9**		1	U	1	U	1	U	1	U	**1.5**		1	U	**1.5**		1	U	**10**	
1,1-Dichloroethane	5	µg/L	1	U	**1.8**		1	U	1	U	1	U	1	U	1	U	1	U	**2**		1	U	**1.1**	
1,1-Dichloroethene	5	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	**0.65**	J
1,2-Dichloroethane	0.6	µg/L	1	U	**1.1**		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Cis-1,2-Dichloroethene	5	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	**2.5**	
Toluene	5	µg/L	**0.26**	J	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichloroethene	5	µg/L	1	U	**1.1**		1	U	1	U	1	U	1	U	**0.97**	J	1	U	**7.8**		1	U	**16**	
Metals (Total) 6020																								
Cadmium	5	µg/L	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	**1.4**	J	**1.4**	J	5	U
Chromium	50	µg/L	**2**	J	10	U	10	U	10	U	10	U	10	U	**1**	J	**25**		**5**	J	10	U	**2**	J
Copper	200	µg/L	**10**	J	20	U	20	U	20	U	**6**	J	20	U	20	U	**25**		**5**	J	**6**	J	**5**	J
Lead	25	µg/L	50	U	50	U	50	U	50	U	50	U	50	U	50	U	**10**	J	50	U	50	U	**3**	J
Nickel	100	µg/L	40	U	40	U	40	U	40	U	40	U	40	U	**2**	J	**24**	J	**129**		40	U	**87**	
Zinc	2000	µg/L	**20**		20	U	20	U	**12**	J	20	U	20	U	20	U	54		**13**	J	**7**	J	**9**	J
Metals (Dissolved) 6020																								
Cadmium	5	µg/L															5	U						
Chromium	50	µg/L															10	U						
Copper	200	µg/L															20	U						
Lead	25	µg/L															50	U						
Nickel	100	µg/L															**4**	J						
Zinc	2000	µg/L															20	U						

Notes:
Only compounds detected shown
GA = NYS Class GA groundwater quality standard, Part 703.
Shaded/Bold = Result exceeds GA standard.
J = result estimated
U = not detected
µg/L = micrograms per liter
Blank cell represents compound not tested for.
FS- field sample
FD- field duplicate

APPENDIX A

MAY 2014

New York Department of Environmental Conservation
Inactive Hazardous Waste Site
Inspection Form-Treatment Systems

Site Name: *Primoshield Inc.*	NYSDEC Site Number: *633027*	NYSDEC PM: *Will Welling*
Site Location: *St. Vincent Street, Utica, NY*	Site Classification # (circle): 1 2 2a 3 (4)	Primary Site Contact: *Will Welling* EFFLUENT
Site Inspection Date: 5-29-14	Purpose of Inspection: Quarterly Inspection + Sampling	
Name of Inspector: Karl Ladner	Title: Env Tech	Agency/Company: MACTEC/AMEC
Phone Number: 518-622-3014		Address: *511 Congress Streeet, Suite 200 Portland, ME 04101*

Treatment Systems

System Status				General Observations:
System in Operation During Visit?	(Yes)	No		Operated System in hand for Inspection and to Collect Samples
Manned on a Fulltime basis?	Yes	(No)		
Maintenance Logs Current?	Yes	No	(NA)	
Equipment Calibration Logs Current?	Yes	No	(NA)	
Pump working?	(Yes)	No		
Initial flow rate (gpm):	30 gpm			
Pressure before basket strainers (P1):	N/A basket strainers permently removed			
Pressure after basket strainers: (P2)	N/A basket strainers permently removed			
Basket Strainer Inspected and cleaned?	(Yes)	No		Basket Inspected Strainers Removed
Flow rate after cleaning filters (gpm):	N/A basket strainers permently removed			
Pressuer after cleaning basket strainers: (P1)	Yes	(No)		
Totalizer reading (gallons)	011446300			
Discharge Monitoring	(Yes)	No		
Does the system require a discharge permit or discharge to a POTW?	(Yes)	No		
Is Permit Performance Monitoring Implemented?	(Yes)	No		
Condition of Operational Controls	(Good)	Poor	NA	
Condition of Gauges	(Good)	Poor	NA	
Condition of flow meters	(Good)	Poor	NA	
Condition of System Alarms	(Good)	Poor	NA	
Condition of Pumps	(Good)	Poor	NA	
Condition of Flow Pipes or Hoses	(Good)	Poor	NA	
Pipes Labeled with Direction of Flow and Contents	Yes	(No)	(NA)	
Condition of Valves	(Good)	Poor	NA	
Condition of Containment Structures (berms etc.)	Good	Poor	(NA)	
Evidence of Leaking	Yes	(No)	NA	
Condition of Feed/Extraction Pumps	Good	Poor	(NA)	
Vaulted Area Condition	(Good)	Poor	NA	
Lighting in Work Areas Adequate	(Yes)	No	NA	
Condition of Collection/Discharge Trenches	(Good)	Poor	NA	
Clean of Debris	(Good)	Poor	NA	
Evidence of Sedimentation	Good	Poor	(NA)	Can Known
Air Stripper Condition	Good	Poor	NA	
Noticeable Odors	Yes	No	NA	
Air Emission Permit Required	Yes	No	NA	
Permit Performance Monitoring Implemented	Yes	No	NA	
Condition of Storage Tanks/Containers	Good	Poor	NA	
Evidence of Leaks	Yes	No	NA	
Tank Compatible with Contents	Yes	No	NA	
Evidence of Leaks	Yes	No	NA	
Labeled Appropriately	Yes	No	NA	
Condition of Filter Presses	Good	Poor	NA	
Condition of Extraction Wells/Recharge Wells	Good	Poor	NA	

List other applicable treatment systems/components and their overall condition:

Chemical Handling Practices

				General Observations:
Are good management practices and handling requirements being applied?	Yes	No	(NA)	No Chemicals in use
Does the usage of chemical for the treatment system appear to meet O&M specifications?	Yes	No	(NA)	

New York Department of Environmental Conservation
Inactive Hazardous Waste Site
Inspection Form-Treatment Systems

Interviews/Additional Contacts

Name/Title	Phone:	Company/Entity	Contact Information
NA			
NA			

Additional Observation Notes: A large section of fence near P106S running SE doesn't have a top rail.

Previously observed: Review and comment as to status (include photo documentation)

Perimeter fence in need of repairs
1. southeast section have overgrowth of trees infringing on fence
Condition still exist on some sections of perimeter fence
2. fence is leaning along the southern perimeter due to neighboring property debris
This section looks ok, not leaning.
3. growth along the southwest perimeter is infringing on fence
Condition still exist on some sections of perimeter fence
4. gap is present in between the fence post and neighboring building
The gap is only 6" and still exist
5. fence repairs required along the northern perimeter: missing top rail
A 20ft section of top rail was replaced but the adjesent section is without a top rail
6. barbed wire missing or in disrepair along southern and norther perimeter
The barbed wire has been replaced
7. vegetation requires trimming along the northern perimeter
Condition still exist on some sections of perimeter fence

Photograph Log:

Photograph 1 Section of fence with new barbed wire

Photograph 2 Section with new top rail. Note the adjesent section without a top rail

Photograph 3 Hole in fence repaired

Photograph - 4 Section of fence without a top rail

Photograph 5 Vegetation allong perimeter fence

Performance Monitoring

Were check samples collected during this visit? (Yes) No

Sample type collected *(circle or write in other)*: Groundwater (Effluent)

List Parameters/Methods Collected Per Media: VOC(624) Cyanide(9010) pH(150.1) Cadinium, Copper, lead, nickel, Zinc (200.7)

Analytical Laboratory/Location: ALS

Sample Observations: Clear



Photo 1 – New barbed wire installed



Photo 2 - New top rail installed



Photo 3 - Hole in fence repaired



Photo 4 section of fence with no top rail



Photo 5 – Vegetation around fence

June 24, 2014

Service Request No: R1404049

Ms. Jayme Connolly
AMEC Environmental & Infrastructure
511 Congress Street
Portland, ME 04112-7050

Laboratory Results for: NYSDEC Primoshield/3612122251-04

Dear Ms. Connolly:

Enclosed are the results of the sample(s) submitted to our laboratory on May 30, 2014. For your reference, these analyses have been assigned our service request number **R1404049**.

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 7477. You may also contact me via email at Lauren.Falanga@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

Lauren Falanga
Project Manager

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

ALS-ENVIRONMENTAL

Client:	AMEC Environmental & Infrastructure	**Service Request No.:**	R1404049
Project:	NYSDEC Primoshield	**Date Received:**	05/30/14
Sample Matrix:	Water		

CASE NARRATIVE

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

Sample Receipt

Two samples were received for analysis at ALS-Rochester on 05/30/14. The samples were received in good condition consistent with the accompanying chain of custody form enclosed except as noted on the Cooler Receipt and Preservation Check Form. The samples were received within the 0-6°C temperature guidelines.

Volatile Organics

Samples were analyzed for a client specific list Volatile Organics by GC/MS Method 624.

All Initial Calibration Criteria and Continuing Calibration Verification (CCV) were met.

All Lab Control Samples were within acceptable limits.

No analytical or quality control problems were encountered during analysis.

General Chemistry and Metals Analysis

Samples were analyzed for specified client parameters. All Method numbers are noted on the data forms.

All Initial Calibration Verification (ICV) and Continuing Calibration Verification (CCV) criteria were met.

All analytes were analyzed within the method specified holding times except for pH which has an "immediate" holding time. The sample was analyzed as soon as possible after receipt in the laboratory. The data and the associated Temperature have been flagged as "H".

All Laboratory Method Blanks were free from contamination.

No problems were encountered during the analysis of this sample.

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 contained above Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Approved by Lauren Falanga **Date** 6/25/14

ALS ASP/CLP Batching Form/Login Sheet

Client Proj #: 3612122251-04	Batch Complete: Yes		Date Revised:
Submission: R1404049	Diskette Requested: Yes		Date Due: 6/20/14
Client: AMEC Environmental & Infrustruct	Date: 6/25/14		Protocol: EPA
Client Rep: LFALANGA	Custody Seal: Present/Absent:		Shipping No.:
Project: NYSDEC Primoshield	Chain of Custody: Present/Absent:		SDG #:

CAS Job #	Client/EPA ID	Matrix	Requested Parameters	Date Sampled	Date Received	pH (Solids)	% Solids	Remarks Sample Condition
R1404049-001	633027 EFFLUENT	Water	624, SM 4500-H+ B, 200.7, 9012B	5/29/14	5/30/14			
R1404049-002	TRIP BLANK	Water	624	5/29/14	5/30/14			

Folder Comments:

ALS Environmental

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.

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/Arclors).

B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.

E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.

E Organics- Concentration has exceeded the calibration range for that specific analysis.

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.

* 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.

H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.

Spike was diluted out.

\+ Correlation coefficient for MSA is <0.995.

N Inorganics- Matrix spike recovery was outside laboratory limits.

N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.

S Concentration has been determined using Method of Standard Additions (MSA).

W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.

P Concentration >40% (25% for CLP) difference between the two GC columns.

C Confirmed by GC/MS

Q DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).

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.

ACCREDITED IN ACCORDANCE WITH nelac

Rochester Lab ID # for State Certifications[1]

NELAP Accredited	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Connecticut ID # PH0556	Nebraska Accredited	
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 15387

ALS Environmental

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

Project Name: Primoshield	Project Number: 3612122251-04
Project Manager: Jayme Connolly	Report CC: Tyge Cunningham
Company/Address: Amec Environmental Former Mactec 511 Congress St PO# CO12900946 Portland ME 04101	
Phone #: 207-828-3457	Email: Tyge.Cunningham
Sampler's Signature: Karl Ladner	Sampler's Printed Name: Karl Ladner

ANALYSIS REQUESTED *(Include Method Number and Container Preservative)*

PRESERVATIVE

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs ○ 8260 ○ 624 ○ CLP	GC/MS SVOAs ○ 8270 ○ 625	GC VOAs ○ 8021 ○ 601/602	PESTICIDES ○ 8081 ○ 608	PCBs ○ 8082 ○ 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	Cyanide 9012B PH-SM-4500							
633027 Effluent		5/29/14	0830	GW	6	X					X KL		X KL							
Trip Blank		5/29/14	—	—	1	X					X		X							

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

REMARKS/ ALTERNATE DESCRIPTION

SPECIAL INSTRUCTIONS/COMMENTS

Metals
Cadinium, Copper, Cr, Ni, ZN (200.7)
(Please Report Lead also) KL

See QAPP ☐

STATE WHERE SAMPLES WERE COLLECTED

TURNAROUND REQUIREMENTS
_____ RUSH (SURCHARGES APPLY)
_____ 1 day _____ 2 day _____ 3 day
_____ 4 day _____ 5 day
REQUESTED REPORT DATE _____

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
Edata _____ Yes _____ No

INVOICE INFORMATION
PO #
BILL TO:

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Karl Ladner					
Signature: Karl Ladner	Signature:	Signature	Signature	Signature	
Printed Name	Printed Name: Gregory O. Esmerian	Printed Name	Printed Name	Printed Name	
Firm: AMEC	Firm: A23	Firm	Firm	Firm	
Date/Time: 5-29-14 1300	Date/Time: 5-30-14 9:55	Date/Time	Date/Time	Date/Time	

R1404049 5
AMEC Environmental & Infrastructure
NYSDEC Primoshield

Distribution: White - Lab Copy; Yellow - Return to Originator

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Cooler Receipt and Preservation Check Form

Project/Client AMEC Folder Number R1404009

Cooler received on 5-30-14 by: PE

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: (**Wet Ice**) **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? (ALS/ROC) CLIENT	
7	Soil VOA received as: Bulk Encore 5035set (NA)	

8. Temperature Readings Date: 5-30-14 Time: 10:10 ID: IR#3 (IR#4) From: (Temp Blank) Sample Bottle

Observed Temp (°C)	3.5						
Correction Factor (°C)	+0.1						
Corrected Temp (°C)	3.6						
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: IR-002 by PE on 5-30-14 at 10:15

5035 samples placed in storage location: _____ by _____ on _____ at _____

PC Secondary Review: VF

Cooler Breakdown: Date: 5/30/14 Time: 1538 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
≥12	NaOH	✓		WC176157H	4/15				
≤2	HNO_3	✓		BD326135B	↓				
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For CN Phenol and 522	✓		If +, contact PM to add $Na_2S_2O_3$ (CN), ascorbic (phenol).					
	$Na_2S_2O_3$	-	-						
	ZnAcetate	-	-						
	HCl	**	**	411426	5/15				

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: 112612-2W, 4-002-003

Other Comments:

PC Secondary Review: VF

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

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404049
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	5/29/14 0830
Sample Matrix:	Water	**Date Received:**	5/30/14
		Date Analyzed:	6/4/14 14:00
Sample Name:	633027 EFFLUENT	**Units:**	µg/L
Lab Code:	R1404049-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	624	**Analysis Lot:**	395482
Data File Name:	I:\ACQUDATA\MSVOA6\DATA\060414\L5288.D\	**Instrument Name:**	R-MS-06
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	**7.5**		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	
75-35-4	1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
110-75-8	2-Chloroethyl Vinyl Ether	10	U	10	
107-02-8	Acrolein	10	U	10	
107-13-1	Acrylonitrile	10	U	10	
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
56-23-5	Carbon Tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
75-09-2	Methylene Chloride	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
127-18-4	Tetrachloroethene (PCE)	1.0	U	1.0	
108-88-3	Toluene	1.0	U	1.0	
79-01-6	Trichloroethene (TCE)	**14**		1.0	
75-69-4	Trichlorofluoromethane (CFC 11)	1.0	U	1.0	
75-01-4	Vinyl Chloride	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
179601-23-1	m,p-Xylenes	2.0	U	2.0	
95-47-6	o-Xylene	1.0	U	1.0	
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404049
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	5/29/14 0830
Sample Matrix:	Water	**Date Received:**	5/30/14
		Date Analyzed:	6/4/14 14:00
Sample Name:	633027 EFFLUENT	**Units:**	µg/L
Lab Code:	R1404049-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	624	**Analysis Lot:**	395482
Data File Name:	I:\ACQUDATA\MSVOA6\DATA\060414\L5288.D\	**Instrument Name:**	R-MS-06
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	107	81-127	6/4/14 14:00	
4-Bromofluorobenzene	97	79-123	6/4/14 14:00	
Toluene-d8	100	83-120	6/4/14 14:00	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404049
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	5/29/14
Sample Matrix:	Water	**Date Received:**	5/30/14
		Date Analyzed:	6/4/14 12:33
Sample Name:	TRIP BLANK	**Units:**	µg/L
Lab Code:	R1404049-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	624	**Analysis Lot:**	395482
Data File Name:	I:\ACQUDATA\MSVOA6\DATA\060414\L5285.D\	**Instrument Name:**	R-MS-06
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	1.0	U	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	
75-35-4	1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
110-75-8	2-Chloroethyl Vinyl Ether	10	U	10	
107-02-8	Acrolein	10	U	10	
107-13-1	Acrylonitrile	10	U	10	
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
56-23-5	Carbon Tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
75-09-2	Methylene Chloride	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
127-18-4	Tetrachloroethene (PCE)	1.0	U	1.0	
108-88-3	Toluene	1.0	U	1.0	
79-01-6	Trichloroethene (TCE)	1.0	U	1.0	
75-69-4	Trichlorofluoromethane (CFC 11)	1.0	U	1.0	
75-01-4	Vinyl Chloride	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
179601-23-1	m,p-Xylenes	2.0	U	2.0	
95-47-6	o-Xylene	1.0	U	1.0	
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404049
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	5/29/14
Sample Matrix:	Water	**Date Received:**	5/30/14
		Date Analyzed:	6/4/14 12:33
Sample Name:	TRIP BLANK	**Units:**	µg/L
Lab Code:	R1404049-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	624	**Analysis Lot:**	395482
Data File Name:	I:\ACQUDATA\MSVOA6\DATA\060414\L5285.D\	**Instrument Name:**	R-MS-06
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	115	81-127	6/4/14 12:33	
4-Bromofluorobenzene	100	79-123	6/4/14 12:33	
Toluene-d8	100	83-120	6/4/14 12:33	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404049
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	6/4/14 11:04
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1406348-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	624	**Analysis Lot:**	395482
Data File Name:	I:\ACQUDATA\MSVOA6\DATA\060414\L5282.D\	**Instrument Name:**	R-MS-06
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	1.0	U	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	
75-35-4	1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
110-75-8	2-Chloroethyl Vinyl Ether	10	U	10	
107-02-8	Acrolein	10	U	10	
107-13-1	Acrylonitrile	10	U	10	
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
56-23-5	Carbon Tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
75-09-2	Methylene Chloride	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
127-18-4	Tetrachloroethene (PCE)	1.0	U	1.0	
108-88-3	Toluene	1.0	U	1.0	
79-01-6	Trichloroethene (TCE)	1.0	U	1.0	
75-69-4	Trichlorofluoromethane (CFC 11)	1.0	U	1.0	
75-01-4	Vinyl Chloride	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
179601-23-1	m,p-Xylenes	2.0	U	2.0	
95-47-6	o-Xylene	1.0	U	1.0	
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404049
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	6/4/14 11:04
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1406348-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	624	**Analysis Lot:**	395482
Data File Name:	I:\ACQUDATA\MSVOA6\DATA\060414\L5282.D\	**Instrument Name:**	R-MS-06
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	112	81-127	6/4/14 11:04	
4-Bromofluorobenzene	100	79-123	6/4/14 11:04	
Toluene-d8	103	83-120	6/4/14 11:04	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: AMEC Environmental & Infrustructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251-04
Sample Matrix: Water

Service Request: R1404049
Date Analyzed: 6/4/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 624

Units: µg/L
Basis: NA

Analysis Lot: 395482

Analyte Name	Lab Control Sample RQ1406348-03 Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	19.8	20.0	99	52 - 162
1,1,2,2-Tetrachloroethane	21.2	20.0	106	46 - 157
1,1,2-Trichloroethane	19.2	20.0	96	52 - 150
1,1-Dichloroethane (1,1-DCA)	21.0	20.0	105	59 - 155
1,1-Dichloroethene (1,1-DCE)	18.1	20.0	91	10 - 234
1,2-Dichloroethane	20.5	20.0	102	49 - 155
1,2-Dichloropropane	21.7	20.0	108	10 - 210
2-Chloroethyl Vinyl Ether	21.5	20.0	108	10 - 305
Acrolein	79.9	100	80	10 - 186
Acrylonitrile	97.7	100	98	84 - 128
Benzene	21.0	20.0	105	37 - 151
Bromodichloromethane	20.6	20.0	103	35 - 155
Bromoform	19.1	20.0	96	45 - 169
Bromomethane	19.2	20.0	96	10 - 242
Carbon Tetrachloride	22.0	20.0	110	70 - 140
Chlorobenzene	20.9	20.0	104	37 - 160
Chloroethane	16.5	20.0	82	14 - 230
Chloroform	19.8	20.0	99	51 - 138
Chloromethane	21.2	20.0	106	10 - 273
Dibromochloromethane	20.5	20.0	102	53 - 149
Methylene Chloride	18.1	20.0	90	10 - 221
Ethylbenzene	20.7	20.0	103	37 - 162
Tetrachloroethene (PCE)	20.2	20.0	101	64 - 148
Toluene	20.8	20.0	104	47 - 150
Trichloroethene (TCE)	20.1	20.0	100	71 - 157
Trichlorofluoromethane (CFC 11)	20.4	20.0	102	17 - 181
Vinyl Chloride	18.8	20.0	94	10 - 251
cis-1,3-Dichloropropene	20.4	20.0	102	10 - 227
m,p-Xylenes	42.1	40.0	105	76 - 131
o-Xylene	21.5	20.0	107	78 - 127
trans-1,2-Dichloroethene	18.4	20.0	92	54 - 156
trans-1,3-Dichloropropene	20.3	20.0	101	17 - 183

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 Environmental

METALS

COVER PAGE - INORGANIC ANALYSIS DATA PACKAGE

Contract: R1404049 SDG No.: 633027 EFFL

Lab Code: _____ Case No.: _____ SAS No.: _____

SOW No.: SW846 CLP-M

Sample ID.	Lab Sample No.
633027 EFFLUENT	R1404049-001

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments: See Attatched Case Narrative

Signature: Lauren Falanga Name: Lauren Falanga

Date: 6/25/14 Title: Project Chemist

00014

METALS

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

633027 EFFLUENT

Contract: R1404049

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027 EFFLU

Matrix (soil/water): WATER Lab Sample ID: R1404049-001

Level (low/med): LOW Date Received: 5/30/2014

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	5.0	U		P
7440-47-3	Chromium	10.0	U		P
7440-50-8	Copper	20.0	U		P
7440-02-0	Nickel	43.2			P
7439-92-1	Lead	50.0	U		P
7440-66-6	Zinc	20.0	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

METALS

-3-

BLANKS

Contract: R1404049

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027 EFFLU

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Cadmium	5.00	U	5.00	U	5.00	U	5.00	U	5.000	U	P
Chromium	10.00	U	10.00	U	10.00	U	10.00	U	10.000	U	P
Copper	20.00	U	20.00	U	20.00	U	20.00	U	20.000	U	P
Nickel	40.00	U	40.00	U	40.00	U	40.00	U	40.000	U	P
Lead	50.00	U	50.00	U	50.00	U	50.00	U	50.000	U	P
Zinc	20.00	U	20.00	U	20.00	U	20.00	U	20.000	U	P

Comments:

METALS

-3-

BLANKS

Contract: R1404049

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027 EFFLU

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Cadmium			5.00	U	5.00	U					P
Chromium			10.00	U	10.00	U					P
Copper			20.00	U	20.00	U					P
Nickel			40.00	U	40.00	U					P
Lead			50.00	U	50.00	U					P
Zinc			20.00	U	20.00	U					P

Comments:

METALS

-7-

LABORATORY CONTROL SAMPLE

Contract: R1404049

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027 EFFLU

Solid LCS Source: _____

Aqueous LCS Source: CPI

Analyte	Aqueous (ug/L True	Found	%R	Solid (mg/K True	Found	C	Limits	%R
Cadmium	50	50	100					
Chromium	200	207	104					
Copper	250	264	106					
Nickel	500	519	104					
Lead	500	503	101					
Zinc	500	528	106					

Comments: _____

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Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404049
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	5/29/14 0830
Sample Matrix:	Water	**Date Received:**	5/30/14
Sample Name:	633027 EFFLUENT		
Lab Code:	R1404049-001	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Cyanide, Total	9012B	0.010	U	mg/L	0.010	1	6/3/14	6/4/14 11:00	
pH	SM 4500-H+ B	7.20		pH Units		1	NA	6/2/14 16:15	H
Temperature of pH Analysis	SM 4500-H+ B	25.6		deg C		1	NA	6/2/14 16:15	H

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404049
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R1404049-MB	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Cyanide, Total	9012B	0.010	U	mg/L	0.010	1	6/ 3/14	6/4/14 10:38	

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QA/QC Report

Client: AMEC Environmental & Infrustructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251-04
Sample Matrix: Water

Service Request: R1404049
Date Analyzed: 6/ 4/14

Lab Control Sample Summary
General Chemistry Parameters

Units: mg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R1404049-LCS1 Result	Spike Amount	% Rec	% Rec Limits
Cyanide, Total	9012B	0.101	0.100	101	85 - 115

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: AMEC Environmental & Infrustructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251-04
Sample Matrix: Water

Service Request: R1404049
Date Analyzed: 6/ 4/14

Lab Control Sample Summary
General Chemistry Parameters

Units: mg/L
Basis: NA

		Lab Control Sample R1404049-LCS2			
Analyte Name	**Method**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**
Cyanide, Total	9012B	0.400	0.400	100	85 - 115

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.

June 24, 2014

Service Request No: R1404049

Ms. Jayme Connolly
AMEC Environmental & Infrastructure
511 Congress Street
Portland, ME 04112-7050

Laboratory Results for: NYSDEC Primoshield/3612122251-04

Dear Ms. Connolly:

Enclosed are the results of the sample(s) submitted to our laboratory on May 30, 2014. For your reference, these analyses have been assigned our service request number **R1404049**.

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 7477. You may also contact me via email at Lauren.Falanga@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

Lauren Falanga
Project Manager

ADDRESS 1565 Jefferson Rd, Building 300, Suite 360, Rochester, NY 14623 PHONE 585-288-5380 | FAX 585-288-8475
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SDG NARRATIVE

ALS Environmental - Rochester, NY
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Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS-ENVIRONMENTAL

Client:	AMEC Environmental & Infrastructure	**Service Request No.:**	R1404049
Project:	NYSDEC Primoshield	**Date Received:**	05/30/14
Sample Matrix:	Water		

CASE NARRATIVE

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

Sample Receipt

Two samples were received for analysis at ALS-Rochester on 05/30/14. The samples were received in good condition consistent with the accompanying chain of custody form enclosed except as noted on the Cooler Receipt and Preservation Check Form. The samples were received within the 0-6°C temperature guidelines.

Volatile Organics

Samples were analyzed for a client specific list Volatile Organics by GC/MS Method 624.

All Initial Calibration Criteria and Continuing Calibration Verification (CCV) were met.

All Lab Control Samples were within acceptable limits.

No analytical or quality control problems were encountered during analysis.

General Chemistry and Metals Analysis

Samples were analyzed for specified client parameters. All Method numbers are noted on the data forms.

All Initial Calibration Verification (ICV) and Continuing Calibration Verification (CCV) criteria were met.

All analytes were analyzed within the method specified holding times except for pH which has an "immediate" holding time. The sample was analyzed as soon as possible after receipt in the laboratory. The data and the associated Temperature have been flagged as "H".

All Laboratory Method Blanks were free from contamination.

No problems were encountered during the analysis of this sample.

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 contained above Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Approved by Lauren Falanga **Date** 6/25/14

ALS ASP/CLP Batching Form/Login Sheet

Client Proj #:	3612122251-04	Batch Complete:	Yes	Date Revised:	
Submission:	R1404049	Diskette Requested:	Yes	Date Due:	6/20/14
Client:	AMEC Environmental & Infrustruct	Date:	6/25/14	Protocol:	EPA
Client Rep:	LFALANGA	Custody Seal: Present/Absent:		Shipping No.:	
Project:	NYSDEC Primoshield	Chain of Custody: Present/Absent:		SDG #:	

CAS Job #	Client/EPA ID	Matrix	Requested Parameters	Date Sampled	Date Received	pH (Solids)	% Solids	Remarks Sample Condition
R1404049-001	633027 EFFLUENT	Water	624, SM 4500-H+ B, 200.7, 9012B	5/29/14	5/30/14			
R1404049-002	TRIP BLANK	Water	624	5/29/14	5/30/14			

Folder Comments:

ALS Environmental

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.

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/Arclors).

B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.

E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.

E Organics- Concentration has exceeded the calibration range for that specific analysis.

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.

* 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.

H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.

Spike was diluted out.

+ Correlation coefficient for MSA is <0.995.

N Inorganics- Matrix spike recovery was outside laboratory limits.

N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.

S Concentration has been determined using Method of Standard Additions (MSA).

W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.

P Concentration >40% (25% for CLP) difference between the two GC columns.

C Confirmed by GC/MS

Q DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).

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 Certifications[1]

NELAP Accredited	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Connecticut ID # PH0556	Nebraska Accredited	
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

ALS Environmental

CHAINS OF CUSTODY

ALS Environmental - Rochester, NY
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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM 15387

ALS Environmental

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

Project Name: Primoshield	Project Number: 3612122251-04
Project Manager: Jayne Connelly	Report CC: Tyge Cunningham
Company/Address: Amec Environmental Former Mactec 511 Congress St PO# CO12900946 Portland ME 04101	
Phone #: 207-828-3457	Email: Tyge.Cunningham
Sampler's Signature: Karl Ladner	Sampler's Printed Name: Karl Ladner

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs ○ 8260 ○ 624 ○ CLP	GC/MS SVOAs ○ 8270 ○ 625	GC VOAs ○ 8021 ○ 601/602	PESTICIDES ○ 8081 ○ 608	PCBs ○ 8082 ○ 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	Cyanide 9012B	PH - SM-4500	
											X KL		X KL		
633027 Effluent		5/29/14	0830	GW	6	X					X		X		
Trip Blank		5/29/14	—	—	1	X									

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

REMARKS/ ALTERNATE DESCRIPTION

SPECIAL INSTRUCTIONS/COMMENTS
Metals
Cadinium, Copper, Cr, Ni, ZN (200.7)
(Please Report Lead also) KL

See QAPP ☐

TURNAROUND REQUIREMENTS
_____ RUSH (SURCHARGES APPLY)
_____ 1 day _____ 2 day _____ 3 day
_____ 4 day _____ 5 day
REQUESTED REPORT DATE
_____

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
Edata _____ Yes _____ No

INVOICE INFORMATION
PO #
BILL TO:

STATE WHERE SAMPLES WERE COLLECTED

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature: Karl Ladner	Signature:	Signature	Signature	Signature	
Printed Name: Karl Ladner	Printed Name: Gregory O. Esmerian	Printed Name	Printed Name	Printed Name	
Firm: AMEC	Firm: A23	Firm	Firm	Firm	
Date/Time: 5-29-14 1300	Date/Time: 5-30-14 9:55	Date/Time	Date/Time	Date/Time	

R1404049 5
AMEC Environmental & Infrastructure
NYSDEC Primoshield

Distribution: White - Lab Copy; Yellow - Return to Originator

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Cooler Receipt and Preservation Check Form

Project/Client AMEC Folder Number R1404009

Cooler received on 5-30-14 by: PE

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: (**Wet Ice**) **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?	(ALS/ROC)	CLIENT	
7	Soil VOA received as: Bulk Encore 5035set			(NA)

8. Temperature Readings Date: 5-30-14 Time: 10:10 ID: IR#3 (IR#4) From: (Temp Blank) Sample Bottle

Observed Temp (°C)	3.5						
Correction Factor (°C)	+0.1						
Corrected Temp (°C)	3.6						
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: R-002 by PE on 5-30-14 at 10:15
5035 samples placed in storage location: _____ by _____ on _____ at _____

PC Secondary Review: VK

Cooler Breakdown: Date: 5/30/14 Time: 1538 by: DH

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	✓		WC1126157H	4/15				
≤2	HNO_3	✓		BD0326135B	↓				
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For CN 1) Phenol and 522	✓		If +, contact PM to add $Na_2S_2O_3$ (CN), ascorbic (phenol).					
	$Na_2S_2O_3$	-	-						
	ZnAcetate	-	-						
	HCl	**	**	411216	5/15				

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

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 112612-2W, 4-002-003

Other Comments:

PC Secondary Review: VK

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

ALS ENVIRONMENTAL

Chain of Custody Report

Client: AMEC Environmental & Infrastructure
Project: NYSDEC Primoshield/3612122251-04

Service Request: R1404049

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1404049-001.01					
	624				
		5/30/14	1542	SMO / GLAFORCE	
		5/30/14	1542	R-002 / GLAFORCE	
		5/30/14	1542	R-001 / GLAFORCE	
		6/4/14	1034	In Lab / DLIPANI	
		6/4/14	2016	R-001-S11 / DLIPANI	
R1404049-001.02					
		5/30/14	1542	SMO / GLAFORCE	
		5/30/14	1542	R-002 / GLAFORCE	
		5/30/14	1542	R-001 / GLAFORCE	
R1404049-001.03					
		5/30/14	1542	SMO / GLAFORCE	
		5/30/14	1542	R-002 / GLAFORCE	
		5/30/14	1542	R-001 / GLAFORCE	
R1404049-001.04					
	9012B				
		5/30/14	1542	SMO / GLAFORCE	
		5/30/14	1542	R-002 / GLAFORCE	
		6/3/14	0825	In Lab / GNITAJOUPPI	
		6/3/14	1655	R-002 / GESMERIAN	
R1404049-001.05					
	SM 4500-H+ B				
		5/30/14	1542	SMO / GLAFORCE	
		5/30/14	1542	R-002 / GLAFORCE	
R1404049-001.06					
	200.7				
		5/30/14	1542	SMO / GLAFORCE	
		5/30/14	1542	R-002 / GLAFORCE	
		5/30/14	1542	R-A01 / GLAFORCE	
		6/3/14	1331	In Lab / MCRIBBIN	
		6/3/14	1450	R-A01 / MCRIBBIN	
		6/3/14	1459	In Lab / MCRIBBIN	
		6/4/14	2019	R-002 / MCRIBBIN	
R1404049-002.01					
	624				
		5/30/14	1542	SMO / GLAFORCE	
		5/30/14	1542	R-002 / GLAFORCE	
		5/30/14	1542	R-001 / GLAFORCE	
		6/4/14	1034	In Lab / DLIPANI	
		6/4/14	2016	R-001-S11 / DLIPANI	
R1404049-002.02					
		5/30/14	1542	SMO / GLAFORCE	

ALS ENVIRONMENTAL

Chain of Custody Report

Client: AMEC Environmental & Infrastructure
Project: NYSDEC Primoshield/3612122251-04

Service Request: R1404049

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
		5/30/14	1542	R-002 / GLAFORCE	
		5/30/14	1542	R-001 / GLAFORCE	
R1404049-002.03					
		5/30/14	1542	SMO / GLAFORCE	
		5/30/14	1542	R-002 / GLAFORCE	
		5/30/14	1542	R-001 / GLAFORCE	

ALS Environmental

VOLATILE ORGANICS
QC SUMMARY

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
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ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: AMEC Environmental & Infrustructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251-04
Sample Matrix: Water

Service Request: R1404049
Date Analyzed: 6/ 4/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 624

Units: µg/L
Basis: NA

Analysis Lot: 395482

Analyte Name	Lab Control Sample RQ1406348-03 Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	19.8	20.0	99	52 - 162
1,1,2,2-Tetrachloroethane	21.2	20.0	106	46 - 157
1,1,2-Trichloroethane	19.2	20.0	96	52 - 150
1,1-Dichloroethane (1,1-DCA)	21.0	20.0	105	59 - 155
1,1-Dichloroethene (1,1-DCE)	18.1	20.0	91	10 - 234
1,2-Dichloroethane	20.5	20.0	102	49 - 155
1,2-Dichloropropane	21.7	20.0	108	10 - 210
2-Chloroethyl Vinyl Ether	21.5	20.0	108	10 - 305
Acrolein	79.9	100	80	10 - 186
Acrylonitrile	97.7	100	98	84 - 128
Benzene	21.0	20.0	105	37 - 151
Bromodichloromethane	20.6	20.0	103	35 - 155
Bromoform	19.1	20.0	96	45 - 169
Bromomethane	19.2	20.0	96	10 - 242
Carbon Tetrachloride	22.0	20.0	110	70 - 140
Chlorobenzene	20.9	20.0	104	37 - 160
Chloroethane	16.5	20.0	82	14 - 230
Chloroform	19.8	20.0	99	51 - 138
Chloromethane	21.2	20.0	106	10 - 273
Dibromochloromethane	20.5	20.0	102	53 - 149
Methylene Chloride	18.1	20.0	90	10 - 221
Ethylbenzene	20.7	20.0	103	37 - 162
Tetrachloroethene (PCE)	20.2	20.0	101	64 - 148
Toluene	20.8	20.0	104	47 - 150
Trichloroethene (TCE)	20.1	20.0	100	71 - 157
Trichlorofluoromethane (CFC 11)	20.4	20.0	102	17 - 181
Vinyl Chloride	18.8	20.0	94	10 - 251
cis-1,3-Dichloropropene	20.4	20.0	102	10 - 227
m,p-Xylenes	42.1	40.0	105	76 - 131
o-Xylene	21.5	20.0	107	78 - 127
trans-1,2-Dichloroethene	18.4	20.0	92	54 - 156
trans-1,3-Dichloropropene	20.3	20.0	101	17 - 183

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:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404049
Project:	NYSDEC Primoshield/3612122251-04	**Date Analyzed:**	6/4/14 11:04
Sample Matrix:	Water		

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Instrument ID:**	R-MS-06
Lab Code:	RQ1406348-04	**File ID:**	I:\ACQUDATA\MSVOA6\DATA\060414\L5282.D\
Analytical Method:	624		

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1406348-03	I:\ACQUDATA\MSVOA6\DATA\060414\L5280.D\	6/4/14 10:01
TRIP BLANK	R1404049-002	I:\ACQUDATA\MSVOA6\DATA\060414\L5285.D\	6/4/14 12:33
633027 EFFLUENT	R1404049-001	I:\ACQUDATA\MSVOA6\DATA\060414\L5288.D\	6/4/14 14:00

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: AMEC Environmental & Infrustructure (Formerly MACTEC) **Service Request:** R1404049
Project: NYSDEC Primoshield/3612122251-04 **Date Analyzed:** 1/27/14 19:51

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA6\DATA\012714\L2829.D\ **Analytical Method:** 624
Instrument ID: R-MS-06 **Analysis Lot:** 307233

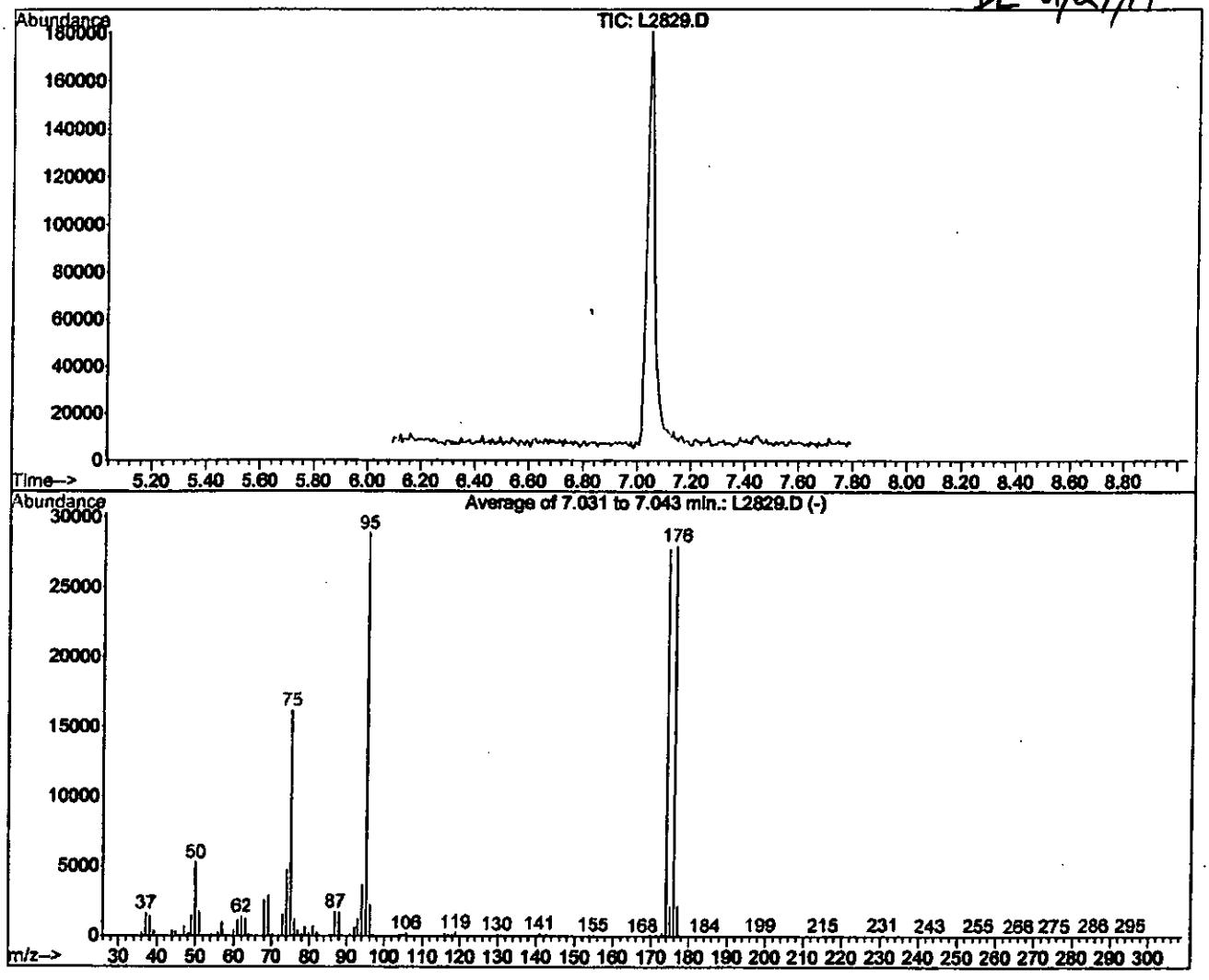
Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	18.24	5263	Pass
75	95	30	60	55.98	16152	Pass
95	95	100	100	100.00	28853	Pass
96	95	5	9	7.70	2223	Pass
173	174	0	2	0.95	263	Pass
174	95	50	120	96.17	27749	Pass
175	174	5	9	7.68	2132	Pass
176	174	95	101	100.66	27931	Pass
177	176	5	9	7.69	2149	Pass

Sample Name	Lab Code	File ID	Date Analyzed	Q
Initial CalibrationICAL	0.1 ppb	I:\ACQUDATA\MSVOA6\DATA\012714\L2831.D\	1/27/14 20:50	
Initial CalibrationICAL	0.2 ppb	I:\ACQUDATA\MSVOA6\DATA\012714\L2832.D\	1/27/14 21:20	
Initial CalibrationICAL	0.5 ppb	I:\ACQUDATA\MSVOA6\DATA\012714\L2833.D\	1/27/14 21:53	
Initial CalibrationICAL	1.0 ppb	I:\ACQUDATA\MSVOA6\DATA\012714\L2834.D\	1/27/14 22:23	
Initial CalibrationICAL	2.0 ppb	I:\ACQUDATA\MSVOA6\DATA\012714\L2835.D\	1/27/14 22:53	
Initial CalibrationICAL	5.0 ppb	I:\ACQUDATA\MSVOA6\DATA\012714\L2836.D\	1/27/14 23:24	
Initial CalibrationICAL	10 ppb	I:\ACQUDATA\MSVOA6\DATA\012714\L2837.D\	1/27/14 23:54	
Initial CalibrationICAL	20 ppb	I:\ACQUDATA\MSVOA6\DATA\012714\L2838.D\	1/28/14 00:24	
Initial CalibrationICAL	50 ppb	I:\ACQUDATA\MSVOA6\DATA\012714\L2839.D\	1/28/14 00:54	
Initial CalibrationICAL	100 ppb	I:\ACQUDATA\MSVOA6\DATA\012714\L2840.D\	1/28/14 01:24	
Initial CalibrationICAL	200 ppb	I:\ACQUDATA\MSVOA6\DATA\012714\L2841.D\	1/28/14 01:54	

BFB

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2829.D Vial: 22
Acq On : 27 Jan 2014 7:51 pm Operator: D.LIPANI
Sample : TUNE CHECK Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6

DL 01/27/14



AutoFind: Scans 155, 156, 157; Background Corrected with Scan 146

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.2	5263	PASS
75	95	30	60	56.0	16152	PASS
95	95	100	100	100.0	28853	PASS
96	95	5	9	7.7	2223	PASS
173	174	0.00	2	0.9	263	PASS
174	95	50	120	96.2	27749	PASS
175	174	5	9	7.7	2132	PASS
176	174	95	101	100.7	27931	PASS
177	176	5	9	7.7	2149	PASS

L2829.D 6240127.M Mon Jan 27 19:59:22 2014

00015

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: AMEC Environmental & Infrustructure (Formerly MACTEC) **Service Request:** R1404049
Project: NYSDEC Primoshield/3612122251-04 **Date Analyzed:** 6/4/14 09:16

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA6\DATA\060414\L5279.D\ **Analytical Method:** 624
Instrument ID: R-MS-06 **Analysis Lot:** 395482

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	22.41	29048	Pass
75	95	30	60	49.82	64578	Pass
95	95	100	100	100.00	129630	Pass
96	95	5	9	6.80	8812	Pass
173	174	0	2	0.23	249	Pass
174	95	50	120	84.89	110042	Pass
175	174	5	9	8.77	9650	Pass
176	174	95	101	98.31	108186	Pass
177	176	5	9	6.56	7093	Pass

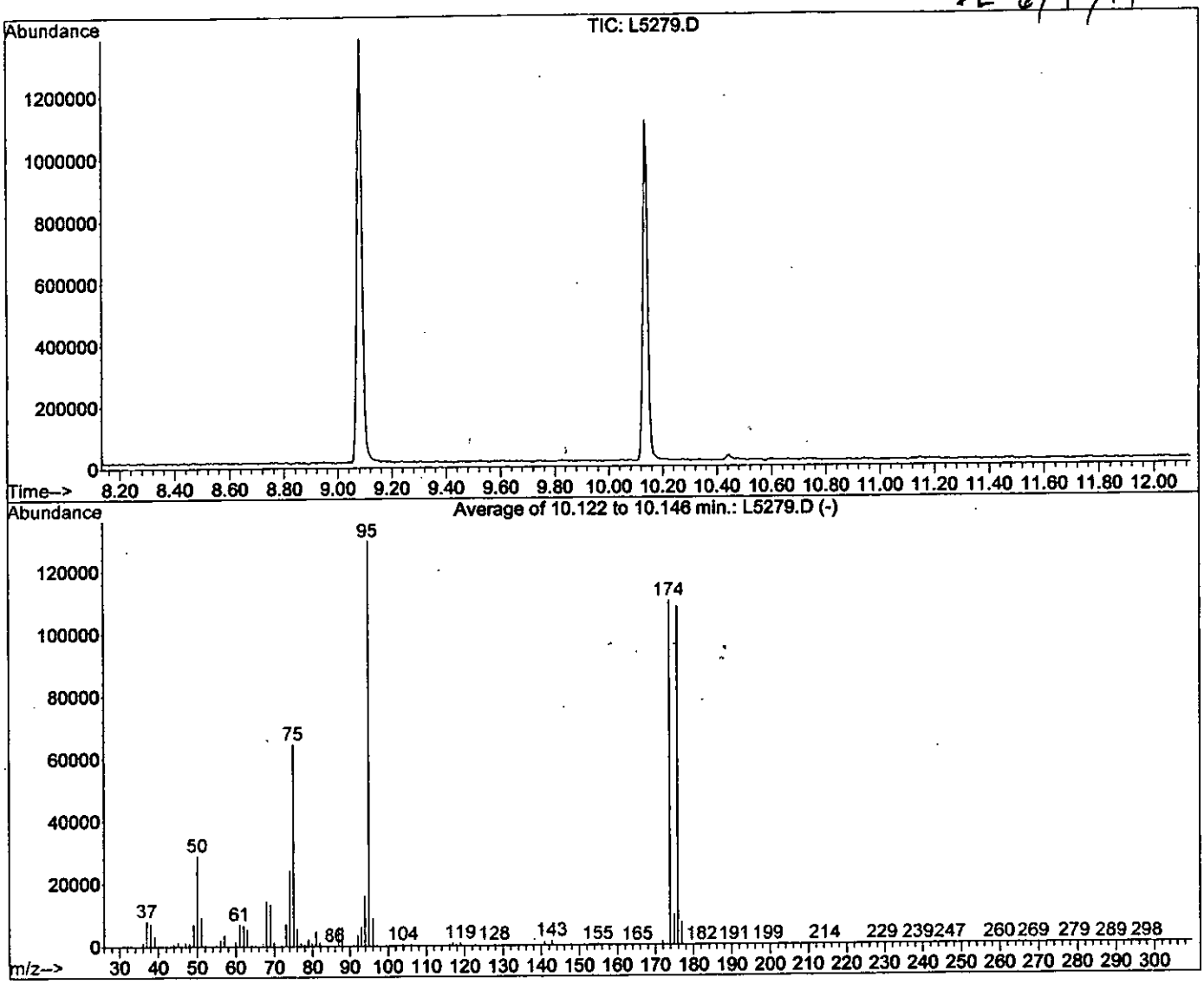
Sample Name	Lab Code	File ID	Date Analyzed	Q
Lab Control Sample	RQ1406348-03	I:\ACQUDATA\MSVOA6\DATA\060414\L5280.D\	6/4/14 10:01	
Continuing Calibration Verification	RQ1406348-02	I:\ACQUDATA\MSVOA6\DATA\060414\L5280.D\	6/4/14 10:01	
Method Blank	RQ1406348-04	I:\ACQUDATA\MSVOA6\DATA\060414\L5282.D\	6/4/14 11:04	
TRIP BLANK	R1404049-002	I:\ACQUDATA\MSVOA6\DATA\060414\L5285.D\	6/4/14 12:33	
633027 EFFLUENT	R1404049-001	I:\ACQUDATA\MSVOA6\DATA\060414\L5288.D\	6/4/14 14:00	

BFB

Data File : I:\ACQUDATA\MSVOA6\DATA\060414\L5279.D
Acq On : 4 Jun 2014 9:16 am
Sample : TUNE CHECK RQ1406348-01
Misc : 624
MS Integration Params: LSCINT.P
Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6

Vial: 4
Operator: D.Lipani
Inst : MS#6
Multiplr: 1.00

DL 6/4/14



Spectrum Information: Average of 10.122 to 10.146 min. sub. scan = 1504

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.4	29048	PASS
75	95	30	60	49.8	64578	PASS
95	95	100	100	100.0	129630	PASS
96	95	5	9	6.8	8812	PASS
173	174	0.00	2	0.2	249	PASS
174	95	50	120	84.9	110042	PASS
175	174	5	9	8.8	9650	PASS
176	174	95	101	98.3	108186	PASS
177	176	5	9	6.6	7093	PASS

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: AMEC Environmental & Infrustructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251-04

Service Request: R1404049
Date Analyzed: 6/4/14 10:01

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

File ID: I:\ACQUDATA\MSVOA6\DATA\060414\L5280.D\
Instrument ID: R-MS-06
Analytical Method: 624

Lab Code: RQ1406348-02
Analysis Lot: 395482
Signal ID:

		1,4-Difluorobenzene		Bromochloromethane		Chlorobenzene-d5	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	597,998	5.71	102,607	3.46	561,336	9.08
	Upper Limit ==>	1,195,996	6.21	205,214	3.96	1,122,672	9.58
	Lower Limit ==>	298,999	5.21	51,304	2.96	280,668	8.58
	ICAL Result ==>	645,887	5.72	102,908	3.48	668,937	9.08
Associated Analyses							
Lab Control Sample	RQ1406348-03	597,998	5.71	102,607	3.46	561,336	9.08
Method Blank	RQ1406348-04	598,396	5.71	98,964	3.47	559,985	9.08
TRIP BLANK	R1404049-002	609,100	5.71	96,031	3.47	569,276	9.08
633027 EFFLUENT	R1404049-001	613,181	5.71	101,305	3.47	563,316	9.08

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

ALS Environmental

VOLATILE ORGANICS
SAMPLE DATA

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ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404049
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	5/29/14 0830
Sample Matrix:	Water	**Date Received:**	5/30/14
		Date Analyzed:	6/4/14 14:00
Sample Name:	633027 EFFLUENT	**Units:**	µg/L
Lab Code:	R1404049-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	624	**Analysis Lot:**	395482
Data File Name:	I:\ACQUDATA\MSVOA6\DATA\060414\L5288.D\	**Instrument Name:**	R-MS-06
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	7.5		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	
75-35-4	1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
110-75-8	2-Chloroethyl Vinyl Ether	10	U	10	
107-02-8	Acrolein	10	U	10	
107-13-1	Acrylonitrile	10	U	10	
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
56-23-5	Carbon Tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
75-09-2	Methylene Chloride	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
127-18-4	Tetrachloroethene (PCE)	1.0	U	1.0	
108-88-3	Toluene	1.0	U	1.0	
79-01-6	Trichloroethene (TCE)	14		1.0	
75-69-4	Trichlorofluoromethane (CFC 11)	1.0	U	1.0	
75-01-4	Vinyl Chloride	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
179601-23-1	m,p-Xylenes	2.0	U	2.0	
95-47-6	o-Xylene	1.0	U	1.0	
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404049
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	5/29/14 0830
Sample Matrix:	Water	**Date Received:**	5/30/14
		Date Analyzed:	6/4/14 14:00
Sample Name:	633027 EFFLUENT	**Units:**	µg/L
Lab Code:	R1404049-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	624	**Analysis Lot:**	395482
Data File Name:	I:\ACQUDATA\MSVOA6\DATA\060414\L5288.D\	**Instrument Name:**	R-MS-06
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	107	81-127	6/4/14 14:00	
4-Bromofluorobenzene	97	79-123	6/4/14 14:00	
Toluene-d8	100	83-120	6/4/14 14:00	

Quantitation Report (Not Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\060414\L5288.D Vial: 13
Acq On : 4 Jun 2014 2:00 pm Operator: D.Lipani
Sample : R1404049-001|1.0 Inst : MS#6
Misc : AMEC 624 6085 T4 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jun 4 14:18 2014 Quant Results File: 6240127.RES

Quant Method : I:\ACQUDATA\M...\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 12:19:30 2014
Response via : Initial Calibration
DataAcq Meth : 6240127

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	3.47	128	101305	30.00	ug/L	-0.01
35) 1,4-Difluorobenzene	5.71	114	613181	30.00	ug/L	0.00
53) d5-Chlorobenzene	9.08	117	563316	30.00	ug/L	0.00
System Monitoring Compounds						
30) SURR1,1,2-Diclethane-d4	4.28	65	215113	32.19	ug/L	-0.01
Spiked Amount 30.000	Range 81 - 127		Recovery = 107.30%			
51) SURR3,Toluene-d8	7.77	98	756490	29.93	ug/L	0.00
Spiked Amount 30.000	Range 83 - 120		Recovery = 99.77%			
68) SURR2,BFB	10.13	95	263548	29.03	ug/L	0.00
Spiked Amount 30.000	Range 79 - 123		Recovery = 96.77%			
Target Compounds						Qvalue
~~12) Acetonitrile~~	~~1.68~~	~~41~~	~~466~~	~~0.50~~	~~ug/L~~	~~67~~
~~13) 2 Propanol~~	~~1.74~~	~~45~~	~~402~~	~~1.28~~	~~ug/L~~	~~62~~
15) 1,1-Diclethene	1.98	96	3593	0.39	ug/L #	56
~~16) tert-Butyl Alcohol~~	~~1.93~~	~~59~~	~~126~~	~~0.26~~	~~ug/L~~	~~89~~
23) 1,1-Diclethane	2.75	63	16817	0.95	ug/L #	89
25) cis-1,2-Dichloroethene	3.30	96	25242	2.20	ug/L	84
26) Chloroform	3.55	83	~~1067~~ 2695	~~0.10~~	~~ug/L~~ # =	85
~~28) Isobutanol~~	~~3.77~~	~~43~~	~~67~~	~~0.30~~	~~ug/L~~ #	~~16~~
32) 1,1,1-Trichloroethane	4.51	97	118341	7.47	ug/L	99
~~39) Dibromomethane~~	~~6.03~~	~~93~~	~~670~~	~~0.13~~	~~ug/L~~ #	~~46~~
41) Trichloroethene	6.16	130	153341	14.49	ug/L	98
~~44) Epichlorohydrin~~	~~6.62~~	~~57~~	~~64~~	~~0.15~~	~~ug/L~~ #	~~1~~

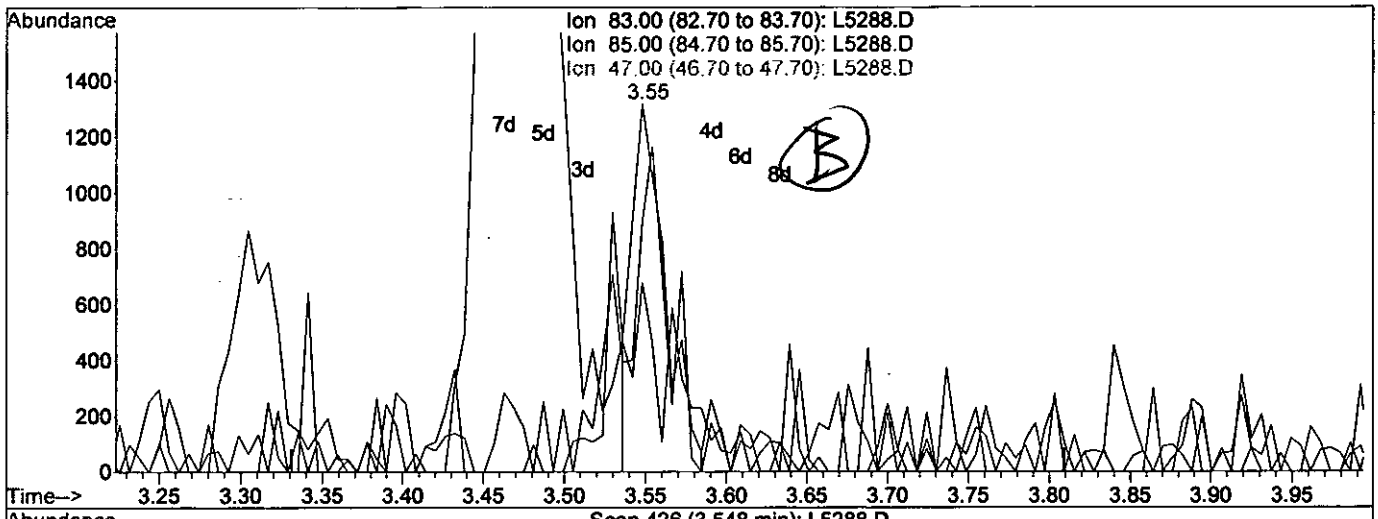
0.15m
>1
6/12/14

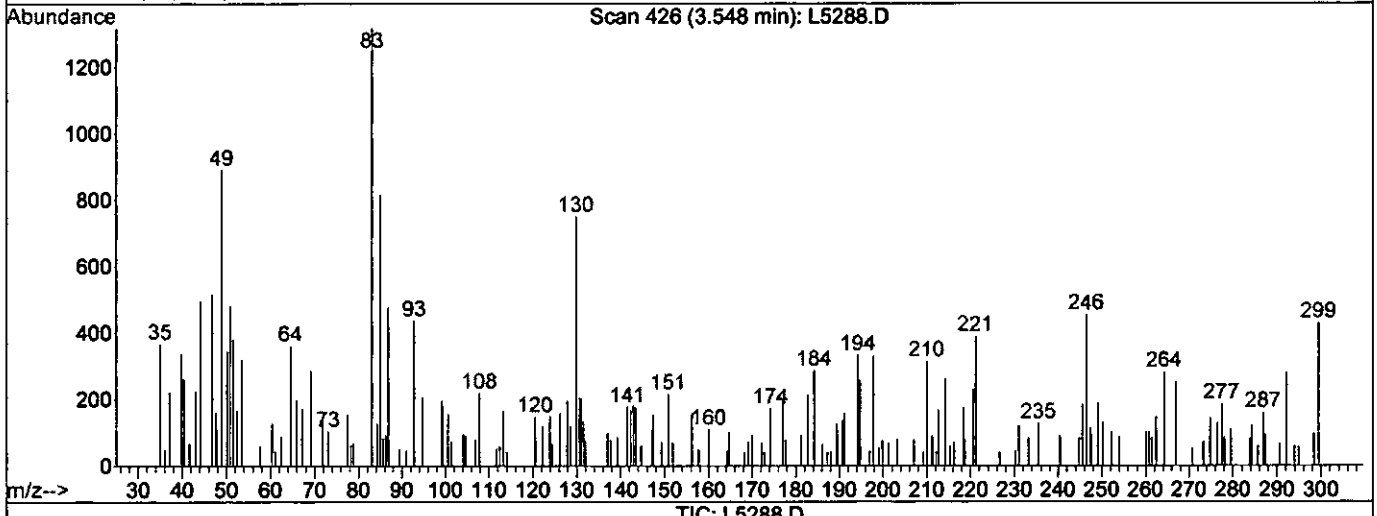
(#) = qualifier out of range (m) = manual integration
L5288.D 6240127.M Wed Jun 04 14:18:44 2014 0002 Page 1

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\060414\L5288.D Vial: 13
Acq On : 4 Jun 2014 2:00 pm Operator: D.Lipani
Sample : R1404049-001|1.0 Inst : MS#6
Misc : AMEC 624 6085 T4 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jun 12 12:05 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 12:19:30 2014
Response via : Multiple Level Calibration





TIC: L5288.D

(26) Chloroform

3.55min 0.10ug/L

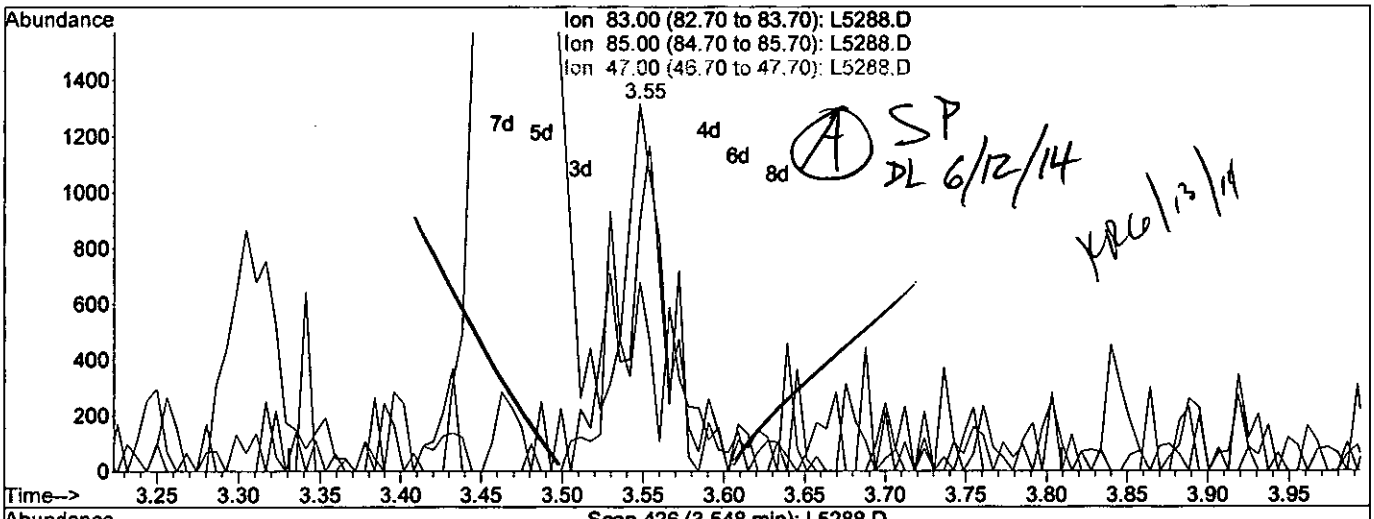
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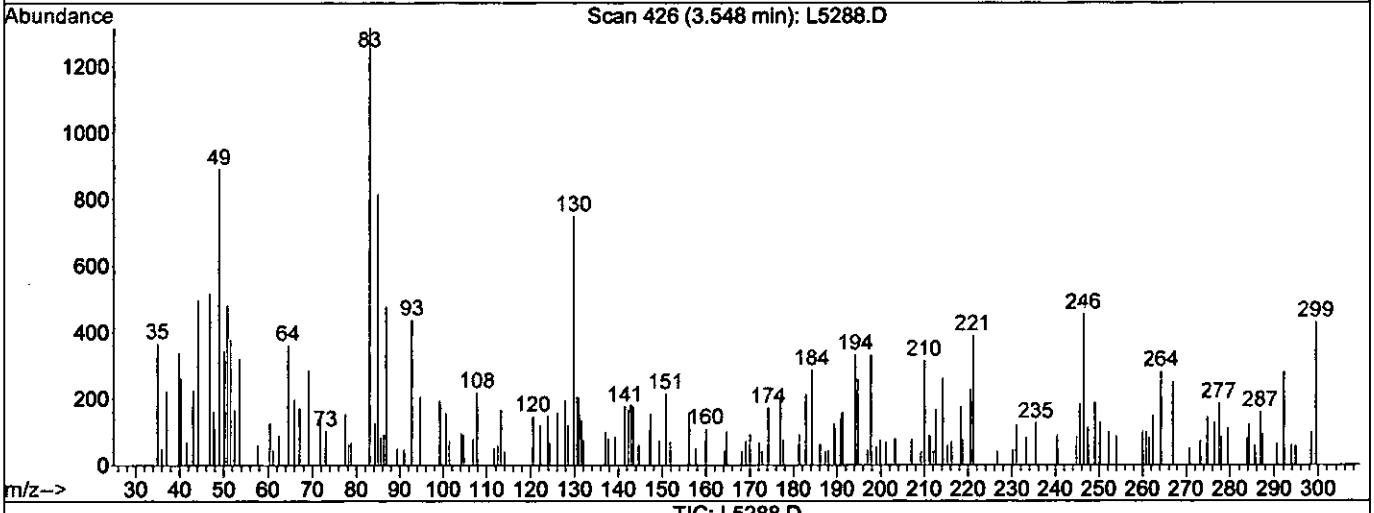
Ion	Exp%	Act%
83.00	100	100
85.00	70.30	68.26
47.00	27.40	51.48#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\060414\L5288.D Vial: 13
Acq On : 4 Jun 2014 2:00 pm Operator: D.Lipani
Sample : R1404049-001|1.0 Inst : MS#6
Misc : AMEC 624 6085 T4 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jun 12 12:06 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 12:19:30 2014
Response via : Multiple Level Calibration





TIC: L5288.D

(26) Chloroform

3.55min 0.15ug/L m

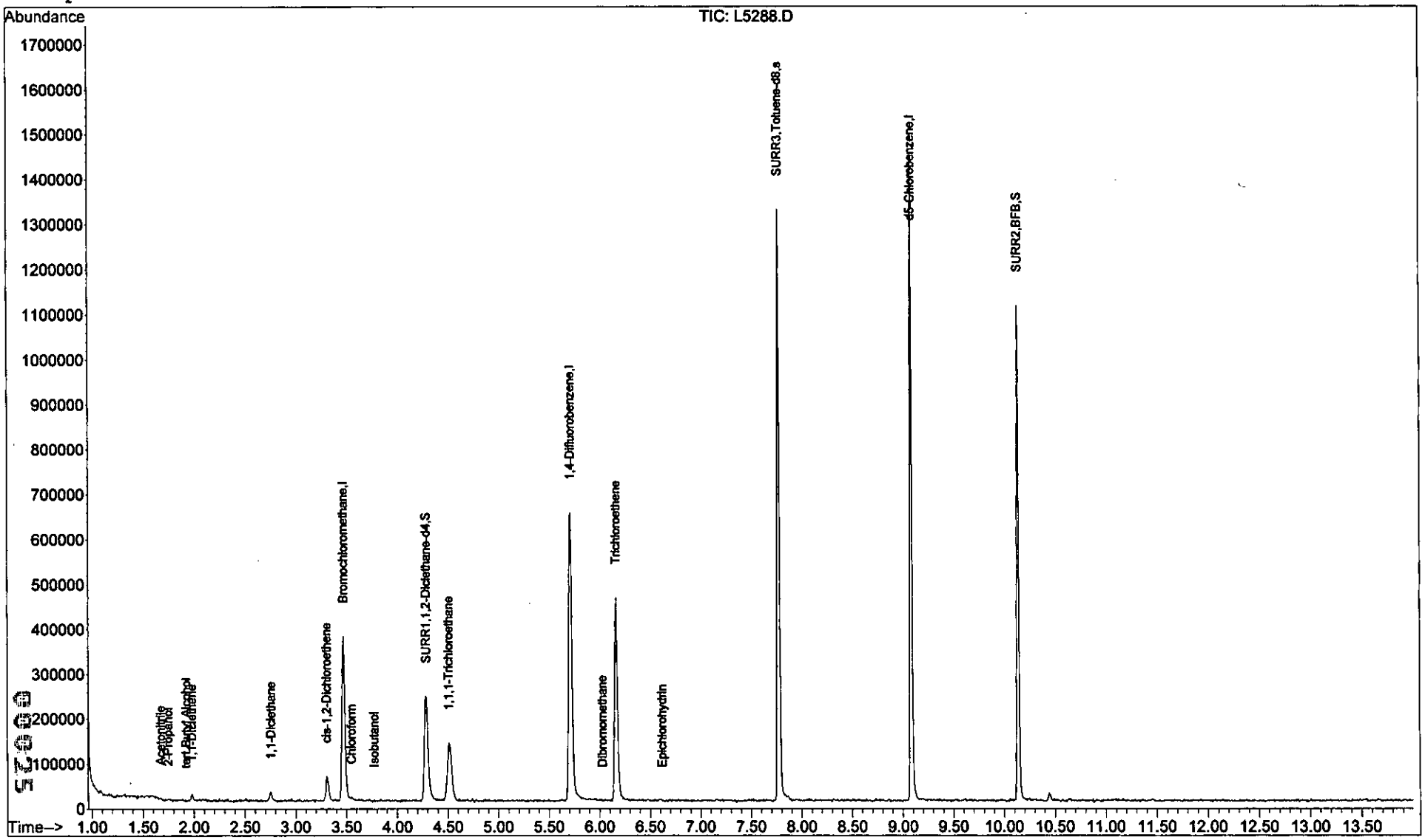
response 2695

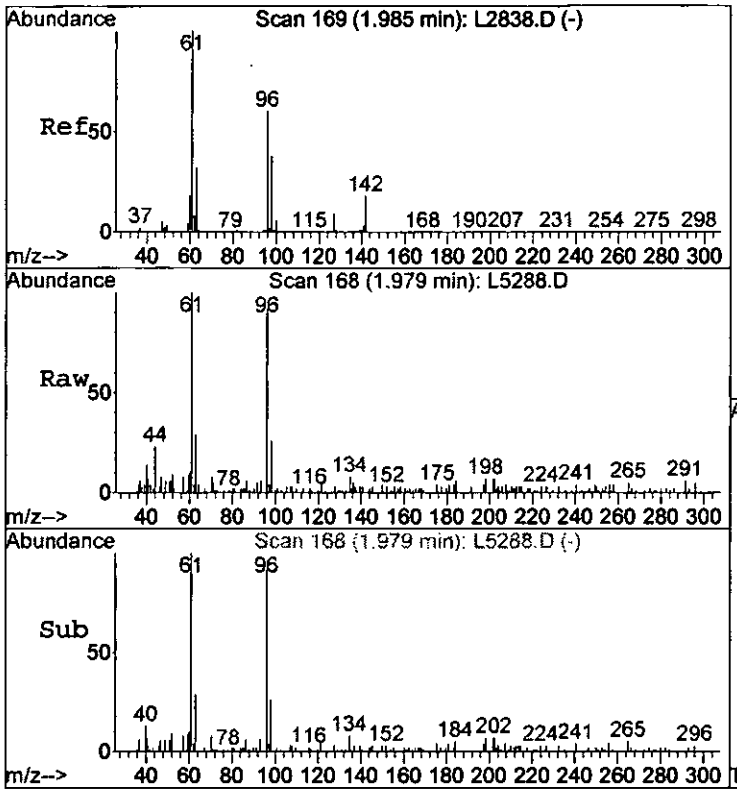
Ion	Exp%	Act%
83.00	100	100
85.00	70.30	61.88
47.00	27.40	39.26#
0.00	0.00	0.00

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\060414\L5288.D Vial: 13
Acq On : 4 Jun 2014 2:00 pm Operator: D.Lipani
Sample : R1404049-001|1.0 Inst : MS#6
Misc : AMEC 624 6085 T4 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jun 4 14:18 2014 Quant Results File: 6240127.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 12:19:30 2014
Response via : Initial Calibration

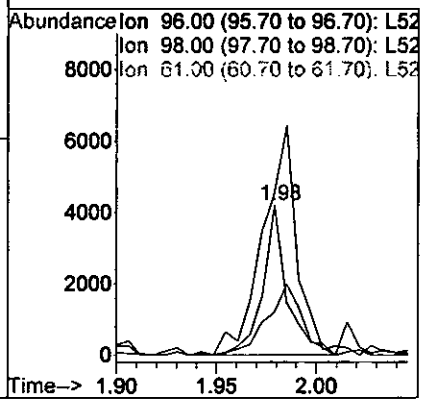


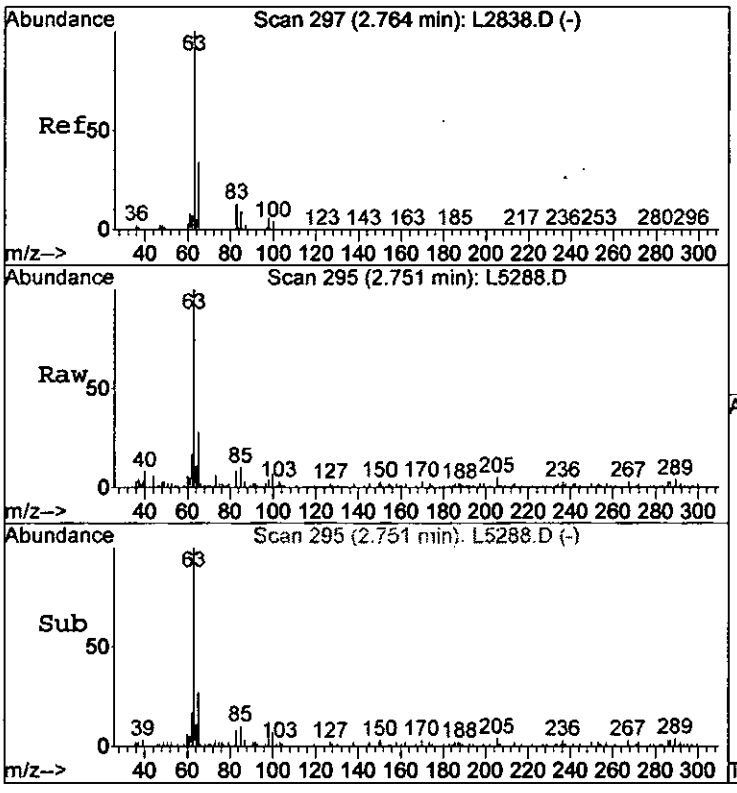


#15
1,1-Diclethene
Concen: 0.39 ug/L
RT: 1.98 min Scan# 168
Delta R.T. -0.01 min
Lab File: L5288.D
Acq: 4 Jun 2014 2:00 pm

Tgt Ion: 96 Resp: 3593

Ion	Ratio	Lower	Upper
96	100		
98	28.5	33.1	93.1#
61	108.2	137.1	197.1#

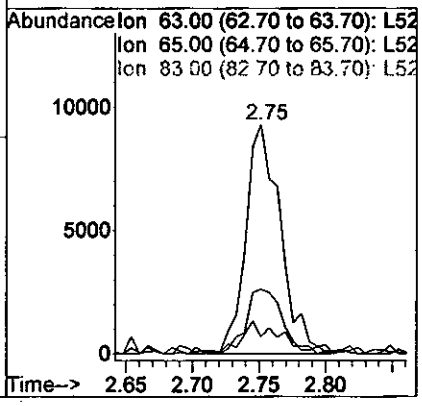


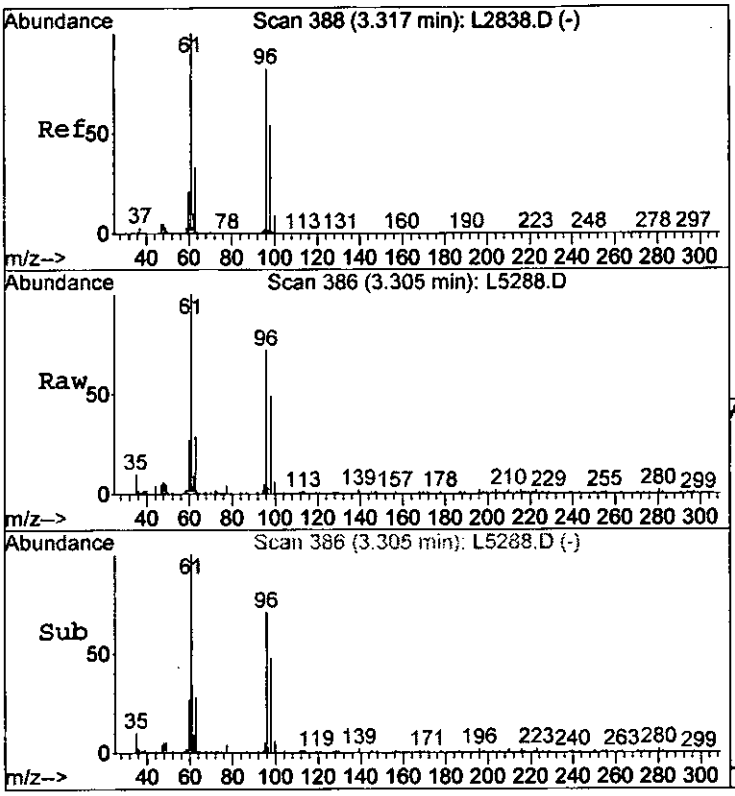


#23
1,1-Diclethane
Concen: 0.95 ug/L
RT: 2.75 min Scan# 295
Delta R.T. -0.01 min
Lab File: L5288.D
Acq: 4 Jun 2014 2:00 pm

Tgt Ion: 63 Resp: 16817

Ion	Ratio	Lower	Upper
63	100		
65	28.1	27.0	40.4
83	7.5	10.6	16.0#

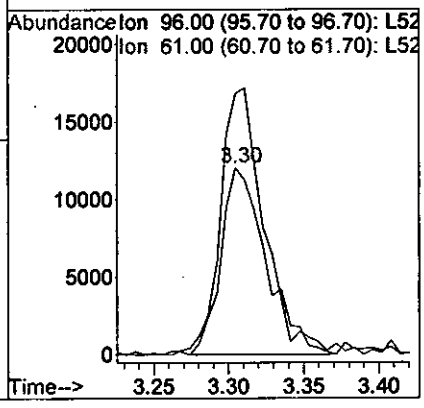


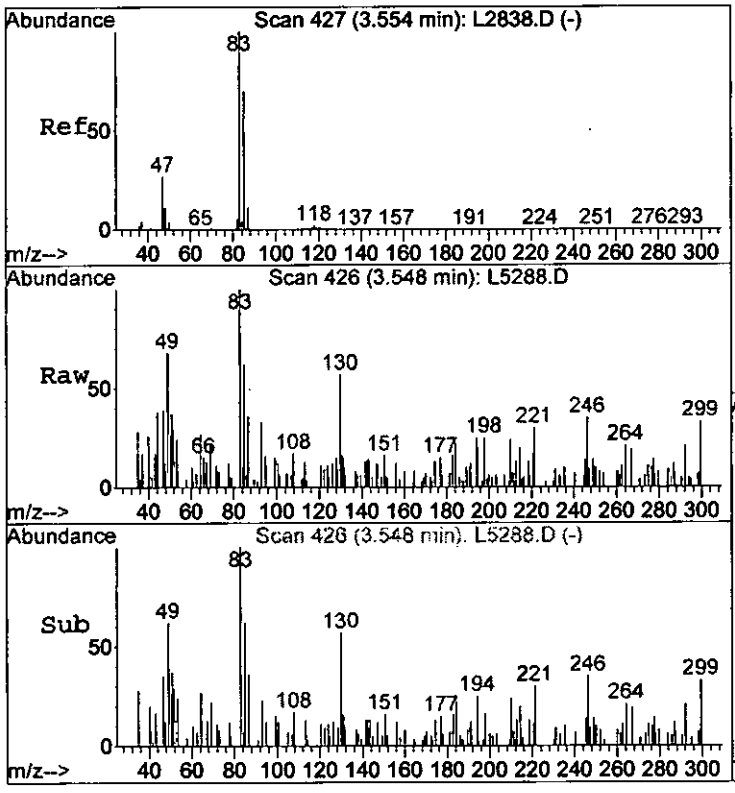


#25
cis-1,2-Dichloroethene
Concen: 2.20 ug/L
RT: 3.30 min Scan# 386
Delta R.T. -0.01 min
Lab File: L5288.D
Acq: 4 Jun 2014 2:00 pm

Tgt Ion: 96 Resp: 25242

Ion	Ratio	Lower	Upper
96	100		
61	139.5	97.4	146.2

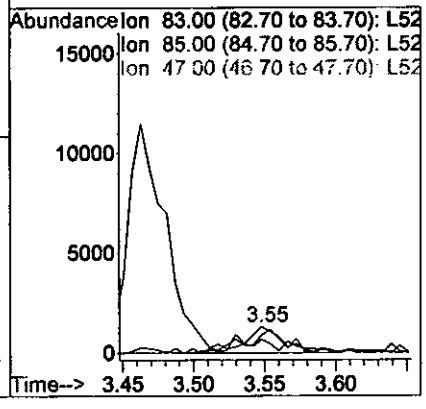


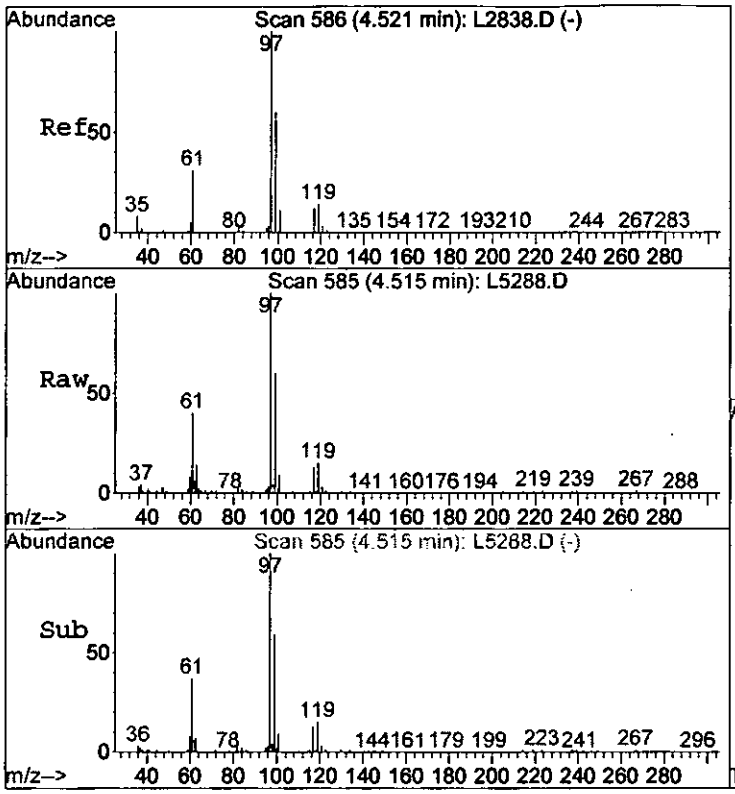


#26
Chloroform
Concen: 0.15 ug/L m
RT: 3.55 min Scan# 426
Delta R.T. -0.01 min
Lab File: L5288.D
Acq: 4 Jun 2014 2:00 pm

Tgt Ion: 83 Resp: 2695

Ion	Ratio	Lower	Upper
83	100		
85	61.9	56.2	84.4
47	39.3	21.9	32.9#

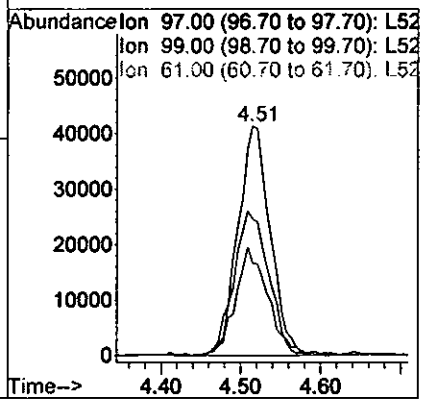


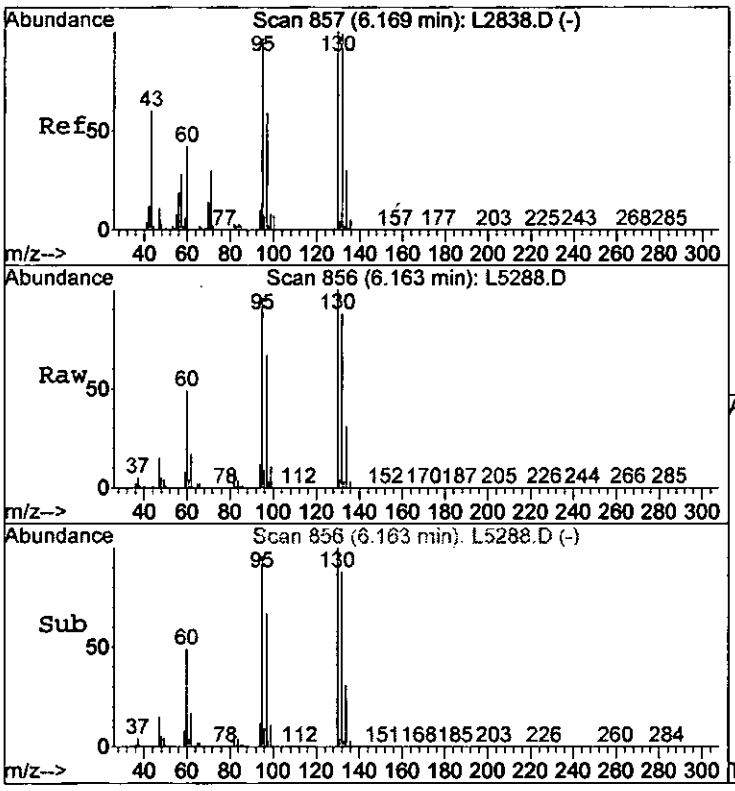


#32
1,1,1-Trichloroethane
Concen: 7.47 ug/L
RT: 4.51 min Scan# 585
Delta R.T. -0.01 min
Lab File: L5288.D
Acq: 4 Jun 2014 2:00 pm

Tgt Ion: 97 Resp: 118341

Ion	Ratio	Lower	Upper
97	100		
99	59.6	48.6	73.0
61	40.2	32.4	48.6

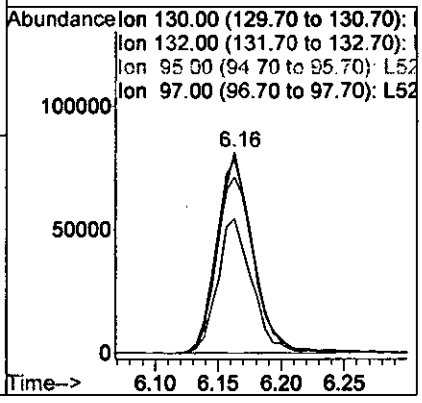




#41
Trichloroethene
Concen: 14.49 ug/L
RT: 6.16 min Scan# 856
Delta R.T. -0.01 min
Lab File: L5288.D
Acq: 4 Jun 2014 2:00 pm

Tgt Ion:130 Resp: 153341

Ion	Ratio	Lower	Upper
130	100		
132	96.6	78.1	117.1
95	103.4	80.6	120.8
97	66.9	51.2	76.8



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: AMEC Environmental & Infrustructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251-04
Sample Matrix: Water

Service Request: R1404049
Date Collected: 5/29/14
Date Received: 5/30/14
Date Analyzed: 6/4/14 12:33

Sample Name: TRIP BLANK
Lab Code: R1404049-002

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 624
Data File Name: I:\ACQUDATA\MSVOA6\DATA\060414\L5285.D\

Analysis Lot: 395482
Instrument Name: R-MS-06
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	1.0	U	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	
75-35-4	1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
110-75-8	2-Chloroethyl Vinyl Ether	10	U	10	
107-02-8	Acrolein	10	U	10	
107-13-1	Acrylonitrile	10	U	10	
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
56-23-5	Carbon Tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
75-09-2	Methylene Chloride	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
127-18-4	Tetrachloroethene (PCE)	1.0	U	1.0	
108-88-3	Toluene	1.0	U	1.0	
79-01-6	Trichloroethene (TCE)	1.0	U	1.0	
75-69-4	Trichlorofluoromethane (CFC 11)	1.0	U	1.0	
75-01-4	Vinyl Chloride	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
179601-23-1	m,p-Xylenes	2.0	U	2.0	
95-47-6	o-Xylene	1.0	U	1.0	
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404049
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	5/29/14
Sample Matrix:	Water	**Date Received:**	5/30/14
		Date Analyzed:	6/4/14 12:33
Sample Name:	TRIP BLANK	**Units:**	µg/L
Lab Code:	R1404049-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	624	**Analysis Lot:**	395482
Data File Name:	I:\ACQUDATA\MSVOA6\DATA\060414\L5285.D\	**Instrument Name:**	R-MS-06
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	115	81-127	6/4/14 12:33	
4-Bromofluorobenzene	100	79-123	6/4/14 12:33	
Toluene-d8	100	83-120	6/4/14 12:33	

Quantitation Report (Not Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\060414\L5285.D Vial: 10
Acq On : 4 Jun 2014 12:33 pm Operator: D.Lipani
Sample : R1404049-002|1.0 Inst : MS#6
Misc : AMEC 624 6085 T4 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jun 4 12:51 2014 Quant Results File: 6240127.RES

Quant Method : I:\ACQUDATA\M...\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 12:19:30 2014
Response via : Initial Calibration
DataAcq Meth : 6240127

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	3.47	128	96031	30.00	ug/L	-0.02
35) 1,4-Difluorobenzene	5.71	114	609100	30.00	ug/L	0.00
53) d5-Chlorobenzene	9.08	117	569276	30.00	ug/L	0.00
System Monitoring Compounds						
30) SURR1,1,2-Diclethane-d4	4.28	65	218494	34.49	ug/L	0.00
Spiked Amount 30.000	Range 81 - 127		Recovery = 114.97%			
51) SURR3,Toluene-d8	7.77	98	753051	29.99	ug/L	0.00
Spiked Amount 30.000	Range 83 - 120		Recovery = 99.97%			
68) SURR2,BFB	10.14	95	275983	30.09	ug/L	0.00
Spiked Amount 30.000	Range 79 - 123		Recovery = 100.30%			
Target Compounds						Qvalue
~~12) Acetonitrile~~	~~1.76~~	~~41~~	~~370~~	~~0.42~~	~~ug/L~~	~~87~~
~~13) 2-Propanol~~	~~1.74~~	~~45~~	~~270~~	~~0.91~~	~~ug/L~~	~~82~~
14) Acetone	1.76	43	997	0.41	ug/L	52 LT
~~16) tert-Butyl Alcohol~~	~~1.95~~	~~59~~	~~173~~	~~0.30~~	~~ug/L~~	~~88~~
28) Isobutanol	3.78	43	74	0.35	ug/L #	33
33) 2-Methyl-1,3-Dioxolane	4.62	73	78	0.11	ug/L #	50
~~44) Epichlorohydrin~~	~~6.54~~	~~57~~	~~221~~	~~0.51~~	~~ug/L #~~	~~70~~

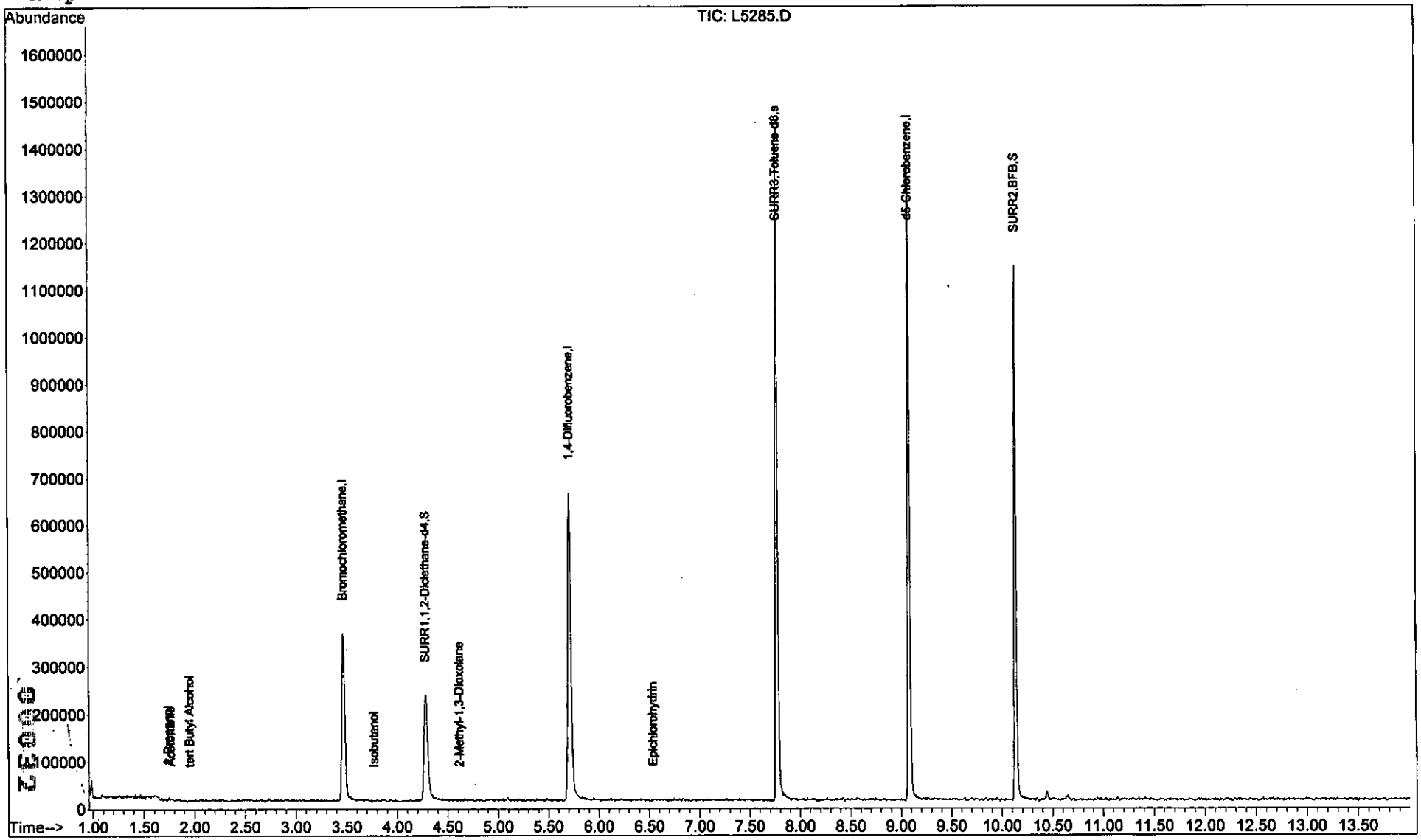
DV
6/12/14

(#) = qualifier out of range (m) = manual integration
L5285.D 6240127.M Wed Jun 04 12:51:22 2014

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\060414\L5285.D Vial: 10
Acq On : 4 Jun 2014 12:33 pm Operator: D.Lipani
Sample : R1404049-002|1.0 Inst : MS#6
Misc : AMEC 624 6085 T4 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jun 4 12:51 2014 Quant Results File: 6240127.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 12:19:30 2014
Response via : Initial Calibration



ALS Environmental

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 01/29/14

Calibration ID:	RC1400006	**Instrument ID:**	R-MS-06
		Column Name:	1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
1,1,1-Trichloroethane (TCA)	T	Average RF			4.690	<=35	4.9
1,1,2,2-Tetrachloroethane	T	Average RF			0.4286	<=35	7.2
1,1,2-Trichloroethane	T	Average RF			0.3619	<=35	5.6
1,1,2-Trichlorotrifluoroethane	T	Average RF			2.824	<=35	6.0
1,1-Dichloroethane (1,1-DCA)	T	Average RF			5.226	<=35	6.1
1,1-Dichloroethene (1,1-DCE)	T	Average RF			2.708	<=35	4.9
1,2-Dibromoethane	T	Average RF			0.3803	<=35	6.2
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123	T	Average RF			3.696	<=35	8.0
1,2-Dichlorobenzene	T	Average RF			0.9304	<=35	6.6
1,2-Dichloroethane	T	Average RF			3.479	<=35	4.8
1,2-Dichloropropane	T	Average RF			0.4880	<=35	8.5
1,3-Dichlorobenzene	T	Average RF			1.034	<=35	4.3
1,4-Dichlorobenzene	T	Average RF			1.048	<=35	6.6
1-Bromo-2-chloroethane	T	Average RF			0.5911	<=35	7.9
1-Chloro-4-(trifluoromethyl)benzene	T	Average RF			0.6468	<=35	5.2
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123	T	Average RF			4.578	<=35	3.0
2-Butanone (MEK)	T	Average RF			0.8562	<=35	10.6
2-Chloroethyl Vinyl Ether	T	Average RF			0.1879	<=35	10.7
2-Hexanone	T	Average RF			0.2277	<=35	13.0
2-Methyl-1,3-dioxolane	T	Average RF			0.2302	<=35	16.1
2-Methyl-1-propanol	T	Average RF			0.06558	<=35	7.2
2-Methyl-2-propanol	T	Average RF			0.1429	<=35	9.5
2-Propanol	T	Average RF			0.09282	<=35	7.5
4-Methyl-2-pentanone	T	Average RF			0.3172	<=35	9.0
Acetone	T	Average RF			0.7669	<=35	7.8
Acetonitrile	T	Average RF			0.2777	<=35	7.3
Acrolein	T	Average RF			0.3412	<=35	14.9
Acrylonitrile	T	Average RF			0.6759	<=35	6.1
Amyl Acetate	T	Average RF			0.6450	<=35	12.3
Benzene	T	Average RF			1.858	<=35	9.5
Bromodichloromethane	T	Average RF			0.6629	<=35	11.0
Bromoform	T	Average RF			0.3022	<=35	9.5
Bromomethane	T	Average RF			2.307	<=35	5.6
Carbon Disulfide	T	Average RF			9.127	<=35	4.7
Carbon Tetrachloride	T	Average RF			0.6184	<=35	8.4
Chlorobenzene	T	Average RF			1.342	<=35	6.5
Chloroethane	T	Average RF			2.130	<=35	7.4
Chloroform	T	Average RF			5.414	<=35	7.0
Chloromethane	T	Average RF			3.753	<=35	6.7
Cyclohexane	T	Average RF			4.920	<=35	4.1
Dibromochloromethane	T	Average RF			0.4766	<=35	7.0
Dibromomethane	T	Average RF			0.2627	<=35	7.4
Dichlorodifluoromethane (CFC 12)	T	Average RF			2.791	<=35	5.5
Dichloromethane	T	Average RF			3.251	<=35	5.4
Epichlorohydrin	T	Average RF			0.02130	<=35	19.3
Ethyl Acetate	T	Average RF			1.653	<=35	21.3
Ethylbenzene	T	Average RF			0.6986	<=35	5.9
Methyl tert-Butyl Ether	T	Average RF			6.403	<=35	7.3
Naphthalene	T	Average RF			0.7768	<=35	10.7
Styrene	T	Average RF			1.345	<=35	8.2
Tetrachloroethene (PCE)	T	Average RF			0.4369	<=35	3.5
Tetrahydrofuran (THF)	T	Average RF			0.5319	<=35	8.7

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Initial Calibration - Summary Report

Calibration ID:	RC1400006	**Instrument ID:**	R-MS-06
		Column Name:	1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
Toluene	T	Average RF			1.991	<=35	7.6
Trichloroethene (TCE)	T	Average RF			0.5177	<=35	5.7
Trichlorofluoromethane (CFC 11)	T	Average RF			4.558	<=35	6.1
Vinyl Chloride	T	Average RF			3.853	<=35	8.5
cis-1,2-Dichloroethene	T	Average RF			3.399	<=35	8.6
cis-1,3-Dichloropropene	T	Average RF			0.7015	<=35	8.7
m,p-Xylenes	T	Average RF			0.8555	<=35	4.9
n-Butyl Acetate	T	Average RF			0.4938	<=35	15.9
n-Heptane	T	Average RF			0.4267	<=35	5.0
o-Xylene	T	Average RF			0.8494	<=35	5.6
trans-1,2-Dichloroethene	T	Average RF			2.936	<=35	4.4
trans-1,3-Dichloropropene	T	Average RF			0.5736	<=35	7.2
1,2-Dichloroethane-d4	S	Average RF			1.979	<=35	1.9
4-Bromofluorobenzene	S	Average RF			0.4834	<=35	4.2
Toluene-d8	S	Average RF			1.237	<=35	3.1

Initial Calibration - Detailed Report

PL 01/29/14

Calibration ID:	RC1400006	**Instrument ID:**	R-MS-06
		Signal ID:	1

#	Lab Code	Sample Name	File Location	Acquisition Date
01	RC1400006-01	STD#1 - 0.1 PPB	I:\ACQUDATA\MSVOA6\DATA\012714\L2831.D	1/27/14 20:50
02	RC1400006-02	STD#2 - 0.2 PPB	I:\ACQUDATA\MSVOA6\DATA\012714\L2832.D	1/27/14 21:20
03	RC1400006-03	STD#3 - 0.5 PPB	I:\ACQUDATA\MSVOA6\DATA\012714\L2833.D	1/27/14 21:53
04	RC1400006-04	STD#4 - 1.0 PPB	I:\ACQUDATA\MSVOA6\DATA\012714\L2834.D	1/27/14 22:23
05	RC1400006-05	STD#5 - 2.0 PPB	I:\ACQUDATA\MSVOA6\DATA\012714\L2835.D	1/27/14 22:53
06	RC1400006-06	STD#6 - 5.0 PPB	I:\ACQUDATA\MSVOA6\DATA\012714\L2836.D	1/27/14 23:24
07	RC1400006-07	STD#7 - 10 PPB	I:\ACQUDATA\MSVOA6\DATA\012714\L2837.D	1/27/14 23:54
08	RC1400006-08	STD#8 - 20 PPB	I:\ACQUDATA\MSVOA6\DATA\012714\L2838.D	1/28/14 00:24
09	RC1400006-09	STD#9 - 50 PPB	I:\ACQUDATA\MSVOA6\DATA\012714\L2839.D	1/28/14 00:54
10	RC1400006-10	STD#10 - 100 PPB	I:\ACQUDATA\MSVOA6\DATA\012714\L2840.D	1/28/14 01:24
11	RC1400006-11	STD#11 - 200 PPB	I:\ACQUDATA\MSVOA6\DATA\012714\L2841.D	1/28/14 01:54

Analyte — **Curve Fit** — **Weighting**

1,1,1-Trichloroethane (TCA) — Average RF — RSD = 4.9 — Average RF = 4.690

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	4.709	04	1.000	4.475	05	2.000	4.815	06	5.000	4.911
07	10.000	4.957	08	20.000	4.350	09	50.000	4.941	10	100.000	4.546
11	200.000	4.503									

1,1,2,2-Tetrachloroethane — Average RF — RSD = 7.2 — Average RF = 0.4286

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	0.4369	04	1.000	0.3705	05	2.000	0.3929	06	5.000	0.4456
07	10.000	0.4137	08	20.000	0.4549	09	50.000	0.4663	10	100.000	0.4387
11	200.000	0.4384									

1,1,2-Trichloroethane — Average RF — RSD = 5.6 — Average RF = 0.3619

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	0.3566	04	1.000	0.3461	05	2.000	0.3411	06	5.000	0.3796
07	10.000	0.3672	08	20.000	0.3502	09	50.000	0.3948	10	100.000	0.3833
11	200.000	0.3381									

1,1,2-Trichlorotrifluoroethane — Average RF — RSD = 6.0 — Average RF = 2.824

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	2.582	04	1.000	2.942	05	2.000	2.896	06	5.000	3.048
07	10.000	2.902	08	20.000	2.605	09	50.000	2.984	10	100.000	2.761
11	200.000	2.697									

1,1-Dichloroethane (1,1-DCA) — Average RF — RSD = 6.1 — Average RF = 5.226

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	5.033	04	1.000	5.551	05	2.000	5.152	06	5.000	5.510
07	10.000	5.489	08	20.000	5.021	09	50.000	5.586	10	100.000	5.016
11	200.000	4.678									

1,1-Dichloroethene (1,1-DCE) — Average RF — RSD = 4.9 — Average RF = 2.708

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	2.499	04	1.000	2.727	05	2.000	2.781	06	5.000	2.690
07	10.000	2.832	08	20.000	2.559	09	50.000	2.930	10	100.000	2.715
11	200.000	2.641									

Initial Calibration - Detailed Report

Calibration ID:	RC1400006	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte | **Curve Fit** | **Weighting**

1,2-Dibromoethane — Average RF | RSD = 6.2 | Average RF = 0.3803

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	0.3457	04	1.000	0.3563	05	2.000	0.3607	06	5.000	0.3986
07	10.000	0.3678	08	20.000	0.3947	09	50.000	0.4140	10	100.000	0.4008
11	200.000	0.3843									

1,2-Dichloro-1,1,2-trifluoroethane (CFC — Average RF | RSD = 8.0 | Average RF = 3.696

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	3.041	04	1.000	3.973	05	2.000	3.931	06	5.000	3.687
07	10.000	3.575	08	20.000	3.724	09	50.000	3.773	10	100.000	3.863

1,2-Dichlorobenzene — Average RF | RSD = 6.6 | Average RF = 0.9304

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	0.8953	04	1.000	0.8495	05	2.000	0.9786	06	5.000	1.034
07	10.000	0.9079	08	20.000	0.9465	09	50.000	0.9622	10	100.000	0.8688

1,2-Dichloroethane — Average RF | RSD = 4.8 | Average RF = 3.479

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	3.815	04	1.000	3.393	05	2.000	3.390	06	5.000	3.632
07	10.000	3.513	08	20.000	3.318	09	50.000	3.564	10	100.000	3.371
11	200.000	3.314									

1,2-Dichloroethane-d4 — Average RF | RSD = 1.9 | Average RF = 1.979

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
11	30.000	1.945	07	30.000	2.001	10	30.000	2.025	06	30.000	2.008
02	30.000	1.991	09	30.000	2.000	05	30.000	2.021	03	30.000	1.964
01	30.000	1.900	08	30.000	1.944	04	30.000	1.968			

1,2-Dichloropropane — Average RF | RSD = 8.5 | Average RF = 0.4880

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	0.4180	04	1.000	0.4619	05	2.000	0.4508	06	5.000	0.5445
07	10.000	0.5030	08	20.000	0.5113	09	50.000	0.5384	10	100.000	0.4934
11	200.000	0.4709									

1,3-Dichlorobenzene — Average RF | RSD = 4.3 | Average RF = 1.034

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	1.058	04	1.000	1.037	05	2.000	1.026	06	5.000	1.091
07	10.000	1.029	08	20.000	1.039	09	50.000	1.053	10	100.000	0.9369

1,4-Dichlorobenzene — Average RF | RSD = 6.6 | Average RF = 1.048

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	1.177	04	1.000	1.014	05	2.000	1.024	06	5.000	1.114
07	10.000	1.014	08	20.000	1.030	09	50.000	1.060	10	100.000	0.9522

1-Bromo-2-chloroethane — Average RF | RSD = 7.9 | Average RF = 0.5911

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	0.5107	04	1.000	0.6318	05	2.000	0.5874	06	5.000	0.5923
07	10.000	0.5618	08	20.000	0.6537	09	50.000	0.6180	10	100.000	0.6237
11	200.000	0.5402									

1-Chloro-4-(trifluoromethyl)benzene — Average RF | RSD = 5.2 | Average RF = 0.6468

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	0.6593	04	1.000	0.5943	05	2.000	0.6588	06	5.000	0.6499
07	10.000	0.6487	08	20.000	0.6871	09	50.000	0.6753	10	100.000	0.6588
11	200.000	0.5887									

Initial Calibration - Detailed Report

Calibration ID:	RC1400006	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte — **Curve Fit**: Average RF — **Weighting**

2,2-Dichloro-1,1,1-trifluoroethane (CFC — Average RF — RSD = 3.0 — Average RF = 4.578

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	4.625	04	1.000	4.524	05	2.000	4.765	06	5.000	4.619
07	10.000	4.417	08	20.000	4.385	09	50.000	4.731	10	100.000	4.556

2-Butanone (MEK) — Average RF — RSD = 10.6 — Average RF = 0.8562

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	5.000	0.7240	07	10.000	0.7882	08	20.000	0.8313	09	50.000	0.9402
10	100.000	0.9507	11	200.000	0.9030						

2-Chloroethyl Vinyl Ether — Average RF — RSD = 10.7 — Average RF = 0.1879

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	1.000	0.1623	05	2.000	0.1669	06	5.000	0.1844	07	10.000	0.1725
08	20.000	0.2030	09	50.000	0.2060	10	100.000	0.2179	11	200.000	0.1900

2-Hexanone — Average RF — RSD = 13.0 — Average RF = 0.2277

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	5.000	0.2076	07	10.000	0.1812	08	20.000	0.2271	09	50.000	0.2557
10	100.000	0.2587	11	200.000	0.2360						

2-Methyl-1,3-dioxolane — Average RF — RSD = 16.1 — Average RF = 0.2302

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	5.000	0.1603	05	10.000	0.1972	06	25.000	0.2473	07	50.000	0.2327
08	100.000	0.2179	09	250.000	0.2734	10	500.000	0.2574	11	1000.000	0.2553

2-Methyl-1-propanol — Average RF — RSD = 7.2 — Average RF = 0.06558

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	100.000	0.06190	07	200.000	0.06062	08	400.000	0.06283	09	1000.000	0.07312
10	2000.000	0.06644	11	4000.000	0.06856						

2-Methyl-2-propanol — Average RF — RSD = 9.5 — Average RF = 0.1429

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	10.000	0.1420	04	20.000	0.1200	05	40.000	0.1303	06	100.000	0.1441
07	200.000	0.1405	08	400.000	0.1432	09	1000.000	0.1682	10	2000.000	0.1551
11	4000.000	0.1426									

2-Propanol — Average RF — RSD = 7.5 — Average RF = 0.09282

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	20.000	0.08558	05	40.000	0.08622	06	100.000	0.09440	07	200.000	0.08915
08	400.000	0.09129	09	1000.000	0.1062	10	2000.000	0.09898	11	4000.000	0.09073

4-Bromofluorobenzene — Average RF — RSD = 4.2 — Average RF = 0.4834

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	30.000	0.4740	01	30.000	0.4872	06	30.000	0.5165	02	30.000	0.4781
09	30.000	0.4641	05	30.000	0.4790	10	30.000	0.4859	07	30.000	0.4616
11	30.000	0.4654	04	30.000	0.4816	08	30.000	0.5241			

4-Methyl-2-pentanone — Average RF — RSD = 9.0 — Average RF = 0.3172

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	5.000	0.2979	07	10.000	0.2801	08	20.000	0.3247	09	50.000	0.3465
10	100.000	0.3512	11	200.000	0.3029						

Acetone — Average RF — RSD = 7.8 — Average RF = 0.7669

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	5.000	0.8055	07	10.000	0.7307	08	20.000	0.6998	09	50.000	0.8609
10	100.000	0.7785	11	200.000	0.7262						

Initial Calibration - Detailed Report

Calibration ID:	RC1400006	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte — **Curve Fit** — **Weighting**

Acetonitrile — Average RF — RSD = 7.3 — Average RF = 0.2777

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	5.000	0.2538	05	10.000	0.2572	06	25.000	0.2761	07	50.000	0.2618
08	100.000	0.2789	09	250.000	0.3127	10	500.000	0.2978	11	1000.000	0.2833

Acrolein — Average RF — RSD = 14.9 — Average RF = 0.3412

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	5.000	0.2402	05	10.000	0.3107	06	25.000	0.3736	07	50.000	0.3435
08	100.000	0.3607	09	250.000	0.3830	10	500.000	0.3764			

Acrylonitrile — Average RF — RSD = 6.1 — Average RF = 0.6759

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.500	0.6113	04	5.000	0.6466	05	10.000	0.6648	06	25.000	0.6953
07	50.000	0.6535	08	100.000	0.6879	09	250.000	0.7466	10	500.000	0.7011

Amyl Acetate — Average RF — RSD = 12.3 — Average RF = 0.6450

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	2.000	0.5308	06	5.000	0.6543	07	10.000	0.5882	08	20.000	0.7294
09	50.000	0.7318	10	100.000	0.6972	11	200.000	0.5835			

Benzene — Average RF — RSD = 9.5 — Average RF = 1.858

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	1.812	04	1.000	1.779	05	2.000	1.794	06	5.000	1.970
07	10.000	2.000	08	20.000	1.837	09	50.000	2.153	10	100.000	1.854
11	200.000	1.520									

Bromodichloromethane — Average RF — RSD = 11.0 — Average RF = 0.6629

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	0.200	0.8329	03	0.500	0.5636	04	1.000	0.6370	05	2.000	0.6146
06	5.000	0.6912	07	10.000	0.6551	08	20.000	0.6692	09	50.000	0.7058
10	100.000	0.6551	11	200.000	0.6041						

Bromoform — Average RF — RSD = 9.5 — Average RF = 0.3022

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	0.2892	04	1.000	0.2664	05	2.000	0.2674	06	5.000	0.3067
07	10.000	0.2796	08	20.000	0.3057	09	50.000	0.3279	10	100.000	0.3323
11	200.000	0.3449									

Bromomethane — Average RF — RSD = 5.6 — Average RF = 2.307

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	2.500	04	1.000	2.179	05	2.000	2.511	06	5.000	2.377
07	10.000	2.298	08	20.000	2.235	09	50.000	2.275	10	100.000	2.182
11	200.000	2.202									

Carbon Disulfide — Average RF — RSD = 4.7 — Average RF = 9.127

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	8.970	04	1.000	9.147	05	2.000	9.450	06	5.000	9.143
07	10.000	8.933	08	20.000	9.779	09	50.000	9.297	10	100.000	8.297

Carbon Tetrachloride — Average RF — RSD = 8.4 — Average RF = 0.6184

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	0.6788	04	1.000	0.5448	05	2.000	0.5641	06	5.000	0.6127
07	10.000	0.6357	08	20.000	0.5746	09	50.000	0.7006	10	100.000	0.6413
11	200.000	0.6129									

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Initial Calibration - Detailed Report

Calibration ID:	RC1400006	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte **Curve Fit** **Weighting**

Chlorobenzene Average RF RSD = 6.5 Average RF = 1.342

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	1.362	04	1.000	1.321	05	2.000	1.325	06	5.000	1.459
07	10.000	1.395	08	20.000	1.333	09	50.000	1.380	10	100.000	1.158

Chloroethane Average RF RSD = 7.4 Average RF = 2.130

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	1.934	04	1.000	2.202	05	2.000	2.374	06	5.000	2.110
07	10.000	2.277	08	20.000	1.988	09	50.000	2.277	10	100.000	2.029
11	200.000	1.981									

Chloroform Average RF RSD = 7.0 Average RF = 5.414

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	0.200	6.081	03	0.500	5.458	04	1.000	5.527	05	2.000	4.912
06	5.000	5.662	07	10.000	5.608	08	20.000	5.140	09	50.000	5.685
10	100.000	5.152	11	200.000	4.910						

Chloromethane Average RF RSD = 6.7 Average RF = 3.753

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	0.200	3.718	03	0.500	4.123	04	1.000	3.588	05	2.000	3.614
06	5.000	4.023	07	10.000	3.915	08	20.000	3.577	09	50.000	3.880
10	100.000	3.339									

Cyclohexane Average RF RSD = 4.1 Average RF = 4.920

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	5.132	04	1.000	4.845	05	2.000	4.818	06	5.000	4.812
07	10.000	4.868	08	20.000	4.663	09	50.000	5.185	10	100.000	5.214
11	200.000	4.742									

Dibromochloromethane Average RF RSD = 7.0 Average RF = 0.4766

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.100	0.4977	02	0.200	0.4722	03	0.500	0.4098	04	1.000	0.4465
05	2.000	0.4535	06	5.000	0.5126	07	10.000	0.4600	08	20.000	0.4924
09	50.000	0.5228	10	100.000	0.5048	11	200.000	0.4703			

Dibromomethane Average RF RSD = 7.4 Average RF = 0.2627

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	0.2442	04	1.000	0.2442	05	2.000	0.2393	06	5.000	0.2711
07	10.000	0.2520	08	20.000	0.2885	09	50.000	0.2900	10	100.000	0.2752
11	200.000	0.2599									

Dichlorodifluoromethane (CFC 12) Average RF RSD = 5.5 Average RF = 2.791

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	2.742	04	1.000	2.703	05	2.000	2.715	06	5.000	3.015
07	10.000	2.968	08	20.000	2.633	09	50.000	2.926	10	100.000	2.629

Dichlorofluoromethane (CFC 21) Average RF RSD = 5.5 Average RF = 5.797

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	5.713	04	1.000	6.239	05	2.000	6.166	06	5.000	5.805
07	10.000	5.647	08	20.000	5.883	09	50.000	5.705	10	100.000	5.219

Dichloromethane Average RF RSD = 5.4 Average RF = 3.251

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	3.432	04	1.000	3.301	05	2.000	3.539	06	5.000	3.171
07	10.000	3.225	08	20.000	3.172	09	50.000	3.347	10	100.000	3.113
11	200.000	2.954									

Initial Calibration - Detailed Report

Calibration ID: RC1400006 **Instrument ID:** R-MS-06
Signal ID: 1

Analyte **Curve Fit** Average RF **Weighting**

Epichlorohydrin Average RF RSD = 19.3 Average RF = 0.02130

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	5.000	0.01340	05	10.000	0.01809	06	25.000	0.02102	07	50.000	0.02014
08	100.000	0.02304	09	250.000	0.02578	10	500.000	0.02506	11	1000.000	0.02385

Ethyl Acetate Average RF RSD = 21.3 Average RF = 1.653

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	2.000	1.177	05	4.000	1.217	06	10.000	1.612	07	20.000	1.649
08	40.000	1.870	09	100.000	2.076	10	200.000	1.972			

Ethylbenzene Average RF RSD = 5.9 Average RF = 0.6986

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	0.7448	04	1.000	0.6566	05	2.000	0.6983	06	5.000	0.7404
07	10.000	0.7096	08	20.000	0.7000	09	50.000	0.7364	10	100.000	0.6816
11	200.000	0.6194									

Isopropyl Acetate Average RF RSD = 14.7 Average RF = 0.6406

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	2.000	0.4807	06	5.000	0.5801	07	10.000	0.6144	08	20.000	0.6503
09	50.000	0.7626	10	100.000	0.7267	11	200.000	0.6691			

Methyl tert-Butyl Ether Average RF RSD = 7.3 Average RF = 6.403

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	5.641	04	1.000	6.422	05	2.000	6.150	06	5.000	6.793
07	10.000	6.559	08	20.000	6.695	09	50.000	7.032	10	100.000	6.583
11	200.000	5.751									

Naphthalene Average RF RSD = 10.7 Average RF = 0.7768

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	0.7261	04	1.000	0.6783	05	2.000	0.6962	06	5.000	0.8465
07	10.000	0.7668	08	20.000	0.8615	09	50.000	0.8889	10	100.000	0.8381
11	200.000	0.6892									

Styrene Average RF RSD = 8.2 Average RF = 1.345

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	1.273	04	1.000	1.206	05	2.000	1.305	06	5.000	1.431
07	10.000	1.317	08	20.000	1.545	09	50.000	1.416	10	100.000	1.267

Tetrachloroethene (PCE) Average RF RSD = 3.5 Average RF = 0.4369

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	0.200	0.4315	03	0.500	0.4514	04	1.000	0.4205	05	2.000	0.4447
06	5.000	0.4266	07	10.000	0.4499	08	20.000	0.4199	09	50.000	0.4645
10	100.000	0.4244	11	200.000	0.4357						

Tetrahydrofuran (THF) Average RF RSD = 8.7 Average RF = 0.5319

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	2.000	0.4980	06	5.000	0.5714	07	10.000	0.4728	08	20.000	0.4876
09	50.000	0.5923	10	100.000	0.5383	11	200.000	0.5628			

Toluene Average RF RSD = 7.6 Average RF = 1.991

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	2.057	04	1.000	1.866	05	2.000	2.022	06	5.000	2.160
07	10.000	2.045	08	20.000	1.963	09	50.000	2.125	10	100.000	1.690

Initial Calibration - Detailed Report

Calibration ID: RC1400006 **Instrument ID:** R-MS-06
Signal ID: 1

Analyte **Curve Fit** Weighting

Toluene-d8 Average RF RSD = 3.1 Average RF = 1.237

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
07	30.000	1.220	03	30.000	1.268	09	30.000	1.239	05	30.000	1.235
02	30.000	1.210	10	30.000	1.325	01	30.000	1.196	11	30.000	1.187
08	30.000	1.236	04	30.000	1.231	06	30.000	1.257			

Trichloroethene (TCE) Average RF RSD = 5.7 Average RF = 0.5177

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.100	0.5095	02	0.200	0.4901	03	0.500	0.5321	04	1.000	0.4607
05	2.000	0.5012	06	5.000	0.5130	07	10.000	0.5505	08	20.000	0.5242
09	50.000	0.5702	10	100.000	0.5324	11	200.000	0.5102			

Trichlorofluoromethane (CFC 11) Average RF RSD = 6.1 Average RF = 4.558

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	4.842	04	1.000	4.256	05	2.000	4.780	06	5.000	4.762
07	10.000	4.590	08	20.000	4.162	09	50.000	4.775	10	100.000	4.300

Vinyl Chloride Average RF RSD = 8.5 Average RF = 3.853

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	0.200	4.566	03	0.500	3.648	04	1.000	3.541	05	2.000	3.752
06	5.000	4.052	07	10.000	3.870	08	20.000	3.579	09	50.000	4.039
10	100.000	3.626									

cis-1,2-Dichloroethene Average RF RSD = 8.6 Average RF = 3.399

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	4.130	04	1.000	3.244	05	2.000	3.291	06	5.000	3.330
07	10.000	3.406	08	20.000	3.250	09	50.000	3.525	10	100.000	3.233
11	200.000	3.185									

cis-1,3-Dichloropropene Average RF RSD = 8.7 Average RF = 0.7015

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	0.6329	04	1.000	0.6621	05	2.000	0.6405	06	5.000	0.7694
07	10.000	0.7349	08	20.000	0.7451	09	50.000	0.7788	10	100.000	0.7223
11	200.000	0.6273									

m,p-Xylenes Average RF RSD = 4.9 Average RF = 0.8555

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	1.000	0.8692	04	2.000	0.8381	05	4.000	0.8536	06	10.000	0.8802
07	20.000	0.8477	08	40.000	0.9063	09	100.000	0.8816	10	200.000	0.7673

n-Butyl Acetate Average RF RSD = 15.9 Average RF = 0.4938

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	1.000	0.4143	04	2.000	0.4016	05	4.000	0.4296	06	10.000	0.5205
07	20.000	0.5091	08	40.000	0.5738	09	100.000	0.6227	10	200.000	0.5412
11	400.000	0.4313									

n-Heptane Average RF RSD = 5.0 Average RF = 0.4267

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	0.4063	04	1.000	0.4143	05	2.000	0.4043	06	5.000	0.4231
07	10.000	0.4036	08	20.000	0.4501	09	50.000	0.4476	10	100.000	0.4585
11	200.000	0.4328									

o-Xylene Average RF RSD = 5.6 Average RF = 0.8494

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	0.8555	04	1.000	0.7769	05	2.000	0.8024	06	5.000	0.8968
07	10.000	0.8429	08	20.000	0.9061	09	50.000	0.8953	10	100.000	0.8195

Initial Calibration - Detailed Report

Calibration ID:	RC1400006	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte **Curve Fit** **Weighting**

trans-1,2-Dichloroethene Average RF RSD = 4.4 Average RF = 2.936

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	2.818	04	1.000	2.979	05	2.000	2.829	06	5.000	3.055
07	10.000	3.016	08	20.000	2.837	09	50.000	3.176	10	100.000	2.909
11	200.000	2.807									

trans-1,3-Dichloropropene Average RF RSD = 7.2 Average RF = 0.5736

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	0.5723	04	1.000	0.5229	05	2.000	0.5330	06	5.000	0.6187
07	10.000	0.5622	08	20.000	0.5765	09	50.000	0.6329	10	100.000	0.6145
11	200.000	0.5290									

Initial Calibration - Detailed Report

Calibration ID: RC1400006 **Instrument ID:** R-MS-06
Signal ID: 1

Analyte

1,1,1-Trichloroethane (TCA)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.50	0.4	04	1.000	0.95	-4.6	05	2.000	2.05	2.7
06	5.000	5.24	4.7	07	10.000	10.57	5.7	08	20.000	18.55	-7.2
09	50.000	52.68	5.4	10	100.000	96.93	-3.1	11	200.000	192.04	-4.0

1,1,2,2-Tetrachloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.51	1.9	04	1.000	0.86	-13.6	05	2.000	1.83	-8.3
06	5.000	5.20	3.9	07	10.000	9.65	-3.5	08	20.000	21.22	6.1
09	50.000	54.39	8.8	10	100.000	102.35	2.3	11	200.000	204.53	2.3

1,1,2-Trichloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.49	-1.5	04	1.000	0.96	-4.4	05	2.000	1.88	-5.8
06	5.000	5.24	4.9	07	10.000	10.15	1.5	08	20.000	19.35	-3.2
09	50.000	54.55	9.1	10	100.000	105.91	5.9	11	200.000	186.85	-6.6

1,1,2-Trichlorotrifluoroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.46	-8.6	04	1.000	1.04	4.2	05	2.000	2.05	2.5
06	5.000	5.40	7.9	07	10.000	10.28	2.8	08	20.000	18.45	-7.8
09	50.000	52.83	5.7	10	100.000	97.75	-2.2	11	200.000	190.98	-4.5

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

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.48	-3.7	04	1.000	1.06	6.2	05	2.000	1.97	-1.4
06	5.000	5.27	5.4	07	10.000	10.50	5.0	08	20.000	19.21	-3.9
09	50.000	53.44	6.9	10	100.000	95.97	-4.0	11	200.000	179.03	-10.5

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

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.46	-7.7	04	1.000	1.01	0.7	05	2.000	2.05	2.7
06	5.000	4.97	-0.7	07	10.000	10.46	4.6	08	20.000	18.90	-5.5
09	50.000	54.09	8.2	10	100.000	100.25	0.3	11	200.000	195.06	-2.5

1,2-Dibromoethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.45	-9.1	04	1.000	0.94	-6.3	05	2.000	1.90	-5.2
06	5.000	5.24	4.8	07	10.000	9.67	-3.3	08	20.000	20.76	3.8
09	50.000	54.42	8.8	10	100.000	105.38	5.4	11	200.000	202.10	1.0

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

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.41	-17.7	04	1.000	1.08	7.5	05	2.000	2.13	6.4
06	5.000	4.99	-0.2	07	10.000	9.67	-3.3	08	20.000	20.15	0.8
09	50.000	51.05	2.1	10	100.000	104.52	4.5				

Initial Calibration - Detailed Report

Calibration ID:	RC1400006	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte

1,2-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.48	-3.8	04	1.000	0.91	-8.7	05	2.000	2.10	5.2
06	5.000	5.56	11.2	07	10.000	9.76	-2.4	08	20.000	20.35	1.7
09	50.000	51.71	3.4	10	100.000	93.38	-6.6				

1,2-Dichloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.55	9.7	04	1.000	0.98	-2.5	05	2.000	1.95	-2.6
06	5.000	5.22	4.4	07	10.000	10.10	1.0	08	20.000	19.07	-4.6
09	50.000	51.23	2.5	10	100.000	96.89	-3.1	11	200.000	190.51	-4.7

1,2-Dichloroethane-d4

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
11	30.000	29.48	-1.7	07	30.000	30.34	1.1	10	30.000	30.71	2.4
06	30.000	30.45	1.5	02	30.000	30.18	0.6	09	30.000	30.32	1.1
05	30.000	30.64	2.1	03	30.000	29.78	-0.7	01	30.000	28.80	-4.0
08	30.000	29.48	-1.7	04	30.000	29.83	-0.6				

1,2-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.43	-14.3	04	1.000	0.95	-5.3	05	2.000	1.85	-7.6
06	5.000	5.58	11.6	07	10.000	10.31	3.1	08	20.000	20.95	4.8
09	50.000	55.16	10.3	10	100.000	101.10	1.1	11	200.000	193.00	-3.5

1,3-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.51	2.3	04	1.000	1.00	0.3	05	2.000	1.98	-0.8
06	5.000	5.27	5.5	07	10.000	9.95	-0.5	08	20.000	20.10	0.5
09	50.000	50.95	1.9	10	100.000	90.63	-9.4				

1,4-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.56	12.3	04	1.000	0.97	-3.3	05	2.000	1.95	-2.3
06	5.000	5.32	6.3	07	10.000	9.68	-3.2	08	20.000	19.65	-1.8
09	50.000	50.55	1.1	10	100.000	90.84	-9.2				

1-Bromo-2-chloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.43	-13.6	04	1.000	1.07	6.9	05	2.000	1.99	-0.6
06	5.000	5.01	0.2	07	10.000	9.51	-4.9	08	20.000	22.12	10.6
09	50.000	52.28	4.6	10	100.000	105.51	5.5	11	200.000	182.79	-8.6

1-Chloro-4-(trifluoromethyl)benzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.51	1.9	04	1.000	0.92	-8.1	05	2.000	2.04	1.9
06	5.000	5.02	0.5	07	10.000	10.03	0.3	08	20.000	21.25	6.2
09	50.000	52.21	4.4	10	100.000	101.85	1.9	11	200.000	182.04	-9.0

Initial Calibration - Detailed Report

Calibration ID:	RC1400006	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte

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

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.51	1.0	04	1.000	0.99	-1.2	05	2.000	2.08	4.1
06	5.000	5.04	0.9	07	10.000	9.65	-3.5	08	20.000	19.16	-4.2
09	50.000	51.67	3.3	10	100.000	99.53	-0.5				

2-Butanone (MEK)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	5.000	4.23	-15.4	07	10.000	9.21	-7.9	08	20.000	19.42	-2.9
09	50.000	54.90	9.8	10	100.000	111.03	11.0	11	200.000	210.92	5.5

2-Chloroethyl Vinyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
04	1.000	0.86	-13.6	05	2.000	1.78	-11.2	06	5.000	4.91	-1.9
07	10.000	9.18	-8.2	08	20.000	21.61	8.1	09	50.000	54.82	9.6
10	100.000	116.00	16.0	11	200.000	202.24	1.1				

2-Hexanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	5.000	4.56	-8.8	07	10.000	7.96	-20.4	08	20.000	19.95	-0.3
09	50.000	56.14	12.3	10	100.000	113.62	13.6	11	200.000	207.27	3.6

2-Methyl-1,3-dioxolane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
04	5.000	3.48	-30.4	05	10.000	8.57	-14.3	06	25.000	26.86	7.4
07	50.000	50.54	1.1	08	100.000	94.67	-5.3	09	250.000	296.89	18.8
10	500.000	559.15	11.8	11	1000.000	1,109.24	10.9				

2-Methyl-1-propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	100.000	94.39	-5.6	07	200.000	184.88	-7.6	08	400.000	383.22	-4.2
09	1000.000	1,115.03	11.5	10	2000.000	2,026.30	1.3	11	4000.000	4,181.98	4.5

2-Methyl-2-propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	10.000	9.94	-0.6	04	20.000	16.79	-16.0	05	40.000	36.47	-8.8
06	100.000	100.87	0.9	07	200.000	196.70	-1.7	08	400.000	400.97	0.2
09	1000.000	1,177.41	17.7	10	2000.000	2,170.66	8.5	11	4000.000	3,990.64	-0.2

2-Propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
04	20.000	18.44	-7.8	05	40.000	37.16	-7.1	06	100.000	101.71	1.7
07	200.000	192.09	-4.0	08	400.000	393.43	-1.6	09	1000.000	1,143.91	14.4
10	2000.000	2,132.77	6.6	11	4000.000	3,910.10	-2.2				

Initial Calibration - Detailed Report

Calibration ID:	**RC1400006**	**Instrument ID:**	**R-MS-06**
		Signal ID:	**1**

Analyte

4-Bromofluorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	30.000	29.42	-1.9	01	30.000	30.23	0.8	06	30.000	32.05	6.8
02	30.000	29.67	-1.1	09	30.000	28.80	-4.0	05	30.000	29.73	-0.9
10	30.000	30.15	0.5	07	30.000	28.64	-4.5	11	30.000	28.88	-3.7
04	30.000	29.89	-0.4	08	30.000	32.52	8.4				

4-Methyl-2-pentanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	5.000	4.70	-6.1	07	10.000	8.83	-11.7	08	20.000	20.47	2.4
09	50.000	54.62	9.2	10	100.000	110.72	10.7	11	200.000	190.94	-4.5

Acetone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	5.000	5.25	5.0	07	10.000	9.53	-4.7	08	20.000	18.25	-8.8
09	50.000	56.13	12.3	10	100.000	101.50	1.5	11	200.000	189.37	-5.3

Acetonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
04	5.000	4.57	-8.6	05	10.000	9.26	-7.4	06	25.000	24.86	-0.6
07	50.000	47.14	-5.7	08	100.000	100.44	0.4	09	250.000	281.47	12.6
10	500.000	536.12	7.2	11	1000.000	1,020.10	2.0				

Acrolein

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
04	5.000	3.52	-29.6	05	10.000	9.11	-8.9	06	25.000	27.37	9.5
07	50.000	50.34	0.7	08	100.000	105.73	5.7	09	250.000	280.67	12.3
10	500.000	551.66	10.3								

Acrylonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.500	2.26	-9.6	04	5.000	4.78	-4.3	05	10.000	9.84	-1.6
06	25.000	25.72	2.9	07	50.000	48.35	-3.3	08	100.000	101.78	1.8
09	250.000	276.17	10.5	10	500.000	518.63	3.7				

Amyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
05	2.000	1.65	-17.7	06	5.000	5.07	1.4	07	10.000	9.12	-8.8
08	20.000	22.61	13.1	09	50.000	56.72	13.4	10	100.000	108.10	8.1
11	200.000	180.91	-9.5								

Benzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.49	-2.4	04	1.000	0.96	-4.2	05	2.000	1.93	-3.4
06	5.000	5.30	6.1	07	10.000	10.76	7.6	08	20.000	19.78	-1.1
09	50.000	57.96	15.9	10	100.000	99.79	-0.2	11	200.000	163.61	-18.2

Initial Calibration - Detailed Report

Calibration ID:	RC1400006	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte

Bromodichloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	0.200	0.25	25.6	03	0.500	0.43	-15.0	04	1.000	0.96	-3.9
05	2.000	1.85	-7.3	06	5.000	5.21	4.3	07	10.000	9.88	-1.2
08	20.000	20.19	1.0	09	50.000	53.24	6.5	10	100.000	98.83	-1.2
11	200.000	182.27	-8.9								

Bromoform

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.48	-4.3	04	1.000	0.88	-11.9	05	2.000	1.77	-11.5
06	5.000	5.07	1.5	07	10.000	9.25	-7.5	08	20.000	20.23	1.1
09	50.000	54.25	8.5	10	100.000	109.96	10.0	11	200.000	228.24	14.1

Bromomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.54	8.4	04	1.000	0.94	-5.5	05	2.000	2.18	8.9
06	5.000	5.15	3.1	07	10.000	9.96	-0.4	08	20.000	19.38	-3.1
09	50.000	49.32	-1.4	10	100.000	94.59	-5.4	11	200.000	190.91	-4.5

Carbon Disulfide

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.49	-1.7	04	1.000	1.00	0.2	05	2.000	2.07	3.5
06	5.000	5.01	0.2	07	10.000	9.79	-2.1	08	20.000	21.43	7.1
09	50.000	50.93	1.9	10	100.000	90.91	-9.1				

Carbon Tetrachloride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.55	9.8	04	1.000	0.88	-11.9	05	2.000	1.82	-8.8
06	5.000	4.95	-0.9	07	10.000	10.28	2.8	08	20.000	18.58	-7.1
09	50.000	56.64	13.3	10	100.000	103.71	3.7	11	200.000	198.22	-0.9

Chlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.51	1.5	04	1.000	0.98	-1.5	05	2.000	1.97	-1.3
06	5.000	5.44	8.7	07	10.000	10.40	4.0	08	20.000	19.87	-0.7
09	50.000	51.44	2.9	10	100.000	86.30	-13.7				

Chloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.45	-9.2	04	1.000	1.03	3.3	05	2.000	2.23	11.4
06	5.000	4.95	-0.9	07	10.000	10.69	6.9	08	20.000	18.66	-6.7
09	50.000	53.45	6.9	10	100.000	95.27	-4.7	11	200.000	185.95	-7.0

Chloroform

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	0.200	0.22	12.3	03	0.500	0.50	0.8	04	1.000	1.02	2.1
05	2.000	1.81	-9.3	06	5.000	5.23	4.6	07	10.000	10.36	3.6
08	20.000	18.99	-5.1	09	50.000	52.50	5.0	10	100.000	95.17	-4.8
11	200.000	181.38	-9.3								

Initial Calibration - Detailed Report

Calibration ID: RC1400006 **Instrument ID:** R-MS-06
Signal ID: 1

Analyte

Chloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	0.200	0.20	-0.9	03	0.500	0.55	9.8	04	1.000	0.96	-4.4
05	2.000	1.93	-3.7	06	5.000	5.36	7.2	07	10.000	10.43	4.3
08	20.000	19.06	-4.7	09	50.000	51.69	3.4	10	100.000	88.97	-11.0

Cyclohexane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.52	4.3	04	1.000	0.98	-1.5	05	2.000	1.96	-2.1
06	5.000	4.89	-2.2	07	10.000	9.89	-1.1	08	20.000	18.96	-5.2
09	50.000	52.70	5.4	10	100.000	105.98	6.0	11	200.000	192.78	-3.6

Dibromochloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.100	0.10	4.4	02	0.200	0.20	-0.9	03	0.500	0.43	-14.0
04	1.000	0.94	-6.3	05	2.000	1.90	-4.8	06	5.000	5.38	7.5
07	10.000	9.65	-3.5	08	20.000	20.66	3.3	09	50.000	54.85	9.7
10	100.000	105.93	5.9	11	200.000	197.37	-1.3				

Dibromomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.46	-7.1	04	1.000	0.93	-7.0	05	2.000	1.82	-8.9
06	5.000	5.16	3.2	07	10.000	9.59	-4.1	08	20.000	21.96	9.8
09	50.000	55.20	10.4	10	100.000	104.77	4.8	11	200.000	197.84	-1.1

Dichlorodifluoromethane (CFC 12)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.49	-1.8	04	1.000	0.97	-3.2	05	2.000	1.94	-2.8
06	5.000	5.40	8.0	07	10.000	10.63	6.3	08	20.000	18.86	-5.7
09	50.000	52.40	4.8	10	100.000	94.20	-5.8				

Dichlorofluoromethane (CFC 21)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.49	-1.5	04	1.000	1.08	7.6	05	2.000	2.13	6.4
06	5.000	5.01	0.1	07	10.000	9.74	-2.6	08	20.000	20.30	1.5
09	50.000	49.20	-1.6	10	100.000	90.03	-10.0				

Dichloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.53	5.6	04	1.000	1.02	1.6	05	2.000	2.18	8.9
06	5.000	4.88	-2.4	07	10.000	9.92	-0.8	08	20.000	19.52	-2.4
09	50.000	51.49	3.0	10	100.000	95.76	-4.2	11	200.000	181.75	-9.1

Epichlorohydrin

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
04	5.000	3.15	-37.1	05	10.000	8.49	-15.1	06	25.000	24.67	-1.3
07	50.000	47.27	-5.5	08	100.000	108.17	8.2	09	250.000	302.66	21.1
10	500.000	588.45	17.7	11	1000.000	1,119.89	12.0				

Initial Calibration - Detailed Report

Calibration ID:	RC1400006	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte

Ethyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
04	2.000	1.42	-28.8	05	4.000	2.95	-26.4	06	10.000	9.75	-2.5
07	20.000	19.94	-0.3	08	40.000	45.25	13.1	09	100.000	125.56	25.6
10	200.000	238.51	19.3								

Ethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.53	6.6	04	1.000	0.94	-6.0	05	2.000	2.00	0.0
06	5.000	5.30	6.0	07	10.000	10.16	1.6	08	20.000	20.04	0.2
09	50.000	52.71	5.4	10	100.000	97.57	-2.4	11	200.000	177.34	-11.3

Isopropyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
05	2.000	1.50	-25.0	06	5.000	4.53	-9.4	07	10.000	9.59	-4.1
08	20.000	20.30	1.5	09	50.000	59.53	19.1	10	100.000	113.45	13.4
11	200.000	208.92	4.5								

Methyl tert-Butyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.44	-11.9	04	1.000	1.00	0.3	05	2.000	1.92	-4.0
06	5.000	5.30	6.1	07	10.000	10.24	2.4	08	20.000	20.91	4.6
09	50.000	54.91	9.8	10	100.000	102.81	2.8	11	200.000	179.64	-10.2

Naphthalene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.47	-6.5	04	1.000	0.87	-12.7	05	2.000	1.79	-10.4
06	5.000	5.45	9.0	07	10.000	9.87	-1.3	08	20.000	22.18	10.9
09	50.000	57.21	14.4	10	100.000	107.88	7.9	11	200.000	177.43	-11.3

Styrene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.47	-5.3	04	1.000	0.90	-10.3	05	2.000	1.94	-3.0
06	5.000	5.32	6.4	07	10.000	9.79	-2.1	08	20.000	22.98	14.9
09	50.000	52.64	5.3	10	100.000	94.20	-5.8				

Tetrachloroethene (PCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	0.200	0.20	-1.2	03	0.500	0.52	3.3	04	1.000	0.96	-3.8
05	2.000	2.04	1.8	06	5.000	4.88	-2.4	07	10.000	10.30	3.0
08	20.000	19.22	-3.9	09	50.000	53.16	6.3	10	100.000	97.14	-2.9
11	200.000	199.46	-0.3								

Tetrahydrofuran (THF)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
05	2.000	1.87	-6.4	06	5.000	5.37	7.4	07	10.000	8.89	-11.1
08	20.000	18.34	-8.3	09	50.000	55.68	11.4	10	100.000	101.20	1.2
11	200.000	211.63	5.8								

Initial Calibration - Detailed Report

Calibration ID:	RC1400006	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte

Toluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.52	3.3	04	1.000	0.94	-6.3	05	2.000	2.03	1.6
06	5.000	5.42	8.5	07	10.000	10.27	2.7	08	20.000	19.72	-1.4
09	50.000	53.36	6.7	10	100.000	84.89	-15.1				

Toluene-d8

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
07	30.000	29.60	-1.3	03	30.000	30.76	2.5	09	30.000	30.04	0.1
05	30.000	29.95	-0.2	02	30.000	29.35	-2.2	10	30.000	32.14	7.1
01	30.000	29.02	-3.3	11	30.000	28.79	-4.0	08	30.000	29.98	-0.1
04	30.000	29.87	-0.4	06	30.000	30.49	1.6				

Trichloroethene (TCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.100	0.10	-1.6	02	0.200	0.19	-5.3	03	0.500	0.51	2.8
04	1.000	0.89	-11.0	05	2.000	1.94	-3.2	06	5.000	4.96	-0.9
07	10.000	10.64	6.4	08	20.000	20.25	1.3	09	50.000	55.08	10.2
10	100.000	102.85	2.8	11	200.000	197.11	-1.4				

Trichlorofluoromethane (CFC 11)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.53	6.2	04	1.000	0.93	-6.6	05	2.000	2.10	4.9
06	5.000	5.22	4.5	07	10.000	10.07	0.7	08	20.000	18.26	-8.7
09	50.000	52.38	4.8	10	100.000	94.34	-5.7				

Vinyl Chloride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	0.200	0.24	18.5	03	0.500	0.47	-5.3	04	1.000	0.92	-8.1
05	2.000	1.95	-2.6	06	5.000	5.26	5.2	07	10.000	10.04	0.4
08	20.000	18.58	-7.1	09	50.000	52.42	4.8	10	100.000	94.12	-5.9

cis-1,2-Dichloroethene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.61	21.5	04	1.000	0.95	-4.6	05	2.000	1.94	-3.2
06	5.000	4.90	-2.0	07	10.000	10.02	0.2	08	20.000	19.12	-4.4
09	50.000	51.85	3.7	10	100.000	95.12	-4.9	11	200.000	187.38	-6.3

cis-1,3-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.45	-9.8	04	1.000	0.94	-5.6	05	2.000	1.83	-8.7
06	5.000	5.48	9.7	07	10.000	10.48	4.8	08	20.000	21.24	6.2
09	50.000	55.51	11.0	10	100.000	102.97	3.0	11	200.000	178.85	-10.6

m,p-Xylenes

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	1.000	1.02	1.6	04	2.000	1.96	-2.0	05	4.000	3.99	-0.2
06	10.000	10.29	2.9	07	20.000	19.82	-0.9	08	40.000	42.38	5.9
09	100.000	103.05	3.1	10	200.000	179.38	-10.3				

Initial Calibration - Detailed Report

Calibration ID:	RC1400006	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte

n-Butyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	1.000	0.84	-16.1	04	2.000	1.63	-18.7	05	4.000	3.48	-13.0
06	10.000	10.54	5.4	07	20.000	20.62	3.1	08	40.000	46.48	16.2
09	100.000	126.10	26.1	10	200.000	219.22	9.6	11	400.000	349.41	-12.6

n-Heptane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.48	-4.8	04	1.000	0.97	-2.9	05	2.000	1.89	-5.3
06	5.000	4.96	-0.8	07	10.000	9.46	-5.4	08	20.000	21.10	5.5
09	50.000	52.45	4.9	10	100.000	107.44	7.4	11	200.000	202.84	1.4

o-Xylene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.50	0.7	04	1.000	0.91	-8.5	05	2.000	1.89	-5.5
06	5.000	5.28	5.6	07	10.000	9.92	-0.8	08	20.000	21.33	6.7
09	50.000	52.70	5.4	10	100.000	96.48	-3.5				

trans-1,2-Dichloroethene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.48	-4.0	04	1.000	1.01	1.5	05	2.000	1.93	-3.6
06	5.000	5.20	4.1	07	10.000	10.27	2.7	08	20.000	19.32	-3.4
09	50.000	54.09	8.2	10	100.000	99.07	-0.9	11	200.000	191.20	-4.4

trans-1,3-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	0.500	0.50	-0.2	04	1.000	0.91	-8.8	05	2.000	1.86	-7.1
06	5.000	5.39	7.9	07	10.000	9.80	-2.0	08	20.000	20.10	0.5
09	50.000	55.17	10.3	10	100.000	107.14	7.1	11	200.000	184.47	-7.8

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2818.D Vial: 11
Acq On : 27 Jan 2014 1:48 pm Operator: D.LIPANI
Sample : STD #1 - 0.1 PPB STD Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 10:56 2014 Quant Results File: 6240127.RES

Quant Method : I:\ACQUDATA\M...\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Fri Nov 01 09:01:07 2013
Response via : Initial Calibration
DataAcq Meth : 6240127

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	3.48	128	101016	30.00	ug/L	0.00
34) 1,4-Difluorobenzene	5.72	114	684666	30.00	ug/L	0.00
52) d5-Chlorobenzene	9.09	117	644717	30.00	ug/L	0.00
System Monitoring Compounds						
29) SURR1,1,2-Diclethane-d4	4.29	65	189276	30.41	ug/L	0.00
Spiked Amount 30.000	Range 81 - 127		Recovery = 101.37%			
50) SURR3,Toluene-d8	7.77	98	817168	30.01	ug/L	0.00
Spiked Amount 30.000	Range 83 - 120		Recovery = 100.03%			
67) SURR2,BFB	10.14	95	308044	30.17	ug/L	0.00
Spiked Amount 30.000	Range 79 - 123		Recovery = 100.57%			
Target Compounds						Qvalue
40) Trichloroethene	6.17	130	1110m	0.10	ug/L	
53) Dibromochloromethane	8.11	129	721m	0.09	ug/L	

DL 1/29/14

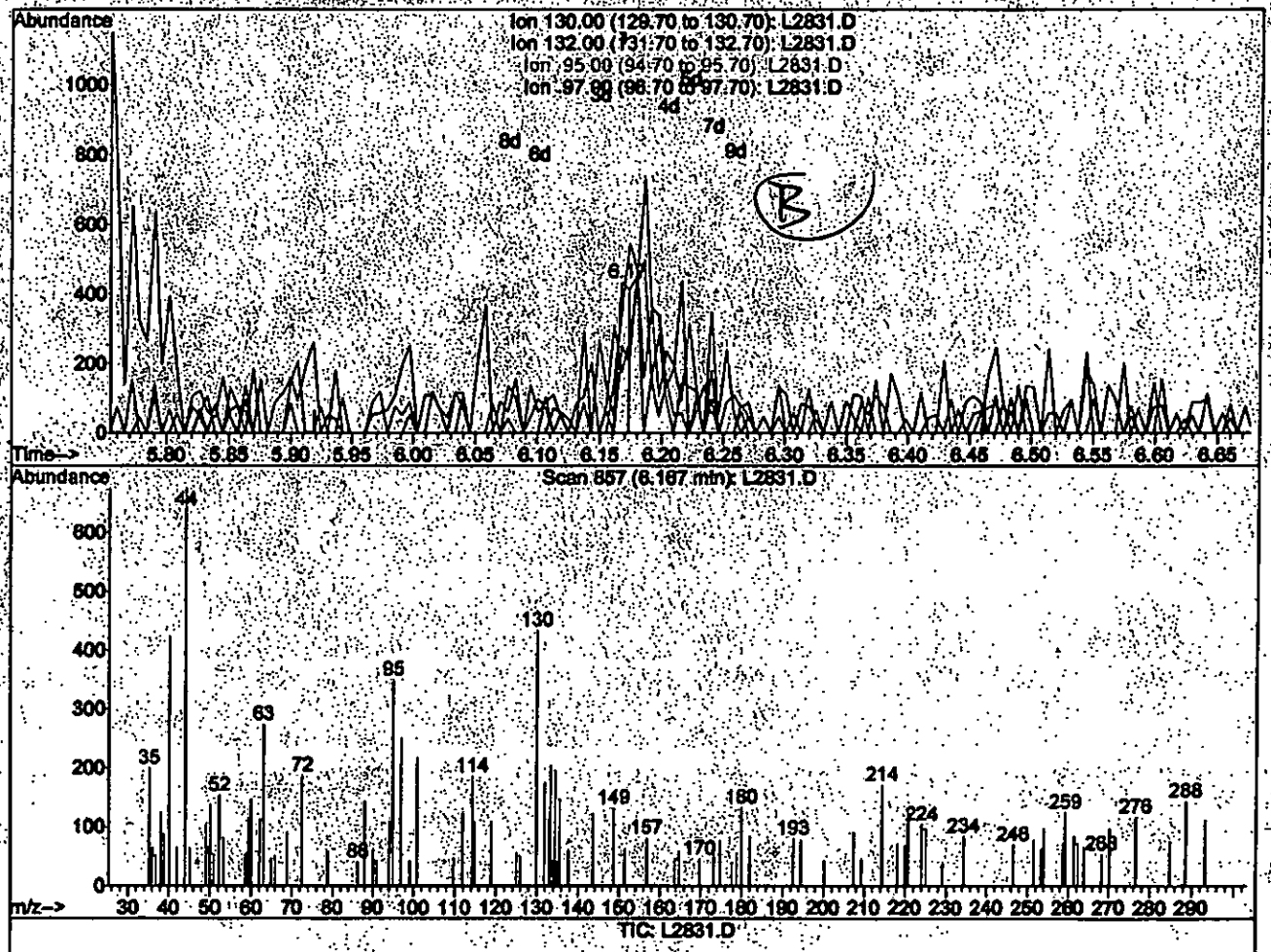
(#) = qualifier out of range (m) = manual integration
L2818.D 6240127.M Wed Jan 29 10:56:53 2014

00053

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2831.D Vial: 24
Acq On : 27 Jan 2014 8:50 pm Operator: D.LIPANI
Sample : STD#1 0.1 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 7:41 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 07:37:58 2014
Response via : Multiple Level Calibration



(41) Trichloroethene

6.17min 0.03ug/L

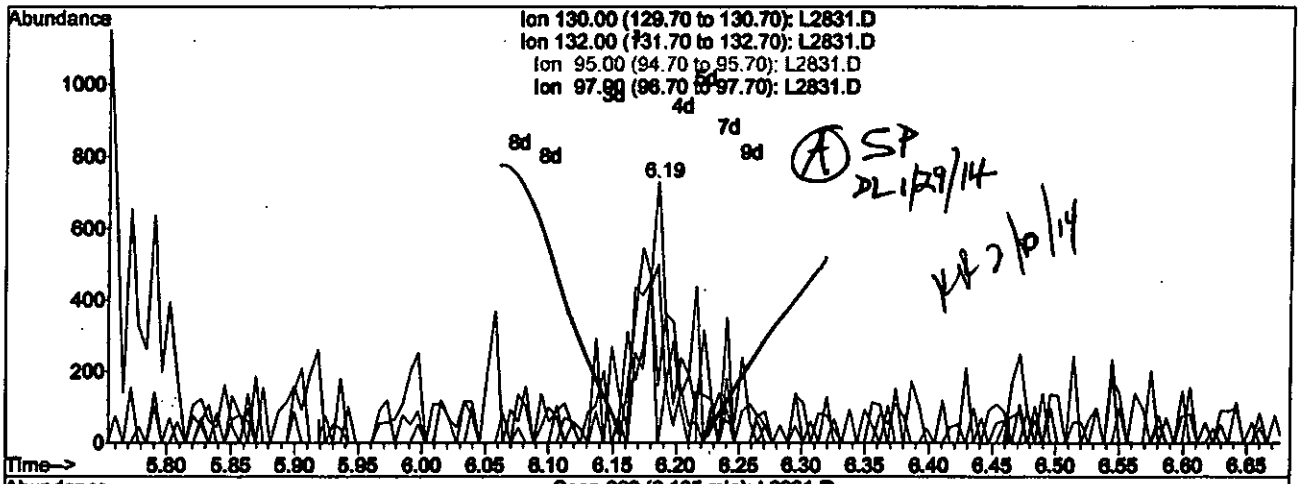
response 309

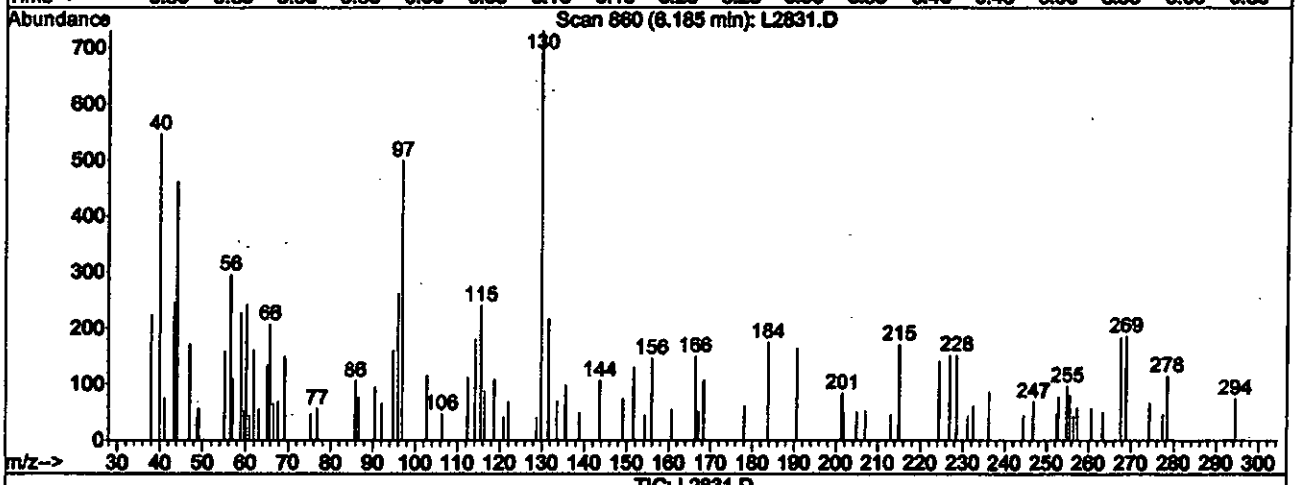
Ion	Exp%	Act%
130.00	100	100
132.00	97.60	66.34#
95.00	100.70	197.73#
97.00	64.00	7.44#

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2831.D Vial: 24
Acq On : 27 Jan 2014 8:50 pm Operator: D.LIPANI
Sample : STD#1 - 0.1 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 7:42 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 07:37:58 2014
Response via : Multiple Level Calibration





TIC: L2831.D

(41) Trichloroethene

6.19min 0.10ug/L m

response 1098

Ion	Exp%	Act%
130.00	100	100
132.00	97.60	18.67#
95.00	100.70	55.65#
97.00	64.00	2.09#

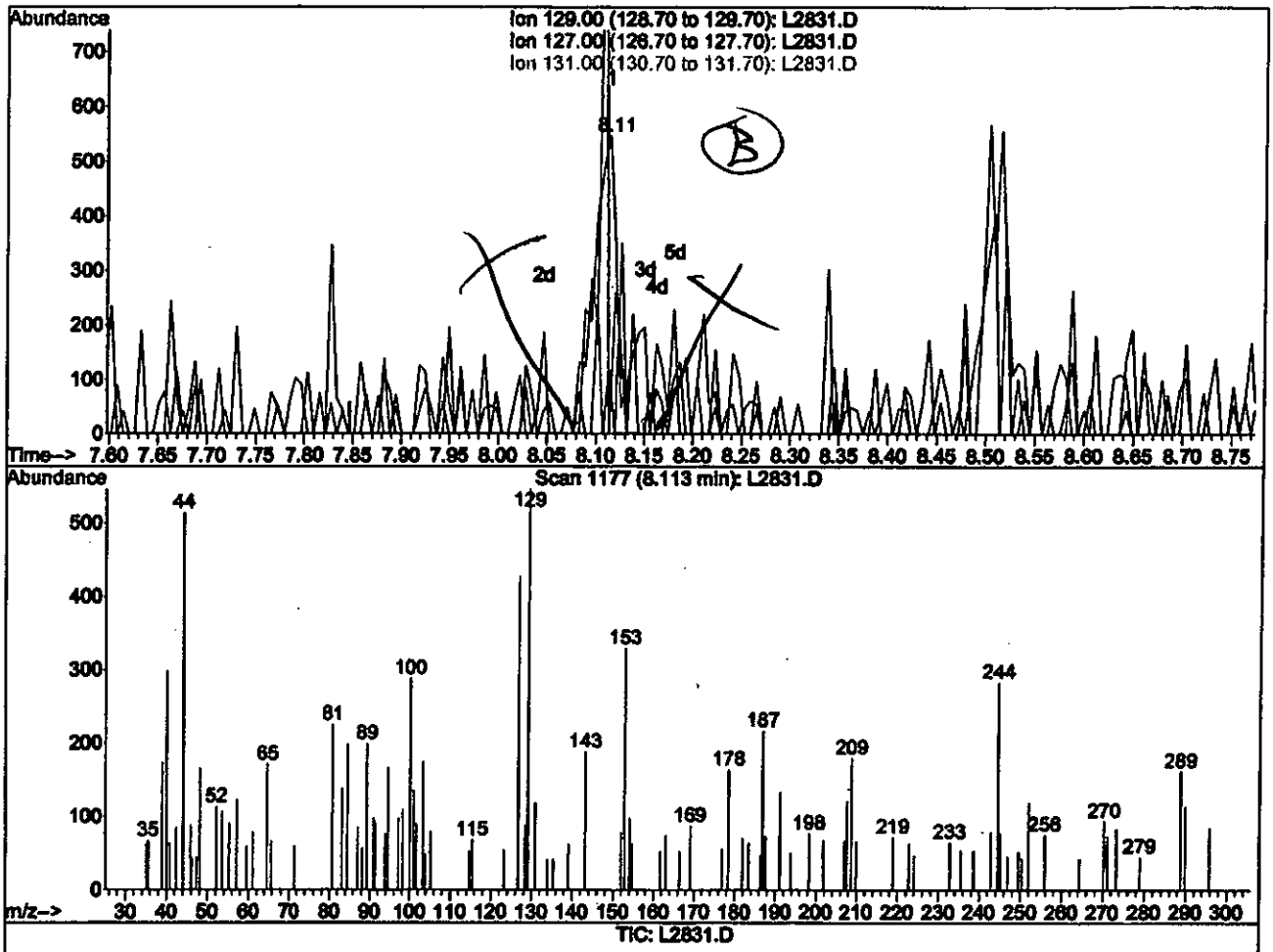
L2831.D 6240127.M Wed Jan 29 07:42:41 2014

00055

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2831.D Vial: 24
Acq On : 27 Jan 2014 8:50 pm Operator: D.LIPANI
Sample : STD#1 - 0.1 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 7:43 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 07:37:58 2014
Response via : Multiple Level Calibration



TIC: L2831.D

(54) Dibromochloromethane

8.11min 0.08ug/L

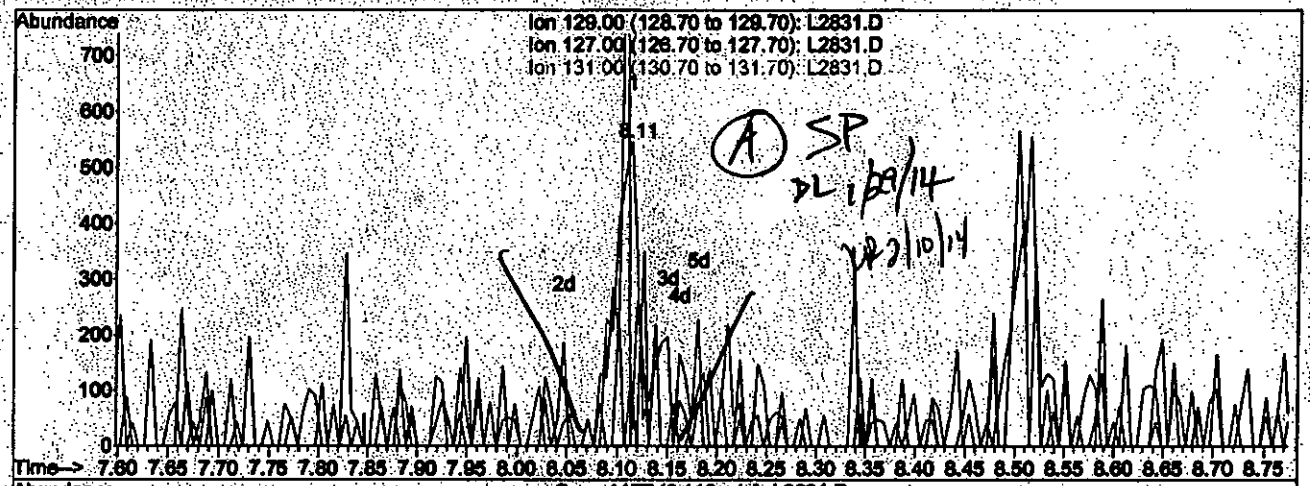
response 857

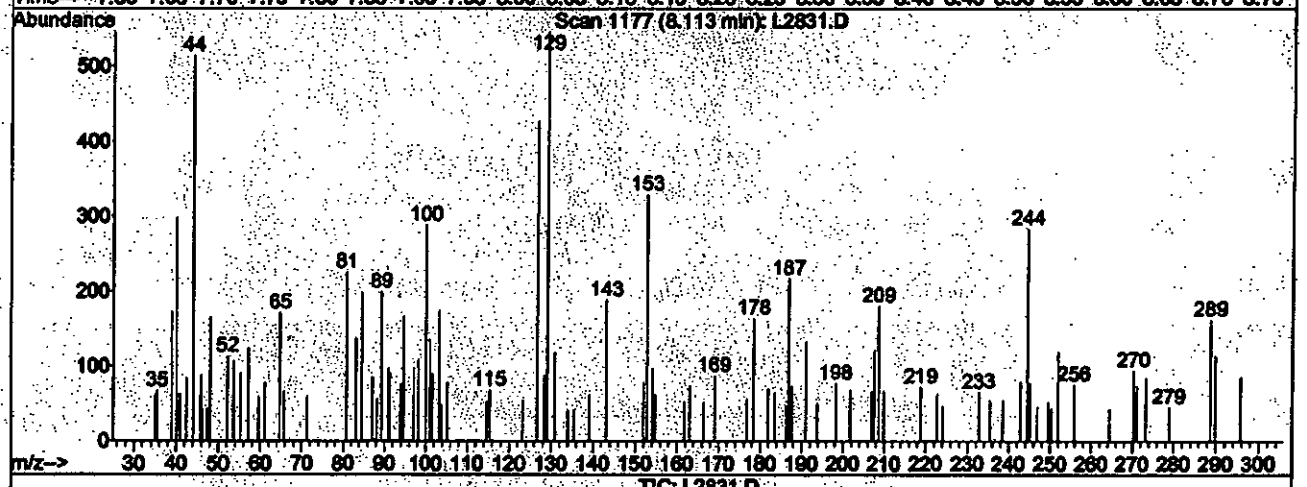
Ion	Exp%	Act%
129.00	100	100
127.00	76.60	97.08#
131.00	22.90	12.95#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2831.D Vial: 24
Acq On : 27 Jan 2014 8:50 pm Operator: D.LIPANI
Sample : STD#1 - 0.1 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 7:43 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 07:37:58 2014
Response via : Multiple Level Calibration





TIC: L2831.D

(54) Dibromochloromethane

8.11min 0.10ug/L m

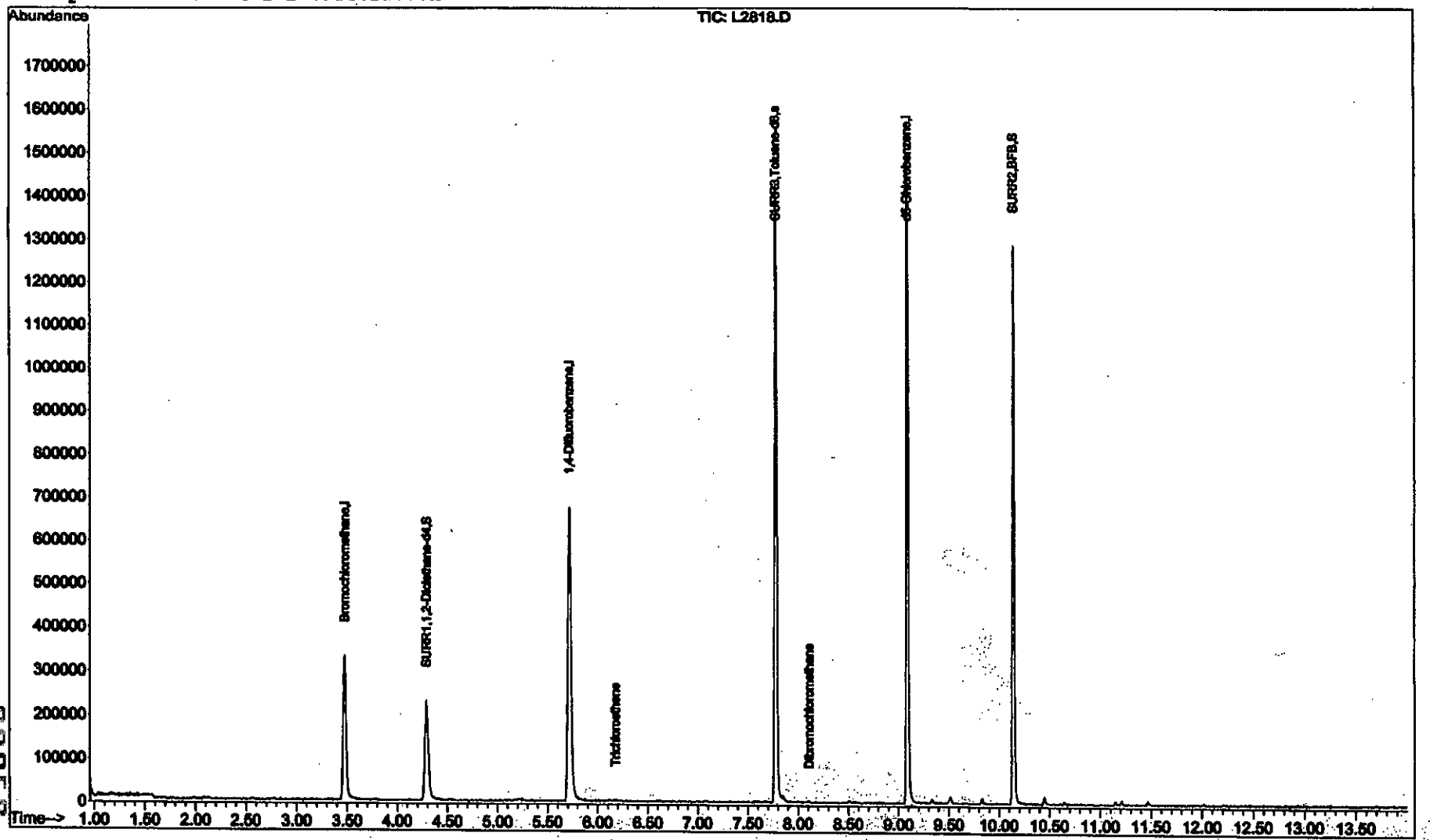
response 1050

Ion	Exp%	Act%
129.00	100	100
127.00	78.60	79.24
131.00	22.90	10.57#
0.00	0.00	0.00

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2818.D Vial: 11
Acq On : 27 Jan 2014 1:48 pm Operator: D.LIPANI
Sample : STD #1 - 0.1 PPB STD Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 10:56 2014 Quant Results File: 6240127.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 10:49:59 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2832.D Vial: 25
Acq On : 27 Jan 2014 9:20 pm Operator: D.LIPANI
Sample : STD#2 - 0.2 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 7:50 2014 Quant Results File: 6240127.RES

Quant Method : I:\ACQUDATA\M...\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 07:44:08 2014
Response via : Initial Calibration
DataAcq Meth : 6240127

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	3.48	128	98267	30.00	ug/L	0.00
35) 1,4-Difluorobenzene	5.72	114	650356	30.00	ug/L	0.00
53) d5-Chlorobenzene	9.09	117	630283	30.00	ug/L	0.00
System Monitoring Compounds						
30) SURR1,1,2-Diclethane-d4	4.29	65	195602	32.55	ug/L	0.00
Spiked Amount 30.000	Range 81 - 127		Recovery = 108.50%			
51) SURR3,Toluene-d8	7.78	98	786930	30.02	ug/L	0.00
Spiked Amount 30.000	Range 83 - 120		Recovery = 100.07%			
68) SURR2,BFB	10.14	95	301362	30.80	ug/L	0.00
Spiked Amount 30.000	Range 79 - 123		Recovery = 102.67%			
Target Compounds						Qvalue
3) Chloromethane	1.11	50	2436	0.20	ug/L	87
4) Vinyl Chloride	1.19	62	2991	0.27	ug/L	81
26) Chloroform	3.56	83	3984m	0.26	ug/L	
41) Trichloroethene	6.17	130	2125	0.19	ug/L #	85
43) Bromodichloromethane	6.23	83	3611	0.27	ug/L #	83
54) Dibromochloromethane	8.10	129	1984	0.20	ug/L #	92
57) Tetrachloroethene	8.52	164	1813	0.19	ug/L	92

DL 1/29/14

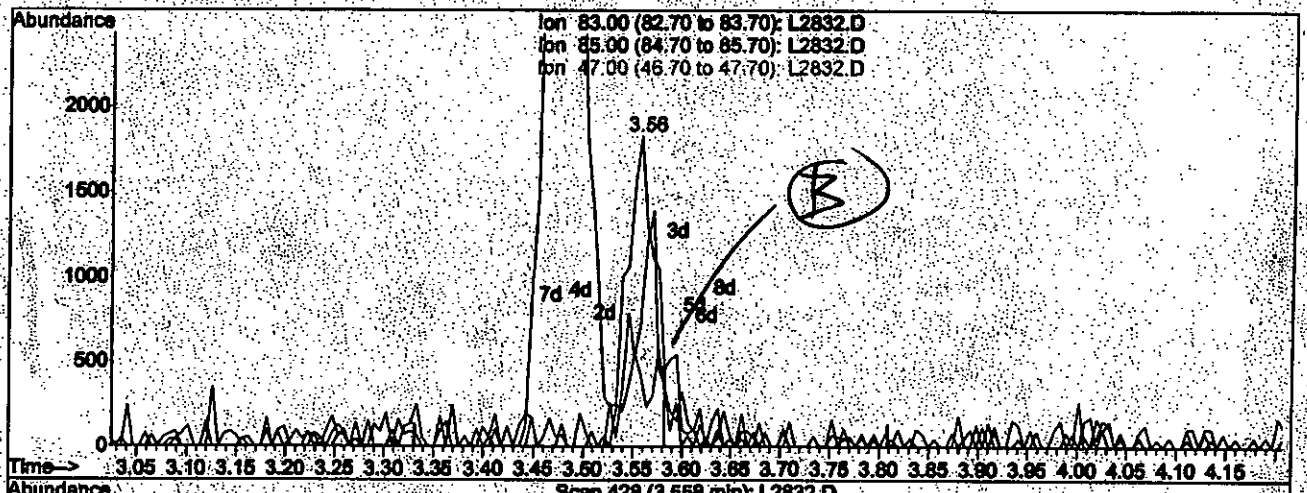
(#) = qualifier out of range (m) = manual integration
L2832.D 6240127.M Wed Jan 29 13:17:10 2014

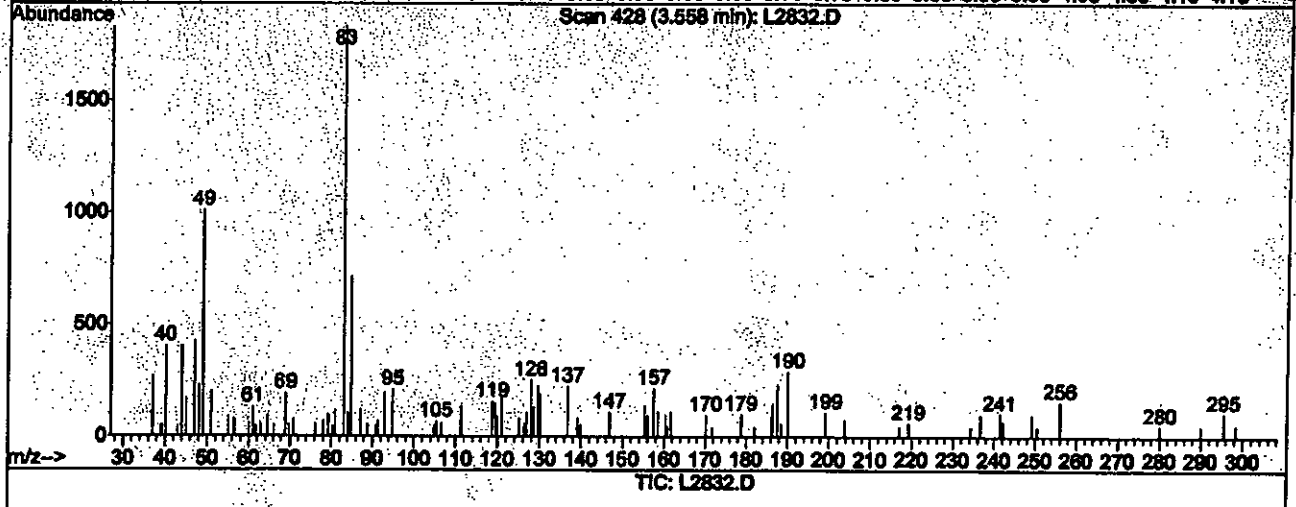
00059

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2832.D Vial: 25
Acq On : 27 Jan 2014 9:20 pm Operator: D.LIPANI
Sample : STD#2 - 0.2 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 7:48 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 07:44:08 2014
Response via : Multiple Level Calibration





TIC: L2832.D

(26) Chloroform

3.56min 0.22ug/L

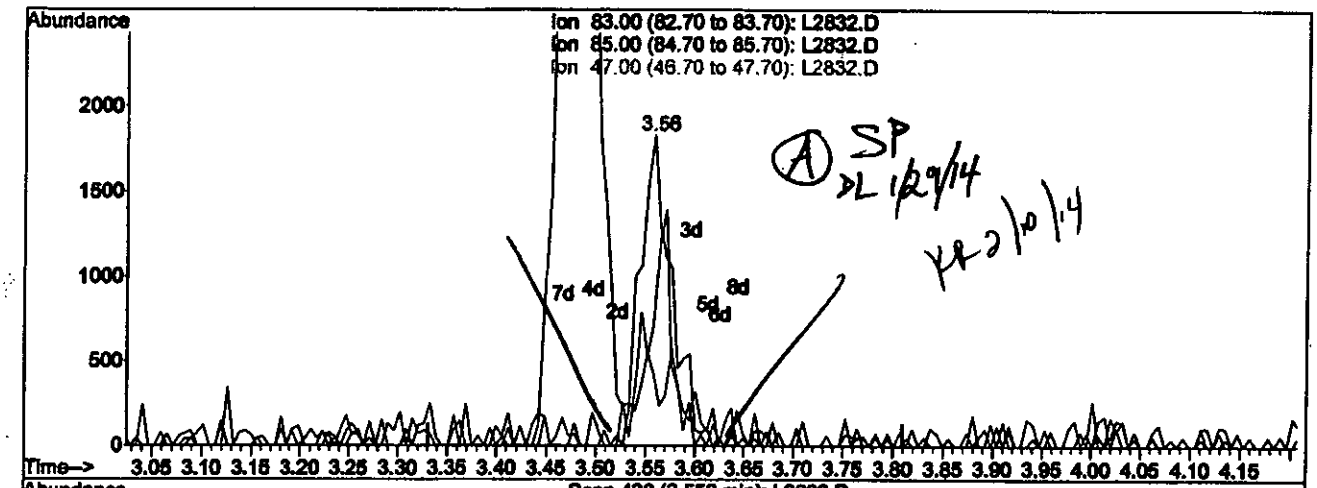
response 3498

Ion	Exp%	Act%
83.00	100	100
85.00	70.30	39.09#
47.00	27.40	23.40
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2832.D Vial: 25
Acq On : 27 Jan 2014 9:20 pm Operator: D.LIPANI
Sample : STD#2 - 0.2 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 7:48 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 07:44:08 2014
Response via : Multiple Level Calibration



TIC: L2832.D

(28) Chloroform

3.56min 0.26ug/L m

response 3984

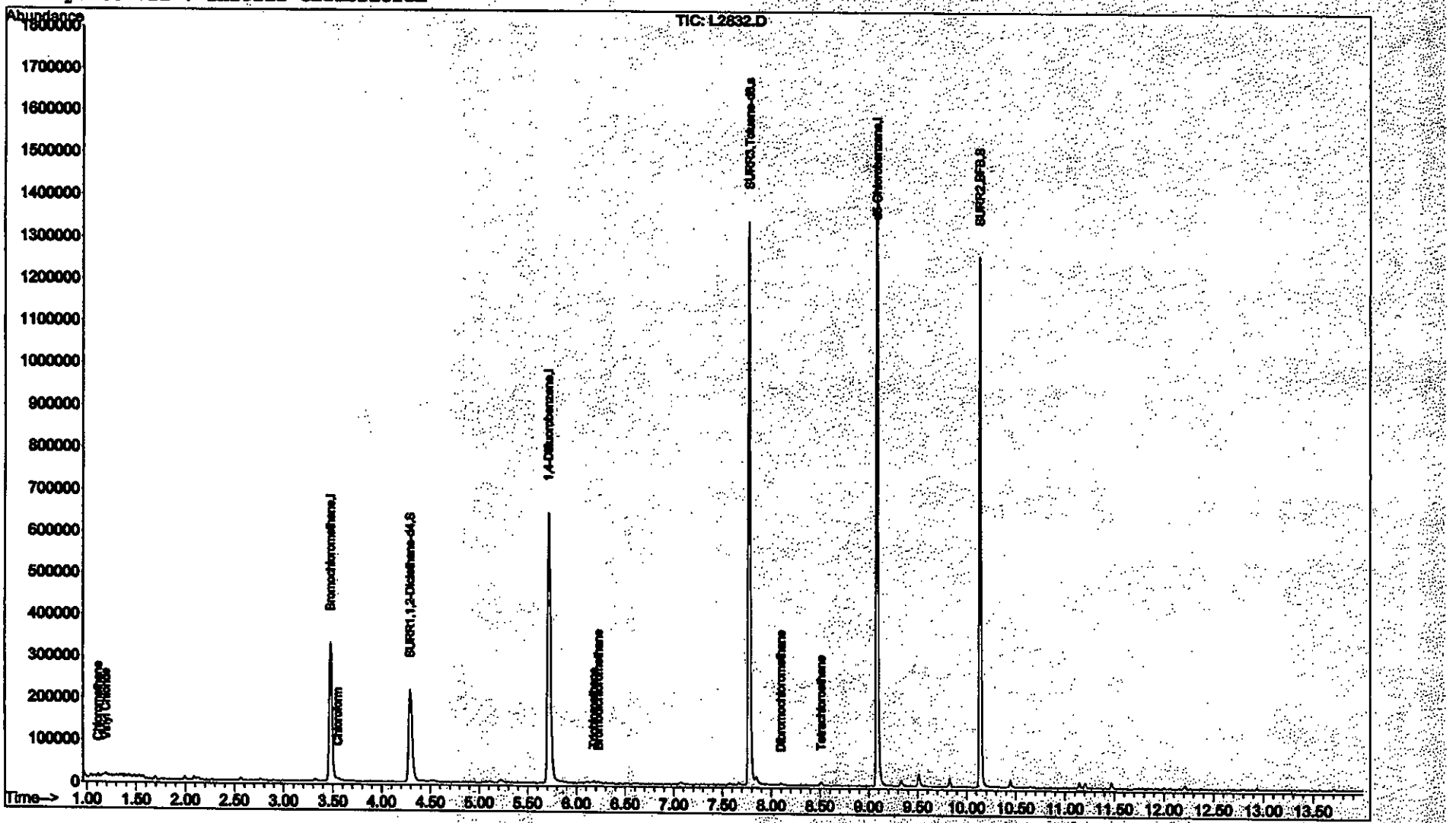
Ion	Exp%	Act%
83.00	100	100
85.00	70.30	39.09#
47.00	27.40	23.40
0.00	0.00	0.00

L2832.D 6240127.M Wed Jan 29 07:48:56 2014

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2832.D Vial: 25
Acq On : 27 Jan 2014 9:20 pm Operator: D.LIPANI
Sample : STD#2 - 0.2 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 7:50 2014 Quant Results File: 6240127.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 12:19:30 2014
Response via : Initial Calibration



L2832.D 6240127.M Wed Jan 29 13:17:13 2014

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2833.D Vial: 26
Acq On : 27 Jan 2014 9:53 pm Operator: D.LIPANI
Sample : STD#3 - 0.5 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 10:00 2014 Quant Results File: 6240127.RES

Quant Method : I:\ACQUDATA\M...\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 09:25:47 2014
Response via : Initial Calibration
DataAcq Meth : 6240127

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	3.48	128	101339	30.00	ug/L		0.00
35) 1,4-Difluorobenzene	5.72	114	652945	30.00	ug/L		0.00
53) d5-Chlorobenzene	9.08	117	630986	30.00	ug/L		0.00
System Monitoring Compounds							
30) SURR1,1,2-Diclethane-d4	4.29	65	199041	31.06	ug/L		0.00
Spiked Amount 30.000	Range 81 - 127		Recovery = 103.53%				
51) SURR3,Toluene-d8	7.78	98	827939	31.46	ug/L		0.00
Spiked Amount 30.000	Range 83 - 120		Recovery = 104.87%				
68) SURR2,BFB	10.14	95	299109	30.09	ug/L		0.00
Spiked Amount 30.000	Range 79 - 123		Recovery = 100.30%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.04	85	4632	0.46	ug/L		92
3) Chloromethane	1.11	50	6963	0.56	ug/L		97
4) Vinyl Chloride	1.19	62	6161	0.49	ug/L		82
5) Bromomethane	1.36	94	4223m	0.58	ug/L		
6) Chloroethane	1.42	64	3267	0.48	ug/L		96
7) Freon-21	1.45	67	9649	0.54	ug/L		97
8) Freon-123	1.62	83	7811	0.56	ug/L	#	86
9) Freon-123A	1.64	67	5136m	0.45	ug/L		
10) Acrolein	1.70	56	2648	2.92	ug/L		73
11) Trichlorofluoromethane	1.70	101	8178	0.56	ug/L		95
12) Acetonitrile	1.73	41	2725	3.15	ug/L	#	32
13) 2-Propanol	1.75	45	3533	11.48	ug/L		75
14) Acetone	1.78	43	1666	0.73	ug/L		90
15) 1,1-Diclethene	1.99	96	4221	0.49	ug/L		89
16) tert Butyl Alcohol	2.02	59	4796m	10.73	ug/L		
17) Acrylonitrile	2.05	53	5162m	2.54	ug/L		
18) Methylene Chloride	2.08	84	5797	0.56	ug/L	#	91
19) Freon 113	2.13	101	4361m	0.48	ug/L		
20) Carbon Disulfide	2.19	76	15151	0.53	ug/L		99
21) trans-1,2-Dichloroethene	2.57	96	4760	0.51	ug/L		83
22) Methyl-t-Butyl Ether	2.68	73	9527	0.48	ug/L	#	91
23) 1,1-Diclethane	2.77	63	8501	0.51	ug/L		99
25) cis-1,2-Dichloroethene	3.33	96	6975m	0.64	ug/L		
26) Chloroform	3.56	83	9218	0.53	ug/L		96
31) 1,2-Dichloroethane	4.41	62	6443	0.59	ug/L	#	65
32) 1,1,1-Trichloroethane	4.52	97	7953	0.53	ug/L	#	76
34) Cyclohexane	4.91	56	8668	0.58	ug/L		84
36) Carbontetrachloride	5.11	117	7387	0.55	ug/L	#	63
38) Benzene	5.21	78	19723m	0.51	ug/L		
39) Dibromomethane	6.03	93	2657	0.49	ug/L		95
40) 1,2-Diclpropane	6.11	63	4549	0.45	ug/L	#	81
41) Trichloroethene	6.18	130	5791	0.53	ug/L		94
42) Heptane	6.18	43	4421m	0.50	ug/L		
43) Bromodichloromethane	6.23	83	6133	0.44	ug/L		98
45) Ethane, 1-Bromo-2-Chloro-	6.74	63	5558	0.46	ug/L	#	93
47) cis-1,3-Dichloropropene	7.06	75	6888	0.47	ug/L		93
49) trans-1,3-Dichloropropene	7.56	75	6228	0.52	ug/L		98
50) 1,1,2-Trichloroethane	7.66	97	3881	0.51	ug/L		94

DL 1/29/14

(#) = qualifier out of range (m) = manual integration
L2833.D 6240127.M Wed Jan 29 10:03:13 2014

00063

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2833.D Vial: 26
Acq On : 27 Jan 2014 9:53 pm Operator: D.LIPANI
Sample : STD#3 - 0.5 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 10:00 2014 Quant Results File: 6240127.RES

Quant Method : I:\ACQUDATA\M...\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 09:25:47 2014
Response via : Initial Calibration
DataAcq Meth : 6240127

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
52) Toluene	7.84	91	22382	0.53 ug/L		97
54) Dibromochloromethane	8.10	129	4310	0.43 ug/L	#	83
56) 1,2-Dibromoethane	8.32	107	3636	0.47 ug/L	#	98
57) Tetrachloroethene	8.51	164	4747	0.51 ug/L		91
58) N-Butyl Acetate	8.55	43	8713m	0.89 ug/L		
59) Chlorobenzene	9.11	112	14327	0.50 ug/L	#	87
60) 4-Chlorobenzotrifluoride	9.22	180	6934	0.49 ug/L	#	90
61) Ethylbenzene	9.33	106	7833	0.53 ug/L		90
62) (m+p)Xylene	9.51	106	18281	1.02 ug/L		99
63) Bromoform	9.50	173	3041	0.48 ug/L		98
64) Styrene	9.77	104	13392	0.47 ug/L		96
65) 1,1,2,2-Tetrachloroethane	9.82	83	4595	0.53 ug/L	#	82
66) o-Xylene	9.83	106	8997	0.51 ug/L	#	92
67) Amyl Acetate	9.89	43	4642m	0.36 ug/L		
69) 1,3-Dclbenz	11.15	146	11126	0.50 ug/L		95
70) 1,4-Dclbenz	11.21	146	12383	0.54 ug/L		91
71) 1,2-Dclbenz	11.47	146	9415	0.46 ug/L	#	90
72) Naphthalen	13.09	128	7636	0.47 ug/L		99

DL 1/29/14

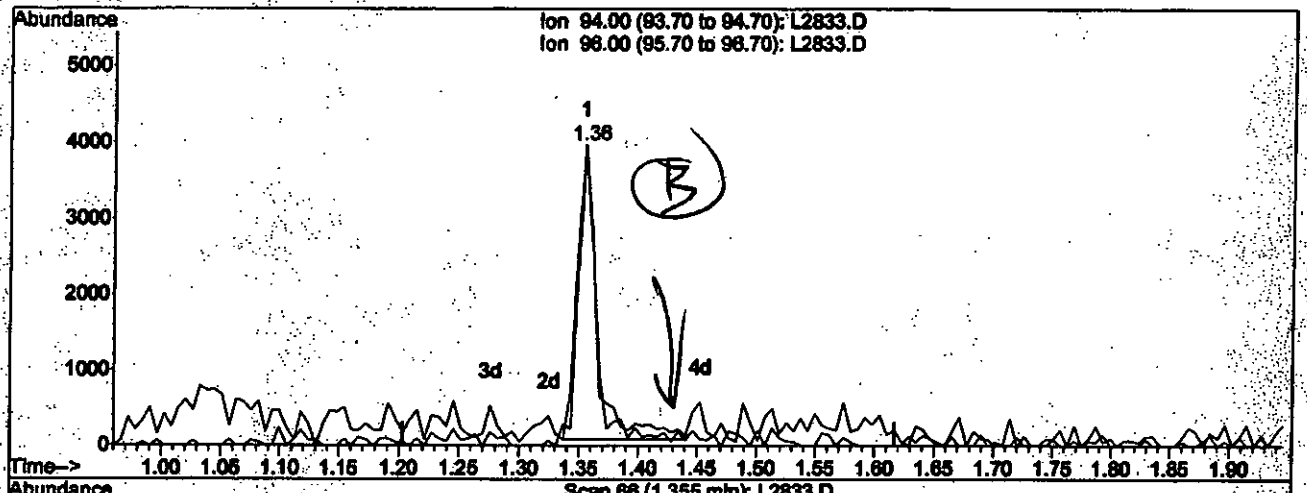
(#) = qualifier out of range (m) = manual integration
L2833.D 6240127.M Wed Jan 29 10:03:14 2014

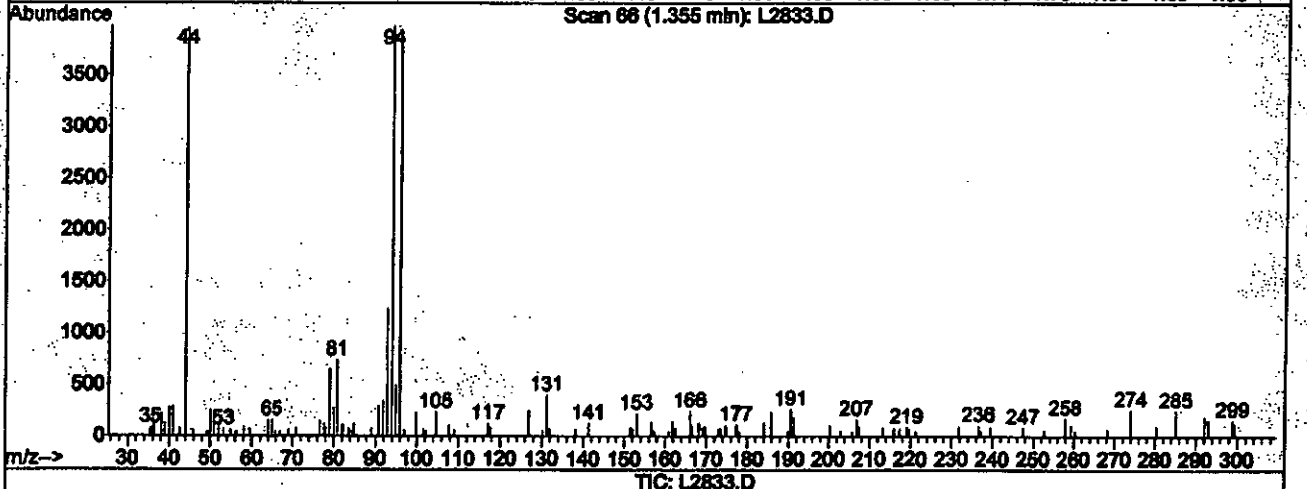
00064

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2833.D Vial: 26
Acq On : 27 Jan 2014 9:53 pm Operator: D.LIPANI
Sample : STD#3 - 0.5 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 9:53 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 09:25:47 2014
Response via : Single Level Calibration





TIC: L2833.D

(5) Bromomethane

1.36min 0.63ug/L

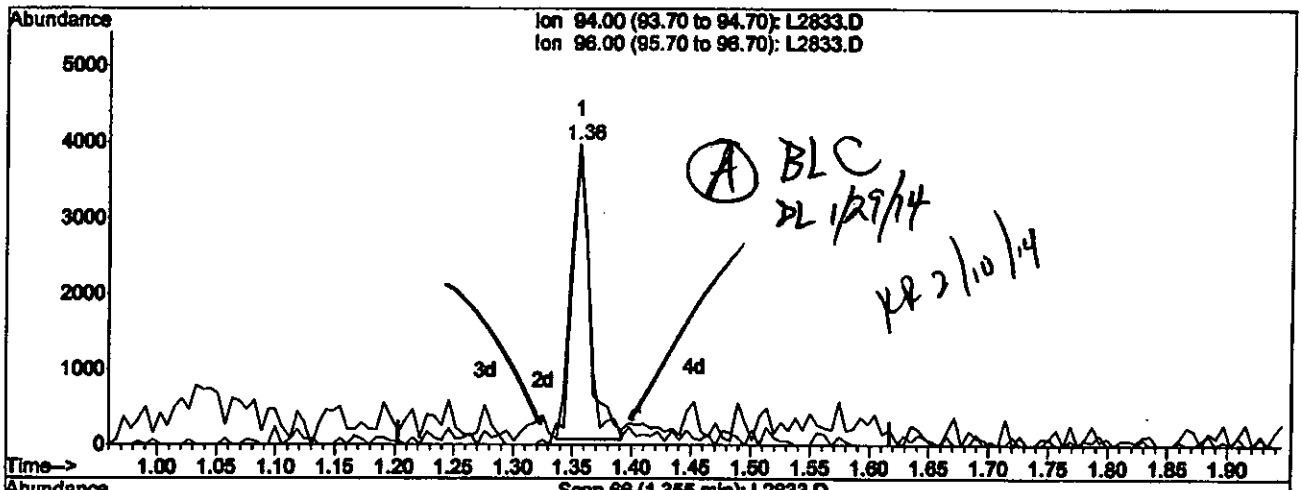
response 4622

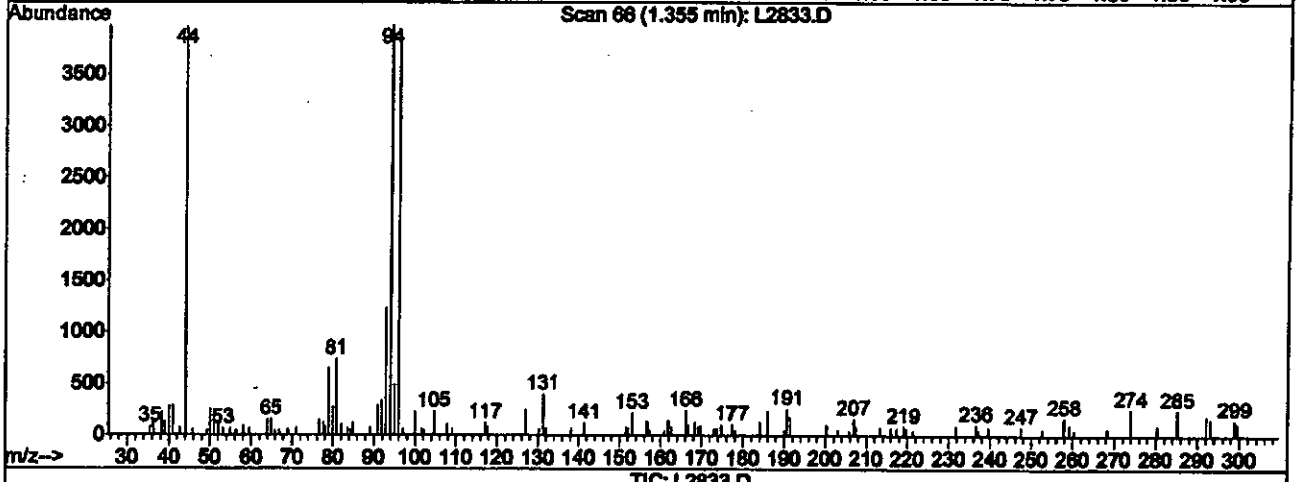
Ion	Exp%	Act%
94.00	100	100
96.00	89.10	95.87
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2833.D Vial: 26
Acq On : 27 Jan 2014 9:53 pm Operator: D.LIPANI
Sample : STD#3 - 0.5 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 9:54 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 09:25:47 2014
Response via : Single Level Calibration





TIC: L2833.D

(6) Bromomethane

1.36min 0.58ug/L m

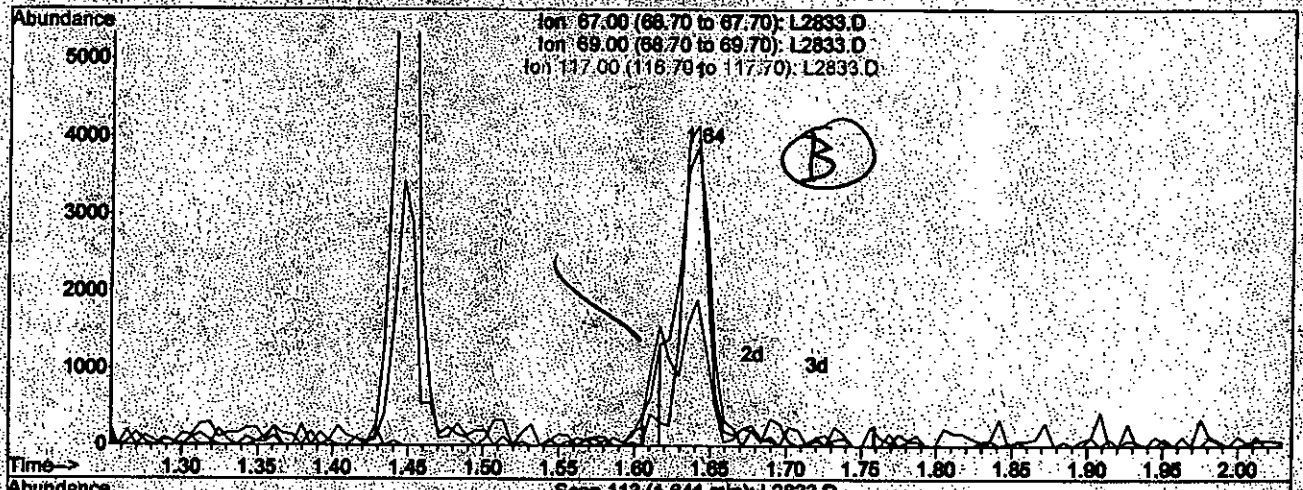
response 4223

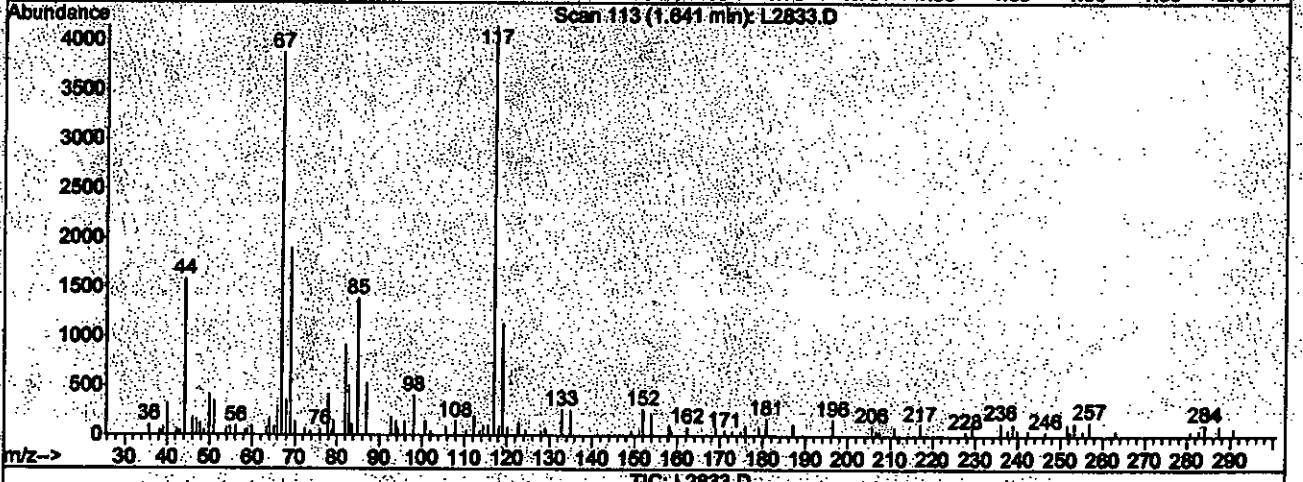
Ion	Exp%	Act%
94.00	100	100
96.00	89.10	95.87
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2833.D Vial: 26
Acq On : 27 Jan 2014 9:53 pm Operator: D.LIPANI
Sample : STD#3 - 0.5 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 9:54 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 09:25:47 2014
Response via : Single Level Calibration





TIC: L2833.D

(9) Freon-123A

1.64mtn 0.49ug/L

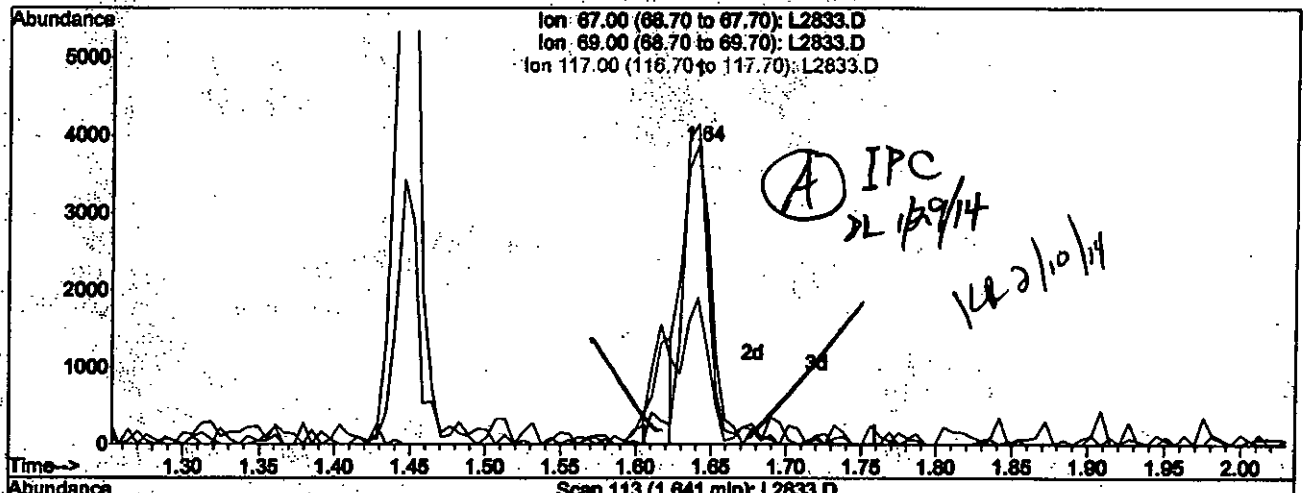
response 5840

Ion	Exp%	Act%
67.00	100	100
69.00	31.10	48.94#
117.00	70.30	107.15#
0.00	0.00	0.00

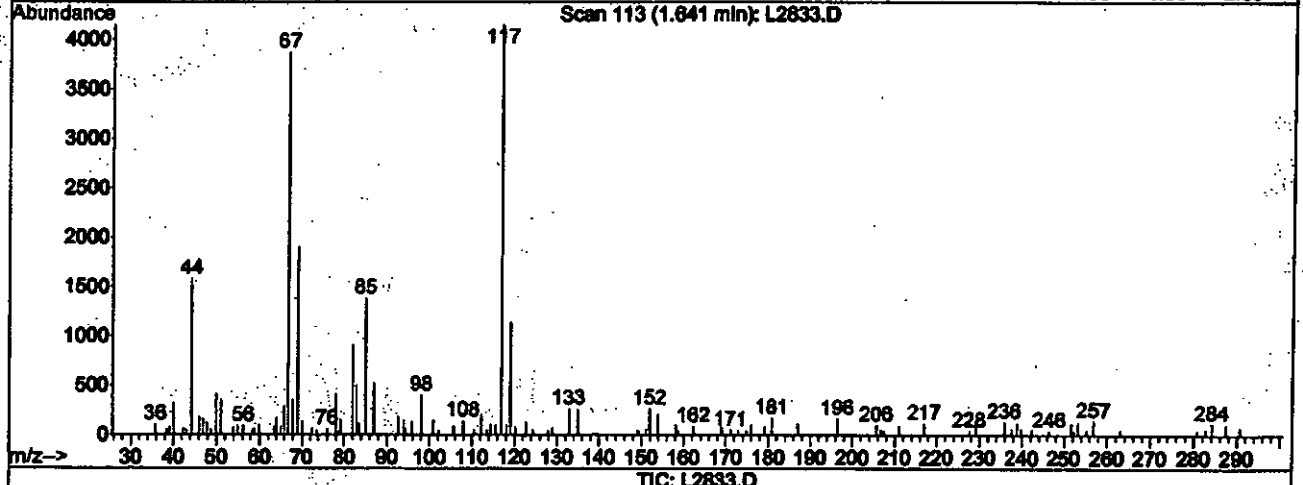
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2833.D Vial: 26
Acq On : 27 Jan 2014 9:53 pm Operator: D.LIPANI
Sample : STD#3 - 0.5 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 9:54 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 09:25:47 2014
Response via : Single Level Calibration



IPC
JL 1/29/14
L2 2/10/14



TIC: L2833.D

(9) Freon-123A

1.64min 0.45ug/L m

response 5136

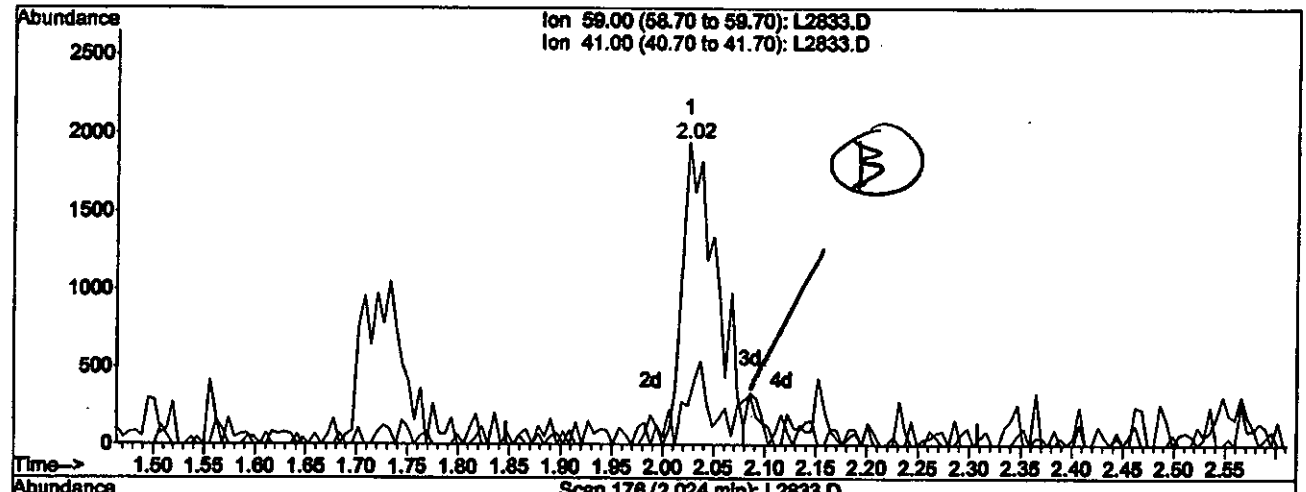
Ion	Exp%	Act%
67.00	100	100
69.00	31.10	48.84#
117.00	70.30	107.16#
0.00	0.00	0.00

L2833.D 6240127.M Wed Jan 29 09:54:52 2014

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2833.D Vial: 26
Acq On : 27 Jan 2014 9:53 pm Operator: D.LIPANI
Sample : STD#3 - 0.5 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 9:54 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 09:25:47 2014
Response via : Single Level Calibration



TIC: L2833.D

(16) tert Butyl Alcohol

2.02min 10.08ug/L

response 4504

Ion	Exp%	Act%
59.00	100	100
41.00	21.60	12.92
0.00	0.00	0.00
0.00	0.00	0.00

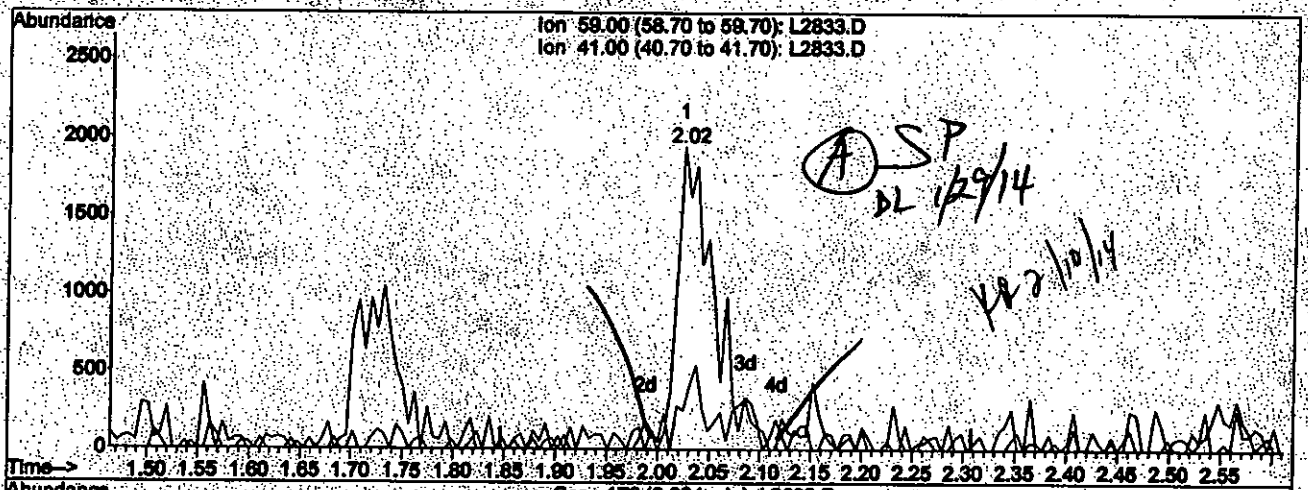
L2833.D 6240127.M Wed Jan 29 09:55:27 2014

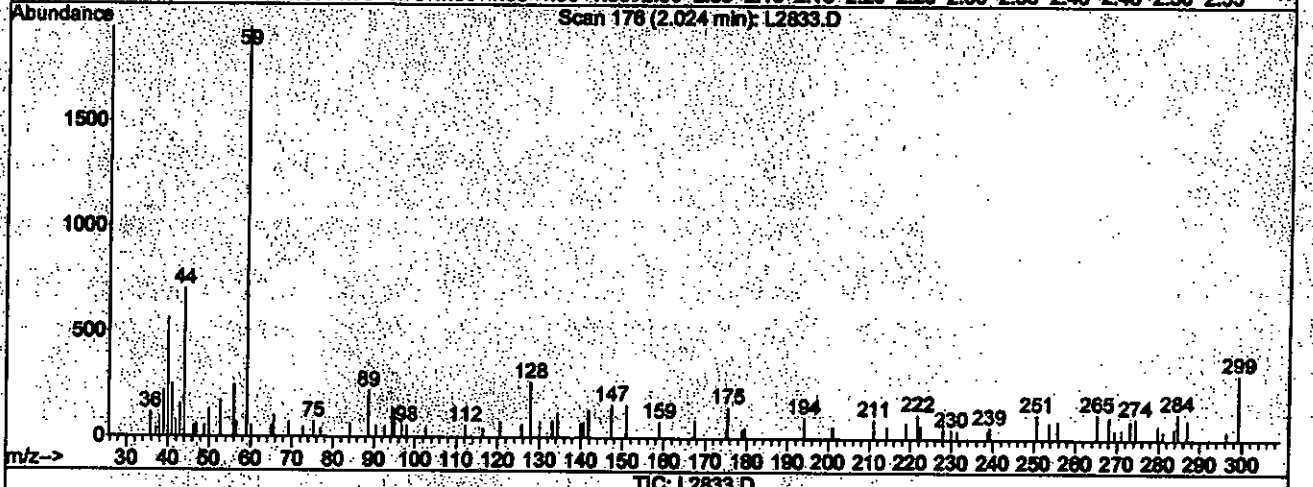
00069

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2833.D Vial: 26
Acq On : 27 Jan 2014 9:53 pm Operator: D.LIPANI
Sample : STD#3 - 0.5 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 9:55 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 09:25:47 2014
Response via : Single Level Calibration





TIC: L2833.D

(16) tert Butyl Alcohol

2.02min 10.73ug/L m

response 4798

Ion	Exp%	Act%
59.00	100	100
41.00	21.60	12.92
0.00	0.00	0.00
0.00	0.00	0.00

SP DL 1/29/14

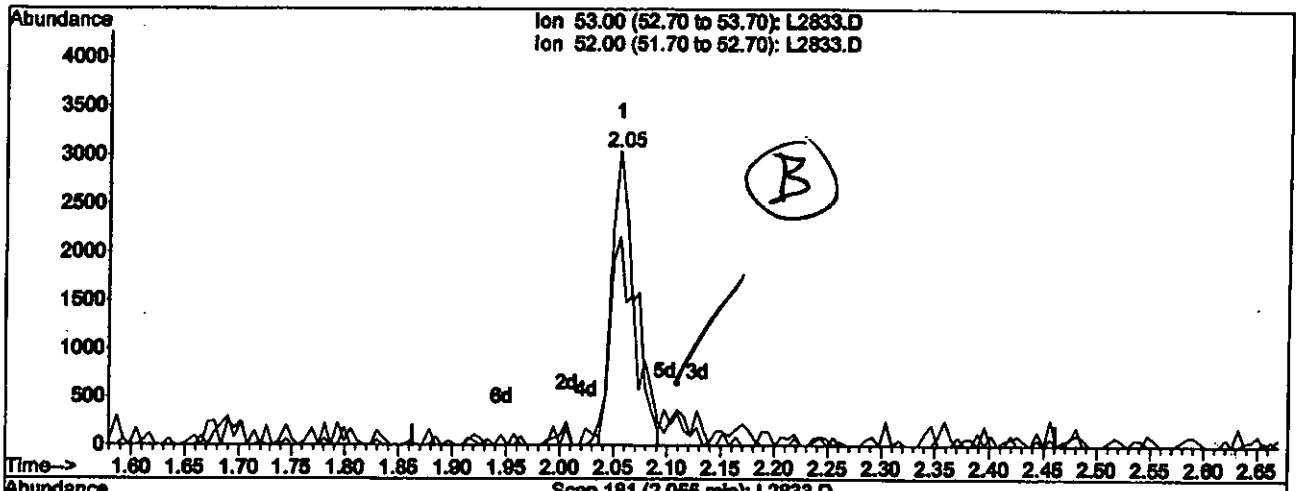
MS 1/30/14

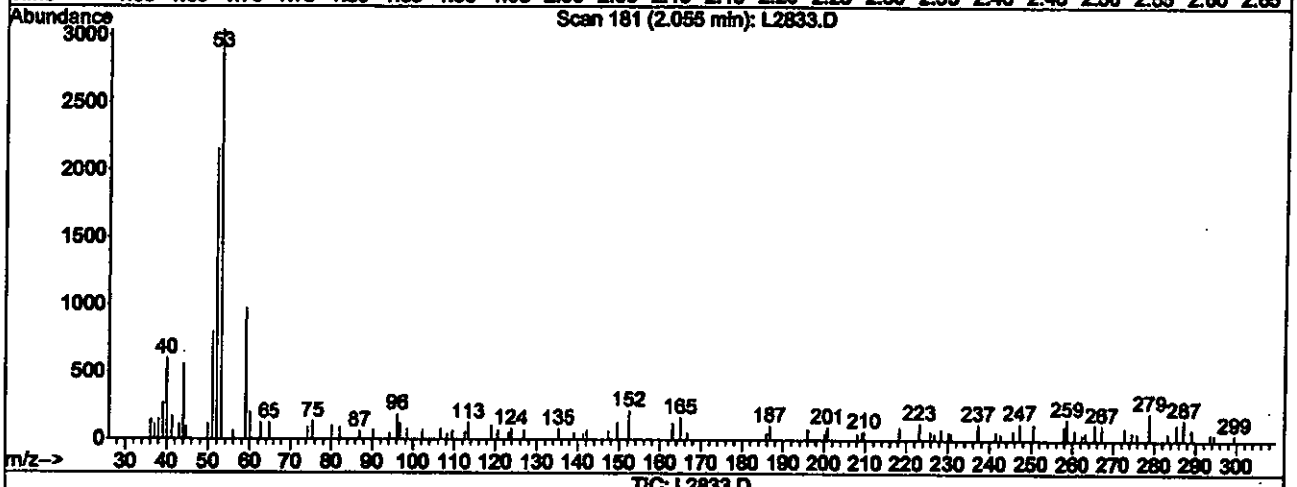
L2833.D 6240127.M Wed Jan 29 09:55:35 2014

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2833.D Vial: 26
Acq On : 27 Jan 2014 9:53 pm Operator: D.LIPANI
Sample : STD#3 - 0.5 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 9:55 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 09:25:47 2014
Response via : Single Level Calibration





TIC: L2833.D

(17) Acrylonitrile

2.05min 2.24ug/L

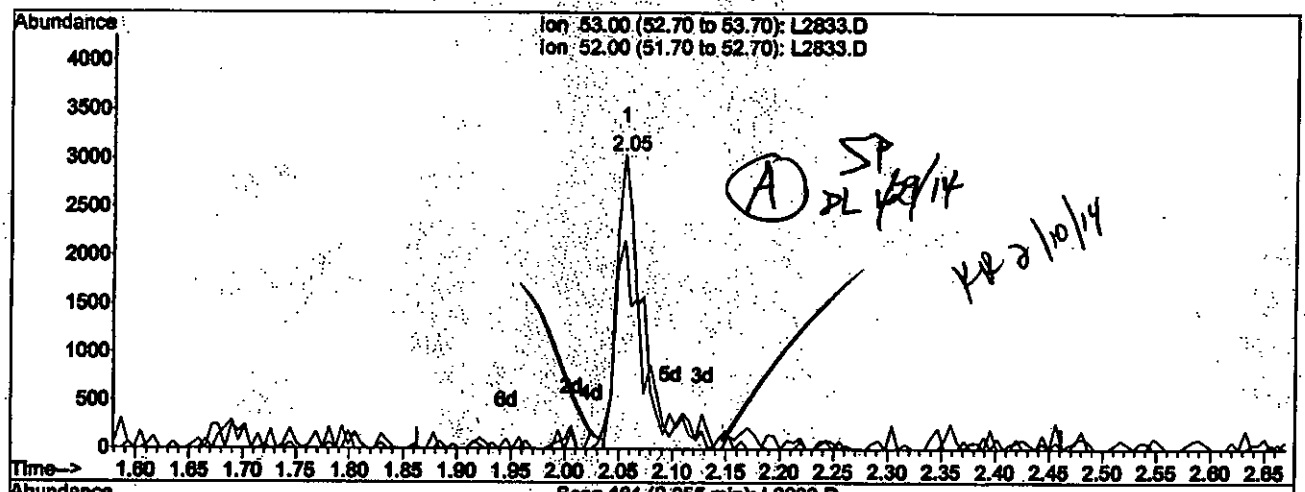
response 4648

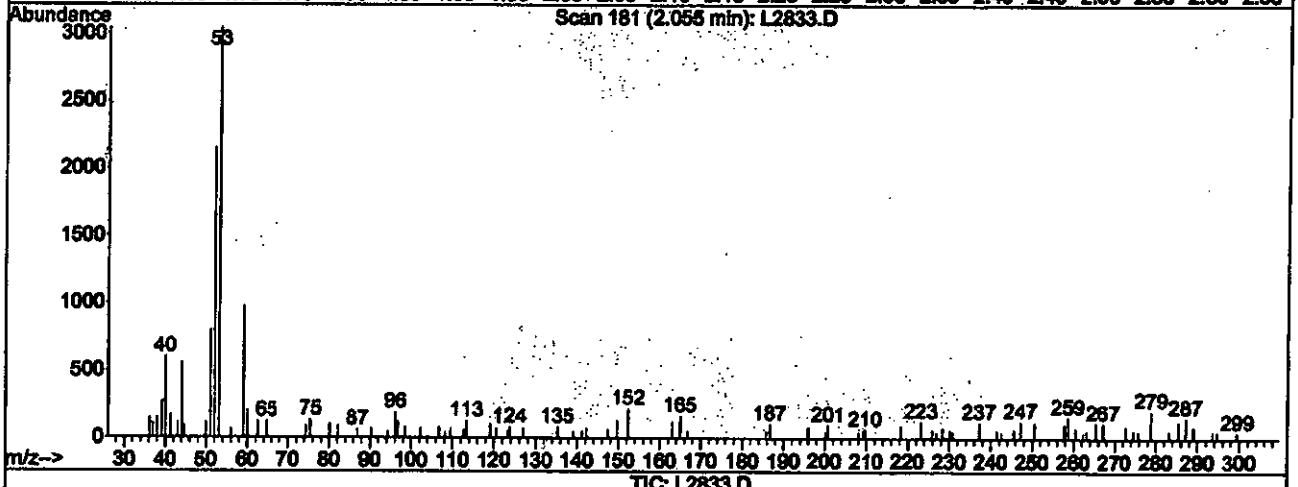
Ion	Exp%	Act%
53.00	100	100
52.00	86.20	70.81
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2833.D Vial: 26
Acq On : 27 Jan 2014 9:53 pm Operator: D.LIPANI
Sample : STD#3 - 0.5 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 9:55 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 09:25:47 2014
Response via : Single Level Calibration





TIC: L2833.D

(17) Acrylonitrile

2.05min 2.54ug/L m

response 5162

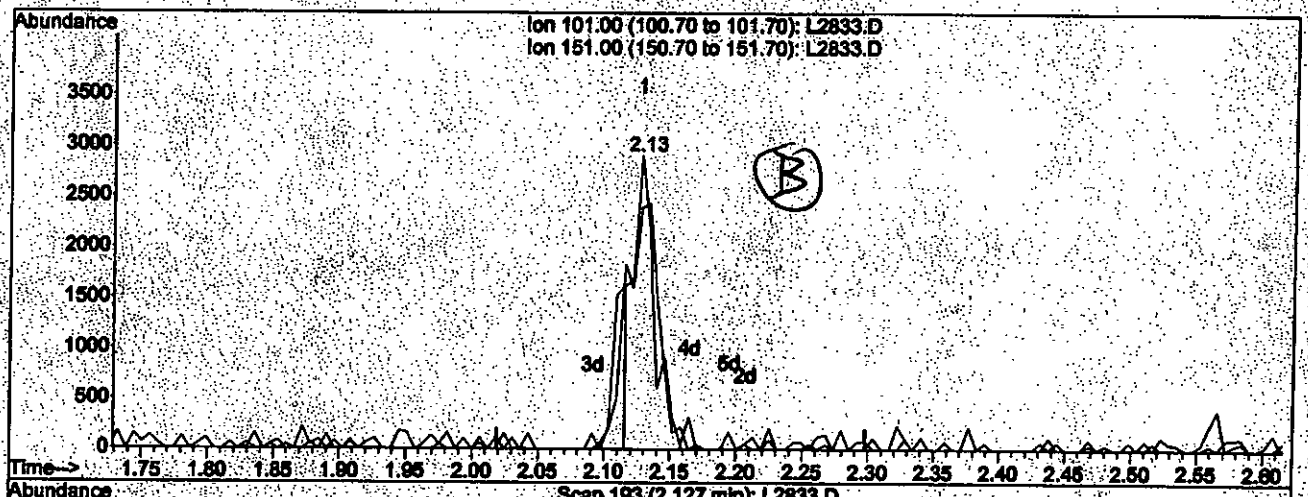
Ion	Exp%	Act%
53.00	100	100
52.00	88.20	70.81
0.00	0.00	0.00
0.00	0.00	0.00

L2833.D 6240127.M Wed Jan 29 09:55:57 2014

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2833.D Vial: 26
Acq On : 27 Jan 2014 9:53 pm Operator: D.LIPANI
Sample : STD#3 - 0.5 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 9:55 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 09:25:47 2014
Response via : Single Level Calibration



TIC: L2833.D

(19) Freon 113

2.13min 0.35ug/L

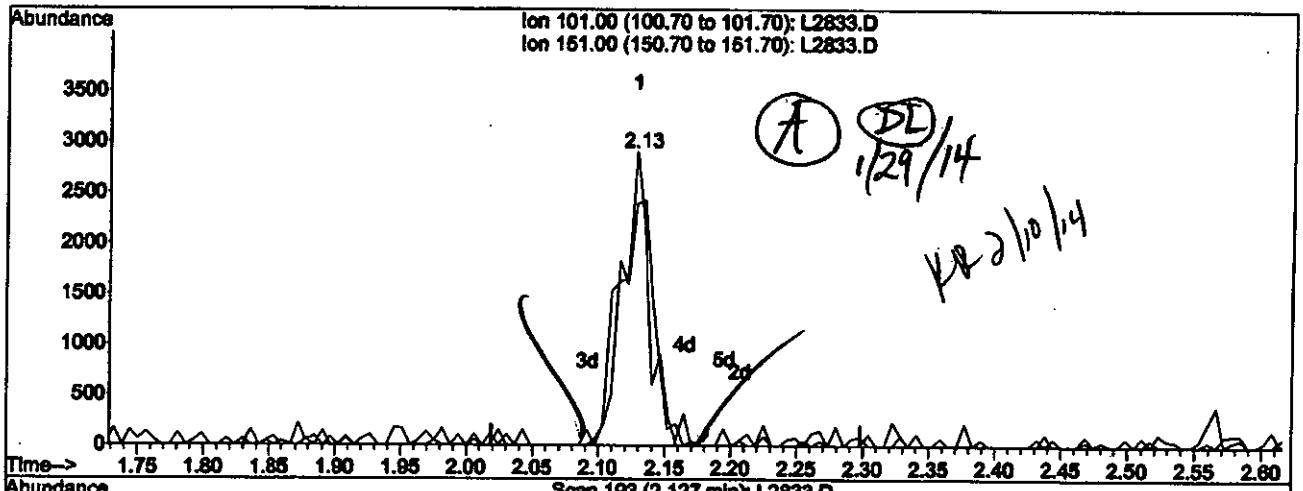
response 3133

Ion	Exp%	Act%
101.00	100	100
151.00	86.00	82.43
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

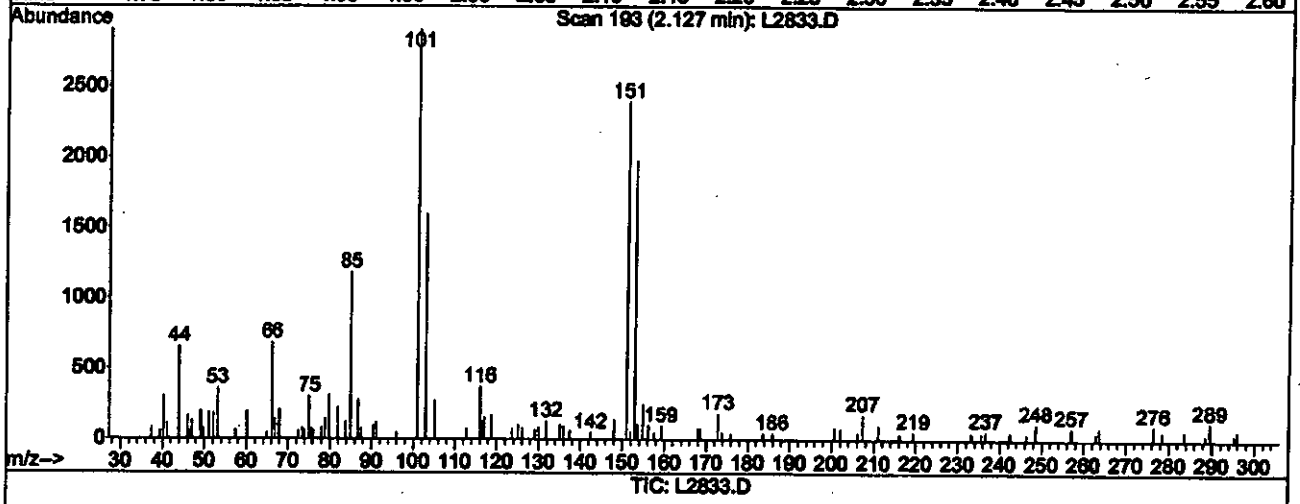
Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2833.D Vial: 26
Acq On : 27 Jan 2014 9:53 pm Operator: D.LIPANI
Sample : STD#3 - 0.5 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 9:56 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 09:25:47 2014
Response via : Single Level Calibration



A DL 1/29/14

KB 2/10/14



TIC: L2833.D

(19) Freon 113

2.13min 0.48ug/L m

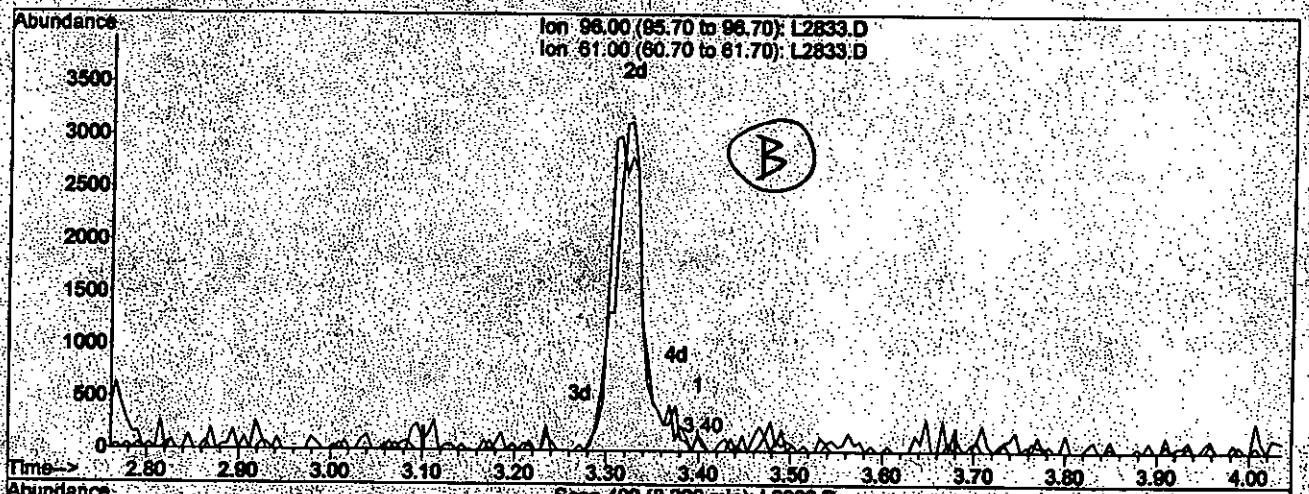
response 4361

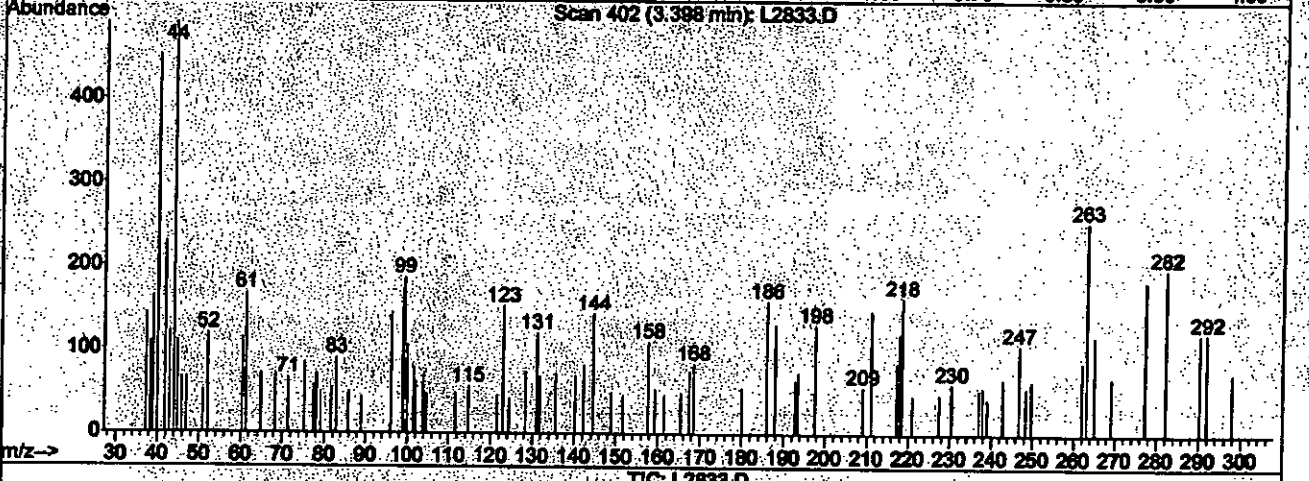
Ion	Exp%	Act%
101.00	100	100
151.00	88.00	82.43
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2833.D Vial: 26
Acq On : 27 Jan 2014 9:53 pm Operator: D.LIPANI
Sample : STD#3 - 0.5 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 9:56 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 09:25:47 2014
Response via : Single Level Calibration





(25) cis-1,2-Dichloroethene

3.40min 0.01ug/L

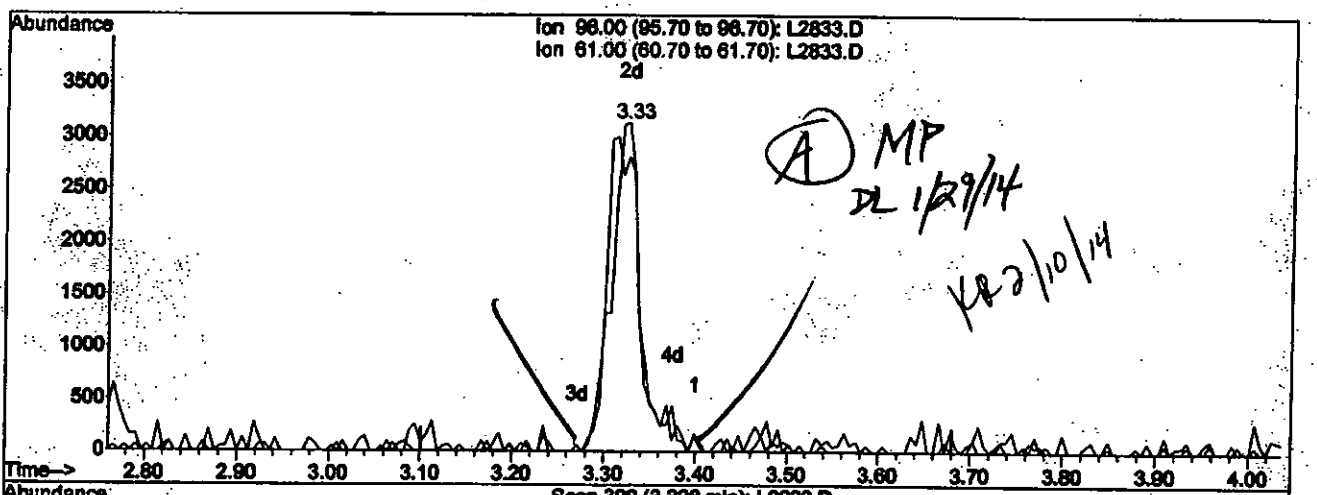
response 70

Ion	Exp%	Act%
96.00	100	100
61.00	127.40	115.17
0.00	0.00	0.00
0.00	0.00	0.00

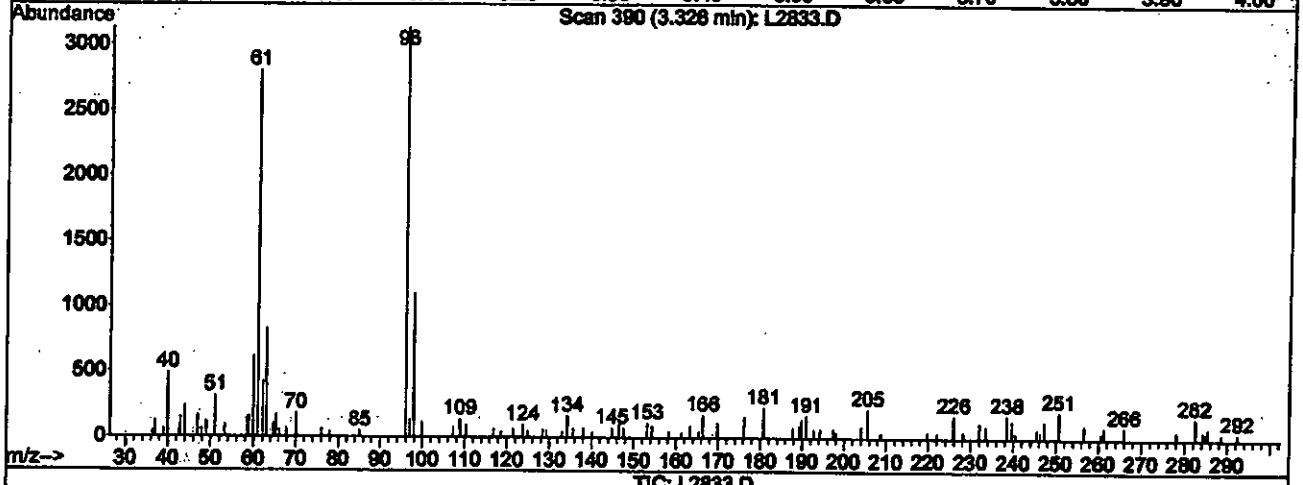
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2833.D Vial: 26
Acq On : 27 Jan 2014 9:53 pm Operator: D.LIPANI
Sample : STD#3 - 0.5 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 9:56 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 09:25:47 2014
Response via : Single Level Calibration



MP 1/29/14
DL 1/29/14
KB 2/10/14



TIC: L2833.D

(25) cis-1,2-Dichloroethene

3.33min 0.64ug/L m

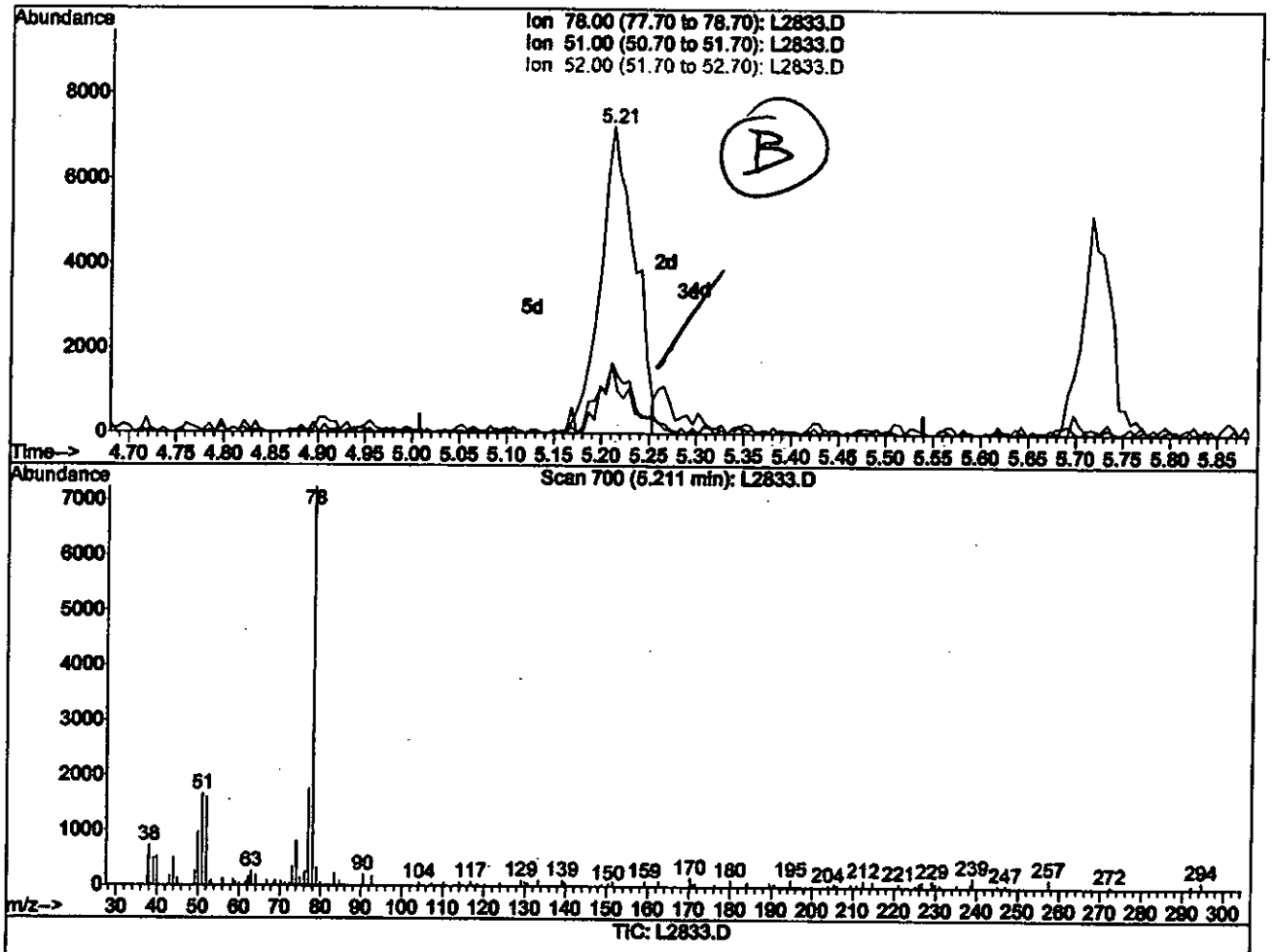
response 6975

Ion	Exp%	Act%
96.00	100	100
61.00	127.40	89.50#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2833.D Vial: 26
Acq On : 27 Jan 2014 9:53 pm Operator: D.LIPANI
Sample : STD#3 - 0.5 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 9:56 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 09:25:47 2014
Response via : Single Level Calibration



(38) Benzene

5.21min 0.47ug/L

response 18152

Ion	Exp%	Act%
78.00	100	100
51.00	16.10	22.97#
52.00	16.80	22.07#
0.00	0.00	0.00

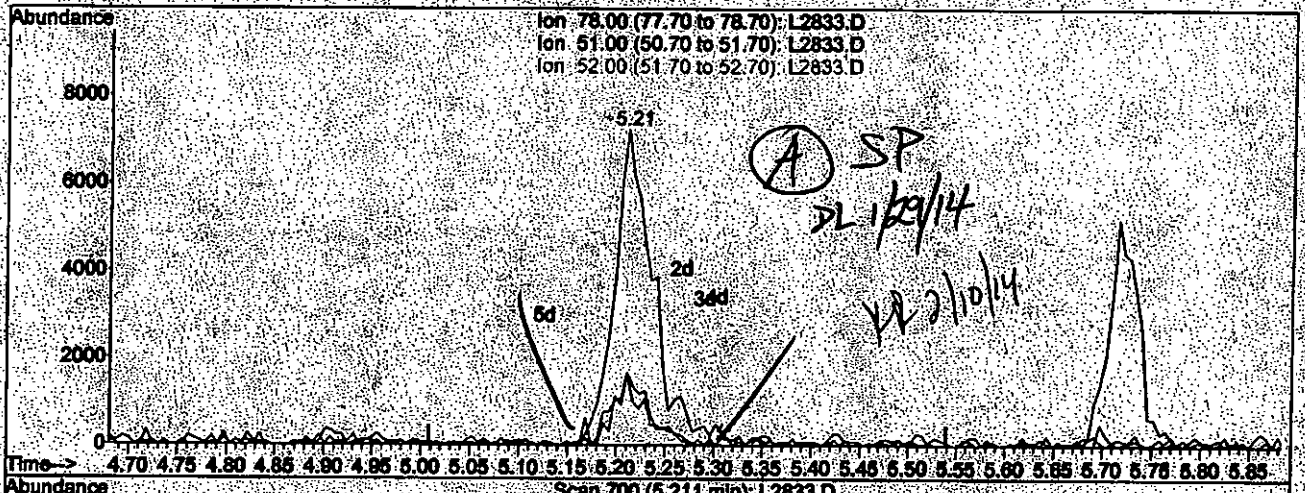
L2833.D 6240127.M Wed Jan 29 09:57:27 2014

00077

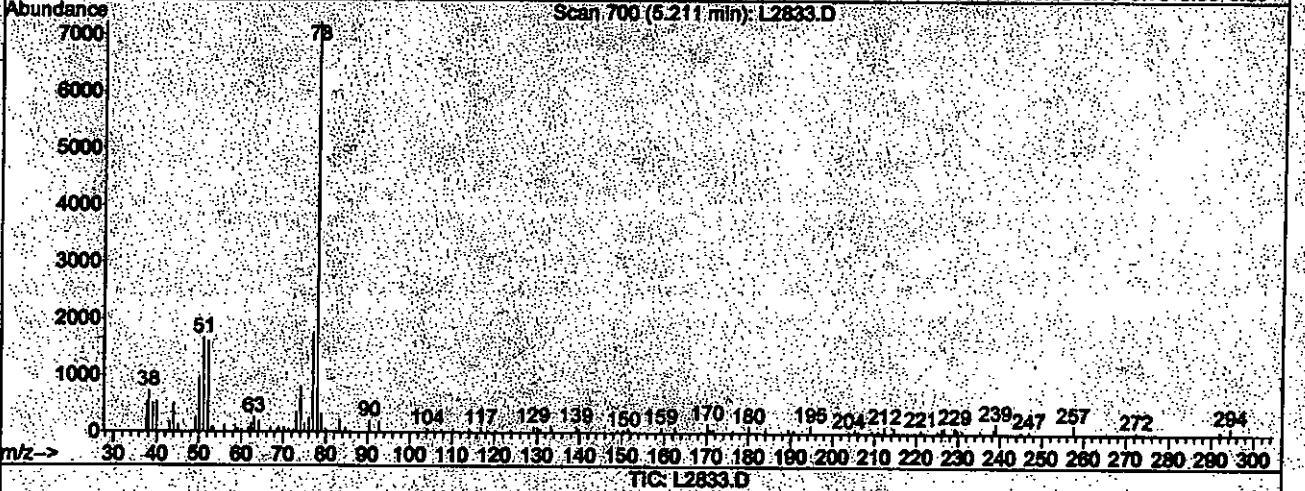
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2833.D Vial: 26
Acq On : 27 Jan 2014 9:53 pm Operator: D.LIPANI
Sample : STD#3 - 0.5 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 9:57 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 09:25:47 2014
Response via : Single Level Calibration



A SP DL 1/29/14 WW 2/10/14



TIC: L2833.D

(38) Benzene

5.21min 0.51ug/L m

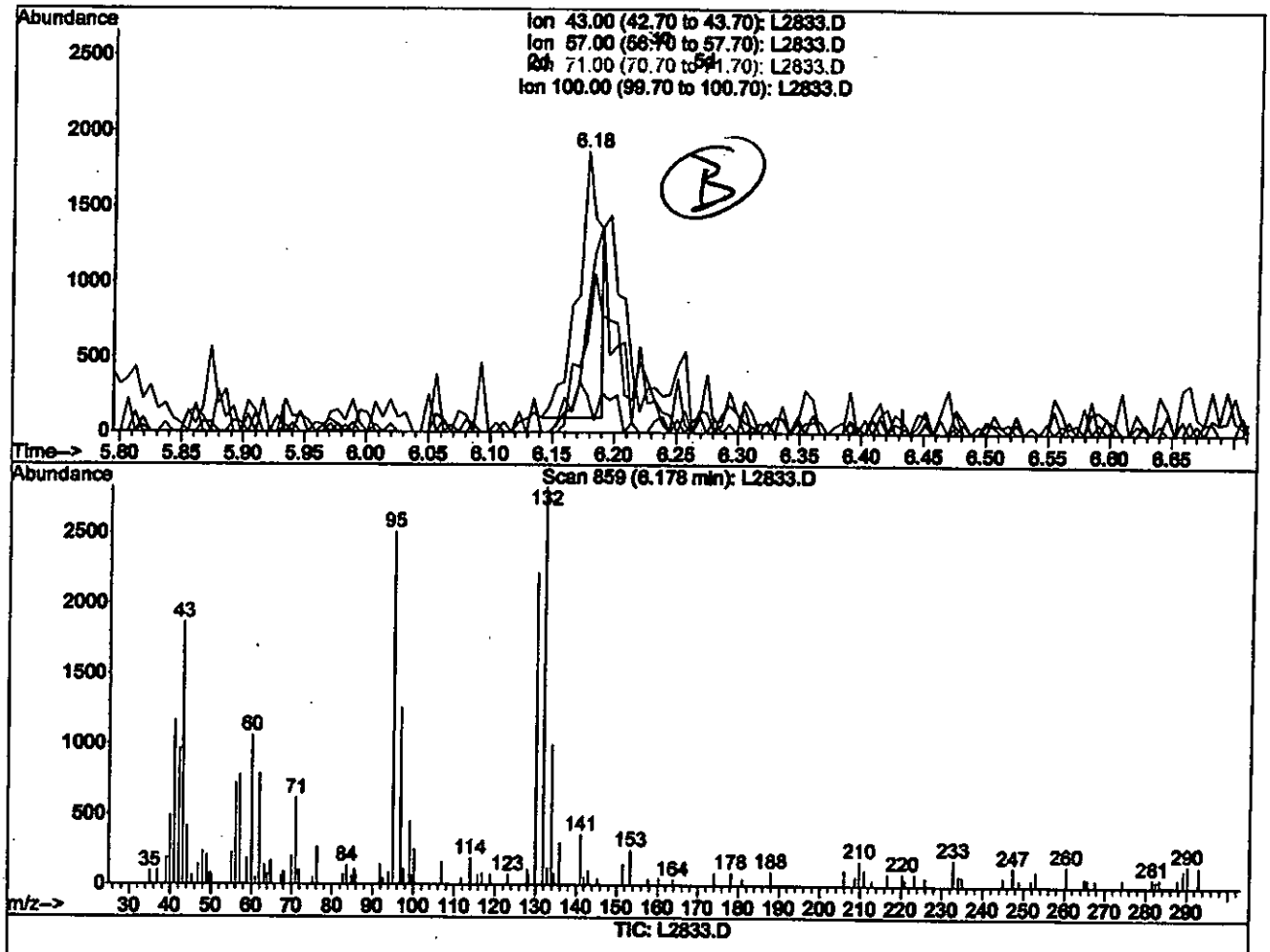
response 18723

Ion	Exp%	Act%
78.00	100	100
51.00	16.10	22.97#
52.00	16.80	22.07#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2833.D Vial: 26
Acq On : 27 Jan 2014 9:53 pm Operator: D.LIPANI
Sample : STD#3 - 0.5 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 9:57 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 09:25:47 2014
Response via : Single Level Calibration



(42) Heptane

6.18min 0.27ug/L

response 2353

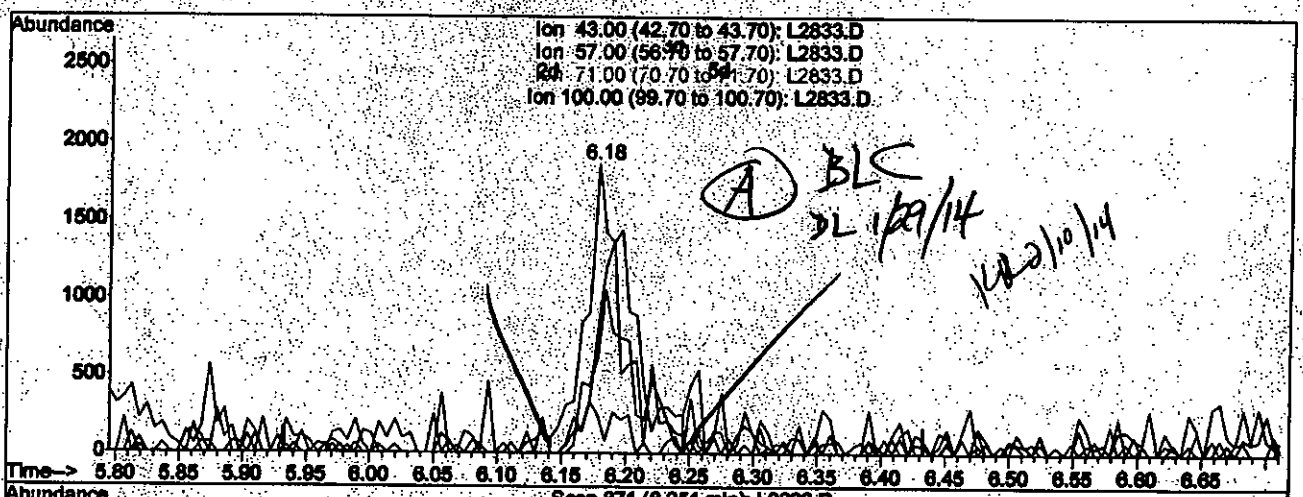
Ion	Exp%	Act%
43.00	100	100
57.00	52.70	71.61#
71.00	57.90	84.00
100.00	15.30	11.30

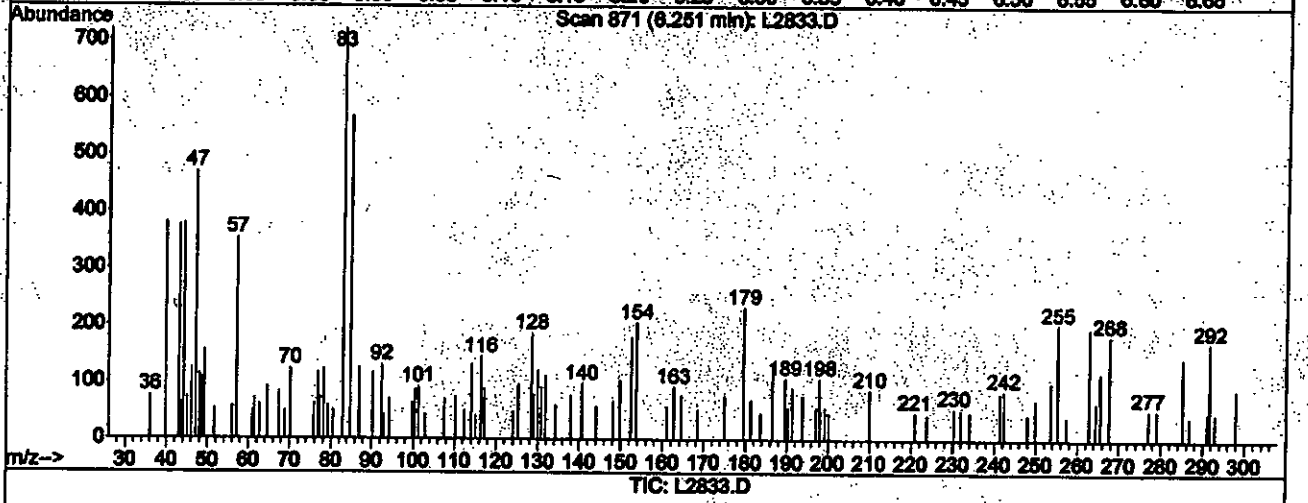
L2833.D 6240127.M Wed Jan 29 09:57:59 2014

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2833.D Vial: 26
Acq On : 27 Jan 2014 9:53 pm Operator: D.LIPANI
Sample : STD#3 - 0.5 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 9:58 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 09:25:47 2014
Response via : Single Level Calibration





TIC: L2833.D

(42) Heptane

6.18min 0.50ug/L m

response 4421

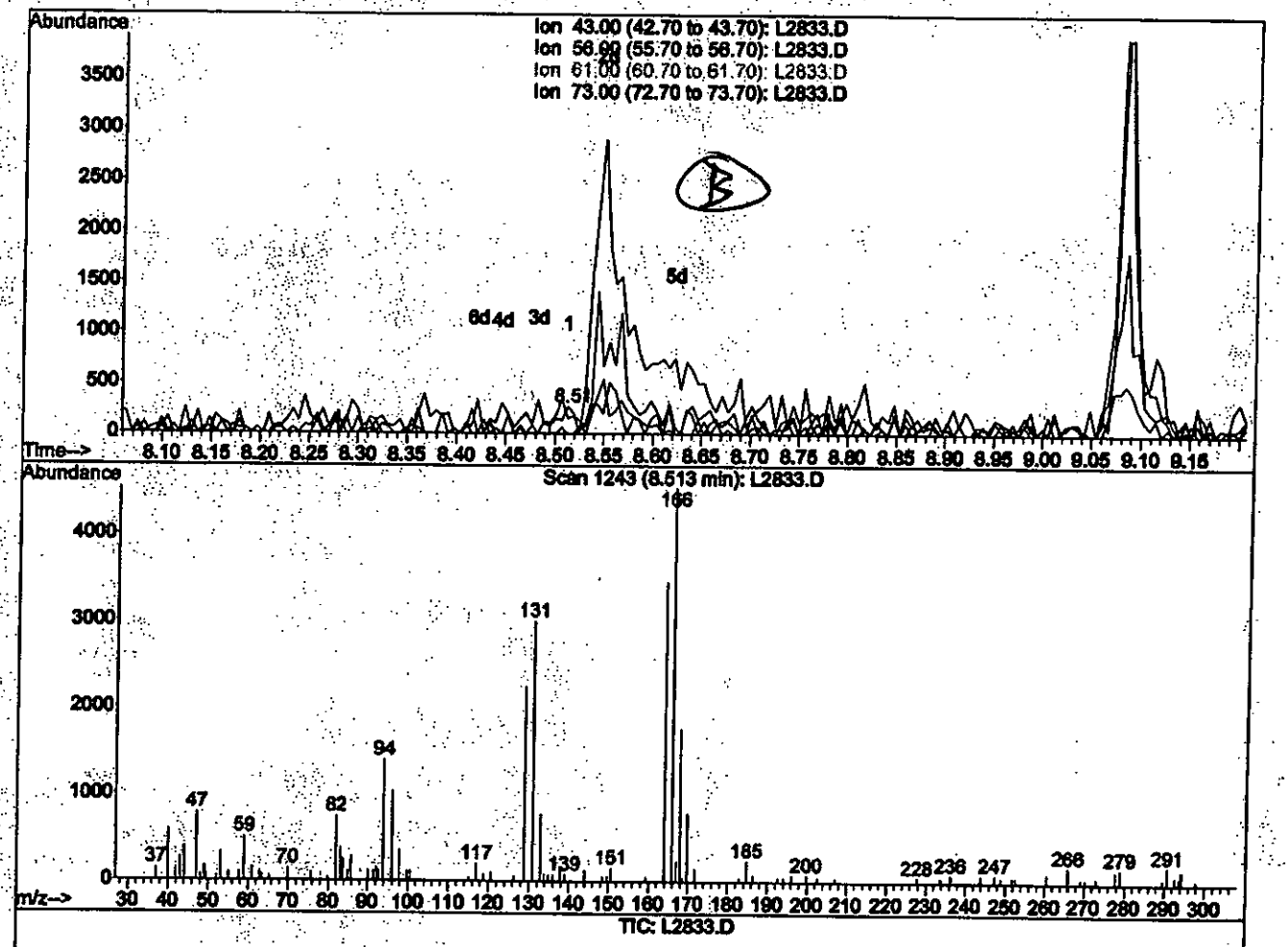
Ion	Exp%	Act%
43.00	100	100
57.00	52.70	38.11
71.00	57.90	34.06#
100.00	15.30	6.02#

L2833.D 6240127.M Wed Jan 29 09:58:35 2014

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2833.D Vial: 26
Acq On : 27 Jan 2014 9:53 pm Operator: D.LIPANI
Sample : STD#3 - 0.5 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 9:58 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 09:25:47 2014
Response via : Single Level Calibration



(58) N-Butyl Acetate

8.51min 0.03ug/L

response 274

Ion	Exp%	Act%
43.00	100	100
56.00	38.70	8.03#
61.00	17.10	161.31#
73.00	14.00	121.80#

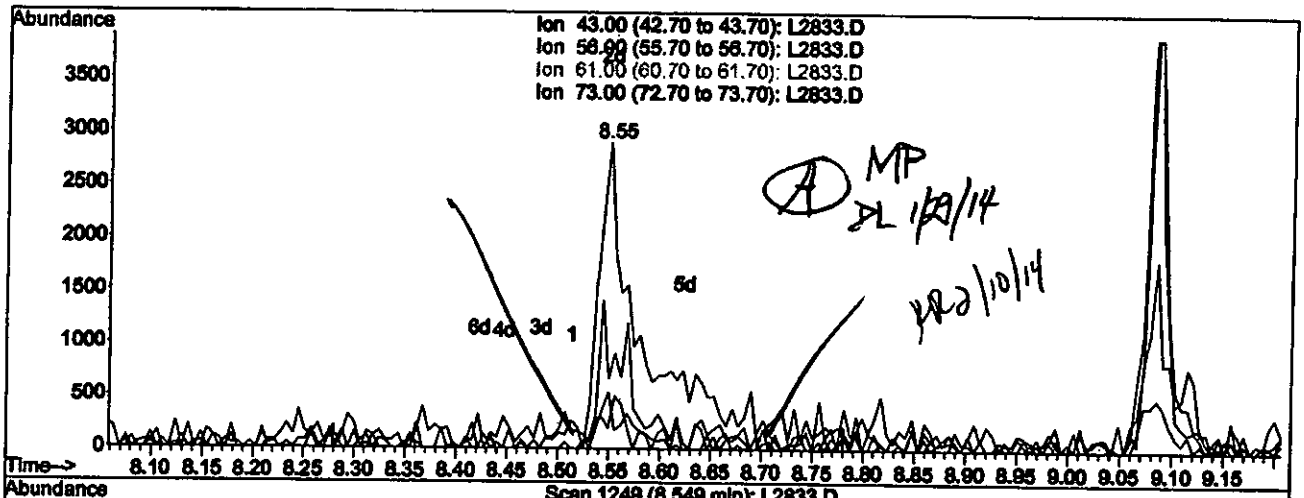
L2833.D 6240127.M Wed Jan 29 09:59:23 2014

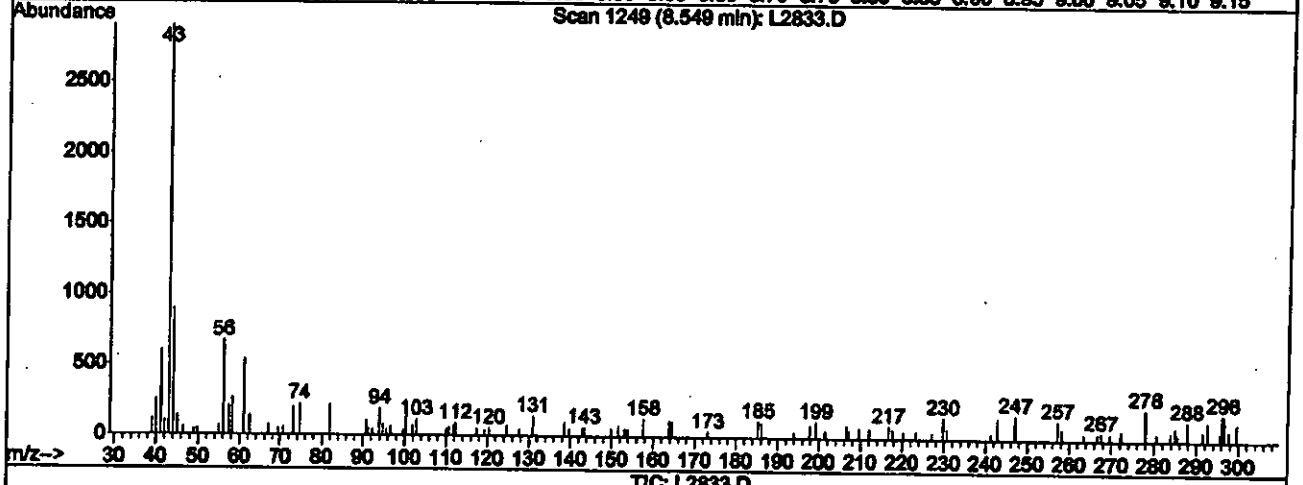
00081

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2833.D Vial: 26
Acq On : 27 Jan 2014 9:53 pm Operator: D.LIPANI
Sample : STD#3 - 0.5 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 9:59 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 09:25:47 2014
Response via : Single Level Calibration





TIC: L2833.D

(58) N-Butyl Acetate

8.55min 0.89ug/L m

response 8713

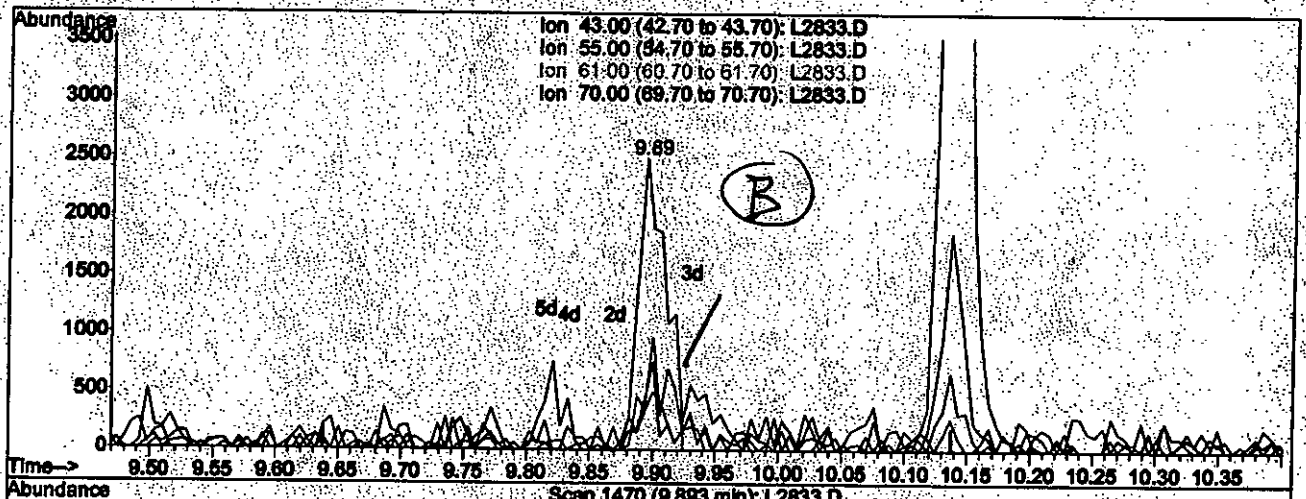
Ion	Exp%	Act%
43.00	100	100
56.00	38.70	0.25#
61.00	17.10	5.07#
73.00	14.00	3.83#

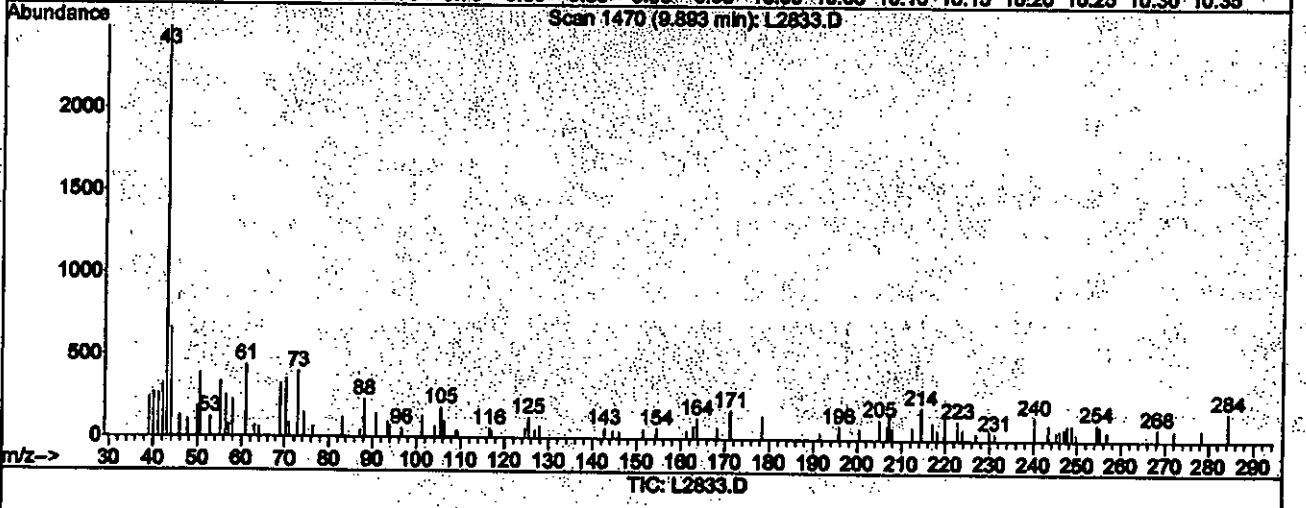
L2833.D 6240127.M Wed Jan 29 09:59:44 2014

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2833.D Vial: 26
Acq On : 27 Jan 2014 9:53 pm Operator: D.LIPANI
Sample : STD#3 - 0.5 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 9:59 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 09:25:47 2014
Response via : Single Level Calibration





(67) Amyl Acetate

9.89min 0.30ug/L

response 3814

Ion	Exp%	Act%
43.00	100	100
55.00	22.90	14.68#
61.00	23.00	18.17#
70.00	36.90	20.21#

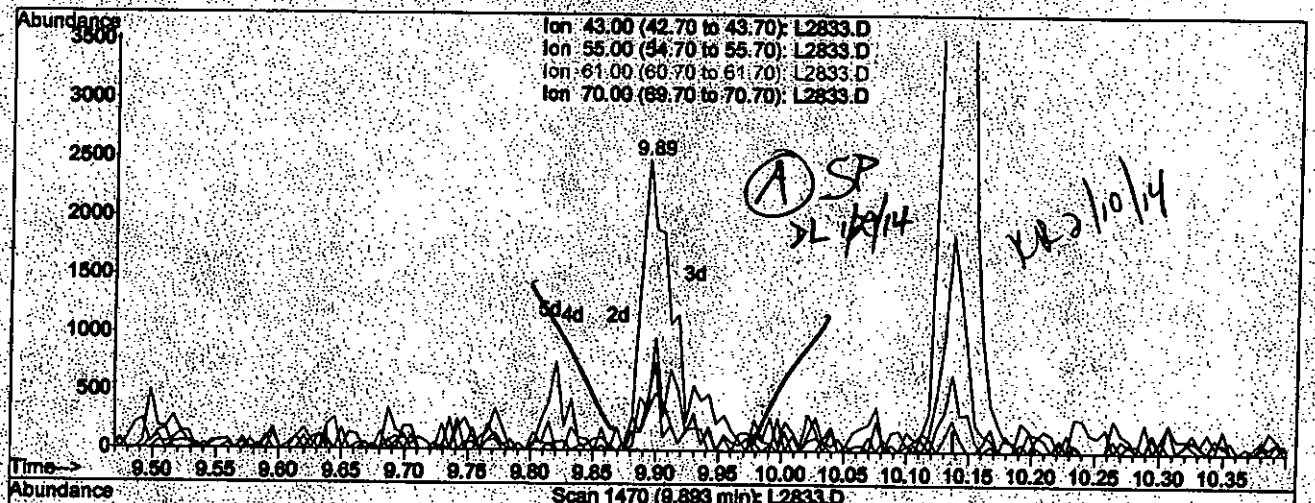
L2833.D 6240127.M Wed Jan 29 10:00:09 2014

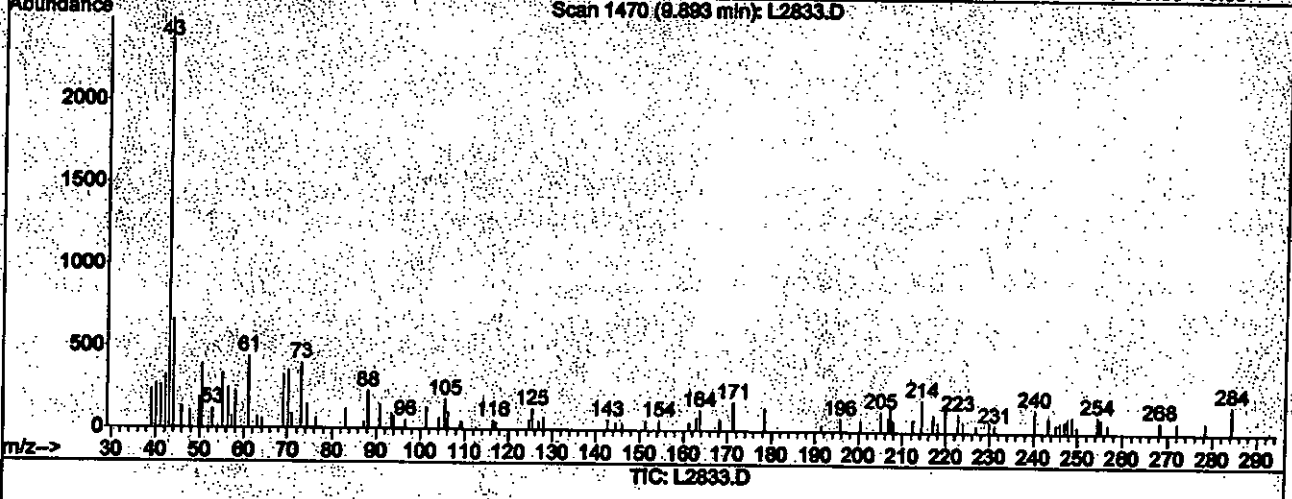
00023

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2833.D Vial: 26
Acq On : 27 Jan 2014 9:53 pm Operator: D.LIPANI
Sample : STD#3 - 0.5 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 10:00 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOA3 on MS#6
Last Update : Wed Jan 29 09:25:47 2014
Response via : Single Level Calibration





(67) Amyl Acetate

9.89min 0.36ug/L m

response 4642

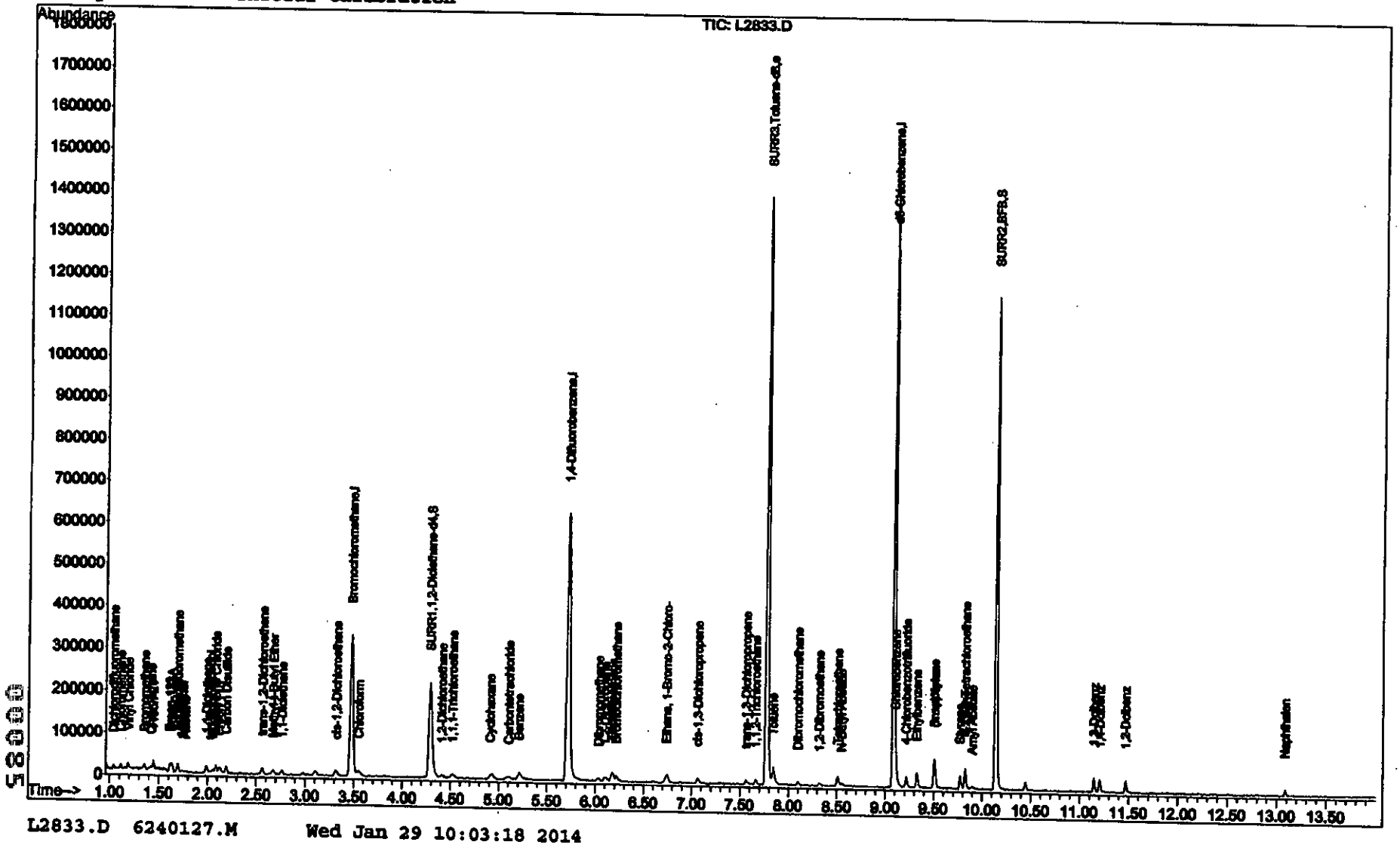
Ion	Exp%	Act%
43.00	100	100
55.00	22.90	12.06#
61.00	23.00	14.93#
70.00	38.90	16.61#

L2833.D 6240127.M Wed Jan 29 10:00:21 2014

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2833.D Vial: 26
Acq On : 27 Jan 2014 9:53 pm Operator: D.LIPANI
Sample : STD#3 - 0.5 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 10:00 2014 Quant Results File: 6240127.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 10:03:00 2014
Response via : Initial Calibration



L2833.D 6240127.M Wed Jan 29 10:03:18 2014

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2834.D Vial: 27
Acq On : 27 Jan 2014 10:23 pm Operator: D.LIPANI
Sample : STD#4 - 1.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 8:22 2014 Quant Results File: 6240127.RES

Quant Method : I:\ACQUDATA\M \6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 07:50:11 2014
Response via : Initial Calibration
DataAcq Meth : 6240127

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	3.47	128	102215	30.00 ug/L	0.00
35) 1,4-Difluorobenzene	5.72	114	649749	30.00 ug/L	0.00
53) d5-Chlorobenzene	9.09	117	634496	30.00 ug/L	0.00
System Monitoring Compounds					
30) SURR1,1,2-Diclethane-d4	4.30	65	201125	31.61 ug/L	0.00
Spiked Amount 30.000	Range 81 - 127		Recovery = 105.37%		
51) SURR3,Toluene-d8	7.77	98	799983	30.45 ug/L	0.00
Spiked Amount 30.000	Range 83 - 120		Recovery = 101.50%		
68) SURR2,BFB	10.14	95	305579	30.69 ug/L	0.00
Spiked Amount 30.000	Range 79 - 123		Recovery = 102.30%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.04	85	9211	0.95 ug/L	96
3) Chloromethane	1.12	50	12226	1.01 ug/L	93
4) Vinyl Chloride	1.19	62	12066	1.01 ug/L	98
5) Bromomethane	1.35	94	7424	1.01 ug/L	78
6) Chloroethane	1.42	64	7501	1.16 ug/L	79
7) Freon-21	1.45	67	21259	1.25 ug/L	96
8) Freon-123	1.61	83	15413	1.09 ug/L	99
9) Freon-123A	1.64	67	13538	1.16 ug/L #	87
10) Acrolein	1.70	56	4092	4.34 ug/L	68
11) Trichlorofluoromethane	1.69	101	14500	1.02 ug/L	85
12) Acetonitrile	1.71	41	4324m	4.65 ug/L	
13) 2-Propanol	1.74	45	5832m	17.85 ug/L	
15) 1,1-Diclethene	1.99	96	9293	1.11 ug/L	87
16) tert Butyl Alcohol	2.03	59	8175m	17.49 ug/L	
17) Acrylonitrile	2.05	53	11016m	5.24 ug/L	
18) Methylene Chloride	2.09	84	11248	1.11 ug/L #	95
19) Freon 113	2.12	101	10025	1.12 ug/L	99
20) Carbon Disulfide	2.19	76	31165	1.12 ug/L #	94
21) trans-1,2-Dichloroethene	2.56	96	10150	1.12 ug/L	91
22) Methyl-t-Butyl Ether	2.68	73	21882	1.12 ug/L	98
23) 1,1-Diclethane	2.76	63	18913	1.18 ug/L #	90
25) cis-1,2-Dichloroethene	3.32	96	11053	1.05 ug/L	97
26) Chloroform	3.55	83	18833	1.12 ug/L	88
27) Ethyl Acetate	3.69	43	8021m	1.54 ug/L	
31) 1,2-Dichloroethane	4.42	62	11560	1.08 ug/L #	83
32) 1,1,1-Trichloroethane	4.53	97	15247	1.06 ug/L	98
33) 2-Methyl-1,3-Dioxolane	4.69	73	2731m	3.84 ug/L	
34) Cyclohexane	4.93	56	16507m	1.15 ug/L	
36) Carbontetrachloride	5.09	117	11800	0.88 ug/L #	95
37) Isopropyl Acetate	5.26	43	10738m	0.83 ug/L	
38) Benzene	5.21	78	38532	1.01 ug/L #	91
39) Dibromomethane	6.03	93	5289	0.94 ug/L #	74
40) 1,2-Diclpropane	6.11	63	10005	0.98 ug/L	98
41) Trichloroethene	6.18	130	9978	0.90 ug/L	96
42) Heptane	6.18	43	8973	1.05 ug/L #	74
43) Bromodichloromethane	6.23	83	13796	1.00 ug/L #	96
44) Epichlorohydrin	6.67	57	1451m	2.88 ug/L	
45) Ethane, 1-Bromo-2-Chloro-	6.73	63	13683	1.13 ug/L #	97

(#) = qualifier out of range (m) = manual integration
L2834.D 6240127.M Wed Jan 29 08:23:38 2014

B

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2834.D Vial: 27
Acq On : 27 Jan 2014 10:23 pm Operator: D.LIPANI
Sample : STD#4 - 1.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 8:22 2014 Quant Results File: 6240127.RES

Quant Method : I:\ACQUDATA\M...\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 07:50:11 2014
Response via : Initial Calibration
DataAcq Meth : 6240127

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
46) 2-Chloroethylvinyl Ether	6.92	63	3516m	0.85 ug/L	
47) cis-1,3-Dichloropropene	7.06	75	14339	1.00 ug/L	94
48) 4-Methyl-2-pentanone	7.28	43	1982	0.31 ug/L #	25
49) trans-1,3-Dichloropropene	7.56	75	11326	0.97 ug/L	99
50) 1,1,2-Trichloroethane	7.67	97	7495	0.98 ug/L	94
52) Toluene	7.85	91	40424	0.99 ug/L	99
54) Dibromochloromethane	8.10	129	9443	0.93 ug/L #	96
56) 1,2-Dibromoethane	8.32	107	7535	0.95 ug/L	92
57) Tetrachloroethene	8.50	164	8893	0.94 ug/L	97
58) N-Butyl Acetate	8.54	43	16986m	1.69 ug/L	
59) Chlorobenzene	9.11	112	27944	1.02 ug/L #	82
60) 4-Chlorobenzotrifluoride	9.22	180	12569	0.87 ug/L #	91
61) Ethylbenzene	9.33	106	13886	0.95 ug/L	90
62) (m+p)Xylene	9.51	106	35450	2.09 ug/L	99
63) Bromoform	9.51	173	5634	0.83 ug/L	98
64) Styrene	9.78	104	25504	0.94 ug/L	100
65) 1,1,2,2-Tetrachloroethane	9.82	83	7835	0.83 ug/L	98
66) o-Xylene	9.83	106	16432	0.93 ug/L	87
67) Amyl Acetate	9.90	43	10362	0.78 ug/L #	91
69) 1,3-Dclbenz	11.14	146	21939	1.02 ug/L	96
70) 1,4-Dclbenz	11.20	146	21445	0.98 ug/L	93
71) 1,2-Dclbenz	11.47	146	17967	0.91 ug/L	98
72) Naphthalen	13.09	128	14345	0.91 ug/L #	97

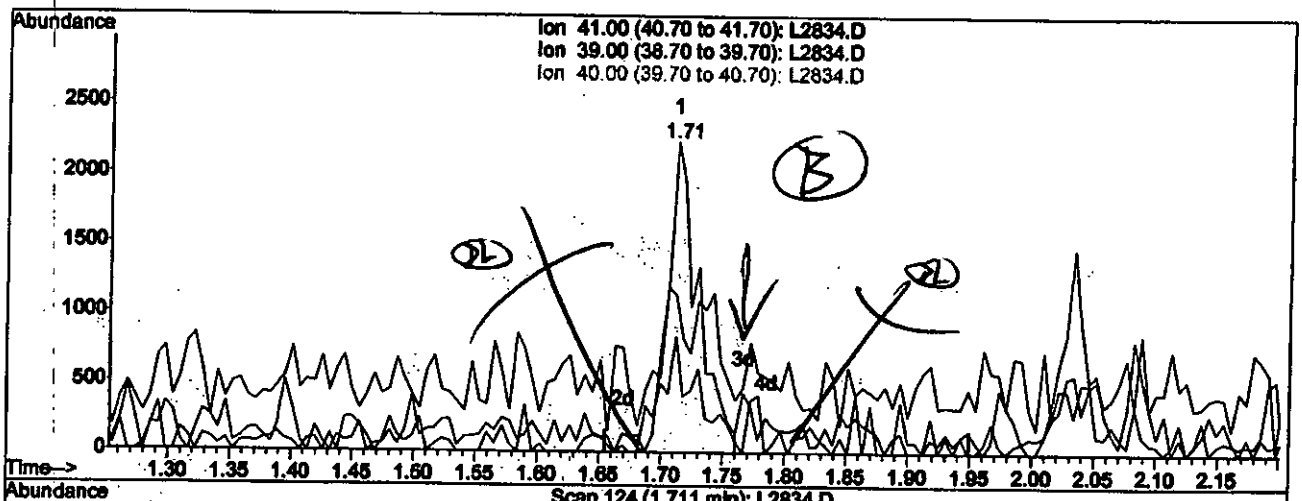
SL 01/29/14

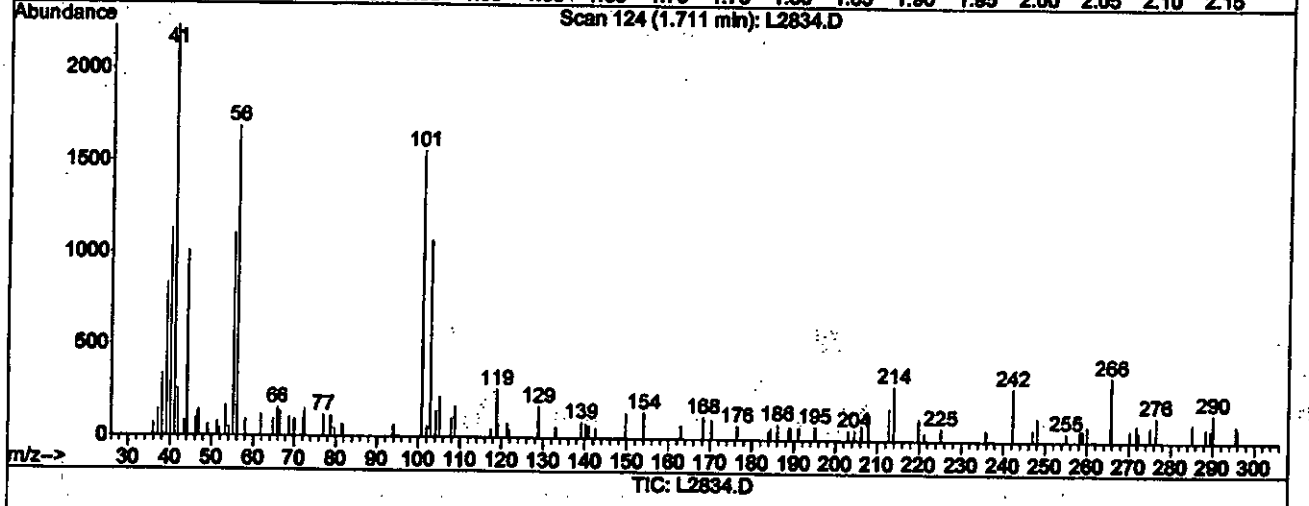
(#) = qualifier out of range (m) = manual integration
L2834.D 6240127.M Wed Jan 29 08:23:38 2014

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2834.D Vial: 27
Acq On : 27 Jan 2014 10:23 pm Operator: D.LIPANI
Sample : STD#4 - 1.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 7:51 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 07:50:11 2014
Response via : Single Level Calibration





(12) Acetonitrile

1.71min 4.08ug/L

response 3796

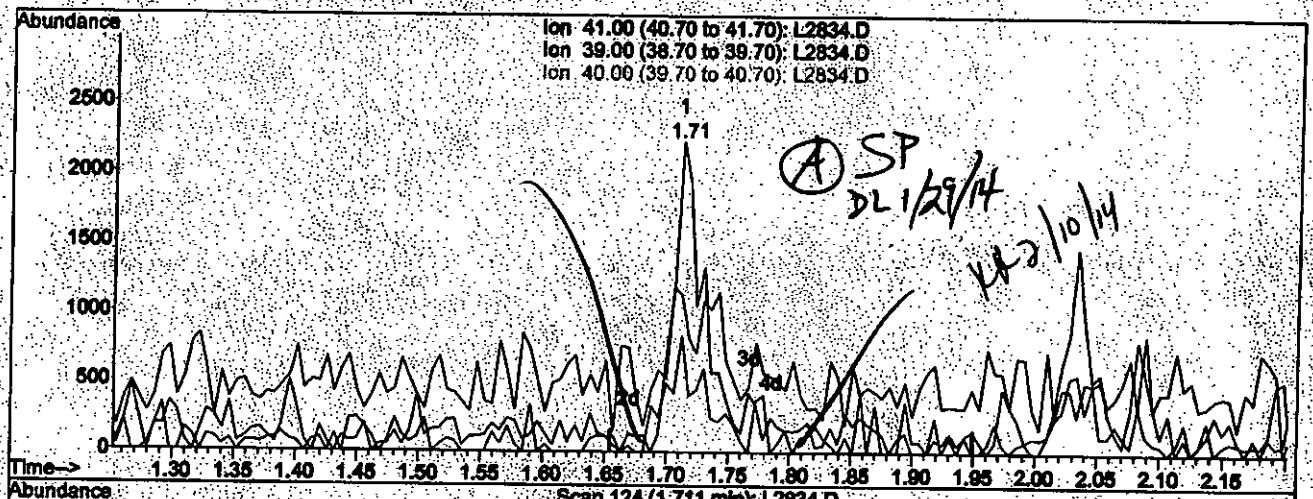
Ion	Exp%	Act%
41.00	100	100
39.00	24.60	37.42
40.00	61.50	50.70
0.00	0.00	0.00

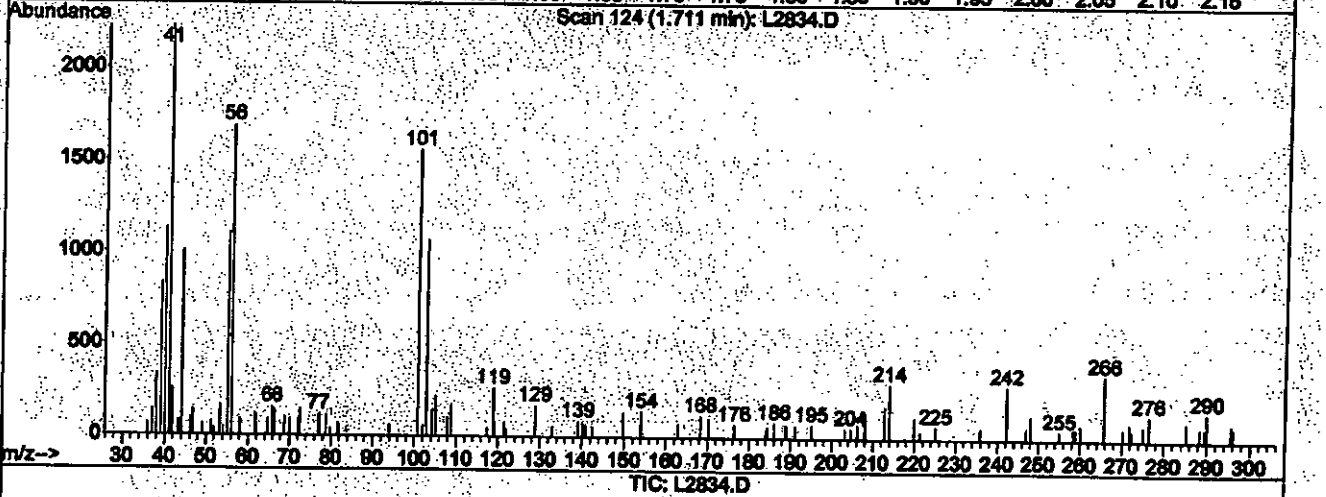
L2834.D 6240127.M Wed Jan 29 07:52:07 2014

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2834.D Vial: 27
Acq On : 27 Jan 2014 10:23 pm Operator: D.LIPANI
Sample : STD#4 - 1.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 7:52 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 07:50:11 2014
Response via : Single Level Calibration





TIC: L2834.D

(12) Acetonitrile

1.71min 4.65ug/L m

response 4324

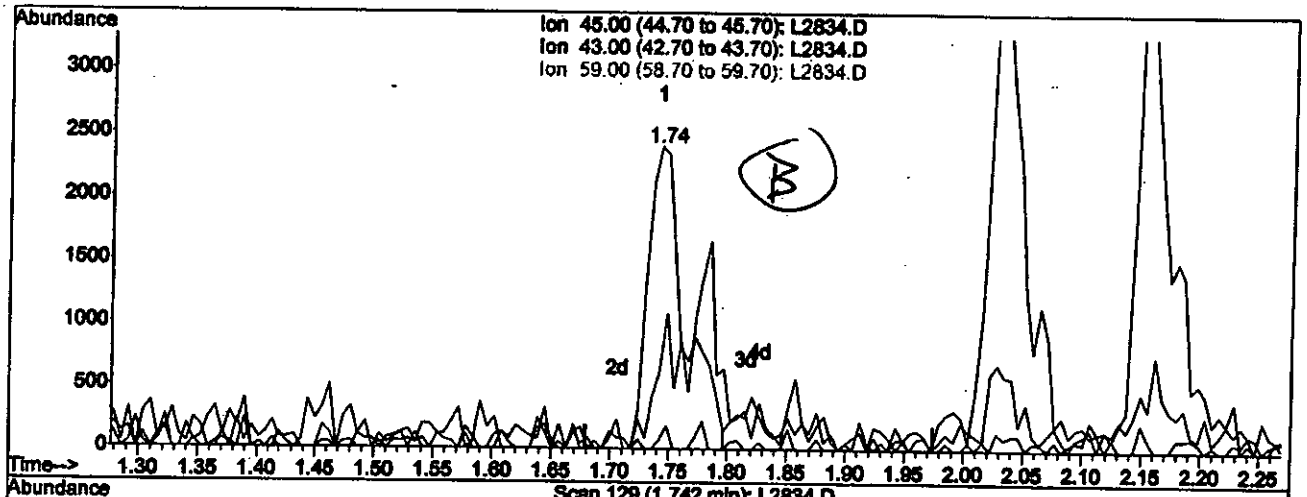
Ion	Exp%	Act%
41.00	100	100
39.00	24.60	37.42
40.00	61.50	50.70
0.00	0.00	0.00

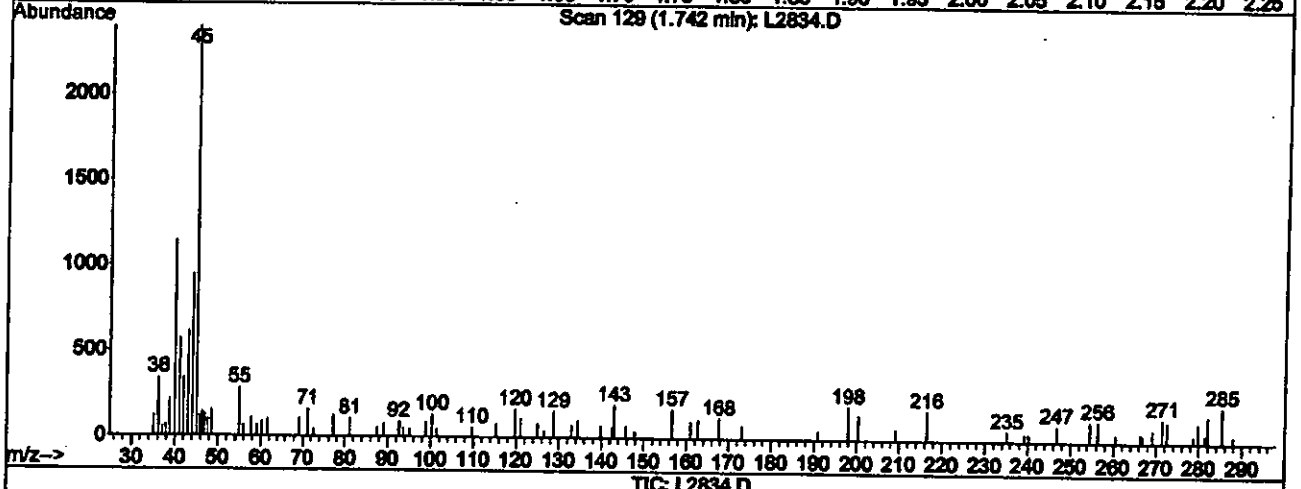
L2834.D 6240127.M Wed Jan 29 07:52:19 2014

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2834.D Vial: 27
Acq On : 27 Jan 2014 10:23 pm Operator: D.LIPANI
Sample : STD#4 - 1.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 7:52 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 07:50:11 2014
Response via : Single Level Calibration





TIC: L2834.D

(13) 2-Propanol

1.74min 16.12ug/L

response 5266

Ion	Exp%	Act%
45.00	100	100
43.00	18.90	25.69
59.00	3.20	2.79
0.00	0.00	0.00

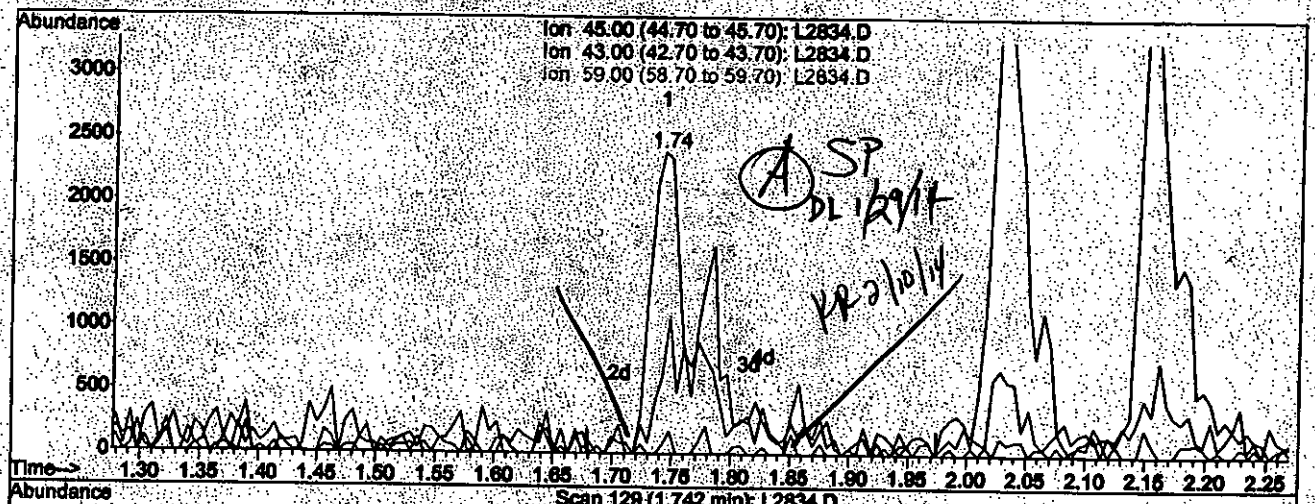
L2834.D 6240127.M Wed Jan 29 07:52:38 2014

00090

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2834.D Vial: 27
Acq On : 27 Jan 2014 10:23 pm Operator: D.LIPANI
Sample : STD#4 - 1.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 7:52 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 07:50:11 2014
Response via : Single Level Calibration



(13) 2-Propanol

1.74min 17.85ug/L m

response 5832

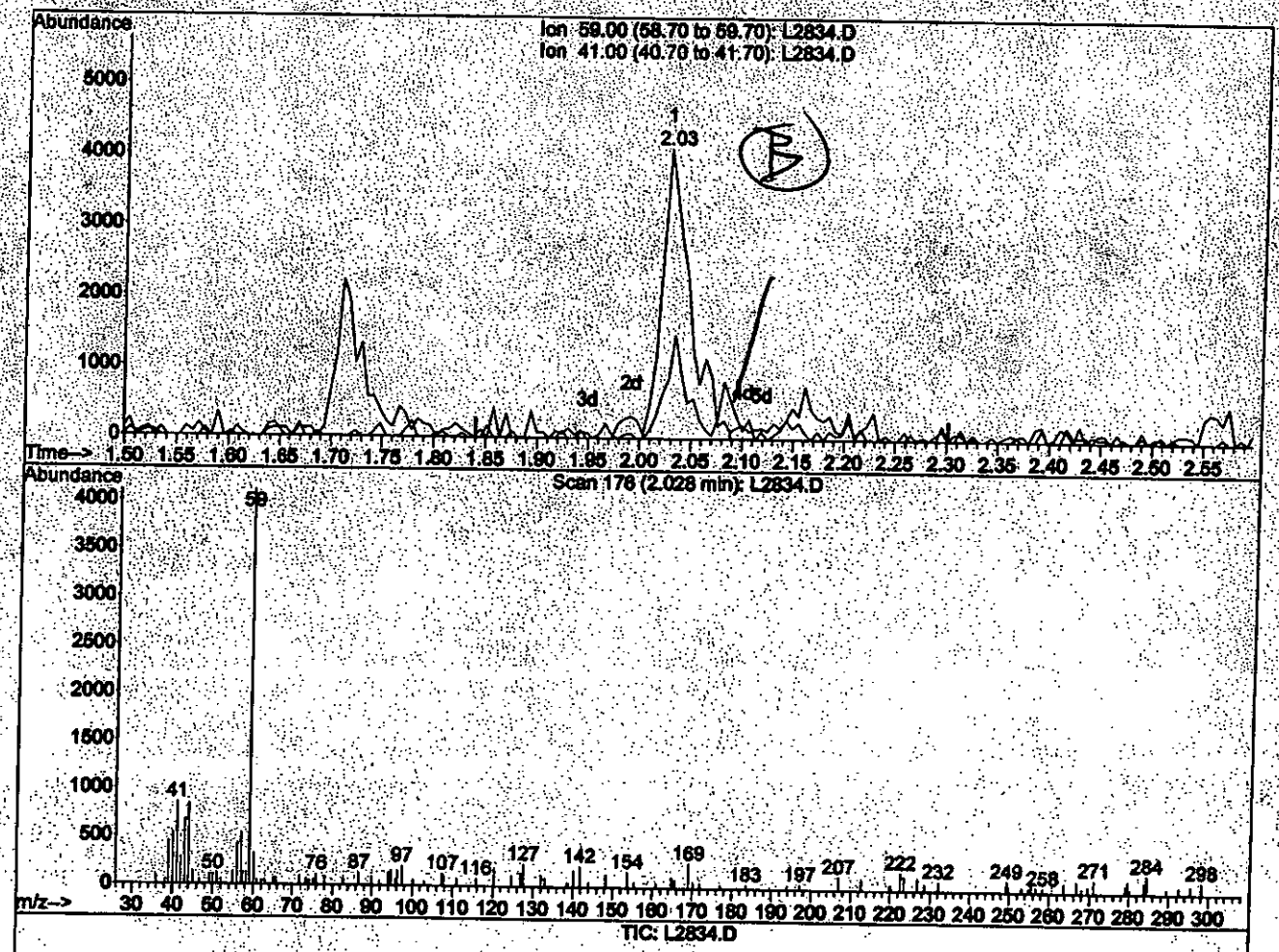
Ion	Exp%	Act%
45.00	100	100
43.00	18.90	25.69
59.00	3.20	2.79
0.00	0.00	0.00

L2834.D 6240127.M Wed Jan 29 07:52:47 2014

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2834.D Vial: 27
Acq On : 27 Jan 2014 10:23 pm Operator: D.LIPANI
Sample : STD#4 - 1.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 7:52 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 07:50:11 2014
Response via : Single Level Calibration



(16) tert Butyl Alcohol

2.03min 16.81ug/L

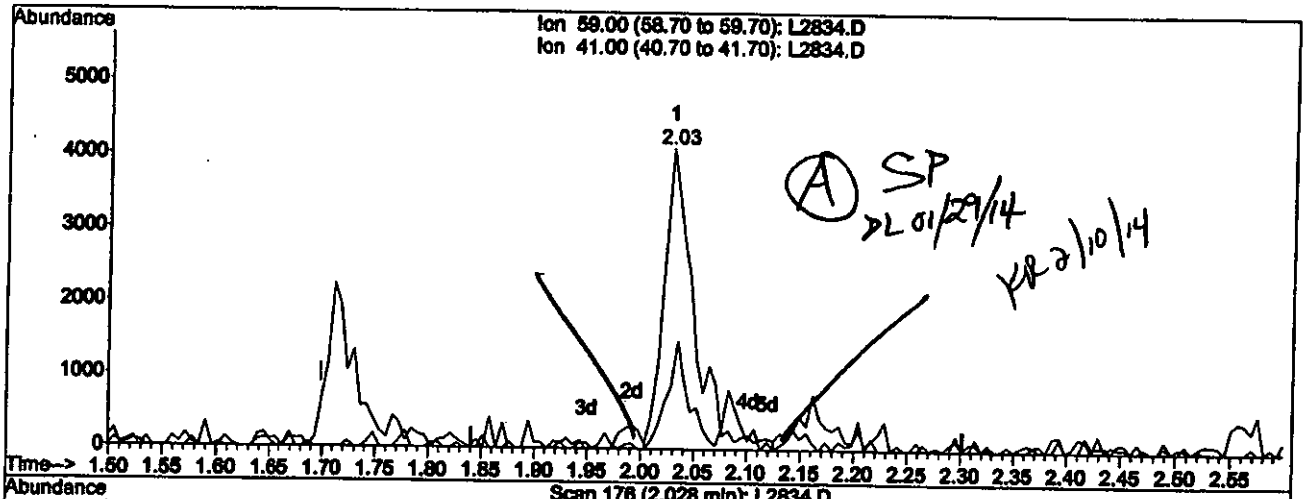
response 7856

Ion	Exp%	Act%
59.00	100	100
41.00	23.90	20.80
0.00	0.00	0.00
0.00	0.00	0.00

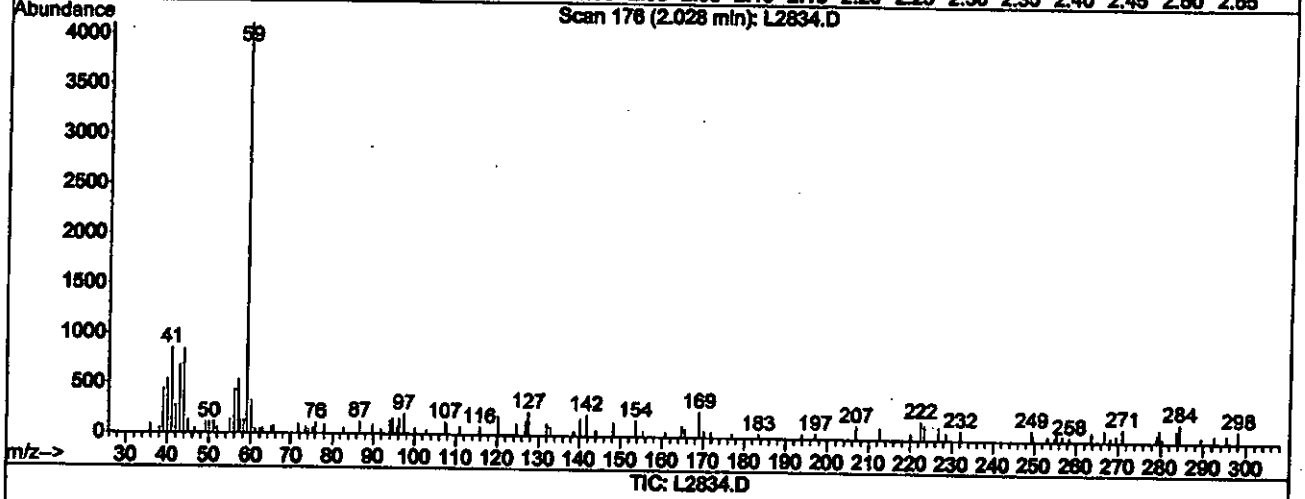
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2834.D Vial: 27
Acq On : 27 Jan 2014 10:23 pm Operator: D.LIPANI
Sample : STD#4 - 1.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 7:53 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 07:50:11 2014
Response via : Single Level Calibration



A SP DL 01/29/14 KR 2/10/14



TIC: L2834.D

(16) tert Butyl Alcohol

2.03min 17.48ug/L m

response 8175

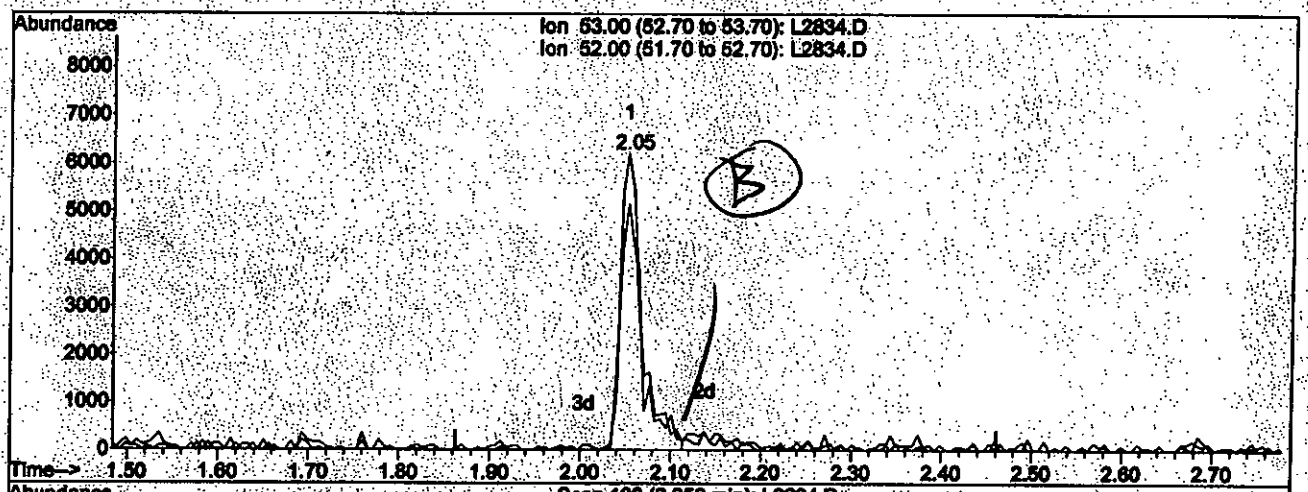
Ion	Exp%	Act%
59.00	100	100
41.00	23.90	20.80
0.00	0.00	0.00
0.00	0.00	0.00

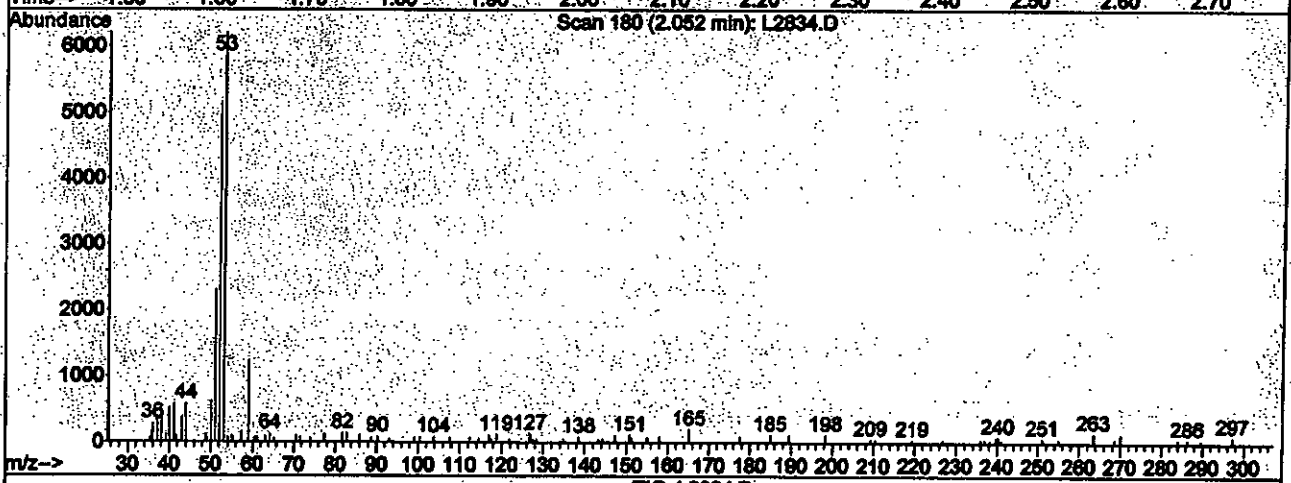
L2834.D 6240127.M Wed Jan 29 07:53:28 2014

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2834.D Vial: 27
Acq On : 27 Jan 2014 10:23 pm Operator: D.LIPANI
Sample : STD#4 - 1.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 7:53 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 07:50:11 2014
Response via : Single Level Calibration





TIC: L2834.D

(17) Acrylonitrile

2.05min 4.80ug/L

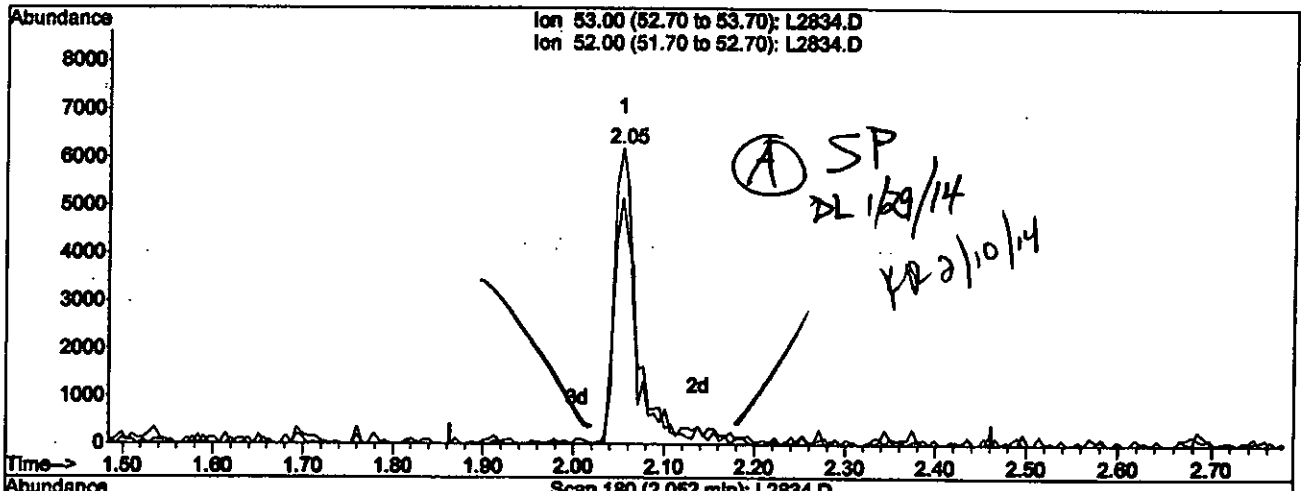
response 10089

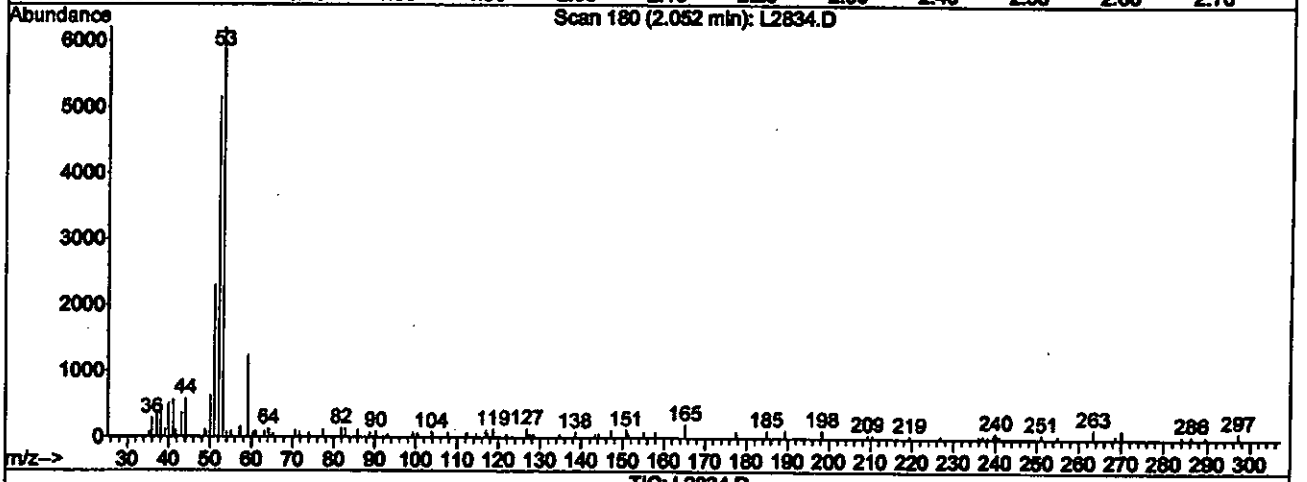
Ion	Exp%	Act%
53.00	100	100
52.00	84.40	83.07
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2834.D Vial: 27
Acq On : 27 Jan 2014 10:23 pm Operator: D.LIPANI
Sample : STD#4 - 1.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 7:53 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 07:50:11 2014
Response via : Single Level Calibration





TIC: L2834.D

(17) Acrylonitrile

2.05min 5.24ug/L m

response 11016

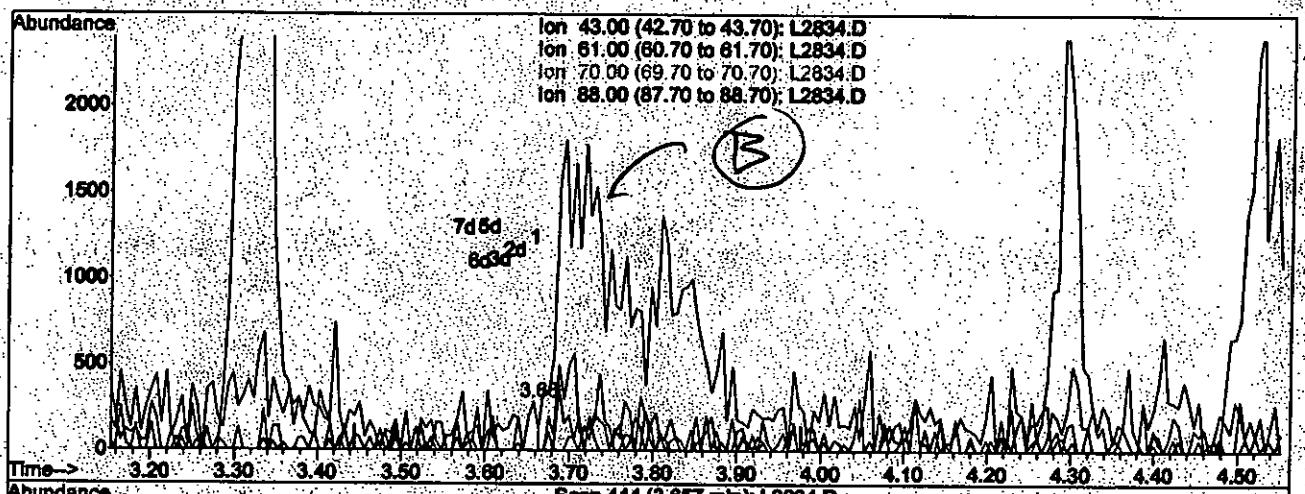
Ion	Exp%	Act%
53.00	100	100
52.00	84.40	83.07
0.00	0.00	0.00
0.00	0.00	0.00

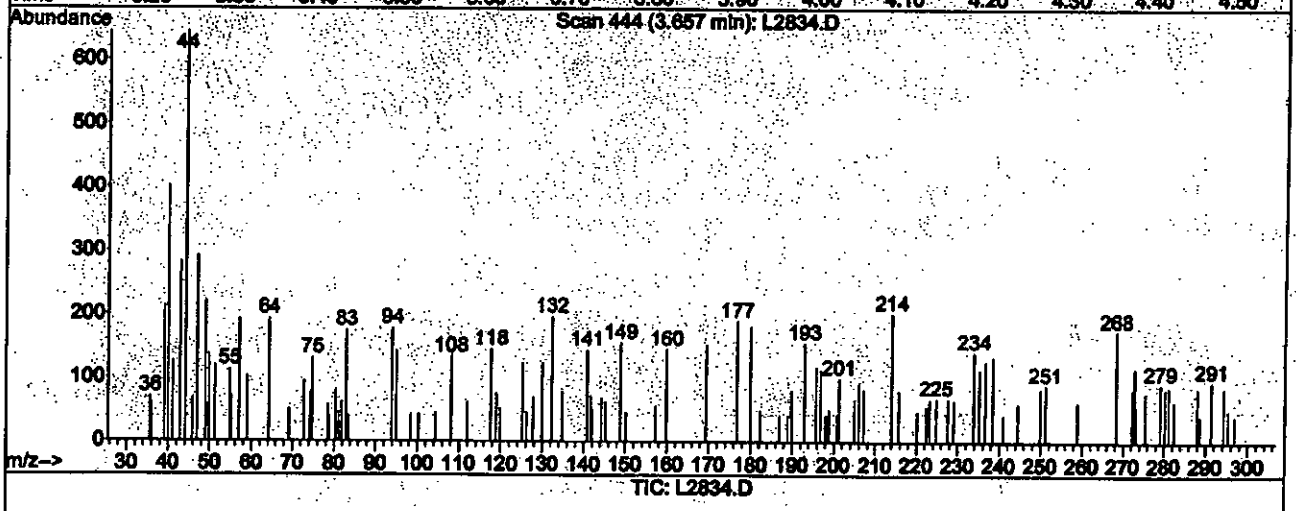
L2834.D 6240127.M Wed Jan 29 07:53:53 2014

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2834.D Vial: 27
Acq On : 27 Jan 2014 10:23 pm Operator: D.LIPANI
Sample : STD#4 - 1.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 7:54 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 07:50:11 2014
Response via : Single Level Calibration





TIC: L2834.D

(27) Ethyl Acetate

3.66min 0.04ug/L

response 218

Ion	Exp%	Act%
43.00	100	100
61.00	13.90	0.00#
70.00	9.90	0.00#
88.00	3.20	0.00#

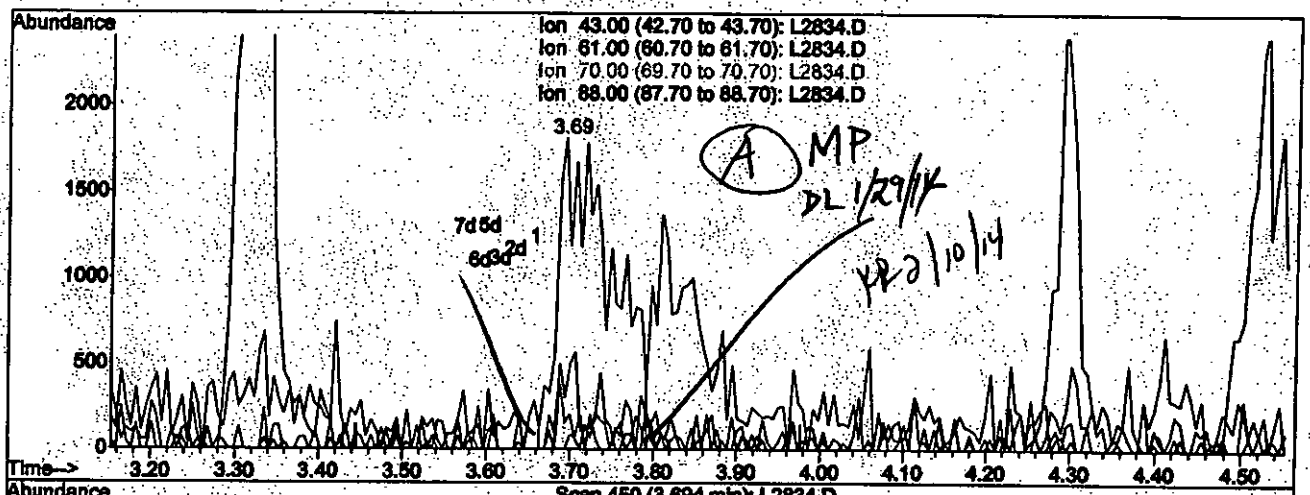
L2834.D 6240127.M Wed Jan 29 07:54:19 2014

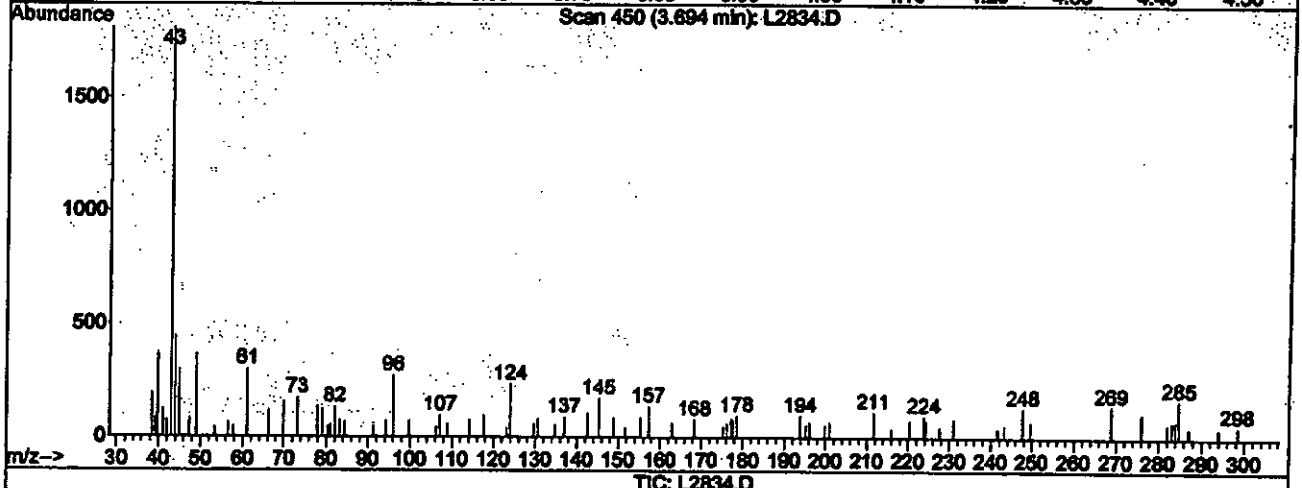
00096

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2834.D Vial: 27
Acq On : 27 Jan 2014 10:23 pm Operator: D.LIPANI
Sample : STD#4 - 1.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 7:54 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 07:50:11 2014
Response via : Single Level Calibration





TIC: L2834.D

(27) Ethyl Acetate

3.69min 1.54ug/L m

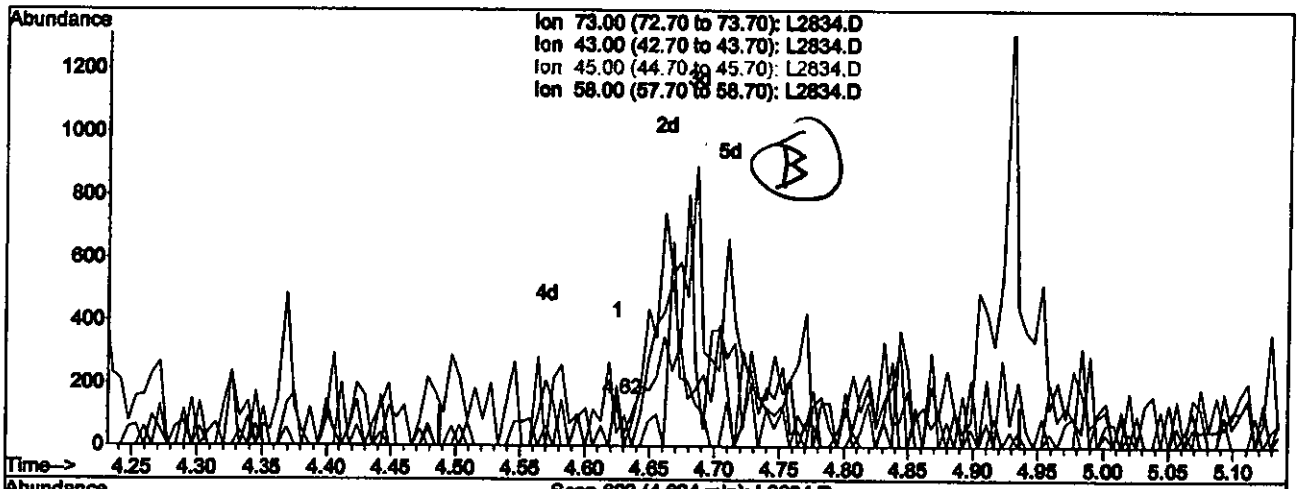
response 8021

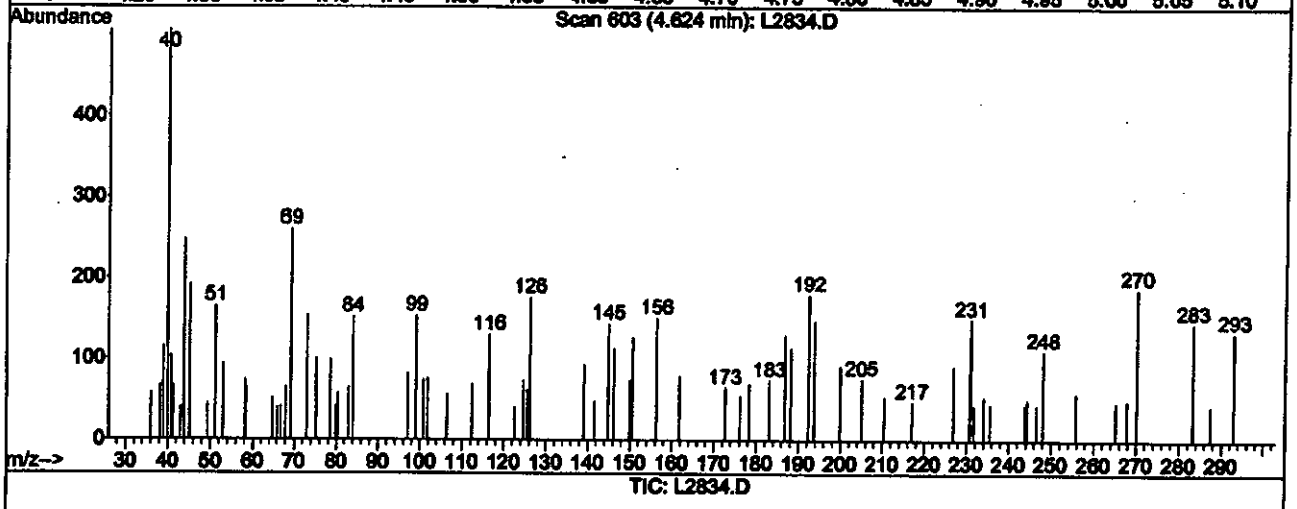
Ion	Exp%	Act%
43.00	100	100
61.00	13.90	16.53
70.00	9.90	8.62
88.00	3.20	0.00#

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2834.D Vial: 27
Acq On : 27 Jan 2014 10:23 pm Operator: D.LIPANI
Sample : STD#4 - 1.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 7:54 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 07:50:11 2014
Response via : Single Level Calibration





TIC: L2834.D

(33) 2-Methyl-1,3-Dioxolane

4.62min 0.10ug/L

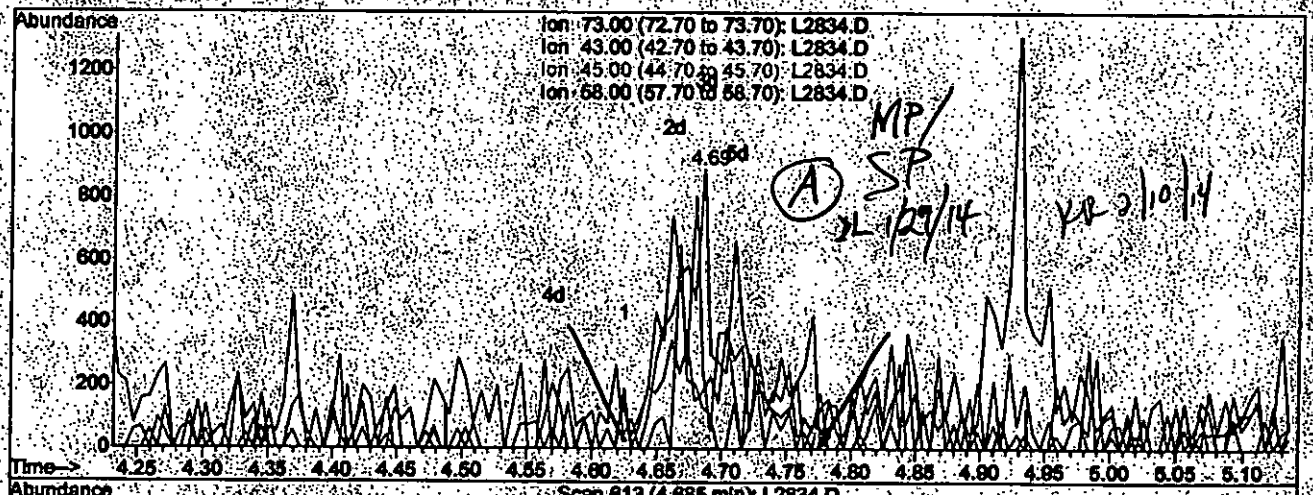
response 71

Ion	Exp%	Act%
73.00	100	100
43.00	47.80	26.62#
45.00	47.80	124.68#
58.00	25.40	90.26#

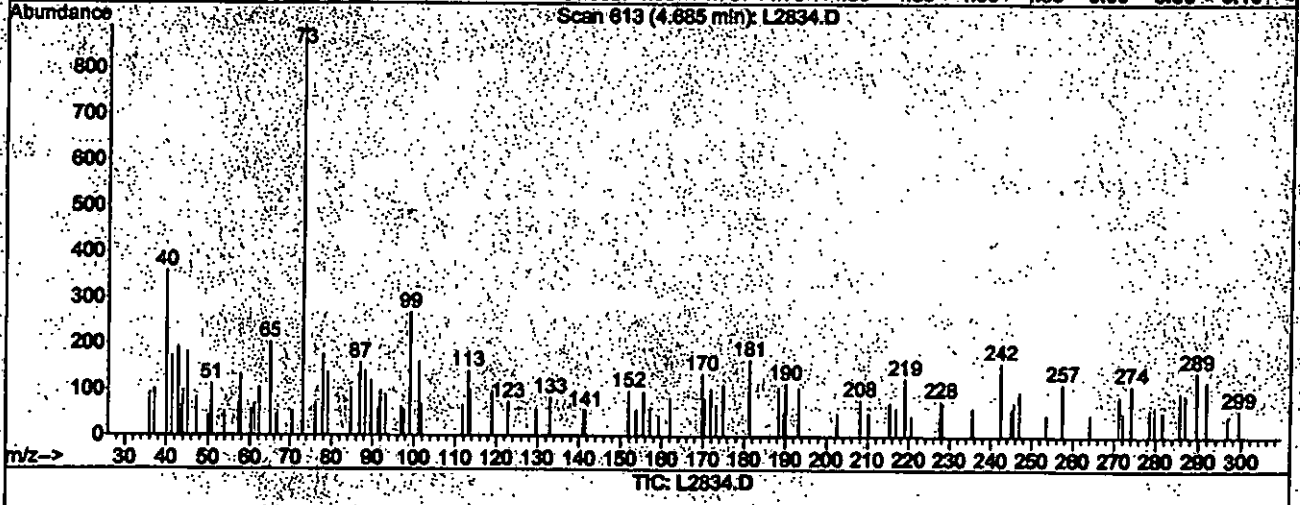
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2834.D Vial: 27
Acq On : 27 Jan 2014 10:23 pm Operator: D LIPANI
Sample : STD#4 - 1.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 7:55 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 07:50:11 2014
Response via : Single Level Calibration



MP/SP 1L 1/29/14 A



(33) 2-Methyl-1,3-Dioxolane

4.69min 3.84ug/L m

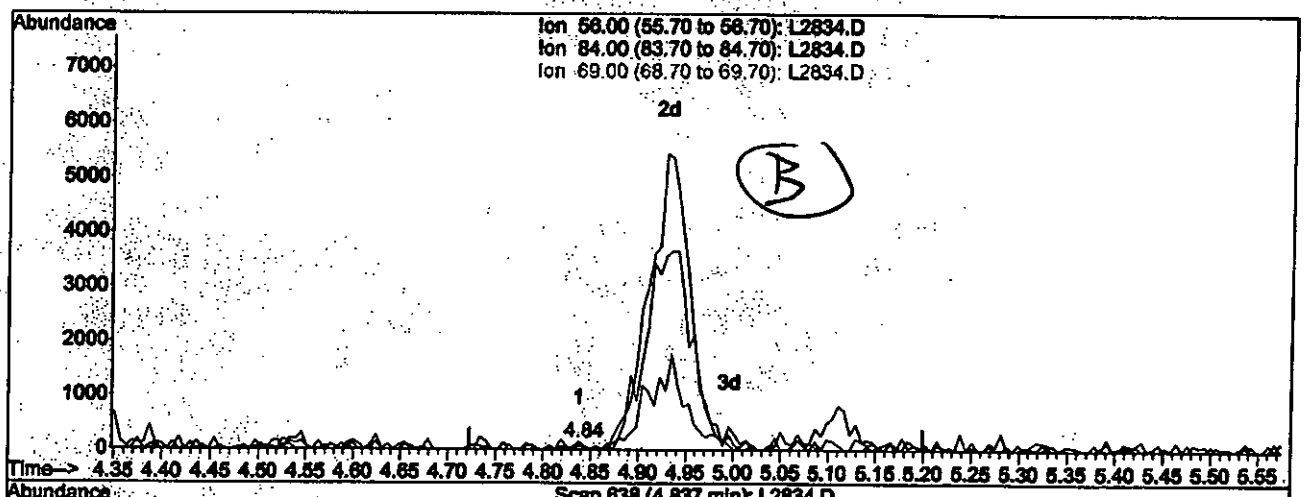
response 2731

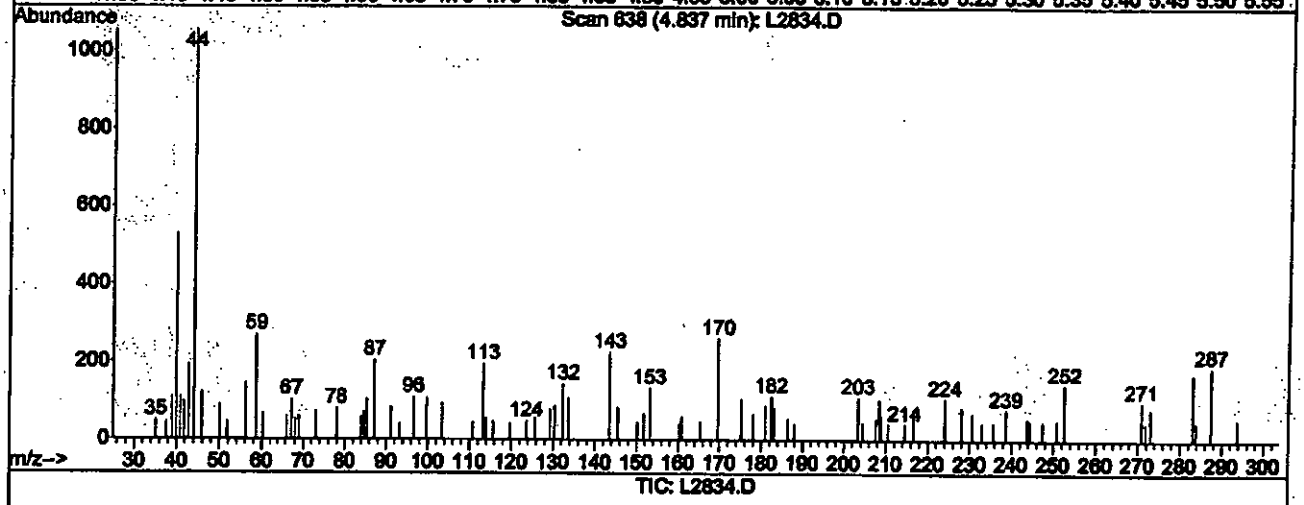
Ion	Exp%	Act%
73.00	100	100
43.00	47.80	21.64#
45.00	47.80	20.40#
58.00	25.40	15.02#

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2834.D Vial: 27
Acq On : 27 Jan 2014 10:23 pm Operator: D.LIPANI
Sample : STD#4 - 1.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 7:55 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 07:50:11 2014
Response via : Single Level Calibration





TIC: L2834.D

(34) Cyclohexane

4.84min 0.01ug/L

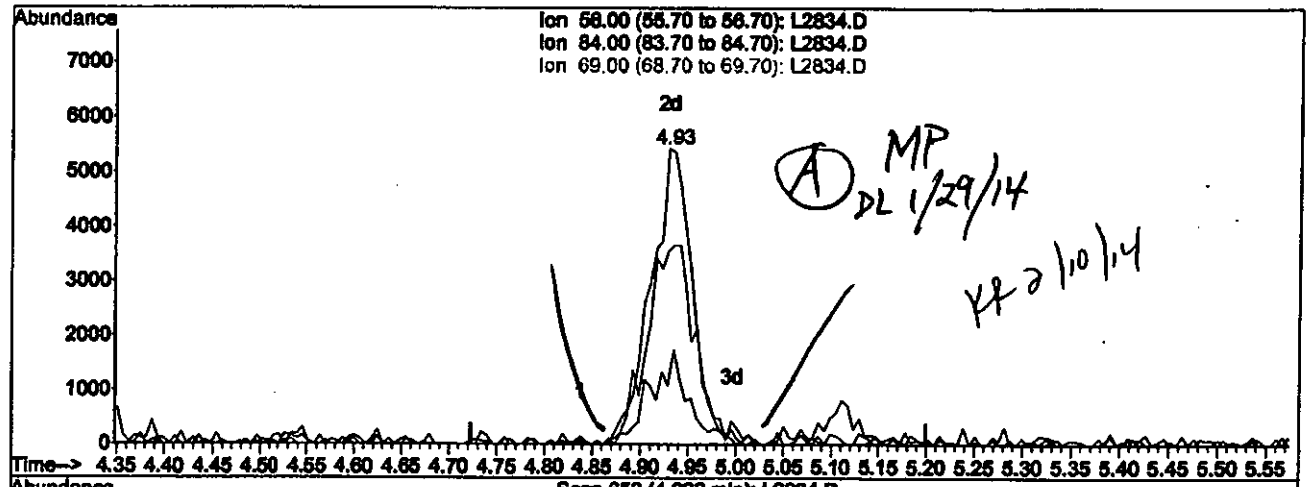
response 72

Ion	Exp%	Act%
56.00	100	100
84.00	85.50	88.36
69.00	31.50	40.41
0.00	0.00	0.00

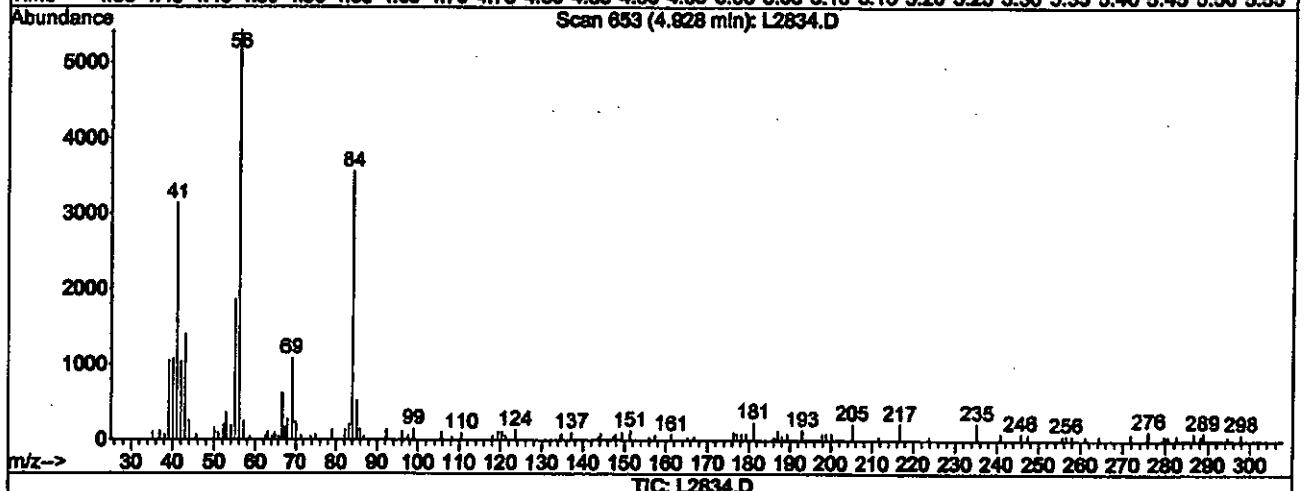
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2834.D Vial: 27
Acq On : 27 Jan 2014 10:23 pm Operator: D.LIPANI
Sample : STD#4 - 1.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 7:55 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 07:50:11 2014
Response via : Single Level Calibration



MP DL 1/29/14 KF 2/10/14



TIC: L2834.D

(34) Cyclohexane

4.93min 1.15ug/L m

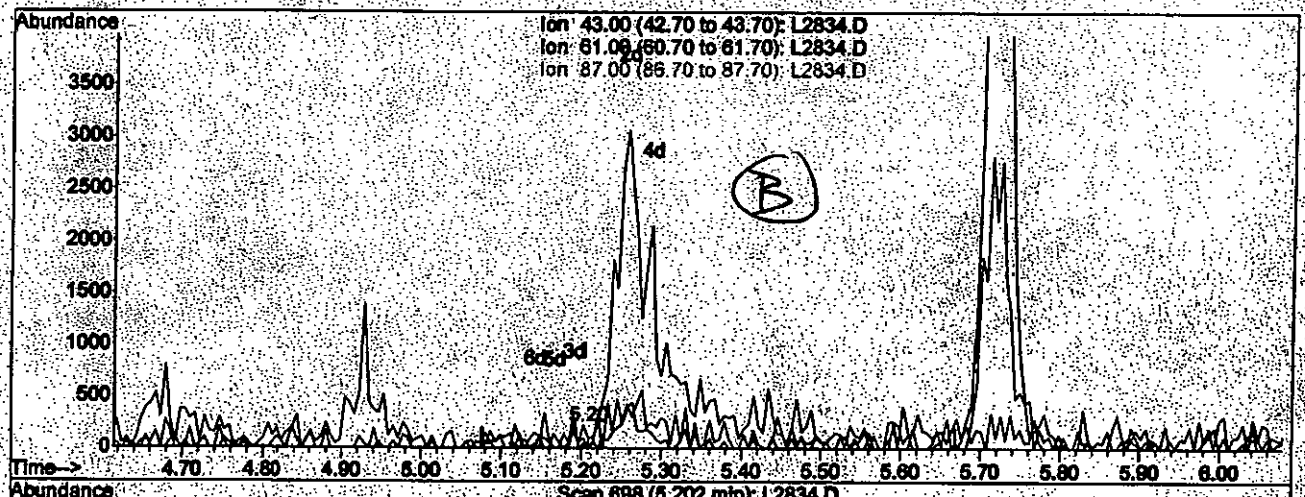
response 16507

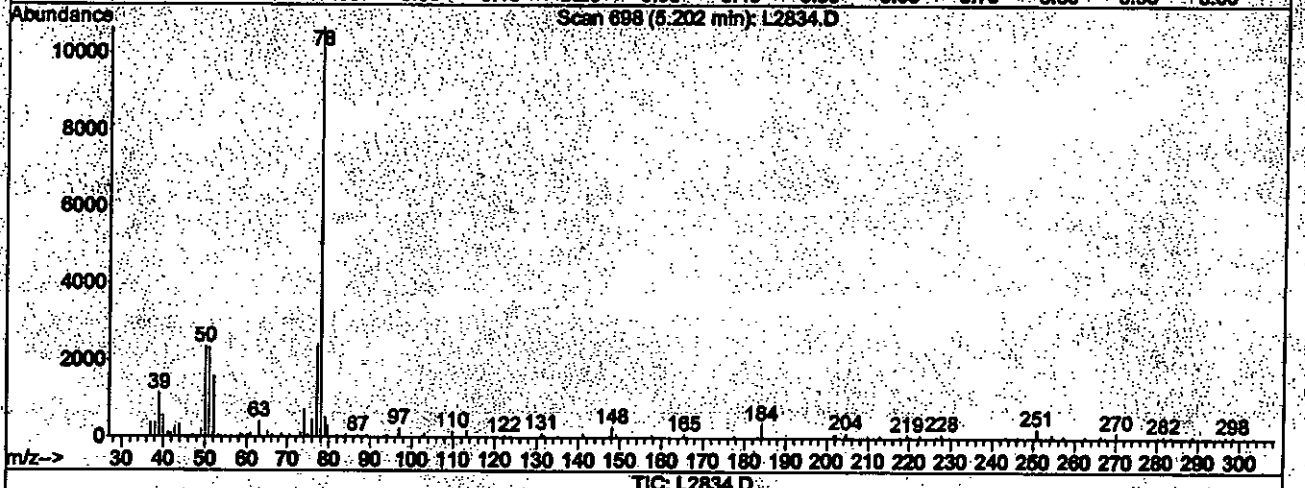
Ion	Exp%	Act%
56.00	100	100
84.00	65.50	65.57
69.00	31.60	19.96#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2834.D Vial: 27
Acq On : 27 Jan 2014 10:23 pm Operator: D.LIPANI
Sample : STD#4 - 1.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 7:55 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 07:50:11 2014
Response via : Single Level Calibration





TIC: L2834.D

(37) Isopropyl Acetate

6.20min 0.01ug/L

response 99

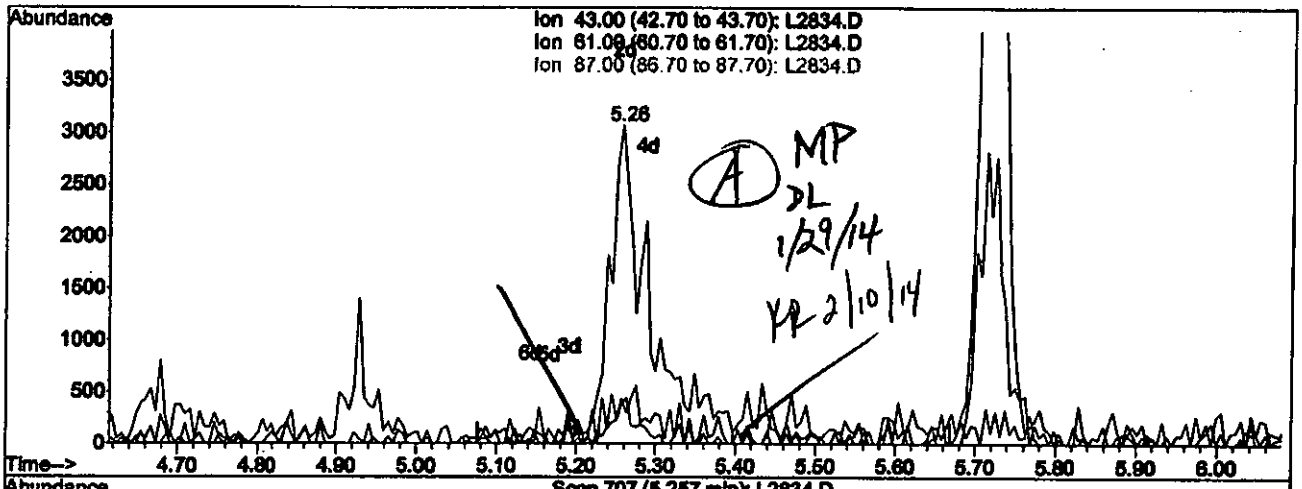
Ion	Exp%	Act%
43.00	100	100
61.00	20.90	138.38#
87.00	10.10	43.43#
0.00	0.00	0.00

L2834.D 6240127.M Wed Jan 29 07:56:04 2014

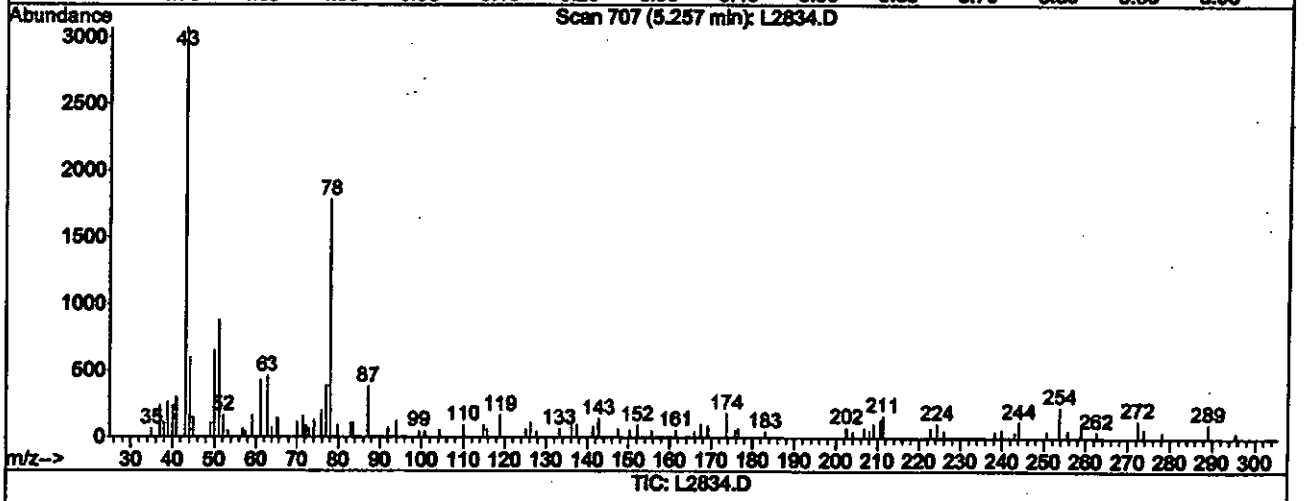
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2834.D Vial: 27
Acq On : 27 Jan 2014 10:23 pm Operator: D.LIPANI
Sample : STD#4 - 1.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 7:56 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 07:50:11 2014
Response via : Single Level Calibration



MP
DL
1/29/14
KP 2/10/14



TIC: L2834.D

(37) Isopropyl Acetate

5.26min 0.83ug/L m

response 10738

Ion	Exp%	Act%
43.00	100	100
61.00	20.90	1.28#
87.00	10.10	0.40#
0.00	0.00	0.00

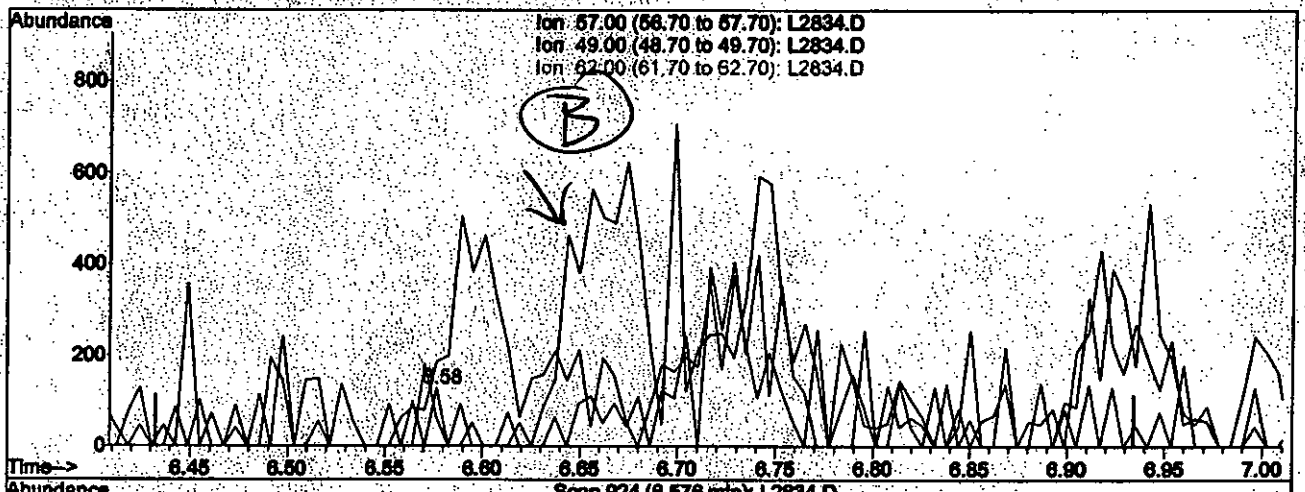
L2834.D 6240127.M Wed Jan 29 07:56:18 2014

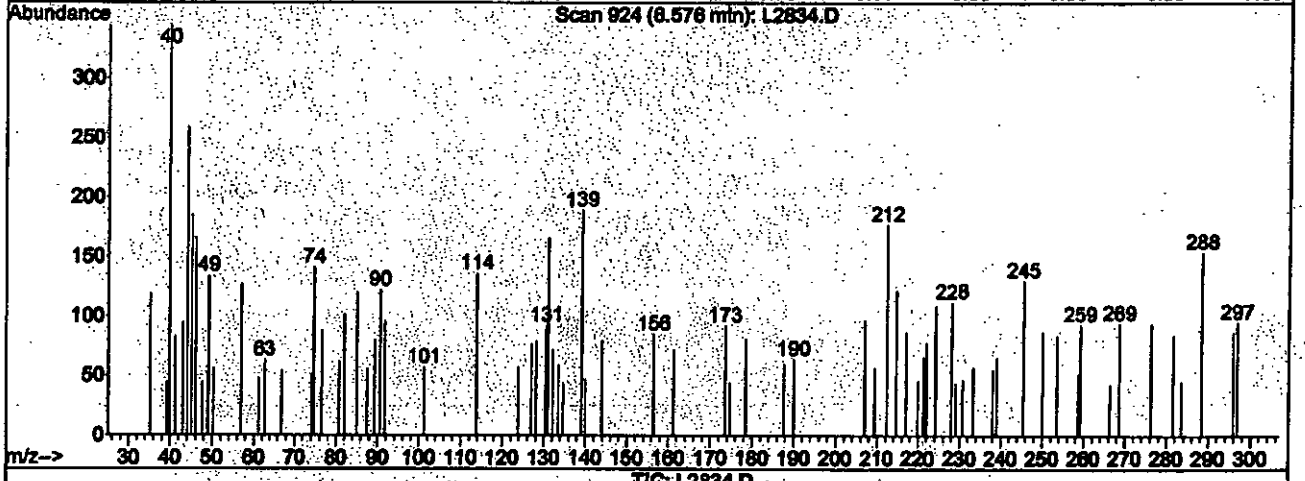
00103

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2834.D Vial: 27
Acq On : 27 Jan 2014 10:23 pm Operator: D.LIPANI
Sample : STD#4 - 1.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 7:56 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 07:50:11 2014
Response via : Single Level Calibration





TIC: L2834.D

(44) Epichlorohydrin

6.58min 0.30ug/L

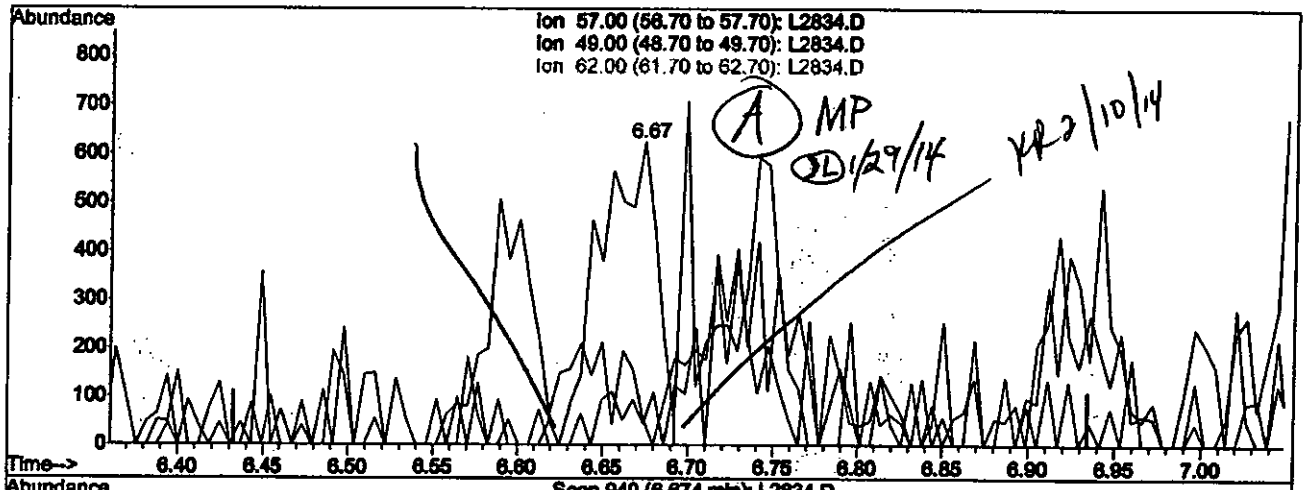
response 150

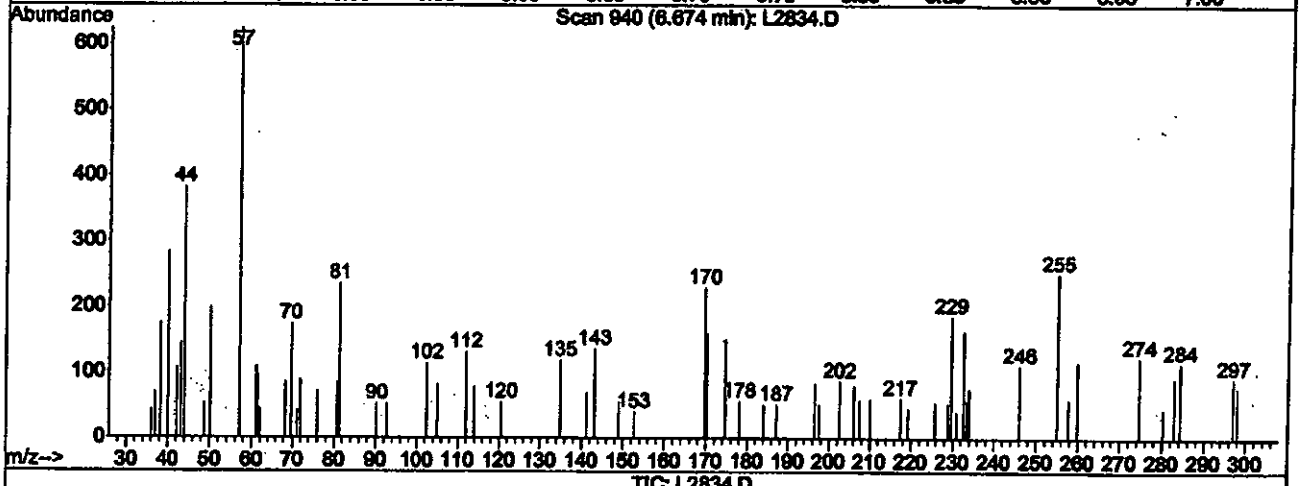
Ion	Exp%	Act%
57.00	100	100
49.00	26.70	146.46#
62.00	22.40	49.61#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2834.D Vial: 27
Acq On : 27 Jan 2014 10:23 pm Operator: D.LIPANI
Sample : STD#4 - 1.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 8:22 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 12:19:30 2014
Response via : Single Level Calibration





TIC: L2834.D

(44) Epichlorohydrin

6.67min 2.88ug/L m

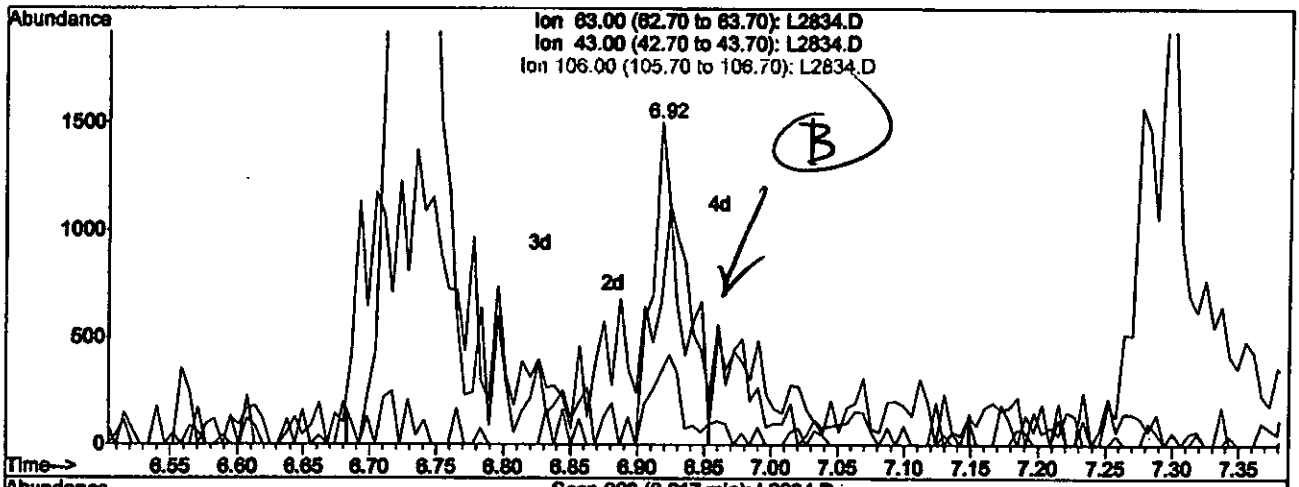
response 1451

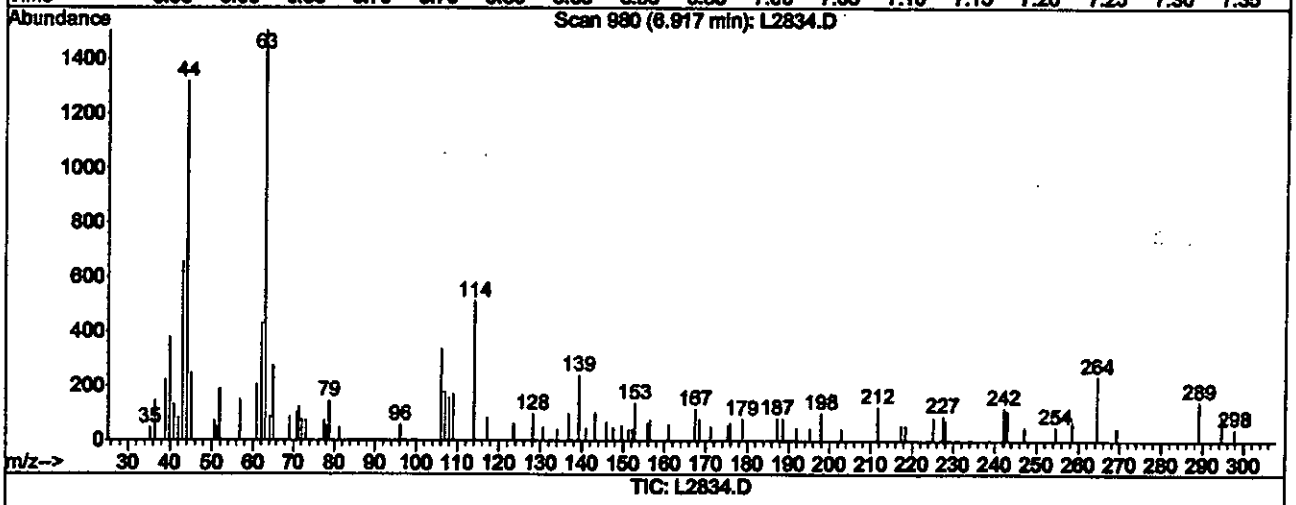
Ion	Exp%	Act%
57.00	100	100
49.00	26.70	8.48#
62.00	22.40	7.05#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2834.D Vial: 27
Acq On : 27 Jan 2014 10:23 pm Operator: D.LIPANI
Sample : STD#4 - 1.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 7:57 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 07:50:11 2014
Response via : Single Level Calibration





TIC: L2834.D

(46) 2-Chloroethylvinyl Ether

6.92min 0.62ug/L

response 2589

Ion	Exp%	Act%
63.00	100	100
43.00	71.10	63.53
106.00	24.60	25.07
0.00	0.00	0.00

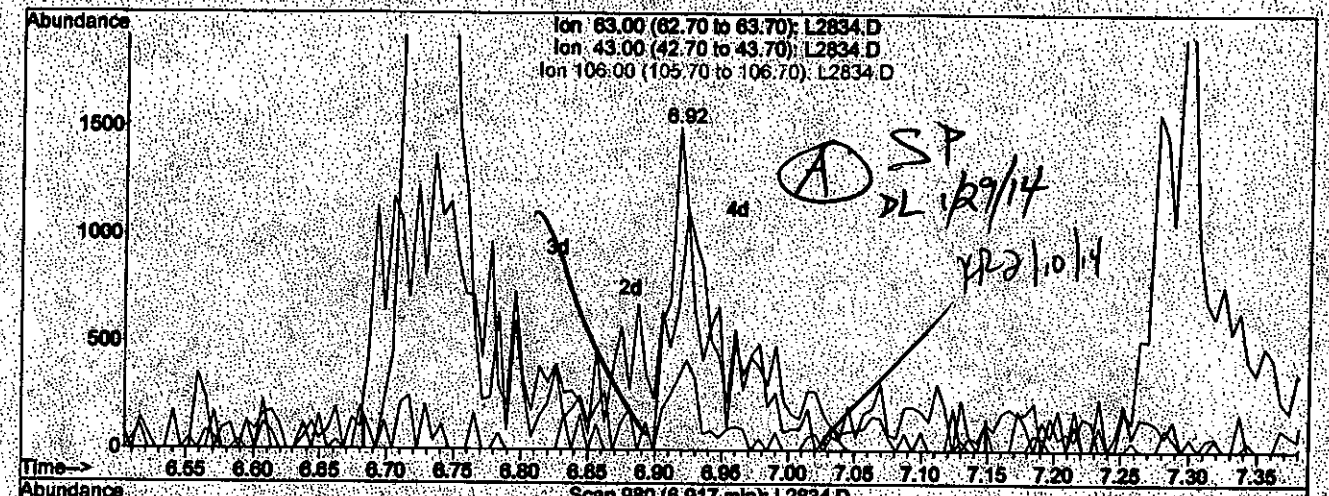
L2834.D 6240127.M Wed Jan 29 07:58:07 2014

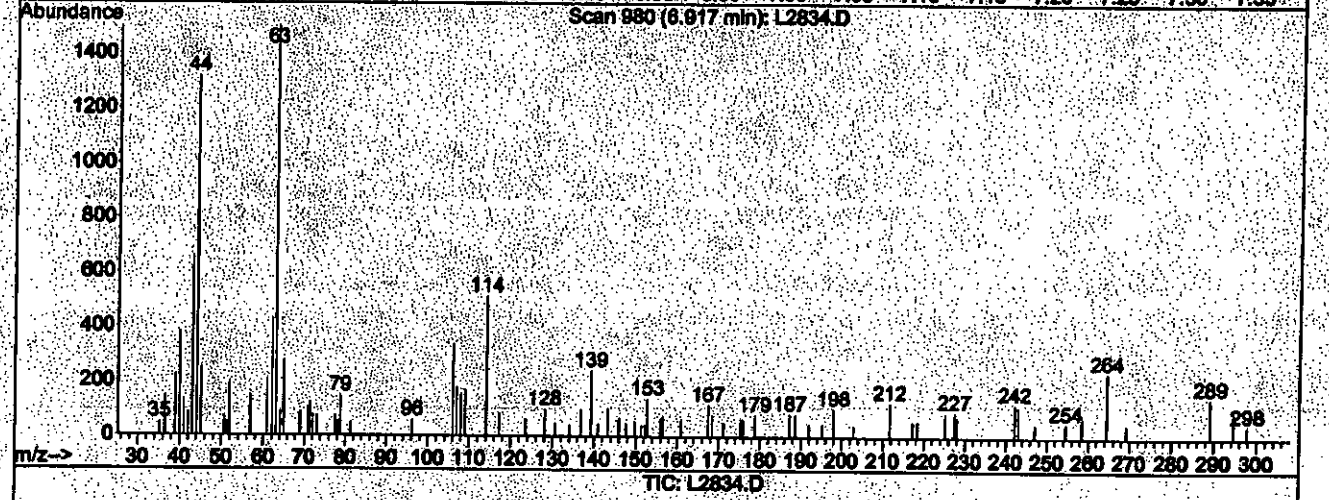
00196

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2834.D Vial: 27
Acq On : 27 Jan 2014 10:23 pm Operator: D.LIPANI
Sample : STD#4 - 1.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 7:58 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 07:50:11 2014
Response via : Single Level Calibration





(46) 2-Chloroethylvinyl Ether

6.92min 0.85ug/L m

response 3516

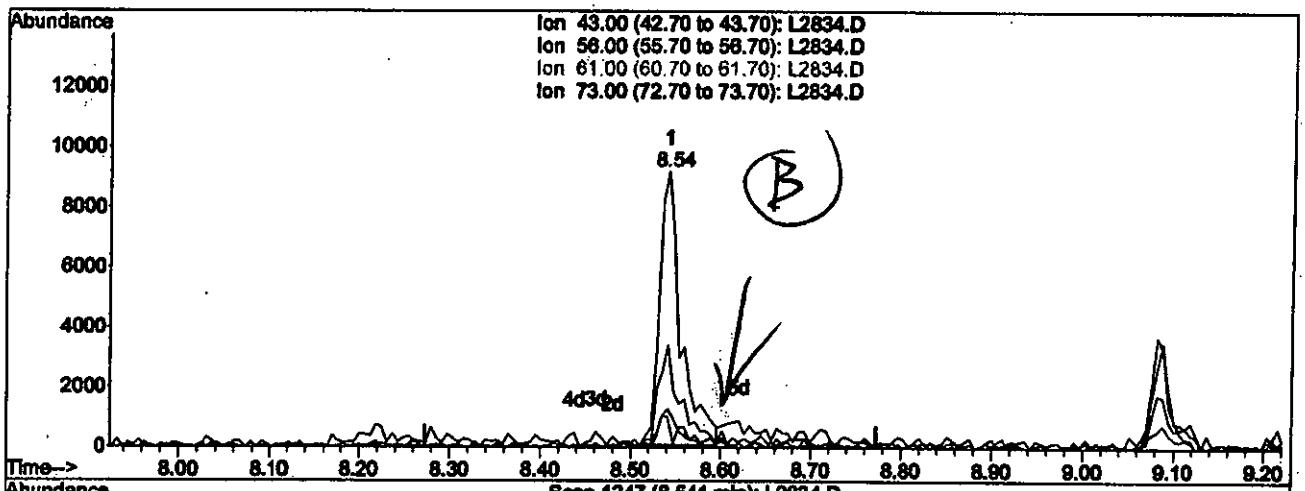
Ion	Exp%	Act%
63.00	100	100
43.00	71.10	46.42#
106.00	24.60	18.32#
0.00	0.00	0.00

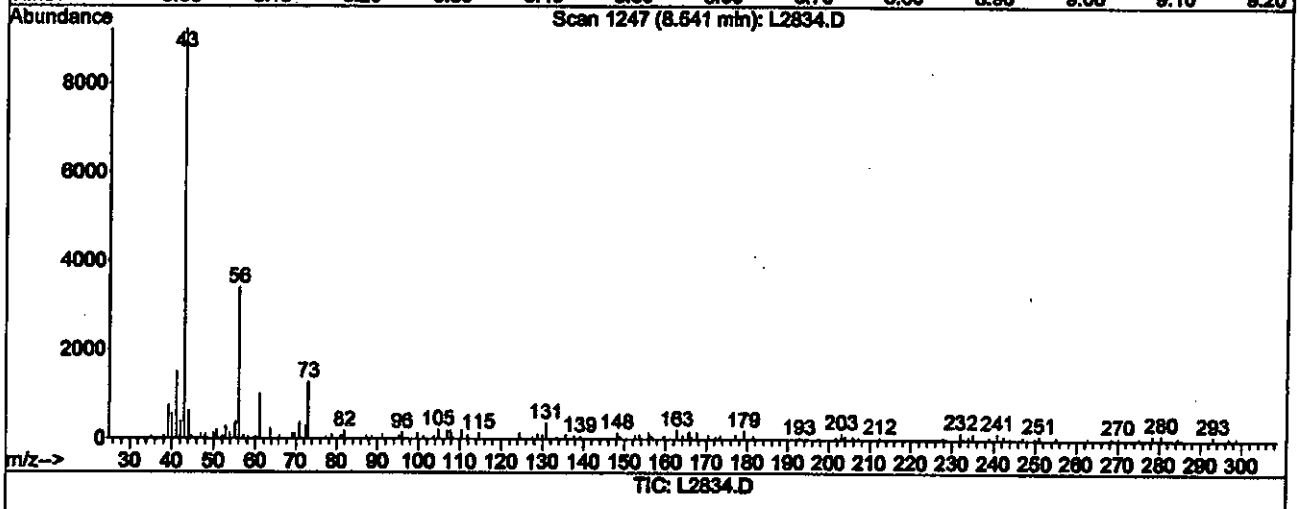
SP 1/29/14
DL 1/29/14
KP 2/10/14

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2834.D Vial: 27
Acq On : 27 Jan 2014 10:23 pm Operator: D.LIPANI
Sample : STD#4 - 1.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 7:58 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Tue Sep 17 19:15:06 2013
Response via : Single Level Calibration





TIC: L2834.D

(58) N-Butyl Acetate

8.54min 1.50ug/L

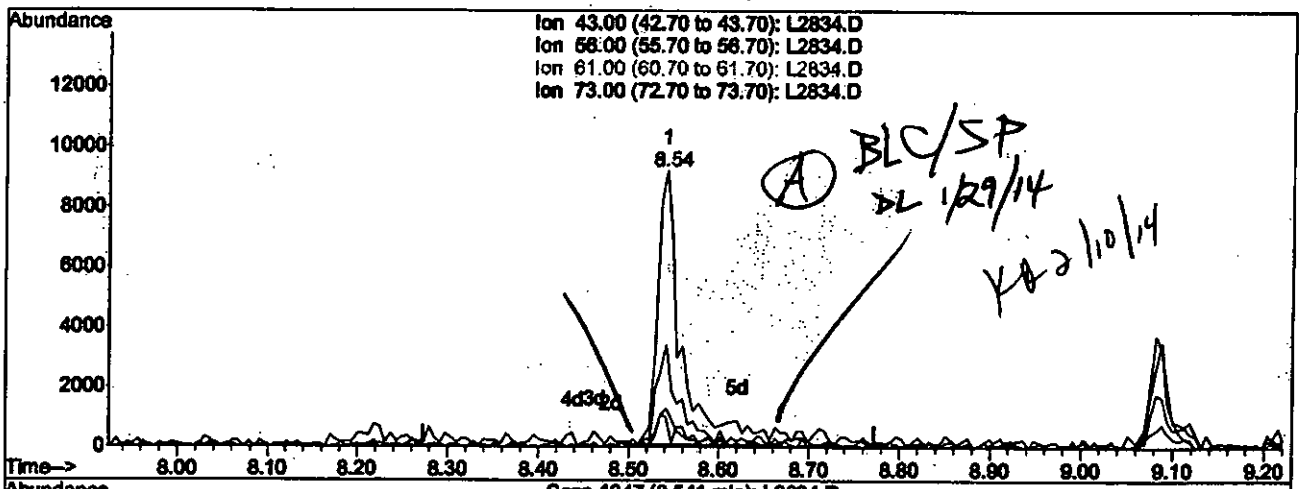
response 16006

Ion	Exp%	Act%
43.00	100	100
56.00	36.40	39.07
61.00	18.00	7.71#
73.00	13.30	11.69

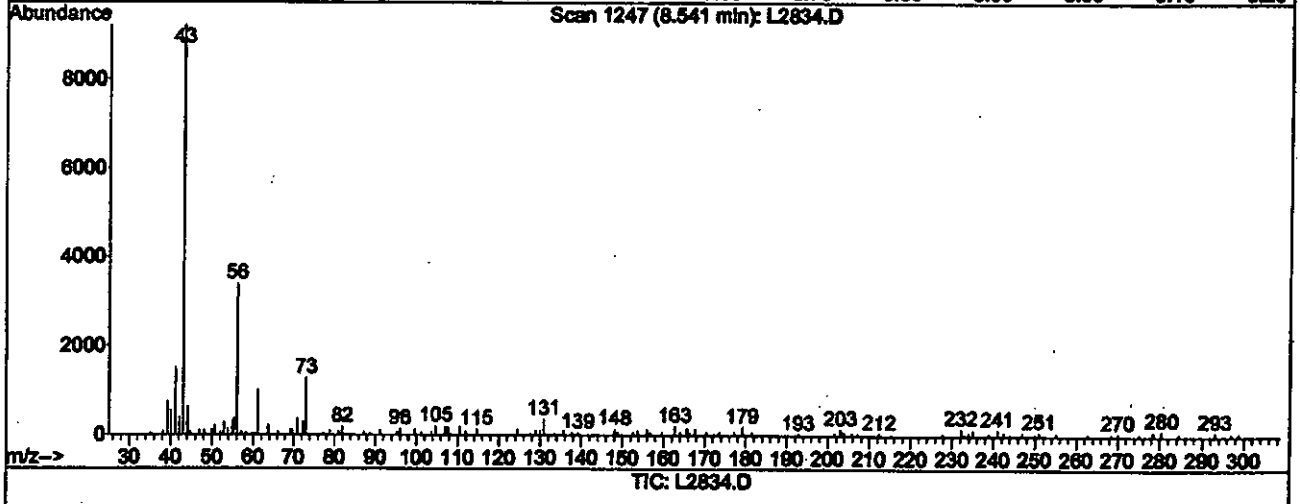
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2834.D Vial: 27
Acq On : 27 Jan 2014 10:23 pm Operator: D.LIPANI
Sample : STD#4 - 1.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 8:22 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Tue Sep 17 19:15:06 2013
Response via : Single Level Calibration



BLC/SP 1/29/14 1/30/14



TIC: L2834.D

(58) N-Butyl Acetate
8.54min 1.69ug/L m
response 16986

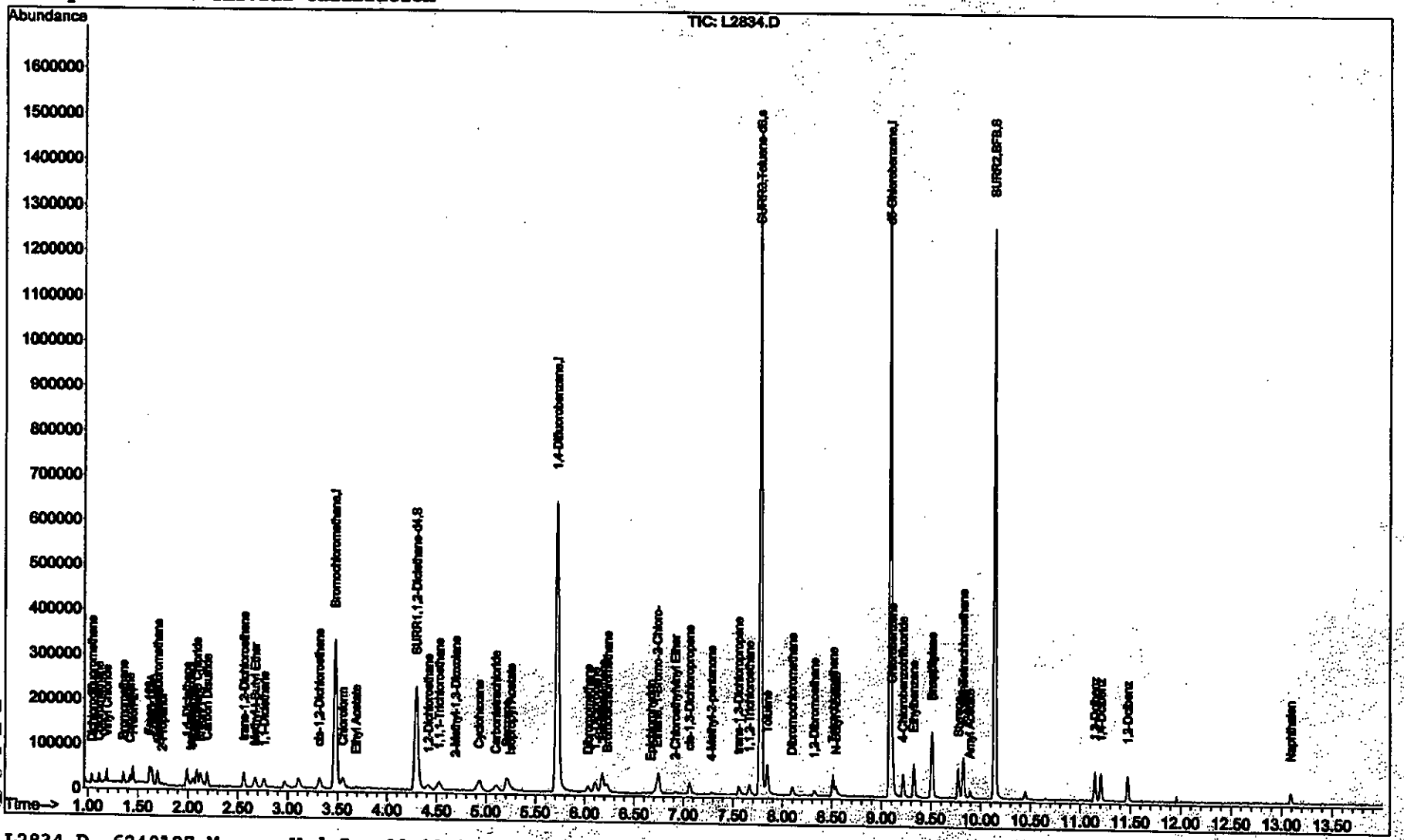
Ion	Exp%	Act%
43.00	100	100
56.00	36.40	34.52
61.00	16.00	6.81#
73.00	13.30	10.33#

L2834.D 6240127.M Wed Jan 29 08:22:32 2014

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2834.D Vial: 27
Acq On : 27 Jan 2014 10:23 pm Operator: D.LIPANI
Sample : STD#4 - 1.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 8:22 2014 Quant Results File: 6240127.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Tue Sep 17 19:15:06 2013
Response via : Initial Calibration



L2834.D 6240127.M Wed Jan 29 08:23:42 2014

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2835.D Vial: 28
Acq On : 27 Jan 2014 10:53 pm Operator: D.LIPANI
Sample : STD#5 - 2.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 8:32 2014 Quant Results File: 6240127.RES

Quant Method : I:\ACQUDATA\M...\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 08:25:06 2014
Response via : Initial Calibration
DataAcq Meth : 6240127

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	3.48	128	99610	30.00	ug/L		0.00
35) 1,4-Difluorobenzene	5.72	114	647117	30.00	ug/L		0.00
53) d5-Chlorobenzene	9.09	117	635682	30.00	ug/L		0.00
System Monitoring Compounds							
30) SURR1,1,2-Diclethane-d4	4.29	65	201286	35.71	ug/L		0.00
Spiked Amount 30.000	Range 81 - 127		Recovery = 119.03%				
51) SURR3,Toluene-d8	7.78	98	798934	31.59	ug/L		0.00
Spiked Amount 30.000	Range 83 - 120		Recovery = 105.30%				
68) SURR2,BFB	10.14	95	304503	32.06	ug/L		0.00
Spiked Amount 30.000	Range 79 - 123		Recovery = 106.87%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.04	85	18027	1.76	ug/L		99
3) Chloromethane	1.11	50	24001	2.02	ug/L		95
4) Vinyl Chloride	1.19	62	24919	2.32	ug/L		94
5) Bromomethane	1.36	94	16674	2.74	ug/L		96
6) Chloroethane	1.42	64	15766	2.75	ug/L		91
7) Freon-21	1.45	67	40944	2.66	ug/L		95
8) Freon-123	1.62	83	31645	2.63	ug/L	#	91
9) Freon-123A	1.64	67	26106	2.54	ug/L		91
10) Acrolein	1.70	56	10317	15.50	ug/L		79
11) Trichlorofluoromethane	1.70	101	31740	2.46	ug/L		99
12) Acetonitrile	1.71	41	8541m	10.51	ug/L		
13) 2-Propanol	1.75	45	11451	36.37	ug/L		88
14) Acetone	1.78	43	4399	2.26	ug/L		84
15) 1,1-Diclethene	1.99	96	18467	2.49	ug/L		84
16) tert Butyl Alcohol	2.02	59	17304	42.10	ug/L		97
17) Acrylonitrile	2.05	53	22073	11.99	ug/L		98
18) Methylene Chloride	2.09	84	23503	2.62	ug/L	#	83
19) Freon 113	2.13	101	19233	2.35	ug/L		83
20) Carbon Disulfide	2.20	76	62757	2.53	ug/L	#	96
21) trans-1,2-Dichloroethene	2.56	96	18788	2.28	ug/L		87
22) Methyl-t-Butyl Ether	2.68	73	40840	2.35	ug/L	#	99
23) 1,1-Diclethane	2.76	63	34216	2.37	ug/L		93
25) cis-1,2-Dichloroethene	3.32	96	21853	2.42	ug/L		89
26) Chloroform	3.56	83	32619	2.25	ug/L		96
27) Ethyl Acetate	3.68	43	16168m	3.66	ug/L		
29) Tetrahydrofuran	4.00	42	3307m	2.47	ug/L		
31) 1,2-Dichloroethane	4.41	62	22511	2.51	ug/L		91
32) 1,1,1-Trichloroethane	4.52	97	31975	2.50	ug/L		95
33) 2-Methyl-1,3-Dioxolane	4.66	73	6548m	10.93	ug/L		
34) Cyclohexane	4.94	56	31994	2.70	ug/L		96
36) Carbontetrachloride	5.10	117	24337	1.84	ug/L	#	95
37) Isopropyl Acetate	5.25	43	20736	1.93	ug/L	#	89
38) Benzene	5.21	78	77409	2.15	ug/L		96
39) Dibromomethane	6.03	93	10324	1.96	ug/L		91
40) 1,2-Diclpropane	6.10	63	19449	2.06	ug/L	#	89
41) Trichloroethene	6.17	130	21623	1.99	ug/L		95
42) Heptane	6.18	43	17440	2.16	ug/L		93
43) Bromodichloromethane	6.22	83	26516	2.08	ug/L	#	95

(#) = qualifier out of range (m) = manual integration
L2835.D 6240127.M Wed Jan 29 08:33:06 2014

DL 1/29/14

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2835.D Vial: 28
Acq On : 27 Jan 2014 10:53 pm Operator: D.LIPANI
Sample : STD#5 - 2.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 8:32 2014 Quant Results File: 6240127.RES

Quant Method : I:\ACQUDATA\M...\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 08:25:06 2014
Response via : Initial Calibration
DataAcq Meth : 6240127

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
44)	Epichlorohydrin	6.67	57	3902m	8.09	ug/L		
45)	Ethane, 1-Bromo-2-Chloro-	6.73	63	25339	2.22	ug/L		98
46)	2-Chloroethylvinyl Ether	6.91	63	7201m	1.73	ug/L		
47)	cis-1,3-Dichloropropene	7.05	75	27631	2.01	ug/L		92
48)	4-Methyl-2-pentanone	7.28	43	9049	1.63	ug/L		97
49)	trans-1,3-Dichloropropene	7.56	75	22993	2.07	ug/L		99
50)	1,1,2-Trichloroethane	7.67	97	14714	2.04	ug/L		98
52)	Toluene	7.84	91	87226	2.23	ug/L		98
54)	Dibromochloromethane	8.10	129	19220	1.81	ug/L		93
56)	1,2-Dibromoethane	8.32	107	15286	1.95	ug/L		97
57)	Tetrachloroethene	8.51	164	18845	1.94	ug/L		92
58)	N-Butyl Acetate	8.53	43	36414	3.75	ug/L		95
59)	Chlorobenzene	9.12	112	56139	2.00	ug/L		92
60)	4-Chlorobenzotrifluoride	9.22	180	27920	1.83	ug/L	#	95
61)	Ethylbenzene	9.33	106	29595	2.09	ug/L		97
62)	(m+p)Xylene	9.50	106	72346	4.17	ug/L		98
63)	Bromoform	9.51	173	11333	1.66	ug/L		99
64)	Styrene	9.77	104	55286	2.01	ug/L		99
65)	1,1,2,2-Tetrachloroethane	9.82	83	16651	1.88	ug/L		98
66)	o-Xylene	9.83	106	34003	1.94	ug/L		93
67)	Amyl Acetate	9.89	43	22496	1.77	ug/L	#	92
69)	1,3-Dclbenz	11.15	146	43472	1.90	ug/L		98
70)	1,4-Dclbenz	11.20	146	43399m	1.90	ug/L		
71)	1,2-Dclbenz	11.47	146	41473	1.99	ug/L		96
72)	Naphthalen	13.09	128	29503	1.82	ug/L		98

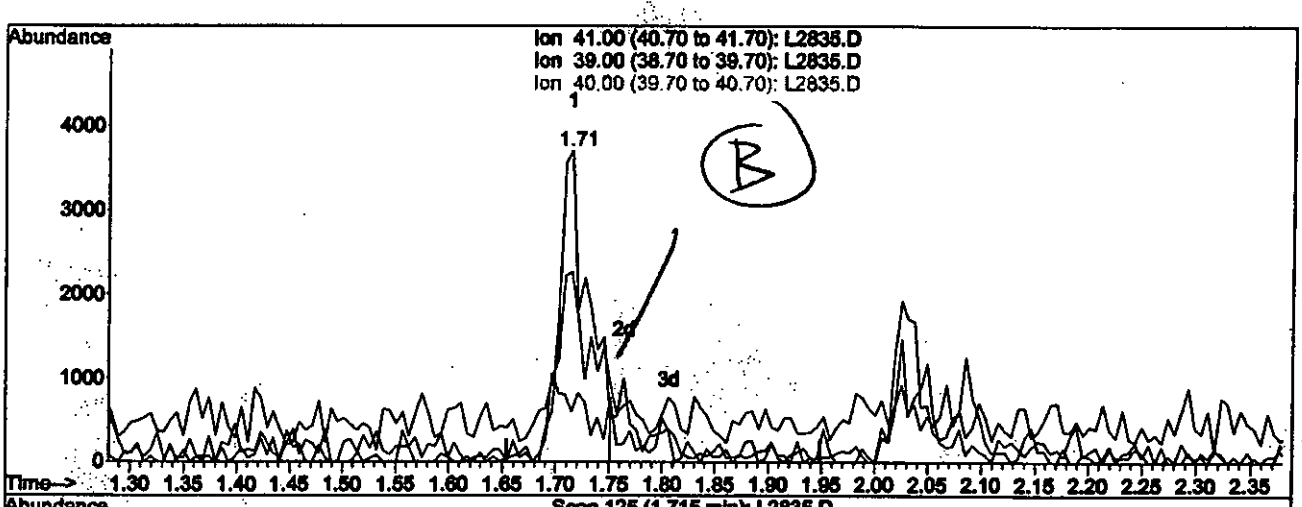
DL 1/29/14

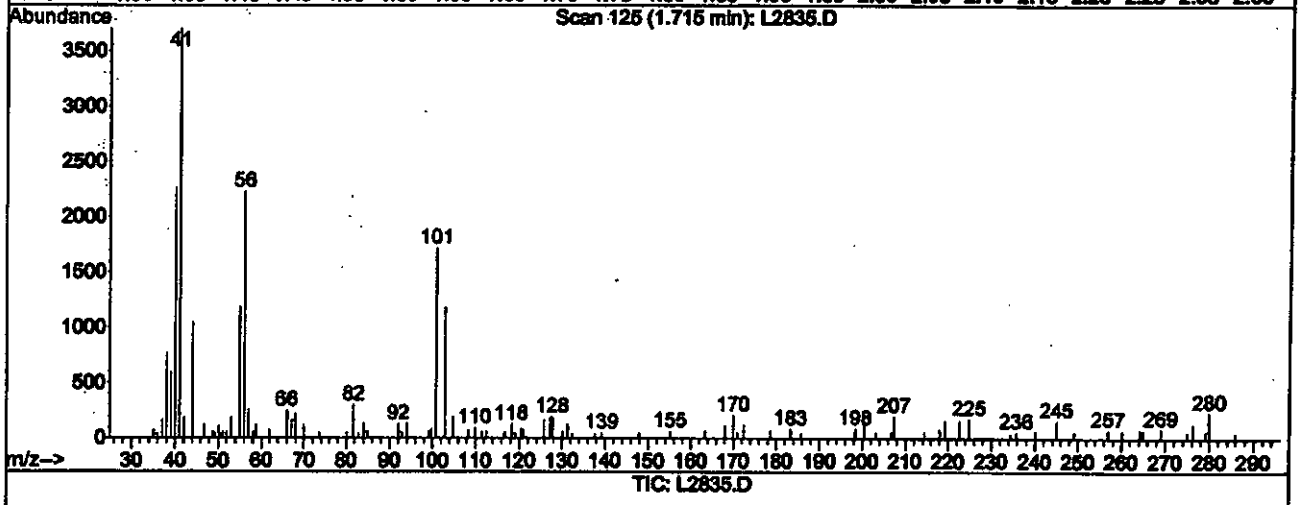
(#) = qualifier out of range (m) = manual integration
L2835.D 6240127.M Wed Jan 29 08:33:07 2014

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2835.D Vial: 28
Acq On : 27 Jan 2014 10:53 pm Operator: D.LIPANI
Sample : STD#5 - 2.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 8:25 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 08:25:06 2014
Response via : Single Level Calibration





TIC: L2835.D

(12) Acetonitrile

1.71min 8.58ug/L

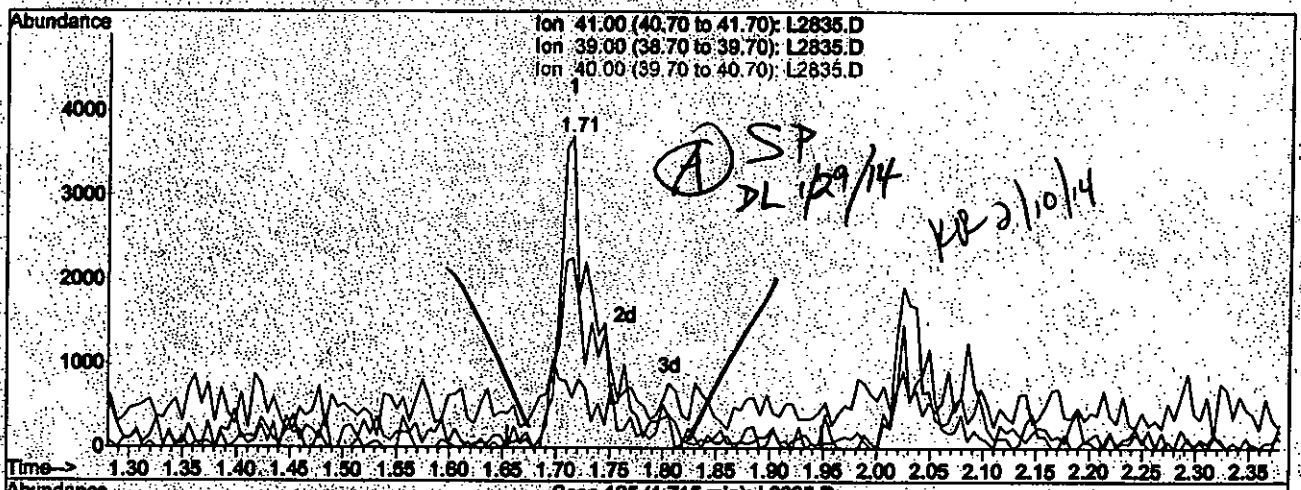
response 6976

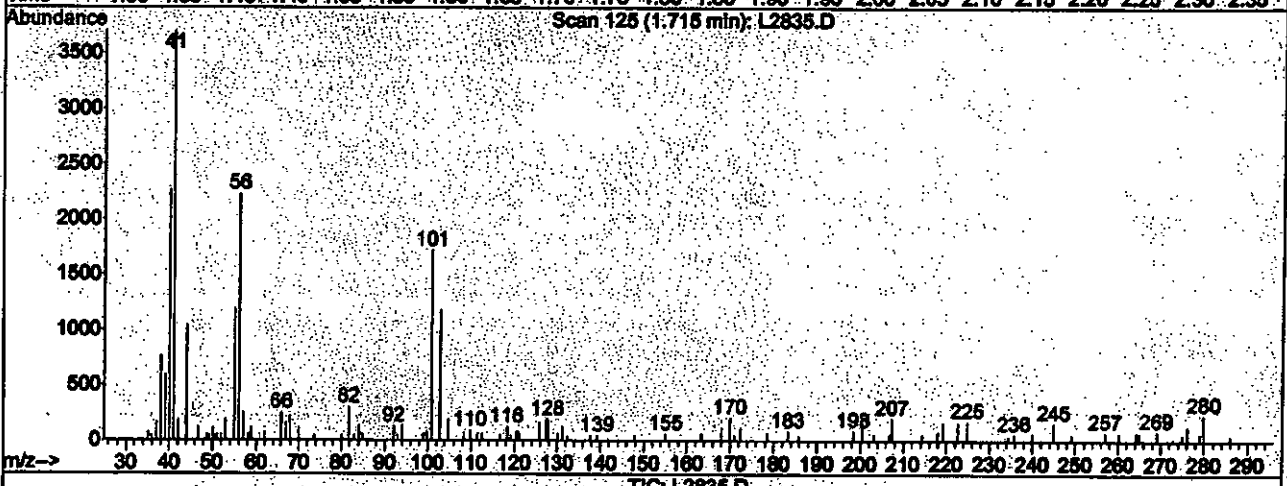
Ion	Exp%	Act%
41.00	100	100
39.00	25.70	16.10
40.00	55.90	61.17
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2835.D Vial: 28
Acq On : 27 Jan 2014 10:53 pm Operator: D.LIPANI
Sample : STD#5 - 2.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 8:25 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 08:25:06 2014
Response via : Single Level Calibration





TIC: L2835.D

(12) Acetonitrile

1.71min 10.51ug/L m

response 8541

Ion	Exp%	Act%
41.00	100	100
39.00	25.70	16.10
40.00	55.90	61.17
0.00	0.00	0.00

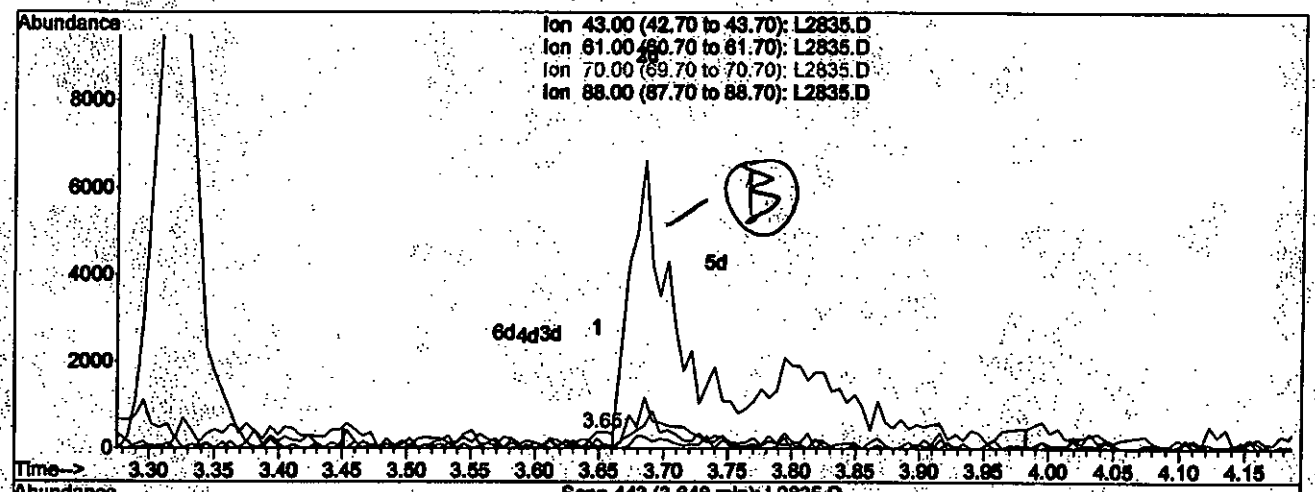
L2835.D 6240127.M Wed Jan 29 08:25:57 2014

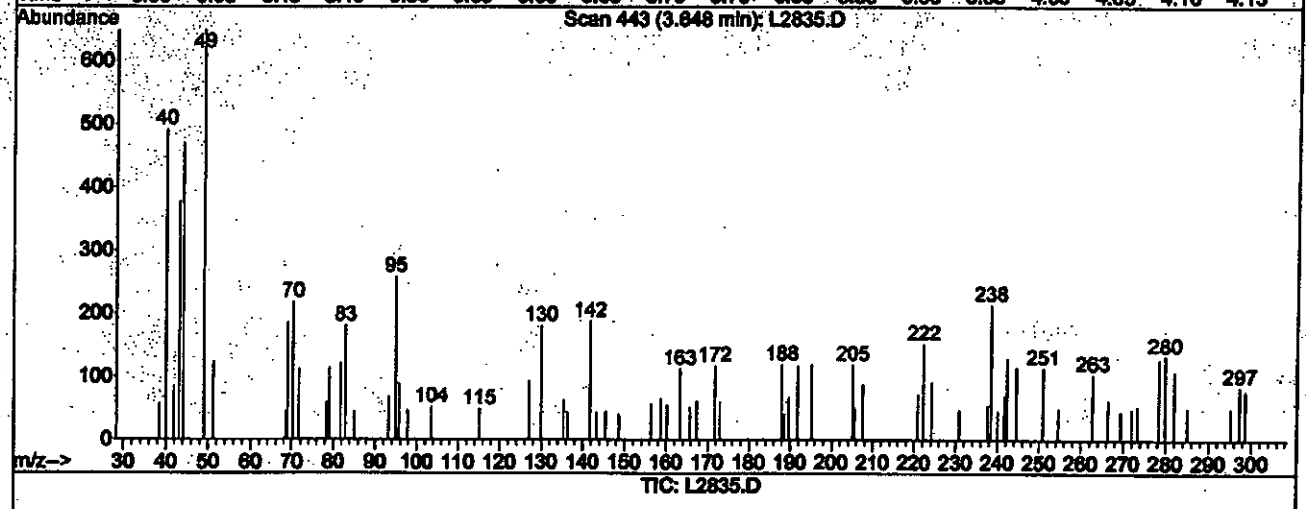
90114

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2835.D Vial: 28
Acq On : 27 Jan 2014 10:53 pm Operator: D.LIPANI
Sample : STD#5 - 2.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 8:25 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 08:25:06 2014
Response via : Single Level Calibration





(27) Ethyl Acetate

3.65min 0.11ug/L

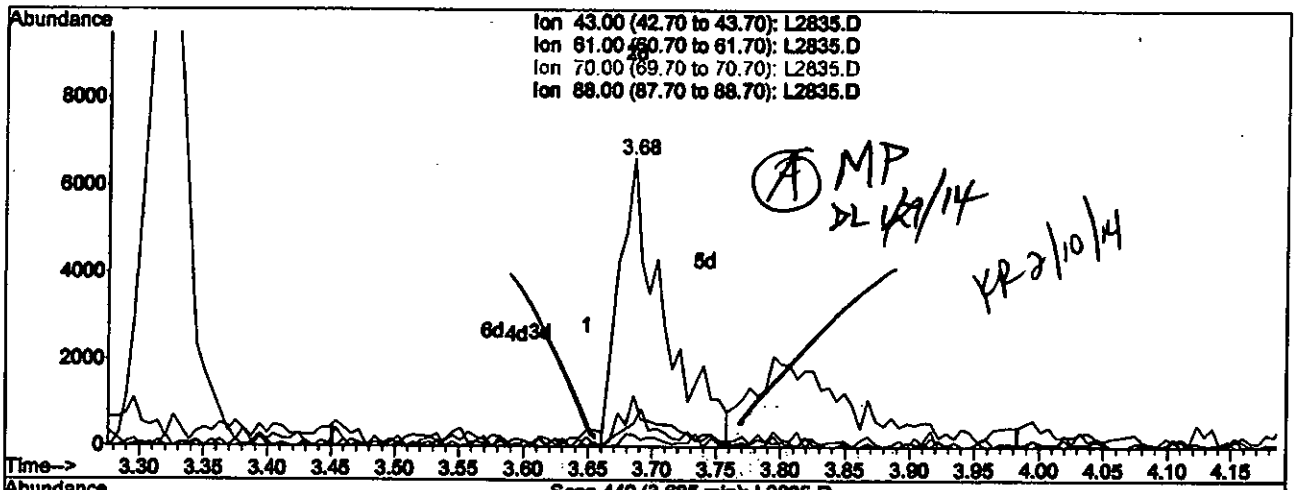
response 466

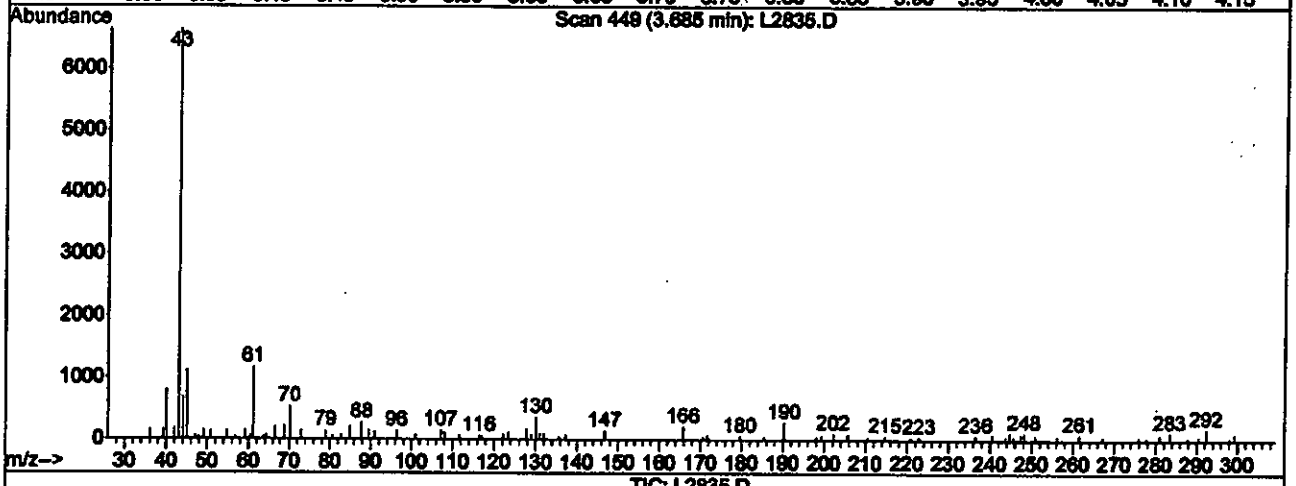
Ion	Exp%	Act%
43.00	100	100
61.00	14.40	0.00#
70.00	8.80	57.67#
88.00	3.10	0.00#

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2835.D Vial: 28
Acq On : 27 Jan 2014 10:53 pm Operator: D.LIPANI
Sample : STD#5 - 2.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 8:27 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 08:25:06 2014
Response via : Single Level Calibration





TIC: L2835.D

(27) Ethyl Acetate

3.68min 3.66ug/L m

response 16168

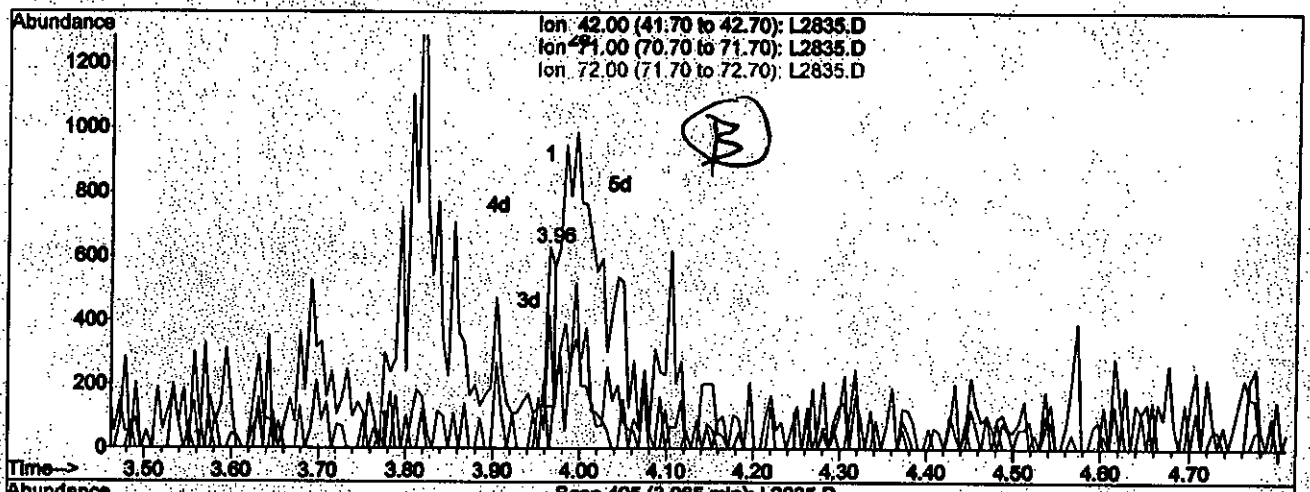
Ion	Exp%	Act%
43.00	100	100
61.00	14.40	17.64#
70.00	8.80	7.96
88.00	3.10	4.09#

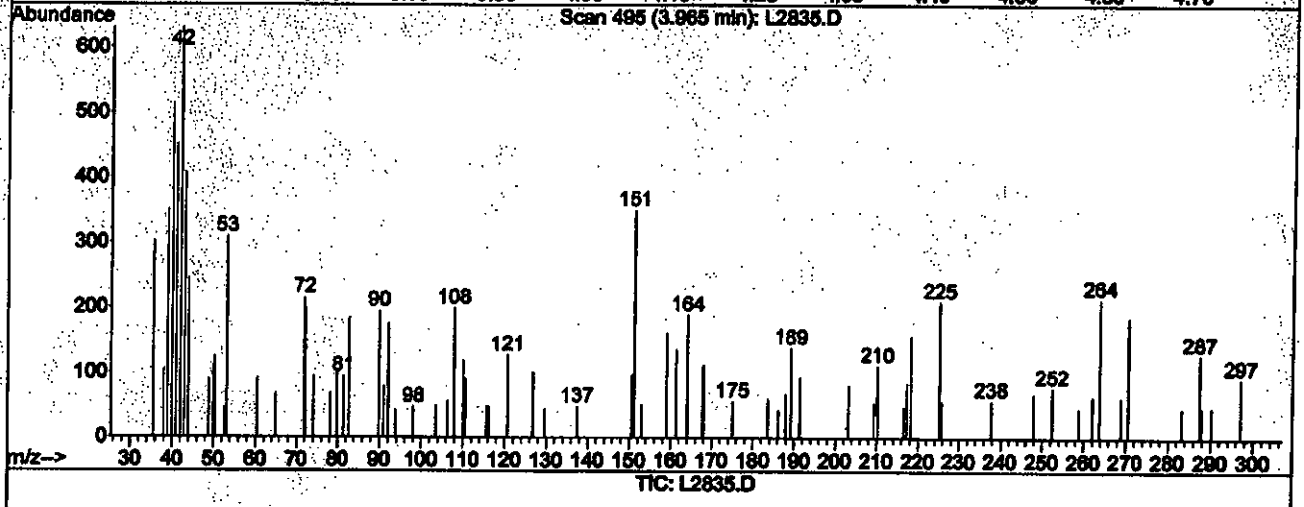
L2835.D 6240127.M Wed Jan 29 08:27:22 2014

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2835.D Vial: 28
Acq On : 27 Jan 2014 10:53 pm Operator: D.LIPANI
Sample : STD#5 - 2.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 8:27 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 08:25:06 2014
Response via : Single Level Calibration





(29) Tetrahydrofuran

3.98min 0.26ug/L

response 341

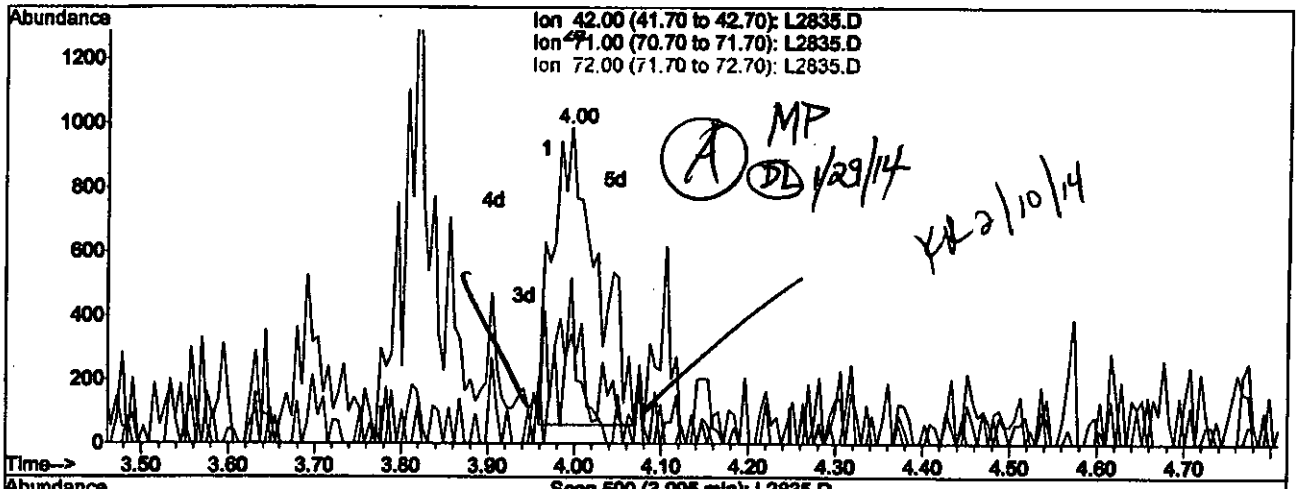
Ion	Exp%	Act%
42.00	100	100
71.00	24.90	0.00#
72.00	32.70	65.71#
0.00	0.00	0.00

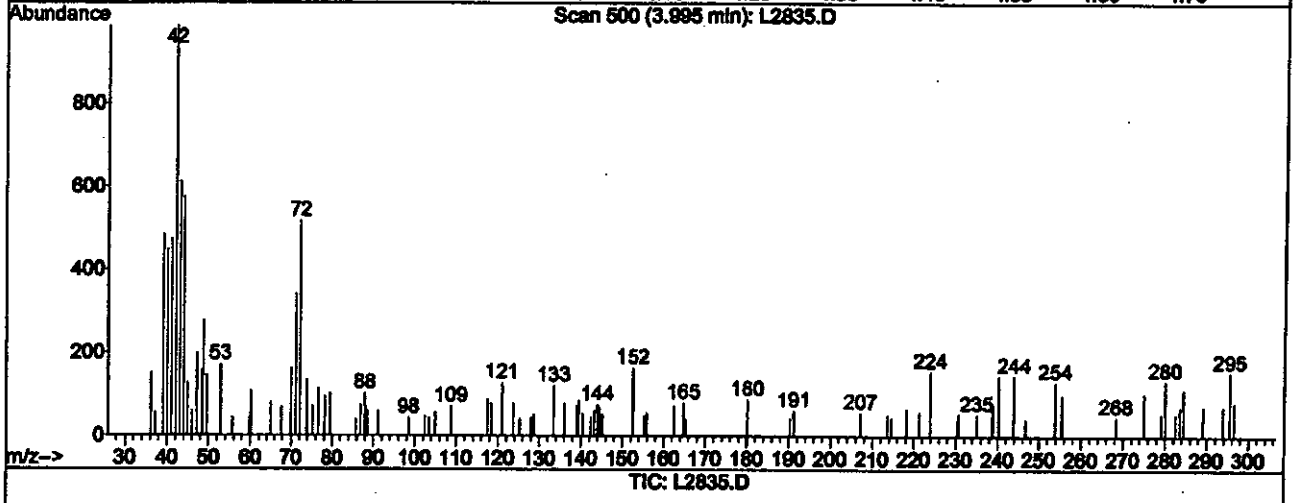
L2835.D 6240127.M Wed Jan 29 08:27:46 2014

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2835.D Vial: 28
Acq On : 27 Jan 2014 10:53 pm Operator: D.LIPANI
Sample : STD#5 - 2.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 8:27 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 08:25:06 2014
Response via : Single Level Calibration





TIC: L2835.D

(29) Tetrahydrofuran

4.00min 2.47ug/L m

response 3307

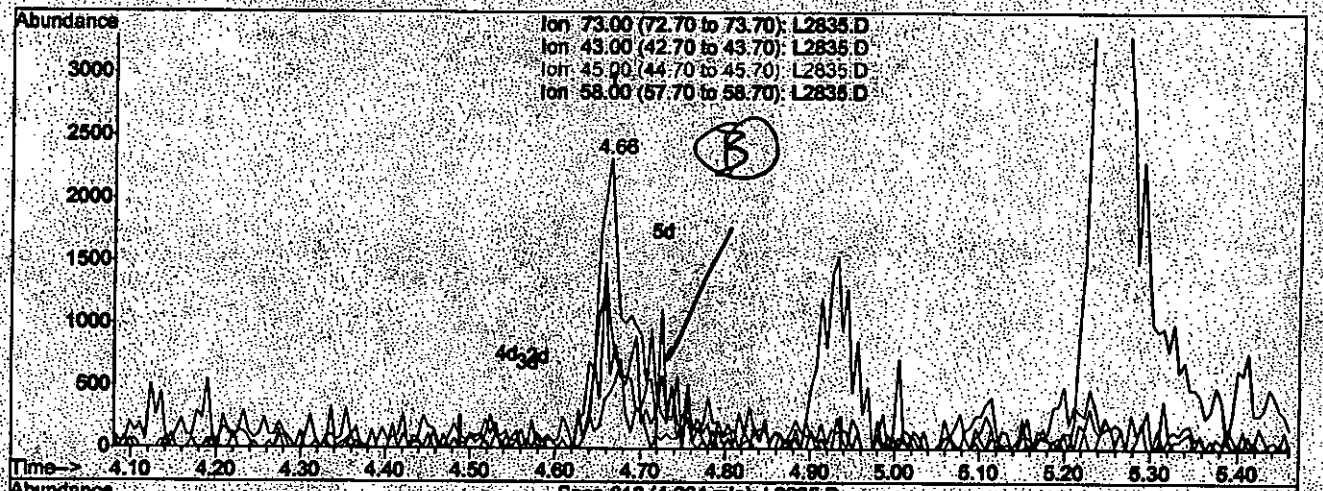
Ion	Exp%	Act%
42.00	100	100
71.00	24.90	34.55#
72.00	32.70	52.38#
0.00	0.00	0.00

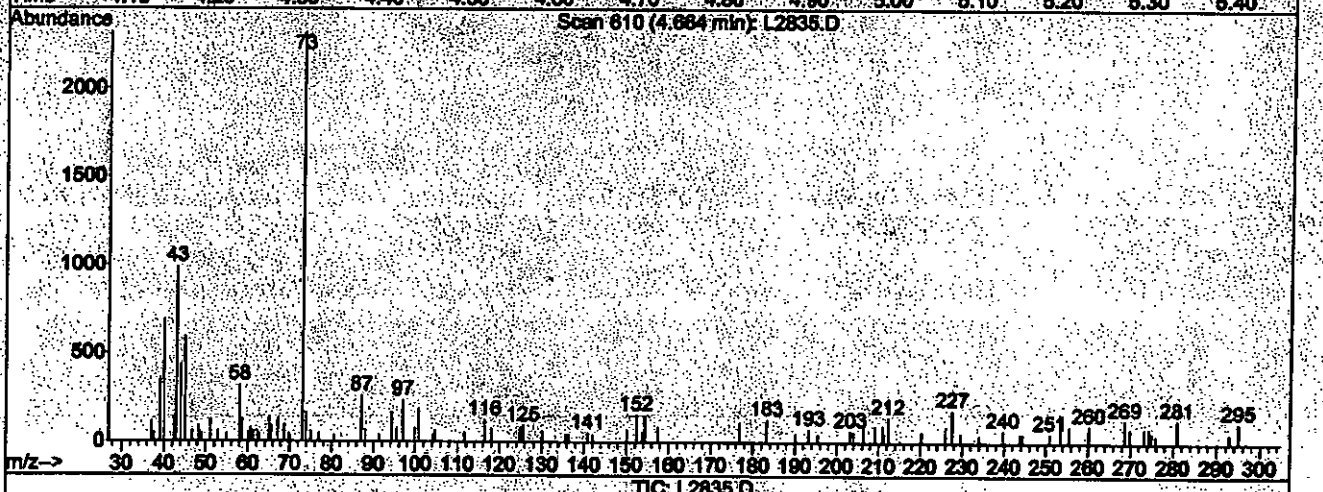
L2835.D 6240127.M Wed Jan 29 08:28:01 2014

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2835.D Vial: 28
Acq On : 27 Jan 2014 10:53 pm Operator: D.LIPANI
Sample : STD#5 - 2.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 8:27 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 08:25:06 2014
Response via : Single Level Calibration





TIC: L2835.D

(33) 2-Methyl-1,3-Dioxolane

4.66min 9.61ug/L

response 5757

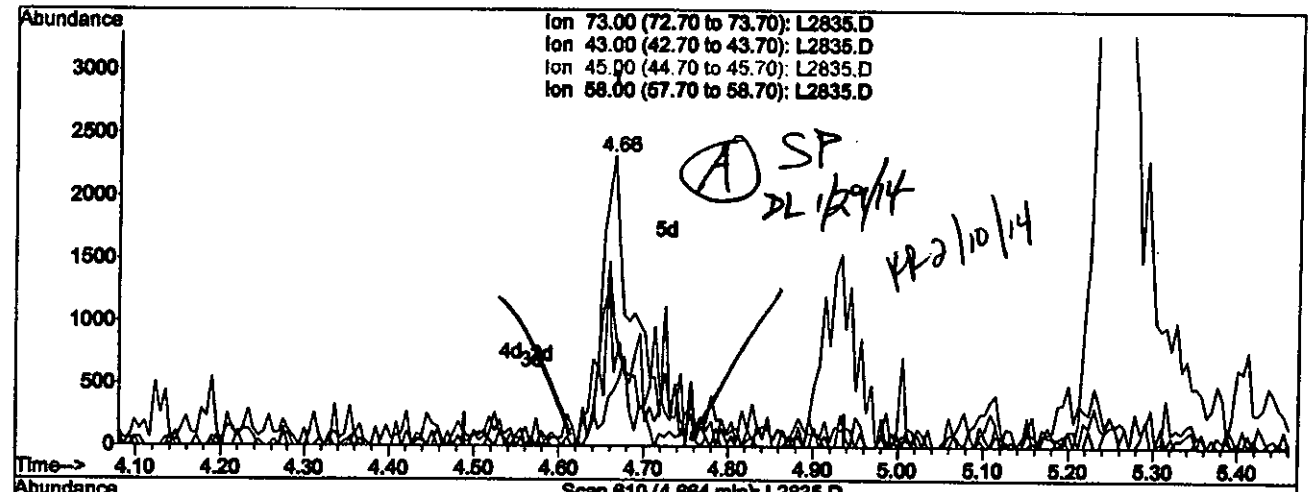
Ion	Exp%	Act%
73.00	100	100
43.00	47.70	42.67
45.00	39.40	25.65#
58.00	21.60	19.27

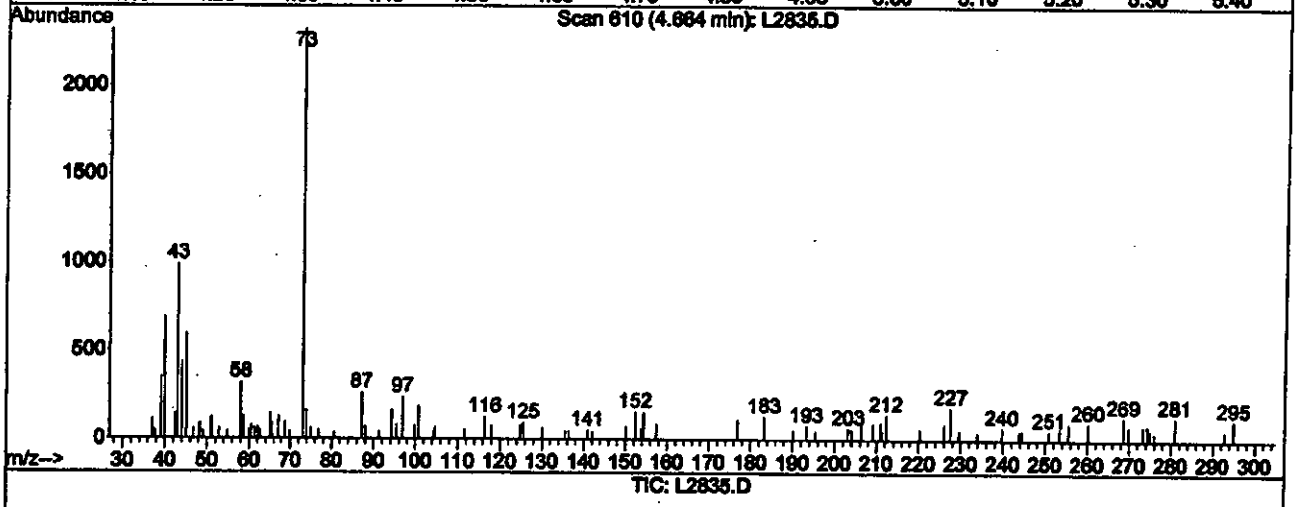
L2835.D 6240127.M Wed Jan 29 08:28:16 2014

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2835.D Vial: 28
Acq On : 27 Jan 2014 10:53 pm Operator: D.LIPANI
Sample : STD#5 - 2.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 8:28 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 08:25:06 2014
Response via : Single Level Calibration





TIC: L2835.D

(33) 2-Methyl-1,3-Dioxolane

4.66min 10.93ug/L m

response 6548

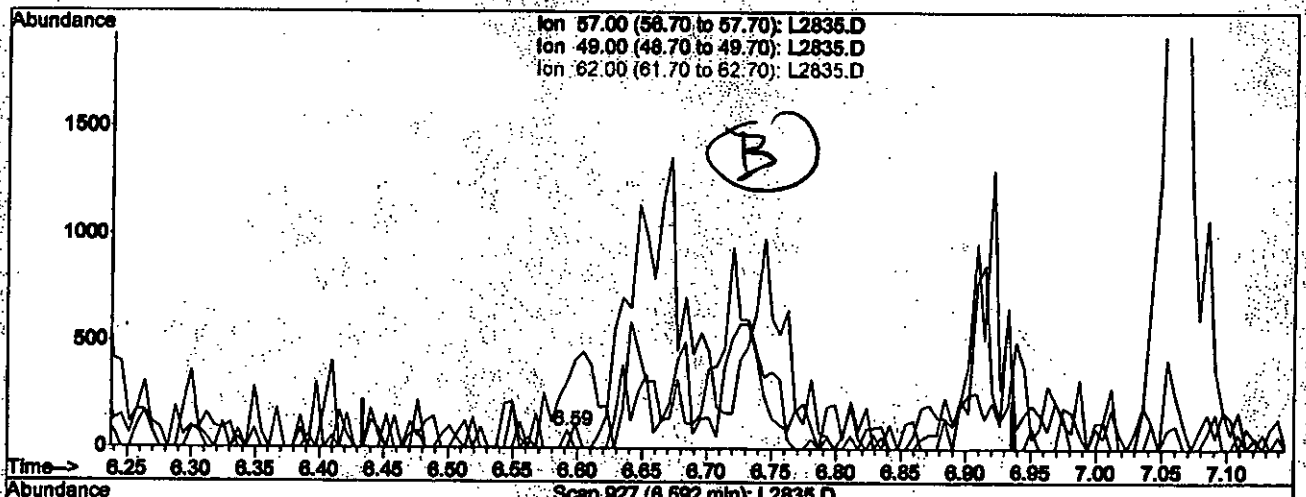
Ion	Exp%	Act%
73.00	100	100
43.00	47.70	42.67
45.00	39.40	25.66#
58.00	21.60	13.75#

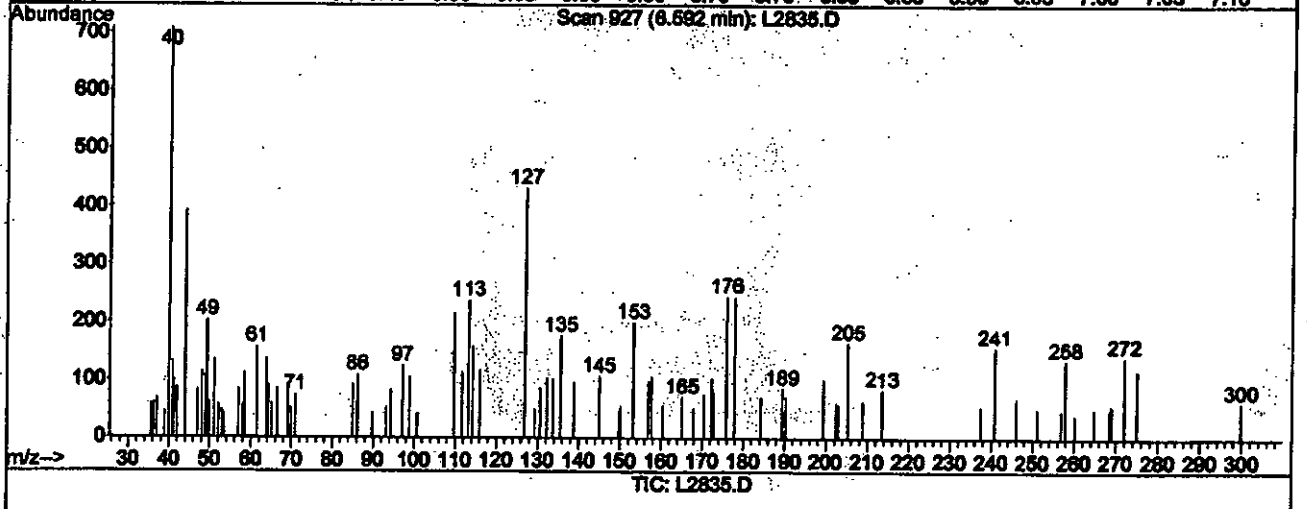
L2835.D 6240127.M Wed Jan 29 08:28:26 2014

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2835.D Vial: 28
Acq On : 27 Jan 2014 10:53 pm Operator: D.LIPANI
Sample : STD#5 - 2.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 8:28 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 08:25:06 2014
Response via : Single Level Calibration





TIC: L2835.D

(44) Epichlorohydrin

6.59min 0.06ug/L

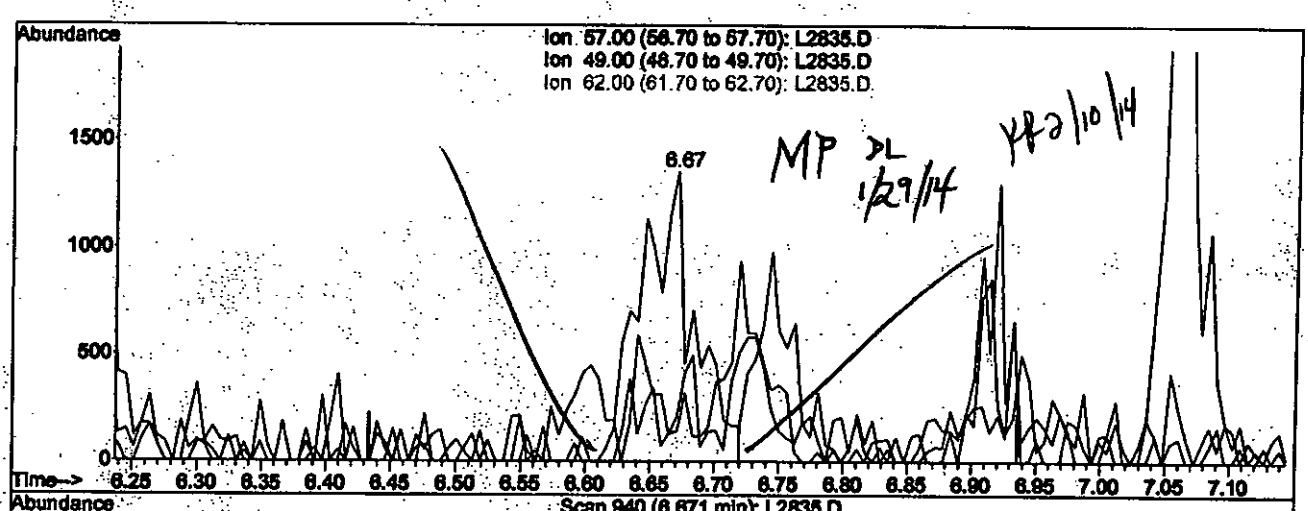
response 31

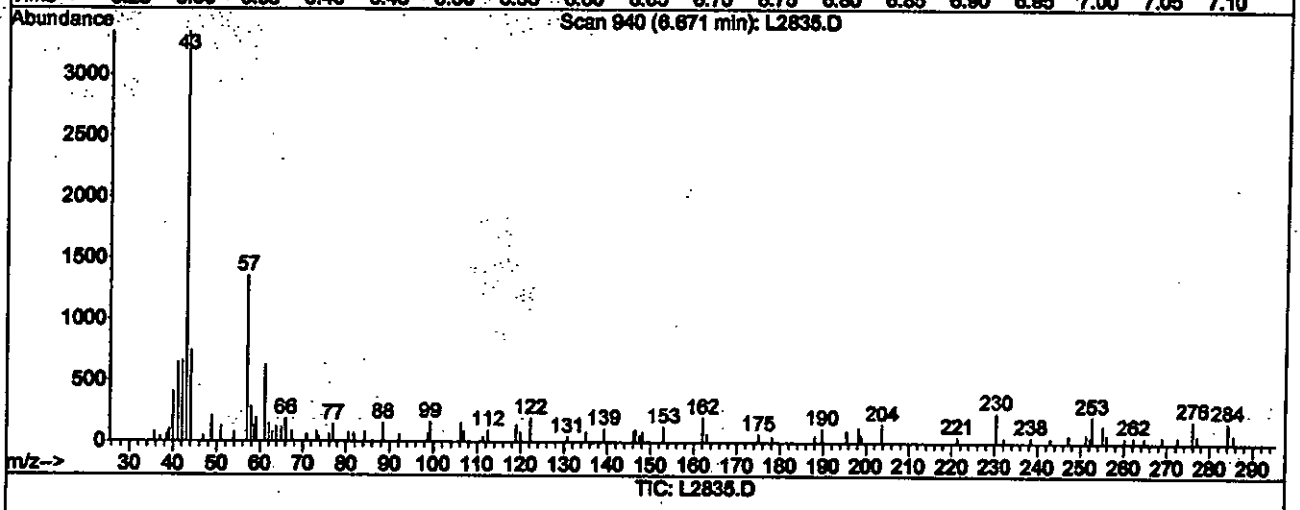
Ion	Exp%	Act%
57.00	100	100
49.00	34.70	371.43#
62.00	18.10	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2835.D Vial: 28
Acq On : 27 Jan 2014 10:53 pm Operator: D.LIPANI
Sample : STD#5 - 2.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 8:28 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 08:25:06 2014
Response via : Single Level Calibration





TIC: L2835.D

(44) Epichlorohydrin

6.67min 8.09ug/L m

response 3902

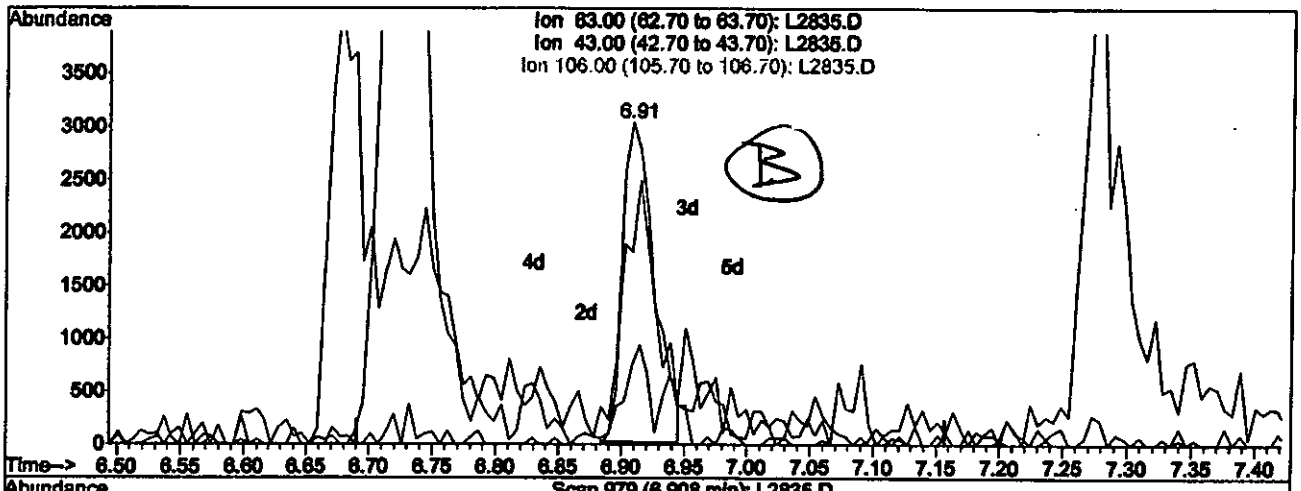
Ion	Exp%	Act%
57.00	100	100
49.00	34.70	15.62#
62.00	18.10	10.46#
0.00	0.00	0.00

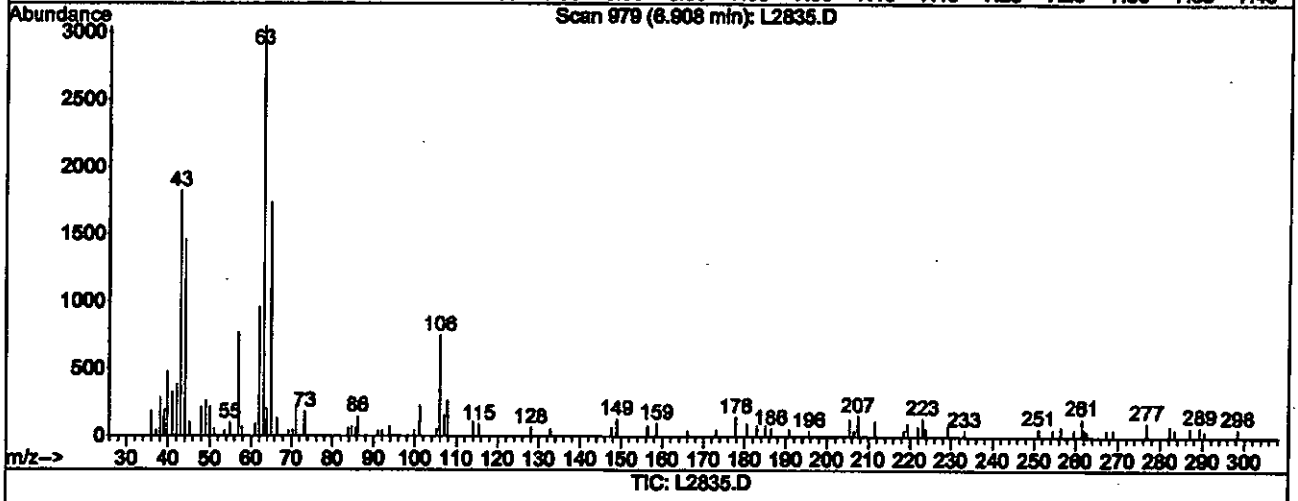
L2835.D 6240127.M Wed Jan 29 08:28:55 2014

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2835.D Vial: 28
Acq On : 27 Jan 2014 10:53 pm Operator: D.LIPANI
Sample : STD#5 - 2.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 8:28 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 08:25:06 2014
Response via : Single Level Calibration





TIC: L2835.D

(46) 2-Chloroethylvinyl Ether

6.91min 1.27ug/L

response 5268

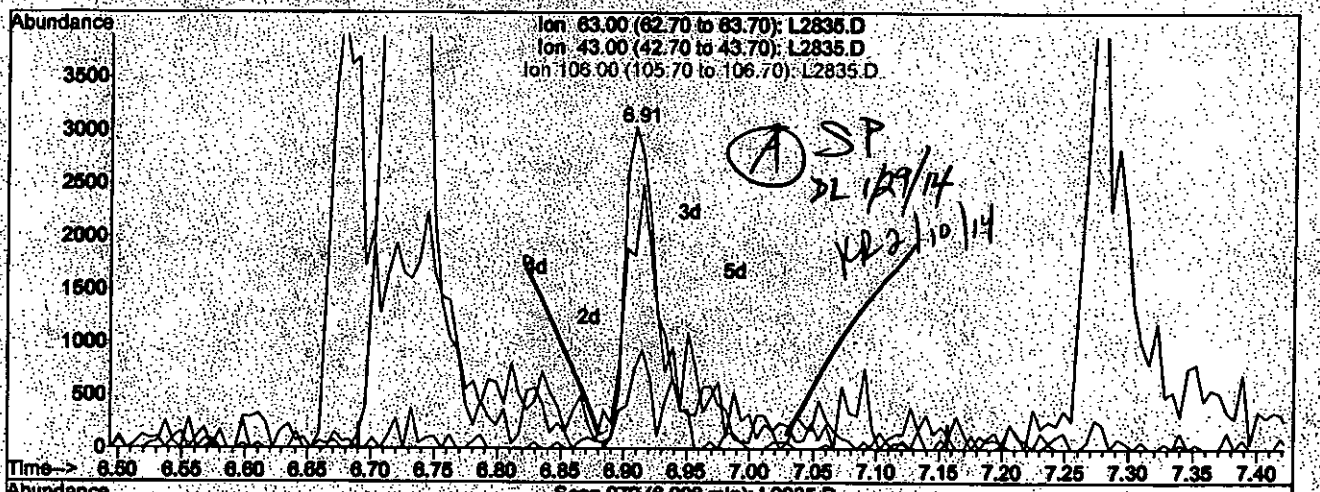
Ion	Exp%	Act%
63.00	100	100
43.00	89.90	87.69#
106.00	24.30	23.19
0.00	0.00	0.00

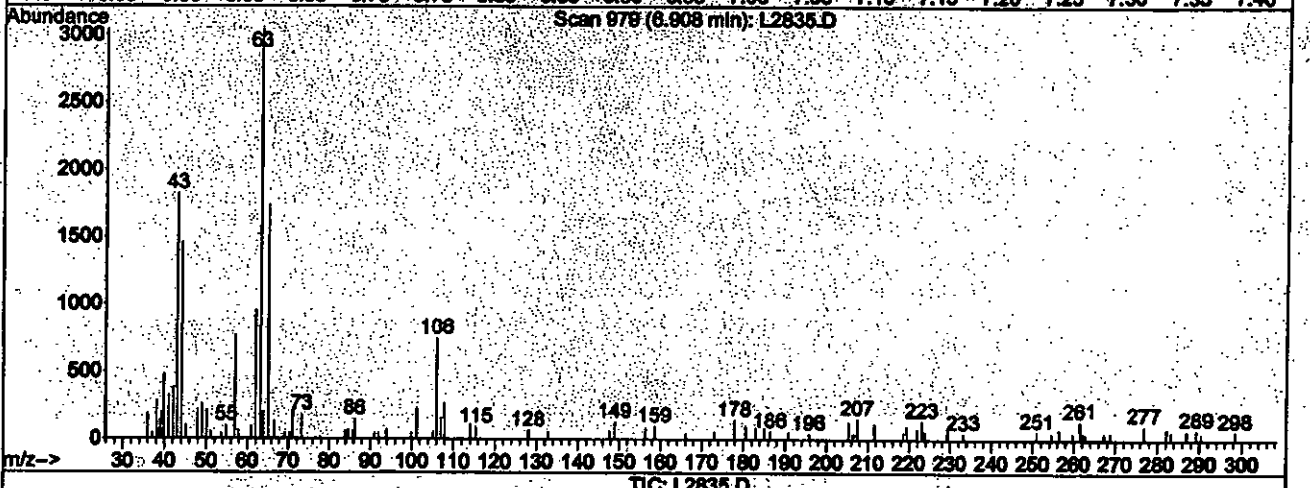
L2835.D 6240127.M Wed Jan 29 08:30:59 2014

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2835.D Vial: 28
Acq On : 27 Jan 2014 10:53 pm Operator: D.LIPANI
Sample : STD#5 - 2.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 8:31 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 08:25:06 2014
Response via : Single Level Calibration





TIC: L2835.D

(46) 2-Chloroethylvinyl Ether

6.91min 1.73ug/L m

response 7201

Ion	Exp%	Act%
63.00	100	100
43.00	69.90	64.13
106.00	24.30	16.98#
0.00	0.00	0.00

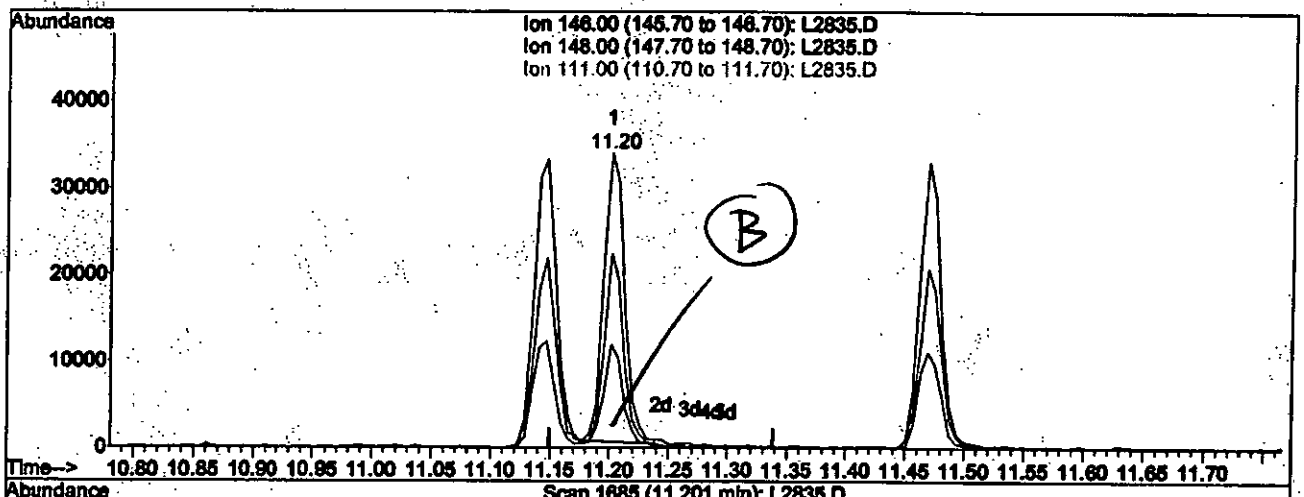
L2835.D 6240127.M Wed Jan 29 08:31:24 2014

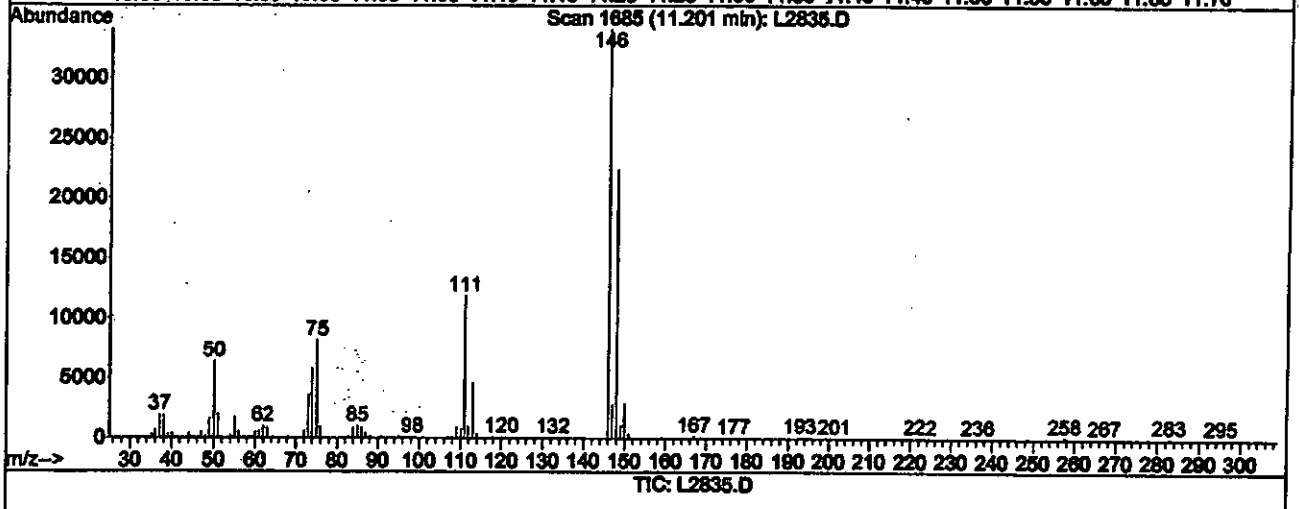
90124

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2835.D Vial: 28
Acq On : 27 Jan 2014 10:53 pm Operator: D.LIPANI
Sample : STD#5 - 2.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 8:31 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 08:25:06 2014
Response via : Single Level Calibration





TIC: L2835.D

(70) 1,4-Dcbenz

11.20min 1.78ug/L

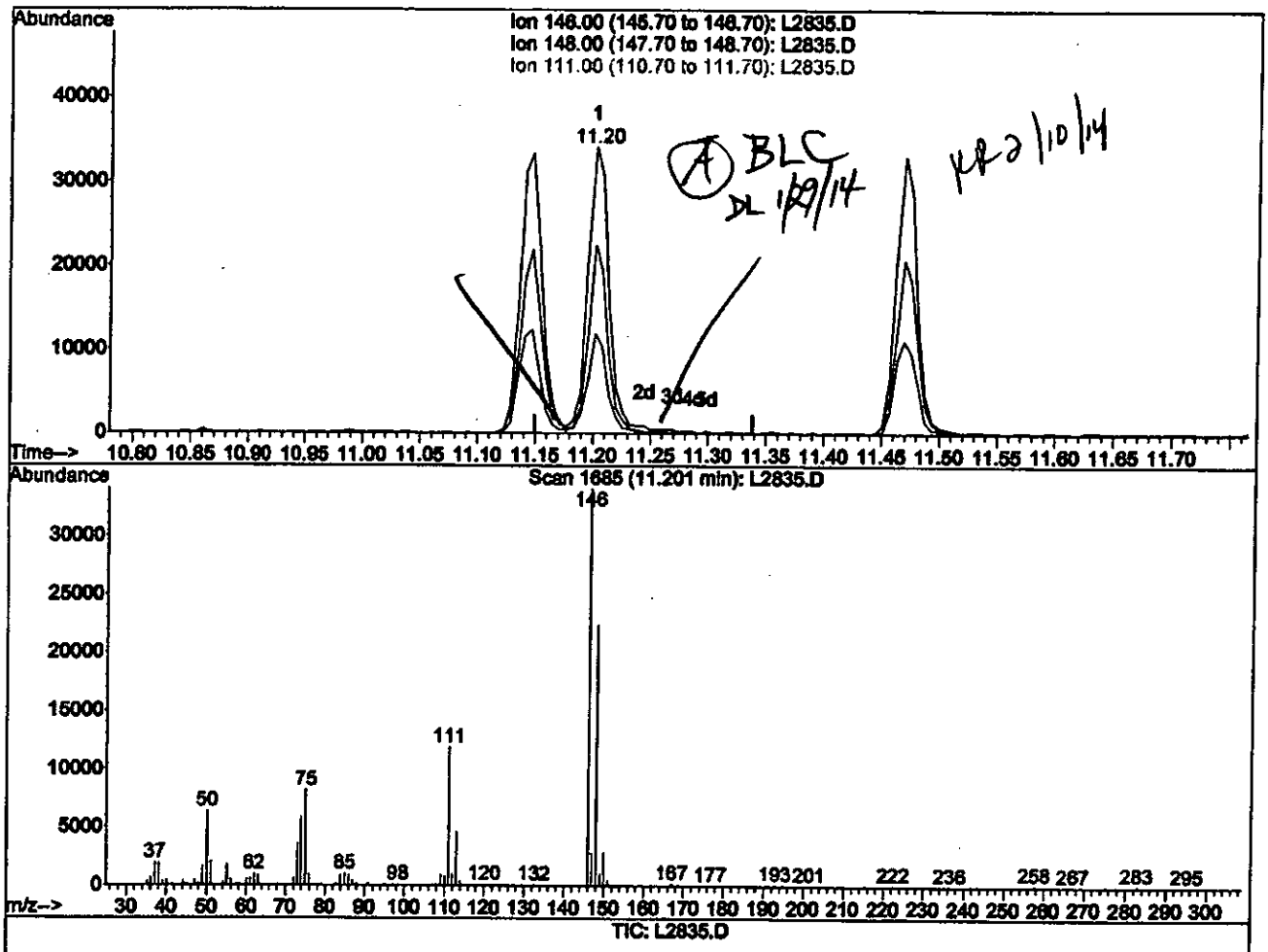
response 40589

Ion	Exp%	Act%
146.00	100	100
148.00	64.90	64.38
111.00	34.20	34.72
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2835.D Vial: 28
Acq On : 27 Jan 2014 10:53 pm Operator: D.LIPANI
Sample : STD#5 - 2.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 8:32 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 08:25:06 2014
Response via : Single Level Calibration



TIC: L2835.D

(70) 1,4-Dclbenz

11.20min 1.90ug/L m

response 43399

Ion	Exp%	Act%
146.00	100	100
148.00	64.90	60.21
111.00	34.20	32.47
0.00	0.00	0.00

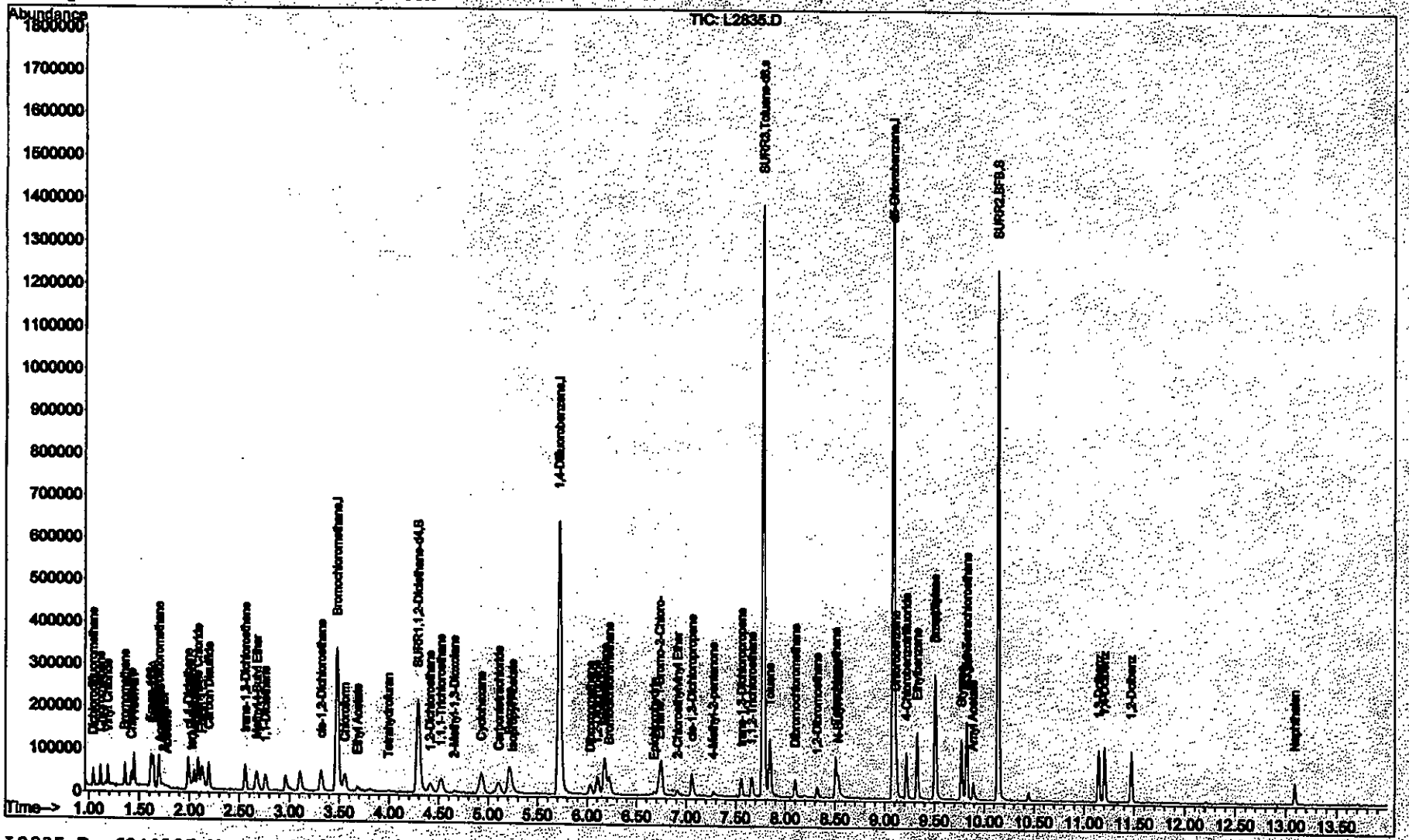
L2835.D 6240127.M Wed Jan 29 08:32:55 2014

00126

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2835.D Vial: 28
Acq On : 27 Jan 2014 10:53 pm Operator: D.LIPANI
Sample : STD#5 - 2.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 8:32 2014 Quant Results File: 6240127.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 08:25:06 2014
Response via : Initial Calibration



L2835.D 6240127.M Wed Jan 29 08:33:11 2014

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2836.D Vial: 29
Acq On : 27 Jan 2014 11:24 pm Operator: D.LIPANI
Sample : STD#6 - 5.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 8:40 2014 Quant Results File: 6240127.RES

Quant Method : I:\ACQUDATA\M...\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 08:33:35 2014
Response via : Initial Calibration
DataAcq Meth : 6240127

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	3.48	128	102068	30.00	ug/L		0.00
35) 1,4-Difluorobenzene	5.72	114	649842	30.00	ug/L		0.00
53) d5-Chlorobenzene	9.09	117	633048	30.00	ug/L		0.00
System Monitoring Compounds							
30) SURR1,1,2-Diclethane-d4	4.29	65	204983	34.87	ug/L		0.00
Spiked Amount 30.000	Range 81 - 127		Recovery = 116.23%				
51) SURR3,Toluene-d8	7.78	98	816696	31.95	ug/L		0.00
Spiked Amount 30.000	Range 83 - 120		Recovery = 106.50%				
68) SURR2,BFB	10.14	95	326956	34.38	ug/L		0.00
Spiked Amount 30.000	Range 79 - 123		Recovery = 114.60%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.04	85	51293	4.90	ug/L		97
3) Chloromethane	1.11	50	68440	5.57	ug/L		93
4) Vinyl Chloride	1.19	62	68929	6.11	ug/L		97
5) Bromomethane	1.36	94	40439	6.27	ug/L		99
6) Chloroethane	1.42	64	35896	5.83	ug/L		95
7) Freon-21	1.45	67	98748	6.02	ug/L		99
8) Freon-123	1.62	83	78571	6.18	ug/L	#	93
9) Freon-123A	1.64	67	62721m	5.81	ug/L		
10) Acrolein	1.70	56	31774	42.46	ug/L		98
11) Trichlorofluoromethane	1.70	101	81007	5.96	ug/L		95
12) Acetonitrile	1.72	41	23486	28.24	ug/L		90
13) 2-Propanol	1.75	45	32119	102.53	ug/L		99
14) Acetone	1.78	43	13703	6.87	ug/L		95
15) 1,1-Diclethene	1.99	96	45756	5.81	ug/L		91
16) tert Butyl Alcohol	2.03	59	49040	116.30	ug/L		95
17) Acrylonitrile	2.05	53	59142	30.93	ug/L		91
18) Methylene Chloride	2.09	84	53946	5.69	ug/L		97
19) Freon 113	2.13	101	51859	6.10	ug/L		91
20) Carbon Disulfide	2.20	76	155534	5.87	ug/L		97
21) trans-1,2-Dichloroethene	2.56	96	51977	6.00	ug/L		95
22) Methyl-t-Butyl Ether	2.68	73	115560	6.33	ug/L		98
23) 1,1-Diclethane	2.76	63	93734	6.17	ug/L		95
24) 2-Butanone	3.25	43	12316m	5.84	ug/L		
25) cis-1,2-Dichloroethene	3.32	96	56653	5.93	ug/L		100
26) Chloroform	3.55	83	96316	6.37	ug/L	#	96
27) Ethyl Acetate	3.67	43	54847	11.91	ug/L	#	98
28) Isobutanol	3.80	43	21060	100.73	ug/L	#	80
29) Tetrahydrofuran	3.97	42	9720	6.89	ug/L		97
31) 1,2-Dichloroethane	4.42	62	61787	6.55	ug/L		98
32) 1,1,1-Trichloroethane	4.53	97	83537	6.17	ug/L		95
33) 2-Methyl-1,3-Dioxolane	4.65	73	21034m	33.85	ug/L		
34) Cyclohexane	4.93	56	81855	6.43	ug/L		96
36) Carbontetrachloride	5.10	117	66356	5.01	ug/L		95
37) Isopropyl Acetate	5.24	43	62833	5.69	ug/L		98
38) Benzene	5.21	78	213389	5.84	ug/L		96
39) Dibromomethane	6.03	93	29359	5.56	ug/L		94
40) 1,2-Diclpropane	6.10	63	58978	6.24	ug/L		97
41) Trichloroethene	6.17	130	55564	5.07	ug/L		96

DL 01/29/14

(#) = qualifier out of range (m) = manual integration
L2836.D 6240127.M Wed Jan 29 08:42:35 2014

00128

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2836.D Vial: 29
Acq On : 27 Jan 2014 11:24 pm Operator: D.LIPANI
Sample : STD#6 - 5.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 8:40 2014 Quant Results File: 6240127.RES

Quant Method : I:\ACQUDATA\M...\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 08:33:35 2014
Response via : Initial Calibration
DataAcq Meth : 6240127

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
42)	Heptane	6.18	43	45826	5.53 ug/L		92
43)	Bromodichloromethane	6.23	83	74859	5.82 ug/L		96
44)	Epichlorohydrin	6.63	57	11382m	24.32 ug/L		
45)	Ethane, 1-Bromo-2-Chloro-	6.72	63	64154	5.56 ug/L	#	87
46)	2-Chloroethylvinyl Ether	6.90	63	19972	4.79 ug/L		98
47)	cis-1,3-Dichloropropene	7.05	75	83331	6.01 ug/L		98
48)	4-Methyl-2-pentanone	7.27	43	32269	5.79 ug/L		99
49)	trans-1,3-Dichloropropene	7.55	75	67012	5.91 ug/L		96
50)	1,1,2-Trichloroethane	7.66	97	41109	5.67 ug/L		93
52)	Toluene	7.85	91	233931	5.87 ug/L		97
54)	Dibromochloromethane	8.10	129	54081	5.16 ug/L		99
55)	2-Hexanone	8.17	43	21900	5.41 ug/L		90
56)	1,2-Dibromoethane	8.32	107	42053	5.40 ug/L		98
57)	Tetrachloroethene	8.51	164	45011	4.66 ug/L		94
58)	N-Butyl Acetate	8.53	43	109841	11.25 ug/L		98
59)	Chlorobenzene	9.11	112	153899	5.53 ug/L		95
60)	4-Chlorobenzotrifluoride	9.22	180	68569	4.56 ug/L		94
61)	Ethylbenzene	9.33	106	78118	5.51 ug/L		99
62)	(m+p)Xylene	9.51	106	185744	10.67 ug/L		90
63)	Bromoform	9.51	173	32357	4.89 ug/L		98
64)	Styrene	9.77	104	150992	5.48 ug/L		99
65)	1,1,2,2-Tetrachloroethane	9.82	83	47011	5.40 ug/L		96
66)	o-Xylene	9.83	106	94615	5.42 ug/L		93
67)	Amyl Acetate	9.89	43	69033	5.46 ug/L		95
69)	1,3-Dclbenz	11.14	146	115062	5.08 ug/L		97
70)	1,4-Dclbenz	11.20	146	117588	5.20 ug/L		95
71)	1,2-Dclbenz	11.47	146	109125	5.26 ug/L		95
72)	Naphthalen	13.09	128	89313	5.57 ug/L		97

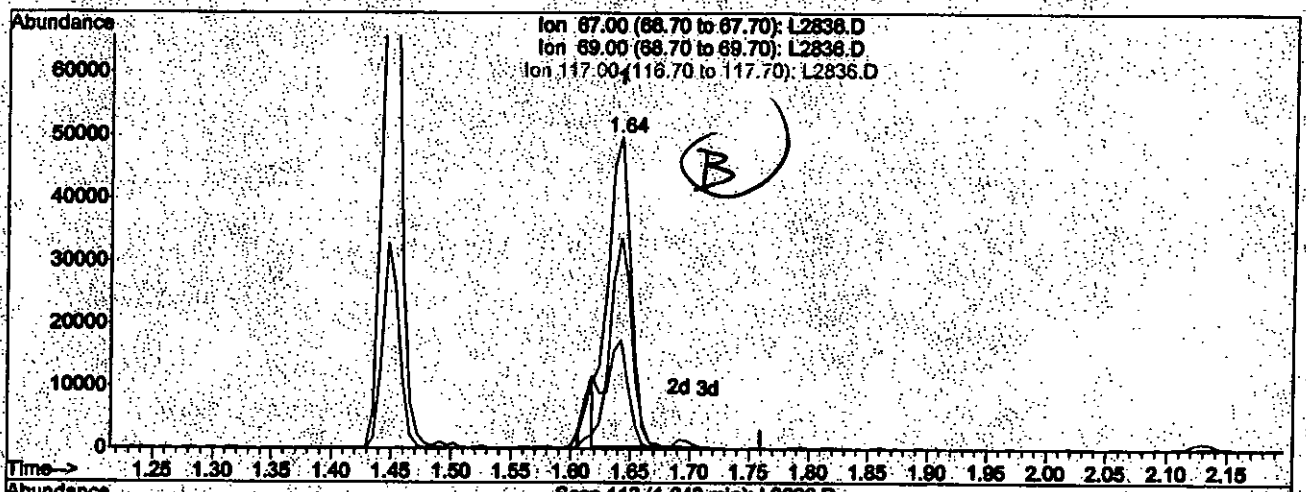
JL 01/29/14

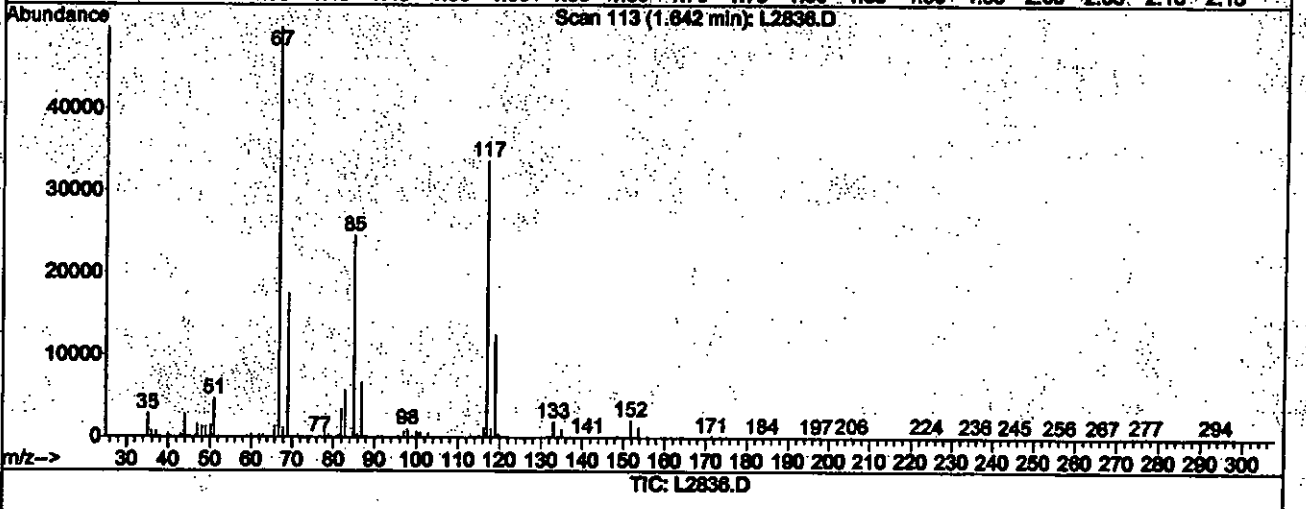
(#) = qualifier out of range (m) = manual integration
L2836.D 6240127.M Wed Jan 29 08:42:36 2014 Page 2

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2836.D Vial: 29
Acq On : 27 Jan 2014 11:24 pm Operator: D.LIPANI
Sample : STD#6 - 5.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 8:36 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 08:33:35 2014
Response via : Single Level Calibration





TIC: L2836.D

(9) Freon-123A

1.64min 6.13ug/L

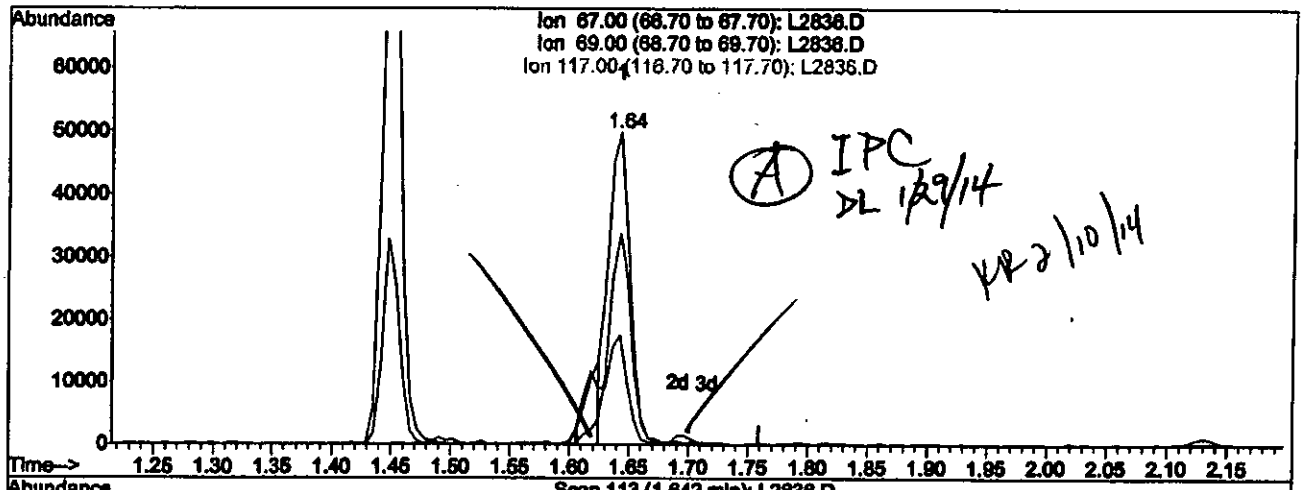
response 66199

Ion	Exp%	Act%
67.00	100	100
69.00	31.10	35.09
117.00	70.30	67.69
0.00	0.00	0.00

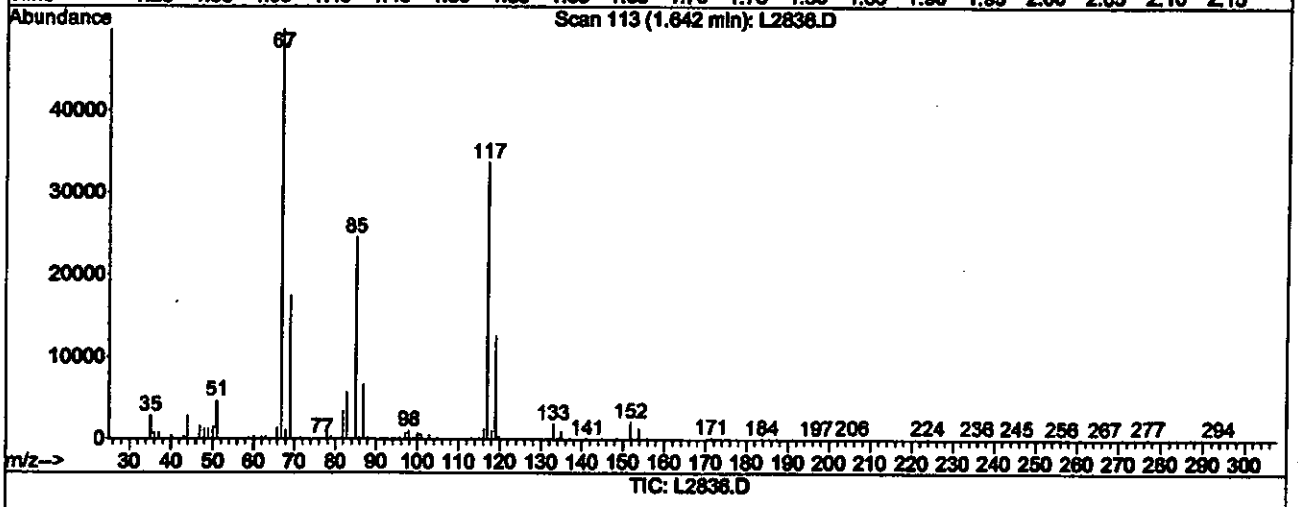
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2836.D Vial: 29
Acq On : 27 Jan 2014 11:24 pm Operator: D.LIPANI
Sample : STD#6 - 5.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 8:37 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 08:33:35 2014
Response via : Single Level Calibration



A IPC DL 1/29/14 KR 2/10/14



TIC: L2836.D

(9) Freon-123A

1.64min 6.81ug/L m

response 62721

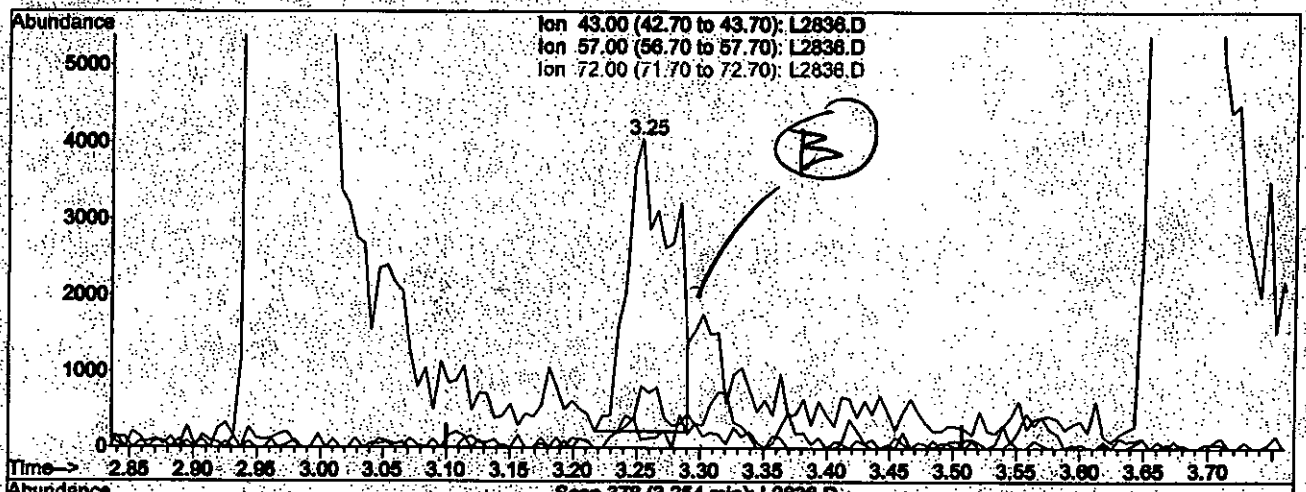
Ion	Exp%	Act%
67.00	100	100
69.00	31.10	35.09
117.00	70.30	67.69
0.00	0.00	0.00

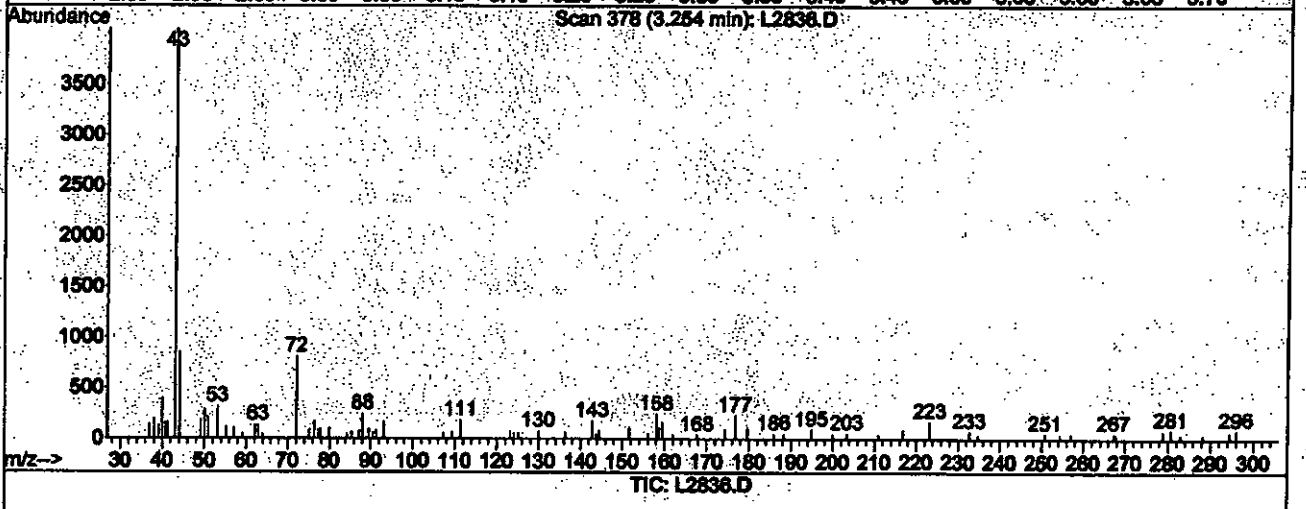
L2836.D 6240127.M Wed Jan 29 08:37:09 2014

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2836.D Vial: 29
Acq On : 27 Jan 2014 11:24 pm Operator: D.LIPANI
Sample : STD#6 - 5.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 8:37 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 08:33:35 2014
Response via : Single Level Calibration





TIC: L2836.D

(24) 2-Butanone

3.25min 4.41ug/L

response 9302

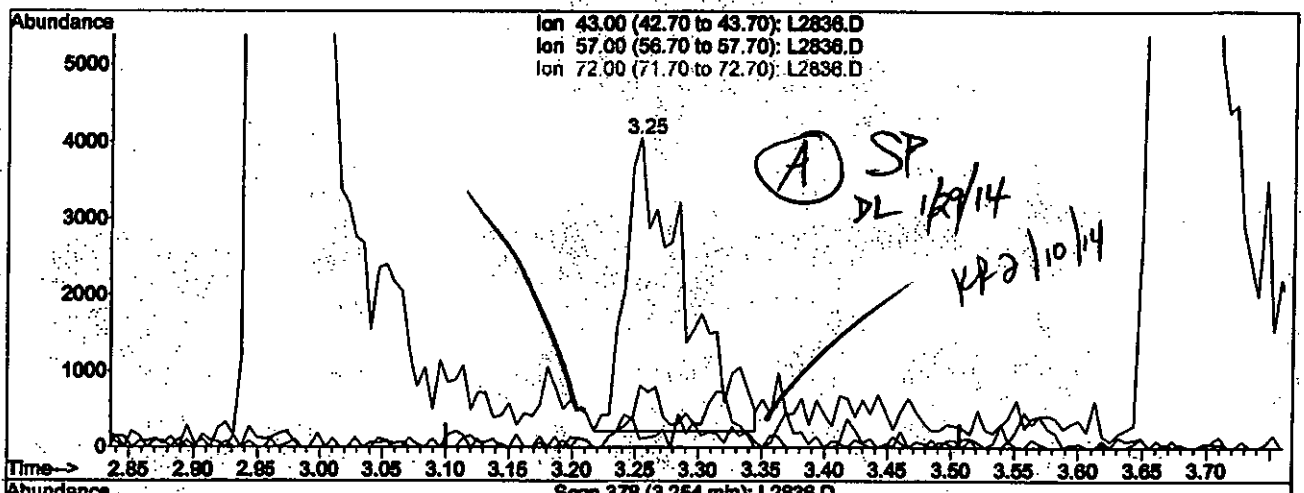
Ion	Exp%	Act%
43.00	100	100
57.00	10.20	2.64#
72.00	26.10	20.04#
0.00	0.00	0.00

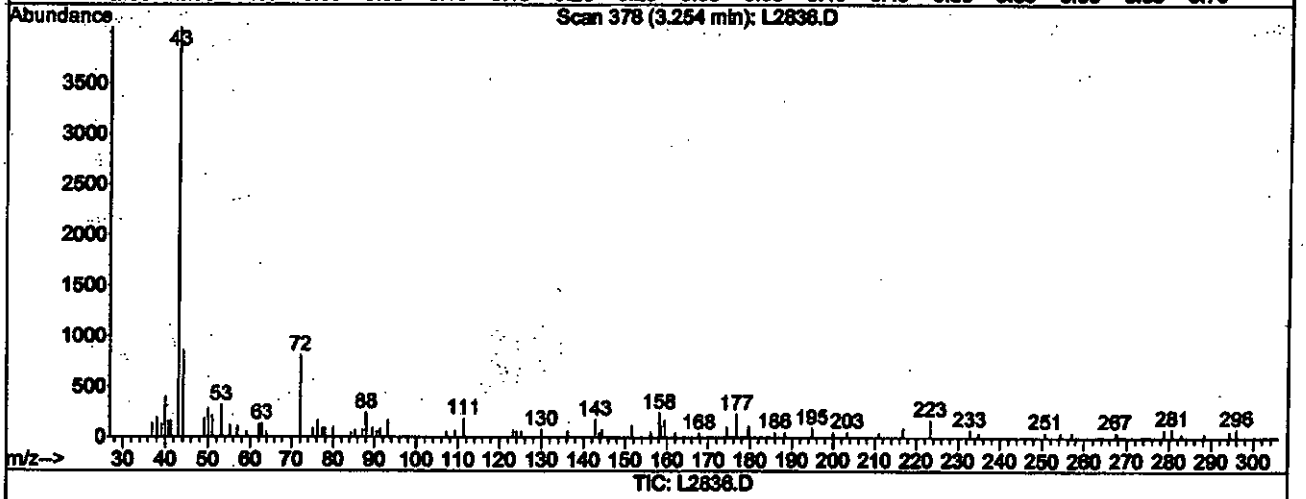
L2836.D 6240127.M Wed Jan 29 08:38:38 2014

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2836.D Vial: 29
Acq On : 27 Jan 2014 11:24 pm Operator: D.LIPANI
Sample : STD#6 - 5.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 8:39 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 08:33:35 2014
Response via : Single Level Calibration





TIC: L2836.D

(24) 2-Butanone

3.25min 5.84ug/L m

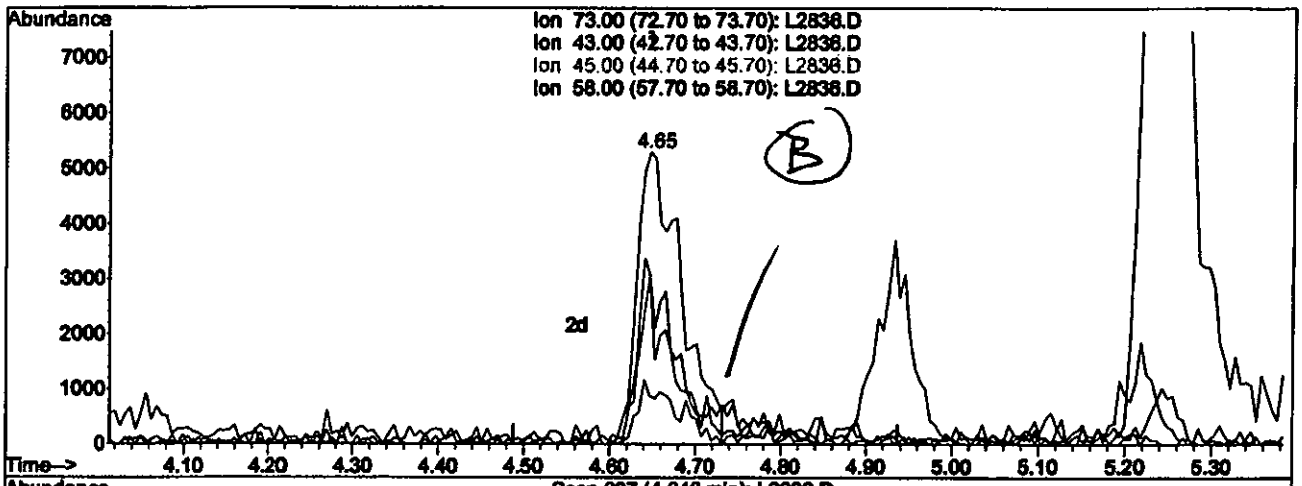
response 12316

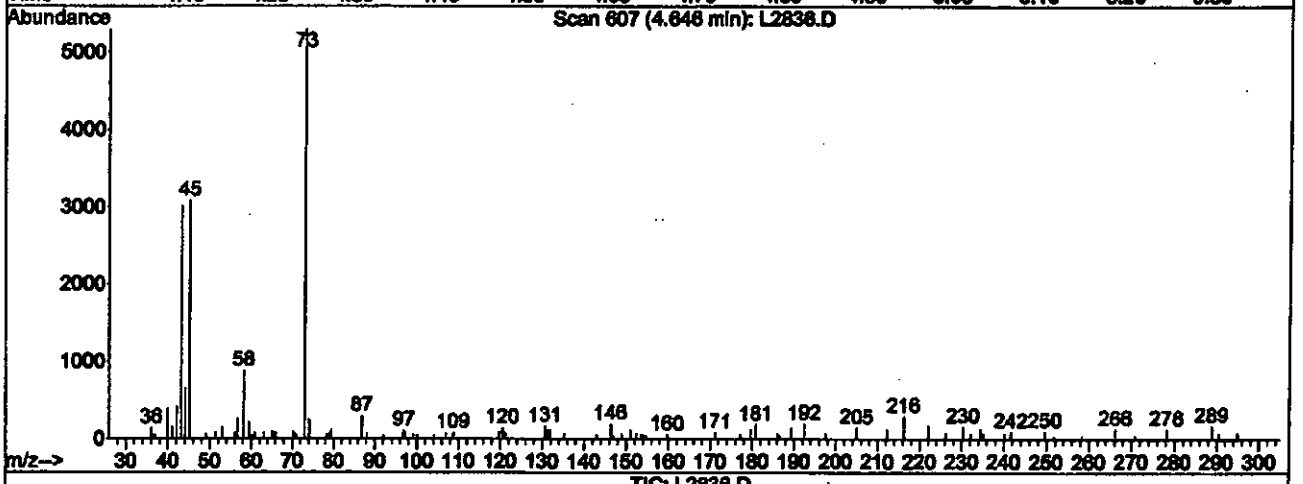
Ion	Exp%	Act%
43.00	100	100
57.00	10.20	2.64#
72.00	26.10	20.04#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2836.D Vial: 29
Acq On : 27 Jan 2014 11:24 pm Operator: D.LIPANI
Sample : STD#6 - 5.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 8:39 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 08:33:35 2014
Response via : Single Level Calibration





TIC: L2836.D

(33) 2-Methyl-1,3-Dioxolane

4.65min 30.55ug/L

response 18980

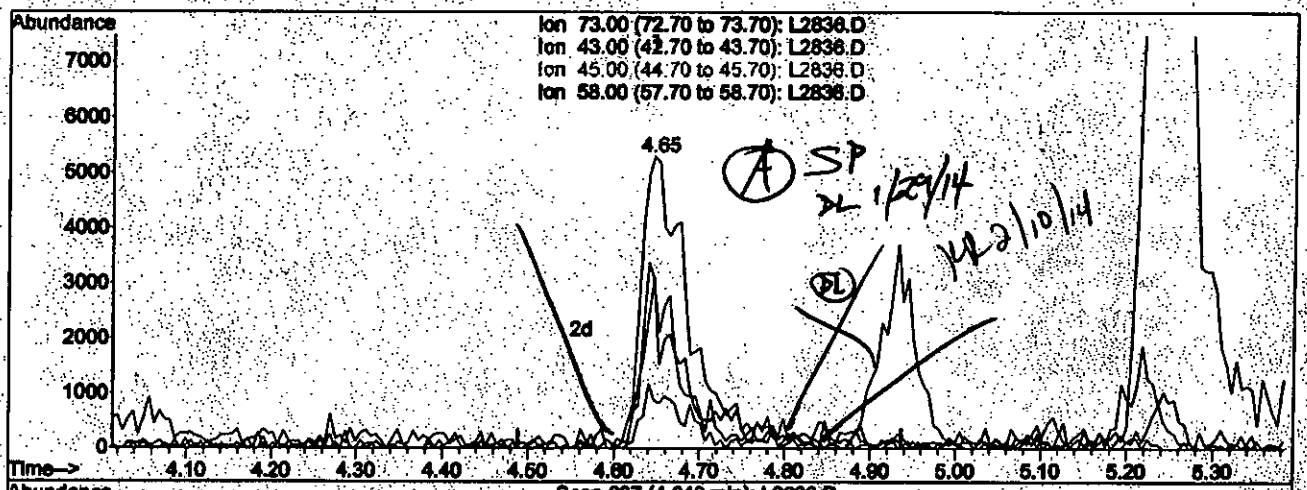
Ion	Exp%	Act%
73.00	100	100
43.00	47.70	57.03
45.00	39.40	58.22#
58.00	21.60	16.67

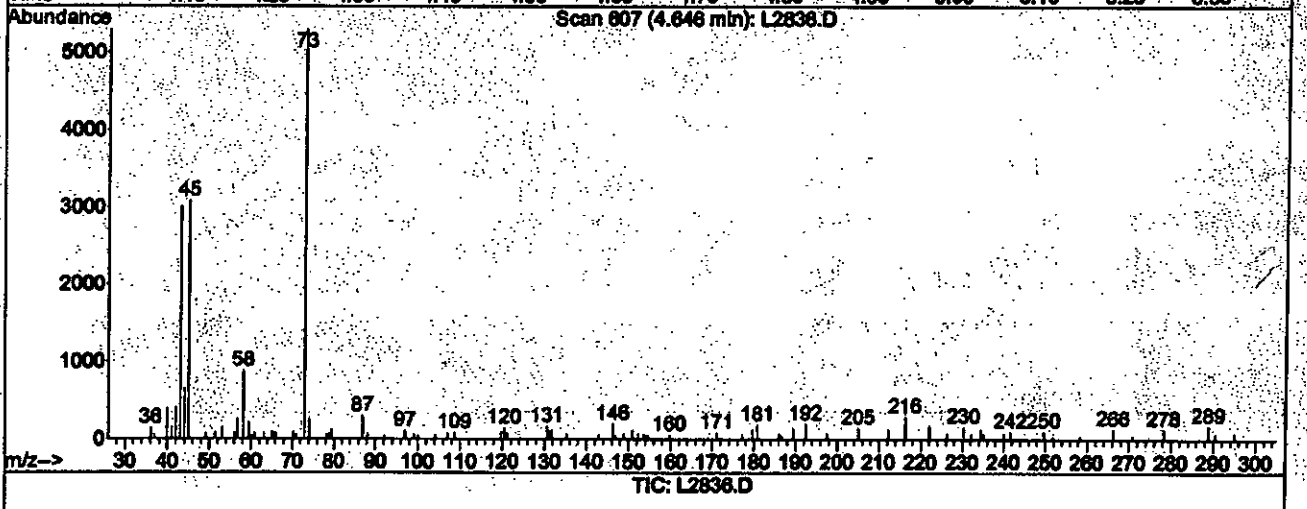
L2836.D 6240127.M Wed Jan 29 08:39:50 2014

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2836.D Vial: 29
Acq On : 27 Jan 2014 11:24 pm Operator: D.LIPANI
Sample : STD#6 - 5.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 8:39 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 08:33:35 2014
Response via : Single Level Calibration





TIC: L2836.D

(33) 2-Methyl-1,3-Dioxolane

4.65min 33.85ug/L m

response 21034

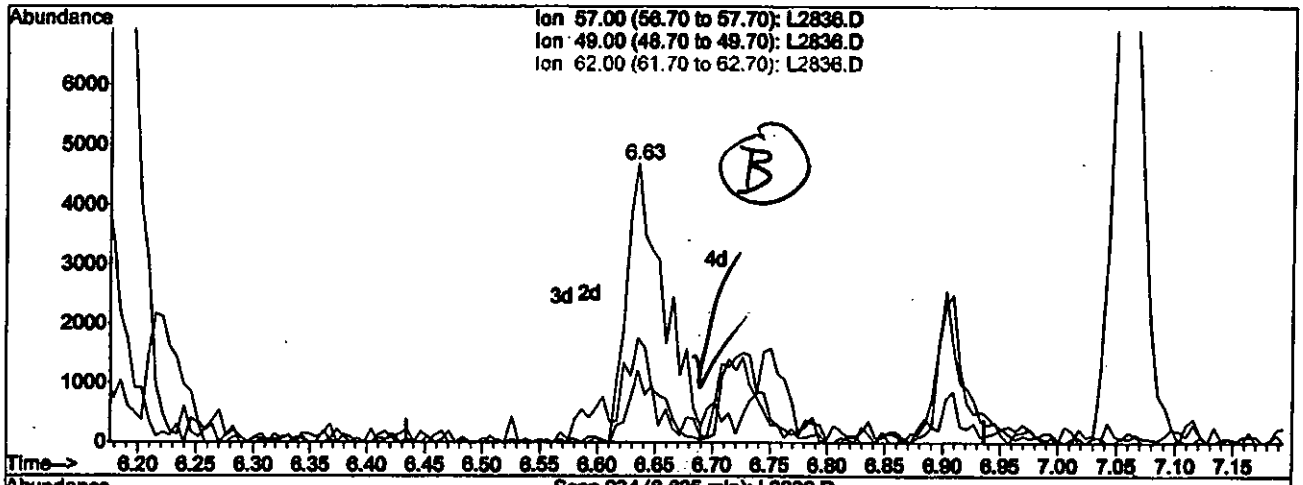
Ion	Exp%	Act%
73.00	100	100
43.00	47.70	57.03
45.00	39.40	58.22#
58.00	21.60	16.67

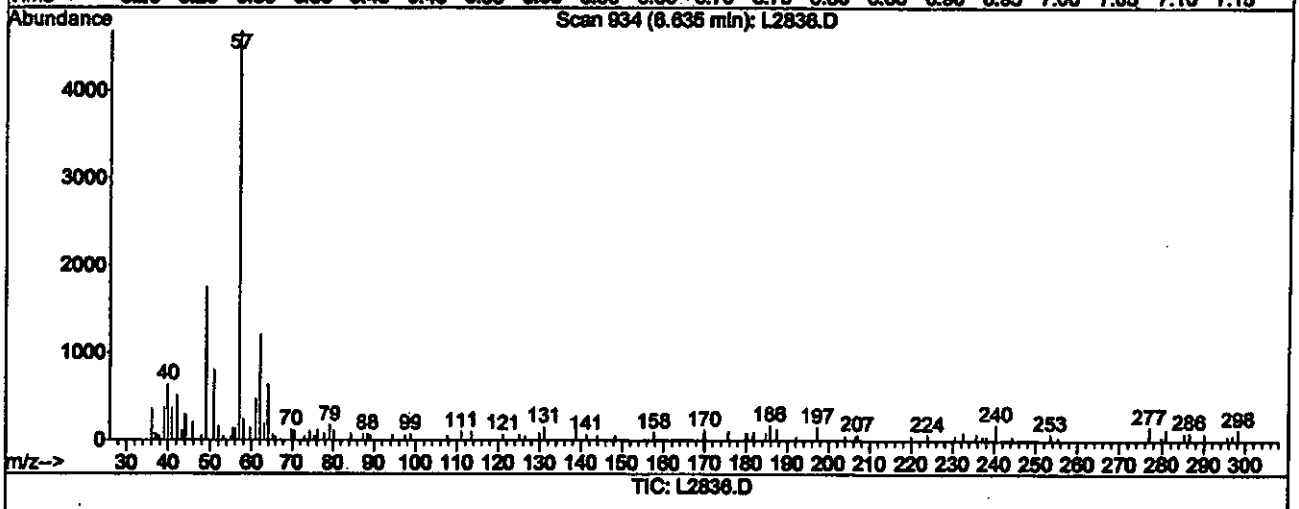
L2836.D 6240127.M Wed Jan 29 08:40:02 2014

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2836.D Vial: 29
Acq On : 27 Jan 2014 11:24 pm Operator: D.LIPANI
Sample : STD#6 - 5.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 8:39 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 08:33:35 2014
Response via : Single Level Calibration





TIC: L2836.D

(44) Epichlorohydrin

6.63min 22.57ug/L

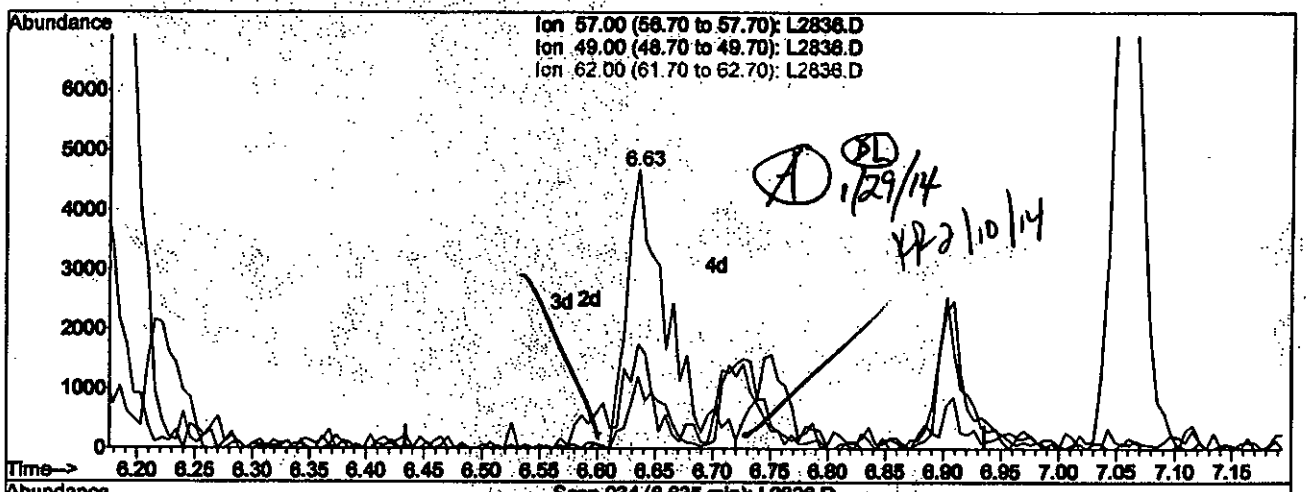
response 10563

Ion	Exp%	Act%
57.00	100	100
49.00	34.70	37.44
62.00	18.10	25.77#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2836.D Vial: 29
Acq On : 27 Jan 2014 11:24 pm Operator: D.LIPANI
Sample : STD#6 - 5.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 8:40 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 08:33:35 2014
Response via : Single Level Calibration



TIC: L2836.D

(44) Epichlorohydrin

6.63min 24.32ug/L m

response 11382

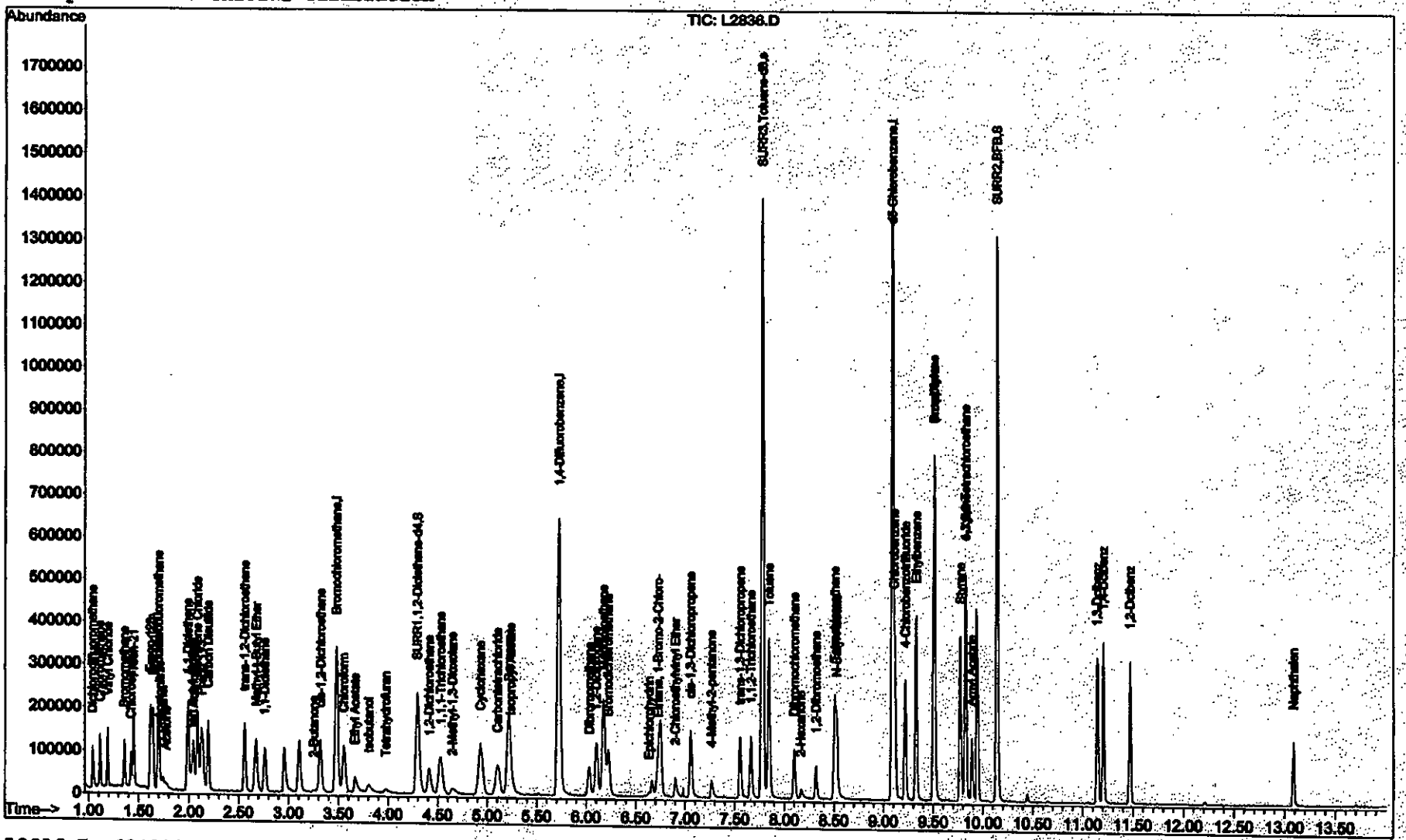
Ion	Exp%	Act%
57.00	100	100
49.00	34.70	37.44
62.00	18.10	25.77#
0.00	0.00	0.00

L2836.D 6240127.M Wed Jan 29 08:40:35 2014

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2836.D Vial: 29
Acq On : 27 Jan 2014 11:24 pm Operator: D.LIPANI
Sample : STD#6 - 5.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 8:40 2014 Quant Results File: 6240127.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 08:33:35 2014
Response via : Initial Calibration



L2836.D 6240127.M Wed Jan 29 08:42:40 2014

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2837.D Vial: 30
Acq On : 27 Jan 2014 11:54 pm Operator: D.LIPANI
Sample : STD#7 - 10 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 10:12 2014 Quant Results File: 6240127.RES

Quant Method : I:\ACQUDATA\M...\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 10:05:42 2014
Response via : Initial Calibration
DataAcq Meth : 6240127

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Bromochloromethane	3.48	128	103560	30.00 ug/L		0.00
35) 1,4-Difluorobenzene	5.72	114	671888	30.00 ug/L		0.00
53) d5-Chlorobenzene	9.09	117	678314	30.00 ug/L		0.00
System Monitoring Compounds						
30) SURR1,1,2-Diclethane-d4	4.29	65	207261	31.66 ug/L		0.00
Spiked Amount 30.000	Range 81 - 127		Recovery = 105.53%			
51) SURR3,Toluene-d8	7.77	98	819926	30.28 ug/L		0.00
Spiked Amount 30.000	Range 83 - 120		Recovery = 100.93%			
68) SURR2,BFB	10.14	95	313078	29.29 ug/L		0.00
Spiked Amount 30.000	Range 79 - 123		Recovery = 97.63%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.04	85	102453	9.91 ug/L		98
3) Chloromethane	1.11	50	135145	10.57 ug/L		98
4) Vinyl Chloride	1.19	62	133589	10.50 ug/L		98
5) Bromomethane	1.36	94	79328	10.79 ug/L		91
6) Chloroethane	1.42	64	78611	11.41 ug/L		97
7) Freon-21	1.45	67	194940	10.61 ug/L		95
8) Freon-123	1.62	83	152462	10.63 ug/L		96
9) Freon-123A	1.64	67	123397	10.64 ug/L		97
10) Acrolein	1.70	56	59289	64.00 ug/L		95
11) Trichlorofluoromethane	1.69	101	158448	10.57 ug/L		97
12) Acetonitrile	1.71	41	45193	51.04 ug/L		91
13) 2-Propanol	1.74	45	61546	195.77 ug/L		90
14) Acetone	1.77	43	25225	10.83 ug/L		95
15) 1,1-Diclethene	1.99	96	97764	11.09 ug/L		95
16) tert Butyl Alcohol	2.03	59	97025	210.98 ug/L		96
17) Acrylonitrile	2.04	53	112802	53.53 ug/L		98
18) Methylene Chloride	2.09	84	111314	10.56 ug/L		98
19) Freon 113	2.12	101	100191	10.82 ug/L		98
20) Carbon Disulfide	2.20	76	308357	10.63 ug/L		98
21) trans-1,2-Dichloroethene	2.56	96	104101	10.87 ug/L		97
22) Methyl-t-Butyl Ether	2.68	73	226415	11.13 ug/L		97
23) 1,1-Diclethane	2.76	63	189477	11.20 ug/L		99
24) 2-Butanone	3.24	43	27210	10.71 ug/L		96
25) cis-1,2-Dichloroethene	3.32	96	117565	10.60 ug/L		100
26) Chloroform	3.56	83	193602	10.93 ug/L	#	92
27) Ethyl Acetate	3.66	43	113819	22.97 ug/L	#	97
28) Isobutanol	3.80	43	41853	189.77 ug/L		91
29) Tetrahydrofuran	3.97	42	16320	9.98 ug/L	#	93
31) 1,2-Dichloroethane	4.41	62	121285	10.90 ug/L		98
32) 1,1,1-Trichloroethane	4.53	97	171132	11.18 ug/L		97
33) 2-Methyl-1,3-Dioxolane	4.64	73	40161m	56.45 ug/L		
34) Cyclohexane	4.93	56	168029	10.96 ug/L		96
36) Carbontetrachloride	5.10	117	142374	10.37 ug/L		92
37) Isopropyl Acetate	5.24	43	137603m	11.00 ug/L		
38) Benzene	5.21	78	447893	11.31 ug/L		99
39) Dibromomethane	6.03	93	56429	10.18 ug/L		97
40) 1,2-Diclpropane	6.10	63	112643	10.86 ug/L		96
41) Trichloroethene	6.17	130	123300	10.90 ug/L		97

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

DL 1/29/14

L2837.D 6240127.M Wed Jan 29 10:12:53 2014 Page 1

00139

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2837.D Vial: 30
Acq On : 27 Jan 2014 11:54 pm Operator: D.LIPANI
Sample : STD#7 - 10 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 10:12 2014 Quant Results File: 6240127.RES

Quant Method : I:\ACQUDATA\M...\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 10:05:42 2014
Response via : Initial Calibration
DataAcq Meth : 6240127

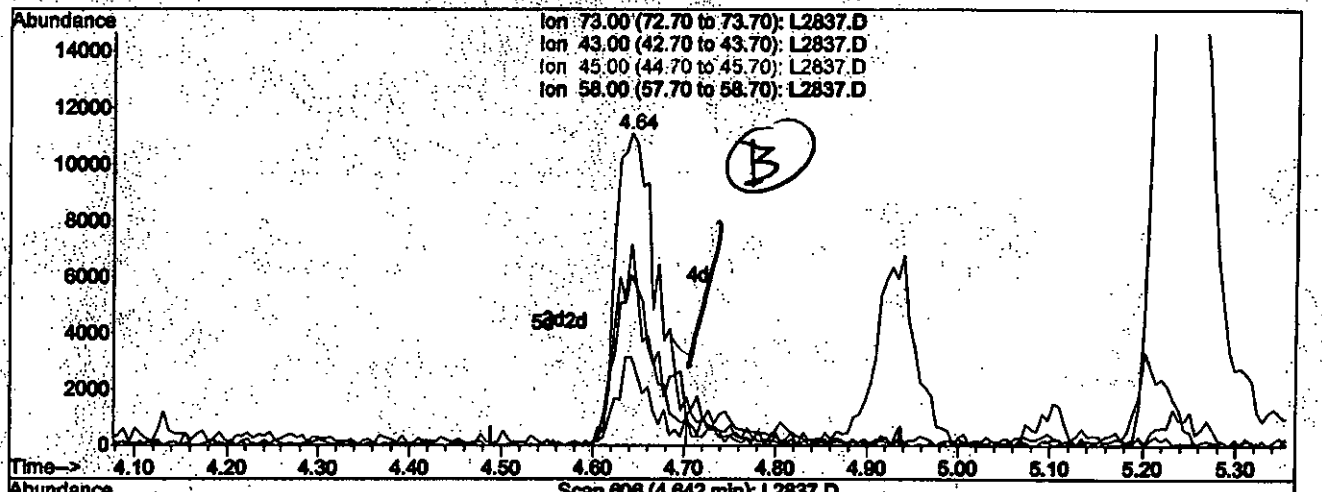
Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
42) Heptane	6.18	43	90394	9.90	ug/L		96
43) Bromodichloromethane	6.22	83	146727	10.33	ug/L		98
44) Epichlorohydrin	6.62	57	22549	48.31	ug/L	#	86
45) Ethane, 1-Bromo-2-Chloro-	6.72	63	125826	10.23	ug/L		96
46) 2-Chloroethylvinyl Ether	6.90	63	38624	9.24	ug/L		95
47) cis-1,3-Dichloropropene	7.06	75	164590	10.95	ug/L		99
48) 4-Methyl-2-pentanone	7.26	43	62723	10.03	ug/L		97
49) trans-1,3-Dichloropropene	7.55	75	125921	10.20	ug/L		98
50) 1,1,2-Trichloroethane	7.66	97	82250	10.59	ug/L		99
52) Toluene	7.84	91	458048	10.60	ug/L		99
54) Dibromochloromethane	8.10	129	104000	9.64	ug/L		99
55) 2-Hexanone	8.16	43	40975	8.88	ug/L	#	91
56) 1,2-Dibromoethane	8.31	107	83165	9.94	ug/L		96
57) Tetrachloroethene	8.51	164	101726	10.17	ug/L		98
58) N-Butyl Acetate	8.52	43	230199	21.84	ug/L		97
59) Chlorobenzene	9.11	112	315376	10.33	ug/L		97
60) 4-Chlorobenzotrifluoride	9.21	180	146669	9.73	ug/L		98
61) Ethylbenzene	9.32	106	160450	10.18	ug/L		97
62) (m+p)Xylene	9.51	106	383354	19.84	ug/L		96
63) Bromoform	9.51	173	63225	9.21	ug/L		94
64) Styrene	9.77	104	297778	9.82	ug/L		100
65) 1,1,2,2-Tetrachloroethane	9.82	83	93542	9.95	ug/L		99
66) o-Xylene	9.82	106	190594	9.98	ug/L		93
67) Amyl Acetate	9.88	43	133003	9.73	ug/L		99
69) 1,3-Dclbenz	11.14	146	232659	9.64	ug/L		98
70) 1,4-Dclbenz	11.20	146	229316	9.38	ug/L		98
71) 1,2-Dclbenz	11.47	146	205270	9.42	ug/L		95
72) Naphthalen	13.09	128	173382	9.97	ug/L		99

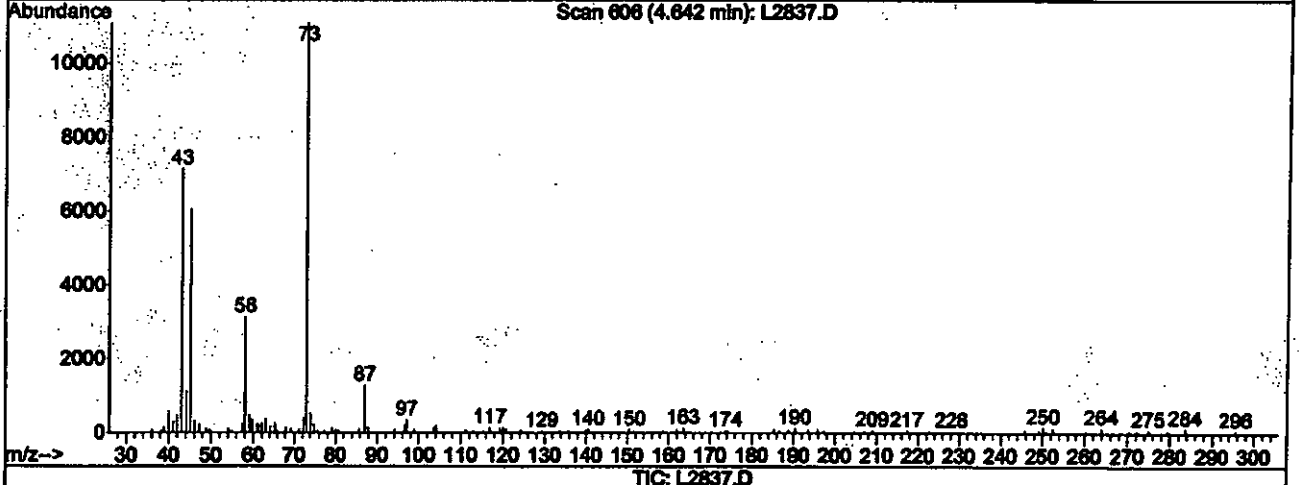
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2837.D Vial: 30
Acq On : 27 Jan 2014 11:54 pm Operator: D.LIPANI
Sample : STD#7 - 10 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 10:10 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 10:05:42 2014
Response via : Single Level Calibration





TIC: L2837.D

(33) 2-Methyl-1,3-Dioxolane

4.64min 50.01ug/L

response 35580

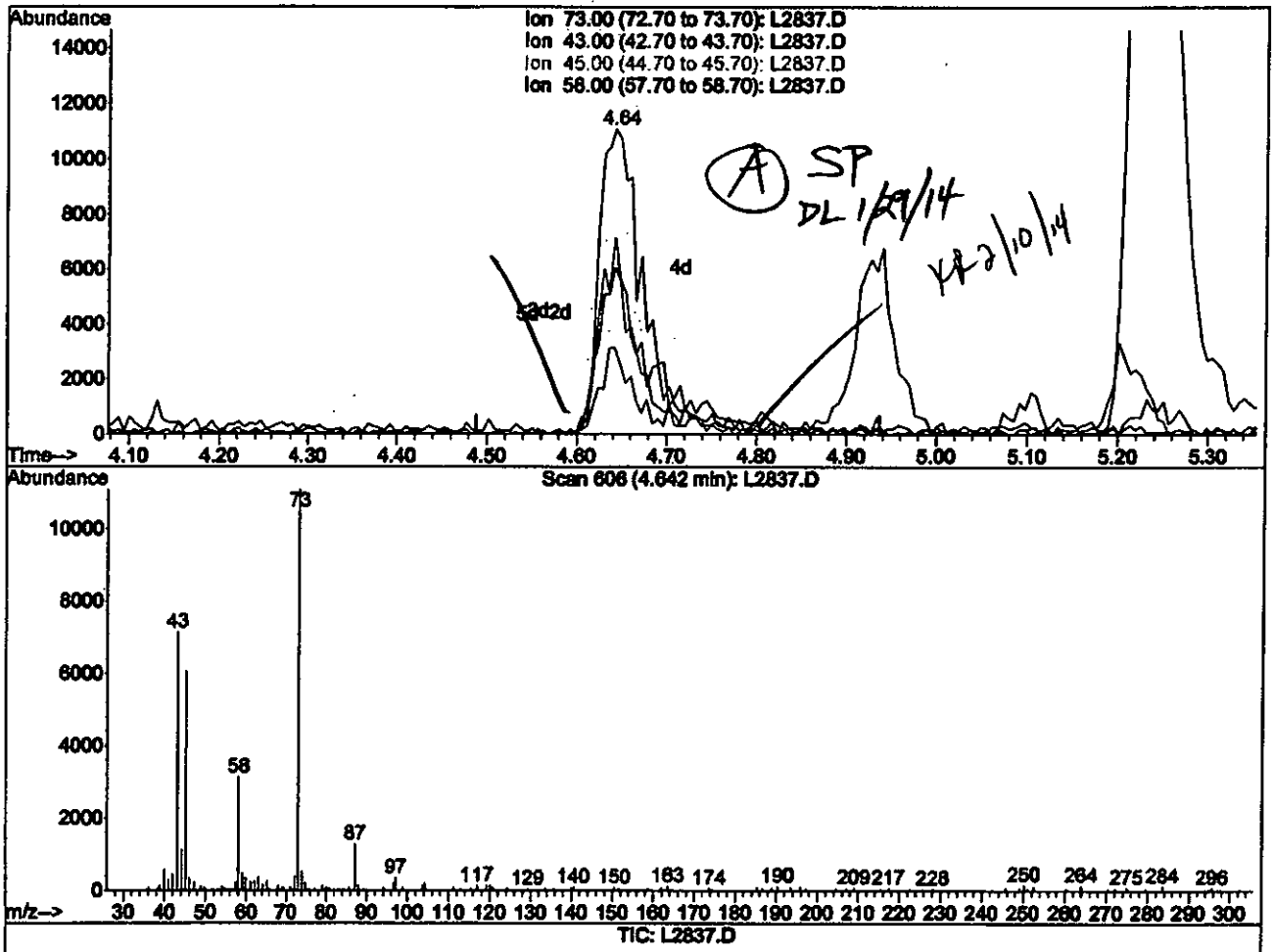
Ion	Exp%	Act%
73.00	100	100
43.00	47.70	64.45#
45.00	39.40	54.64#
58.00	21.60	28.29#

L2837.D 6240127.M Wed Jan 29 10:11:33 2014

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2837.D Vial: 30
Acq On : 27 Jan 2014 11:54 pm Operator: D.LIPANI
Sample : STD#7 - 10 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 10:11 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 10:05:42 2014
Response via : Single Level Calibration



TIC: L2837.D

(33) 2-Methyl-1,3-Dioxolane

4.64min 56.45ug/L m

response 40161

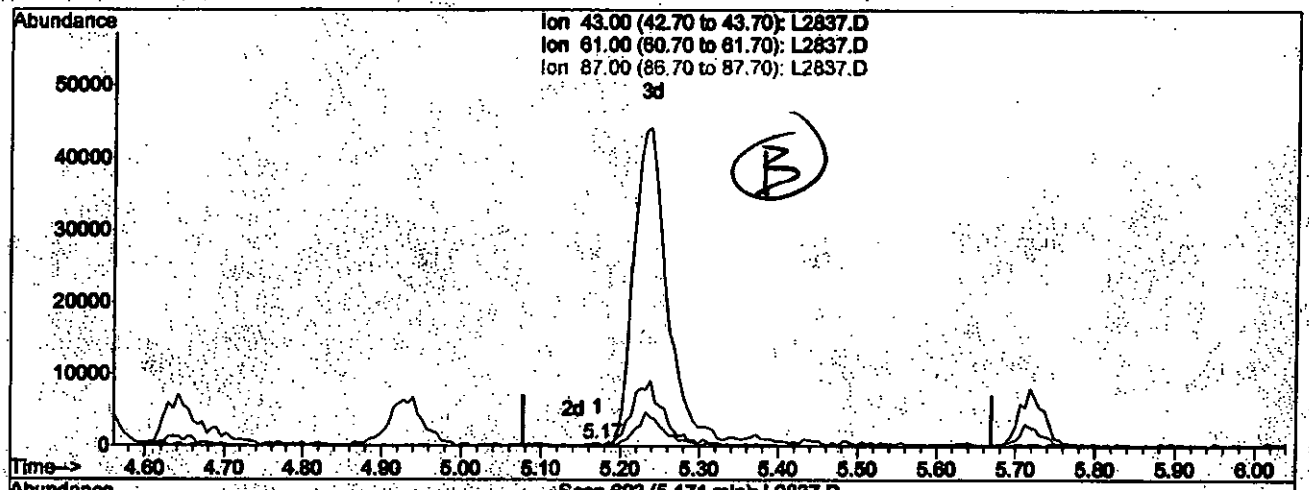
Ion	Exp%	Act%
73.00	100	100
43.00	47.70	64.46#
45.00	39.40	54.64#
58.00	21.60	28.29#

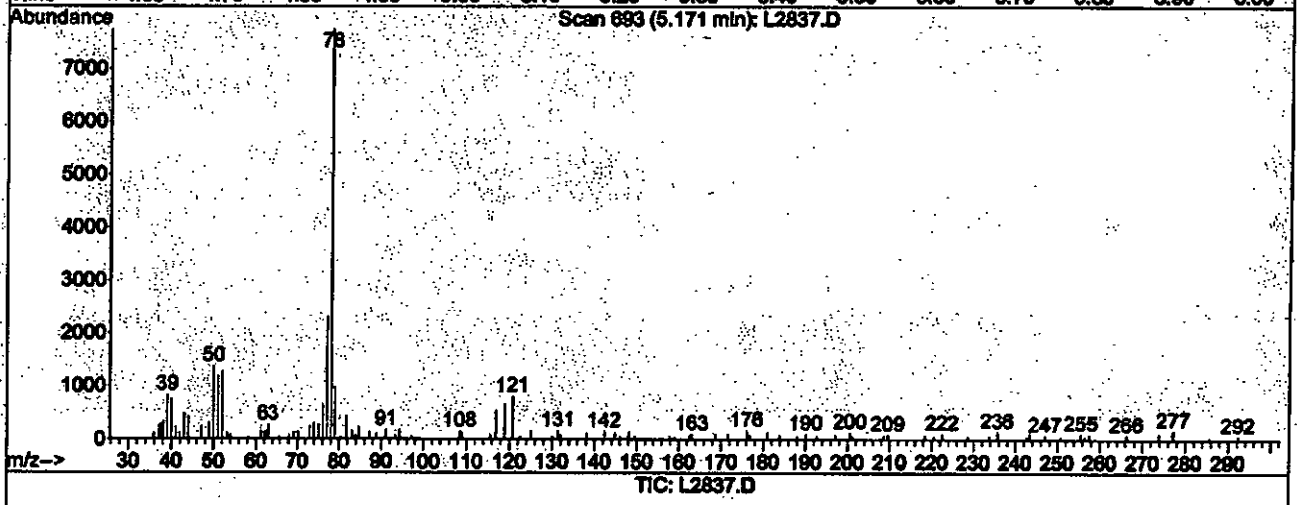
L2837.D 6240127.M Wed Jan 29 10:11:55 2014

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2837.D Vial: 30
Acq On : 27 Jan 2014 11:54 pm Operator: D.LIPANI
Sample : STD#7 - 10 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 10:11 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 10:05:42 2014
Response via : Single Level Calibration





TIC: L2837.D

(37) Isopropyl Acetate

5.17min 0.04ug/L

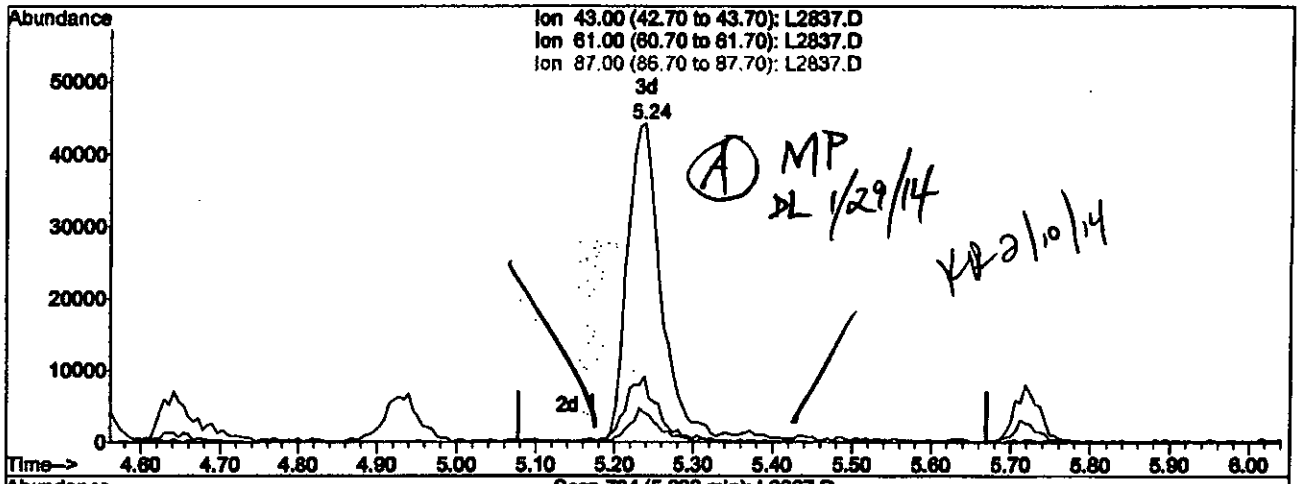
response 479

Ion	Exp%	Act%
43.00	100	100
61.00	21.40	25.47
87.00	11.20	10.44
0.00	0.00	0.00

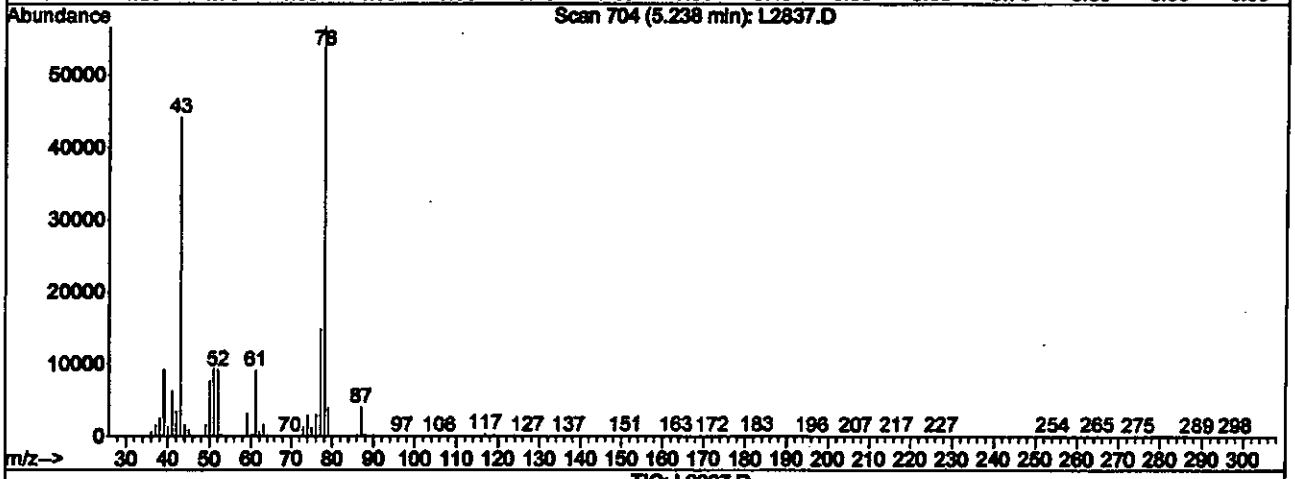
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2837.D Vial: 30
Acq On : 27 Jan 2014 11:54 pm Operator: D.LIPANI
Sample : STD#7 - 10 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 10:12 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 10:05:42 2014
Response via : Single Level Calibration



A MP DL 1/29/14 KB 2/10/14



TIC: L2837.D

(37) Isopropyl Acetate

5.24min 11.00ug/L m

response 137603

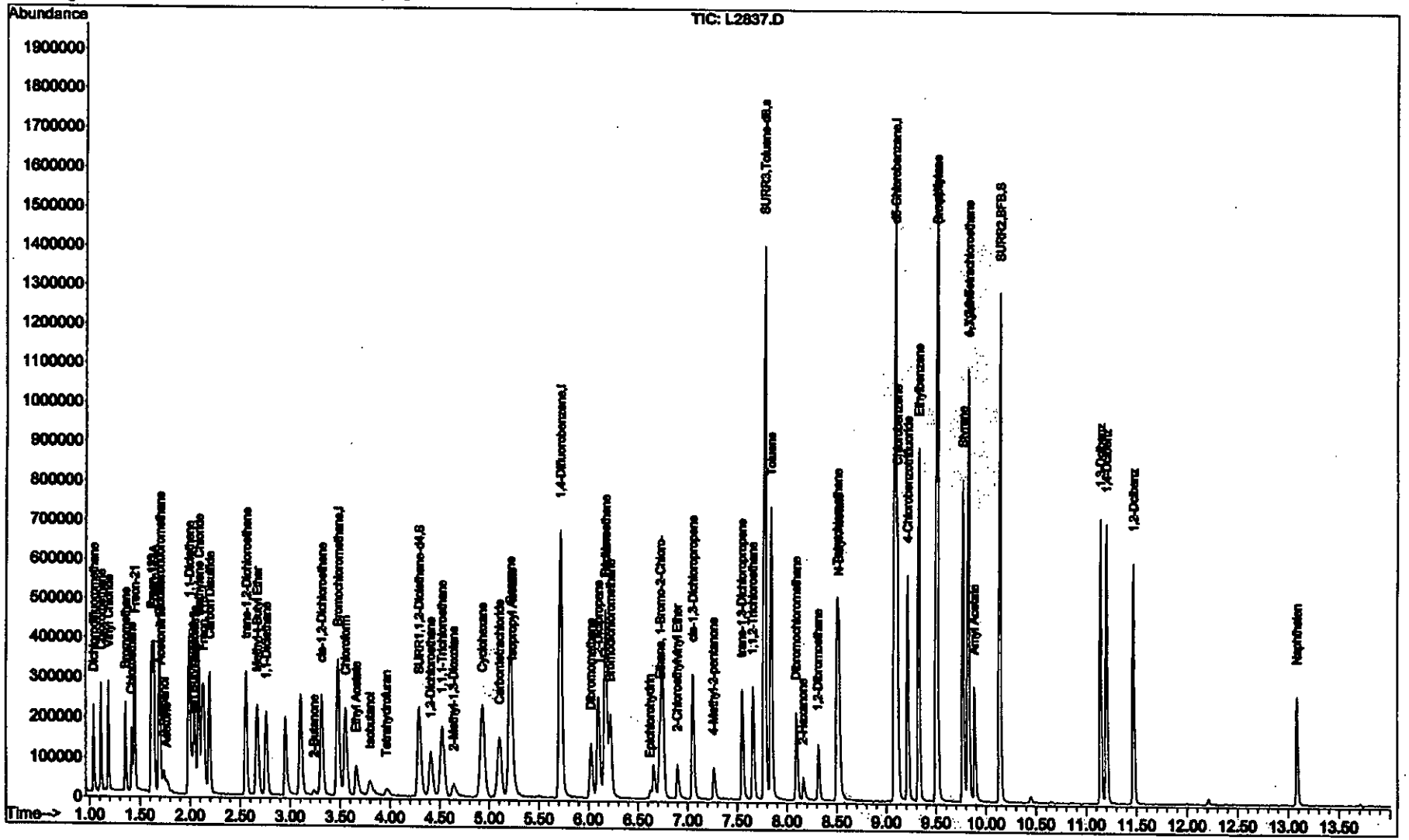
Ion	Exp%	Act%
43.00	100	100
61.00	21.40	0.08#
87.00	11.20	0.04#
0.00	0.00	0.00

L2837.D 6240127.M Wed Jan 29 10:12:27 2014

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2837.D Vial: 30
Acq On : 27 Jan 2014 11:54 pm Operator: D.LIPANI
Sample : STD#7 - 10 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 10:12 2014 Quant Results File: 6240127.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 10:05:42 2014
Response via : Initial Calibration



L2837.D 6240127.M Wed Jan 29 10:12:58 2014

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2838.D Vial: 31
Acq On : 28 Jan 2014 12:24 am Operator: D.LIPANI
Sample : STD#8 - 20 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 10:13 2014 Quant Results File: 6240127.RES

Quant Method : I:\ACQUDATA\M...\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 10:13:10 2014
Response via : Initial Calibration
DataAcq Meth : 6240127

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	3.48	128	106395	30.00 ug/L	0.00
35) 1,4-Difluorobenzene	5.72	114	669765	30.00 ug/L	0.00
53) d5-Chlorobenzene	9.09	117	642521	30.00 ug/L	0.00
System Monitoring Compounds					
30) SURR1,1,2-Diclethane-d4	4.29	65	206859	30.76 ug/L	0.00
Spiked Amount 30.000	Range 81 - 127		Recovery = 102.53%		
51) SURR3,Toluene-d8	7.77	98	827763	30.67 ug/L	0.00
Spiked Amount 30.000	Range 83 - 120		Recovery = 102.23%		
68) SURR2,BFB	10.14	95	336715	33.26 ug/L	0.00
Spiked Amount 30.000	Range 79 - 123		Recovery = 110.87%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.04	85	186740	17.58 ug/L	98
3) Chloromethane	1.12	50	253741	19.32 ug/L	98
4) Vinyl Chloride	1.19	62	253881	19.42 ug/L	99
5) Bromomethane	1.36	94	158535	21.00 ug/L	98
6) Chloroethane	1.42	64	141015	19.92 ug/L	99
7) Freon-21	1.44	67	417254	22.10 ug/L	97
8) Freon-123	1.61	83	311043	21.12 ug/L	96
9) Freon-123A	1.64	67	264146	22.16 ug/L	96
10) Acrolein	1.70	56	127928	134.42 ug/L	97
11) Trichlorofluoromethane	1.69	101	295215	19.17 ug/L	98
12) Acetonitrile	1.71	41	98917	108.74 ug/L	94
13) 2-Propanol	1.74	45	129505	400.96 ug/L	94
14) Acetone	1.77	43	49638	20.74 ug/L	97
15) 1,1-Diclethene	1.99	96	181533	20.04 ug/L	90
16) tert Butyl Alcohol	2.03	59	203202	430.09 ug/L	95
17) Acrylonitrile	2.05	53	243975	112.69 ug/L	98
18) Methylene Chloride	2.09	84	225003	20.78 ug/L	98
19) Freon 113	2.13	101	184795	19.42 ug/L	92
20) Carbon Disulfide	2.19	76	693602	23.27 ug/L	98
21) trans-1,2-Dichloroethene	2.56	96	201240	20.46 ug/L	98
22) Methyl-t-Butyl Ether	2.67	73	474897	22.73 ug/L	97
23) 1,1-Diclethane	2.76	63	356132	20.48 ug/L	99
24) 2-Butanone	3.23	43	58963	22.60 ug/L #	90
25) cis-1,2-Dichloroethene	3.32	96	230520	20.22 ug/L	95
26) Chloroform	3.55	83	364572	20.03 ug/L #	89
27) Ethyl Acetate	3.66	43	265301	52.12 ug/L	98
28) Isobutanol	3.79	43	89129	393.36 ug/L	92
29) Tetrahydrofuran	3.96	42	34586	20.59 ug/L #	75
31) 1,2-Dichloroethane	4.41	62	235333	20.59 ug/L	95
32) 1,1,1-Trichloroethane	4.52	97	308549	19.63 ug/L	95
33) 2-Methyl-1,3-Dioxolane	4.64	73	77288	105.75 ug/L	93
34) Cyclohexane	4.93	56	330764	21.00 ug/L	94
36) Carbontetrachloride	5.10	117	256582	18.76 ug/L	98
37) Isopropyl Acetate	5.23	43	290351	23.29 ug/L	98
38) Benzene	5.21	78	820187	20.78 ug/L	98
39) Dibromomethane	6.02	93	128801	23.30 ug/L	91
40) 1,2-Diclpropane	6.10	63	228281	22.07 ug/L	99
41) Trichloroethene	6.17	130	234047	20.76 ug/L	96

(#) = qualifier out of range (m) = manual integration
L2838.D 6240127.M Wed Jan 29 10:14:44 2014 Page 1

DL 1/29/14

00146

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2838.D Vial: 31
Acq On : 28 Jan 2014 12:24 am Operator: D.LIPANI
Sample : STD#8 - 20 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 10:13 2014 Quant Results File: 6240127.RES

Quant Method : I:\ACQUDATA\M...\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 10:13:10 2014
Response via : Initial Calibration
DataAcq Meth : 6240127

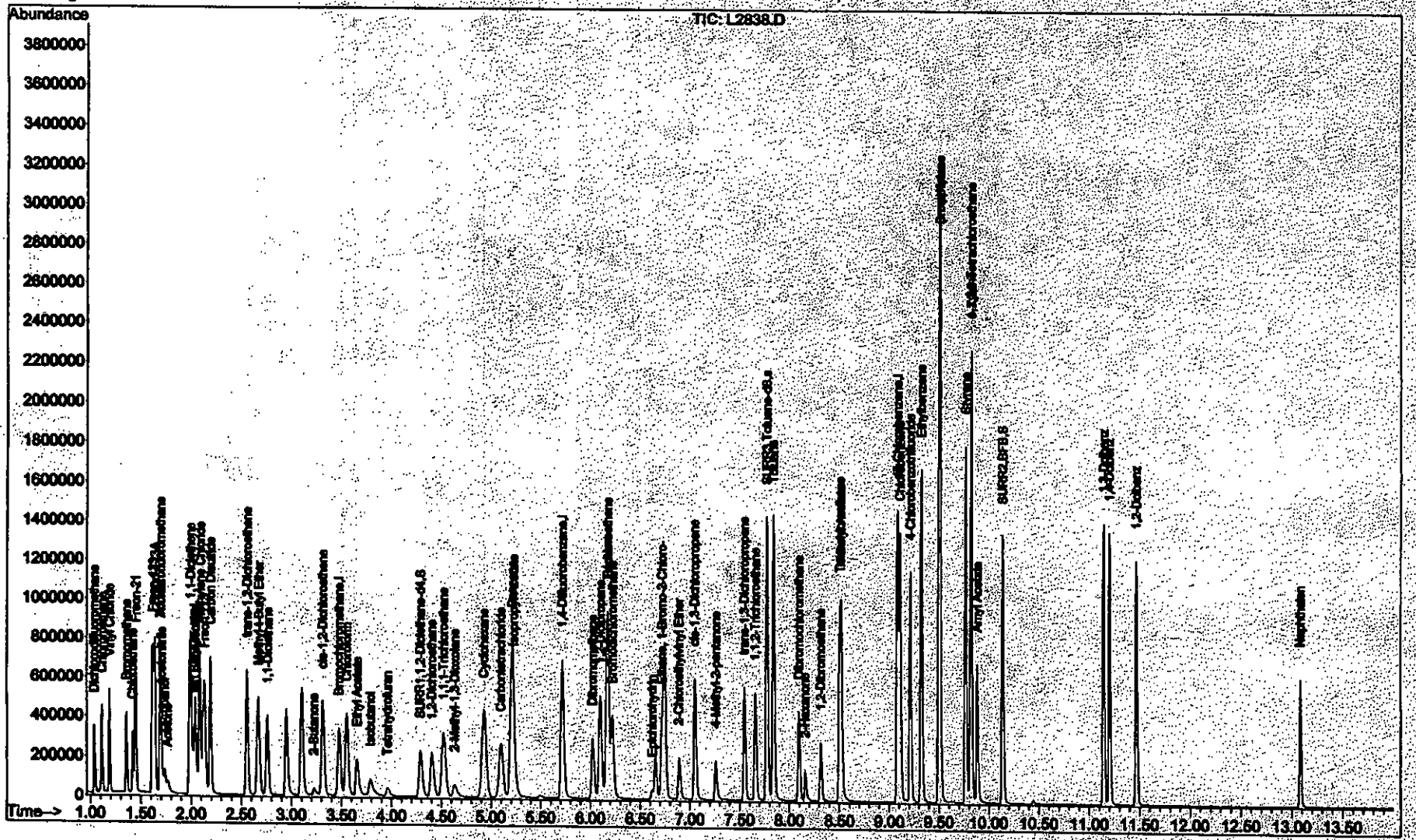
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
42)	Heptane	6.18	43	200972	22.09	ug/L		97
43)	Bromodichloromethane	6.22	83	298783	21.10	ug/L		98
44)	Epichlorohydrin	6.63	57	51430	110.54	ug/L	#	88
45)	Ethane, 1-Bromo-2-Chloro-	6.72	63	291896	23.81	ug/L	#	98
46)	2-Chloroethylvinyl Ether	6.89	63	90655	21.74	ug/L		99
47)	cis-1,3-Dichloropropene	7.06	75	332709	22.20	ug/L		98
48)	4-Methyl-2-pentanone	7.26	43	144982	23.27	ug/L		99
49)	trans-1,3-Dichloropropene	7.55	75	257407	20.92	ug/L		99
50)	1,1,2-Trichloroethane	7.66	97	156367	20.20	ug/L		96
52)	Toluene	7.84	91	876403	20.34	ug/L		99
54)	Dibromochloromethane	8.10	129	210912	20.65	ug/L		99
55)	2-Hexanone	8.16	43	97287	22.25	ug/L		95
56)	1,2-Dibromoethane	8.32	107	169059	21.34	ug/L		99
57)	Tetrachloroethene	8.50	164	179842	18.98	ug/L		97
58)	N-Butyl Acetate	8.52	43	491578	49.23	ug/L		97
59)	Chlorobenzene	9.11	112	570865	19.73	ug/L		96
60)	4-Chlorobenzotrifluoride	9.22	180	294323	20.61	ug/L		98
61)	Ethylbenzene	9.33	106	299824	20.08	ug/L		100
62)	(m+p)Xylene	9.51	106	776444	42.41	ug/L		98
63)	Bromoform	9.50	173	130935	20.13	ug/L		97
64)	Styrene	9.77	104	661841	23.05	ug/L		99
65)	1,1,2,2-Tetrachloroethane	9.82	83	194849	21.87	ug/L		96
66)	o-Xylene	9.82	106	388105	21.46	ug/L		95
67)	Amyl Acetate	9.88	43	312416	24.12	ug/L		96
69)	1,3-Dclbenz	11.14	146	445117	19.46	ug/L		98
70)	1,4-Dclbenz	11.20	146	441128	19.05	ug/L		98
71)	1,2-Dclbenz	11.47	146	405438	19.65	ug/L		97
72)	Naphthalen	13.08	128	369032	22.41	ug/L		98

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

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2838.D Vial: 31
Acq On : 28 Jan 2014 12:24 am Operator: D.LIPANI
Sample : STD#8 - 20 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 10:13 2014 Quant Results File: 6240127.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 10:13:10 2014
Response via : Initial Calibration



L2838.D 6240127.M Wed Jan 29 10:14:49 2014

09148

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2839.D Vial: 32
Acq On : 28 Jan 2014 12:54 am Operator: D.LIPANI
Sample : STD#9 - 50 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 10:19 2014 Quant Results File: 6240127.RES

Quant Method : I:\ACQUDATA\M...\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 10:15:08 2014
Response via : Initial Calibration
DataAcq Meth : 6240127

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	3.48	128	102908	30.00	ug/L	0.00
35) 1,4-Difluorobenzene	5.72	114	645887	30.00	ug/L	0.00
53) d5-Chlorobenzene	9.08	117	668937	30.00	ug/L	0.00
System Monitoring Compounds						
30) SURR1,1,2-Diclethane-d4	4.30	65	205817	31.30	ug/L	0.00
Spiked Amount 30.000	Range 81 - 127		Recovery = 104.33%			
51) SURR3,Toluene-d8	7.78	98	799939	30.55	ug/L	0.00
Spiked Amount 30.000	Range 83 - 120		Recovery = 101.83%			
68) SURR2,BFB	10.14	95	310480	29.04	ug/L	0.00
Spiked Amount 30.000	Range 79 - 123		Recovery = 96.80%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.04	85	501797	50.57	ug/L	98
3) Chloromethane	1.11	50	665463	52.48	ug/L	98
4) Vinyl Chloride	1.19	62	692761	54.61	ug/L	96
5) Bromomethane	1.36	94	390188	52.16	ug/L	91
6) Chloroethane	1.42	64	390560	56.31	ug/L	100
7) Freon-21	1.45	67	978433	51.72	ug/L	98
8) Freon-123	1.62	83	811381	55.23	ug/L	97
9) Freon-123A	1.64	67	647203	54.47	ug/L	95
10) Acrolein	1.70	56	328466	328.00	ug/L	97
11) Trichlorofluoromethane	1.70	101	818957	54.81	ug/L	97
12) Acetonitrile	1.71	41	268126	299.64	ug/L	90
13) 2-Propanol	1.74	45	364200	1181.48	ug/L	99
14) Acetone	1.77	43	147653	62.00	ug/L	96
15) 1,1-Diclethene	1.99	96	502526	56.94	ug/L	96
16) tert Butyl Alcohol	2.02	59	577123	1255.38	ug/L	95
17) Acrylonitrile	2.05	53	640293	298.49	ug/L	100
18) Methylene Chloride	2.09	84	574102	54.06	ug/L	96
19) Freon 113	2.13	101	511817	55.40	ug/L	97
20) Carbon Disulfide	2.19	76	1594562	53.37	ug/L	99
21) trans-1,2-Dichloroethene	2.56	96	544812	56.80	ug/L	98
22) Methyl-t-Butyl Ether	2.67	73	1206034	58.30	ug/L	100
23) 1,1-Diclethane	2.76	63	958020	56.18	ug/L	98
24) 2-Butanone	3.22	43	161256	61.15	ug/L #	90
25) cis-1,2-Dichloroethene	3.31	96	604568	54.21	ug/L	98
26) Chloroform	3.56	83	974968	54.80	ug/L	92
27) Ethyl Acetate	3.65	43	712061	138.60	ug/L	98
28) Isobutanol	3.79	43	250833	1129.76	ug/L	99
29) Tetrahydrofuran	3.96	42	101580	60.84	ug/L	92
31) 1,2-Dichloroethane	4.41	62	611326	54.23	ug/L	98
32) 1,1,1-Trichloroethane	4.52	97	847513	55.23	ug/L	96
33) 2-Methyl-1,3-Dioxolane	4.63	73	234438	323.38	ug/L	96
34) Cyclohexane	4.93	56	889329	56.71	ug/L	92
36) Carbontetrachloride	5.11	117	754132	57.95	ug/L	98
37) Isopropyl Acetate	5.23	43	820962	65.70	ug/L	99
38) Benzene	5.22	78	2318179	60.59	ug/L	100
39) Dibromomethane	6.03	93	312202	57.61	ug/L	99
40) 1,2-Diclpropane	6.10	63	579545	57.41	ug/L	99
41) Trichloroethene	6.17	130	613816	56.35	ug/L	99

DL 1/29/14

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

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2839.D Vial: 32
Acq On : 28 Jan 2014 12:54 am Operator: D.LIPANI
Sample : STD#9 - 50 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 10:19 2014 Quant Results File: 6240127.RES

Quant Method : I:\ACQUDATA\M...\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 10:15:08 2014
Response via : Initial Calibration
DataAcq Meth : 6240127

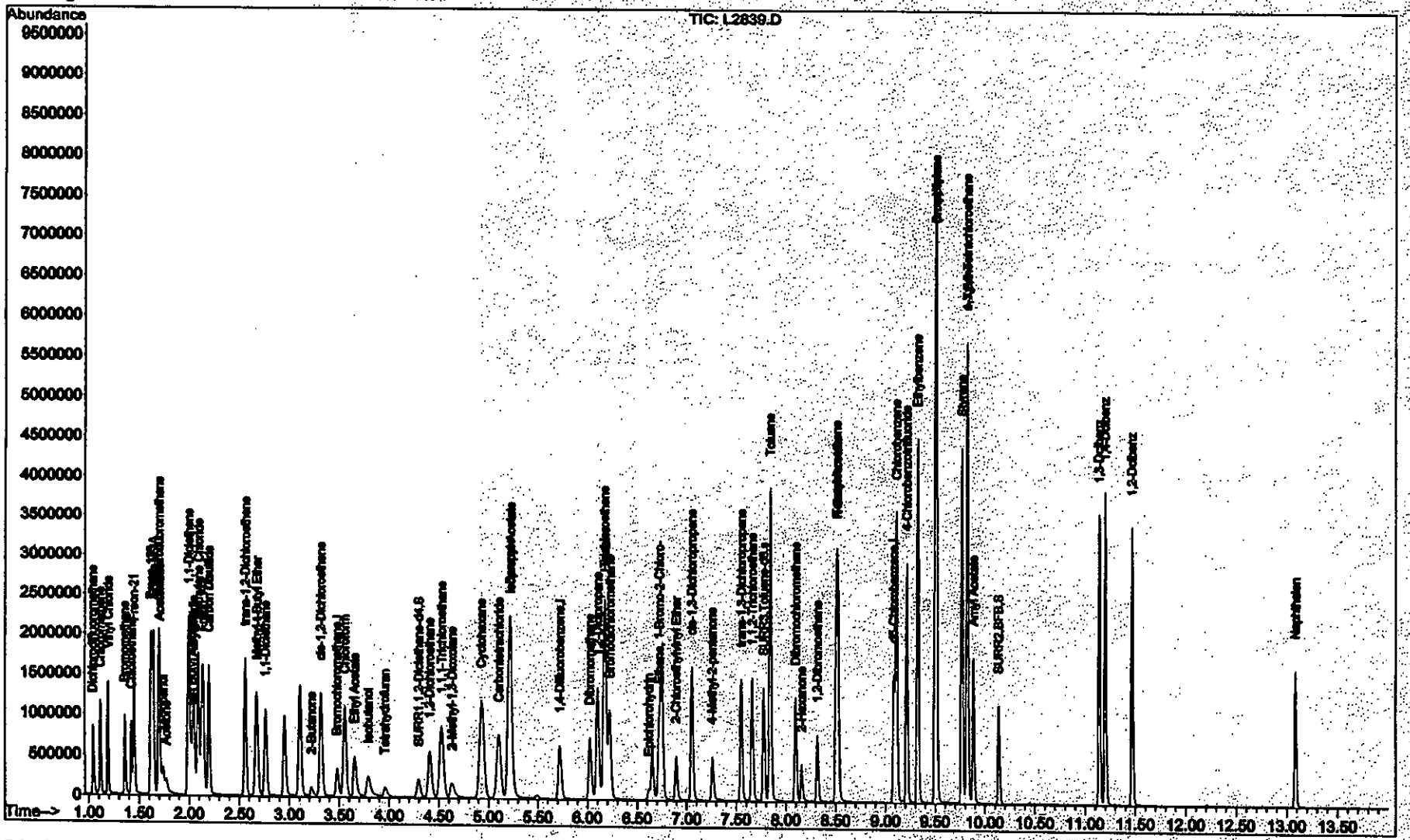
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
42)	Heptane	6.18	43	481871	53.79	ug/L		98
43)	Bromodichloromethane	6.23	83	759793	55.05	ug/L		99
44)	Epichlorohydrin	6.62	57	138775	309.15	ug/L	#	90
45)	Ethane, 1-Bromo-2-Chloro-	6.72	63	665282	54.83	ug/L		97
46)	2-Chloroethylvinyl Ether	6.90	63	221763	55.07	ug/L		99
47)	cis-1,3-Dichloropropene	7.05	75	838333	57.22	ug/L		99
48)	4-Methyl-2-pentanone	7.26	43	373039	59.79	ug/L		98
49)	trans-1,3-Dichloropropene	7.55	75	681268	57.19	ug/L		99
50)	1,1,2-Trichloroethane	7.66	97	425016	56.78	ug/L		98
52)	Toluene	7.84	91	2287250	54.79	ug/L		97
54)	Dibromochloromethane	8.10	129	582878	55.24	ug/L		99
55)	2-Hexanone	8.15	43	285037	61.14	ug/L		99
56)	1,2-Dibromoethane	8.32	107	461532	55.81	ug/L		99
57)	Tetrachloroethene	8.51	164	517894	53.22	ug/L		98
58)	N-Butyl Acetate	8.52	43	1388469	130.94	ug/L		97
59)	Chlorobenzene	9.11	112	1538850	51.41	ug/L		98
60)	4-Chlorobenzotrifluoride	9.22	180	752935	51.46	ug/L		98
61)	Ethylbenzene	9.33	106	820956	53.01	ug/L		87
62)	(m+p)Xylene	9.51	106	1965823	102.97	ug/L		87
63)	Bromoform	9.50	173	365626	54.57	ug/L		97
64)	Styrene	9.77	104	1578588	52.35	ug/L		97
65)	1,1,2,2-Tetrachloroethane	9.82	83	519845	55.79	ug/L		98
66)	o-Xylene	9.83	106	998129	53.09	ug/L		96
67)	Amyl Acetate	9.88	43	815858	58.74	ug/L		98
69)	1,3-Dclbenz	11.15	146	1174392	49.93	ug/L		98
70)	1,4-Dclbenz	11.20	146	1181548	49.67	ug/L		98
71)	1,2-Dclbenz	11.47	146	1072800	50.65	ug/L		97
72)	Naphthalen	13.09	128	991042	57.19	ug/L		99

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

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2839.D Vial: 32
Acq On : 28 Jan 2014 12:54 am Operator: D.LIPANI
Sample : STD#9 - 50 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 10:19 2014 Quant Results File: 6240127.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 10:15:08 2014
Response via : Initial Calibration



L2839.D 6240127.M Wed Jan 29 10:22:24 2014

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2840.D Vial: 33
Acq On : 28 Jan 2014 1:24 am Operator: D.LIPANI
Sample : STD#10 - 100 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 10:29 2014 Quant Results File: 6240127.RES

Quant Method : I:\ACQUDATA\M...\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 10:22:35 2014
Response via : Initial Calibration
DataAcq Meth : 6240127

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	3.48	128	108917	30.00	ug/L		0.00
35) 1,4-Difluorobenzene	5.72	114	680397	30.00	ug/L		0.00
53) d5-Chlorobenzene	9.08	117	675215	30.00	ug/L		0.00
System Monitoring Compounds							
30) SURR1,1,2-Diclethane-d4	4.29	65	220593	31.18	ug/L		0.00
Spiked Amount 30.000	Range 81 - 127		Recovery = 103.93%				
51) SURR3,Toluene-d8	7.78	98	901511	32.54	ug/L		0.00
Spiked Amount 30.000	Range 83 - 120		Recovery = 108.47%				
68) SURR2,BFB	10.14	95	328062	30.33	ug/L		0.00
Spiked Amount 30.000	Range 79 - 123		Recovery = 101.10%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.04	85	954640	91.80	ug/L		97
3) Chloromethane	1.11	50	1212276	88.99	ug/L		95
4) Vinyl Chloride	1.19	62	1316493	95.59	ug/L		89
5) Bromomethane	1.36	94	792126	97.04	ug/L		89
6) Chloroethane	1.42	64	736813	97.25	ug/L		99
7) Freon-21	1.45	67	1894885	91.85	ug/L	#	85
8) Freon-123	1.62	83	1654178	102.60	ug/L		95
9) Freon-123A	1.64	67	1402478	108.26	ug/L		92
10) Acrolein	1.70	56	683293	591.71	ug/L		96
11) Trichlorofluoromethane	1.70	101	1561284	95.92	ug/L		98
12) Acetonitrile	1.71	41	540530	549.98	ug/L		93
13) 2-Propanol	1.74	45	718684	2142.01	ug/L		98
14) Acetone	1.77	43	282626	105.35	ug/L		94
15) 1,1-Diclethene	1.99	96	985746	102.52	ug/L		90
16) tert Butyl Alcohol	2.02	59	1126103	2217.25	ug/L		96
17) Acrylonitrile	2.04	53	1272653	535.90	ug/L		98
18) Methylene Chloride	2.09	84	1130142	97.83	ug/L		98
19) Freon 113	2.13	101	1002359	99.71	ug/L		98
20) Carbon Disulfide	2.19	76	3012359	92.58	ug/L	#	93
21) trans-1,2-Dichloroethene	2.56	96	1056177	101.10	ug/L		97
22) Methyl-t-Butyl Ether	2.67	73	2390003	105.39	ug/L	#	97
23) 1,1-Diclethane	2.76	63	1821054	97.98	ug/L		99
24) 2-Butanone	3.22	43	345161	116.61	ug/L	#	96
25) cis-1,2-Dichloroethene	3.31	96	1173905	96.88	ug/L		97
26) Chloroform	3.55	83	1870563	96.86	ug/L		96
27) Ethyl Acetate	3.65	43	1431581	247.66	ug/L		99
28) Isobutanol	3.79	43	482446	1985.60	ug/L		94
29) Tetrahydrofuran	3.95	42	195420	104.45	ug/L		92
31) 1,2-Dichloroethane	4.41	62	1223785	99.41	ug/L		99
32) 1,1,1-Trichloroethane	4.53	97	1650315	98.81	ug/L		95
33) 2-Methyl-1,3-Dioxolane	4.63	73	467309	577.10	ug/L		96
34) Cyclohexane	4.93	56	1892941	109.77	ug/L		94
36) Carbontetrachloride	5.10	117	1454574	104.45	ug/L		99
37) Isopropyl Acetate	5.23	43	1648184	118.27	ug/L		99
38) Benzene	5.21	78	4204530	101.37	ug/L		95
39) Dibromomethane	6.03	93	624193	106.91	ug/L		99
40) 1,2-Diclpropane	6.11	63	1118959	102.86	ug/L		99
41) Trichloroethene	6.17	130	1207443	103.83	ug/L		98

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

00152

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2840.D Vial: 33
Acq On : 28 Jan 2014 1:24 am Operator: D.LIPANI
Sample : STD#10 - 100 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 10:29 2014 Quant Results File: 6240127.RES

Quant Method : I:\ACQUDATA\M...\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 10:22:35 2014
Response via : Initial Calibration
DataAcq Meth : 6240127

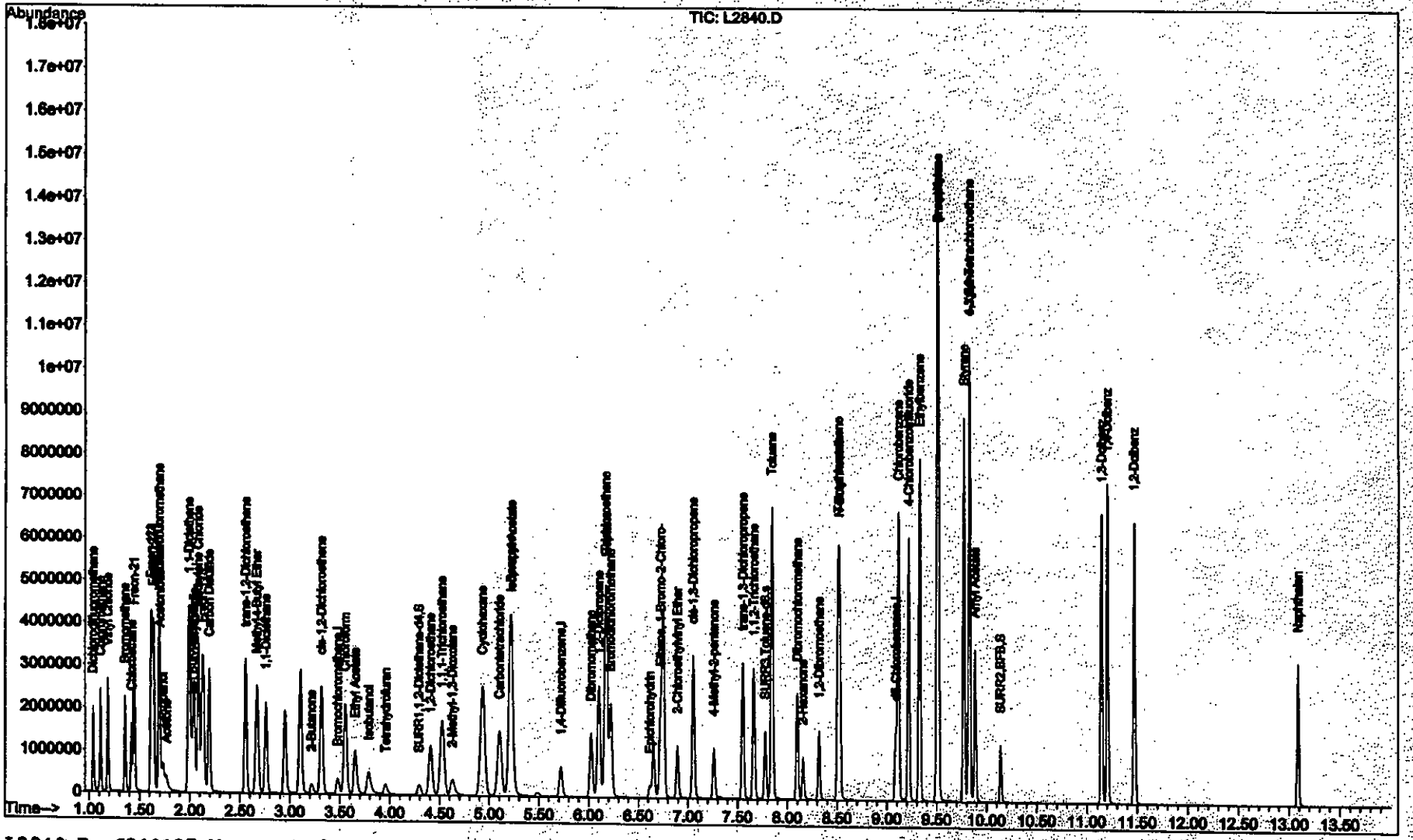
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
42)	Heptane	6.18	43	1039783	108.91	ug/L		99
43)	Bromodichloromethane	6.23	83	1485772	100.30	ug/L		99
44)	Epichlorohydrin	6.62	57	284233	588.49	ug/L		96
45)	Ethane, 1-Bromo-2-Chloro-	6.72	63	1414435	108.24	ug/L		97
46)	2-Chloroethylvinyl Ether	6.90	63	494295	116.49	ug/L		98
47)	cis-1,3-Dichloropropene	7.05	75	1638101	104.19	ug/L		97
48)	4-Methyl-2-pentanone	7.26	43	796616	115.43	ug/L		99
49)	trans-1,3-Dichloropropene	7.55	75	1393742	108.75	ug/L		97
50)	1,1,2-Trichloroethane	7.66	97	869247	107.86	ug/L		99
52)	Toluene	7.84	91	3833034	85.21	ug/L	#	88
54)	Dibromochloromethane	8.10	129	1136259	106.27	ug/L		98
55)	2-Hexanone	8.15	43	582348	118.24	ug/L		99
56)	1,2-Dibromoethane	8.32	107	902047	106.74	ug/L		100
57)	Tetrachloroethene	8.51	164	955217	96.90	ug/L		99
58)	N-Butyl Acetate	8.53	43	2436355	221.09	ug/L		93
59)	Chlorobenzene	9.12	112	2605795	85.78	ug/L		94
60)	4-Chlorobenzotrifluoride	9.22	180	1482689	101.18	ug/L		97
61)	Ethylbenzene	9.33	106	1534012	97.58	ug/L	#	65
62)	(m+p)Xylene	9.51	106	3453909	178.34	ug/L	#	69
63)	Bromoform	9.50	173	748008	110.19	ug/L		98
64)	Styrene	9.77	104	2851565	93.49	ug/L	#	91
65)	1,1,2,2-Tetrachloroethane	9.82	83	987382	103.32	ug/L		96
66)	o-Xylene	9.83	106	1844507	96.60	ug/L		81
67)	Amyl Acetate	9.88	43	1569302	109.35	ug/L		97
69)	1,3-Dclbenz	11.15	146	2108617	89.36	ug/L		94
70)	1,4-Dclbenz	11.20	146	2143135	89.65	ug/L		94
71)	1,2-Dclbenz	11.47	146	1955393	92.03	ug/L		93
72)	Naphthalen	13.09	128	1886236	106.87	ug/L		99

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

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2840.D Vial: 33
Acq On : 28 Jan 2014 1:24 am Operator: D.LIPANI
Sample : STD#10 - 100 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 10:29 2014 Quant Results File: 6240127.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 10:22:35 2014
Response via : Initial Calibration



L2840.D 6240127.M Wed Jan 29 10:30:09 2014

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2841.D Vial: 34
Acq On : 28 Jan 2014 1:54 am Operator: D.LIPANI
Sample : STD#11 - 200 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 9:11 2014 Quant Results File: 6240127.RES

Quant Method : I:\ACQUDATA\M...\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 09:09:13 2014
Response via : Initial Calibration
DataAcq Meth : 6240127

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	3.48	128	113449	30.00	ug/L		0.00
35) 1,4-Difluorobenzene	5.72	114	742743	30.00	ug/L		0.00
53) d5-Chlorobenzene	9.09	117	716820	30.00	ug/L		0.00
System Monitoring Compounds							
30) SURR1,1,2-Diclethane-d4	4.30	65	220604	30.75	ug/L		0.00
Spiked Amount 30.000	Range 81 - 127		Recovery = 102.50%				
51) SURR3,Toluene-d8	7.78	98	881442	29.45	ug/L		0.00
Spiked Amount 30.000	Range 83 - 120		Recovery = 98.17%				
68) SURR2,BFB	10.14	95	333591	29.54	ug/L		0.00
Spiked Amount 30.000	Range 79 - 123		Recovery = 98.47%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.04	85	1774731	160.44	ug/L		84
3) Chloromethane	1.11	50	2144206	153.00	ug/L		74
4) Vinyl Chloride	1.18	62	2355763	168.89	ug/L		64
5) Bromomethane	1.35	94	1665253	204.19	ug/L		94
6) Chloroethane	1.42	64	1498022	198.33	ug/L		94
7) Freon-21	1.45	67	2985091m	148.18	ug/L		
8) Freon-123	1.62	83	3012924	191.71	ug/L		89
9) Freon-123A	1.64	67	2489286m	193.59	ug/L		
10) Acrolein	1.70	56	1373064	1352.99	ug/L		100
11) Trichlorofluoromethane	1.70	101	2916660	177.50	ug/L		88
12) Acetonitrile	1.71	41	1071279	1104.46	ug/L		97
13) 2-Propanol	1.74	45	1372419	3984.99	ug/L		96
14) Acetone	1.77	43	549221	215.17	ug/L		99
15) 1,1-Diclethene	1.99	96	1997804	206.75	ug/L		86
16) tert Butyl Alcohol	2.03	59	2156419	4309.38	ug/L		98
17) Acrylonitrile	2.05	53	2474549	1087.69	ug/L		99
18) Methylene Chloride	2.08	84	2234171	193.36	ug/L		92
19) Freon 113	2.13	101	2039819	200.91	ug/L		93
20) Carbon Disulfide	2.19	76	4556219	143.26	ug/L	#	75
21) trans-1,2-Dichloroethene	2.56	96	2123105	202.29	ug/L		89
22) Methyl-t-Butyl Ether	2.67	73	4349709	195.13	ug/L	#	84
23) 1,1-Diclethane	2.76	63	3538253	190.74	ug/L	#	90
24) 2-Butanone	3.22	43	682942	245.45	ug/L	#	91
25) cis-1,2-Dichloroethene	3.31	96	2408721	198.04	ug/L		95
26) Chloroform	3.56	83	3713259	191.25	ug/L	#	88
27) Ethyl Acetate	3.65	43	2891719	511.51	ug/L		96
28) Isobutanol	3.79	43	1037128	4292.63	ug/L		94
29) Tetrahydrofuran	3.96	42	425649	237.65	ug/L	#	80
31) 1,2-Dichloroethane	4.41	62	2506305	205.56	ug/L		94
32) 1,1,1-Trichloroethane	4.53	97	3405818	203.11	ug/L		97
33) 2-Methyl-1,3-Dioxolane	4.63	73	965618	1239.02	ug/L		91
34) Cyclohexane	4.94	56	3586757	213.48	ug/L		97
36) Carbontetrachloride	5.11	117	3034726	200.03	ug/L		98
37) Isopropyl Acetate	5.23	43	3313305	239.56	ug/L		98
38) Benzene	5.22	78	7525144	172.32	ug/L	#	77
39) Dibromomethane	6.03	93	1286722	209.89	ug/L		91
40) 1,2-Diclpropane	6.11	63	2331896	203.32	ug/L		96
41) Trichloroethene	6.17	130	2526241	202.06	ug/L		95

DL 1/29/14

(#) = qualifier out of range (m) = manual integration
L2841.D 6240127.M Wed Jan 29 09:17:16 2014 Page 1

00155

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2841.D Vial: 34
Acq On : 28 Jan 2014 1:54 am Operator: D.LIPANI
Sample : STD#11 - 200 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 9:11 2014 Quant Results File: 6240127.RES

Quant Method : I:\ACQUDATA\M...\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 09:09:13 2014
Response via : Initial Calibration
DataAcq Meth : 6240127

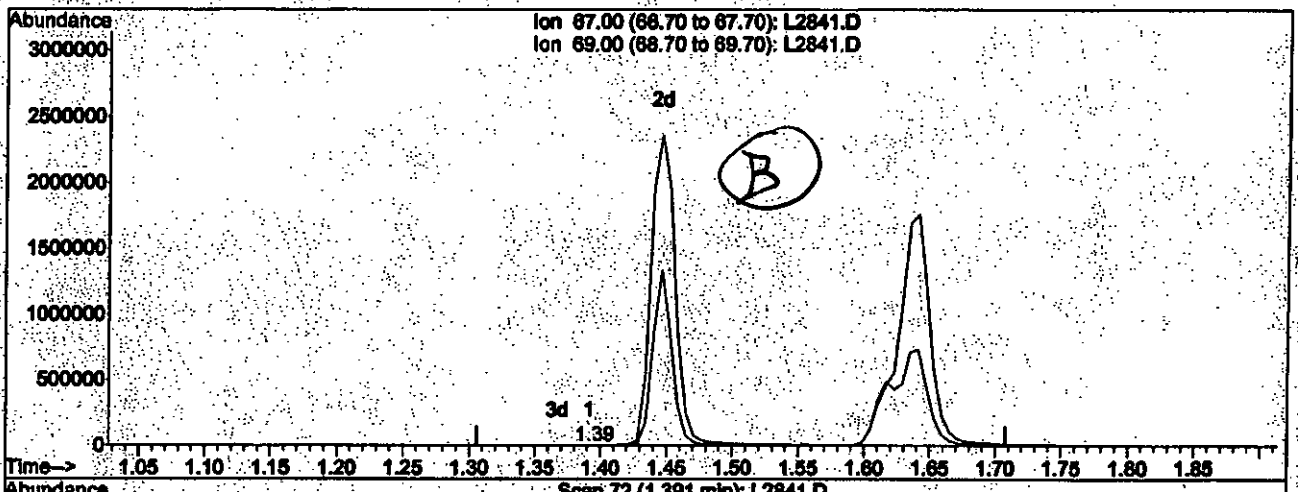
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
42)	Heptane	6.18	43	2142920	214.53	ug/L		97
43)	Bromodichloromethane	6.23	83	2991153	190.48	ug/L		99
44)	Epichlorohydrin	6.62	57	590495	1144.47	ug/L	#	92
45)	Ethane, 1-Bromo-2-Chloro-	6.72	63	2674849	196.08	ug/L	#	92
46)	2-Chloroethylvinyl Ether	6.90	63	940740	203.48	ug/L		99
47)	cis-1,3-Dichloropropene	7.06	75	3106053	186.89	ug/L		94
48)	4-Methyl-2-pentanone	7.26	43	1499633	217.03	ug/L		98
49)	trans-1,3-Dichloropropene	7.55	75	2619550	192.01	ug/L		93
50)	1,1,2-Trichloroethane	7.66	97	1674057	195.06	ug/L		96
52)	Toluene	7.85	91	5558966	116.34	ug/L	#	73
54)	Dibromochloromethane	8.10	129	2247638	197.24	ug/L		95
55)	2-Hexanone	8.15	43	1127750	231.18	ug/L		97
56)	1,2-Dibromoethane	8.32	107	1836490	207.79	ug/L		98
57)	Tetrachloroethene	8.51	164	2082229	197.01	ug/L		94
58)	N-Butyl Acetate	8.52	43	4122560	370.05	ug/L	#	80
59)	Chlorobenzene	9.11	112	4296018	133.11	ug/L	#	73
60)	4-Chlorobenzotrifluoride	9.22	180	2813239	176.56	ug/L	#	86
61)	Ethylbenzene	9.33	106	2960024	177.68	ug/L	#	36
62)	(m+p)Xylene	9.52	106	5428719	276.09	ug/L	#	55
63)	Bromoform	9.51	173	1648302	227.10	ug/L		97
64)	Styrene	9.78	104	4372128	141.46	ug/L	#	73
65)	1,1,2,2-Tetrachloroethane	9.83	83	2094827	210.79	ug/L		97
66)	o-Xylene	9.83	106	3390417	171.05	ug/L	#	64
67)	Amyl Acetate	9.89	43	2788277	192.93	ug/L	#	92
69)	1,3-Dclbenz	11.15	146	3647710	147.63	ug/L	#	79
70)	1,4-Dclbenz	11.21	146	3687454	147.42	ug/L	#	81
71)	1,2-Dclbenz	11.47	146	3496666	156.04	ug/L	#	71
72)	Naphthalen	13.09	128	3293347	179.23	ug/L	#	89

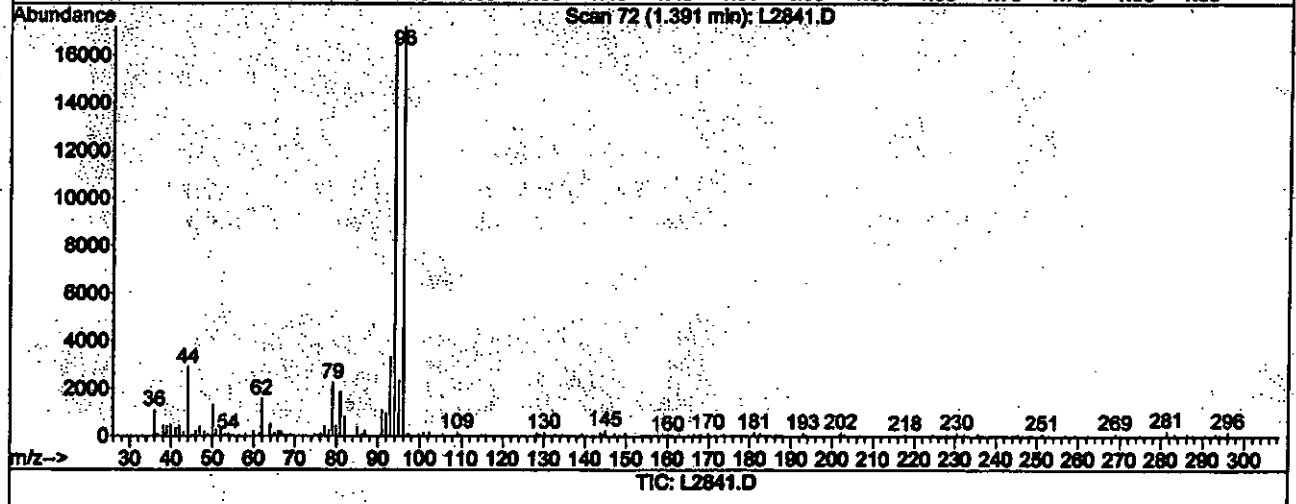
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2841.D Vial: 34
Acq On : 28 Jan 2014 1:54 am Operator: D.LIPANI
Sample : STD#11 - 200 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 9:09 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 09:09:13 2014
Response via : Single Level Calibration





TIC: L2841.D

(7) Freon-21

1.39min 0.01ug/L

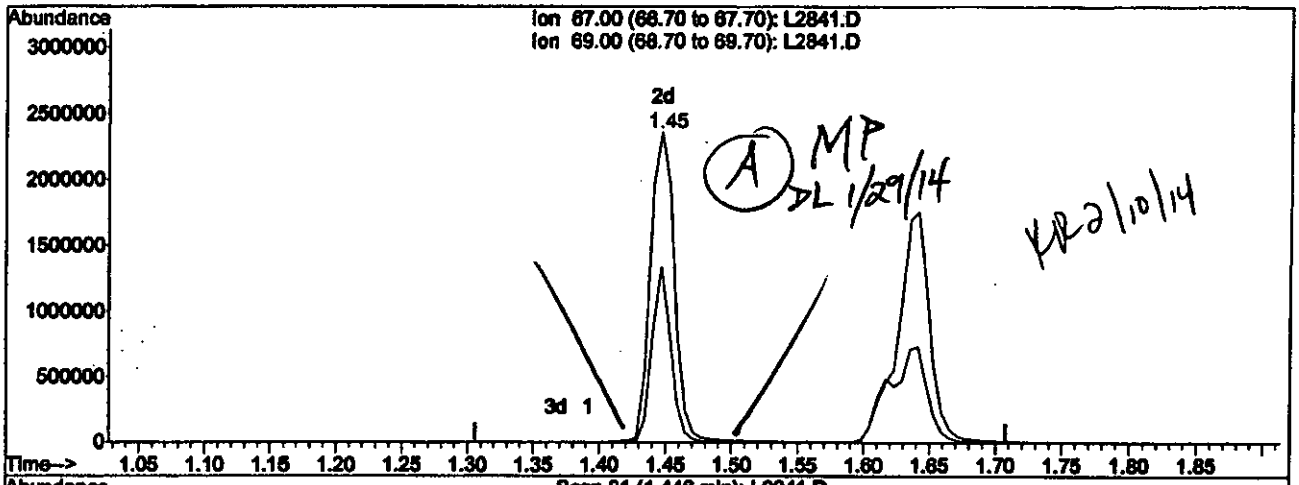
response 108

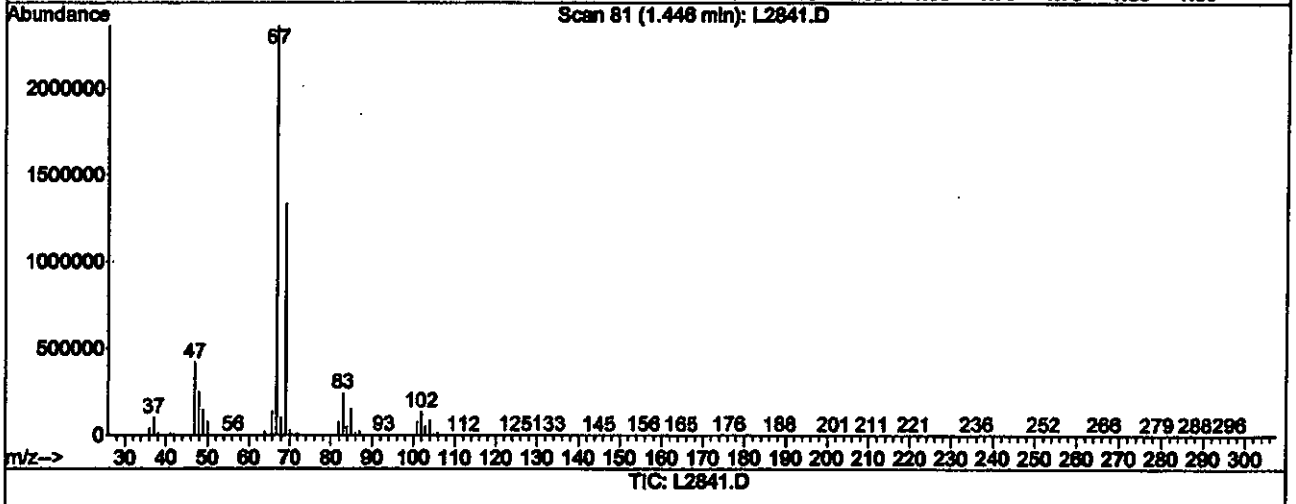
Ion	Exp%	Act%
67.00	100	100
69.00	34.10	34.34
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2841.D Vial: 34
Acq On : 28 Jan 2014 1:54 am Operator: D.LIPANI
Sample : STD#11 - 200 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 9:10 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 09:09:13 2014
Response via : Single Level Calibration





TIC: L2841.D

(7) Freon-21

1.45min 148.18ug/L m

response 2986091

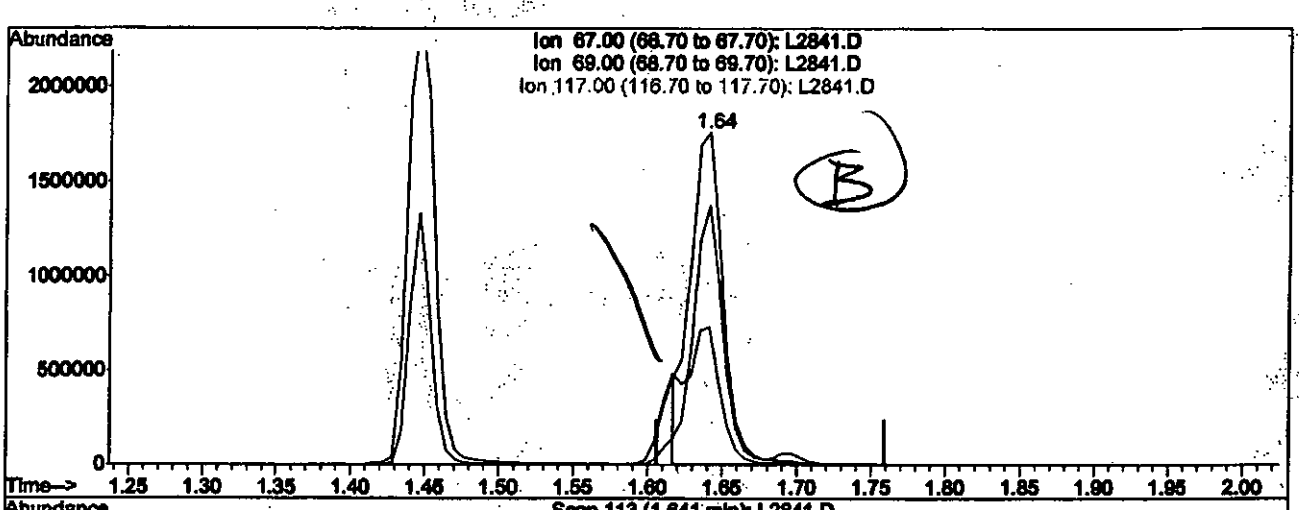
Ion	Exp%	Act%
67.00	100	100
69.00	34.10	56.61#
0.00	0.00	0.00
0.00	0.00	0.00

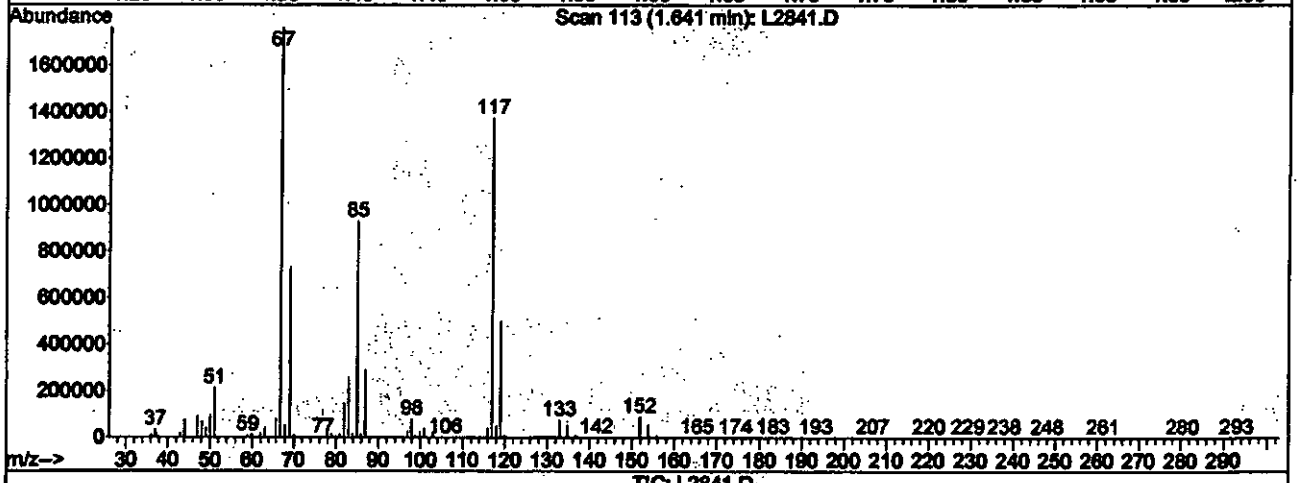
L2841.D 6240127.M Wed Jan 29 09:10:55 2014

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2841.D Vial: 34
Acq On : 28 Jan 2014 1:54 am Operator: D.LIPANI
Sample : STD#11 - 200 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 9:10 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 09:09:13 2014
Response via : Single Level Calibration





TIC: L2841.D

(9) Freon-123A

1.64min 207.34ug/L

response 2666051

Ion	Exp%	Act%
67.00	100	100
69.00	31.10	41.57#
117.00	70.30	78.08
0.00	0.00	0.00

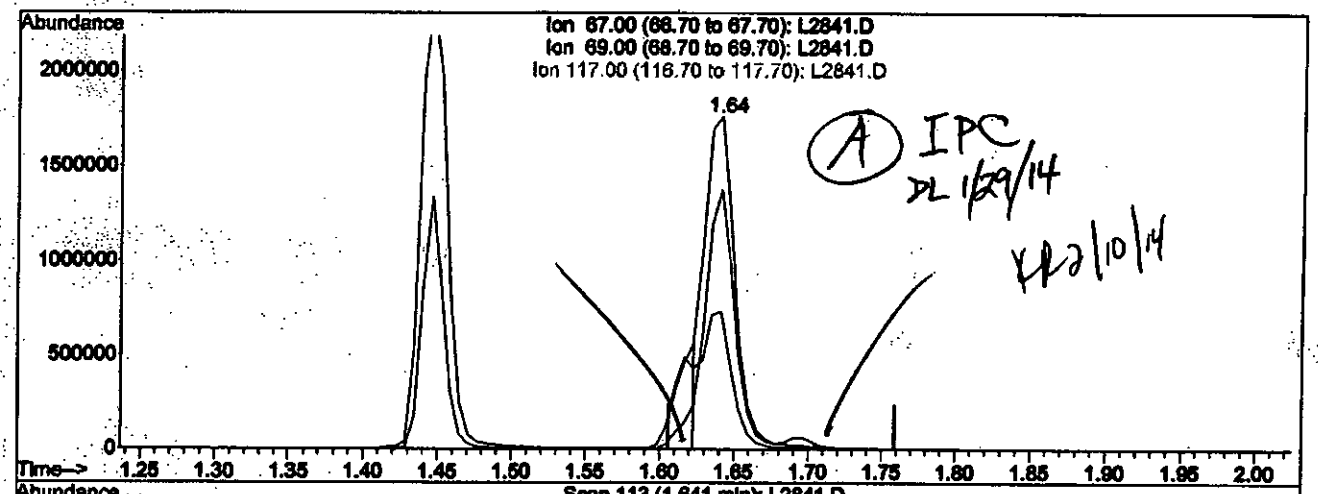
L2841.D 6240127.M Wed Jan 29 09:11:20 2014

00159

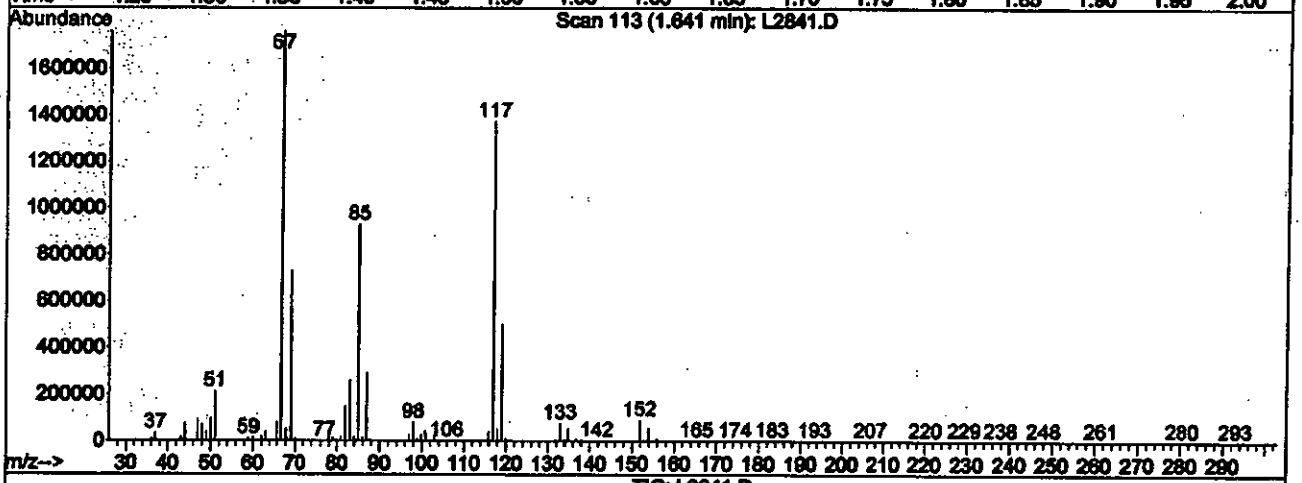
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2841.D Vial: 34
Acq On : 28 Jan 2014 1:54 am Operator: D.LIPANI
Sample : STD#11 - 200 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 9:11 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 09:09:13 2014
Response via : Single Level Calibration



A IPC DL 1/29/14 KP 2/10/14



TIC: L2841.D

(9) Freon-123A

1.64min 193.59ug/L m

response 2489286

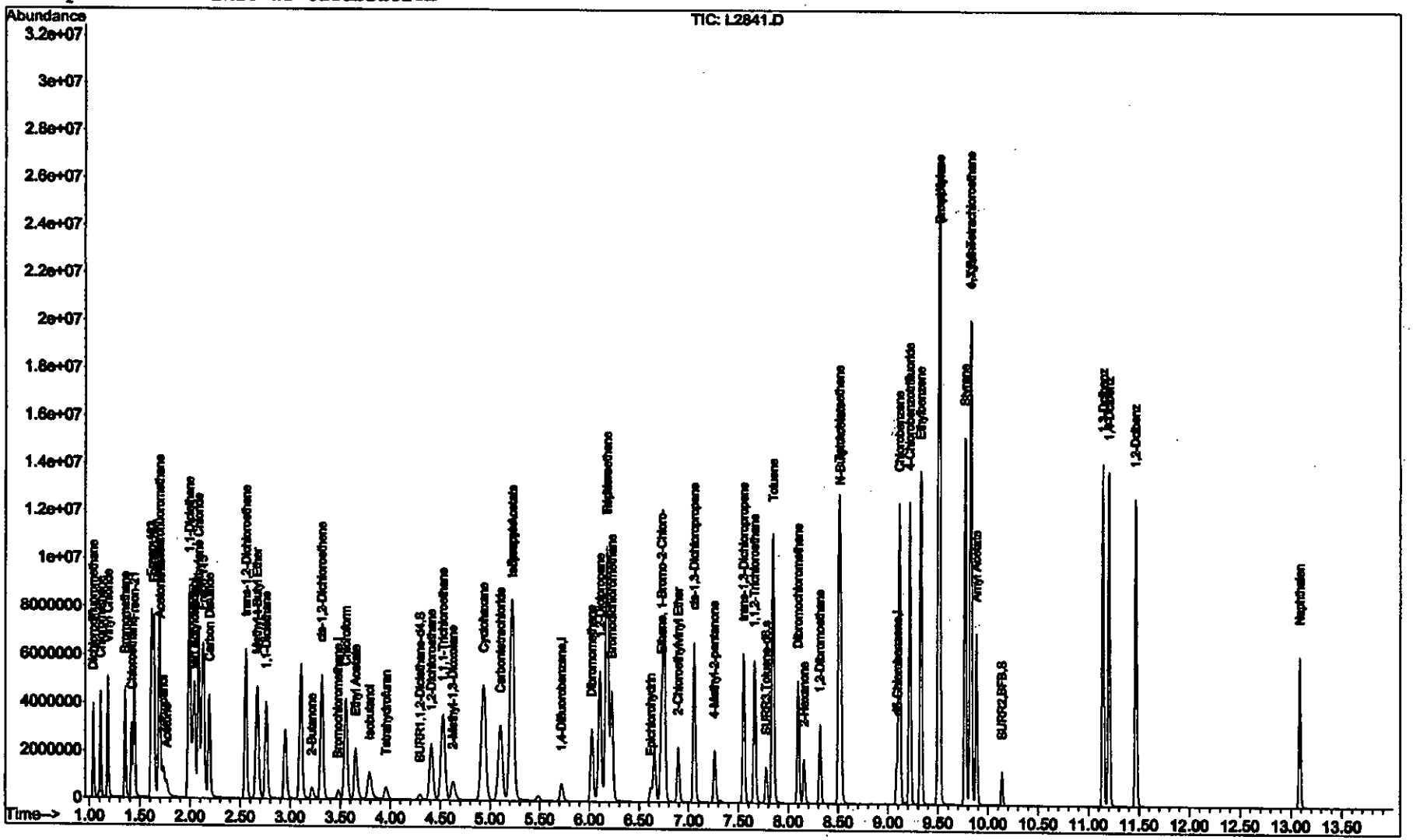
Ion	Exp%	Act%
67.00	100	100
69.00	31.10	41.57#
117.00	70.30	78.08
0.00	0.00	0.00

L2841.D 6240127.M Wed Jan 29 09:11:28 2014

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2841.D Vial: 34
Acq On : 28 Jan 2014 1:54 am Operator: D.LIPANI
Sample : STD#11 - 200 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 9:11 2014 Quant Results File: 6240127.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 09:16:58 2014
Response via : Initial Calibration



L2841.D 6240127.M Wed Jan 29 09:17:22 2014

TSTGS

Initial Calibration Verification Summary Report

DL 01/29/14

Calibration ID: RC1400006 **Instrument ID:** R-MS-06
Column Name: 1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
1,1,1-Trichloroethane (TCA)	RC1400006-12	T	Average RF	50	49.78	ug/L	-0.4	<=30
1,1,2,2-Tetrachloroethane	RC1400006-12	T	Average RF	50	53.05	ug/L	6.1	<=30
1,1,2-Trichloroethane	RC1400006-12	T	Average RF	50	54.51	ug/L	9.0	<=30
1,1,2-Trichlorotrifluoroethane	RC1400006-12	T	Average RF	50	46.17	ug/L	-7.7	<=30
1,1-Dichloroethane (1,1-DCA)	RC1400006-12	T	Average RF	50	50.78	ug/L	1.6	<=30
1,1-Dichloroethene (1,1-DCE)	RC1400006-12	T	Average RF	50	47.50	ug/L	-5.0	<=30
1,2-Dibromoethane	RC1400006-12	T	Average RF	50	48.58	ug/L	-2.8	<=30
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123	RC1400006-12	T	Average RF	50	52.66	ug/L	5.3	<=30
1,2-Dichlorobenzene	RC1400006-12	T	Average RF	50	51.20	ug/L	2.4	<=30
1,2-Dichloroethane	RC1400006-12	T	Average RF	50	49.54	ug/L	-0.9	<=30
1,2-Dichloropropane	RC1400006-12	T	Average RF	50	52.68	ug/L	5.4	<=30
1,3-Dichlorobenzene	RC1400006-12	T	Average RF	50	50.13	ug/L	0.3	<=30
1,4-Dichlorobenzene	RC1400006-12	T	Average RF	50	50.53	ug/L	1.1	<=30
1-Bromo-2-chloroethane	RC1400006-12	T	Average RF	50	47.88	ug/L	-4.2	<=30
1-Chloro-4-(trifluoromethyl)benzene	RC1400006-12	T	Average RF	50	51.44	ug/L	2.9	<=30
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123	RC1400006-12	T	Average RF	50	52.36	ug/L	4.7	<=30
2-Butanone (MEK)	RC1400006-12	T	Average RF	50	45.62	ug/L	-8.8	<=30
2-Chloroethyl Vinyl Ether	RC1400006-12	T	Average RF	50	68.22	ug/L	36.4	<=30
2-Hexanone	RC1400006-12	T	Average RF	50	52.08	ug/L	4.2	<=30
2-Methyl-1,3-dioxolane	RC1400006-12	T	Average RF	250	277.9	ug/L	11.2	<=30
2-Methyl-1-propanol	RC1400006-12	T	Average RF	1000	962.4	ug/L	-3.8	<=30
2-Methyl-2-propanol	RC1400006-12	T	Average RF	1000	1042	ug/L	4.2	<=30
2-Propanol	RC1400006-12	T	Average RF	1000	1005	ug/L	0.5	<=30
4-Methyl-2-pentanone	RC1400006-12	T	Average RF	50	54.29	ug/L	8.6	<=30
Acetone	RC1400006-12	T	Average RF	50	40.39	ug/L	-19.2	<=30
Acetonitrile	RC1400006-12	T	Average RF	250	242.2	ug/L	-3.1	<=30
Acrolein	RC1400006-12	T	Average RF	250	244.3	ug/L	-2.3	<=30
Acrylonitrile	RC1400006-12	T	Average RF	250	266.5	ug/L	6.6	<=30
Amyl Acetate	RC1400006-12	T	Average RF	50	57.76	ug/L	15.5	<=30
Benzene	RC1400006-12	T	Average RF	50	50.07	ug/L	0.1	<=30
Bromodichloromethane	RC1400006-12	T	Average RF	50	51.08	ug/L	2.2	<=30
Bromoform	RC1400006-12	T	Average RF	50	53.22	ug/L	6.4	<=30
Bromomethane	RC1400006-12	T	Average RF	50	50.18	ug/L	0.4	<=30
Carbon Disulfide	RC1400006-12	T	Average RF	50	46.61	ug/L	-6.8	<=30
Carbon Tetrachloride	RC1400006-12	T	Average RF	50	49.57	ug/L	-0.9	<=30
Chlorobenzene	RC1400006-12	T	Average RF	50	49.77	ug/L	-0.5	<=30
Chloroethane	RC1400006-12	T	Average RF	50	46.16	ug/L	-7.7	<=30
Chloroform	RC1400006-12	T	Average RF	50	49.13	ug/L	-1.7	<=30
Chloromethane	RC1400006-12	T	Average RF	50	45.34	ug/L	-9.3	<=30
Cyclohexane	RC1400006-12	T	Average RF	50	48.13	ug/L	-3.7	<=30
Dibromochloromethane	RC1400006-12	T	Average RF	50	55.26	ug/L	10.5	<=30
Dibromomethane	RC1400006-12	T	Average RF	50	50.33	ug/L	0.7	<=30
Dichlorodifluoromethane (CFC 12)	RC1400006-12	T	Average RF	50	40.87	ug/L	-18.3	<=30
Dichloromethane	RC1400006-12	T	Average RF	50	47.90	ug/L	-4.2	<=30
Epichlorohydrin	RC1400006-12	T	Average RF	250	270.7	ug/L	8.3	<=30
Ethyl Acetate	RC1400006-12	T	Average RF	50	55.33	ug/L	10.7	<=30
Ethylbenzene	RC1400006-12	T	Average RF	50	52.15	ug/L	4.3	<=30
Isopropyl Acetate	RC1400006-12	T	Average RF	50	51.62	ug/L	3.2	<=30
Methyl tert-Butyl Ether	RC1400006-12	T	Average RF	50	49.80	ug/L	-0.4	<=30
Naphthalene	RC1400006-12	T	Average RF	50	55.05	ug/L	10.1	<=30
Styrene	RC1400006-12	T	Average RF	50	51.30	ug/L	2.6	<=30

Initial Calibration Verification Summary Report

Calibration ID:	RC1400006	**Instrument ID:**	R-MS-06
		Column Name:	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Tetrachloroethene (PCE)	RC1400006-12	T	Average RF	50	50.06	ug/L	0.1	<=30
Tetrahydrofuran (THF)	RC1400006-12	T	Average RF	50	48.54	ug/L	-2.9	<=30
Toluene	RC1400006-12	T	Average RF	50	50.84	ug/L	1.7	<=30
Trichloroethene (TCE)	RC1400006-12	T	Average RF	50	53.60	ug/L	7.2	<=30
Trichlorofluoromethane (CFC 11)	RC1400006-12	T	Average RF	50	45.87	ug/L	-8.3	<=30
Vinyl Chloride	RC1400006-12	T	Average RF	50	47.34	ug/L	-5.3	<=30
cis-1,2-Dichloroethene	RC1400006-12	T	Average RF	50	48.43	ug/L	-3.1	<=30
cis-1,3-Dichloropropene	RC1400006-12	T	Average RF	50	55.12	ug/L	10.2	<=30
m,p-Xylenes	RC1400006-12	T	Average RF	100	102.6	ug/L	2.6	<=30
n-Butyl Acetate	RC1400006-12	T	Average RF	50	58.85	ug/L	17.7	<=30
n-Heptane	RC1400006-12	T	Average RF	50	49.23	ug/L	-1.5	<=30
o-Xylene	RC1400006-12	T	Average RF	50	52.71	ug/L	5.4	<=30
trans-1,2-Dichloroethene	RC1400006-12	T	Average RF	50	51.12	ug/L	2.2	<=30
trans-1,3-Dichloropropene	RC1400006-12	T	Average RF	50	56.48	ug/L	13.0	<=30
1,2-Dichloroethane-d4	RC1400006-12	S	Average RF	30	30.86	ug/L	2.9	<=30
4-Bromofluorobenzene	RC1400006-12	S	Average RF	30	33.00	ug/L	10.0	<=30
Toluene-d8	RC1400006-12	S	Average RF	30	32.02	ug/L	6.7	<=30

Exceptions

QAP	Method
LAB QAP	624

Compound	Type	Criteria	Result
2-Chloroethyl Vinyl Ether	Percent Difference	<= 30	36.43

Exceptions

QAP	Method
Phenova PT	624

Compound	Type	Criteria	Result
2-Chloroethyl Vinyl Ether	Percent Difference	<= 30	36.43

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2844.D Vial: 37
Acq On : 28 Jan 2014 3:23 am Operator: D.LIPANI
Sample : ICV 50 Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 12:21 2014 Quant Results File: 6240127.RES

Quant Method : I:\ACQUDATA\M...\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 12:19:30 2014
Response via : Initial Calibration
DataAcq Meth : 6240127

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	3.48	128	111170	30.00	ug/L	0.00
35) 1,4-Difluorobenzene	5.72	114	696054	30.00	ug/L	0.00
53) d5-Chlorobenzene	9.08	117	689247	30.00	ug/L	0.00
System Monitoring Compounds						
30) SURR1,1,2-Diclethane-d4	4.29	65	226304	30.86	ug/L	0.00
Spiked Amount 30.000	Range 81 - 127		Recovery = 102.87%			
51) SURR3,Toluene-d8	7.78	98	918883	32.02	ug/L	0.00
Spiked Amount 30.000	Range 83 - 120		Recovery = 106.73%			
68) SURR2,BFB	10.14	95	366516	33.00	ug/L	0.00
Spiked Amount 30.000	Range 79 - 123		Recovery = 110.00%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.04	85	422744	40.87	ug/L	99
3) Chloromethane	1.11	50	630587	45.34	ug/L	99
4) Vinyl Chloride	1.18	62	675894	47.34	ug/L	98
5) Bromomethane	1.35	94	428910	50.18	ug/L	95
6) Chloroethane	1.42	64	364365	46.16	ug/L	99
7) Freon-21	1.45	67	1112284	51.78	ug/L	93
8) Freon-123	1.62	83	888141	52.36	ug/L	99
9) Freon-123A	1.64	67	721185	52.66	ug/L	93
10) Acrolein	1.70	56	308905	244.34	ug/L	95
11) Trichlorofluoromethane	1.70	101	774750	45.87	ug/L	99
12) Acetonitrile	1.71	41	249192	242.15	ug/L	94
13) 2-Propanol	1.74	45	345800	1005.40	ug/L	98
14) Acetone	1.77	43	114797	40.39	ug/L	95
15) 1,1-Diclethene	1.99	96	476740	47.50	ug/L	96
16) tert Butyl Alcohol	2.02	59	551565	1041.64	ug/L	98
17) Acrylonitrile	2.04	53	667394	266.46	ug/L	95
18) Methylene Chloride	2.08	84	576931	47.90	ug/L	95
19) Freon 113	2.13	101	483253	46.17	ug/L	100
20) Carbon Disulfide	2.19	76	1576393	46.61	ug/L	99
21) trans-1,2-Dichloroethene	2.56	96	556235	51.12	ug/L	98
22) Methyl-t-Butyl Ether	2.67	73	1181576	49.80	ug/L	98
23) 1,1-Diclethane	2.76	63	983359	50.78	ug/L	98
24) 2-Butanone	3.22	43	144735	45.62	ug/L #	87
25) cis-1,2-Dichloroethene	3.31	96	610023	48.43	ug/L	98
26) Chloroform	3.55	83	985663	49.13	ug/L	93
27) Ethyl Acetate	3.65	43	338973	55.33	ug/L	99
28) Isobutanol	3.79	43	233890	962.44	ug/L	89
29) Tetrahydrofuran	3.96	42	95660	48.54	ug/L	90
31) 1,2-Dichloroethane	4.41	62	638708	49.54	ug/L	95
32) 1,1,1-Trichloroethane	4.52	97	865150	49.78	ug/L	92
33) 2-Methyl-1,3-Dioxolane	4.63	73	237083	277.93	ug/L	96
34) Cyclohexane	4.94	56	877509	48.13	ug/L	93
36) Carbontetrachloride	5.10	117	711226	49.57	ug/L	99
37) Isopropyl Acetate	5.23	43	767210	51.62	ug/L	100
38) Benzene	5.21	78	2158065	50.07	ug/L	99
39) Dibromomethane	6.03	93	306786	50.33	ug/L	98
40) 1,2-Diclpropane	6.10	63	596523	52.68	ug/L	100
41) Trichloroethene	6.17	130	643780	53.60	ug/L	98

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

DL 01/29/14

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2844.D Vial: 37
Acq On : 28 Jan 2014 3:23 am Operator: D.LIPANI
Sample : ICV 50 Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 12:21 2014 Quant Results File: 6240127.RES

Quant Method : I:\ACQUDATA\M...\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 12:19:30 2014
Response via : Initial Calibration
DataAcq Meth : 6240127

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
42) Heptane	6.18	43	487448	49.23	ug/L		98
43) Bromodichloromethane	6.23	83	785613	51.08	ug/L		100
44) Epichlorohydrin	6.62	57	133761	270.70	ug/L	#	91
45) Ethane, 1-Bromo-2-Chloro-	6.72	63	656664	47.88	ug/L		98
46) 2-Chloroethylvinyl Ether	6.89	63	297369	68.22	ug/L		99
47) cis-1,3-Dichloropropene	7.05	75	897059	55.12	ug/L		99
48) 4-Methyl-2-pentanone	7.26	43	399559	54.29	ug/L		97
49) trans-1,3-Dichloropropene	7.55	75	751582	56.48	ug/L		98
50) 1,1,2-Trichloroethane	7.66	97	457683	54.51	ug/L		99
52) Toluene	7.84	91	2348483	50.84	ug/L		97
54) Dibromochloromethane	8.10	129	605058	55.26	ug/L		99
55) 2-Hexanone	8.16	43	272497	52.08	ug/L		99
56) 1,2-Dibromoethane	8.32	107	424447	48.58	ug/L		100
57) Tetrachloroethene	8.51	164	502455	50.06	ug/L		99
58) N-Butyl Acetate	8.52	43	667614	58.85	ug/L	#	97
59) Chlorobenzene	9.11	112	1533964	49.77	ug/L		99
60) 4-Chlorobenzotrifluoride	9.22	180	764336	51.44	ug/L		99
61) Ethylbenzene	9.33	106	836980	52.15	ug/L		88
62) (m+p)Xylene	9.51	106	2017007	102.62	ug/L		87
63) Bromoform	9.50	173	369572	53.22	ug/L		96
64) Styrene	9.77	104	1585363	51.30	ug/L		98
65) 1,1,2,2-Tetrachloroethane	9.82	83	522409	53.05	ug/L		97
66) o-Xylene	9.83	106	1028701	52.71	ug/L		96
67) Amyl Acetate	9.89	43	855927	57.76	ug/L		99
69) 1,3-Dclbenz	11.15	146	1190650	50.13	ug/L		98
70) 1,4-Dclbenz	11.20	146	1216932	50.53	ug/L		97
71) 1,2-Dclbenz	11.47	146	1094390	51.20	ug/L		98
72) Naphthalen	13.09	128	982572	55.05	ug/L		100

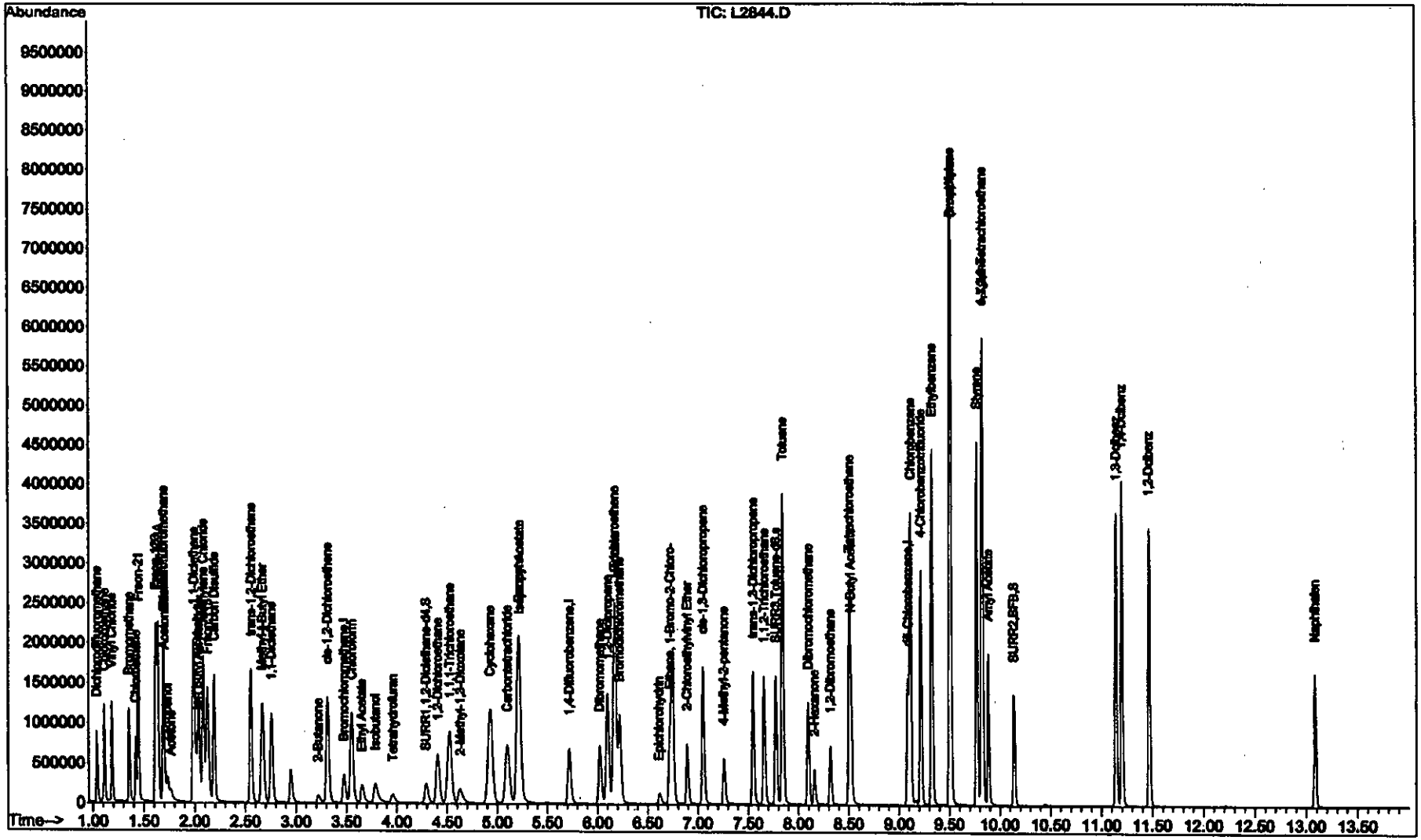
(#) = qualifier out of range (m) = manual integration

00165

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\012714\L2844.D Vial: 37
Acq On : 28 Jan 2014 3:23 am Operator: D.LIPANI
Sample : ICV 50 Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 29 12:21 2014 Quant Results File: 6240127.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 12:19:30 2014
Response via : Initial Calibration



L2844.D 6240127.M Wed Jan 29 12:22:42 2014

ALS Environmental

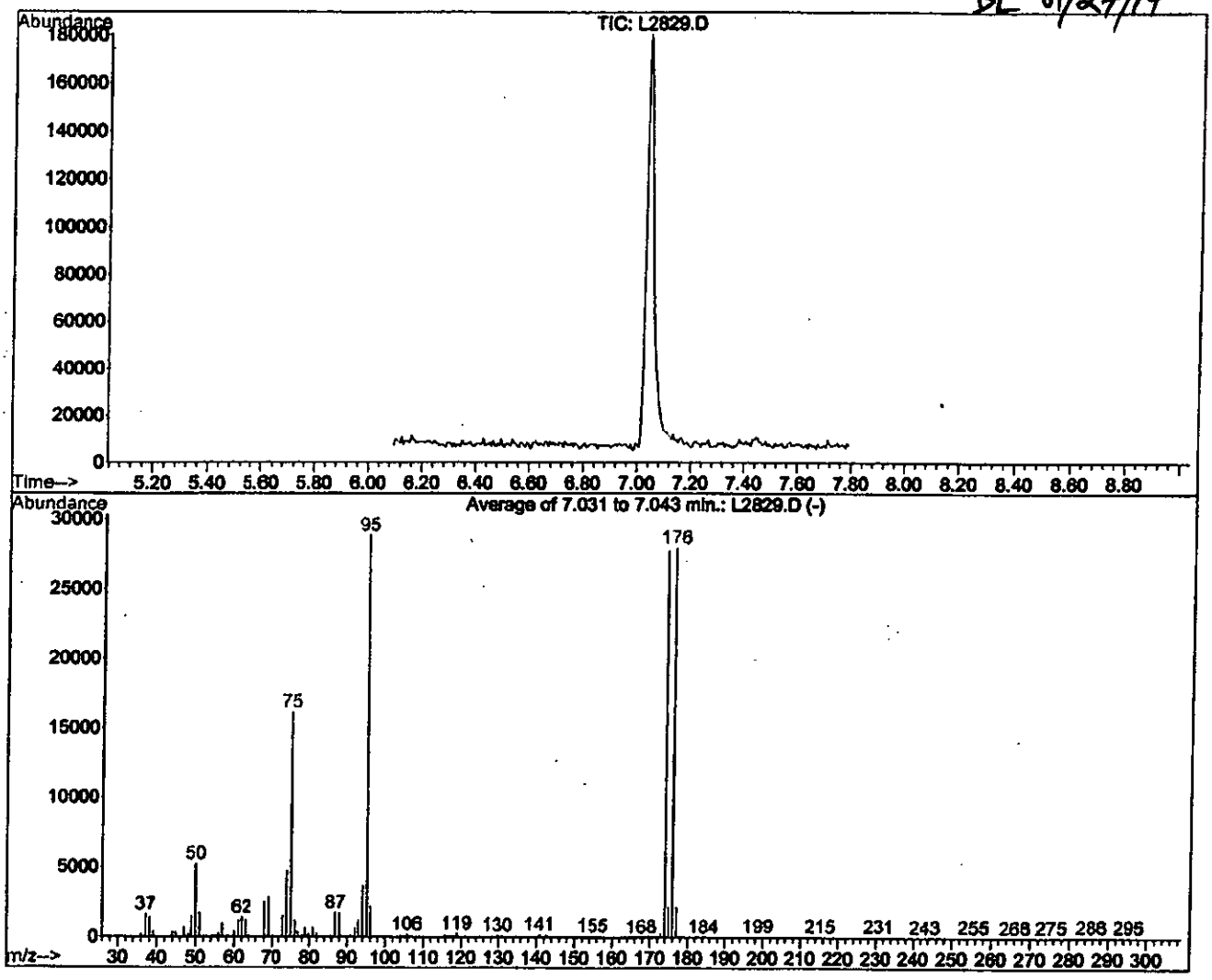
VOLATILE ORGANICS
RAW QC DATA

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\012714\L2829.D Vial: 22
Acq On : 27 Jan 2014 7:51 pm Operator: D.LIPANI
Sample : TUNE CHECK Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6

DL 01/27/14



AutoFind: Scans 155, 156, 157; Background Corrected with Scan 146

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.2	5263	PASS
75	95	30	60	56.0	16152	PASS
95	95	100	100	100.0	28853	PASS
96	95	5	9	7.7	2223	PASS
173	174	0.00	2	0.9	263	PASS
174	95	50	120	96.2	27749	PASS
175	174	5	9	7.7	2132	PASS
176	174	95	101	100.7	27931	PASS
177	176	5	9	7.7	2149	PASS

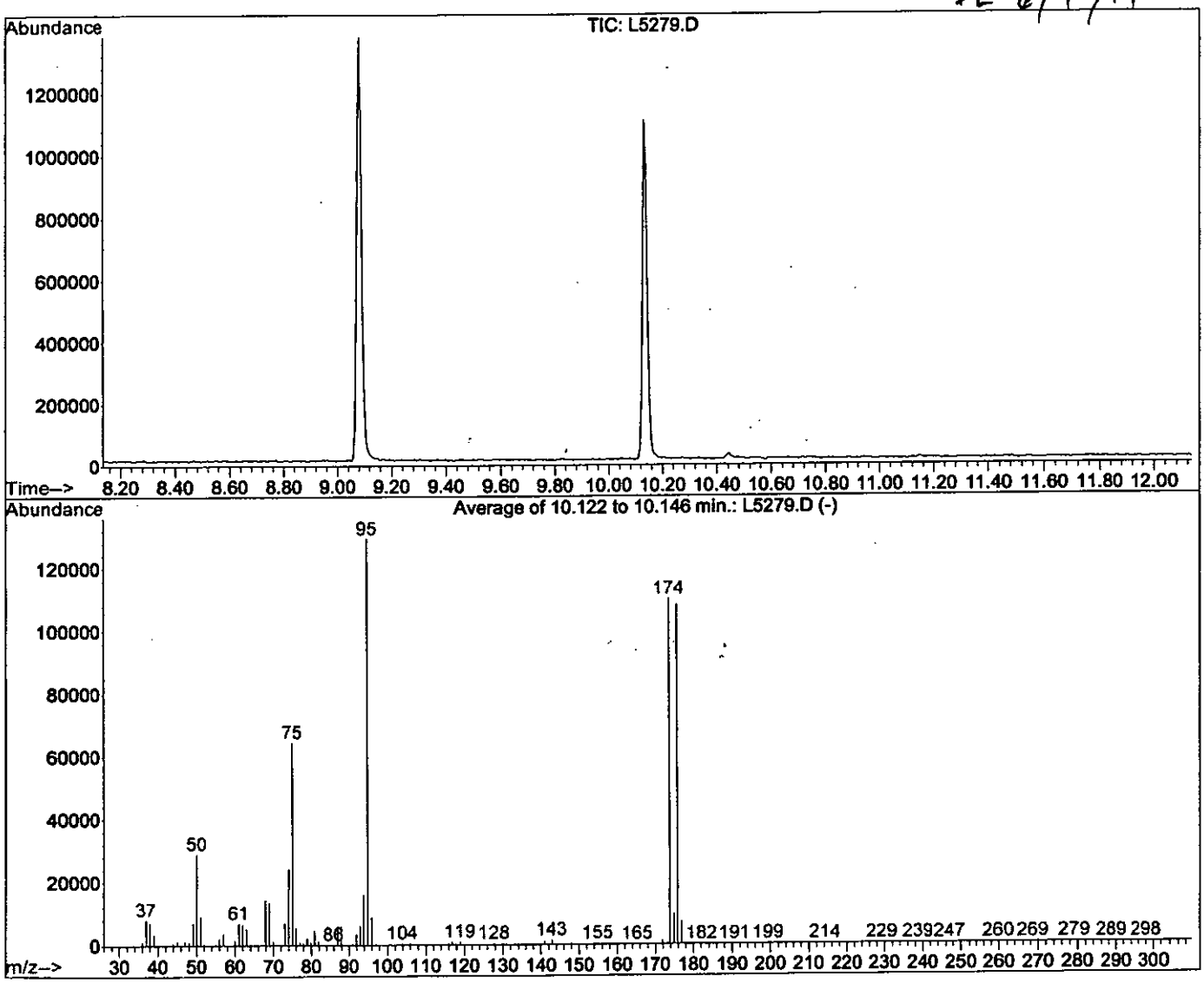
L2829.D 6240127.M Mon Jan 27 19:59:22 2014

BFB

Data File : I:\ACQUDATA\MSVOA6\DATA\060414\L5279.D
Acq On : 4 Jun 2014 9:16 am
Sample : TUNE CHECK RQ1406348-01
Misc : 624
MS Integration Params: LSCINT.P
Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6

Vial: 4
Operator: D.Lipani
Inst : MS#6
Multiplr: 1.00

DL 6/4/14



Spectrum Information: Average of 10.122 to 10.146 min. Sub. Scan = 1504

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.4	29048	PASS
75	95	30	60	49.8	64578	PASS
95	95	100	100	100.0	129630	PASS
96	95	5	9	6.8	8812	PASS
173	174	0.00	2	0.2	249	PASS
174	95	50	120	84.9	110042	PASS
175	174	5	9	8.8	9650	PASS
176	174	95	101	98.3	108186	PASS
177	176	5	9	6.6	7093	PASS

L5279.D 6240127.M Wed Jun 04 09:31:50 2014

00169

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404049
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	6/4/14 11:04
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1406348-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	624	**Analysis Lot:**	395482
Data File Name:	I:\ACQUDATA\MSVOA6\DATA\060414\L5282.D\	**Instrument Name:**	R-MS-06
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	1.0	U	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	
75-35-4	1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
110-75-8	2-Chloroethyl Vinyl Ether	10	U	10	
107-02-8	Acrolein	10	U	10	
107-13-1	Acrylonitrile	10	U	10	
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
56-23-5	Carbon Tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
75-09-2	Methylene Chloride	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
127-18-4	Tetrachloroethene (PCE)	1.0	U	1.0	
108-88-3	Toluene	1.0	U	1.0	
79-01-6	Trichloroethene (TCE)	1.0	U	1.0	
75-69-4	Trichlorofluoromethane (CFC 11)	1.0	U	1.0	
75-01-4	Vinyl Chloride	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
179601-23-1	m,p-Xylenes	2.0	U	2.0	
95-47-6	o-Xylene	1.0	U	1.0	
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404049
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	6/4/14 11:04
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1406348-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	624	**Analysis Lot:**	395482
Data File Name:	I:\ACQUDATA\MSVOA6\DATA\060414\L5282.D\	**Instrument Name:**	R-MS-06
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	112	81-127	6/4/14 11:04	
4-Bromofluorobenzene	100	79-123	6/4/14 11:04	
Toluene-d8	103	83-120	6/4/14 11:04	

Quantitation Report (Not Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\060414\L5282.D Vial: 7
Acq On : 4 Jun 2014 11:04 am Operator: D.Lipani
Sample : MET BLK RQ1406348-04 Inst : MS#6
Misc : 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jun 4 11:22 2014 Quant Results File: 6240127.RES

Quant Method : I:\ACQUDATA\M...\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 12:19:30 2014
Response via : Initial Calibration
DataAcq Meth : 6240127

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	3.47	128	98964	30.00 ug/L	-0.02
35) 1,4-Difluorobenzene	5.71	114	598396	30.00 ug/L	0.00
53) d5-Chlorobenzene	9.08	117	559985	30.00 ug/L	0.00
System Monitoring Compounds					
30) SURR1,1,2-Diclethane-d4	4.28	65	219481	33.62 ug/L	0.00
Spiked Amount 30.000	Range 81 - 127		Recovery = 112.07%		
51) SURR3,Toluene-d8	7.77	98	762080	30.89 ug/L	0.00
Spiked Amount 30.000	Range 83 - 120		Recovery = 102.97%		
68) SURR2,BFB	10.14	95	270474	29.98 ug/L	0.00
Spiked Amount 30.000	Range 79 - 123		Recovery = 99.93%		
Target Compounds					Qvalue
~~10) Acrolein~~	~~1.68~~	~~56~~	~~184~~	~~0.16 ug/L #~~	~~12~~
~~12) Acetonitrile~~	~~1.72~~	~~41~~	~~1235~~	~~1.35 ug/L #~~	~~3~~
~~13) 2-Propanol~~	~~1.72~~	~~45~~	~~363~~	~~1.19 ug/L~~	~~55~~
14) Acetone	1.76	43	764	0.30 ug/L	57 LT
~~16) tert-Butyl Alcohol~~	~~1.96~~	~~59~~	~~154~~	~~0.33 ug/L~~	~~77~~
28) Isobutanol	3.78	43	236	1.09 ug/L #	18
33) 2-Methyl-1,3-Dioxolane	4.63	73	89	0.12 ug/L #	33
~~44) Epichlorohydrin~~	~~6.62~~	~~57~~	~~110~~	~~0.26 ug/L #~~	~~1~~
71) 1,2-Dclbenz	11.47	146	1831	0.11 ug/L #	66
72) Naphthalen	13.08	128	3293	0.23 ug/L #	82

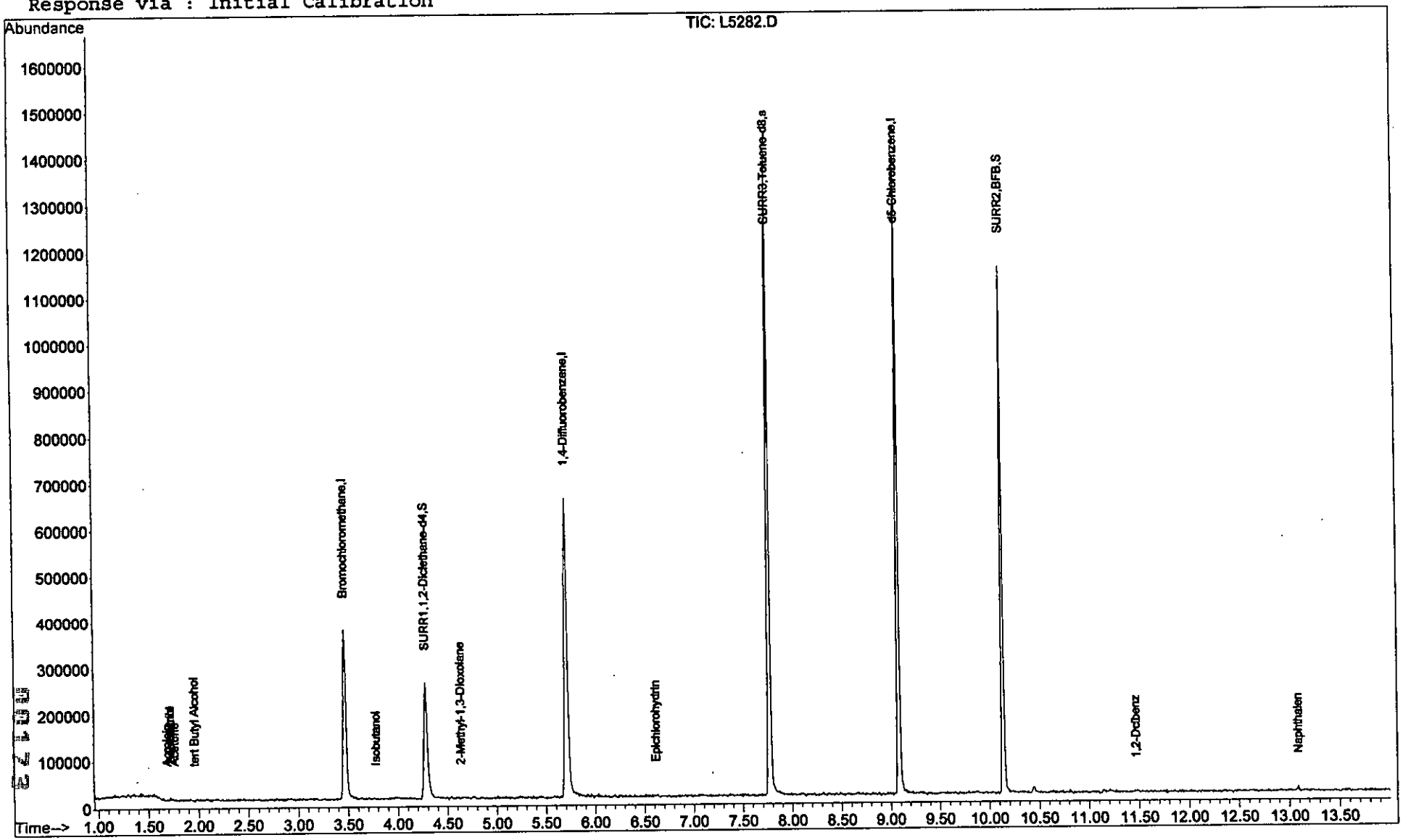
DL 6/4/14

(#) = qualifier out of range (m) = manual integration
L5282.D 6240127.M Wed Jun 04 11:22:45 2014 0017 Page 1

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\060414\L5282.D Vial: 7
Acq On : 4 Jun 2014 11:04 am Operator: D.Lipani
Sample : MET BLK Inst : MS#6
Misc : 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jun 4 11:22 2014 Quant Results File: 6240127.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 12:19:30 2014
Response via : Initial Calibration



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404049
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	6/4/14 10:01
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1406348-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	624	**Analysis Lot:**	395482
Data File Name:	I:\ACQUDATA\MSVOA6\DATA\060414\L5280.D\	**Instrument Name:**	R-MS-06
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	**19.8**		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	**21.2**		1.0	
79-00-5	1,1,2-Trichloroethane	**19.2**		1.0	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**21.0**		1.0	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**18.1**		1.0	
107-06-2	1,2-Dichloroethane	**20.5**		1.0	
78-87-5	1,2-Dichloropropane	**21.7**		1.0	
110-75-8	2-Chloroethyl Vinyl Ether	**21.5**		10	
107-02-8	Acrolein	**79.9**		10	
107-13-1	Acrylonitrile	**97.7**		10	
71-43-2	Benzene	**21.0**		1.0	
75-27-4	Bromodichloromethane	**20.6**		1.0	
75-25-2	Bromoform	**19.1**		1.0	
74-83-9	Bromomethane	**19.2**		1.0	
56-23-5	Carbon Tetrachloride	**22.0**		1.0	
108-90-7	Chlorobenzene	**20.9**		1.0	
75-00-3	Chloroethane	**16.5**		1.0	
67-66-3	Chloroform	**19.8**		1.0	
74-87-3	Chloromethane	**21.2**		1.0	
124-48-1	Dibromochloromethane	**20.5**		1.0	
75-09-2	Methylene Chloride	**18.1**		1.0	
100-41-4	Ethylbenzene	**20.7**		1.0	
127-18-4	Tetrachloroethene (PCE)	**20.2**		1.0	
108-88-3	Toluene	**20.8**		1.0	
79-01-6	Trichloroethene (TCE)	**20.1**		1.0	
75-69-4	Trichlorofluoromethane (CFC 11)	**20.4**		1.0	
75-01-4	Vinyl Chloride	**18.8**		1.0	
10061-01-5	cis-1,3-Dichloropropene	**20.4**		1.0	
179601-23-1	m,p-Xylenes	**42.1**		2.0	
95-47-6	o-Xylene	**21.5**		1.0	
156-60-5	trans-1,2-Dichloroethene	**18.4**		1.0	
10061-02-6	trans-1,3-Dichloropropene	**20.3**		1.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404049
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	6/4/14 10:01
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1406348-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	624	**Analysis Lot:**	395482
Data File Name:	I:\ACQUDATA\MSVOA6\DATA\060414\L5280.D\	**Instrument Name:**	R-MS-06
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	103	81-127	6/4/14 10:01	
4-Bromofluorobenzene	102	79-123	6/4/14 10:01	
Toluene-d8	103	83-120	6/4/14 10:01	

Quantitation Report (Not Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\060414\L5280.D Vial: 5
Acq On : 4 Jun 2014 10:01 am Operator: D.Lipani
Sample : LCS RQ1406348-02, -03 Inst : MS#6
Misc : 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jun 4 10:19 2014 Quant Results File: 6240127.RES

Quant Method : I:\ACQUDATA\M...\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 12:19:30 2014
Response via : Initial Calibration
DataAcq Meth : 6240127

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	3.46	128	102607	30.00	ug/L	-0.02
35) 1,4-Difluorobenzene	5.71	114	597998	30.00	ug/L	-0.01
53) d5-Chlorobenzene	9.08	117	561336	30.00	ug/L	0.00
System Monitoring Compounds						
30) SURR1,1,2-Diclethane-d4	4.28	65	208783	30.85	ug/L	-0.01
Spiked Amount 30.000	Range 81 - 127		Recovery = 102.83%			
51) SURR3,Toluene-d8	7.77	98	758383	30.76	ug/L	0.00
Spiked Amount 30.000	Range 83 - 120		Recovery = 102.53%			
68) SURR2,BFB	10.13	95	275586	30.47	ug/L	0.00
Spiked Amount 30.000	Range 79 - 123		Recovery = 101.57%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.03	85	257085	26.93	ug/L	97
3) Chloromethane	1.10	50	271949	21.19	ug/L	96
4) Vinyl Chloride	1.18	62	247972	18.82	ug/L	97
5) Bromomethane	1.35	94	151144	19.16	ug/L	92
6) Chloroethane	1.41	64	120245	16.50	ug/L	98
7) Freon-21	1.44	67	325165	16.40	ug/L	100
8) Freon-123	1.61	83	276670	17.67	ug/L	93
9) Freon-123A	1.63	67	269519	21.32	ug/L	96
10) Acrolein	1.69	56	93189	79.86	ug/L	89
11) Trichlorofluoromethane	1.69	101	317888	20.39	ug/L	99
12) Acetonitrile	1.70	41	92445	97.33	ug/L	96
13) 2-Propanol	1.73	45	104896	330.43	ug/L	97
14) Acetone	1.76	43	43267	16.49	ug/L	95
15) 1,1-Diclethene	1.98	96	167780	18.11	ug/L	96
16) tert Butyl Alcohol	2.01	59	155202	317.56	ug/L	89
17) Acrylonitrile	2.03	53	225922	97.73	ug/L	92
18) Methylene Chloride	2.08	84	200701	18.05	ug/L #	87
19) Freon 113	2.12	101	182215	18.86	ug/L	96
20) Carbon Disulfide	2.18	76	600069	19.22	ug/L	97
21) trans-1,2-Dichloroethene	2.54	96	184312	18.35	ug/L	91
22) Methyl-t-Butyl Ether	2.66	73	376324	17.18	ug/L #	96
23) 1,1-Diclethane	2.75	63	375874	21.03	ug/L	94
24) 2-Butanone	3.21	43	46198	15.78	ug/L	95
25) cis-1,2-Dichloroethene	3.30	96	200667	17.26	ug/L	88
26) Chloroform	3.53	83	366070	19.77	ug/L	92
27) Ethyl Acetate	3.64	43	105644	18.68	ug/L #	92
28) Isobutanol	3.78	43	76378	340.52	ug/L	93
29) Tetrahydrofuran	3.95	42	29291	16.10	ug/L #	81
31) 1,2-Dichloroethane	4.39	62	243341	20.45	ug/L	91
32) 1,1,1-Trichloroethane	4.51	97	318221	19.84	ug/L	95
33) 2-Methyl-1,3-Dioxolane	4.62	73	59905	76.09	ug/L	91
34) Cyclohexane	4.91	56	285731	16.98	ug/L	89
36) Carbontetrachloride	5.09	117	270760	21.97	ug/L	94
37) Isopropyl Acetate	5.21	43	243199	19.05	ug/L	97
38) Benzene	5.20	78	775893	20.95	ug/L	97
39) Dibromomethane	6.01	93	105205	20.09	ug/L	96
40) 1,2-Diclpropane	6.09	63	210870	21.68	ug/L	98
41) Trichloroethene	6.16	130	206889	20.05	ug/L	98

(#) = qualifier out of range (m) = manual integration
L5280.D 6240127.M Wed Jun 04 10:19:19 2014

DL 6/4/14

Quantitation Report (Not Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\060414\L5280.D Vial: 5
Acq On : 4 Jun 2014 10:01 am Operator: D.Lipani
Sample : LCS Inst : MS#6
Misc : 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jun 4 10:19 2014 Quant Results File: 6240127.RES

Quant Method : I:\ACQUDATA\M...\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 12:19:30 2014
Response via : Initial Calibration
DataAcq Meth : 6240127

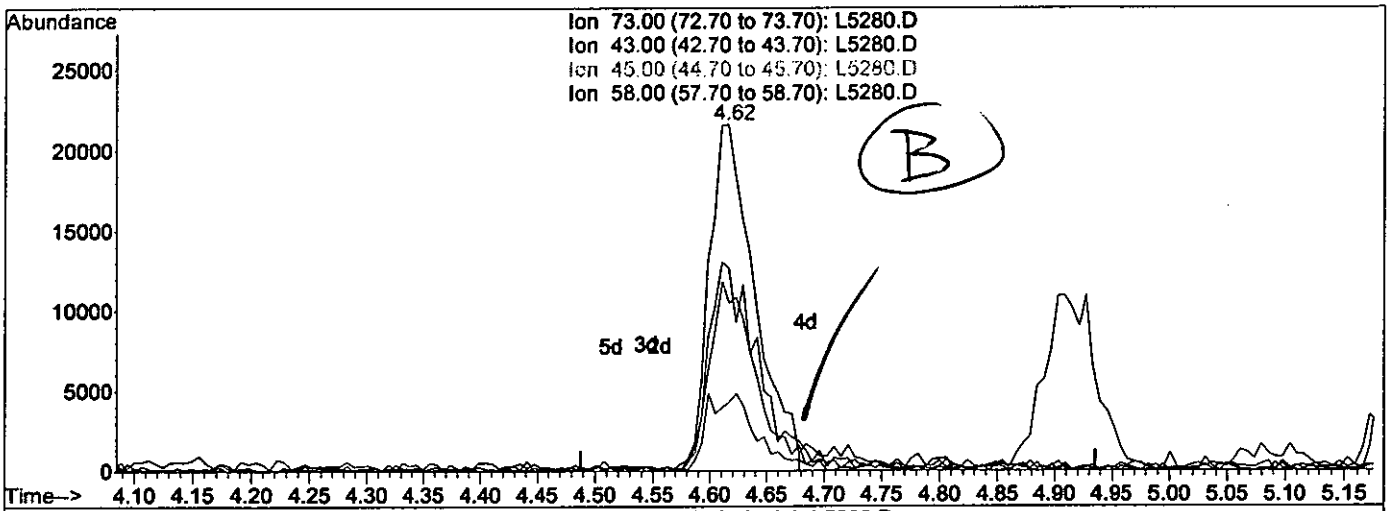
	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
42)	Heptane	6.17	43	175009	20.57 ug/L		95
43)	Bromodichloromethane	6.22	83	271733	20.57 ug/L		98
44)	Epichlorohydrin	6.62	57	40482	95.36 ug/L		96
45)	Ethane, 1-Bromo-2-Chloro-	6.72	63	233009	19.78 ug/L		99
46)	2-Chloroethylvinyl Ether	6.89	63	80541	21.51 ug/L		97
47)	cis-1,3-Dichloropropene	7.04	75	284897	20.38 ug/L		99
48)	4-Methyl-2-pentanone	7.26	43	120581	19.07 ug/L		97
49)	trans-1,3-Dichloropropene	7.54	75	231684	20.26 ug/L		97
50)	1,1,2-Trichloroethane	7.65	97	138393	19.19 ug/L		98
52)	Toluene	7.83	91	825102	20.79 ug/L		100
54)	Dibromochloromethane	8.09	129	182576	20.47 ug/L		96
55)	2-Hexanone	8.16	43	78609	18.45 ug/L		89
56)	1,2-Dibromoethane	8.31	107	134506	18.90 ug/L		96
57)	Tetrachloroethene	8.50	164	165122	20.20 ug/L		95
58)	N-Butyl Acetate	8.52	43	203450	22.02 ug/L	#	95
59)	Chlorobenzene	9.11	112	524443	20.89 ug/L		99
60)	4-Chlorobenzotrifluoride	9.21	180	261443	21.60 ug/L		96
61)	Ethylbenzene	9.32	106	270487	20.69 ug/L		94
62)	(m+p)Xylene	9.50	106	674376	42.13 ug/L		93
63)	Bromoform	9.50	173	108040	19.10 ug/L		94
64)	Styrene	9.76	104	524929	20.86 ug/L		98
65)	1,1,2,2-Tetrachloroethane	9.82	83	170161	21.22 ug/L		97
66)	o-Xylene	9.82	106	341037	21.46 ug/L		96
67)	Amyl Acetate	9.88	43	275181	22.80 ug/L		95
69)	1,3-Dclbenz	11.14	146	388619	20.09 ug/L		98
70)	1,4-Dclbenz	11.20	146	404074	20.60 ug/L		99
71)	1,2-Dclbenz	11.46	146	348864	20.04 ug/L		95
72)	Naphthalen	13.08	128	250541	17.24 ug/L		99

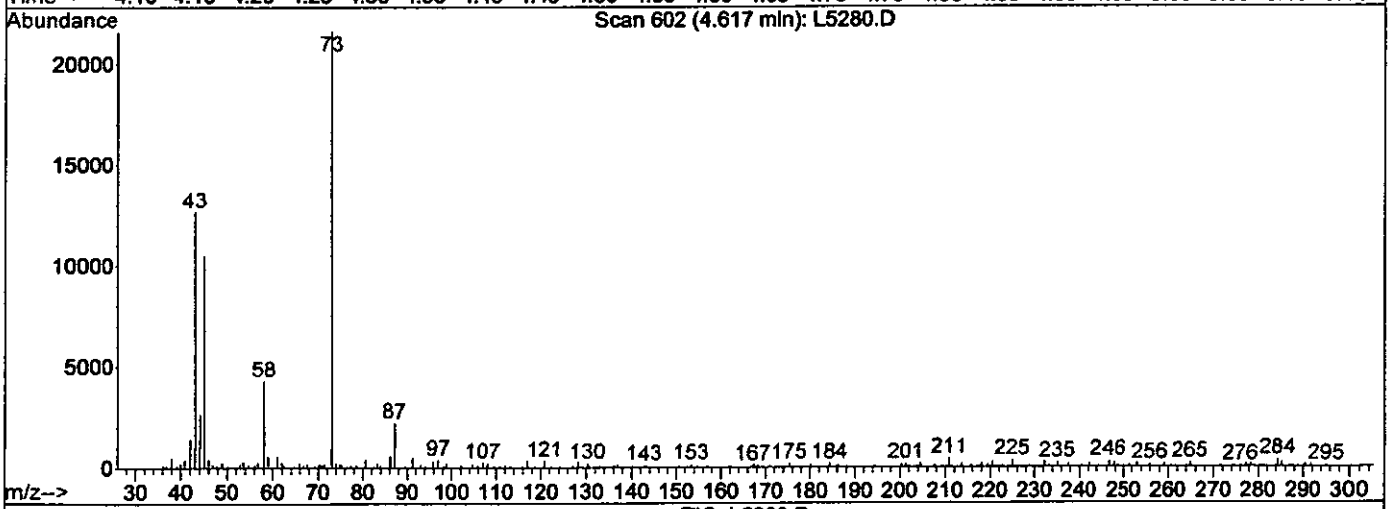
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\060414\L5280.D Vial: 5
Acq On : 4 Jun 2014 10:01 am Operator: D.Lipani
Sample : LCS Inst : MS#6
Misc : 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jun 4 10:10 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 12:19:30 2014
Response via : Single Level Calibration





TIC: L5280.D

(33) 2-Methyl-1,3-Dioxolane

4.62min 76.09ug/L

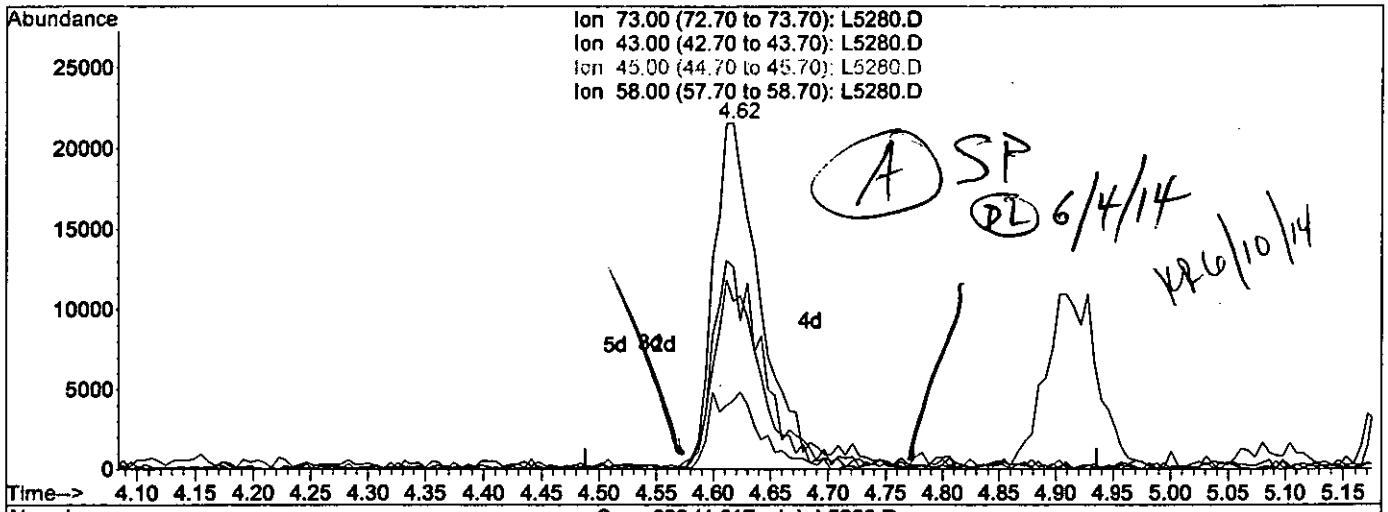
response 59905

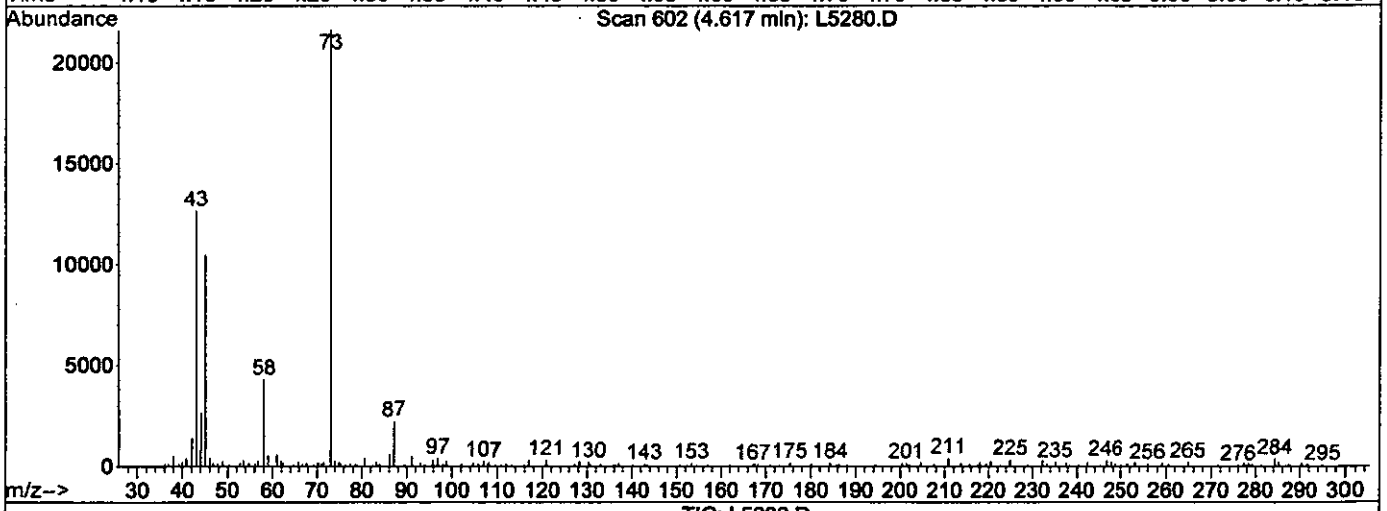
Ion	Exp%	Act%
73.00	100	100
43.00	47.80	58.83
45.00	47.80	48.54
58.00	25.40	19.88

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\060414\L5280.D Vial: 5
Acq On : 4 Jun 2014 10:01 am Operator: D.Lipani
Sample : LCS Inst : MS#6
Misc : 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jun 4 10:11 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 12:19:30 2014
Response via : Single Level Calibration





TIC: L5280.D

(33) 2-Methyl-1,3-Dioxolane

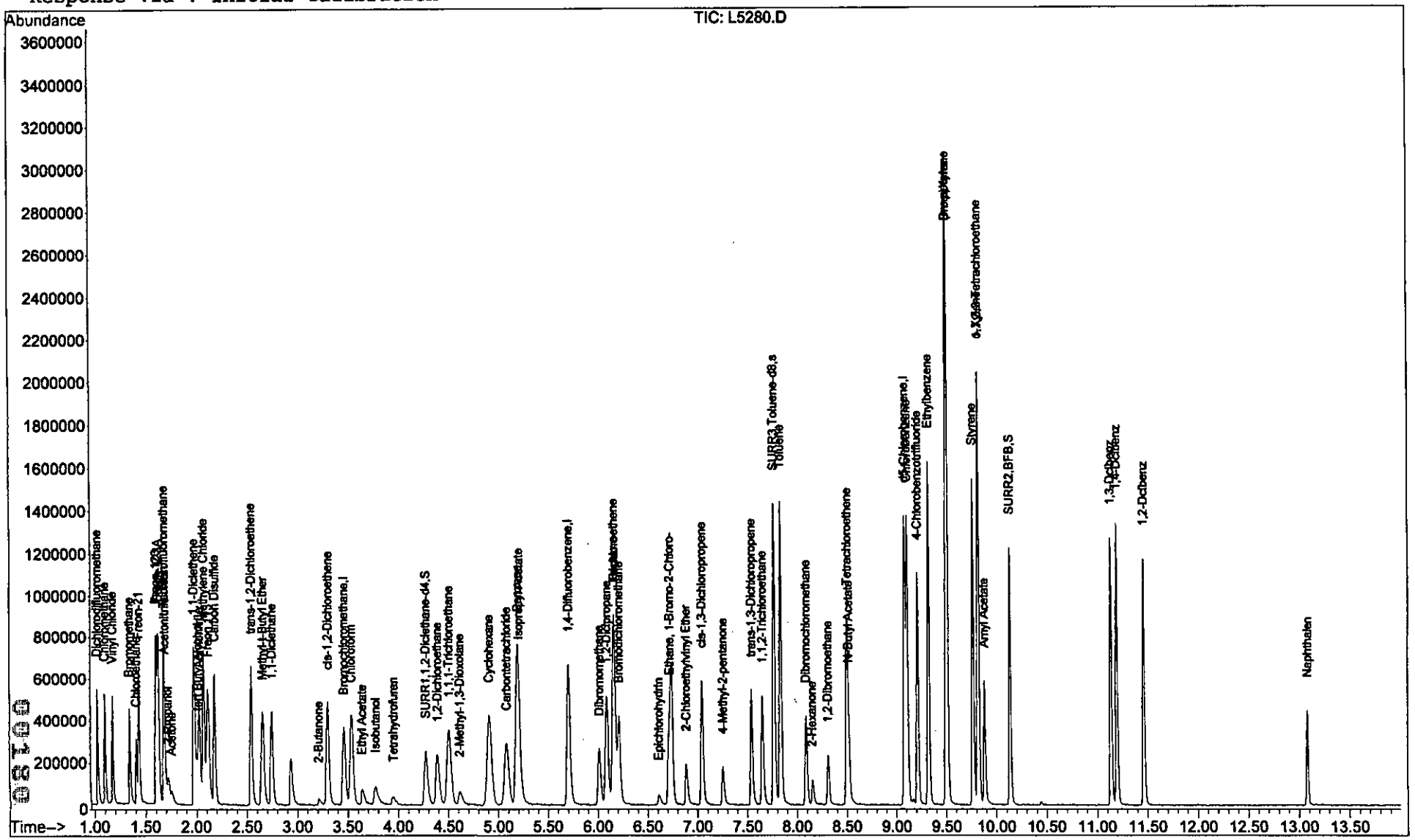
4.62min 81.88ug/L m

response 64469

Ion	Exp%	Act%
73.00	100	100
43.00	47.80	58.63
45.00	47.80	48.54
58.00	25.40	19.88

Data File : I:\ACQUDATA\MSVOA6\DATA\060414\L5280.D Vial: 5
Acq On : 4 Jun 2014 10:01 am Operator: D.Lipani
Sample : LCS Inst : MS#6
Misc : 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jun 4 10:19 2014 Quant Results File: 6240127.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\6240127.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Wed Jan 29 12:19:30 2014
Response via : Initial Calibration



Analysis: 624 - ICAL Analyst: D. Ligman Tune Method: T012714

Date: 01/27/14 - P.M. run Data Path: j:\acqudata\msvoa6\DATA\012714\... Run Method: 624012 7.M

Instr. GCMS#6 LIMS Run#: -ICAL-

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
16	Blk	Mods:	Repeller 19.07 to 18.40, EntLens 49.5 to 48.0, EntOffs						L2825	Y	19.58 to 20.08, Wid219 back to -0.10.
17	Tune Check		1.0µl Surr/50mL DI → 10mL purged	Tune					26	N	
18	Tune Check		" "	"					27	N	
	Mods to Tune file:		Rep. 18.40 to 18.06,	EntLens 48.0 to 50.5					—		
19	Tune Check		prep'd as above,	with mods					L2828	N	
20	Tune Check								29	Y	
21	Inst. Blk								L2830	Y	
	5.0µl 66069 → up to 1.0mL MeOH	1°Targ 2.5	1°Targ 5.0 / 1°Targ 10	PPL 500 / Ext 500	HSL 500	Fr+ 500					
22	STD#1 - 0.1PPB	2.0µl	— —	— —	—	—			L2831	Y	(into 50mL DI)
23	#2 - 0.2PPB	4.0µl	— —	— —	—	—			32	Y	
24	#3 - 0.5PPB	—	5.0µl —	— —	—	—			33	Y	
25	#4 - 1.0PPB	—	— 5.0µl	— —	—	—			34	Y	
26	#5 - 2.0PPB	—	— 10µl	— —	—	—			35	Y	
27	#6 - 5.0PPB	—	— —	2.0µl →		→			36	Y	into 200mL DI
28	#7 - 10PPB	—	— —	2.0µl →		→			37	Y	into 100mL DI
29	#8 - 20PPB	—	— —	2.0µl →		→			38	Y	into 50mL DI
30	#9 - 50PPB	—	— —	5.0µl →		→			39	Y	
31	#10 - 100PPB	—	— —	10µl →		→			L2840	Y	
32	#11 - 200PPB	—	— —	20µl →		→			41	Y	
33	Blk								42	N	
34	Blk								43	Y	
35	ICV 50								44	Y	2-CEVE↑
36	Blk								45	Y	
	EOD DL 1-27-14										

All samples = 10 mL + 1.0 uL combined IS/Surr. 10 mL purged

Primary PPL: 66069 10µl / 1.0mL MeOH = 1°Targ 5.0

Primary Ext: 66679

Primary HSL: 66678

Primary Fr+: 66036

Primary: —

> 20µl / 1.0mL MeOH = 1°Targ 10

Secondary PPL: 65811 12.5µl / 50mL DI = ICV.

Secondary Ext: 66724

Secondary Fr+: 66569

Secondary: —

Secondary: —

DL 1/27/14 300

Combined IS/Surr 2F: 65848

Surrogate 250: 65849

Internal Std: —

T0144

Analysis: 624 Analyst: D. Lapham Tune Method: 6240127.M

Date: 06/04/14 Data Path: j:\acqudata\msvoa G\DATA\060414\... Run Method: ↓ ↓ ↓

Instr. GCMS#6 LIMS Run#: 395482

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	Blk								L5278	Y	
2	Tune Check		(Run as a blk)						↓ 79	Y	
3	LCS								L5280	Y	
4	Met Blk								81	N	
5	Met Blk								82	Y	
6	R1404099-003	1.0	neg	[redacted]	6253	II	-1	~5	83	Y	
7	↓ -001	1.0	neg	↓	↓	↓	-1	~5	84	Y	
8	R1404049-002	1.0	neg	[redacted]	6085	IV	-1	<2	85	Y	
9	R1404012-002	1.0	neg	[redacted]	4898	II	-1	<2	86	Y	
10	↓ -001	1.0	neg	↓	↓	↓	-1	<2	87	Y	
11	R1404049-001	1.0	neg	[redacted]	6085	IV	-1	<2	88	Y	
12	R1404120-001	25	(2.0mL/50mL) neg	[redacted]	1141	II	-1	<2	↓ 89	Y	Very foamy + SO_2!
13	Blk		—	—	—	—	—	—	L5290	O.K.	
14	R1404081-001	50	(1.0mL/50mL) neg	[redacted]	6112	II	-1	<2	91	Y	
15	R1404056-001	1.0	neg	[redacted]	6102	II	C-1	<2	92	Y	composited
16	Blk		—	—	—	—	—	—	93	N	had tried 4057-001 1.0 - way too foamy!
17	Blk		—	—	—	—	—	—	94	Y	
18	R1404057-004	1.0	neg	[redacted]	6102	II	C-1	<2	95	Y	- job 4057 all composited
19	-001	25	(2.0mL/50mL) neg	↓	↓	↓	C-1	<2	96	O.K.	try 1/20? huge IPA interferes w acetone!
20	-002	10	(5.0mL/50mL) neg	↓	↓	↓	C-1	<2	97	(N)	weak rpt 1/5
21	-003	50	(1.0mL/50mL) neg	↓	↓	↓	C-1	<2	↓ 98	(Y)	rpt 1/100 or 200
22	Blk		—	—	—	—	—	—	99	O.K.	
23	R1404124-006	1.0	neg	[redacted]	8477	II	-1	<2	L5300	Y	
24	↓ -003	2.5	(20mL/50mL) neg	↓	↓	↓	C-1	<2	01	Y	
25	R1404125-001	2.5	" " neg	↓	↓	↓	C-1	<2	02	Y	
26	R1404126-001	2.5	" " neg	↓	↓	↓	C-1	<2	03	Y	
27	R1404012-001MS	1.0	neg	[redacted]	4898	II	-2	<2	04	Y	
28	↓ -001MSD	1.0	neg	↓	↓	↓	-3	<2	05	Y	but TCE ↓?
29	Blk		—	—	—	—	—	—	06	O.K.	
30	R1404057-001	20	(2.5mL/50mL) neg	[redacted]	6102	II	-2	<2	↓ 07	Y	report
31	Blk		—	—	—	—	—	—	08	O.K.	
	EOD DL 6-4-14										

All samples = 10 mL + 1.0 uL combined IS/Surr. 10 mL purged

Primary :

Primary :

Primary :

Primary :

Primary :

Secondary PPL : 71053 5.0µl / 50mL DI = LCS.

Secondary Ext : 70900

Secondary Fr+ : 70519

Secondary :

Secondary : also 5.0µl each of secondaries into full vials sample = MS/MSD. 4.25µl ~ EE DL 6/4/14

Combined IS/Surr 300 : 70287

Surrogate :

Internal Std :

GG1827

ALS Environmental

METALS 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 Environmental

METALS

COVER PAGE - INORGANIC ANALYSIS DATA PACKAGE

Contract: R1404049 SDG No.: 633027 EFFL

Lab Code: _____ Case No.: _____ SAS No.: _____

SOW No.: SW846 CLP-M

Sample ID.	Lab Sample No.
633027 EFFLUENT	R1404049-001

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments: See Attatched Case Narrative

Signature: Lauren Falanga Name: Lauren Falanga

Date: 6/25/14 Title: Project Chemist

00184

ALS Environmental

METALS

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

633027 EFFLUENT

Contract: R1404049

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027 EFFLU

Matrix (soil/water): WATER Lab Sample ID: R1404049-001

Level (low/med): LOW Date Received: 5/30/2014

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	5.0	U		P
7440-47-3	Chromium	10.0	U		P
7440-50-8	Copper	20.0	U		P
7440-02-0	Nickel	43.2			P
7439-92-1	Lead	50.0	U		P
7440-66-6	Zinc	20.0	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

METALS
-2A-
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: R1404049

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027 EFFLU

Initial Calibration Source: PERKIN ELMER

Continuing Calibration Source: PERKIN ELMER

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Cadmium	500	510	102	500	520	104	513	103	P
Chromium	500	516	103	500	521	104	517	103	P
Copper	1250	1240	99	1250	1250	100	1250	100	P
Nickel	2000	2040	102	2000	2070	104	2050	102	P
Lead	500	503	101	500	510	102	504	101	P
Zinc	1000	1040	104	1000	1070	107	1040	104	P

Comments:

METALS
-2A-
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: R1404049

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027 EFFLU

Initial Calibration Source: PERKIN ELMER

Continuing Calibration Source: PERKIN ELMER

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Cadmium				500	507	101	507	101	P
Chromium				500	512	102	511	102	P
Copper				1250	1240	99	1240	99	P
Nickel				2000	2030	102	2030	102	P
Lead				500	501	100	500	100	P
Zinc				1000	1020	102	1020	102	P

Comments:

METALS
-2A-
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: R1404049

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027 EFFLU

Initial Calibration Source: PERKIN ELMER

Continuing Calibration Source: PERKIN ELMER

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Cadmium				500	509	102			P
Chromium				500	513	103			P
Copper				1250	1250	100			P
Nickel				2000	2040	102			P
Lead				500	511	102			P
Zinc				1000	1050	105			P

Comments:

METALS
-2B-
CRDL STANDARD FOR AA AND ICP

Contract: R1404049

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 633027 EFFLU

AA CRDL Standard Source: ACCUSTANDARD

ICP CRDL Standard Source:

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Cadmium				10.0	10.80	108	10.78	108
Chromium				10.0	10.20	102	8.45	84
Copper				25.0	28.78	115	27.61	110
Nickel				40.0	42.87	107	40.84	102
Lead				10.0	11.43	114	10.94	109
Zinc				20.0	24.81	124	21.25	106

Comments:

METALS

-3-

BLANKS

Contract: R1404049

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027 EFFLU

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Cadmium	5.00	U	5.00	U	5.00	U	5.00	U	5.000	U	P
Chromium	10.00	U	10.00	U	10.00	U	10.00	U	10.000	U	P
Copper	20.00	U	20.00	U	20.00	U	20.00	U	20.000	U	P
Nickel	40.00	U	40.00	U	40.00	U	40.00	U	40.000	U	P
Lead	50.00	U	50.00	U	50.00	U	50.00	U	50.000	U	P
Zinc	20.00	U	20.00	U	20.00	U	20.00	U	20.000	U	P

Comments:

METALS

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BLANKS

Contract: R1404049

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027 EFFLU

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Cadmium			5.00	U	5.00	U					P
Chromium			10.00	U	10.00	U					P
Copper			20.00	U	20.00	U					P
Nickel			40.00	U	40.00	U					P
Lead			50.00	U	50.00	U					P
Zinc			20.00	U	20.00	U					P

Comments:

METALS

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ICP INTERFERENCE CHECK SAMPLE

Contract: R1404049

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027 EFFLU

ICP ID Number: Optima ICP 3 ICS Source: PERKIN ELMER

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Cadmium		1000	0.2	958	96	0.1	970	97
Chromium		500	1.9	504	101	0.0	508	102
Copper		500	4.9	528	106	4.8	523	105
Nickel		1000	-1.4	950	95	-3.7	958	96
Lead		50	1.7	52	104	1.3	53	106
Zinc		1000	9.6	943	94	7.7	962	96

METALS

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LABORATORY CONTROL SAMPLE

Contract: R1404049

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027 EFFLU

Solid LCS Source: _____

Aqueous LCS Source: CPI

Analyte	Aqueous (ug/L			Solid (mg/K				
	True	Found	%R	True	Found	C	Limits	%R
Cadmium	50	50	100					
Chromium	200	207	104					
Copper	250	264	106					
Nickel	500	519	104					
Lead	500	503	101					
Zinc	500	528	106					

Comments: _____

METALS

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ICP SERIAL DILUTIONS

SAMPLE NO.

633027 EFFLUENTL

Contract: R1404049

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027 EFFLU

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Cadmium	5.00	U	25.00	U			P
Chromium	10.00	U	50.00	U			P
Copper	20.00	U	100.00	U			P
Nickel	43.20		200.00	U	100.0		P
Lead	50.00	U	250.00	U			P
Zinc	20.00	U	100.00	U			P

Comments: _____

ALS Environmental

METALS

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DETECTION LIMITS

Contract: R1404049

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027 EFFLU

ICP ID Number: Optima ICP 3 Date: 2/4/2014

Flame AA ID Number: _____

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	PQL ug/L	MDL ug/L	M
Cadmium	226.502		5.0	5.0	P
Chromium	267.716		10.0	10.0	P
Copper	324.752		20.0	20.0	P
Nickel	231.604		40.0	40.0	P
Lead	220.353		50.0	50.0	P
Zinc	206.200		20.0	20.0	P

Comments: _____

METALS

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ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Contract: R1404049

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027 EFFLU

ICP ID Number: Optima ICP 3 Date: 3/31/2014

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg
Aluminum	308.215	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.836	0.0954007	0.0000000	0.0000000	0.0000000
Arsenic	188.979	0.0099568	0.0000000	-0.0801871	0.0000000
Barium	233.527	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.107	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.772	0.0000000	0.0000000	4.4044499	0.0000000
Cadmium	226.502	-0.0035345	0.0000000	0.1333330	0.0000000
Calcium	227.546	-2.9304600	0.0000000	-53.8955002	0.0000000
Chromium	267.716	0.0031845	0.0000000	-0.0140317	-0.1262880
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.752	0.0000000	0.0000000	-0.1145200	0.0000000
Iron	259.939	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	-0.1338530	0.0000000	0.0438866	0.0000000
Magnesium	279.077	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	-0.1267620	0.0000000
Molybdenum	202.031	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.490	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.026	-0.0281652	0.0000000	-0.2522740	0.0000000
Silver	328.068	0.0000000	0.0000000	-0.2778280	0.0000000
Sodium	589.592	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.552	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.801	0.0764274	0.0099938	-0.0434154	0.0000000
Tin	189.927	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	337.279	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0437078	0.0000000
Zinc	206.200	0.0000000	0.0000000	0.0000000	0.0000000

Comments: _____

METALS
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ICP LINEAR RANGES (QUARTERLY)

Contract: R1404049

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027 EFFLU

ICP ID Number: Optima ICP 3 Date: 3/8/2014

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Cadmium	0.200	2000	P
Chromium	0.200	10000	P
Copper	0.200	5000	P
Nickel	0.200	8000	P
Lead	0.200	10000	P
Zinc	0.200	4000	P

Comments: _____

METALS

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PREPARATION LOG

Contract: R1404049

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027 EFFLUENT

Method: P

Sample ID	Preparation Date	Initial Volume	Final Volume(mL)
LCSW	6/3/2014	50.0	50.0
PBW	6/3/2014	50.0	50.0
633027 EFFLUENT	6/3/2014	50.0	50.0

Comments:

METALS
-14-

ANALYSIS RUN LOG

Contract: R1404049

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 633027 EFFLU

Instrument ID Number: Optima ICP 3 Method: P

Start Date: 6/6/2014 End Date: 6/7/2014

Sample ID.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
Calib Blank 1	1.00	20:13							X		X		X		X				X						X	
Calib Std 1	1.00	20:18							X		X		X		X				X						X	
Calib Std 2	1.00	20:24							X				X													
Calib Std 3	1.00	20:30									X								X						X	
Calib Std 4	1.00	20:36							X		X		X		X				X						X	
Calib Std 5	1.00	20:42							X		X		X		X				X						X	
ICV1	1.00	20:48							X		X		X		X				X						X	
ICB1	1.00	20:54							X		X		X		X				X						X	
CRDL1	1.00	21:00							X		X		X		X				X						X	
ICS-A1	1.00	21:06							X		X		X		X				X						X	
ICS-AB1	1.00	21:12							X		X		X		X				X						X	
CCV1	1.00	21:18							X		X		X		X				X						X	
CCB1	1.00	21:24							X		X		X		X				X						X	
PBW	1.00	21:30							X		X		X		X				X						X	
LCSW	1.00	21:36							X		X		X		X				X						X	
ZZZZZZ	10.00	21:42																								
ZZZZZZ	1.00	21:48																								
ZZZZZZ	1.00	21:54																								
ZZZZZZ	1.00	22:00																								
ZZZZZZ	1.00	22:06																								
ZZZZZZ	5.00	22:12																								
ZZZZZZ	10.00	22:18																								
ZZZZZZ	1.00	22:24																								
CCV2	1.00	22:30							X		X		X		X				X						X	
CCB2	1.00	22:36							X		X		X		X				X						X	
ZZZZZZ	1.00	22:42																								
ZZZZZZ	1.00	22:48																								
ZZZZZZ	1.00	22:54																								
ZZZZZZ	1.00	23:00																								
633027 EFFLUENT	1.00	23:06							X		X		X		X				X						X	
633027 EFFLUENTL	5.00	23:12							X		X		X		X				X						X	
ZZZZZZ	1.00	23:18																								
ZZZZZZ	1.00	23:25																								

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

METALS
-14-

ANALYSIS RUN LOG

Contract: R1404049

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 633027 EFFLU

Instrument ID Number: Optima ICP 3 Method: P

Start Date: 6/6/2014 End Date: 6/7/2014

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	23:31																										
ZZZZZZ	1.00	23:37																										
CCV3	1.00	23:43							X		X		X		X				X							X		
CCB3	1.00	23:49							X		X		X		X				X							X		
ZZZZZZ	1.00	23:55																										
ZZZZZZ	5.00	00:01																										
ZZZZZZ	1.00	00:07																										
ZZZZZZ	1.00	00:13																										
ZZZZZZ	1.00	00:19																										
ZZZZZZ	1.00	00:25																										
CCV4	1.00	00:31							X		X		X		X				X							X		
CCB4	1.00	00:37							X		X		X		X				X							X		
CRDL2	1.00	00:43							X		X		X		X				X							X		
ICS-A2	1.00	00:49							X		X		X		X				X							X		
ICS-AB2	1.00	00:55							X		X		X		X				X							X		
ZZZZZZ	1.00	01:01																										
ZZZZZZ	1.00	01:08																										
CCV5	1.00	01:14							X		X		X		X				X							X		
CCB5	1.00	01:20							X		X		X		X				X							X		

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

Metals Cover Page

Analyst: CJW **Date:** 6/6/14 **Instrument:** Opt 3

Data File: 3Jun06b **Reviewed By:** DCB **Entered By:** DCB

Approval: TC 6/9/14

Starlims Run #	Analytes Used	Batch ID	Method	Failed Analytes	Repeats
396075	Ag As Be Cd Cr Cu Mg Ca Mn Mo Na	209881	200.7	Fe	
	Ni Pb Sb Se Tl Zn				
396076	TAL B - Fe	209867	6010	Fe Cr^{III}	R3765-002,3,4,5,8,13 Ca
					R4023-001 -002 Ca
					R4027 Cr
					R4023-001 K Na
396077	Ag As Be Cd Cr Cu Mn Ni Pb Se Zn	209799	6010	Fe Cr^{III}	R3915-004,11,13,14 Ag
					R3915-013,14 Se
					R3942-003,4 Cr
396078	Tl	209654	6010		
396079	As Cr	209457	6010	~~Cr~~	

Package Data:

Client Sub#	TIER	Analytes Used	Batch ID	Raw Data Copied?
R4049	III / (IV) / ILM	Cd Cr Cu Ni Pb Zn	209881	Yes / No
✓ R3765	III / (IV) / ILM	TAL B - Fe	209867	Yes / No
R3747	III / (IV) / ILM	Tl	209654	Yes / No
~~R3511~~	~~III / (IV) / ILM~~	As 6/8/14 DCB		Yes / No
	III / IV / ILM			Yes / No
	III / IV / ILM			Yes / No
	III / IV / ILM			Yes / No
	III / IV / ILM			Yes / No

Analysis Begun

Start Time: 6/6/2014 8:13:15 PM
Logged In Analyst: alrce.metals03
Spectrometer Model: Optima 5300 DV, S/N 077N6051602
Plasma On Time: 6/6/2014 6:22:32 PM
Technique: ICP Continuous
Autosampler Model: AS-93plus

Sample Information File: C:\pe\Optima5300\Sample Information\ROUTINE1.sif
Batch ID: r
Results Data Set: 3Jun06b
Results Library: C:\pe\Optima5300\Results\Jun14.mdb

analyst: CRW 6/6/14

RC 6/18/14

Method Loaded
Method Name: DV200-6010C Opt3
IEC File: DV033114.iec
Method Last Saved: 5/20/2014 1:26:11 PM
MSF File:
Method Description: 5300DV TAL Metals Method 200.7/6010C-Optima 3

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Al 308.215	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
B 249.772	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Cd 226.502	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Fe 259.939	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
K 766.490	Lin Thru 0	Peak Area	Radial	Y 371.029	Yes
Mg 279.077	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Ni 231.604	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Na 589.592	Lin Thru 0	Peak Area	Radial	Y 371.029	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Se 196.026	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Ti 337.279	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 206.200	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Ca 227.546	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Y 371.029	Yes

Sequence No.: 1
Sample ID: Calib Blank 1
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 1
Date Collected: 6/6/2014 8:13:15 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib Blank 1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	7308152.7	121174.67	1.66%	1.000	mg/L
Ag 328.068†	-128.1	54.45	42.50%	[0.00]	mg/L
Al 308.215†	12806.0	243.03	1.90%	[0.00]	mg/L
As 188.979†	-4.0	0.28	7.00%	[0.00]	mg/L
B 249.772†	771.0	60.99	7.91%	[0.00]	mg/L
Ba 233.527†	-495.2	1.86	0.38%	[0.00]	mg/L
Be 313.107†	-15002.2	330.62	2.20%	[0.00]	mg/L
Cd 226.502†	-190.7	7.36	3.86%	[0.00]	mg/L
Co 228.616†	-6.7	0.20	3.01%	[0.00]	mg/L
Cr 267.716†	-56.8	0.78	1.37%	[0.00]	mg/L
Cu 324.752†	8470.2	81.15	0.96%	[0.00]	mg/L
Fe 259.939†	5445.2	136.81	2.51%	[0.00]	mg/L

K 766.490†	423.8	19.46	4.59%	[0.00] mg/L
Mg 279.077†	-1853.0	30.76	1.66%	[0.00] mg/L
Mn 257.610†	-302.0	23.33	7.72%	[0.00] mg/L
Mo 202.031†	11.1	1.60	14.50%	[0.00] mg/L
Ni 231.604†	-147.0	4.03	2.74%	[0.00] mg/L
Na 589.592†	66.2	69.59	105.17%	[0.00] mg/L
Pb 220.353†	-22.7	5.19	22.90%	[0.00] mg/L
Sb 206.836†	29.7	1.24	4.19%	[0.00] mg/L
Se 196.026†	0.5	1.42	285.38%	[0.00] mg/L
Sn 189.927†	189.1	5.30	2.81%	[0.00] mg/L
Ti 337.279†	130.5	30.79	23.60%	[0.00] mg/L
Tl 190.801†	9.4	2.18	23.35%	[0.00] mg/L
V 292.402†	54.7	0.92	1.67%	[0.00] mg/L
Zn 206.200†	100.3	5.74	5.72%	[0.00] mg/L
Ca 227.546†	-43.3	4.73	10.93%	[0.00] mg/L
Sr 421.552†	96.8	31.40	32.44%	[0.00] mg/L

Sequence No.: 2
Sample ID: Calib Std 1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 6/6/2014 8:18:58 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib Std 1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	7421418.2	204805.07	2.76%	1.015	mg/L
As 188.979†	5.7	0.16	2.78%	[0.0050]	mg/L
Ba 233.527†	1761.7	34.97	1.98%	[0.0200]	mg/L
Cd 226.502†	82.2	8.17	9.95%	[0.0010]	mg/L
Co 228.616†	51.7	3.25	6.28%	[0.0030]	mg/L
Cr 267.716†	126.9	19.50	15.37%	[0.0010]	mg/L
Cu 324.752†	2739.4	290.84	10.62%	[0.0100]	mg/L
Mn 257.610†	3980.9	96.55	2.43%	[0.0100]	mg/L
Mo 202.031†	249.2	8.13	3.26%	[0.0250]	mg/L
Ni 231.604†	193.5	2.04	1.06%	[0.0050]	mg/L
Pb 220.353†	28.9	3.16	10.93%	[0.0050]	mg/L
Sb 206.836†	13.0	0.42	3.23%	[0.0100]	mg/L
Se 196.026†	1.5	0.34	23.44%	[0.0050]	mg/L
Tl 190.801†	7.7	1.22	15.91%	[0.0100]	mg/L
V 292.402†	241.0	3.64	1.51%	[0.0030]	mg/L
Zn 206.200†	213.9	8.52	3.98%	[0.0100]	mg/L

Sequence No.: 3
Sample ID: Calib Std 2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 6/6/2014 8:24:35 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib Std 2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	7398011.0	17827.42	0.24%	1.012	mg/L
Al 308.215†	932.3	14.36	1.54%	[0.100]	mg/L
As 188.979†	10.1	0.09	0.85%	[0.0100]	mg/L
B 249.772†	23861.1	179.96	0.75%	[0.200]	mg/L
Be 313.107†	12533.3	96.65	0.77%	[0.0030]	mg/L
Cd 226.502†	347.8	3.24	0.93%	[0.005]	mg/L
Cu 324.752†	5440.9	3.36	0.06%	[0.0200]	mg/L
K 766.490†	668.8	25.30	3.78%	[2.000]	mg/L
Mg 279.077†	12073.9	14.07	0.12%	[1.000]	mg/L
Na 589.592†	5827.3	87.10	1.49%	[1.000]	mg/L
Sb 206.836†	70.8	2.57	3.62%	[0.060]	mg/L
Se 196.026†	5.5	0.09	1.56%	[0.0100]	mg/L
Sn 189.927†	1740.8	5.91	0.34%	[0.500]	mg/L
Ca 227.546†	126.6	3.41	2.70%	[1.000]	mg/L

Sequence No.: 4
Sample ID: Calib Std 3
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 6/6/2014 8:30:28 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib Std 3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	7186886.8	23683.73	0.33%	0.9834	mg/L
Ag 328.068†	2775.6	21.70	0.78%	[0.0100]	mg/L
B 249.772†	7092.9	880.73	12.42%	[0.0500]	mg/L
Be 313.107†	17206.5	38.43	0.22%	[0.0050]	mg/L
Co 228.616†	1085.5	3.32	0.31%	[0.050]	mg/L
Cr 267.716†	1391.4	1.44	0.10%	[0.010]	mg/L
Fe 259.939†	9735.2	487.96	5.01%	[0.1000]	mg/L
K 766.490†	170.8	34.72	20.33%	[0.5000]	mg/L
Mg 279.077†	5605.4	16.86	0.30%	[0.5000]	mg/L
Ni 231.604†	1843.5	14.30	0.78%	[0.0400]	mg/L
Na 589.592†	3119.8	64.83	2.08%	[0.5000]	mg/L
Sn 189.927†	451.7	27.24	6.03%	[0.1000]	mg/L
Ti 337.279†	31613.3	5.29	0.02%	[0.0500]	mg/L
V 292.402†	3751.5	31.92	0.85%	[0.050]	mg/L
Zn 206.200†	466.8	3.35	0.72%	[0.020]	mg/L
Ca 227.546†	63.8	1.84	2.88%	[0.5000]	mg/L
Sr 421.552†	5808.8	53.11	0.91%	[0.0500]	mg/L

Sequence No.: 5
Sample ID: Calib Std 4
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 12
Date Collected: 6/6/2014 8:36:19 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib Std 4

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	7274040.1	39645.82	0.55%	0.9953	mg/L
Ag 328.068†	57375.5	953.94	1.66%	[0.2000]	mg/L
Al 308.215†	57470.2	1317.88	2.29%	[4.0000]	mg/L
As 188.979†	372.1	2.29	0.61%	[0.4000]	mg/L
B 249.772†	130674.8	3469.54	2.66%	[1.0000]	mg/L
Ba 233.527†	354149.4	6525.82	1.84%	[4.0000]	mg/L
Be 313.107†	359874.1	2631.49	0.73%	[0.1000]	mg/L
Cd 226.502†	16592.5	261.87	1.58%	[0.2000]	mg/L
Co 228.616†	21295.7	341.40	1.60%	[1.0000]	mg/L
Cr 267.716†	27515.6	437.92	1.59%	[0.2000]	mg/L
Cu 324.752†	139930.7	2950.89	2.11%	[0.5000]	mg/L
Fe 259.939†	130592.3	2524.33	1.93%	[2.0000]	mg/L
K 766.490†	3895.6	27.40	0.70%	[10.000]	mg/L
Mg 279.077†	123967.3	2189.75	1.77%	[10.000]	mg/L
Mn 257.610†	120347.3	2262.66	1.88%	[0.3000]	mg/L
Mo 202.031†	10205.4	65.08	0.64%	[1.0000]	mg/L
Ni 231.604†	35887.7	573.34	1.60%	[0.8000]	mg/L
Na 589.592†	59595.7	23.61	0.04%	[10.000]	mg/L
Pb 220.353†	953.2	6.19	0.65%	[0.2000]	mg/L
Sb 206.836†	2422.4	14.24	0.59%	[2.0000]	mg/L
Se 196.026†	123.6	1.17	0.95%	[0.2000]	mg/L
Sn 189.927†	7001.6	49.68	0.71%	[2.0000]	mg/L
Ti 337.279†	636128.5	4678.84	0.74%	[1.0000]	mg/L
Tl 190.801†	486.3	2.79	0.57%	[0.4000]	mg/L
V 292.402†	76055.3	1663.38	2.19%	[1.0000]	mg/L
Zn 206.200†	8380.5	62.92	0.75%	[0.4000]	mg/L
Ca 227.546†	1418.6	0.37	0.03%	[10.000]	mg/L
Sr 421.552†	113778.4	59.31	0.05%	[1.0000]	mg/L

Sequence No.: 6
Sample ID: Calib Std 5
Analyst:

Autosampler Location: 2
Date Collected: 6/6/2014 8:42:14 PM
Data Type: Original

Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: Calib Std 5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	7205015.6	4192.35	0.06%	0.9859	mg/L
Ag 328.068†	278259.3	1989.69	0.72%	[1.0000]	mg/L
Al 308.215†	299441.7	2936.15	0.98%	[20.000]	mg/L
As 188.979†	1786.5	13.75	0.77%	[2.0000]	mg/L
B 249.772†	624460.5	8734.95	1.40%	[5.0000]	mg/L
Ba 233.527†	1673750.4	8050.90	0.48%	[20.000]	mg/L
Be 313.107†	1719065.5	6941.71	0.40%	[0.5000]	mg/L
Cd 226.502†	78037.8	562.05	0.72%	[1.0000]	mg/L
Co 228.616†	102301.3	583.63	0.57%	[5.0000]	mg/L
Cr 267.716†	132034.3	758.06	0.57%	[1.0000]	mg/L
Cu 324.752†	697385.5	7776.24	1.12%	[2.5000]	mg/L
Fe 259.939†	623987.4	4530.04	0.73%	[10.000]	mg/L
K 766.490†	20944.2	95.82	0.46%	[50.000]	mg/L
Mg 279.077†	603333.2	3542.07	0.59%	[50.000]	mg/L
Mn 257.610†	576811.9	3703.33	0.64%	[1.5000]	mg/L
Mo 202.031†	49624.7	320.80	0.65%	[5.0000]	mg/L
Ni 231.604†	169512.5	1113.13	0.66%	[4.0000]	mg/L
Na 589.592†	301308.7	220.53	0.07%	[50.000]	mg/L
Pb 220.353†	4580.0	28.25	0.62%	[1.0000]	mg/L
Sb 206.836†	11806.4	104.60	0.89%	[10.000]	mg/L
Se 196.026†	585.7	3.64	0.62%	[1.0000]	mg/L
Sn 189.927†	34263.0	266.37	0.78%	[10.000]	mg/L
Ti 337.279†	3073740.2	15025.45	0.49%	[5.0000]	mg/L
Tl 190.801†	2414.4	22.78	0.94%	[2.0000]	mg/L
V 292.402†	367926.9	3296.10	0.90%	[5.0000]	mg/L
Zn 206.200†	39233.9	260.42	0.66%	[2.0000]	mg/L
Ca 227.546†	7395.1	65.69	0.89%	[50.000]	mg/L
Sr 421.552†	578798.4	5355.77	0.93%	[5.0000]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	278600	0.00000	0.999982	
Al 308.215	3	Lin Thru 0	0.0	14950	0.00000	0.999968	
As 188.979	4	Lin Thru 0	0.0	894.7	0.00000	0.999968	
B 249.772	4	Lin Thru 0	0.0	125100	0.00000	0.999958	
Ba 233.527	3	Lin Thru 0	0.0	83870	0.00000	0.999938	
Be 313.107	4	Lin Thru 0	0.0	3444000	0.00000	0.999959	
Cd 226.502	4	Lin Thru 0	0.0	78230	0.00000	0.999927	
Co 228.616	4	Lin Thru 0	0.0	20490	0.00000	0.999969	
Cr 267.716	4	Lin Thru 0	0.0	132200	0.00000	0.999967	
Cu 324.752	4	Lin Thru 0	0.0	279000	0.00000	1.000000	
Fe 259.939	3	Lin Thru 0	0.0	62510	0.00000	0.999945	
K 766.490	4	Lin Thru 0	0.0	417.6	0.00000	0.999877	
Mg 279.077	4	Lin Thru 0	0.0	12080	0.00000	0.999986	
Mn 257.610	3	Lin Thru 0	0.0	385200	0.00000	0.999966	
Mo 202.031	3	Lin Thru 0	0.0	9936	0.00000	0.999985	
Ni 231.604	4	Lin Thru 0	0.0	42470	0.00000	0.999937	
Na 589.592	4	Lin Thru 0	0.0	6024	0.00000	0.999997	
Pb 220.353	3	Lin Thru 0	0.0	4587	0.00000	0.999969	
Sb 206.836	4	Lin Thru 0	0.0	1182	0.00000	0.999988	
Se 196.026	4	Lin Thru 0	0.0	586.9	0.00000	0.999941	
Sn 189.927	4	Lin Thru 0	0.0	3429	0.00000	0.999986	
Ti 337.279	3	Lin Thru 0	0.0	615600	0.00000	0.999978	
Tl 190.801	3	Lin Thru 0	0.0	1208	0.00000	0.999997	
V 292.402	4	Lin Thru 0	0.0	73680	0.00000	0.999979	
Zn 206.200	4	Lin Thru 0	0.0	19670	0.00000	0.999913	
Ca 227.546	4	Lin Thru 0	0.0	147.7	0.00000	0.999964	
Sr 421.552	3	Lin Thru 0	0.0	115700	0.00000	0.999995	

Sequence No.: 7 Autosampler Location: 3
Sample ID: ICV Date Collected: 6/6/2014 8:48:21 PM
Analyst: Data Type: Original

Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7268834.6	0.9946	mg/L	0.00342				0.34%
Ag 328.068†	141552.1	0.5095	mg/L	0.00103	0.5095	mg/L	0.00103	0.20%
QC value within limits for Ag 328.068 Recovery = 101.90%								
Al 308.215†	143748.9	9.616	mg/L	0.0290	9.616	mg/L	0.0290	0.30%
QC value within limits for Al 308.215 Recovery = 96.16%								
As 188.979†	910.8	1.018	mg/L	0.0008	1.018	mg/L	0.0008	0.08%
QC value within limits for As 188.979 Recovery = 101.83%								
B 249.772†	321165.9	2.545	mg/L	0.0050	2.545	mg/L	0.0050	0.20%
QC value within limits for B 249.772 Recovery = 101.80%								
Ba 233.527†	858773.4	10.24	mg/L	0.010	10.24	mg/L	0.010	0.10%
QC value within limits for Ba 233.527 Recovery = 102.39%								
Be 313.107†	871237.2	0.2529	mg/L	0.00056	0.2529	mg/L	0.00056	0.22%
QC value within limits for Be 313.107 Recovery = 101.18%								
Cd 226.502†	39959.7	0.5102	mg/L	0.00119	0.5102	mg/L	0.00119	0.23%
QC value within limits for Cd 226.502 Recovery = 102.04%								
Co 228.616†	51440.9	2.510	mg/L	0.0061	2.510	mg/L	0.0061	0.24%
QC value within limits for Co 228.616 Recovery = 100.41%								
Cr 267.716†	67768.4	0.5157	mg/L	0.00104	0.5157	mg/L	0.00104	0.20%
QC value within limits for Cr 267.716 Recovery = 103.13%								
Cu 324.752†	345579.2	1.239	mg/L	0.0027	1.239	mg/L	0.0027	0.22%
QC value within limits for Cu 324.752 Recovery = 99.14%								
Fe 259.939†	313569.2	5.016	mg/L	0.0105	5.016	mg/L	0.0105	0.21%
QC value within limits for Fe 259.939 Recovery = 100.32%								
K 766.490†	10465.6	25.06	mg/L	0.116	25.06	mg/L	0.116	0.46%
QC value within limits for K 766.490 Recovery = 100.24%								
Mg 279.077†	304138.4	25.18	mg/L	0.078	25.18	mg/L	0.078	0.31%
QC value within limits for Mg 279.077 Recovery = 100.71%								
Mn 257.610†	291205.2	0.7567	mg/L	0.00173	0.7567	mg/L	0.00173	0.23%
QC value within limits for Mn 257.610 Recovery = 100.89%								
Mo 202.031†	24543.8	2.470	mg/L	0.0047	2.470	mg/L	0.0047	0.19%
QC value within limits for Mo 202.031 Recovery = 98.81%								
Ni 231.604†	86633.3	2.040	mg/L	0.0047	2.040	mg/L	0.0047	0.23%
QC value within limits for Ni 231.604 Recovery = 101.98%								
Na 589.592†	155306.3	25.78	mg/L	0.000	25.78	mg/L	0.000	0.00%
QC value within limits for Na 589.592 Recovery = 103.13%								
Pb 220.353†	2300.5	0.5026	mg/L	0.00199	0.5026	mg/L	0.00199	0.40%
QC value within limits for Pb 220.353 Recovery = 100.52%								
Sb 206.836†	5987.0	5.065	mg/L	0.0195	5.065	mg/L	0.0195	0.38%
QC value within limits for Sb 206.836 Recovery = 101.30%								
Se 196.026†	299.0	0.5108	mg/L	0.00400	0.5108	mg/L	0.00400	0.78%
QC value within limits for Se 196.026 Recovery = 102.16%								
Sn 189.927†	16899.3	4.928	mg/L	0.0039	4.928	mg/L	0.0039	0.08%
QC value within limits for Sn 189.927 Recovery = 98.56%								
Ti 337.279†	1540447.4	2.502	mg/L	0.0046	2.502	mg/L	0.0046	0.18%
QC value within limits for Ti 337.279 Recovery = 100.10%								
Tl 190.801†	1203.8	0.9962	mg/L	0.00167	0.9962	mg/L	0.00167	0.17%
QC value within limits for Tl 190.801 Recovery = 99.62%								
V 292.402†	187398.9	2.543	mg/L	0.0037	2.543	mg/L	0.0037	0.15%
QC value within limits for V 292.402 Recovery = 101.73%								
Zn 206.200†	20557.2	1.045	mg/L	0.0011	1.045	mg/L	0.0011	0.10%
QC value within limits for Zn 206.200 Recovery = 104.52%								
Ca 227.546†	3559.7	24.41	mg/L	0.097	24.41	mg/L	0.097	0.40%
QC value within limits for Ca 227.546 Recovery = 97.62%								
Sr 421.552†	295013.9	2.550	mg/L	0.0026	2.550	mg/L	0.0026	0.10%
QC value within limits for Sr 421.552 Recovery = 102.01%								

All analyte(s) passed QC.

Sequence No.: 8 Autosampler Location: 1
Sample ID: ICB Date Collected: 6/6/2014 8:54:29 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7454618.3	1.020	mg/L	0.0202				1.98%
Ag 328.068†	115.0	0.0004	mg/L	0.00011	0.0004	mg/L	0.00011	27.73%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-455.1	-0.0304	mg/L	0.01658	-0.0304	mg/L	0.01658	54.45%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	2.9	0.0033	mg/L	0.00125	0.0033	mg/L	0.00125	38.48%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	7099.7	0.0568	mg/L	0.00673	0.0568	mg/L	0.00673	11.85%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	593.6	0.0071	mg/L	0.00193	0.0071	mg/L	0.00193	27.30%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	1120.5	0.0003	mg/L	0.00003	0.0003	mg/L	0.00003	8.91%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	31.9	0.0004	mg/L	0.00001	0.0004	mg/L	0.00001	2.29%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	53.6	0.0026	mg/L	0.00042	0.0026	mg/L	0.00042	15.93%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-26.8	-0.0002	mg/L	0.00012	-0.0002	mg/L	0.00012	58.37%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	1645.8	0.0059	mg/L	0.00154	0.0059	mg/L	0.00154	26.05%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	-555.2	-0.0089	mg/L	0.00143	-0.0089	mg/L	0.00143	16.10%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	-2.5	-0.0060	mg/L	0.04181	-0.0060	mg/L	0.04181	699.58%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	-212.3	-0.0176	mg/L	0.00307	-0.0176	mg/L	0.00307	17.47%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-7.8	0.0000	mg/L	0.00013	0.0000	mg/L	0.00013	601.81%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	27.1	0.0027	mg/L	0.00060	0.0027	mg/L	0.00060	22.13%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	129.2	0.0030	mg/L	0.00045	0.0030	mg/L	0.00045	14.68%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	225.9	0.0375	mg/L	0.00275	0.0375	mg/L	0.00275	7.34%
QC value within limits for Na 589.592 Recovery = Not calculated								
Pb 220.353†	5.9	0.0013	mg/L	0.00048	0.0013	mg/L	0.00048	37.08%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	10.3	0.0087	mg/L	0.00294	0.0087	mg/L	0.00294	33.85%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-1.1	-0.0019	mg/L	0.00081	-0.0019	mg/L	0.00081	42.51%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	36.2	0.0106	mg/L	0.00223	0.0106	mg/L	0.00223	21.12%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 337.279†	1358.8	0.0022	mg/L	0.00066	0.0022	mg/L	0.00066	29.94%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	0.4	0.0004	mg/L	0.00199	0.0004	mg/L	0.00199	557.10%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	164.2	0.0022	mg/L	0.00011	0.0022	mg/L	0.00011	4.96%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	105.2	0.0053	mg/L	0.00077	0.0053	mg/L	0.00077	14.42%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	-3.8	-0.0263	mg/L	0.01407	-0.0263	mg/L	0.01407	53.49%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Sr 421.552†	242.2	0.0021	mg/L	0.00065	0.0021	mg/L	0.00065	31.23%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 9
Sample ID: MRL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 6/6/2014 9:00:19 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MRL

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7421670.3	1.016	mg/L	0.0038				0.37%

Ag 328.068†	2907.8	0.0105 mg/L	0.00028	0.0105 mg/L	0.00028	2.65%
QC value within limits for Ag 328.068 Recovery = 104.62%						
Al 308.215†	2317.8	0.1551 mg/L	0.00114	0.1551 mg/L	0.00114	0.74%
QC value less than the lower limit for Al 308.215 Recovery = 77.53%						
As 188.979†	19.7	0.0220 mg/L	0.00078	0.0220 mg/L	0.00078	3.56%
QC value within limits for As 188.979 Recovery = 109.88%						
B 249.772†	29199.5	0.2330 mg/L	0.00120	0.2330 mg/L	0.00120	0.51%
QC value within limits for B 249.772 Recovery = 116.50%						
Ba 233.527†	18254.7	0.2176 mg/L	0.00124	0.2176 mg/L	0.00124	0.57%
QC value within limits for Ba 233.527 Recovery = 108.82%						
Be 313.107†	18446.7	0.0054 mg/L	0.00004	0.0054 mg/L	0.00004	0.78%
QC value within limits for Be 313.107 Recovery = 107.11%						
Cd 226.502†	845.8	0.0108 mg/L	0.00004	0.0108 mg/L	0.00004	0.36%
QC value within limits for Cd 226.502 Recovery = 108.01%						
Co 228.616†	1085.1	0.0529 mg/L	0.00006	0.0529 mg/L	0.00006	0.11%
QC value within limits for Co 228.616 Recovery = 105.90%						
Cr 267.716†	1332.0	0.0102 mg/L	0.00005	0.0102 mg/L	0.00005	0.46%
QC value within limits for Cr 267.716 Recovery = 101.98%						
Cu 324.752†	8027.7	0.0288 mg/L	0.00004	0.0288 mg/L	0.00004	0.13%
QC value within limits for Cu 324.752 Recovery = 115.14%						
Fe 259.939†	5496.5	0.0879 mg/L	0.00024	0.0879 mg/L	0.00024	0.27%
QC value within limits for Fe 259.939 Recovery = 87.93%						
K 766.490†	352.1	0.8430 mg/L	0.01156	0.8430 mg/L	0.01156	1.37%
QC value within limits for K 766.490 Recovery = 84.30%						
Mg 279.077†	11971.6	0.9911 mg/L	0.00582	0.9911 mg/L	0.00582	0.59%
QC value within limits for Mg 279.077 Recovery = 99.11%						
Mn 257.610†	5975.3	0.0155 mg/L	0.00011	0.0155 mg/L	0.00011	0.74%
QC value within limits for Mn 257.610 Recovery = 103.49%						
Mo 202.031†	272.1	0.0274 mg/L	0.00007	0.0274 mg/L	0.00007	0.26%
QC value within limits for Mo 202.031 Recovery = 109.56%						
Ni 231.604†	1820.7	0.0429 mg/L	0.00007	0.0429 mg/L	0.00007	0.16%
QC value within limits for Ni 231.604 Recovery = 107.16%						
Na 589.592†	6150.9	1.021 mg/L	0.0060	1.021 mg/L	0.0060	0.59%
QC value within limits for Na 589.592 Recovery = 102.11%						
Pb 220.353†	52.4	0.0114 mg/L	0.00030	0.0114 mg/L	0.00030	2.67%
QC value within limits for Pb 220.353 Recovery = 114.30%						
Sb 206.836†	78.5	0.0664 mg/L	0.00151	0.0664 mg/L	0.00151	2.27%
QC value within limits for Sb 206.836 Recovery = 110.67%						
Se 196.026†	4.4	0.0076 mg/L	0.00031	0.0076 mg/L	0.00031	4.03%
QC value less than the lower limit for Se 196.026 Recovery = 75.80%						
Sn 189.927†	1775.5	0.5177 mg/L	0.00157	0.5177 mg/L	0.00157	0.30%
QC value within limits for Sn 189.927 Recovery = 103.55%						
Ti 337.279†	32778.2	0.0532 mg/L	0.00029	0.0532 mg/L	0.00029	0.54%
QC value within limits for Ti 337.279 Recovery = 106.50%						
Tl 190.801†	25.8	0.0214 mg/L	0.00056	0.0214 mg/L	0.00056	2.63%
QC value within limits for Tl 190.801 Recovery = 106.82%						
V 292.402†	3982.7	0.0541 mg/L	0.00001	0.0541 mg/L	0.00001	0.02%
QC value within limits for V 292.402 Recovery = 108.10%						
Zn 206.200†	487.9	0.0248 mg/L	0.00039	0.0248 mg/L	0.00039	1.57%
QC value greater than the upper limit for Zn 206.200 Recovery = 124.03%						
Ca 227.546†	135.7	0.9239 mg/L	0.01153	0.9239 mg/L	0.01153	1.25%
QC value within limits for Ca 227.546 Recovery = 92.39%						
Sr 421.552†	12017.1	0.1039 mg/L	0.00036	0.1039 mg/L	0.00036	0.35%
QC value within limits for Sr 421.552 Recovery = 103.88%						

QC Failed. Continue with analysis.

Sequence No.: 10
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 6/6/2014 9:06:09 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7149152.9	0.9782	mg/L	0.01415				1.45%
Ag 328.068†	-7695.3	-0.0029	mg/L	0.00002	-0.0029	mg/L	0.00002	0.83%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	3825400.0	255.9	mg/L	2.14	255.9	mg/L	2.14	0.84%
QC value within limits for Al 308.215 Recovery = 102.36%								

As 188.979†	0.5	0.0051 mg/L	0.00107	0.0051 mg/L	0.00107	21.00%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.772†	43874.9	-0.0408 mg/L	0.00103	-0.0408 mg/L	0.00103	2.53%
Ba 233.527†	438.9	0.0052 mg/L	0.00002	0.0052 mg/L	0.00002	0.35%
Be 313.107†	-650.9	-0.0002 mg/L	0.00002	-0.0002 mg/L	0.00002	9.33%
QC value within limits for Be 313.107 Recovery = Not calculated						
Cd 226.502†	868.9	0.0002 mg/L	0.00009	0.0002 mg/L	0.00009	53.71%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	37.0	0.0018 mg/L	0.00046	0.0018 mg/L	0.00046	25.33%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-4092.3	0.0019 mg/L	0.00002	0.0019 mg/L	0.00002	0.97%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-1460.9	0.0049 mg/L	0.00030	0.0049 mg/L	0.00030	6.14%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 259.939†	5556296.8	88.88 mg/L	1.019	88.88 mg/L	1.019	1.15%
QC value within limits for Fe 259.939 Recovery = 88.88%						
K 766.490†	-11.5	-0.0275 mg/L	0.04537	-0.0275 mg/L	0.04537	164.80%
Mg 279.077†	3104752.3	257.0 mg/L	2.65	257.0 mg/L	2.65	1.03%
QC value within limits for Mg 279.077 Recovery = 102.81%						
Mn 257.610†	-5779.7	-0.0037 mg/L	0.00001	-0.0037 mg/L	0.00001	0.24%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	9.8	0.0010 mg/L	0.00062	0.0010 mg/L	0.00062	62.73%
Ni 231.604†	-60.5	-0.0014 mg/L	0.00016	-0.0014 mg/L	0.00016	11.37%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Na 589.592†	136.9	0.0227 mg/L	0.00148	0.0227 mg/L	0.00148	6.52%
Pb 220.353†	-131.5	0.0017 mg/L	0.00033	0.0017 mg/L	0.00033	19.80%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	25.8	-0.0026 mg/L	0.00061	-0.0026 mg/L	0.00061	23.68%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-14.8	0.0009 mg/L	0.00181	0.0009 mg/L	0.00181	209.98%
QC value within limits for Se 196.026 Recovery = Not calculated						
Sn 189.927†	-130.0	-0.0379 mg/L	0.00076	-0.0379 mg/L	0.00076	2.00%
Ti 337.279†	523.6	0.0009 mg/L	0.00003	0.0009 mg/L	0.00003	3.05%
Tl 190.801†	19.7	-0.0019 mg/L	0.00254	-0.0019 mg/L	0.00254	135.44%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	493.6	0.0028 mg/L	0.00041	0.0028 mg/L	0.00041	14.58%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	188.3	0.0096 mg/L	0.00065	0.0096 mg/L	0.00065	6.74%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	36871.7	255.2 mg/L	0.36	255.2 mg/L	0.36	0.14%
QC value within limits for Ca 227.546 Recovery = 102.10%						
Sr 421.552†	448.1	0.0039 mg/L	0.00012	0.0039 mg/L	0.00012	2.99%

All analyte(s) passed QC.

Sequence No.: 11 **Autosampler Location: 8**
Sample ID: ICSAB **Date Collected: 6/6/2014 9:12:04 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7095288.7	0.9709	mg/L	0.00868				0.89%
Ag 328.068†	51190.0	0.2084	mg/L	0.00259	0.2084	mg/L	0.00259	1.24%
QC value within limits for Ag 328.068 Recovery = 104.20%								
Al 308.215†	3795606.1	253.9	mg/L	0.72	253.9	mg/L	0.72	0.29%
QC value within limits for Al 308.215 Recovery = 101.56%								
As 188.979†	88.9	0.1040	mg/L	0.00293	0.1040	mg/L	0.00293	2.81%
QC value within limits for As 188.979 Recovery = 103.99%								
B 249.772†	42483.5	-0.0513	mg/L	0.00312	-0.0513	mg/L	0.00312	6.08%
Ba 233.527†	44050.2	0.5252	mg/L	0.00675	0.5252	mg/L	0.00675	1.28%
QC value within limits for Ba 233.527 Recovery = 105.04%								
Be 313.107†	1705671.4	0.4952	mg/L	0.00236	0.4952	mg/L	0.00236	0.48%
QC value within limits for Be 313.107 Recovery = 99.04%								
Cd 226.502†	75772.1	0.9577	mg/L	0.01161	0.9577	mg/L	0.01161	1.21%
QC value within limits for Cd 226.502 Recovery = 95.77%								
Co 228.616†	9824.3	0.4794	mg/L	0.00427	0.4794	mg/L	0.00427	0.89%
QC value within limits for Co 228.616 Recovery = 95.88%								
Cr 267.716†	62365.3	0.5045	mg/L	0.00704	0.5045	mg/L	0.00704	1.40%

	QC value within limits for Cr 267.716 Recovery = 100.89%					
Cu 324.752†	144491.1	0.5281 mg/L	0.00562	0.5281 mg/L	0.00562	1.06%
	QC value within limits for Cu 324.752 Recovery = 105.61%					
Fe 259.939†	5547201.0	88.74 mg/L	0.548	88.74 mg/L	0.548	0.62%
	QC value within limits for Fe 259.939 Recovery = 88.74%					
K 766.490†	3.4	0.0081 mg/L	0.09890	0.0081 mg/L	0.09890	>999.9%
Mg 279.077†	3103431.6	256.9 mg/L	1.25	256.9 mg/L	1.25	0.49%
	QC value within limits for Mg 279.077 Recovery = 102.77%					
Mn 257.610†	190108.7	0.5048 mg/L	0.00691	0.5048 mg/L	0.00691	1.37%
	QC value within limits for Mn 257.610 Recovery = 100.96%					
Mo 202.031†	5.2	0.0005 mg/L	0.00008	0.0005 mg/L	0.00008	14.52%
Ni 231.604†	40358.5	0.9502 mg/L	0.01240	0.9502 mg/L	0.01240	1.31%
	QC value within limits for Ni 231.604 Recovery = 95.02%					
Na 589.592†	111.6	0.0185 mg/L	0.00663	0.0185 mg/L	0.00663	35.80%
Pb 220.353†	101.8	0.0523 mg/L	0.00059	0.0523 mg/L	0.00059	1.13%
	QC value within limits for Pb 220.353 Recovery = 104.58%					
Sb 206.836†	764.1	0.6224 mg/L	0.00496	0.6224 mg/L	0.00496	0.80%
	QC value within limits for Sb 206.836 Recovery = 103.73%					
Se 196.026†	17.4	0.0556 mg/L	0.00104	0.0556 mg/L	0.00104	1.87%
	QC value within limits for Se 196.026 Recovery = 111.15%					
Sn 189.927†	-136.7	-0.0399 mg/L	0.00004	-0.0399 mg/L	0.00004	0.11%
Ti 337.279†	355.9	0.0006 mg/L	0.00005	0.0006 mg/L	0.00005	9.35%
Tl 190.801†	147.4	0.1040 mg/L	0.00109	0.1040 mg/L	0.00109	1.04%
	QC value within limits for Tl 190.801 Recovery = 103.99%					
V 292.402†	36362.9	0.4896 mg/L	0.00793	0.4896 mg/L	0.00793	1.62%
	QC value within limits for V 292.402 Recovery = 97.93%					
Zn 206.200†	18542.3	0.9427 mg/L	0.00891	0.9427 mg/L	0.00891	0.95%
	QC value within limits for Zn 206.200 Recovery = 94.27%					
Ca 227.546†	36913.0	255.5 mg/L	3.54	255.5 mg/L	3.54	1.38%
	QC value within limits for Ca 227.546 Recovery = 102.21%					
Sr 421.552†	382.0	0.0033 mg/L	0.00032	0.0033 mg/L	0.00032	9.65%

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 6/6/2014 9:18:03 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7214569.3	0.9872	mg/L	0.00006				0.01%
Ag 328.068†	140566.8	0.5060	mg/L	0.00648	0.5060	mg/L	0.00648	1.28%
	QC value within limits for Ag 328.068 Recovery = 101.20%							
Al 308.215†	147629.4	9.876	mg/L	0.1278	9.876	mg/L	0.1278	1.29%
	QC value within limits for Al 308.215 Recovery = 98.76%							
As 188.979†	916.7	1.025	mg/L	0.0060	1.025	mg/L	0.0060	0.58%
	QC value within limits for As 188.979 Recovery = 102.50%							
B 249.772†	318863.7	2.526	mg/L	0.0623	2.526	mg/L	0.0623	2.47%
	QC value within limits for B 249.772 Recovery = 101.04%							
Ba 233.527†	872079.5	10.40	mg/L	0.002	10.40	mg/L	0.002	0.02%
	QC value within limits for Ba 233.527 Recovery = 103.97%							
Be 313.107†	880615.6	0.2557	mg/L	0.00011	0.2557	mg/L	0.00011	0.04%
	QC value within limits for Be 313.107 Recovery = 102.27%							
Cd 226.502†	40696.1	0.5196	mg/L	0.00326	0.5196	mg/L	0.00326	0.63%
	QC value within limits for Cd 226.502 Recovery = 103.92%							
Co 228.616†	52417.5	2.558	mg/L	0.0224	2.558	mg/L	0.0224	0.88%
	QC value within limits for Co 228.616 Recovery = 102.32%							
Cr 267.716†	68497.8	0.5212	mg/L	0.00557	0.5212	mg/L	0.00557	1.07%
	QC value within limits for Cr 267.716 Recovery = 104.25%							
Cu 324.752†	349338.9	1.253	mg/L	0.0204	1.253	mg/L	0.0204	1.63%
	QC value within limits for Cu 324.752 Recovery = 100.22%							
Fe 259.939†	321996.6	5.151	mg/L	0.0349	5.151	mg/L	0.0349	0.68%
	QC value within limits for Fe 259.939 Recovery = 103.02%							
K 766.490†	9905.8	23.72	mg/L	0.288	23.72	mg/L	0.288	1.21%
	QC value within limits for K 766.490 Recovery = 94.88%							
Mg 279.077†	310005.4	25.66	mg/L	0.199	25.66	mg/L	0.199	0.77%
	QC value within limits for Mg 279.077 Recovery = 102.66%							
Mn 257.610†	296116.5	0.7694	mg/L	0.00706	0.7694	mg/L	0.00706	0.92%

QC value within limits for Mn 257.610 Recovery = 102.59%

Mo 202.031†	24846.4	2.501 mg/L	0.0272	2.501 mg/L	0.0272	1.09%

QC value within limits for Mo 202.031 Recovery = 100.03%

Ni 231.604†	87802.9	2.067 mg/L	0.0192	2.067 mg/L	0.0192	0.93%

QC value within limits for Ni 231.604 Recovery = 103.36%

Na 589.592†	147351.2	24.46 mg/L	0.042	24.46 mg/L	0.042	0.17%

QC value within limits for Na 589.592 Recovery = 97.85%

Pb 220.353†	2336.7	0.5105 mg/L	0.00225	0.5105 mg/L	0.00225	0.44%

QC value within limits for Pb 220.353 Recovery = 102.10%

Sb 206.836†	5978.7	5.058 mg/L	0.0394	5.058 mg/L	0.0394	0.78%

QC value within limits for Sb 206.836 Recovery = 101.16%

Se 196.026†	307.5	0.5253 mg/L	0.00284	0.5253 mg/L	0.00284	0.54%

QC value within limits for Se 196.026 Recovery = 105.06%

Sn 189.927†	17218.1	5.021 mg/L	0.0541	5.021 mg/L	0.0541	1.08%

QC value within limits for Sn 189.927 Recovery = 100.41%

Ti 337.279†	1546979.1	2.513 mg/L	0.0033	2.513 mg/L	0.0033	0.13%

QC value within limits for Ti 337.279 Recovery = 100.52%

Tl 190.801†	1217.0	1.007 mg/L	0.0056	1.007 mg/L	0.0056	0.55%

QC value within limits for Tl 190.801 Recovery = 100.71%

V 292.402†	185834.4	2.522 mg/L	0.0130	2.522 mg/L	0.0130	0.52%

QC value within limits for V 292.402 Recovery = 100.88%

Zn 206.200†	21107.2	1.073 mg/L	0.0002	1.073 mg/L	0.0002	0.02%

QC value within limits for Zn 206.200 Recovery = 107.31%

Ca 227.546†	3584.1	24.58 mg/L	0.221	24.58 mg/L	0.221	0.90%

QC value within limits for Ca 227.546 Recovery = 98.32%

Sr 421.552†	280109.9	2.421 mg/L	0.0174	2.421 mg/L	0.0174	0.72%

QC value within limits for Sr 421.552 Recovery = 96.85%

All analyte(s) passed QC.

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Sequence No.: 13
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 6/6/2014 9:24:23 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7311170.7	1.000	mg/L	0.0028				0.28%
Ag 328.068†	86.4	0.0003	mg/L	0.00018	0.0003	mg/L	0.00018	56.22%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	778.7	0.0521	mg/L	0.00527	0.0521	mg/L	0.00527	10.12%
QC value greater than the upper limit for Al 308.215 Recovery = Not calculated								
As 188.979†	3.3	0.0037	mg/L	0.00096	0.0037	mg/L	0.00096	26.24%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	6063.4	0.0484	mg/L	0.00440	0.0484	mg/L	0.00440	9.08%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	379.1	0.0045	mg/L	0.00120	0.0045	mg/L	0.00120	26.56%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	628.7	0.0002	mg/L	0.00006	0.0002	mg/L	0.00006	30.68%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	28.1	0.0004	mg/L	0.00014	0.0004	mg/L	0.00014	40.19%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	27.2	0.0013	mg/L	0.00043	0.0013	mg/L	0.00043	32.43%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-80.0	-0.0006	mg/L	0.00001	-0.0006	mg/L	0.00001	1.82%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	1642.7	0.0059	mg/L	0.00069	0.0059	mg/L	0.00069	11.65%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	510.8	0.0082	mg/L	0.00205	0.0082	mg/L	0.00205	25.13%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	-53.5	-0.1280	mg/L	0.01670	-0.1280	mg/L	0.01670	13.05%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	571.7	0.0473	mg/L	0.00873	0.0473	mg/L	0.00873	18.45%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-174.7	-0.0005	mg/L	0.00013	-0.0005	mg/L	0.00013	28.59%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	19.0	0.0019	mg/L	0.00010	0.0019	mg/L	0.00010	5.47%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	72.7	0.0017	mg/L	0.00026	0.0017	mg/L	0.00026	15.35%

	QC value within limits for Ni 231.604 Recovery = Not calculated						
Na 589.592†	140.6	0.0233	mg/L	0.00269	0.0233	mg/L	0.00269 11.53%
	QC value within limits for Na 589.592 Recovery = Not calculated						
Pb 220.353†	4.6	0.0010	mg/L	0.00041	0.0010	mg/L	0.00041 40.42%
	QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	8.8	0.0074	mg/L	0.00076	0.0074	mg/L	0.00076 10.27%
	QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-1.7	-0.0029	mg/L	0.00026	-0.0029	mg/L	0.00026 9.12%
	QC value within limits for Se 196.026 Recovery = Not calculated						
Sn 189.927†	25.1	0.0073	mg/L	0.00169	0.0073	mg/L	0.00169 23.13%
	QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 337.279†	820.2	0.0013	mg/L	0.00016	0.0013	mg/L	0.00016 12.19%
	QC value within limits for Ti 337.279 Recovery = Not calculated						
Tl 190.801†	0.6	0.0005	mg/L	0.00039	0.0005	mg/L	0.00039 77.80%
	QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	124.9	0.0017	mg/L	0.00018	0.0017	mg/L	0.00018 10.56%
	QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	94.2	0.0048	mg/L	0.00102	0.0048	mg/L	0.00102 21.37%
	QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	1.6	0.0117	mg/L	0.01023	0.0117	mg/L	0.01023 87.45%
	QC value within limits for Ca 227.546 Recovery = Not calculated						
Sr 421.552†	121.9	0.0011	mg/L	0.00004	0.0011	mg/L	0.00004 4.03%
	QC value within limits for Sr 421.552 Recovery = Not calculated						

QC Failed. Continue with analysis.

Sequence No.: 14
Sample ID: PBW-209881
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 38
Date Collected: 6/6/2014 9:30:19 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: PBW-209881

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7586044.9	1.038	mg/L	0.0061				0.59%
Ag 328.068†	33.6	0.0001	mg/L	0.00005				46.21%
Al 308.215†	-278.7	-0.0186	mg/L	0.00232				12.42%
As 188.979†	-0.8	-0.0009	mg/L	0.00164				173.41%
B 249.772†	3571.3	0.0287	mg/L	0.00189				6.57%
Ba 233.527†	57.5	0.0007	mg/L	0.00028				41.17%
Be 313.107†	309.4	0.0001	mg/L	0.00005				50.95%
Cd 226.502†	-12.5	-0.0002	mg/L	0.00002				15.01%
Co 228.616†	-14.7	-0.0007	mg/L	0.00007				10.23%
Cr 267.716†	-72.7	-0.0006	mg/L	0.00000				0.41%
Cu 324.752†	182.0	0.0006	mg/L	0.00020				31.58%
Fe 259.939†	-2495.6	-0.0399	mg/L	0.00172				4.32%
K 766.490†	-33.3	-0.0796	mg/L	0.00246				3.09%
Mg 279.077†	-227.0	-0.0188	mg/L	0.00775				41.26%
Mn 257.610†	-339.4	-0.0009	mg/L	0.00008				9.35%
Mo 202.031†	1.0	0.0001	mg/L	0.00007				67.07%
Ni 231.604†	-23.3	-0.0005	mg/L	0.00024				43.69%
Na 589.592†	7.5	0.0012	mg/L	0.00063				50.45%
Pb 220.353†	-0.0	0.0000	mg/L	0.00070				>999.9%
Sb 206.836†	6.1	0.0052	mg/L	0.00125				24.20%
Se 196.026†	-0.7	-0.0012	mg/L	0.00377				311.41%
Sn 189.927†	-106.2	-0.0310	mg/L	0.00038				1.24%
Ti 337.279†	449.8	0.0007	mg/L	0.00003				4.04%
Tl 190.801†	-6.5	-0.0053	mg/L	0.00144				26.91%
V 292.402†	30.7	0.0004	mg/L	0.00014				33.06%
Zn 206.200†	1.9	0.0001	mg/L	0.00003				35.42%
Ca 227.546†	-4.6	-0.0335	mg/L	0.01957				58.49%
Sr 421.552†	-15.9	-0.0001	mg/L	0.00020				144.33%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 15
Sample ID: LCSW-209881
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 39
Date Collected: 6/6/2014 9:36:13 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: LCSW-209881

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7531090.0	1.031	mg/L	0.0067				0.65%
Ag 328.068†	14284.6	0.0515	mg/L	0.00063				1.22%
Al 308.215†	28025.3	1.875	mg/L	0.0143				0.76%
As 188.979†	34.8	0.0389	mg/L	0.00162				4.15%
B 249.772†	122698.5	0.9764	mg/L	0.00069				0.07%
Ba 233.527†	170096.5	2.028	mg/L	0.0117				0.58%
Be 313.107†	171089.9	0.0497	mg/L	0.00009				0.18%
Cd 226.502†	3895.5	0.0497	mg/L	0.00014				0.29%
Co 228.616†	10211.6	0.4983	mg/L	0.00231				0.46%
Cr 267.716†	27358.5	0.2071	mg/L	0.00124				0.60%
Cu 324.752†	73554.4	0.2638	mg/L	0.00196				0.74%
Fe 259.939†	61062.0	0.9768	mg/L	0.00689				0.71%
K 766.490†	7536.4	18.05	mg/L	0.038				0.21%
Mg 279.077†	23564.5	1.951	mg/L	0.0082				0.42%
Mn 257.610†	194214.4	0.5043	mg/L	0.00248				0.49%
Mo 202.031†	4901.7	0.4933	mg/L	0.00213				0.43%
Ni 231.604†	22043.4	0.5190	mg/L	0.00217				0.42%
Na 589.592†	117410.6	19.49	mg/L	0.113				0.58%
Pb 220.353†	2305.9	0.5029	mg/L	0.00397				0.79%
Sb 206.836†	582.3	0.4925	mg/L	0.00754				1.53%
Se 196.026†	588.0	1.002	mg/L	0.0081				0.81%
Sn 189.927†	18420.5	5.371	mg/L	0.0258				0.48%
Ti 337.279†	307429.0	0.4994	mg/L	0.00302				0.61%
Tl 190.801†	2291.0	1.897	mg/L	0.0125				0.66%
V 292.402†	36447.4	0.4946	mg/L	0.00196				0.40%
Zn 206.200†	10390.9	0.5283	mg/L	0.00313				0.59%
Ca 227.546†	276.5	1.931	mg/L	0.0288				1.49%
Sr 421.552†	11.9	0.0001	mg/L	0.00005				45.38%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 16
Sample ID: R1403922-001 10X
Analyst:
Initial Sample Wt:
Dilution: 10X

Autosampler Location: 40
Date Collected: 6/6/2014 9:42:18 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403922-001 10X

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7210149.7	0.9866	mg/L	0.01291				1.31%
Ag 328.068†	-35.0	-0.0001	mg/L	0.00030				221.58%
Al 308.215†	9.6	0.0006	mg/L	0.01092				>999.9%
As 188.979†	1.3	0.0014	mg/L	0.00111				78.78%
B 249.772†	5266.0	0.0423	mg/L	0.00307				7.27%
Ba 233.527†	216.7	0.0026	mg/L	0.00010				3.74%
Be 313.107†	-350.0	-0.0001	mg/L	0.00007				70.90%
Cd 226.502†	-10.5	-0.0001	mg/L	0.00006				49.64%
Co 228.616†	-10.4	-0.0005	mg/L	0.00009				18.62%
Cr 267.716†	-288.2	-0.0016	mg/L	0.00003				1.77%
Cu 324.752†	689.9	0.0025	mg/L	0.00050				20.27%
Fe 259.939†	-2636.6	-0.0422	mg/L	0.00077				1.83%
K 766.490†	426.0	1.020	mg/L	0.0284				2.78%
Mg 279.077†	52776.7	4.369	mg/L	0.0692				1.58%
Mn 257.610†	238.9	0.0006	mg/L	0.00002				3.81%
Mo 202.031†	18.5	0.0019	mg/L	0.00015				7.81%
Ni 231.604†	137.3	0.0032	mg/L	0.00011				3.35%
Na 589.592†	2935462.9	487.3	mg/L	8.42				1.73%
Pb 220.353†	5.2	0.0011	mg/L	0.00064				57.12%
Sb 206.836†	4.1	0.0034	mg/L	0.00103				29.73%
Se 196.026†	0.0	0.0000	mg/L	0.00195				>999.9%
Sn 189.927†	-133.1	-0.0388	mg/L	0.00110				2.84%
Ti 337.279†	174.9	0.0003	mg/L	0.00010				34.34%
Tl 190.801†	0.2	0.0000	mg/L	0.00267				>999.9%
V 292.402†	23.9	0.0003	mg/L	0.00032				96.68%
Zn 206.200†	66.2	0.0034	mg/L	0.00014				4.05%

Ca 227.546†	2759.3	18.68	mg/L	0.151	0.81%
Sr 421.552†	80769.1	0.6982	mg/L	0.01366	1.96%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 17
Sample ID: R1403933-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 41
Date Collected: 6/6/2014 9:48:22 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403933-001

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7706767.5	1.055	mg/L	0.0036				0.34%
Ag 328.068†	-107.3	-0.0001	mg/L	0.00009				127.73%
Al 308.215†	9993.9	0.6685	mg/L	0.01430				2.14%
As 188.979†	0.5	0.0006	mg/L	0.00057				91.27%
B 249.772†	2566.0	0.0156	mg/L	0.00140				8.95%
Ba 233.527†	855.7	0.0102	mg/L	0.00008				0.76%
Be 313.107†	121.6	0.0000	mg/L	0.00001				42.37%
Cd 226.502†	9.4	0.0000	mg/L	0.00002				76.24%
Co 228.616†	14.1	0.0007	mg/L	0.00009				13.51%
Cr 267.716†	236.2	0.0020	mg/L	0.00000				0.24%
Cu 324.752†	4836.7	0.0175	mg/L	0.00023				1.33%
Fe 259.939†	69983.5	1.119	mg/L	0.0105				0.94%
K 766.490†	109.8	0.2628	mg/L	0.03365				12.80%
Mg 279.077†	16363.0	1.355	mg/L	0.0207				1.53%
Mn 257.610†	14617.5	0.0381	mg/L	0.00060				1.58%
Mo 202.031†	17.0	0.0017	mg/L	0.00007				3.85%
Ni 231.604†	161.4	0.0038	mg/L	0.00024				6.27%
Na 589.592†	17616.4	2.925	mg/L	0.0046				0.16%
Pb 220.353†	298.0	0.0650	mg/L	0.00096				1.47%
Sb 206.836†	3.6	0.0030	mg/L	0.00065				21.55%
Se 196.026†	0.5	0.0011	mg/L	0.00157				145.27%
Sn 189.927†	-117.1	-0.0342	mg/L	0.00001				0.02%
Ti 337.279†	11171.3	0.0181	mg/L	0.00055				3.04%
Tl 190.801†	-5.3	-0.0044	mg/L	0.00164				37.33%
V 292.402†	458.3	0.0062	mg/L	0.00003				0.52%
Zn 206.200†	3212.7	0.1633	mg/L	0.00054				0.33%
Ca 227.546†	398.2	2.759	mg/L	0.0256				0.93%
Sr 421.552†	723.7	0.0063	mg/L	0.00023				3.65%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 18
Sample ID: R1403933-001D
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 42
Date Collected: 6/6/2014 9:54:15 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403933-001D

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7713662.3	1.055	mg/L	0.0078				0.74%
Ag 328.068†	-136.9	-0.0002	mg/L	0.00023				134.44%
Al 308.215†	10749.0	0.7191	mg/L	0.01204				1.67%
As 188.979†	1.1	0.0013	mg/L	0.00048				38.17%
B 249.772†	1873.3	0.0099	mg/L	0.00062				6.27%
Ba 233.527†	928.5	0.0111	mg/L	0.00001				0.07%
Be 313.107†	17.3	0.0000	mg/L	0.00002				407.64%
Cd 226.502†	13.3	0.0000	mg/L	0.00007				397.89%
Co 228.616†	-1.9	-0.0001	mg/L	0.00013				141.44%
Cr 267.716†	316.0	0.0026	mg/L	0.00007				2.58%
Cu 324.752†	5065.9	0.0183	mg/L	0.00033				1.78%
Fe 259.939†	72423.7	1.159	mg/L	0.0117				1.01%
K 766.490†	115.3	0.2761	mg/L	0.01685				6.10%
Mg 279.077†	17120.3	1.417	mg/L	0.0070				0.49%
Mn 257.610†	14849.5	0.0387	mg/L	0.00030				0.77%
Mo 202.031†	16.1	0.0016	mg/L	0.00009				5.31%

Ni 231.604†	119.2	0.0028	mg/L	0.00022	7.67%
Na 589.592†	22680.8	3.765	mg/L	0.0133	0.35%
Pb 220.353†	301.4	0.0658	mg/L	0.00014	0.22%
Sb 206.836†	3.1	0.0026	mg/L	0.00016	6.28%
Se 196.026†	0.5	0.0011	mg/L	0.00058	51.72%
Sn 189.927†	-114.2	-0.0333	mg/L	0.00021	0.63%
Ti 337.279†	12012.8	0.0195	mg/L	0.00001	0.06%
Tl 190.801†	-2.3	-0.0019	mg/L	0.00079	41.39%
V 292.402†	445.8	0.0060	mg/L	0.00010	1.70%
Zn 206.200†	3201.9	0.1628	mg/L	0.00089	0.55%
Ca 227.546†	419.8	2.908	mg/L	0.0264	0.91%
Sr 421.552†	776.5	0.0067	mg/L	0.00010	1.46%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 19
Sample ID: R1403933-001S
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 43
Date Collected: 6/6/2014 10:00:09 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403933-001S

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7564274.6	1.035	mg/L	0.0002				0.02%
Ag 328.068†	14137.5	0.0513	mg/L	0.00048				0.93%
Al 308.215†	37230.7	2.491	mg/L	0.0195				0.78%
As 188.979†	35.9	0.0402	mg/L	0.00258				6.42%
B 249.772†	122590.1	0.9709	mg/L	0.01312				1.35%
Ba 233.527†	173084.7	2.064	mg/L	0.0149				0.72%
Be 313.107†	169630.6	0.0492	mg/L	0.00020				0.40%
Cd 226.502†	3909.6	0.0497	mg/L	0.00008				0.17%
Co 228.616†	10251.9	0.5003	mg/L	0.00420				0.84%
Cr 267.716†	27685.2	0.2098	mg/L	0.00186				0.89%
Cu 324.752†	78078.4	0.2801	mg/L	0.00232				0.83%
Fe 259.939†	127474.5	2.039	mg/L	0.0126				0.62%
K 766.490†	7701.9	18.44	mg/L	0.054				0.29%
Mg 279.077†	40081.1	3.318	mg/L	0.0186				0.56%
Mn 257.610†	211006.4	0.5481	mg/L	0.00366				0.67%
Mo 202.031†	4898.9	0.4931	mg/L	0.00212				0.43%
Ni 231.604†	22229.0	0.5234	mg/L	0.00457				0.87%
Na 589.592†	134379.7	22.31	mg/L	0.149				0.67%
Pb 220.353†	2607.6	0.5687	mg/L	0.00193				0.34%
Sb 206.836†	574.9	0.4863	mg/L	0.00229				0.47%
Se 196.026†	595.2	1.015	mg/L	0.0050				0.49%
Sn 189.927†	19003.4	5.541	mg/L	0.0560				1.01%
Ti 337.279†	316121.1	0.5135	mg/L	0.00327				0.64%
Tl 190.801†	2294.9	1.900	mg/L	0.0036				0.19%
V 292.402†	36647.6	0.4973	mg/L	0.00578				1.16%
Zn 206.200†	13694.4	0.6963	mg/L	0.00464				0.67%
Ca 227.546†	681.0	4.729	mg/L	0.0273				0.58%
Sr 421.552†	694.6	0.0060	mg/L	0.00034				5.62%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 20
Sample ID: R1403933-001A
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 44
Date Collected: 6/6/2014 10:06:13 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403933-001A

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7563416.1	1.035	mg/L	0.0020				0.19%
Ag 328.068†	11202.3	0.0408	mg/L	0.00023				0.56%
Al 308.215†	37883.1	2.534	mg/L	0.0263				1.04%
As 188.979†	31.2	0.0350	mg/L	0.00194				5.54%
B 249.772†	121266.8	0.9602	mg/L	0.01143				1.19%
Ba 233.527†	166907.0	1.990	mg/L	0.0105				0.53%

Be 313.107†	162905.3	0.0473 mg/L	0.00001	0.02%
Cd 226.502†	3764.8	0.0479 mg/L	0.00009	0.19%
Co 228.616†	9930.4	0.4846 mg/L	0.00192	0.40%
Cr 267.716†	26865.4	0.2036 mg/L	0.00143	0.70%
Cu 324.752†	75318.8	0.2702 mg/L	0.00195	0.72%
Fe 259.939†	129906.6	2.078 mg/L	0.0082	0.40%
K 766.490†	7667.7	18.36 mg/L	0.060	0.33%
Mg 279.077†	39580.3	3.277 mg/L	0.0124	0.38%
Mn 257.610†	203855.6	0.5295 mg/L	0.00300	0.57%
Mo 202.031†	5425.9	0.5461 mg/L	0.00188	0.34%
Ni 231.604†	21448.7	0.5050 mg/L	0.00206	0.41%
Na 589.592†	130922.9	21.74 mg/L	0.149	0.69%
Pb 220.353†	2542.1	0.5544 mg/L	0.00286	0.52%
Sb 206.836†	646.3	0.5466 mg/L	0.00218	0.40%
Se 196.026†	4.8	0.0086 mg/L	0.00053	6.12%
Sn 189.927†	-114.6	-0.0334 mg/L	0.00026	0.79%
Ti 337.279†	353367.0	0.5740 mg/L	0.00027	0.05%
Tl 190.801†	2220.2	1.839 mg/L	0.0058	0.31%
V 292.402†	35366.0	0.4799 mg/L	0.00328	0.68%
Zn 206.200†	13511.1	0.6869 mg/L	0.00379	0.55%
Ca 227.546†	679.6	4.722 mg/L	0.0200	0.42%
Sr 421.552†	725.7	0.0063 mg/L	0.00006	0.89%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 21
Sample ID: R1403933-001L
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 45
Date Collected: 6/6/2014 10:12:18 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403933-001L

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6780402.3	0.9278	mg/L	0.10676				11.51%
Ag 328.068†	-53.5	-0.0001	mg/L	0.00028				215.69%
Al 308.215†	3404.0	0.2277	mg/L	0.13593				59.70%
As 188.979†	-0.5	-0.0006	mg/L	0.00060				103.16%
B 249.772†	3495.3	0.0269	mg/L	0.00159				5.89%
Ba 233.527†	168.0	0.0020	mg/L	0.00049				24.44%
Be 313.107†	-1660.4	-0.0005	mg/L	0.00059				121.46%
Cd 226.502†	-25.1	-0.0003	mg/L	0.00040				114.85%
Co 228.616†	-15.6	-0.0008	mg/L	0.00015				20.15%
Cr 267.716†	-112.5	-0.0008	mg/L	0.00021				25.76%
Cu 324.752†	2176.6	0.0078	mg/L	0.00466				59.58%
Fe 259.939†	14122.5	0.2259	mg/L	0.03727				16.50%
K 766.490†	25.2	0.0603	mg/L	0.16739				277.51%
Mg 279.077†	2758.5	0.2284	mg/L	0.01055				4.62%
Mn 257.610†	2853.5	0.0074	mg/L	0.00077				10.34%
Mo 202.031†	8.2	0.0008	mg/L	0.00009				11.38%
Ni 231.604†	-30.8	-0.0007	mg/L	0.00037				51.68%
Na 589.592†	4111.3	0.6825	mg/L	0.07652				11.21%
Pb 220.353†	68.5	0.0149	mg/L	0.00025				1.69%
Sb 206.836†	6.6	0.0055	mg/L	0.00446				80.51%
Se 196.026†	-1.3	-0.0022	mg/L	0.00284				129.51%
Sn 189.927†	-62.7	-0.0183	mg/L	0.00329				18.00%
Ti 337.279†	2706.5	0.0044	mg/L	0.00066				15.05%
Tl 190.801†	0.8	0.0006	mg/L	0.00124				197.14%
V 292.402†	146.7	0.0020	mg/L	0.00031				15.57%
Zn 206.200†	802.9	0.0408	mg/L	0.00535				13.11%
Ca 227.546†	82.5	0.5716	mg/L	0.04484				7.84%
Sr 421.552†	160.9	0.0014	mg/L	0.00019				13.64%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 22
Sample ID: R1403941-001 10X
Analyst:
Initial Sample Wt:
Dilution: 10X

Autosampler Location: 46
Date Collected: 6/6/2014 10:18:14 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403941-001 10X

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7355383.2	1.006	mg/L	0.0035				0.34%
Ag 328.068†	-22.5	-0.0001	mg/L	0.00013				177.16%
Al 308.215†	239.9	0.0160	mg/L	0.00014				0.84%
As 188.979†	0.3	0.0003	mg/L	0.00208				600.35%
B 249.772†	1939.4	0.0154	mg/L	0.00069				4.46%
Ba 233.527†	332.3	0.0040	mg/L	0.00007				1.72%
Be 313.107†	-43.0	0.0000	mg/L	0.00002				147.45%
Cd 226.502†	-9.8	-0.0001	mg/L	0.00004				31.34%
Co 228.616†	-20.0	-0.0010	mg/L	0.00017				17.69%
Cr 267.716†	-236.9	-0.0015	mg/L	0.00002				1.33%
Cu 324.752†	1404.3	0.0050	mg/L	0.00003				0.62%
Fe 259.939†	1116.3	0.0179	mg/L	0.00017				0.96%
K 766.490†	147.0	0.3519	mg/L	0.10835				30.79%
Mg 279.077†	28568.5	2.365	mg/L	0.0104				0.44%
Mn 257.610†	189.0	0.0005	mg/L	0.00003				6.48%
Mo 202.031†	27.1	0.0027	mg/L	0.00041				14.92%
Ni 231.604†	38.2	0.0009	mg/L	0.00004				4.68%
Na 589.592†	303495.7	50.38	mg/L	0.436				0.87%
Pb 220.353†	3.0	0.0006	mg/L	0.00097				149.85%
Sb 206.836†	2.5	0.0021	mg/L	0.00010				4.62%
Se 196.026†	-0.3	-0.0006	mg/L	0.00190				329.84%
Sn 189.927†	-97.5	-0.0284	mg/L	0.00052				1.83%
Ti 337.279†	248.6	0.0004	mg/L	0.00000				0.48%
Tl 190.801†	-1.8	-0.0015	mg/L	0.00182				118.25%
V 292.402†	28.8	0.0004	mg/L	0.00019				49.22%
Zn 206.200†	81.8	0.0042	mg/L	0.00017				4.11%
Ca 227.546†	1074.3	7.276	mg/L	0.0176				0.24%
Sr 421.552†	2507.3	0.0217	mg/L	0.00010				0.48%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 23
Sample ID: R1403955-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 47
Date Collected: 6/6/2014 10:24:18 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403955-001

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7315667.4	1.001	mg/L	0.0016				0.16%
Ag 328.068†	-318.9	-0.0010	mg/L	0.00019				18.32%
Al 308.215†	1395.1	0.0933	mg/L	0.00605				6.48%
As 188.979†	0.1	0.0001	mg/L	0.00116				901.44%
B 249.772†	3627.1	0.0272	mg/L	0.00015				0.56%
Ba 233.527†	3205.1	0.0382	mg/L	0.00012				0.30%
Be 313.107†	-656.4	-0.0002	mg/L	0.00001				7.04%
Cd 226.502†	-13.0	-0.0002	mg/L	0.00013				56.91%
Co 228.616†	-23.9	-0.0012	mg/L	0.00002				1.71%
Cr 267.716†	-583.6	-0.0024	mg/L	0.00013				5.47%
Cu 324.752†	300.3	0.0011	mg/L	0.00030				26.57%
Fe 259.939†	25855.5	0.4136	mg/L	0.00039				0.09%
K 766.490†	505.8	1.211	mg/L	0.0173				1.43%
Mg 279.077†	191020.3	15.81	mg/L	0.062				0.39%
Mn 257.610†	40056.4	0.1040	mg/L	0.00062				0.59%
Mo 202.031†	27.7	0.0028	mg/L	0.00026				9.28%
Ni 231.604†	-38.3	-0.0009	mg/L	0.00009				10.25%
Na 589.592†	605260.7	100.5	mg/L	0.11				0.11%
Pb 220.353†	1.7	0.0004	mg/L	0.00081				215.66%
Sb 206.836†	2.4	0.0021	mg/L	0.00134				65.11%
Se 196.026†	-1.8	-0.0030	mg/L	0.00123				40.45%
Sn 189.927†	-254.5	-0.0742	mg/L	0.00002				0.03%
Ti 337.279†	1066.0	0.0017	mg/L	0.00005				2.83%
Tl 190.801†	1.8	0.0009	mg/L	0.00097				114.22%
V 292.402†	54.1	0.0007	mg/L	0.00015				20.74%
Zn 206.200†	150.0	0.0076	mg/L	0.00005				0.71%
Ca 227.546†	10196.0	69.07	mg/L	0.577				0.84%

Sr 421.552† 47764.6 0.4129 mg/L 0.00506 1.23%
Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 24
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 6/6/2014 10:30:21 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7282104.3	0.9964	mg/L	0.00926				0.93%
Ag 328.068†	141460.2	0.5092	mg/L	0.00848	0.5092	mg/L	0.00848	1.67%
QC value within limits for Ag 328.068 Recovery = 101.84%								
Al 308.215†	146246.5	9.783	mg/L	0.1966	9.783	mg/L	0.1966	2.01%
QC value within limits for Al 308.215 Recovery = 97.83%								
As 188.979†	898.1	1.004	mg/L	0.0053	1.004	mg/L	0.0053	0.53%
QC value within limits for As 188.979 Recovery = 100.42%								
B 249.772†	314552.5	2.492	mg/L	0.0280	2.492	mg/L	0.0280	1.13%
QC value within limits for B 249.772 Recovery = 99.68%								
Ba 233.527†	869558.0	10.37	mg/L	0.014	10.37	mg/L	0.014	0.14%
QC value within limits for Ba 233.527 Recovery = 103.67%								
Be 313.107†	878671.0	0.2551	mg/L	0.00058	0.2551	mg/L	0.00058	0.23%
QC value within limits for Be 313.107 Recovery = 102.04%								
Cd 226.502†	40196.6	0.5132	mg/L	0.00812	0.5132	mg/L	0.00812	1.58%
QC value within limits for Cd 226.502 Recovery = 102.64%								
Co 228.616†	52188.3	2.547	mg/L	0.0438	2.547	mg/L	0.0438	1.72%
QC value within limits for Co 228.616 Recovery = 101.87%								
Cr 267.716†	67989.7	0.5174	mg/L	0.00834	0.5174	mg/L	0.00834	1.61%
QC value within limits for Cr 267.716 Recovery = 103.47%								
Cu 324.752†	347869.4	1.247	mg/L	0.0207	1.247	mg/L	0.0207	1.66%
QC value within limits for Cu 324.752 Recovery = 99.80%								
Fe 259.939†	317014.6	5.071	mg/L	0.0895	5.071	mg/L	0.0895	1.76%
QC value within limits for Fe 259.939 Recovery = 101.42%								
K 766.490†	10189.7	24.40	mg/L	0.564	24.40	mg/L	0.564	2.31%
QC value within limits for K 766.490 Recovery = 97.60%								
Mg 279.077†	307322.8	25.44	mg/L	0.437	25.44	mg/L	0.437	1.72%
QC value within limits for Mg 279.077 Recovery = 101.77%								
Mn 257.610†	294933.6	0.7663	mg/L	0.01352	0.7663	mg/L	0.01352	1.76%
QC value within limits for Mn 257.610 Recovery = 102.18%								
Mo 202.031†	24751.7	2.491	mg/L	0.0446	2.491	mg/L	0.0446	1.79%
QC value within limits for Mo 202.031 Recovery = 99.65%								
Ni 231.604†	87193.5	2.053	mg/L	0.0344	2.053	mg/L	0.0344	1.68%
QC value within limits for Ni 231.604 Recovery = 102.64%								
Na 589.592†	150403.0	24.97	mg/L	0.696	24.97	mg/L	0.696	2.79%
QC value within limits for Na 589.592 Recovery = 99.88%								
Pb 220.353†	2304.9	0.5036	mg/L	0.00330	0.5036	mg/L	0.00330	0.65%
QC value within limits for Pb 220.353 Recovery = 100.71%								
Sb 206.836†	5906.9	4.997	mg/L	0.0297	4.997	mg/L	0.0297	0.59%
QC value within limits for Sb 206.836 Recovery = 99.94%								
Se 196.026†	302.3	0.5164	mg/L	0.00072	0.5164	mg/L	0.00072	0.14%
QC value within limits for Se 196.026 Recovery = 103.28%								
Sn 189.927†	17187.4	5.012	mg/L	0.0811	5.012	mg/L	0.0811	1.62%
QC value within limits for Sn 189.927 Recovery = 100.24%								
Ti 337.279†	1551545.6	2.520	mg/L	0.0026	2.520	mg/L	0.0026	0.10%
QC value within limits for Ti 337.279 Recovery = 100.82%								
Tl 190.801†	1212.5	1.003	mg/L	0.0057	1.003	mg/L	0.0057	0.56%
QC value within limits for Tl 190.801 Recovery = 100.34%								
V 292.402†	182554.0	2.477	mg/L	0.0000	2.477	mg/L	0.0000	0.00%
QC value within limits for V 292.402 Recovery = 99.10%								
Zn 206.200†	20441.7	1.039	mg/L	0.0136	1.039	mg/L	0.0136	1.31%
QC value within limits for Zn 206.200 Recovery = 103.93%								
Ca 227.546†	3572.4	24.50	mg/L	0.129	24.50	mg/L	0.129	0.53%
QC value within limits for Ca 227.546 Recovery = 97.98%								
Sr 421.552†	284124.3	2.456	mg/L	0.0266	2.456	mg/L	0.0266	1.08%
QC value within limits for Sr 421.552 Recovery = 98.24%								

All analyte(s) passed QC.

Sequence No.: 25
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 6/6/2014 10:36:29 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7294294.8	0.9981	mg/L	0.00428				0.43%
Ag 328.068†	89.8	0.0003	mg/L	0.00021	0.0003	mg/L	0.00021	67.06%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-19.8	-0.0013	mg/L	0.00041	-0.0013	mg/L	0.00041	31.18%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-0.1	-0.0001	mg/L	0.00132	-0.0001	mg/L	0.00132	886.89%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	4179.9	0.0335	mg/L	0.00415	0.0335	mg/L	0.00415	12.36%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	232.1	0.0028	mg/L	0.00098	0.0028	mg/L	0.00098	35.42%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	4.7	0.0000	mg/L	0.00002	0.0000	mg/L	0.00002	>999.9%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	4.7	0.0001	mg/L	0.00019	0.0001	mg/L	0.00019	292.73%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	11.8	0.0006	mg/L	0.00046	0.0006	mg/L	0.00046	79.86%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-190.9	-0.0015	mg/L	0.00011	-0.0015	mg/L	0.00011	7.47%
QC value less than the lower limit for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	1082.2	0.0039	mg/L	0.00076	0.0039	mg/L	0.00076	19.52%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	-1961.7	-0.0314	mg/L	0.00034	-0.0314	mg/L	0.00034	1.09%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	-14.9	-0.0357	mg/L	0.04981	-0.0357	mg/L	0.04981	139.69%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	-767.8	-0.0636	mg/L	0.00239	-0.0636	mg/L	0.00239	3.77%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-454.2	-0.0012	mg/L	0.00009	-0.0012	mg/L	0.00009	7.90%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	16.4	0.0017	mg/L	0.00010	0.0017	mg/L	0.00010	5.76%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	2.3	0.0001	mg/L	0.00022	0.0001	mg/L	0.00022	400.17%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	321.7	0.0534	mg/L	0.00005	0.0534	mg/L	0.00005	0.09%
QC value within limits for Na 589.592 Recovery = Not calculated								
Pb 220.353†	5.0	0.0011	mg/L	0.00059	0.0011	mg/L	0.00059	54.35%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	6.6	0.0055	mg/L	0.00278	0.0055	mg/L	0.00278	50.18%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.1	-0.0002	mg/L	0.00001	-0.0002	mg/L	0.00001	7.72%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	0.6	0.0002	mg/L	0.00052	0.0002	mg/L	0.00052	319.51%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 337.279†	643.0	0.0010	mg/L	0.00030	0.0010	mg/L	0.00030	28.29%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	0.7	0.0006	mg/L	0.00213	0.0006	mg/L	0.00213	349.60%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	94.4	0.0013	mg/L	0.00018	0.0013	mg/L	0.00018	14.32%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	18.5	0.0009	mg/L	0.00039	0.0009	mg/L	0.00039	41.49%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	0.0	-0.0016	mg/L	0.01442	-0.0016	mg/L	0.01442	912.57%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Sr 421.552†	98.6	0.0009	mg/L	0.00046	0.0009	mg/L	0.00046	53.41%
QC value within limits for Sr 421.552 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 26
Sample ID: R1404042-001
Analyst:
Initial Sample Wt:

Autosampler Location: 48
Date Collected: 6/6/2014 10:42:25 PM
Data Type: Original
Initial Sample Vol:

Dilution: Sample Prep Vol: 50 mL

Mean Data: R1404042-001

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7501697.0	1.026	mg/L	0.0010				0.09%
Ag 328.068†	-422.7	0.0001	mg/L	0.00021				257.75%
Al 308.215†	232550.5	15.56	mg/L	0.023				0.14%
As 188.979†	-3.3	-0.0033	mg/L	0.00065				19.47%
B 249.772†	22402.6	0.1537	mg/L	0.00123				0.80%
Ba 233.527†	13871.2	0.1654	mg/L	0.00001				0.01%
Be 313.107†	31.5	0.0000	mg/L	0.00002				206.35%
Cd 226.502†	125.6	0.0009	mg/L	0.00004				3.96%
Co 228.616†	65.7	0.0032	mg/L	0.00125				39.04%
Cr 267.716†	88414.3	0.6696	mg/L	0.00155				0.23%
Cu 324.752†	48540.3	0.1746	mg/L	0.00019				0.11%
Fe 259.939†	360097.1	5.760	mg/L	0.0224				0.39%
K 766.490†	2320.5	5.557	mg/L	0.0777				1.40%
Mg 279.077†	96385.8	7.979	mg/L	0.0101				0.13%
Mn 257.610†	163055.2	0.4241	mg/L	0.00098				0.23%
Mo 202.031†	79.3	0.0080	mg/L	0.00093				11.64%
Ni 231.604†	1031.0	0.0243	mg/L	0.00162				6.69%
Na 589.592†	1053397.6	174.9	mg/L	0.30				0.17%
Pb 220.353†	31.3	0.0087	mg/L	0.00002				0.26%
Sb 206.836†	8.8	0.0059	mg/L	0.00203				34.21%
Se 196.026†	1.8	0.0047	mg/L	0.00246				52.51%
Sn 189.927†	-208.0	-0.0606	mg/L	0.00006				0.11%
Ti 337.279†	23141.4	0.0376	mg/L	0.00007				0.19%
Tl 190.801†	-0.6	-0.0017	mg/L	0.00443				253.65%
V 292.402†	31.7	0.0002	mg/L	0.00018				99.47%
Zn 206.200†	14454.1	0.7349	mg/L	0.00180				0.24%
Ca 227.546†	4728.1	32.38	mg/L	0.203				0.63%
Sr 421.552†	15705.5	0.1358	mg/L	0.00051				0.37%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 27
Sample ID: R1404042-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 49
Date Collected: 6/6/2014 10:48:34 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1404042-002

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7418512.7	1.015	mg/L	0.0022				0.21%
Ag 328.068†	-93.5	-0.0002	mg/L	0.00035				180.45%
Al 308.215†	79217.0	5.299	mg/L	0.0109				0.21%
As 188.979†	2.7	0.0030	mg/L	0.00158				53.33%
B 249.772†	315687.8	2.521	mg/L	0.0116				0.46%
Ba 233.527†	4550.1	0.0542	mg/L	0.00003				0.06%
Be 313.107†	109.3	0.0000	mg/L	0.00000				13.11%
Cd 226.502†	-5.9	-0.0001	mg/L	0.00006				44.29%
Co 228.616†	-13.6	-0.0007	mg/L	0.00007				10.22%
Cr 267.716†	1345.3	0.0112	mg/L	0.00012				1.06%
Cu 324.752†	11398.9	0.0409	mg/L	0.00005				0.11%
Fe 259.939†	31659.9	0.5064	mg/L	0.00407				0.80%
K 766.490†	688.8	1.649	mg/L	0.1340				8.13%
Mg 279.077†	99649.2	8.250	mg/L	0.0133				0.16%
Mn 257.610†	12524.0	0.0326	mg/L	0.00012				0.38%
Mo 202.031†	39.4	0.0040	mg/L	0.00021				5.18%
Ni 231.604†	211.0	0.0050	mg/L	0.00006				1.24%
Na 589.592†	158998.0	26.40	mg/L	0.136				0.52%
Pb 220.353†	9.2	0.0027	mg/L	0.00144				53.64%
Sb 206.836†	4.0	0.0029	mg/L	0.00005				1.66%
Se 196.026†	0.3	0.0008	mg/L	0.00275				323.77%
Sn 189.927†	-225.3	-0.0657	mg/L	0.00011				0.17%
Ti 337.279†	5086.6	0.0083	mg/L	0.00003				0.31%
Tl 190.801†	-2.6	-0.0029	mg/L	0.00303				106.20%
V 292.402†	120.3	0.0016	mg/L	0.00021				12.80%

Zn 206.200†	11765.7	0.5982 mg/L	0.00013		0.02%
Ca 227.546†	4367.0	29.62 mg/L	0.090		0.30%
Sr 421.552†	18524.4	0.1601 mg/L	0.00113		0.70%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 28
Sample ID: R1404047-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 50
Date Collected: 6/6/2014 10:54:46 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1404047-001

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7366845.5	1.008	mg/L	0.0055				0.55%
Ag 328.068†	-304.6	-0.0001	mg/L	0.00003				20.86%
Al 308.215†	1028.0	0.0688	mg/L	0.00540				7.85%
As 188.979†	1.4	0.0018	mg/L	0.00081				45.06%
B 249.772†	22562.3	0.1653	mg/L	0.00159				0.96%
Ba 233.527†	363.1	0.0043	mg/L	0.00004				0.87%
Be 313.107†	-547.4	-0.0002	mg/L	0.00004				24.89%
Cd 226.502†	54.8	0.0002	mg/L	0.00004				15.75%
Co 228.616†	-42.0	-0.0020	mg/L	0.00003				1.60%
Cr 267.716†	5313.6	0.0406	mg/L	0.00053				1.32%
Cu 324.752†	545789.3	1.957	mg/L	0.0039				0.20%
Fe 259.939†	213976.0	3.423	mg/L	0.0277				0.81%
K 766.490†	4985.6	11.94	mg/L	0.046				0.38%
Mg 279.077†	36509.9	3.023	mg/L	0.0260				0.86%
Mn 257.610†	44103.7	0.1149	mg/L	0.00102				0.88%
Mo 202.031†	9523.4	0.9585	mg/L	0.00981				1.02%
Ni 231.604†	1280.0	0.0301	mg/L	0.00005				0.16%
Na 589.592†	692781.7	115.0	mg/L	0.45				0.39%
Pb 220.353†	21.5	0.0046	mg/L	0.00092				20.17%
Sb 206.836†	1.9	0.0016	mg/L	0.00007				4.35%
Se 196.026†	0.4	0.0014	mg/L	0.00098				72.25%
Sn 189.927†	-184.4	-0.0538	mg/L	0.00095				1.76%
Ti 337.279†	22689.2	0.0369	mg/L	0.00030				0.81%
Tl 190.801†	-1.8	-0.0014	mg/L	0.00062				43.10%
V 292.402†	61.3	0.0007	mg/L	0.00045				65.63%
Zn 206.200†	1318.3	0.0670	mg/L	0.00020				0.30%
Ca 227.546†	1676.7	11.54	mg/L	0.126				1.09%
Sr 421.552†	9807.9	0.0848	mg/L	0.00039				0.47%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 29
Sample ID: R1404047-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 51
Date Collected: 6/6/2014 11:00:49 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1404047-002

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7338536.9	1.004	mg/L	0.0037				0.37%
Ag 328.068†	-88.8	-0.0003	mg/L	0.00026				82.17%
Al 308.215†	2037.5	0.1363	mg/L	0.00952				6.98%
As 188.979†	-3.0	-0.0034	mg/L	0.00087				25.65%
B 249.772†	9355.0	0.0747	mg/L	0.00102				1.36%
Ba 233.527†	5409.1	0.0645	mg/L	0.00047				0.73%
Be 313.107†	-311.0	-0.0001	mg/L	0.00007				73.18%
Cd 226.502†	-20.2	-0.0003	mg/L	0.00003				12.95%
Co 228.616†	-29.3	-0.0014	mg/L	0.00014				10.04%
Cr 267.716†	-412.0	-0.0013	mg/L	0.00013				9.82%
Cu 324.752†	34983.1	0.1254	mg/L	0.00157				1.26%
Fe 259.939†	930.3	0.0149	mg/L	0.00004				0.28%
K 766.490†	1088.8	2.607	mg/L	0.0577				2.21%
Mg 279.077†	171055.0	14.16	mg/L	0.104				0.73%
Mn 257.610†	12163.7	0.0316	mg/L	0.00031				0.98%

Mo 202.031†	135.0	0.0136	mg/L	0.00038	2.77%
Ni 231.604†	175.9	0.0041	mg/L	0.00014	3.29%
Na 589.592†	140498.4	23.32	mg/L	0.314	1.35%
Pb 220.353†	5.5	0.0012	mg/L	0.00004	3.32%
Sb 206.836†	4.7	0.0039	mg/L	0.00037	9.36%
Se 196.026†	-0.6	-0.0010	mg/L	0.00238	243.42%
Sn 189.927†	-232.5	-0.0678	mg/L	0.00075	1.11%
Ti 337.279†	471.1	0.0008	mg/L	0.00004	4.91%
Tl 190.801†	-2.4	-0.0023	mg/L	0.00315	134.90%
V 292.402†	28.2	0.0004	mg/L	0.00020	53.02%
Zn 206.200†	1276.9	0.0649	mg/L	0.00003	0.04%
Ca 227.546†	4902.0	33.20	mg/L	0.297	0.90%
Sr 421.552†	29770.5	0.2573	mg/L	0.00220	0.86%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 30
Sample ID: R1404049-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 52
Date Collected: 6/6/2014 11:06:53 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1404049-001

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7280728.6	0.9962	mg/L	0.00040				0.04%
Ag 328.068†	-446.1	-0.0016	mg/L	0.00008				4.74%
Al 308.215†	340.1	0.0228	mg/L	0.00017				0.75%
As 188.979†	-0.3	-0.0003	mg/L	0.00085				283.83%
B 249.772†	17462.3	0.1398	mg/L	0.00035				0.25%
Ba 233.527†	6763.0	0.0806	mg/L	0.00079				0.98%
Be 313.107†	-588.9	-0.0002	mg/L	0.00002				9.27%
Cd 226.502†	-13.5	-0.0002	mg/L	0.00001				3.10%
Co 228.616†	-27.1	-0.0013	mg/L	0.00026				19.56%
Cr 267.716†	-906.3	-0.0033	mg/L	0.00034				10.31%
Cu 324.752†	1080.7	0.0039	mg/L	0.00014				3.58%
Fe 259.939†	-3218.2	-0.0515	mg/L	0.00140				2.71%
K 766.490†	1071.3	2.565	mg/L	0.0825				3.22%
Mg 279.077†	342795.9	28.38	mg/L	0.006				0.02%
Mn 257.610†	4608.0	0.0120	mg/L	0.00002				0.20%
Mo 202.031†	34.7	0.0035	mg/L	0.00041				11.81%
Ni 231.604†	1834.3	0.0432	mg/L	0.00008				0.18%
Na 589.592†	183071.0	30.39	mg/L	0.189				0.62%
Pb 220.353†	-1.0	-0.0002	mg/L	0.00089				421.82%
Sb 206.836†	2.3	0.0020	mg/L	0.00036				18.22%
Se 196.026†	0.2	0.0003	mg/L	0.00434				>999.9%
Sn 189.927†	-290.4	-0.0847	mg/L	0.00088				1.04%
Ti 337.279†	452.9	0.0007	mg/L	0.00001				1.67%
Tl 190.801†	-2.3	-0.0030	mg/L	0.00103				34.24%
V 292.402†	29.5	0.0004	mg/L	0.00012				30.40%
Zn 206.200†	37.9	0.0019	mg/L	0.00009				4.82%
Ca 227.546†	16261.7	110.1	mg/L	0.12				0.11%
Sr 421.552†	48261.0	0.4172	mg/L	0.00150				0.36%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 31
Sample ID: R1404049-001L
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 53
Date Collected: 6/6/2014 11:12:59 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1404049-001L

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7155339.8	0.9791	mg/L	0.00160				0.16%
Ag 328.068†	-77.7	-0.0003	mg/L	0.00039				131.93%
Al 308.215†	137.4	0.0092	mg/L	0.00359				39.10%
As 188.979†	2.3	0.0026	mg/L	0.00003				1.01%
B 249.772†	3891.5	0.0314	mg/L	0.00003				0.09%

Ba 233.527†	1329.7	0.0159 mg/L	0.00012	0.73%
Be 313.107†	-795.6	-0.0002 mg/L	0.00002	7.51%
Cd 226.502†	-24.9	-0.0003 mg/L	0.00006	18.24%
Co 228.616†	-27.0	-0.0013 mg/L	0.00005	3.82%
Cr 267.716†	-392.5	-0.0023 mg/L	0.00001	0.40%
Cu 324.752†	874.6	0.0031 mg/L	0.00000	0.03%
Fe 259.939†	-3776.0	-0.0604 mg/L	0.00019	0.32%
K 766.490†	211.5	0.5065 mg/L	0.03383	6.68%
Mg 279.077†	68419.5	5.664 mg/L	0.0147	0.26%
Mn 257.610†	513.5	0.0013 mg/L	0.00004	2.82%
Mo 202.031†	18.0	0.0018 mg/L	0.00002	0.92%
Ni 231.604†	329.0	0.0077 mg/L	0.00004	0.52%
Na 589.592†	38038.3	6.315 mg/L	0.0734	1.16%
Pb 220.353†	3.2	0.0007 mg/L	0.00159	225.14%
Sb 206.836†	2.5	0.0021 mg/L	0.00034	16.23%
Se 196.026†	1.2	0.0020 mg/L	0.00355	180.70%
Sn 189.927†	-196.9	-0.0574 mg/L	0.00022	0.39%
Ti 337.279†	182.7	0.0003 mg/L	0.00005	17.19%
Tl 190.801†	-2.5	-0.0023 mg/L	0.00111	49.03%
V 292.402†	28.7	0.0004 mg/L	0.00015	38.19%
Zn 206.200†	33.4	0.0017 mg/L	0.00026	15.21%
Ca 227.546†	3023.7	20.47 mg/L	0.029	0.14%
Sr 421.552†	10179.2	0.0880 mg/L	0.00073	0.83%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

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Sequence No.: 32
Sample ID: R1404056-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 54
Date Collected: 6/6/2014 11:18:54 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1404056-002

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7392751.7	1.012	mg/L	0.0230				2.27%
Ag 328.068†	-74.3	-0.0003	mg/L	0.00021				75.72%
Al 308.215†	2292.7	0.1534	mg/L	0.02638				17.20%
As 188.979†	-1.2	-0.0013	mg/L	0.00251				187.11%
B 249.772†	3202.4	0.0257	mg/L	0.00068				2.65%
Ba 233.527†	1681.4	0.0200	mg/L	0.00038				1.91%
Be 313.107†	-499.7	-0.0001	mg/L	0.00009				60.63%
Cd 226.502†	-13.4	-0.0002	mg/L	0.00001				4.28%
Co 228.616†	-34.5	-0.0017	mg/L	0.00012				7.19%
Cr 267.716†	-7.6	0.0010	mg/L	0.00014				13.39%
Cu 324.752†	3793.2	0.0136	mg/L	0.00119				8.72%
Fe 259.939†	-981.0	-0.0157	mg/L	0.00253				16.10%
K 766.490†	1415.5	3.390	mg/L	0.0388				1.15%
Mg 279.077†	102963.6	8.524	mg/L	0.2429				2.85%
Mn 257.610†	1436.2	0.0037	mg/L	0.00011				3.05%
Mo 202.031†	27.0	0.0027	mg/L	0.00001				0.54%
Ni 231.604†	-1.7	0.0000	mg/L	0.00015				367.20%
Na 589.592†	105708.4	17.55	mg/L	0.436				2.48%
Pb 220.353†	4.0	0.0009	mg/L	0.00001				0.90%
Sb 206.836†	0.8	0.0007	mg/L	0.00032				48.63%
Se 196.026†	0.7	0.0011	mg/L	0.00283				254.07%
Sn 189.927†	-231.2	-0.0674	mg/L	0.00006				0.09%
Ti 337.279†	2030.8	0.0033	mg/L	0.00008				2.47%
Tl 190.801†	-4.5	-0.0040	mg/L	0.00029				7.28%
V 292.402†	33.1	0.0004	mg/L	0.00020				44.16%
Zn 206.200†	299.1	0.0152	mg/L	0.00043				2.86%
Ca 227.546†	4507.9	30.53	mg/L	0.984				3.22%
Sr 421.552†	18128.6	0.1567	mg/L	0.00367				2.34%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

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Sequence No.: 33
Sample ID: R1404057-005
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 55
Date Collected: 6/6/2014 11:25:01 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1404057-005

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7557625.3	1.034	mg/L	0.0042				0.41%
Ag 328.068†	101.7	0.0004	mg/L	0.00018				41.67%
Al 308.215†	21388.5	1.431	mg/L	0.0150				1.05%
As 188.979†	-0.4	-0.0004	mg/L	0.00055				125.64%
B 249.772†	916.9	0.0062	mg/L	0.00026				4.23%
Ba 233.527†	184.4	0.0022	mg/L	0.00005				2.07%
Be 313.107†	177.3	0.0001	mg/L	0.00001				14.62%
Cd 226.502†	-17.0	-0.0002	mg/L	0.00002				6.18%
Co 228.616†	11.9	0.0006	mg/L	0.00009				16.28%
Cr 267.716†	6367.7	0.0482	mg/L	0.00042				0.87%
Cu 324.752†	17978.2	0.0645	mg/L	0.00033				0.51%
Fe 259.939†	16463.2	0.2634	mg/L	0.00126				0.48%
K 766.490†	44.7	0.1070	mg/L	0.01947				18.19%
Mg 279.077†	8101.8	0.6707	mg/L	0.00322				0.48%
Mn 257.610†	4721.6	0.0123	mg/L	0.00004				0.30%
Mo 202.031†	14.7	0.0015	mg/L	0.00015				10.36%
Ni 231.604†	858.3	0.0202	mg/L	0.00013				0.63%
Na 589.592†	125558.0	20.84	mg/L	0.204				0.98%
Pb 220.353†	14.0	0.0032	mg/L	0.00003				1.06%
Sb 206.836†	3.3	0.0026	mg/L	0.00047				17.95%
Se 196.026†	0.6	0.0012	mg/L	0.00023				19.75%
Sn 189.927†	-141.3	-0.0412	mg/L	0.00030				0.73%
Ti 337.279†	104024.1	0.1690	mg/L	0.00081				0.48%
Tl 190.801†	-2.7	-0.0024	mg/L	0.00049				20.68%
V 292.402†	56.2	0.0008	mg/L	0.00001				0.94%
Zn 206.200†	2235.3	0.1136	mg/L	0.00053				0.47%
Ca 227.546†	367.9	2.510	mg/L	0.0445				1.77%
Sr 421.552†	1431.8	0.0124	mg/L	0.00017				1.41%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 34
Sample ID: R1404057-005D
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 56
Date Collected: 6/6/2014 11:31:08 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1404057-005D

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7576517.2	1.037	mg/L	0.0038				0.37%
Ag 328.068†	67.3	0.0003	mg/L	0.00009				30.13%
Al 308.215†	20696.6	1.385	mg/L	0.0067				0.48%
As 188.979†	-1.3	-0.0014	mg/L	0.00042				29.73%
B 249.772†	560.6	0.0033	mg/L	0.00024				7.20%
Ba 233.527†	171.8	0.0020	mg/L	0.00004				2.08%
Be 313.107†	169.2	0.0000	mg/L	0.00001				29.27%
Cd 226.502†	-11.5	-0.0002	mg/L	0.00001				3.32%
Co 228.616†	8.1	0.0004	mg/L	0.00022				57.23%
Cr 267.716†	6366.1	0.0482	mg/L	0.00006				0.13%
Cu 324.752†	17301.5	0.0620	mg/L	0.00053				0.86%
Fe 259.939†	16249.7	0.2599	mg/L	0.00138				0.53%
K 766.490†	29.2	0.0700	mg/L	0.07823				111.76%
Mg 279.077†	7820.8	0.6475	mg/L	0.00504				0.78%
Mn 257.610†	4683.1	0.0122	mg/L	0.00002				0.15%
Mo 202.031†	13.8	0.0014	mg/L	0.00012				8.39%
Ni 231.604†	862.7	0.0203	mg/L	0.00005				0.23%
Na 589.592†	121850.7	20.23	mg/L	0.042				0.21%
Pb 220.353†	9.0	0.0021	mg/L	0.00202				94.46%
Sb 206.836†	2.7	0.0022	mg/L	0.00001				0.31%
Se 196.026†	0.7	0.0013	mg/L	0.00220				171.75%
Sn 189.927†	-142.4	-0.0415	mg/L	0.00010				0.24%
Ti 337.279†	104094.9	0.1691	mg/L	0.00081				0.48%
Tl 190.801†	-5.2	-0.0045	mg/L	0.00003				0.73%
V 292.402†	53.7	0.0007	mg/L	0.00005				6.93%
Zn 206.200†	2242.1	0.1140	mg/L	0.00059				0.52%

Ca 227.546†	353.1	2.409 mg/L	0.0469		1.95%
Sr 421.552†	1329.7	0.0115 mg/L	0.00035		3.07%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 35
Sample ID: R1404057-005S
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 57
Date Collected: 6/6/2014 11:37:12 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1404057-005S

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7542716.0	1.032	mg/L	0.0031				0.30%
Ag 328.068†	14270.1	0.0516	mg/L	0.00034				0.65%
Al 308.215†	49873.4	3.336	mg/L	0.0133				0.40%
As 188.979†	34.9	0.0390	mg/L	0.00181				4.64%
B 249.772†	119485.4	0.9495	mg/L	0.00546				0.57%
Ba 233.527†	169679.8	2.023	mg/L	0.0050				0.25%
Be 313.107†	167134.8	0.0485	mg/L	0.00005				0.11%
Cd 226.502†	3827.9	0.0488	mg/L	0.00001				0.01%
Co 228.616†	10162.4	0.4959	mg/L	0.00049				0.10%
Cr 267.716†	33391.2	0.2528	mg/L	0.00004				0.02%
Cu 324.752†	90086.1	0.3230	mg/L	0.00051				0.16%
Fe 259.939†	79007.3	1.264	mg/L	0.0024				0.19%
K 766.490†	7717.0	18.48	mg/L	0.016				0.09%
Mg 279.077†	31585.2	2.615	mg/L	0.0033				0.13%
Mn 257.610†	198834.9	0.5164	mg/L	0.00113				0.22%
Mo 202.031†	4855.5	0.4887	mg/L	0.00031				0.06%
Ni 231.604†	22512.0	0.5300	mg/L	0.00025				0.05%
Na 589.592†	237446.2	39.42	mg/L	0.254				0.65%
Pb 220.353†	2314.2	0.5049	mg/L	0.00090				0.18%
Sb 206.836†	576.9	0.4878	mg/L	0.00328				0.67%
Se 196.026†	560.2	0.9548	mg/L	0.00815				0.85%
Sn 189.927†	18607.0	5.426	mg/L	0.0003				0.00%
Ti 337.279†	407104.7	0.6613	mg/L	0.00053				0.08%
Tl 190.801†	2290.9	1.897	mg/L	0.0095				0.50%
V 292.402†	36884.0	0.5005	mg/L	0.00075				0.15%
Zn 206.200†	12628.3	0.6421	mg/L	0.00049				0.08%
Ca 227.546†	642.7	4.430	mg/L	0.0449				1.01%
Sr 421.552†	1311.8	0.0113	mg/L	0.00017				1.53%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 36
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 6/6/2014 11:43:23 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7305505.1	0.9996	mg/L	0.00682				0.68%
Ag 328.068†	141585.2	0.5096	mg/L	0.00493	0.5096	mg/L	0.00493	0.97%
QC value within limits for Ag 328.068 Recovery = 101.92%								
Al 308.215†	145252.9	9.717	mg/L	0.0971	9.717	mg/L	0.0971	1.00%
QC value within limits for Al 308.215 Recovery = 97.17%								
As 188.979†	901.6	1.008	mg/L	0.0100	1.008	mg/L	0.0100	1.00%
QC value within limits for As 188.979 Recovery = 100.81%								
B 249.772†	313158.4	2.481	mg/L	0.0404	2.481	mg/L	0.0404	1.63%
QC value within limits for B 249.772 Recovery = 99.25%								
Ba 233.527†	857279.4	10.22	mg/L	0.010	10.22	mg/L	0.010	0.10%
QC value within limits for Ba 233.527 Recovery = 102.21%								
Be 313.107†	865855.0	0.2514	mg/L	0.00014	0.2514	mg/L	0.00014	0.06%
QC value within limits for Be 313.107 Recovery = 100.55%								
Cd 226.502†	39735.6	0.5073	mg/L	0.00518	0.5073	mg/L	0.00518	1.02%
QC value within limits for Cd 226.502 Recovery = 101.47%								
Co 228.616†	51429.0	2.510	mg/L	0.0254	2.510	mg/L	0.0254	1.01%

QC value within limits for Co 228.616 Recovery = 100.39%

Cr 267.716†	67280.1	0.5119 mg/L	0.00547	0.5119 mg/L	0.00547	1.07%

QC value within limits for Cr 267.716 Recovery = 102.39%

Cu 324.752†	345322.3	1.238 mg/L	0.0157	1.238 mg/L	0.0157	1.27%

QC value within limits for Cu 324.752 Recovery = 99.07%

Fe 259.939†	310526.1	4.967 mg/L	0.0543	4.967 mg/L	0.0543	1.09%

QC value within limits for Fe 259.939 Recovery = 99.35%

K 766.490†	10084.8	24.15 mg/L	0.152	24.15 mg/L	0.152	0.63%

QC value within limits for K 766.490 Recovery = 96.59%

Mg 279.077†	301962.9	25.00 mg/L	0.234	25.00 mg/L	0.234	0.93%

QC value within limits for Mg 279.077 Recovery = 99.99%

Mn 257.610†	290837.1	0.7557 mg/L	0.00727	0.7557 mg/L	0.00727	0.96%

QC value within limits for Mn 257.610 Recovery = 100.76%

Mo 202.031†	24617.5	2.478 mg/L	0.0264	2.478 mg/L	0.0264	1.07%

QC value within limits for Mo 202.031 Recovery = 99.11%

Ni 231.604†	86220.8	2.030 mg/L	0.0202	2.030 mg/L	0.0202	0.99%

QC value within limits for Ni 231.604 Recovery = 101.50%

Na 589.592†	150460.8	24.98 mg/L	0.175	24.98 mg/L	0.175	0.70%

QC value within limits for Na 589.592 Recovery = 99.91%

Pb 220.353†	2295.1	0.5014 mg/L	0.00227	0.5014 mg/L	0.00227	0.45%

QC value within limits for Pb 220.353 Recovery = 100.28%

Sb 206.836†	5979.3	5.058 mg/L	0.0341	5.058 mg/L	0.0341	0.67%

QC value within limits for Sb 206.836 Recovery = 101.17%

Se 196.026†	296.8	0.5071 mg/L	0.00009	0.5071 mg/L	0.00009	0.02%

QC value within limits for Se 196.026 Recovery = 101.41%

Sn 189.927†	16939.9	4.940 mg/L	0.0548	4.940 mg/L	0.0548	1.11%

QC value within limits for Sn 189.927 Recovery = 98.79%

Ti 337.279†	1537783.5	2.498 mg/L	0.0007	2.498 mg/L	0.0007	0.03%

QC value within limits for Ti 337.279 Recovery = 99.93%

Tl 190.801†	1200.9	0.9937 mg/L	0.00530	0.9937 mg/L	0.00530	0.53%

QC value within limits for Tl 190.801 Recovery = 99.37%

V 292.402†	185696.4	2.520 mg/L	0.0354	2.520 mg/L	0.0354	1.41%

QC value within limits for V 292.402 Recovery = 100.80%

Zn 206.200†	20043.9	1.019 mg/L	0.0142	1.019 mg/L	0.0142	1.39%

QC value within limits for Zn 206.200 Recovery = 101.91%

Ca 227.546†	3608.9	24.74 mg/L	0.214	24.74 mg/L	0.214	0.87%

QC value within limits for Ca 227.546 Recovery = 98.95%

Sr 421.552†	284081.9	2.456 mg/L	0.0240	2.456 mg/L	0.0240	0.98%

QC value within limits for Sr 421.552 Recovery = 98.23%

All analyte(s) passed QC.

Sequence No.: 37
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 6/6/2014 11:49:34 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7425726.2	1.016	mg/L	0.0086				0.85%
Ag 328.068†	42.6	0.0001	mg/L	0.00024	0.0001	mg/L	0.00024	176.51%

QC value within limits for Ag 328.068 Recovery = Not calculated

Al 308.215†	-331.2	-0.0222	mg/L	0.00943	-0.0222	mg/L	0.00943	42.54%

QC value within limits for Al 308.215 Recovery = Not calculated

As 188.979†	1.5	0.0017	mg/L	0.00089	0.0017	mg/L	0.00089	53.88%

QC value within limits for As 188.979 Recovery = Not calculated

B 249.772†	4073.2	0.0328	mg/L	0.00449	0.0328	mg/L	0.00449	13.70%

QC value within limits for B 249.772 Recovery = Not calculated

Ba 233.527†	315.3	0.0038	mg/L	0.00120	0.0038	mg/L	0.00120	32.04%

QC value within limits for Ba 233.527 Recovery = Not calculated

Be 313.107†	404.0	0.0001	mg/L	0.00001	0.0001	mg/L	0.00001	9.41%

QC value within limits for Be 313.107 Recovery = Not calculated

Cd 226.502†	11.7	0.0002	mg/L	0.00003	0.0002	mg/L	0.00003	21.18%

QC value within limits for Cd 226.502 Recovery = Not calculated

Co 228.616†	13.0	0.0006	mg/L	0.00029	0.0006	mg/L	0.00029	45.51%

QC value within limits for Co 228.616 Recovery = Not calculated

Cr 267.716†	-230.4	-0.0018	mg/L	0.00004	-0.0018	mg/L	0.00004	2.08%

QC value less than the lower limit for Cr 267.716 Recovery = Not calculated

Cu 324.752†	1198.1	0.0043	mg/L	0.00103	0.0043	mg/L	0.00103	23.98%

QC value within limits for Cu 324.752 Recovery = Not calculated

Fe 259.939†	-3274.1	-0.0524 mg/L	0.00057	-0.0524 mg/L	0.00057	1.09%

QC value within limits for Fe 259.939 Recovery = Not calculated

K 766.490†	-12.1	-0.0290 mg/L	0.11814	-0.0290 mg/L	0.11814	407.67%

QC value within limits for K 766.490 Recovery = Not calculated

Mg 279.077†	-963.3	-0.0797 mg/L	0.00167	-0.0797 mg/L	0.00167	2.09%

QC value within limits for Mg 279.077 Recovery = Not calculated

Mn 257.610†	-470.7	-0.0012 mg/L	0.00008	-0.0012 mg/L	0.00008	6.80%

QC value within limits for Mn 257.610 Recovery = Not calculated

Mo 202.031†	20.9	0.0021 mg/L	0.00061	0.0021 mg/L	0.00061	28.78%

QC value within limits for Mo 202.031 Recovery = Not calculated

Ni 231.604†	5.4	0.0001 mg/L	0.00017	0.0001 mg/L	0.00017	130.53%

QC value within limits for Ni 231.604 Recovery = Not calculated

Na 589.592†	264.0	0.0438 mg/L	0.00169	0.0438 mg/L	0.00169	3.86%

QC value within limits for Na 589.592 Recovery = Not calculated

Pb 220.353†	4.7	0.0010 mg/L	0.00064	0.0010 mg/L	0.00064	62.65%

QC value within limits for Pb 220.353 Recovery = Not calculated

Sb 206.836†	5.6	0.0048 mg/L	0.00036	0.0048 mg/L	0.00036	7.59%

QC value within limits for Sb 206.836 Recovery = Not calculated

Se 196.026†	-0.3	-0.0006 mg/L	0.00148	-0.0006 mg/L	0.00148	262.17%

QC value within limits for Se 196.026 Recovery = Not calculated

Sn 189.927†	-41.2	-0.0120 mg/L	0.00192	-0.0120 mg/L	0.00192	15.95%

QC value within limits for Sn 189.927 Recovery = Not calculated

Ti 337.279†	975.6	0.0016 mg/L	0.00050	0.0016 mg/L	0.00050	31.77%

QC value within limits for Ti 337.279 Recovery = Not calculated

Tl 190.801†	1.7	0.0014 mg/L	0.00063	0.0014 mg/L	0.00063	45.86%

QC value within limits for Tl 190.801 Recovery = Not calculated

V 292.402†	118.6	0.0016 mg/L	0.00039	0.0016 mg/L	0.00039	24.02%

QC value within limits for V 292.402 Recovery = Not calculated

Zn 206.200†	23.7	0.0012 mg/L	0.00045	0.0012 mg/L	0.00045	37.44%

QC value within limits for Zn 206.200 Recovery = Not calculated

Ca 227.546†	-10.1	-0.0711 mg/L	0.01031	-0.0711 mg/L	0.01031	14.52%

QC value within limits for Ca 227.546 Recovery = Not calculated

Sr 421.552†	155.7	0.0013 mg/L	0.00026	0.0013 mg/L	0.00026	19.23%

QC value within limits for Sr 421.552 Recovery = Not calculated

QC Failed. Continue with analysis.

==========

Sequence No.: 38
Sample ID: R1404057-005A
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 58
Date Collected: 6/6/2014 11:55:31 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1404057-005A

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7576600.0	1.037	mg/L	0.0018				0.18%
Ag 328.068†	11820.5	0.0428	mg/L	0.00030				0.69%
Al 308.215†	47933.7	3.207	mg/L	0.0141				0.44%
As 188.979†	29.1	0.0326	mg/L	0.00019				0.57%
B 249.772†	115872.2	0.9209	mg/L	0.00202				0.22%
Ba 233.527†	158772.3	1.893	mg/L	0.0046				0.24%
Be 313.107†	157087.9	0.0456	mg/L	0.00021				0.47%
Cd 226.502†	3604.3	0.0459	mg/L	0.00009				0.19%
Co 228.616†	9523.9	0.4648	mg/L	0.00128				0.27%
Cr 267.716†	31574.5	0.2391	mg/L	0.00069				0.29%
Cu 324.752†	85664.4	0.3072	mg/L	0.00069				0.22%
Fe 259.939†	75156.3	1.202	mg/L	0.0047				0.39%
K 766.490†	7241.3	17.34	mg/L	0.093				0.54%
Mg 279.077†	29968.5	2.481	mg/L	0.0045				0.18%
Mn 257.610†	185861.2	0.4827	mg/L	0.00123				0.25%
Mo 202.031†	5280.1	0.5314	mg/L	0.00088				0.16%
Ni 231.604†	21072.4	0.4961	mg/L	0.00096				0.19%
Na 589.592†	229577.4	38.11	mg/L	0.370				0.97%
Pb 220.353†	2181.7	0.4760	mg/L	0.00153				0.32%
Sb 206.836†	639.3	0.5406	mg/L	0.00028				0.05%
Se 196.026†	633.1	1.079	mg/L	0.0001				0.01%
Sn 189.927†	-140.1	-0.0408	mg/L	0.00099				2.43%
Ti 337.279†	430503.6	0.6994	mg/L	0.00199				0.28%
Tl 190.801†	2153.8	1.783	mg/L	0.0085				0.48%

V 292.402†	34416.2	0.4670 mg/L	0.00275		0.59%
Zn 206.200†	12160.8	0.6183 mg/L	0.00115		0.19%
Ca 227.546†	629.1	4.335 mg/L	0.0138		0.32%
Sr 421.552†	1435.6	0.0124 mg/L	0.00035		2.80%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 39
Sample ID: R1404057-005L
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 59
Date Collected: 6/7/2014 12:01:38 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1404057-005L

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7507520.4	1.027	mg/L	0.0038				0.37%
Ag 328.068†	31.0	0.0001	mg/L	0.00014				123.31%
Al 308.215†	3940.4	0.2636	mg/L	0.00251				0.95%
As 188.979†	0.2	0.0002	mg/L	0.00003				11.15%
B 249.772†	1985.3	0.0158	mg/L	0.00165				10.42%
Ba 233.527†	75.6	0.0009	mg/L	0.00008				8.63%
Be 313.107†	-45.2	0.0000	mg/L	0.00001				63.14%
Cd 226.502†	-11.5	-0.0001	mg/L	0.00005				33.25%
Co 228.616†	-9.5	-0.0005	mg/L	0.00016				34.98%
Cr 267.716†	1069.9	0.0081	mg/L	0.00011				1.35%
Cu 324.752†	4067.1	0.0146	mg/L	0.00002				0.10%
Fe 259.939†	439.3	0.0070	mg/L	0.00025				3.54%
K 766.490†	24.6	0.0590	mg/L	0.06037				102.35%
Mg 279.077†	679.8	0.0563	mg/L	0.00384				6.83%
Mn 257.610†	593.6	0.0015	mg/L	0.00002				1.62%
Mo 202.031†	9.9	0.0010	mg/L	0.00008				7.54%
Ni 231.604†	136.9	0.0032	mg/L	0.00007				2.08%
Na 589.592†	25239.1	4.190	mg/L	0.0293				0.70%
Pb 220.353†	7.5	0.0017	mg/L	0.00026				15.38%
Sb 206.836†	2.7	0.0023	mg/L	0.00156				68.37%
Se 196.026†	0.2	0.0003	mg/L	0.00031				115.55%
Sn 189.927†	-108.0	-0.0315	mg/L	0.00063				2.00%
Ti 337.279†	21545.0	0.0350	mg/L	0.00004				0.11%
Tl 190.801†	-0.4	-0.0004	mg/L	0.00287				816.26%
V 292.402†	27.3	0.0004	mg/L	0.00016				42.42%
Zn 206.200†	485.1	0.0247	mg/L	0.00020				0.79%
Ca 227.546†	72.8	0.4945	mg/L	0.01070				2.16%
Sr 421.552†	249.5	0.0022	mg/L	0.00029				13.37%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 40
Sample ID: R1404057-006
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 60
Date Collected: 6/7/2014 12:07:33 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1404057-006

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7482405.7	1.024	mg/L	0.0087				0.85%
Ag 328.068†	497.7	0.0019	mg/L	0.00015				8.22%
Al 308.215†	5737.2	0.3838	mg/L	0.00679				1.77%
As 188.979†	-0.6	-0.0007	mg/L	0.00127				186.21%
B 249.772†	1902.8	0.0138	mg/L	0.00060				4.34%
Ba 233.527†	1431.3	0.0171	mg/L	0.00002				0.11%
Be 313.107†	18.2	0.0000	mg/L	0.00004				794.48%
Cd 226.502†	40.2	0.0005	mg/L	0.00006				12.38%
Co 228.616†	-36.5	-0.0018	mg/L	0.00013				7.39%
Cr 267.716†	17.7	0.0003	mg/L	0.00017				49.96%
Cu 324.752†	13164.1	0.0472	mg/L	0.00042				0.88%
Fe 259.939†	20506.6	0.3280	mg/L	0.00123				0.38%
K 766.490†	95.8	0.2295	mg/L	0.05390				23.49%
Mg 279.077†	20241.9	1.676	mg/L	0.0138				0.83%

Mn 257.610†	16219.8	0.0422 mg/L	0.00027	0.64%
Mo 202.031†	8.5	0.0009 mg/L	0.00000	0.55%
Ni 231.604†	82.3	0.0019 mg/L	0.00022	11.25%
Na 589.592†	52094.1	8.648 mg/L	0.1006	1.16%
Pb 220.353†	94.5	0.0206 mg/L	0.00068	3.31%
Sb 206.836†	3.7	0.0031 mg/L	0.00066	21.05%
Se 196.026†	-0.7	-0.0011 mg/L	0.00084	73.81%
Sn 189.927†	-165.5	-0.0483 mg/L	0.00075	1.55%
Ti 337.279†	5275.4	0.0086 mg/L	0.00006	0.70%
Tl 190.801†	-2.8	-0.0024 mg/L	0.00390	160.56%
V 292.402†	97.7	0.0013 mg/L	0.00016	12.29%
Zn 206.200†	5580.1	0.2837 mg/L	0.00237	0.83%
Ca 227.546†	1011.2	6.867 mg/L	0.0663	0.97%
Sr 421.552†	5013.1	0.0433 mg/L	0.00017	0.40%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 41
Sample ID: R1404057-007
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 61
Date Collected: 6/7/2014 12:13:30 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1404057-007

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7444503.9	1.019	mg/L	0.0005				0.05%
Ag 328.068†	-84.8	-0.0003	mg/L	0.00011				36.24%
Al 308.215†	841.7	0.0563	mg/L	0.00495				8.78%
As 188.979†	0.0	0.0000	mg/L	0.00035				>999.9%
B 249.772†	2444.6	0.0197	mg/L	0.00053				2.67%
Ba 233.527†	890.5	0.0106	mg/L	0.00006				0.60%
Be 313.107†	32.0	0.0000	mg/L	0.00001				54.45%
Cd 226.502†	-20.5	-0.0003	mg/L	0.00006				22.21%
Co 228.616†	-32.1	-0.0016	mg/L	0.00015				9.85%
Cr 267.716†	-140.8	-0.0003	mg/L	0.00008				24.63%
Cu 324.752†	14214.3	0.0509	mg/L	0.00037				0.73%
Fe 259.939†	-2196.7	-0.0351	mg/L	0.00094				2.68%
K 766.490†	392.6	0.9402	mg/L	0.03582				3.81%
Mg 279.077†	72361.4	5.991	mg/L	0.0273				0.46%
Mn 257.610†	-142.9	-0.0004	mg/L	0.00000				0.14%
Mo 202.031†	34.2	0.0034	mg/L	0.00012				3.36%
Ni 231.604†	-25.2	-0.0006	mg/L	0.00002				4.02%
Na 589.592†	74457.3	12.36	mg/L	0.089				0.72%
Pb 220.353†	2.9	0.0006	mg/L	0.00115				178.48%
Sb 206.836†	3.5	0.0030	mg/L	0.00019				6.45%
Se 196.026†	0.1	0.0001	mg/L	0.00250				>999.9%
Sn 189.927†	-201.2	-0.0587	mg/L	0.00012				0.20%
Ti 337.279†	23776.9	0.0386	mg/L	0.00020				0.52%
Tl 190.801†	-4.8	-0.0042	mg/L	0.00254				60.17%
V 292.402†	40.3	0.0005	mg/L	0.00017				31.22%
Zn 206.200†	852.0	0.0433	mg/L	0.00000				0.01%
Ca 227.546†	3075.7	20.83	mg/L	0.079				0.38%
Sr 421.552†	11738.1	0.1015	mg/L	0.00105				1.04%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 42
Sample ID: R1404057-008
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 62
Date Collected: 6/7/2014 12:19:34 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1404057-008

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7485573.9	1.024	mg/L	0.0102				1.00%
Ag 328.068†	-170.5	-0.0006	mg/L	0.00021				34.06%
Al 308.215†	1558.6	0.1043	mg/L	0.01237				11.86%
As 188.979†	0.2	0.0002	mg/L	0.00248				>999.9%

B 249.772†	2640.6	0.0214 mg/L	0.00024	1.14%
Ba 233.527†	1771.9	0.0211 mg/L	0.00015	0.72%
Be 313.107†	203.4	0.0001 mg/L	0.00005	88.57%
Cd 226.502†	-18.2	-0.0002 mg/L	0.00004	18.91%
Co 228.616†	-36.4	-0.0018 mg/L	0.00023	13.23%
Cr 267.716†	-456.9	-0.0024 mg/L	0.00007	2.80%
Cu 324.752†	2419.3	0.0087 mg/L	0.00055	6.33%
Fe 259.939†	-4027.4	-0.0644 mg/L	0.00012	0.18%
K 766.490†	574.4	1.375 mg/L	0.1009	7.34%
Mg 279.077†	103129.0	8.538 mg/L	0.0905	1.06%
Mn 257.610†	-340.8	-0.0009 mg/L	0.00002	2.33%
Mo 202.031†	28.0	0.0028 mg/L	0.00006	2.28%
Ni 231.604†	-65.9	-0.0016 mg/L	0.00013	8.44%
Na 589.592†	101937.1	16.92 mg/L	0.224	1.32%
Pb 220.353†	3.9	0.0009 mg/L	0.00099	114.62%
Sb 206.836†	3.8	0.0032 mg/L	0.00290	89.29%
Se 196.026†	-0.6	-0.0010 mg/L	0.00055	58.29%
Sn 189.927†	-226.4	-0.0660 mg/L	0.00012	0.18%
Ti 337.279†	417.1	0.0007 mg/L	0.00004	6.15%
Tl 190.801†	-1.8	-0.0018 mg/L	0.00179	99.80%
V 292.402†	47.7	0.0007 mg/L	0.00007	11.27%
Zn 206.200†	141.9	0.0072 mg/L	0.00016	2.21%
Ca 227.546†	4597.6	31.13 mg/L	0.310	0.99%
Sr 421.552†	19546.5	0.1690 mg/L	0.00229	1.36%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 43
Sample ID: R1404059-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 63
Date Collected: 6/7/2014 12:25:41 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1404059-001

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7399250.6	1.012	mg/L	0.0008				0.08%
Ag 328.068†	-157.2	-0.0005	mg/L	0.00052				107.01%
Al 308.215†	424.4	0.0284	mg/L	0.00386				13.59%
As 188.979†	1.6	0.0018	mg/L	0.00025				13.92%
B 249.772†	14085.5	0.1114	mg/L	0.00096				0.86%
Ba 233.527†	4947.8	0.0590	mg/L	0.00016				0.28%
Be 313.107†	-392.9	-0.0001	mg/L	0.00001				7.47%
Cd 226.502†	-8.2	-0.0001	mg/L	0.00011				78.51%
Co 228.616†	-40.0	-0.0019	mg/L	0.00018				9.24%
Cr 267.716†	-456.7	-0.0026	mg/L	0.00007				2.65%
Cu 324.752†	246.3	0.0009	mg/L	0.00018				19.68%
Fe 259.939†	17526.0	0.2804	mg/L	0.00229				0.82%
K 766.490†	2968.4	7.108	mg/L	0.1318				1.85%
Mg 279.077†	84989.7	7.036	mg/L	0.0295				0.42%
Mn 257.610†	5588.9	0.0145	mg/L	0.00003				0.23%
Mo 202.031†	281.5	0.0283	mg/L	0.00036				1.28%
Ni 231.604†	-68.8	-0.0016	mg/L	0.00014				8.83%
Na 589.592†	196513.0	32.62	mg/L	0.005				0.01%
Pb 220.353†	4.9	0.0011	mg/L	0.00010				9.84%
Sb 206.836†	1.0	0.0008	mg/L	0.00276				324.61%
Se 196.026†	-0.2	-0.0003	mg/L	0.00014				49.29%
Sn 189.927†	-268.7	-0.0783	mg/L	0.00119				1.52%
Ti 337.279†	595.5	0.0010	mg/L	0.00006				6.06%
Tl 190.801†	-1.6	-0.0019	mg/L	0.00062				31.87%
V 292.402†	21.3	0.0003	mg/L	0.00026				93.45%
Zn 206.200†	9.7	0.0005	mg/L	0.00009				17.66%
Ca 227.546†	9863.8	66.82	mg/L	0.097				0.15%
Sr 421.552†	55055.1	0.4759	mg/L	0.00038				0.08%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 44
Sample ID: CCV
Analyst:
Initial Sample Wt:

Autosampler Location: 3
Date Collected: 6/7/2014 12:31:37 AM
Data Type: Original
Initial Sample Vol:

Dilution: Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7341693.6	1.005	mg/L	0.0028				0.27%
Ag 328.068†	141244.6	0.5084	mg/L	0.00466	0.5084	mg/L	0.00466	0.92%
QC value within limits for Ag 328.068 Recovery = 101.68%								
Al 308.215†	145038.2	9.702	mg/L	0.1257	9.702	mg/L	0.1257	1.30%
QC value within limits for Al 308.215 Recovery = 97.02%								
As 188.979†	898.2	1.004	mg/L	0.0022	1.004	mg/L	0.0022	0.22%
QC value within limits for As 188.979 Recovery = 100.42%								
B 249.772†	311730.7	2.470	mg/L	0.0116	2.470	mg/L	0.0116	0.47%
QC value within limits for B 249.772 Recovery = 98.79%								
Ba 233.527†	854170.2	10.18	mg/L	0.014	10.18	mg/L	0.014	0.14%
QC value within limits for Ba 233.527 Recovery = 101.84%								
Be 313.107†	861097.5	0.2500	mg/L	0.00006	0.2500	mg/L	0.00006	0.02%
QC value within limits for Be 313.107 Recovery = 100.00%								
Cd 226.502†	39747.7	0.5075	mg/L	0.00458	0.5075	mg/L	0.00458	0.90%
QC value within limits for Cd 226.502 Recovery = 101.50%								
Co 228.616†	51511.7	2.514	mg/L	0.0271	2.514	mg/L	0.0271	1.08%
QC value within limits for Co 228.616 Recovery = 100.55%								
Cr 267.716†	67204.2	0.5114	mg/L	0.00472	0.5114	mg/L	0.00472	0.92%
QC value within limits for Cr 267.716 Recovery = 102.27%								
Cu 324.752†	345220.3	1.238	mg/L	0.0116	1.238	mg/L	0.0116	0.93%
QC value within limits for Cu 324.752 Recovery = 99.04%								
Fe 259.939†	310531.6	4.967	mg/L	0.0541	4.967	mg/L	0.0541	1.09%
QC value within limits for Fe 259.939 Recovery = 99.35%								
K 766.490†	10148.3	24.30	mg/L	0.102	24.30	mg/L	0.102	0.42%
QC value within limits for K 766.490 Recovery = 97.20%								
Mg 279.077†	301712.6	24.98	mg/L	0.281	24.98	mg/L	0.281	1.13%
QC value within limits for Mg 279.077 Recovery = 99.91%								
Mn 257.610†	290522.0	0.7549	mg/L	0.00814	0.7549	mg/L	0.00814	1.08%
QC value within limits for Mn 257.610 Recovery = 100.65%								
Mo 202.031†	24613.7	2.477	mg/L	0.0187	2.477	mg/L	0.0187	0.76%
QC value within limits for Mo 202.031 Recovery = 99.09%								
Ni 231.604†	86266.8	2.031	mg/L	0.0179	2.031	mg/L	0.0179	0.88%
QC value within limits for Ni 231.604 Recovery = 101.55%								
Na 589.592†	152102.1	25.25	mg/L	0.114	25.25	mg/L	0.114	0.45%
QC value within limits for Na 589.592 Recovery = 101.00%								
Pb 220.353†	2289.1	0.5001	mg/L	0.00071	0.5001	mg/L	0.00071	0.14%
QC value within limits for Pb 220.353 Recovery = 100.02%								
Sb 206.836†	5957.6	5.040	mg/L	0.0035	5.040	mg/L	0.0035	0.07%
QC value within limits for Sb 206.836 Recovery = 100.80%								
Se 196.026†	295.9	0.5054	mg/L	0.00222	0.5054	mg/L	0.00222	0.44%
QC value within limits for Se 196.026 Recovery = 101.09%								
Sn 189.927†	16928.3	4.936	mg/L	0.0661	4.936	mg/L	0.0661	1.34%
QC value within limits for Sn 189.927 Recovery = 98.72%								
Ti 337.279†	1528877.0	2.484	mg/L	0.0004	2.484	mg/L	0.0004	0.02%
QC value within limits for Ti 337.279 Recovery = 99.35%								
Tl 190.801†	1196.8	0.9903	mg/L	0.00418	0.9903	mg/L	0.00418	0.42%
QC value within limits for Tl 190.801 Recovery = 99.03%								
V 292.402†	185539.2	2.518	mg/L	0.0054	2.518	mg/L	0.0054	0.21%
QC value within limits for V 292.402 Recovery = 100.72%								
Zn 206.200†	20130.4	1.023	mg/L	0.0065	1.023	mg/L	0.0065	0.64%
QC value within limits for Zn 206.200 Recovery = 102.35%								
Ca 227.546†	3593.5	24.63	mg/L	0.007	24.63	mg/L	0.007	0.03%
QC value within limits for Ca 227.546 Recovery = 98.53%								
Sr 421.552†	287846.2	2.488	mg/L	0.0046	2.488	mg/L	0.0046	0.18%
QC value within limits for Sr 421.552 Recovery = 99.53%								

All analyte(s) passed QC.

Sequence No.: 45
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 6/7/2014 12:37:47 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7480578.2	1.024	mg/L	0.0108				1.05%
Ag 328.068†	49.2	0.0002	mg/L	0.00024	0.0002	mg/L	0.00024	151.00%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-586.0	-0.0392	mg/L	0.01575	-0.0392	mg/L	0.01575	40.17%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	0.9	0.0010	mg/L	0.00052	0.0010	mg/L	0.00052	50.06%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	3624.6	0.0292	mg/L	0.00441	0.0292	mg/L	0.00441	15.08%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	269.8	0.0032	mg/L	0.00113	0.0032	mg/L	0.00113	35.17%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	600.6	0.0002	mg/L	0.00004	0.0002	mg/L	0.00004	24.47%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	4.2	0.0001	mg/L	0.00010	0.0001	mg/L	0.00010	158.29%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	6.6	0.0003	mg/L	0.00042	0.0003	mg/L	0.00042	131.70%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-288.4	-0.0022	mg/L	0.00002	-0.0022	mg/L	0.00002	0.72%
QC value less than the lower limit for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	1016.1	0.0036	mg/L	0.00117	0.0036	mg/L	0.00117	32.10%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	-3380.3	-0.0541	mg/L	0.00049	-0.0541	mg/L	0.00049	0.90%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	-43.8	-0.1049	mg/L	0.01153	-0.1049	mg/L	0.01153	10.99%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	-1114.2	-0.0922	mg/L	0.00111	-0.0922	mg/L	0.00111	1.20%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-586.2	-0.0015	mg/L	0.00005	-0.0015	mg/L	0.00005	3.24%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	19.4	0.0020	mg/L	0.00050	0.0020	mg/L	0.00050	25.53%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	-6.3	-0.0001	mg/L	0.00015	-0.0001	mg/L	0.00015	104.48%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	227.8	0.0378	mg/L	0.00322	0.0378	mg/L	0.00322	8.51%
QC value within limits for Na 589.592 Recovery = Not calculated								
Pb 220.353†	2.6	0.0006	mg/L	0.00058	0.0006	mg/L	0.00058	101.24%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	4.0	0.0034	mg/L	0.00018	0.0034	mg/L	0.00018	5.19%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	0.6	0.0011	mg/L	0.00029	0.0011	mg/L	0.00029	27.00%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-36.5	-0.0107	mg/L	0.00160	-0.0107	mg/L	0.00160	15.03%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 337.279†	814.3	0.0013	mg/L	0.00045	0.0013	mg/L	0.00045	34.27%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	-1.5	-0.0012	mg/L	0.00068	-0.0012	mg/L	0.00068	55.94%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	107.4	0.0015	mg/L	0.00014	0.0015	mg/L	0.00014	9.34%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	15.2	0.0008	mg/L	0.00058	0.0008	mg/L	0.00058	74.92%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	-10.0	-0.0710	mg/L	0.02597	-0.0710	mg/L	0.02597	36.57%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Sr 421.552†	151.0	0.0013	mg/L	0.00002	0.0013	mg/L	0.00002	1.76%
QC value within limits for Sr 421.552 Recovery = Not calculated								
QC Failed. Continue with analysis.								

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Sequence No.: 46
Sample ID: MRL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 6/7/2014 12:43:43 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MRL

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7384110.8	1.010	mg/L	0.0055				0.54%
Ag 328.068†	2870.9	0.0103	mg/L	0.00008	0.0103	mg/L	0.00008	0.73%

QC value within limits for Ag 328.068 Recovery = 103.19%

Al 308.215†	2494.0	0.1668 mg/L	0.00465	0.1668 mg/L	0.00465	2.79%

QC value within limits for Al 308.215 Recovery = 83.42%

As 188.979†	19.7	0.0220 mg/L	0.00121	0.0220 mg/L	0.00121	5.48%

QC value within limits for As 188.979 Recovery = 110.03%

B 249.772†	26897.2	0.2148 mg/L	0.00006	0.2148 mg/L	0.00006	0.03%

QC value within limits for B 249.772 Recovery = 107.38%

Ba 233.527†	18204.6	0.2170 mg/L	0.00005	0.2170 mg/L	0.00005	0.02%

QC value within limits for Ba 233.527 Recovery = 108.52%

Be 313.107†	18113.0	0.0053 mg/L	0.00001	0.0053 mg/L	0.00001	0.24%

QC value within limits for Be 313.107 Recovery = 105.18%

Cd 226.502†	843.9	0.0108 mg/L	0.00004	0.0108 mg/L	0.00004	0.37%

QC value within limits for Cd 226.502 Recovery = 107.82%

Co 228.616†	1073.4	0.0524 mg/L	0.00012	0.0524 mg/L	0.00012	0.22%

QC value within limits for Co 228.616 Recovery = 104.76%

Cr 267.716†	1101.4	0.0084 mg/L	0.00001	0.0084 mg/L	0.00001	0.17%

QC value within limits for Cr 267.716 Recovery = 84.45%

Cu 324.752†	7701.9	0.0276 mg/L	0.00024	0.0276 mg/L	0.00024	0.87%

QC value within limits for Cu 324.752 Recovery = 110.45%

Fe 259.939†	3218.3	0.0515 mg/L	0.00022	0.0515 mg/L	0.00022	0.42%

QC value less than the lower limit for Fe 259.939 Recovery = 51.48%

K 766.490†	335.4	0.8031 mg/L	0.01308	0.8031 mg/L	0.01308	1.63%

QC value within limits for K 766.490 Recovery = 80.31%

Mg 279.077†	11140.0	0.9222 mg/L	0.00390	0.9222 mg/L	0.00390	0.42%

QC value within limits for Mg 279.077 Recovery = 92.22%

Mn 257.610†	5425.6	0.0141 mg/L	0.00010	0.0141 mg/L	0.00010	0.71%

QC value within limits for Mn 257.610 Recovery = 93.95%

Mo 202.031†	271.9	0.0274 mg/L	0.00037	0.0274 mg/L	0.00037	1.36%

QC value within limits for Mo 202.031 Recovery = 109.45%

Ni 231.604†	1734.6	0.0408 mg/L	0.00002	0.0408 mg/L	0.00002	0.05%

QC value within limits for Ni 231.604 Recovery = 102.10%

Na 589.592†	6166.0	1.024 mg/L	0.0044	1.024 mg/L	0.0044	0.43%

QC value within limits for Na 589.592 Recovery = 102.37%

Pb 220.353†	50.1	0.0109 mg/L	0.00045	0.0109 mg/L	0.00045	4.15%

QC value within limits for Pb 220.353 Recovery = 109.41%

Sb 206.836†	76.3	0.0645 mg/L	0.00227	0.0645 mg/L	0.00227	3.52%

QC value within limits for Sb 206.836 Recovery = 107.53%

Se 196.026†	4.7	0.0081 mg/L	0.00029	0.0081 mg/L	0.00029	3.59%

QC value within limits for Se 196.026 Recovery = 80.53%

Sn 189.927†	1755.1	0.5118 mg/L	0.00062	0.5118 mg/L	0.00062	0.12%

QC value within limits for Sn 189.927 Recovery = 102.36%

Ti 337.279†	32656.4	0.0531 mg/L	0.00010	0.0531 mg/L	0.00010	0.19%

QC value within limits for Ti 337.279 Recovery = 106.10%

Tl 190.801†	22.2	0.0184 mg/L	0.00402	0.0184 mg/L	0.00402	21.90%

QC value within limits for Tl 190.801 Recovery = 91.84%

V 292.402†	3979.7	0.0540 mg/L	0.00009	0.0540 mg/L	0.00009	0.17%

QC value within limits for V 292.402 Recovery = 108.02%

Zn 206.200†	417.9	0.0212 mg/L	0.00015	0.0212 mg/L	0.00015	0.71%

QC value within limits for Zn 206.200 Recovery = 106.24%

Ca 227.546†	132.0	0.8972 mg/L	0.00661	0.8972 mg/L	0.00661	0.74%

QC value within limits for Ca 227.546 Recovery = 89.72%

Sr 421.552†	11647.3	0.1007 mg/L	0.00013	0.1007 mg/L	0.00013	0.13%

QC value within limits for Sr 421.552 Recovery = 100.68%

QC Failed. Continue with analysis.

Sequence No.: 47
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 6/7/2014 12:49:41 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6913294.6	0.9460	mg/L	0.00957				1.01%
Ag 328.068†	-7906.1	-0.0034	mg/L	0.00002	-0.0034	mg/L	0.00002	0.50%

QC value within limits for Ag 328.068 Recovery = Not calculated

Al 308.215†	3818600.9	255.4	mg/L	3.40	255.4	mg/L	3.40	1.33%

QC value within limits for Al 308.215 Recovery = 102.18%

As 188.979†	0.5	0.0053	mg/L	0.00234	0.0053	mg/L	0.00234	44.39%

```
   QC value within limits for As 188.979  Recovery = Not calculated
B 249.772†          43592.2     -0.0480 mg/L       0.00234     -0.0480 mg/L       0.00234   4.87%
Ba 233.527†           341.1      0.0041 mg/L       0.00003      0.0041 mg/L       0.00003   0.62%
Be 313.107†         -1314.6     -0.0004 mg/L       0.00005     -0.0004 mg/L       0.00005  13.98%
   QC value within limits for Be 313.107  Recovery = Not calculated
Cd 226.502†           879.0      0.0001 mg/L       0.00007      0.0001 mg/L       0.00007  47.57%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†            -1.7     -0.0001 mg/L       0.00022     -0.0001 mg/L       0.00022 264.97%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†         -4386.1      0.0000 mg/L       0.00057      0.0000 mg/L       0.00057 >999.9%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†         -1544.3      0.0048 mg/L       0.00029      0.0048 mg/L       0.00029   6.17%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 259.939†       5626237.4       90.00 mg/L         1.300       90.00 mg/L         1.300   1.44%
   QC value within limits for Fe 259.939  Recovery = 90.00%
K 766.490†             -3.9     -0.0094 mg/L       0.03164     -0.0094 mg/L       0.03164 335.09%
Mg 279.077†       3132200.4       259.3 mg/L          3.79       259.3 mg/L          3.79   1.46%
   QC value within limits for Mg 279.077  Recovery = 103.72%
Mn 257.610†         -6416.0     -0.0052 mg/L       0.00008     -0.0052 mg/L       0.00008   1.59%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†            8.6      0.0009 mg/L       0.00056      0.0009 mg/L       0.00056  64.96%
Ni 231.604†         -158.4     -0.0037 mg/L       0.00029     -0.0037 mg/L       0.00029   7.90%
   QC value within limits for Ni 231.604  Recovery = Not calculated
Na 589.592†           158.5      0.0263 mg/L       0.00151      0.0263 mg/L       0.00151   5.73%
Pb 220.353†         -132.8       0.0013 mg/L       0.00182      0.0013 mg/L       0.00182 141.99%
   QC value within limits for Pb 220.353  Recovery = Not calculated
Sb 206.836†            29.1      0.0003 mg/L       0.00056      0.0003 mg/L       0.00056 213.74%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†          -12.4       0.0052 mg/L       0.00172      0.0052 mg/L       0.00172  33.02%
   QC value within limits for Se 196.026  Recovery = Not calculated
Sn 189.927†         -170.1     -0.0496 mg/L       0.00025     -0.0496 mg/L       0.00025   0.50%
Ti 337.279†           507.4      0.0008 mg/L       0.00000      0.0008 mg/L       0.00000   0.58%
Tl 190.801†            19.4     -0.0021 mg/L       0.00043     -0.0021 mg/L       0.00043  20.33%
   QC value within limits for Tl 190.801  Recovery = Not calculated
V 292.402†            497.5      0.0028 mg/L       0.00075      0.0028 mg/L       0.00075  26.77%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 206.200†           151.9      0.0077 mg/L       0.00001      0.0077 mg/L       0.00001   0.09%
   QC value within limits for Zn 206.200  Recovery = Not calculated
Ca 227.546†         37918.5       262.4 mg/L          3.30       262.4 mg/L          3.30   1.26%
   QC value within limits for Ca 227.546  Recovery = 104.96%
Sr 421.552†           467.9      0.0040 mg/L       0.00005      0.0040 mg/L       0.00005   1.31%
All analyte(s) passed QC.
```

Sequence No.: 48
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 6/7/2014 12:55:40 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6990600.8	0.9565	mg/L	0.00768				0.80%
Ag 328.068†	51135.1	0.2084	mg/L	0.00123	0.2084	mg/L	0.00123	0.59%
QC value within limits for Ag 328.068 Recovery = 104.19%								
Al 308.215†	3796955.7	254.0	mg/L	0.27	254.0	mg/L	0.27	0.11%
QC value within limits for Al 308.215 Recovery = 101.60%								
As 188.979†	89.3	0.1044	mg/L	0.00233	0.1044	mg/L	0.00233	2.23%
QC value within limits for As 188.979 Recovery = 104.41%								
B 249.772†	42148.2	-0.0568	mg/L	0.00158	-0.0568	mg/L	0.00158	2.78%
Ba 233.527†	44257.5	0.5277	mg/L	0.00248	0.5277	mg/L	0.00248	0.47%
QC value within limits for Ba 233.527 Recovery = 105.53%								
Be 313.107†	1719633.6	0.4993	mg/L	0.00166	0.4993	mg/L	0.00166	0.33%
QC value within limits for Be 313.107 Recovery = 99.85%								
Cd 226.502†	76766.8	0.9703	mg/L	0.00691	0.9703	mg/L	0.00691	0.71%
QC value within limits for Cd 226.502 Recovery = 97.03%								
Co 228.616†	9861.7	0.4812	mg/L	0.00556	0.4812	mg/L	0.00556	1.16%
QC value within limits for Co 228.616 Recovery = 96.25%								
Cr 267.716†	62861.2	0.5084	mg/L	0.00301	0.5084	mg/L	0.00301	0.59%
QC value within limits for Cr 267.716 Recovery = 101.67%								

Cu 324.752†	143087.1	0.5231 mg/L	0.00489	0.5231 mg/L	0.00489	0.94%
QC value within limits for Cu 324.752 Recovery = 104.62%						
Fe 259.939†	5587873.9	89.39 mg/L	0.263	89.39 mg/L	0.263	0.29%
QC value within limits for Fe 259.939 Recovery = 89.39%						
K 766.490†	-44.5	-0.1065 mg/L	0.04005	-0.1065 mg/L	0.04005	37.60%
Mg 279.077†	3116151.6	258.0 mg/L	0.66	258.0 mg/L	0.66	0.26%
QC value within limits for Mg 279.077 Recovery = 103.19%						
Mn 257.610†	190802.0	0.5067 mg/L	0.00273	0.5067 mg/L	0.00273	0.54%
QC value within limits for Mn 257.610 Recovery = 101.34%						
Mo 202.031†	2.9	0.0003 mg/L	0.00007	0.0003 mg/L	0.00007	25.14%
Ni 231.604†	40675.2	0.9577 mg/L	0.00586	0.9577 mg/L	0.00586	0.61%
QC value within limits for Ni 231.604 Recovery = 95.77%						
Na 589.592†	103.5	0.0172 mg/L	0.00634	0.0172 mg/L	0.00634	36.90%
Pb 220.353†	104.6	0.0529 mg/L	0.00046	0.0529 mg/L	0.00046	0.87%
QC value within limits for Pb 220.353 Recovery = 105.78%						
Sb 206.836†	772.8	0.6297 mg/L	0.00587	0.6297 mg/L	0.00587	0.93%
QC value within limits for Sb 206.836 Recovery = 104.95%						
Se 196.026†	15.5	0.0525 mg/L	0.00286	0.0525 mg/L	0.00286	5.45%
QC value within limits for Se 196.026 Recovery = 104.92%						
Sn 189.927†	-168.4	-0.0491 mg/L	0.00101	-0.0491 mg/L	0.00101	2.05%
Ti 337.279†	319.8	0.0005 mg/L	0.00003	0.0005 mg/L	0.00003	5.42%
Tl 190.801†	147.2	0.1038 mg/L	0.00447	0.1038 mg/L	0.00447	4.30%
QC value within limits for Tl 190.801 Recovery = 103.84%						
V 292.402†	37015.9	0.4985 mg/L	0.00590	0.4985 mg/L	0.00590	1.18%
QC value within limits for V 292.402 Recovery = 99.70%						
Zn 206.200†	18922.5	0.9621 mg/L	0.01352	0.9621 mg/L	0.01352	1.41%
QC value within limits for Zn 206.200 Recovery = 96.21%						
Ca 227.546†	37135.4	257.1 mg/L	1.74	257.1 mg/L	1.74	0.68%
QC value within limits for Ca 227.546 Recovery = 102.82%						
Sr 421.552†	435.5	0.0038 mg/L	0.00018	0.0038 mg/L	0.00018	4.67%

All analyte(s) passed QC.

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Sequence No.: 49
Sample ID: HLCCV2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 6/7/2014 1:01:39 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: HLCCV2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6805940.5	0.9313	mg/L	0.00200				0.21%
Ag 328.068†	577434.0	2.086	mg/L	0.0071	2.086	mg/L	0.0071	0.34%
QC value within limits for Ag 328.068 Recovery = 104.31%								
Al 308.215†	7865509.3	526.2	mg/L	1.07	526.2	mg/L	1.07	0.20%
QC value within limits for Al 308.215 Recovery = 105.23%								
As 188.979†	3617.6	4.042	mg/L	0.0127	4.042	mg/L	0.0127	0.31%
QC value within limits for As 188.979 Recovery = 101.05%								
B 249.772†	1292114.1	10.11	mg/L	0.082	10.11	mg/L	0.082	0.81%
QC value within limits for B 249.772 Recovery = 101.14%								
Ba 233.527†	3187357.0	38.00	mg/L	0.058	38.00	mg/L	0.058	0.15%
QC value within limits for Ba 233.527 Recovery = 95.00%								
Be 313.107†	3308739.2	0.9606	mg/L	0.00190	0.9606	mg/L	0.00190	0.20%
QC value within limits for Be 313.107 Recovery = 96.06%								
Cd 226.502†	146967.4	1.874	mg/L	0.0061	1.874	mg/L	0.0061	0.33%
QC value within limits for Cd 226.502 Recovery = 93.71%								
Co 228.616†	198693.4	9.696	mg/L	0.0329	9.696	mg/L	0.0329	0.34%
QC value within limits for Co 228.616 Recovery = 96.96%								
Cr 267.716†	1255350.6	9.556	mg/L	0.0186	9.556	mg/L	0.0186	0.19%
QC value within limits for Cr 267.716 Recovery = 95.56%								
Cu 324.752†	1501161.8	5.386	mg/L	0.0381	5.386	mg/L	0.0381	0.71%
QC value within limits for Cu 324.752 Recovery = 107.73%								
Fe 259.939†	3042973.8	48.68	mg/L	0.056	48.68	mg/L	0.056	0.11%
QC value within limits for Fe 259.939 Recovery = 97.35%								
K 766.490†	71668.8	171.6	mg/L	0.57	171.6	mg/L	0.57	0.33%
QC value greater than the upper limit for K 766.490 Recovery = 114.41%								
Mg 279.077†	6201321.9	513.4	mg/L	0.81	513.4	mg/L	0.81	0.16%
QC value within limits for Mg 279.077 Recovery = 102.68%								
Mn 257.610†	3784556.0	9.832	mg/L	0.0172	9.832	mg/L	0.0172	0.17%
QC value within limits for Mn 257.610 Recovery = 98.32%								

Mo 202.031†	97415.4	9.805 mg/L	0.0245	9.805 mg/L	0.0245	0.25%
QC value within limits for Mo 202.031 Recovery = 98.05%						
Ni 231.604†	315963.2	7.439 mg/L	0.0313	7.439 mg/L	0.0313	0.42%
QC value within limits for Ni 231.604 Recovery = 92.99%						
Na 589.592†	929352.5	154.3 mg/L	0.23	154.3 mg/L	0.23	0.15%
QC value within limits for Na 589.592 Recovery = 102.86%						
Pb 220.353†	44163.5	9.696 mg/L	0.0608	9.696 mg/L	0.0608	0.63%
QC value within limits for Pb 220.353 Recovery = 96.96%						
Sb 206.836†	41.4	-0.0151 mg/L	0.00090	-0.0151 mg/L	0.00090	5.93%
Se 196.026†	1139.1	1.966 mg/L	0.0013	1.966 mg/L	0.0013	0.06%
QC value within limits for Se 196.026 Recovery = 98.30%						
Sn 189.927†	-302.1	-0.0881 mg/L	0.00072	-0.0881 mg/L	0.00072	0.81%
Ti 337.279†	5960200.4	9.682 mg/L	0.0186	9.682 mg/L	0.0186	0.19%
QC value within limits for Ti 337.279 Recovery = 96.82%						
Tl 190.801†	4761.3	3.902 mg/L	0.0019	3.902 mg/L	0.0019	0.05%
QC value within limits for Tl 190.801 Recovery = 97.56%						
V 292.402†	717572.0	9.737 mg/L	0.0014	9.737 mg/L	0.0014	0.01%
QC value within limits for V 292.402 Recovery = 97.37%						
Zn 206.200†	73125.9	3.718 mg/L	0.0299	3.718 mg/L	0.0299	0.80%
QC value within limits for Zn 206.200 Recovery = 92.95%						
Ca 227.546†	40639.8	279.4 mg/L	0.75	279.4 mg/L	0.75	0.27%
QC value greater than the upper limit for Ca 227.546 Recovery = 111.76%						
Sr 421.552†	1179268.4	10.19 mg/L	0.014	10.19 mg/L	0.014	0.14%
QC value within limits for Sr 421.552 Recovery = 101.94%						

QC Failed. Continue with analysis.

Sequence No.: 50
Sample ID: HLCCV1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 6/7/2014 1:08:02 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: HLCCV1

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7278874.7	0.9960	mg/L	0.01065				1.07%
Ag 328.068†	274584.1	0.9883	mg/L	0.00300	0.9883	mg/L	0.00300	0.30%
QC value within limits for Ag 328.068 Recovery = 98.83%								
Al 308.215†	294886.6	19.73	mg/L	0.030	19.73	mg/L	0.030	0.15%
QC value within limits for Al 308.215 Recovery = 98.63%								
As 188.979†	1813.0	2.027	mg/L	0.0151	2.027	mg/L	0.0151	0.74%
QC value within limits for As 188.979 Recovery = 101.35%								
B 249.772†	623865.3	4.943	mg/L	0.0417	4.943	mg/L	0.0417	0.84%
QC value within limits for B 249.772 Recovery = 98.87%								
Ba 233.527†	1667339.9	19.88	mg/L	0.126	19.88	mg/L	0.126	0.63%
QC value within limits for Ba 233.527 Recovery = 99.40%								
Be 313.107†	1709679.5	0.4964	mg/L	0.00304	0.4964	mg/L	0.00304	0.61%
QC value within limits for Be 313.107 Recovery = 99.27%								
Cd 226.502†	77668.3	0.9916	mg/L	0.00071	0.9916	mg/L	0.00071	0.07%
QC value within limits for Cd 226.502 Recovery = 99.16%								
Co 228.616†	101647.9	4.960	mg/L	0.0005	4.960	mg/L	0.0005	0.01%
QC value within limits for Co 228.616 Recovery = 99.20%								
Cr 267.716†	130884.0	0.9960	mg/L	0.00015	0.9960	mg/L	0.00015	0.02%
QC value within limits for Cr 267.716 Recovery = 99.60%								
Cu 324.752†	710317.5	2.547	mg/L	0.0188	2.547	mg/L	0.0188	0.74%
QC value within limits for Cu 324.752 Recovery = 101.89%								
Fe 259.939†	612666.6	9.801	mg/L	0.0069	9.801	mg/L	0.0069	0.07%
QC value within limits for Fe 259.939 Recovery = 98.01%								
K 766.490†	20726.5	49.63	mg/L	0.641	49.63	mg/L	0.641	1.29%
QC value within limits for K 766.490 Recovery = 99.26%								
Mg 279.077†	596537.8	49.39	mg/L	0.015	49.39	mg/L	0.015	0.03%
QC value within limits for Mg 279.077 Recovery = 98.77%								
Mn 257.610†	569503.2	1.480	mg/L	0.0004	1.480	mg/L	0.0004	0.02%
QC value within limits for Mn 257.610 Recovery = 98.65%								
Mo 202.031†	49398.8	4.972	mg/L	0.0050	4.972	mg/L	0.0050	0.10%
QC value within limits for Mo 202.031 Recovery = 99.44%								
Ni 231.604†	168299.0	3.962	mg/L	0.0023	3.962	mg/L	0.0023	0.06%
QC value within limits for Ni 231.604 Recovery = 99.06%								
Na 589.592†	299119.6	49.66	mg/L	0.698	49.66	mg/L	0.698	1.41%
QC value within limits for Na 589.592 Recovery = 99.32%								

Pb 220.353†	4711.5	1.029 mg/L	0.0076	1.029 mg/L	0.0076	0.74%
QC value within limits for Pb 220.353 Recovery = 102.93%					
Sb 206.836†	11950.1	10.11 mg/L	0.072	10.11 mg/L	0.072	0.71%
QC value within limits for Sb 206.836 Recovery = 101.10%					
Se 196.026†	589.3	1.007 mg/L	0.0058	1.007 mg/L	0.0058	0.57%
QC value within limits for Se 196.026 Recovery = 100.67%					
Sn 189.927†	34152.4	9.959 mg/L	0.0402	9.959 mg/L	0.0402	0.40%
QC value within limits for Sn 189.927 Recovery = 99.59%					
Ti 337.279†	3050434.2	4.955 mg/L	0.0326	4.955 mg/L	0.0326	0.66%
QC value within limits for Ti 337.279 Recovery = 99.11%					
Tl 190.801†	2427.4	2.009 mg/L	0.0176	2.009 mg/L	0.0176	0.88%
QC value within limits for Tl 190.801 Recovery = 100.43%					
V 292.402†	362487.7	4.919 mg/L	0.0056	4.919 mg/L	0.0056	0.11%
QC value within limits for V 292.402 Recovery = 98.39%					
Zn 206.200†	39895.7	2.028 mg/L	0.0056	2.028 mg/L	0.0056	0.28%
QC value within limits for Zn 206.200 Recovery = 101.42%					
Ca 227.546†	7410.3	50.77 mg/L	0.380	50.77 mg/L	0.380	0.75%
QC value within limits for Ca 227.546 Recovery = 101.54%					
Sr 421.552†	572062.9	4.945 mg/L	0.0448	4.945 mg/L	0.0448	0.91%
QC value within limits for Sr 421.552 Recovery = 98.90%					

All analyte(s) passed QC.

Sequence No.: 51
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 6/7/2014 1:14:14 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7407441.0	1.014	mg/L	0.0032				0.32%
Ag 328.068†	139866.3	0.5034	mg/L	0.00280	0.5034	mg/L	0.00280	0.56%
QC value within limits for Ag 328.068 Recovery = 100.69%								
Al 308.215†	144038.5	9.636	mg/L	0.0774	9.636	mg/L	0.0774	0.80%
QC value within limits for Al 308.215 Recovery = 96.36%								
As 188.979†	904.1	1.011	mg/L	0.0012	1.011	mg/L	0.0012	0.12%
QC value within limits for As 188.979 Recovery = 101.08%								
B 249.772†	323189.5	2.561	mg/L	0.0068	2.561	mg/L	0.0068	0.27%
QC value within limits for B 249.772 Recovery = 102.46%								
Ba 233.527†	853910.5	10.18	mg/L	0.074	10.18	mg/L	0.074	0.73%
QC value within limits for Ba 233.527 Recovery = 101.81%								
Be 313.107†	861965.4	0.2503	mg/L	0.00133	0.2503	mg/L	0.00133	0.53%
QC value within limits for Be 313.107 Recovery = 100.10%								
Cd 226.502†	39843.2	0.5087	mg/L	0.00327	0.5087	mg/L	0.00327	0.64%
QC value within limits for Cd 226.502 Recovery = 101.74%								
Co 228.616†	51526.1	2.514	mg/L	0.0142	2.514	mg/L	0.0142	0.56%
QC value within limits for Co 228.616 Recovery = 100.58%								
Cr 267.716†	67428.7	0.5131	mg/L	0.00332	0.5131	mg/L	0.00332	0.65%
QC value within limits for Cr 267.716 Recovery = 102.61%								
Cu 324.752†	348827.6	1.251	mg/L	0.0097	1.251	mg/L	0.0097	0.78%
QC value within limits for Cu 324.752 Recovery = 100.07%								
Fe 259.939†	309844.0	4.956	mg/L	0.0262	4.956	mg/L	0.0262	0.53%
QC value within limits for Fe 259.939 Recovery = 99.13%								
K 766.490†	10011.8	23.97	mg/L	0.088	23.97	mg/L	0.088	0.37%
QC value within limits for K 766.490 Recovery = 95.89%								
Mg 279.077†	302612.2	25.05	mg/L	0.117	25.05	mg/L	0.117	0.47%
QC value within limits for Mg 279.077 Recovery = 100.21%								
Mn 257.610†	290193.3	0.7540	mg/L	0.00435	0.7540	mg/L	0.00435	0.58%
QC value within limits for Mn 257.610 Recovery = 100.54%								
Mo 202.031†	24560.8	2.472	mg/L	0.0185	2.472	mg/L	0.0185	0.75%
QC value within limits for Mo 202.031 Recovery = 98.88%								
Ni 231.604†	86496.4	2.036	mg/L	0.0112	2.036	mg/L	0.0112	0.55%
QC value within limits for Ni 231.604 Recovery = 101.82%								
Na 589.592†	147973.4	24.57	mg/L	0.141	24.57	mg/L	0.141	0.57%
QC value within limits for Na 589.592 Recovery = 98.26%								
Pb 220.353†	2337.9	0.5107	mg/L	0.00188	0.5107	mg/L	0.00188	0.37%
QC value within limits for Pb 220.353 Recovery = 102.15%								
Sb 206.836†	5961.7	5.044	mg/L	0.0162	5.044	mg/L	0.0162	0.32%
QC value within limits for Sb 206.836 Recovery = 100.87%								

Se 196.026†	296.3	0.5061 mg/L	0.00349	0.5061 mg/L	0.00349	0.69%
QC value within limits for Se 196.026 Recovery = 101.22%						
Sn 189.927†	16904.1	4.929 mg/L	0.0257	4.929 mg/L	0.0257	0.52%
QC value within limits for Sn 189.927 Recovery = 98.58%						
Ti 337.279†	1521625.6	2.472 mg/L	0.0175	2.472 mg/L	0.0175	0.71%
QC value within limits for Ti 337.279 Recovery = 98.88%						
Tl 190.801†	1208.1	0.9998 mg/L	0.00262	0.9998 mg/L	0.00262	0.26%
QC value within limits for Tl 190.801 Recovery = 99.98%						
V 292.402†	184233.4	2.500 mg/L	0.0236	2.500 mg/L	0.0236	0.94%
QC value within limits for V 292.402 Recovery = 100.01%						
Zn 206.200†	20678.3	1.051 mg/L	0.0029	1.051 mg/L	0.0029	0.28%
QC value within limits for Zn 206.200 Recovery = 105.13%						
Ca 227.546†	3569.8	24.47 mg/L	0.124	24.47 mg/L	0.124	0.51%
QC value within limits for Ca 227.546 Recovery = 97.88%						
Sr 421.552†	273421.0	2.364 mg/L	0.0191	2.364 mg/L	0.0191	0.81%
QC value within limits for Sr 421.552 Recovery = 94.54%						

All analyte(s) passed QC.

Sequence No.: 52
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 6/7/2014 1:20:36 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7572862.5	1.036	mg/L	0.0092				0.88%
Ag 328.068†	119.8	0.0004	mg/L	0.00029	0.0004	mg/L	0.00029	69.05%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-368.6	-0.0247	mg/L	0.00177	-0.0247	mg/L	0.00177	7.19%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	1.3	0.0015	mg/L	0.00026	0.0015	mg/L	0.00026	17.56%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	10648.5	0.0854	mg/L	0.00676	0.0854	mg/L	0.00676	7.93%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	573.1	0.0068	mg/L	0.00158	0.0068	mg/L	0.00158	23.20%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	1349.5	0.0004	mg/L	0.00009	0.0004	mg/L	0.00009	23.80%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	23.1	0.0003	mg/L	0.00016	0.0003	mg/L	0.00016	51.92%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	82.7	0.0040	mg/L	0.00051	0.0040	mg/L	0.00051	12.74%
QC value greater than the upper limit for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-93.4	-0.0007	mg/L	0.00008	-0.0007	mg/L	0.00008	11.49%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	3809.0	0.0136	mg/L	0.00059	0.0136	mg/L	0.00059	4.31%
QC value greater than the upper limit for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	-3388.3	-0.0542	mg/L	0.00055	-0.0542	mg/L	0.00055	1.02%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	14.4	0.0344	mg/L	0.02688	0.0344	mg/L	0.02688	78.07%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	-288.5	-0.0239	mg/L	0.01190	-0.0239	mg/L	0.01190	49.82%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-403.8	-0.0011	mg/L	0.00020	-0.0011	mg/L	0.00020	19.06%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	27.6	0.0028	mg/L	0.00046	0.0028	mg/L	0.00046	16.44%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	206.5	0.0049	mg/L	0.00041	0.0049	mg/L	0.00041	8.52%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	270.6	0.0449	mg/L	0.00370	0.0449	mg/L	0.00370	8.24%
QC value within limits for Na 589.592 Recovery = Not calculated								
Pb 220.353†	18.5	0.0040	mg/L	0.00045	0.0040	mg/L	0.00045	11.23%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	7.7	0.0065	mg/L	0.00152	0.0065	mg/L	0.00152	23.34%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.9	-0.0016	mg/L	0.00449	-0.0016	mg/L	0.00449	276.41%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-10.0	-0.0029	mg/L	0.00080	-0.0029	mg/L	0.00080	27.34%
QC value within limits for Sn 189.927 Recovery = Not calculated								

Ti 337.279†	1265.6	0.0021 mg/L	0.00041	0.0021 mg/L	0.00041	19.96%
QC value within limits for Ti 337.279 Recovery = Not calculated						
Tl 190.801†	3.0	0.0025 mg/L	0.00119	0.0025 mg/L	0.00119	48.14%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	138.1	0.0019 mg/L	0.00051	0.0019 mg/L	0.00051	27.21%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	138.5	0.0070 mg/L	0.00037	0.0070 mg/L	0.00037	5.22%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	3.7	0.0223 mg/L	0.00612	0.0223 mg/L	0.00612	27.41%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Sr 421.552†	179.1	0.0015 mg/L	0.00026	0.0015 mg/L	0.00026	16.85%
QC value within limits for Sr 421.552 Recovery = Not calculated						

QC Failed. Continue with analysis.

Sequence No.: 53
Sample ID: PBW-209867
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 64
Date Collected: 6/7/2014 1:26:53 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: PBW-209867

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7531776.7	1.031	mg/L	0.0030				0.29%
Ag 328.068†	-89.7	-0.0003	mg/L	0.00007				20.69%
Al 308.215†	-440.2	-0.0294	mg/L	0.00064				2.16%
As 188.979†	-0.6	-0.0007	mg/L	0.00003				3.81%
B 249.772†	6331.8	0.0509	mg/L	0.00389				7.65%
Ba 233.527†	144.8	0.0017	mg/L	0.00047				27.46%
Be 313.107†	292.7	0.0001	mg/L	0.00004				52.95%
Cd 226.502†	-17.8	-0.0002	mg/L	0.00000				1.33%
Co 228.616†	9.3	0.0005	mg/L	0.00041				91.15%
Cr 267.716†	-99.0	-0.0008	mg/L	0.00022				29.37%
Cu 324.752†	3347.0	0.0120	mg/L	0.00054				4.48%
Fe 259.939†	-4412.4	-0.0706	mg/L	0.00064				0.90%
K 766.490†	-6.4	-0.0154	mg/L	0.05307				343.74%
Mg 279.077†	-867.4	-0.0718	mg/L	0.00251				3.50%
Mn 257.610†	-554.2	-0.0014	mg/L	0.00005				3.39%
Mo 202.031†	4.6	0.0005	mg/L	0.00014				30.54%
Ni 231.604†	51.6	0.0012	mg/L	0.00044				36.19%
Na 589.592†	149.2	0.0248	mg/L	0.00209				8.43%
Pb 220.353†	12.3	0.0027	mg/L	0.00069				25.79%
Sb 206.836†	5.6	0.0048	mg/L	0.00108				22.65%
Se 196.026†	-0.1	-0.0002	mg/L	0.00013				52.43%
Sn 189.927†	-93.7	-0.0273	mg/L	0.00038				1.41%
Ti 337.279†	711.8	0.0012	mg/L	0.00015				12.91%
Tl 190.801†	-7.0	-0.0058	mg/L	0.00019				3.21%
V 292.402†	54.8	0.0007	mg/L	0.00002				3.13%
Zn 206.200†	70.6	0.0036	mg/L	0.00003				0.97%
Ca 227.546†	-7.8	-0.0566	mg/L	0.01257				22.20%
Sr 421.552†	19.1	0.0002	mg/L	0.00005				29.81%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 54
Sample ID: LCSW-209867
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 65
Date Collected: 6/7/2014 1:32:58 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: LCSW-209867

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7615271.3	1.042	mg/L	0.0021				0.20%
Ag 328.068†	14024.3	0.0506	mg/L	0.00020				0.39%
Al 308.215†	27453.5	1.837	mg/L	0.0255				1.39%
As 188.979†	34.9	0.0391	mg/L	0.00245				6.27%
B 249.772†	122328.8	0.9737	mg/L	0.01565				1.61%
Ba 233.527†	169836.0	2.025	mg/L	0.0156				0.77%

Be 313.107†	168875.4	0.0490 mg/L	0.00044	0.89%
Cd 226.502†	3882.1	0.0495 mg/L	0.00013	0.26%
Co 228.616†	10128.2	0.4942 mg/L	0.00509	1.03%
Cr 267.716†	27237.6	0.2062 mg/L	0.00215	1.04%
Cu 324.752†	75083.4	0.2692 mg/L	0.00310	1.15%
Fe 259.939†	58694.1	0.9389 mg/L	0.00911	0.97%
K 766.490†	7443.4	17.82 mg/L	0.028	0.16%
Mg 279.077†	22645.8	1.875 mg/L	0.0211	1.13%
Mn 257.610†	192865.9	0.5008 mg/L	0.00417	0.83%
Mo 202.031†	4947.2	0.4979 mg/L	0.00191	0.38%
Ni 231.604†	21902.5	0.5157 mg/L	0.00445	0.86%
Na 589.592†	116993.4	19.42 mg/L	0.027	0.14%
Pb 220.353†	2323.5	0.5067 mg/L	0.00024	0.05%
Sb 206.836†	581.9	0.4922 mg/L	0.00514	1.04%
Se 196.026†	574.5	0.9791 mg/L	0.01038	1.06%
Sn 189.927†	18446.0	5.379 mg/L	0.0569	1.06%
Ti 337.279†	307928.2	0.5002 mg/L	0.00536	1.07%
Tl 190.801†	2281.3	1.889 mg/L	0.0071	0.38%
V 292.402†	36760.2	0.4989 mg/L	0.00075	0.15%
Zn 206.200†	10362.5	0.5269 mg/L	0.00393	0.75%
Ca 227.546†	274.5	1.915 mg/L	0.0360	1.88%
Sr 421.552†	-21.9	-0.0002 mg/L	0.00020	105.86%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 55
Sample ID: R1403765-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 66
Date Collected: 6/7/2014 1:39:12 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403765-001

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7473959.5	1.023	mg/L	0.0101				0.99%
Ag 328.068†	-190.7	-0.0006	mg/L	0.00001				1.73%
Al 308.215†	10703.3	0.7160	mg/L	0.00014				0.02%
As 188.979†	2.2	0.0025	mg/L	0.00014				5.45%
B 249.772†	8328.3	0.0645	mg/L	0.00277				4.29%
Ba 233.527†	6829.6	0.0814	mg/L	0.00030				0.37%
Be 313.107†	468.4	0.0001	mg/L	0.00002				12.10%
Cd 226.502†	-13.3	-0.0002	mg/L	0.00016				67.24%
Co 228.616†	-10.6	-0.0005	mg/L	0.00020				39.29%
Cr 267.716†	-569.6	-0.0014	mg/L	0.00041				28.59%
Cu 324.752†	2091.1	0.0076	mg/L	0.00046				6.15%
Fe 259.939†	29910.1	0.4785	mg/L	0.00054				0.11%
K 766.490†	2593.9	6.211	mg/L	0.0064				0.10%
Mg 279.077†	274414.3	22.72	mg/L	0.065				0.28%
Mn 257.610†	6899.7	0.0180	mg/L	0.00010				0.58%
Mo 202.031†	35.2	0.0035	mg/L	0.00017				4.74%
Ni 231.604†	1.1	0.0000	mg/L	0.00002				79.67%
Na 589.592†	61705.7	10.24	mg/L	0.095				0.93%
Pb 220.353†	6.4	0.0015	mg/L	0.00028				18.67%
Sb 206.836†	2.5	0.0020	mg/L	0.00127				62.41%
Se 196.026†	-1.1	-0.0018	mg/L	0.00138				76.71%
Sn 189.927†	-211.9	-0.0618	mg/L	0.00082				1.32%
Ti 337.279†	15782.0	0.0256	mg/L	0.00035				1.36%
Tl 190.801†	-3.0	-0.0028	mg/L	0.00047				16.58%
V 292.402†	129.1	0.0017	mg/L	0.00030				17.49%
Zn 206.200†	78.8	0.0040	mg/L	0.00031				7.70%
Ca 227.546†	5286.7	35.83	mg/L	0.035				0.10%
Sr 421.552†	55489.9	0.4797	mg/L	0.00367				0.77%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 56
Sample ID: R1403765-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 67
Date Collected: 6/7/2014 1:45:09 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403765-002

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7480153.9	1.024	mg/L	0.0083				0.81%
Ag 328.068†	-283.1	-0.0007	mg/L	0.00020				29.36%
Al 308.215†	9485.7	0.6346	mg/L	0.03929				6.19%
As 188.979†	-0.2	-0.0001	mg/L	0.00189				>999.9%
B 249.772†	3597.7	0.0234	mg/L	0.00161				6.86%
Ba 233.527†	7134.8	0.0851	mg/L	0.00320				3.77%
Be 313.107†	415.6	0.0001	mg/L	0.00006				51.21%
Cd 226.502†	-7.3	-0.0003	mg/L	0.00001				4.96%
Co 228.616†	-20.2	-0.0010	mg/L	0.00026				26.73%
Cr 267.716†	-705.4	-0.0021	mg/L	0.00018				8.66%
Cu 324.752†	1808.9	0.0066	mg/L	0.00053				7.97%
Fe 259.939†	75658.7	1.210	mg/L	0.0466				3.85%
K 766.490†	456.4	1.093	mg/L	0.0164				1.50%
Mg 279.077†	312147.0	25.84	mg/L	0.954				3.69%
Mn 257.610†	40875.2	0.1063	mg/L	0.00385				3.62%
Mo 202.031†	30.5	0.0031	mg/L	0.00041				13.46%
Ni 231.604†	7.0	0.0002	mg/L	0.00033				201.81%
Na 589.592†	17001.9	2.823	mg/L	0.0068				0.24%
Pb 220.353†	7.4	0.0016	mg/L	0.00054				32.64%
Sb 206.836†	3.0	0.0025	mg/L	0.00159				64.27%
Se 196.026†	1.5	0.0029	mg/L	0.00380				131.14%
Sn 189.927†	-244.6	-0.0713	mg/L	0.00042				0.59%
Ti 337.279†	14157.6	0.0230	mg/L	0.00095				4.13%
Tl 190.801†	-3.7	-0.0036	mg/L	0.00528				144.83%
V 292.402†	93.2	0.0012	mg/L	0.00011				9.36%
Zn 206.200†	76.9	0.0039	mg/L	0.00014				3.57%
Ca 227.546†	8603.5	58.33	mg/L LR	2.535				4.35%
Sr 421.552†	13996.2	0.1210	mg/L	0.00057				0.47%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 57
Sample ID: R1403765-003
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 68
Date Collected: 6/7/2014 1:51:08 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403765-003

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7400026.2	1.013	mg/L	0.0012				0.12%
Ag 328.068†	-372.1	-0.0009	mg/L	0.00019				21.26%
Al 308.215†	75860.0	5.075	mg/L	0.0148				0.29%
As 188.979†	4.7	0.0054	mg/L	0.00209				39.02%
B 249.772†	5072.3	0.0333	mg/L	0.00061				1.83%
Ba 233.527†	12254.1	0.1461	mg/L	0.00088				0.60%
Be 313.107†	764.9	0.0002	mg/L	0.00002				8.66%
Cd 226.502†	0.1	-0.0002	mg/L	0.00005				25.87%
Co 228.616†	-11.4	-0.0006	mg/L	0.00003				6.05%
Cr 267.716†	-1093.7	-0.0021	mg/L	0.00010				4.63%
Cu 324.752†	1645.5	0.0061	mg/L	0.00022				3.62%
Fe 259.939†	102955.5	1.647	mg/L	0.0048				0.29%
K 766.490†	3644.0	8.726	mg/L	0.2386				2.73%
Mg 279.077†	588237.0	48.70	mg/L	0.220				0.45%
Mn 257.610†	22768.7	0.0593	mg/L	0.00015				0.25%
Mo 202.031†	39.7	0.0040	mg/L	0.00007				1.70%
Ni 231.604†	-3.1	-0.0001	mg/L	0.00026				358.16%
Na 589.592†	65696.8	10.91	mg/L	0.140				1.28%
Pb 220.353†	3.4	0.0013	mg/L	0.00096				71.39%
Sb 206.836†	3.8	0.0027	mg/L	0.00038				14.19%
Se 196.026†	0.7	0.0017	mg/L	0.00056				32.74%
Sn 189.927†	-250.2	-0.0730	mg/L	0.00014				0.19%
Ti 337.279†	41890.9	0.0681	mg/L	0.00043				0.64%
Tl 190.801†	-5.9	-0.0059	mg/L	0.00012				2.10%
V 292.402†	196.8	0.0026	mg/L	0.00001				0.40%
Zn 206.200†	157.5	0.0080	mg/L	0.00045				5.66%
Ca 227.546†	9332.0	63.30	mg/L VR	0.197				0.31%

Sr 421.552†	55641.4	0.4810	mg/L	0.00708	1.47%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 58
Sample ID: R1403765-004
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 69
Date Collected: 6/7/2014 1:57:09 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403765-004

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7440154.5	1.018	mg/L	0.0065				0.64%
Ag 328.068†	-1254.6	-0.0006	mg/L	0.00016				25.50%
Al 308.215†	213074.5	14.25	mg/L	0.213				1.50%
As 188.979†	3.0	0.0043	mg/L	0.00022				5.02%
B 249.772†	9919.3	0.0180	mg/L	0.00113				6.27%
Ba 233.527†	11692.0	0.1394	mg/L	0.00155				1.11%
Be 313.107†	1863.3	0.0005	mg/L	0.00007				13.16%
Cd 226.502†	109.5	-0.0004	mg/L	0.00005				12.30%
Co 228.616†	79.5	0.0039	mg/L	0.00015				3.87%
Cr 267.716†	1171.5	0.0140	mg/L	0.00000				0.03%
Cu 324.752†	5929.3	0.0228	mg/L	0.00066				2.88%
Fe 259.939†	869651.2	13.91	mg/L	0.026				0.19%
K 766.490†	1953.1	4.677	mg/L	0.1135				2.43%
Mg 279.077†	481215.2	39.84	mg/L	0.042				0.11%
Mn 257.610†	98420.6	0.2573	mg/L	0.00278				1.08%
Mo 202.031†	30.4	0.0031	mg/L	0.00028				9.03%
Ni 231.604†	470.9	0.0111	mg/L	0.00017				1.53%
Na 589.592†	32083.9	5.326	mg/L	0.0405				0.76%
Pb 220.353†	19.1	0.0055	mg/L	0.00154				28.18%
Sb 206.836†	5.5	0.0033	mg/L	0.00218				66.60%
Se 196.026†	-1.1	0.0015	mg/L	0.00232				156.58%
Sn 189.927†	-273.8	-0.0798	mg/L	0.00059				0.74%
Ti 337.279†	346076.9	0.5622	mg/L	0.00801				1.43%
Tl 190.801†	1.1	-0.0005	mg/L	0.00039				81.71%
V 292.402†	1779.2	0.0235	mg/L	0.00017				0.71%
Zn 206.200†	679.8	0.0346	mg/L	0.00020				0.57%
Ca 227.546†	13560.9	92.63	mg/L LR	1.299				1.40%
Sr 421.552†	20866.5	0.1804	mg/L	0.00076				0.42%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 59
Sample ID: R1403765-004D
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 70
Date Collected: 6/7/2014 2:03:10 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403765-004D

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7451495.6	1.020	mg/L	0.0053				0.52%
Ag 328.068†	-1206.4	-0.0006	mg/L	0.00012				22.25%
Al 308.215†	209831.7	14.04	mg/L	0.225				1.60%
As 188.979†	1.2	0.0023	mg/L	0.00000				0.21%
B 249.772†	9321.2	0.0147	mg/L	0.00024				1.61%
Ba 233.527†	11427.4	0.1362	mg/L	0.00165				1.21%
Be 313.107†	1715.8	0.0005	mg/L	0.00003				6.83%
Cd 226.502†	108.1	-0.0004	mg/L	0.00003				7.63%
Co 228.616†	82.2	0.0040	mg/L	0.00001				0.15%
Cr 267.716†	1147.0	0.0138	mg/L	0.00009				0.68%
Cu 324.752†	5588.6	0.0216	mg/L	0.00057				2.66%
Fe 259.939†	849530.6	13.59	mg/L	0.204				1.50%
K 766.490†	1894.9	4.537	mg/L	0.1668				3.68%
Mg 279.077†	472519.1	39.12	mg/L	0.566				1.45%
Mn 257.610†	97694.4	0.2554	mg/L	0.00372				1.46%
Mo 202.031†	27.5	0.0028	mg/L	0.00014				4.93%
Ni 231.604†	458.9	0.0108	mg/L	0.00016				1.48%

Na 589.592†	31000.9	5.147	mg/L	0.0771		1.50%
Pb 220.353†	11.0	0.0037	mg/L	0.00023		6.12%
Sb 206.836†	4.1	0.0022	mg/L	0.00082		37.82%
Se 196.026†	0.5	0.0041	mg/L	0.00298		73.28%
Sn 189.927†	-272.6	-0.0795	mg/L	0.00132		1.66%
Ti 337.279†	358550.7	0.5825	mg/L	0.00831		1.43%
Tl 190.801†	1.8	0.0001	mg/L	0.00166		>999.9%
V 292.402†	1779.9	0.0236	mg/L	0.00012		0.50%
Zn 206.200†	651.9	0.0331	mg/L	0.00038		1.16%
Ca 227.546†	13411.4	91.60	mg/L	1.275		1.39%
Sr 421.552†	20632.9	0.1784	mg/L	0.00206		1.16%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 60
Sample ID: R1403765-004S
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 71
Date Collected: 6/7/2014 2:09:18 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403765-004S

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7483239.4	1.024	mg/L	0.0018				0.17%
Ag 328.068†	12753.3	0.0498	mg/L	0.00003				0.06%
Al 308.215†	222769.5	14.90	mg/L	0.078				0.53%
As 188.979†	35.4	0.0405	mg/L	0.00231				5.70%
B 249.772†	129879.4	0.9747	mg/L	0.00154				0.16%
Ba 233.527†	175170.0	2.088	mg/L	0.0072				0.34%
Be 313.107†	169603.6	0.0492	mg/L	0.00005				0.10%
Cd 226.502†	3789.4	0.0466	mg/L	0.00024				0.52%
Co 228.616†	9634.6	0.4702	mg/L	0.00226				0.48%
Cr 267.716†	27368.6	0.2123	mg/L	0.00005				0.02%
Cu 324.752†	74247.6	0.2678	mg/L	0.00062				0.23%
Fe 259.939†	900727.2	14.41	mg/L	0.011				0.08%
K 766.490†	9470.1	22.68	mg/L	0.155				0.69%
Mg 279.077†	498519.3	41.27	mg/L	0.012				0.03%
Mn 257.610†	285769.3	0.7437	mg/L	0.00296				0.40%
Mo 202.031†	4892.1	0.4924	mg/L	0.00276				0.56%
Ni 231.604†	21029.9	0.4951	mg/L	0.00204				0.41%
Na 589.592†	146620.6	24.34	mg/L	0.184				0.76%
Pb 220.353†	2254.0	0.4927	mg/L	0.00287				0.58%
Sb 206.836†	571.3	0.4820	mg/L	0.00362				0.75%
Se 196.026†	566.8	0.9693	mg/L	0.00381				0.39%
Sn 189.927†	17835.5	5.201	mg/L	0.0164				0.32%
Ti 337.279†	624729.6	1.015	mg/L	0.0015				0.14%
Tl 190.801†	2242.1	1.855	mg/L	0.0051				0.27%
V 292.402†	37401.2	0.5070	mg/L	0.00327				0.65%
Zn 206.200†	9963.3	0.5066	mg/L	0.00338				0.67%
Ca 227.546†	14083.7	96.20	mg/L	0.399				0.42%
Sr 421.552†	20097.4	0.1737	mg/L	0.00154				0.89%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 61
Sample ID: R1403765-004A
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 72
Date Collected: 6/7/2014 2:15:24 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403765-004A

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7433274.3	1.017	mg/L	0.0090				0.89%
Ag 328.068†	10837.8	0.0429	mg/L	0.00013				0.30%
Al 308.215†	240435.4	16.08	mg/L	0.058				0.36%
As 188.979†	33.3	0.0382	mg/L	0.00173				4.53%
B 249.772†	124733.8	0.9336	mg/L	0.00015				0.02%
Ba 233.527†	167111.7	1.992	mg/L	0.0106				0.53%
Be 313.107†	158930.4	0.0461	mg/L	0.00037				0.81%

Cd 226.502†	3578.7	0.0439 mg/L	0.00026	0.59%
Co 228.616†	9037.8	0.4410 mg/L	0.00203	0.46%
Cr 267.716†	25936.4	0.2014 mg/L	0.00084	0.42%
Cu 324.752†	70084.2	0.2529 mg/L	0.00071	0.28%
Fe 259.939†	899665.3	14.39 mg/L	0.086	0.60%
K 766.490†	9194.6	22.02 mg/L	0.450	2.04%
Mg 279.077†	493589.0	40.86 mg/L	0.244	0.60%
Mn 257.610†	274439.7	0.7143 mg/L	0.00368	0.52%
Mo 202.031†	5120.5	0.5154 mg/L	0.00241	0.47%
Ni 231.604†	19791.2	0.4660 mg/L	0.00311	0.67%
Na 589.592†	137566.5	22.84 mg/L	0.347	1.52%
Pb 220.353†	2121.3	0.4640 mg/L	0.00286	0.62%
Sb 206.836†	605.4	0.5107 mg/L	0.00213	0.42%
Se 196.026†	654.9	1.119 mg/L	0.0110	0.98%
Sn 189.927†	19794.5	5.772 mg/L	0.0319	0.55%
Ti 337.279†	658283.6	1.069 mg/L	0.0062	0.58%
Tl 190.801†	2115.7	1.751 mg/L	0.0088	0.50%
V 292.402†	35636.9	0.4830 mg/L	0.00035	0.07%
Zn 206.200†	9484.1	0.4822 mg/L	0.00199	0.41%
Ca 227.546†	13938.8	95.22 mg/L	0.594	0.62%
Sr 421.552†	19563.1	0.1691 mg/L	0.00214	1.26%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 62
Sample ID: R1403765-004L
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 73
Date Collected: 6/7/2014 2:21:28 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403765-004L

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7558100.5	1.034	mg/L	0.0005				0.05%
Ag 328.068†	-282.1	-0.0002	mg/L	0.00004				16.90%
Al 308.215†	40779.4	2.728	mg/L	0.0038				0.14%
As 188.979†	0.0	0.0002	mg/L	0.00114				550.20%
B 249.772†	3634.7	0.0168	mg/L	0.00143				8.55%
Ba 233.527†	2413.0	0.0288	mg/L	0.00002				0.07%
Be 313.107†	797.2	0.0002	mg/L	0.00000				2.13%
Cd 226.502†	21.0	-0.0001	mg/L	0.00001				7.97%
Co 228.616†	12.1	0.0006	mg/L	0.00013				21.59%
Cr 267.716†	-9.2	0.0010	mg/L	0.00006				5.78%
Cu 324.752†	1744.2	0.0066	mg/L	0.00016				2.38%
Fe 259.939†	174190.5	2.786	mg/L	0.0020				0.07%
K 766.490†	360.6	0.8633	mg/L	0.02891				3.35%
Mg 279.077†	96250.4	7.968	mg/L	0.0085				0.11%
Mn 257.610†	19666.6	0.0514	mg/L	0.00017				0.33%
Mo 202.031†	14.8	0.0015	mg/L	0.00000				0.24%
Ni 231.604†	92.5	0.0022	mg/L	0.00008				3.79%
Na 589.592†	6412.2	1.065	mg/L	0.0073				0.68%
Pb 220.353†	6.8	0.0017	mg/L	0.00006				3.29%
Sb 206.836†	0.9	0.0005	mg/L	0.00065				122.84%
Se 196.026†	-0.0	0.0006	mg/L	0.00086				131.87%
Sn 189.927†	-165.0	-0.0481	mg/L	0.00070				1.46%
Ti 337.279†	71307.7	0.1158	mg/L	0.00068				0.59%
Tl 190.801†	0.7	0.0004	mg/L	0.00297				839.68%
V 292.402†	400.3	0.0053	mg/L	0.00012				2.34%
Zn 206.200†	205.2	0.0104	mg/L	0.00020				1.90%
Ca 227.546†	2604.8	17.80	mg/L	0.021				0.12%
Sr 421.552†	4041.0	0.0349	mg/L	0.00054				1.53%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 63
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 6/7/2014 2:27:31 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7248940.0	0.9919	mg/L	0.00237				0.24%
Ag 328.068†	143756.3	0.5174	mg/L	0.00439	0.5174	mg/L	0.00439	0.85%
QC value within limits for Ag 328.068 Recovery = 103.48%								
Al 308.215†	147075.8	9.839	mg/L	0.1053	9.839	mg/L	0.1053	1.07%
QC value within limits for Al 308.215 Recovery = 98.39%								
As 188.979†	928.5	1.038	mg/L	0.0027	1.038	mg/L	0.0027	0.26%
QC value within limits for As 188.979 Recovery = 103.81%								
B 249.772†	317169.0	2.513	mg/L	0.0420	2.513	mg/L	0.0420	1.67%
QC value within limits for B 249.772 Recovery = 100.52%								
Ba 233.527†	866192.6	10.33	mg/L	0.008	10.33	mg/L	0.008	0.08%
QC value within limits for Ba 233.527 Recovery = 103.27%								
Be 313.107†	873030.4	0.2535	mg/L	0.00043	0.2535	mg/L	0.00043	0.17%
QC value within limits for Be 313.107 Recovery = 101.39%								
Cd 226.502†	40772.9	0.5206	mg/L	0.00562	0.5206	mg/L	0.00562	1.08%
QC value within limits for Cd 226.502 Recovery = 104.11%								
Co 228.616†	52742.1	2.574	mg/L	0.0235	2.574	mg/L	0.0235	0.91%
QC value within limits for Co 228.616 Recovery = 102.95%								
Cr 267.716†	68925.3	0.5244	mg/L	0.00533	0.5244	mg/L	0.00533	1.02%
QC value within limits for Cr 267.716 Recovery = 104.89%								
Cu 324.752†	350456.1	1.257	mg/L	0.0140	1.257	mg/L	0.0140	1.11%
QC value within limits for Cu 324.752 Recovery = 100.54%								
Fe 259.939†	316283.3	5.059	mg/L	0.0453	5.059	mg/L	0.0453	0.90%
QC value within limits for Fe 259.939 Recovery = 101.19%								
K 766.490†	10258.1	24.56	mg/L	0.087	24.56	mg/L	0.087	0.35%
QC value within limits for K 766.490 Recovery = 98.25%								
Mg 279.077†	308671.6	25.55	mg/L	0.239	25.55	mg/L	0.239	0.94%
QC value within limits for Mg 279.077 Recovery = 102.22%								
Mn 257.610†	296478.5	0.7704	mg/L	0.00724	0.7704	mg/L	0.00724	0.94%
QC value within limits for Mn 257.610 Recovery = 102.71%								
Mo 202.031†	25177.2	2.534	mg/L	0.0287	2.534	mg/L	0.0287	1.13%
QC value within limits for Mo 202.031 Recovery = 101.36%								
Ni 231.604†	88482.7	2.083	mg/L	0.0218	2.083	mg/L	0.0218	1.05%
QC value within limits for Ni 231.604 Recovery = 104.16%								
Na 589.592†	151857.4	25.21	mg/L	0.094	25.21	mg/L	0.094	0.37%
QC value within limits for Na 589.592 Recovery = 100.84%								
Pb 220.353†	2353.8	0.5142	mg/L	0.00256	0.5142	mg/L	0.00256	0.50%
QC value within limits for Pb 220.353 Recovery = 102.84%								
Sb 206.836†	6117.4	5.175	mg/L	0.0087	5.175	mg/L	0.0087	0.17%
QC value within limits for Sb 206.836 Recovery = 103.51%								
Se 196.026†	301.8	0.5156	mg/L	0.00021	0.5156	mg/L	0.00021	0.04%
QC value within limits for Se 196.026 Recovery = 103.11%								
Sn 189.927†	17324.5	5.052	mg/L	0.0635	5.052	mg/L	0.0635	1.26%
QC value within limits for Sn 189.927 Recovery = 101.04%								
Ti 337.279†	1547679.8	2.514	mg/L	0.0031	2.514	mg/L	0.0031	0.12%
QC value within limits for Ti 337.279 Recovery = 100.57%								
Tl 190.801†	1228.3	1.016	mg/L	0.0020	1.016	mg/L	0.0020	0.19%
QC value within limits for Tl 190.801 Recovery = 101.64%								
V 292.402†	189485.3	2.571	mg/L	0.0053	2.571	mg/L	0.0053	0.21%
QC value within limits for V 292.402 Recovery = 102.86%								
Zn 206.200†	20826.4	1.059	mg/L	0.0112	1.059	mg/L	0.0112	1.06%
QC value within limits for Zn 206.200 Recovery = 105.89%								
Ca 227.546†	3655.7	25.06	mg/L	0.037	25.06	mg/L	0.037	0.15%
QC value within limits for Ca 227.546 Recovery = 100.24%								
Sr 421.552†	285495.4	2.468	mg/L	0.0011	2.468	mg/L	0.0011	0.05%
QC value within limits for Sr 421.552 Recovery = 98.72%								

All analyte(s) passed QC.

Sequence No.: 64
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 6/7/2014 2:33:45 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7534606.4	1.031	mg/L	0.0004				0.04%

Ag 328.068†	45.4	0.0001 mg/L	0.00006	0.0001 mg/L	0.00006	40.18%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 308.215†	-705.0	-0.0472 mg/L	0.00152	-0.0472 mg/L	0.00152	3.23%
QC value within limits for Al 308.215 Recovery = Not calculated						
As 188.979†	1.1	0.0013 mg/L	0.00059	0.0013 mg/L	0.00059	46.79%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.772†	4002.3	0.0323 mg/L	0.00404	0.0323 mg/L	0.00404	12.51%
QC value within limits for B 249.772 Recovery = Not calculated						
Ba 233.527†	320.6	0.0038 mg/L	0.00097	0.0038 mg/L	0.00097	25.48%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	795.1	0.0002 mg/L	0.00004	0.0002 mg/L	0.00004	17.59%
QC value within limits for Be 313.107 Recovery = Not calculated						
Cd 226.502†	9.4	0.0001 mg/L	0.00005	0.0001 mg/L	0.00005	35.29%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	23.5	0.0011 mg/L	0.00017	0.0011 mg/L	0.00017	14.54%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-290.1	-0.0022 mg/L	0.00003	-0.0022 mg/L	0.00003	1.51%
QC value less than the lower limit for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	1128.8	0.0040 mg/L	0.00043	0.0040 mg/L	0.00043	10.54%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 259.939†	-3850.8	-0.0616 mg/L	0.00029	-0.0616 mg/L	0.00029	0.46%
QC value within limits for Fe 259.939 Recovery = Not calculated						
K 766.490†	-31.9	-0.0764 mg/L	0.05568	-0.0764 mg/L	0.05568	72.88%
QC value within limits for K 766.490 Recovery = Not calculated						
Mg 279.077†	-1160.9	-0.0961 mg/L	0.00438	-0.0961 mg/L	0.00438	4.56%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	-645.8	-0.0017 mg/L	0.00009	-0.0017 mg/L	0.00009	5.39%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	18.2	0.0018 mg/L	0.00029	0.0018 mg/L	0.00029	15.84%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	41.4	0.0010 mg/L	0.00034	0.0010 mg/L	0.00034	34.54%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Na 589.592†	205.7	0.0342 mg/L	0.00658	0.0342 mg/L	0.00658	19.25%
QC value within limits for Na 589.592 Recovery = Not calculated						
Pb 220.353†	3.8	0.0008 mg/L	0.00065	0.0008 mg/L	0.00065	78.33%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	3.9	0.0033 mg/L	0.00278	0.0033 mg/L	0.00278	83.11%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-0.8	-0.0014 mg/L	0.00152	-0.0014 mg/L	0.00152	109.60%
QC value within limits for Se 196.026 Recovery = Not calculated						
Sn 189.927†	-35.3	-0.0103 mg/L	0.00066	-0.0103 mg/L	0.00066	6.38%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 337.279†	801.8	0.0013 mg/L	0.00016	0.0013 mg/L	0.00016	12.52%
QC value within limits for Ti 337.279 Recovery = Not calculated						
Tl 190.801†	-0.7	-0.0006 mg/L	0.00216	-0.0006 mg/L	0.00216	378.27%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	108.5	0.0015 mg/L	0.00014	0.0015 mg/L	0.00014	9.68%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	30.6	0.0016 mg/L	0.00067	0.0016 mg/L	0.00067	42.92%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	0.5	0.0002 mg/L	0.03615	0.0002 mg/L	0.03615	>999.9%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Sr 421.552†	101.2	0.0009 mg/L	0.00015	0.0009 mg/L	0.00015	16.82%
QC value within limits for Sr 421.552 Recovery = Not calculated						

QC Failed. Continue with analysis.

Sequence No.: 65
Sample ID: R1403765-005
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 74
Date Collected: 6/7/2014 2:39:45 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403765-005

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7450387.6	1.019	mg/L	0.0050				0.49%
Ag 328.068†	-167.0	-0.0006	mg/L	0.00018				29.25%
Al 308.215†	-471.9	-0.0316	mg/L	0.00039				1.24%
As 188.979†	1.0	0.0011	mg/L	0.00135				123.26%
B 249.772†	2792.3	0.0226	mg/L	0.00148				6.53%

Ba 233.527†	2318.7	0.0276 mg/L	0.00043	1.57%
Be 313.107†	207.4	0.0001 mg/L	0.00004	68.01%
Cd 226.502†	-34.3	-0.0004 mg/L	0.00002	4.23%
Co 228.616†	-3.5	-0.0002 mg/L	0.00015	89.55%
Cr 267.716†	-888.3	-0.0031 mg/L	0.00011	3.67%
Cu 324.752†	6458.9	0.0231 mg/L	0.00007	0.28%
Fe 259.939†	-4326.6	-0.0692 mg/L	0.00068	0.98%
K 766.490†	329.7	0.7896 mg/L	0.03639	4.61%
Mg 279.077†	347915.2	28.80 mg/L	0.065	0.22%
Mn 257.610†	10789.0	0.0280 mg/L	0.00005	0.19%
Mo 202.031†	27.4	0.0028 mg/L	0.00026	9.25%
Ni 231.604†	816.5	0.0192 mg/L	0.00018	0.93%
Na 589.592†	23248.5	3.860 mg/L	0.0317	0.82%
Pb 220.353†	5.0	0.0011 mg/L	0.00150	138.11%
Sb 206.836†	4.6	0.0039 mg/L	0.00030	7.62%
Se 196.026†	1.2	0.0020 mg/L	0.00143	70.05%
Sn 189.927†	-244.0	-0.0711 mg/L	0.00071	1.00%
Ti 337.279†	802.6	0.0013 mg/L	0.00018	13.54%
Tl 190.801†	-4.4	-0.0043 mg/L	0.00332	77.28%
V 292.402†	36.2	0.0005 mg/L	0.00035	71.19%
Zn 206.200†	841.5	0.0428 mg/L	0.00017	0.40%
Ca 227.546†	9275.5	62.81 mg/L LR	0.356	0.57%
Sr 421.552†	9927.9	0.0858 mg/L	0.00098	1.14%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 66
Sample ID: R1403765-008
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 75
Date Collected: 6/7/2014 2:45:46 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403765-008

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7436472.2	1.018	mg/L	0.0049				0.48%
Ag 328.068†	-301.0	-0.0010	mg/L	0.00017				16.86%
Al 308.215†	-40.8	-0.0027	mg/L	0.00254				93.10%
As 188.979†	-1.8	-0.0020	mg/L	0.00033				17.08%
B 249.772†	1214.3	0.0084	mg/L	0.00071				8.48%
Ba 233.527†	2535.9	0.0302	mg/L	0.00027				0.90%
Be 313.107†	278.2	0.0001	mg/L	0.00004				53.26%
Cd 226.502†	-36.4	-0.0005	mg/L	0.00000				0.61%
Co 228.616†	-21.9	-0.0011	mg/L	0.00021				19.65%
Cr 267.716†	-938.3	-0.0034	mg/L	0.00024				6.95%
Cu 324.752†	989.3	0.0036	mg/L	0.00016				4.51%
Fe 259.939†	18589.0	0.2974	mg/L	0.00056				0.19%
K 766.490†	246.3	0.5898	mg/L	0.02958				5.02%
Mg 279.077†	350953.0	29.05	mg/L	0.152				0.52%
Mn 257.610†	21299.5	0.0553	mg/L	0.00041				0.75%
Mo 202.031†	26.2	0.0026	mg/L	0.00022				8.43%
Ni 231.604†	806.7	0.0190	mg/L	0.00014				0.76%
Na 589.592†	12423.3	2.062	mg/L	0.0101				0.49%
Pb 220.353†	-0.3	-0.0001	mg/L	0.00093				>999.9%
Sb 206.836†	2.2	0.0019	mg/L	0.00207				110.75%
Se 196.026†	1.3	0.0023	mg/L	0.00007				2.87%
Sn 189.927†	-250.8	-0.0731	mg/L	0.00076				1.04%
Ti 337.279†	1340.8	0.0022	mg/L	0.00007				3.23%
Tl 190.801†	-1.2	-0.0016	mg/L	0.00335				215.90%
V 292.402†	38.7	0.0005	mg/L	0.00034				66.16%
Zn 206.200†	514.4	0.0262	mg/L	0.00036				1.39%
Ca 227.546†	8406.4	56.95	mg/L LR	0.578				1.01%
Sr 421.552†	9735.1	0.0842	mg/L	0.00053				0.63%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 67
Sample ID: R1403765-009
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 76
Date Collected: 6/7/2014 2:51:49 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403765-009

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7383506.9	1.010	mg/L	0.0004				0.04%
Ag 328.068†	-198.1	-0.0005	mg/L	0.00003				5.00%
Al 308.215†	10349.8	0.6924	mg/L	0.00560				0.81%
As 188.979†	1.9	0.0022	mg/L	0.00202				92.31%
B 249.772†	3632.9	0.0264	mg/L	0.00062				2.35%
Ba 233.527†	4516.6	0.0539	mg/L	0.00005				0.09%
Be 313.107†	109.7	0.0000	mg/L	0.00003				92.87%
Cd 226.502†	-42.1	-0.0006	mg/L	0.00002				2.66%
Co 228.616†	-17.8	-0.0009	mg/L	0.00004				4.81%
Cr 267.716†	-719.9	-0.0023	mg/L	0.00008				3.56%
Cu 324.752†	654.8	0.0024	mg/L	0.00014				5.89%
Fe 259.939†	37564.8	0.6009	mg/L	0.00254				0.42%
K 766.490†	3964.9	9.494	mg/L	0.0111				0.12%
Mg 279.077†	303991.3	25.17	mg/L	0.058				0.23%
Mn 257.610†	7656.5	0.0200	mg/L	0.00006				0.31%
Mo 202.031†	89.8	0.0090	mg/L	0.00025				2.80%
Ni 231.604†	-11.4	-0.0003	mg/L	0.00002				9.27%
Na 589.592†	107569.9	17.86	mg/L	0.019				0.11%
Pb 220.353†	-2.7	-0.0005	mg/L	0.00079				153.28%
Sb 206.836†	4.3	0.0036	mg/L	0.00020				5.45%
Se 196.026†	2.3	0.0040	mg/L	0.00209				52.09%
Sn 189.927†	-217.3	-0.0634	mg/L	0.00025				0.40%
Ti 337.279†	11888.5	0.0193	mg/L	0.00006				0.31%
Tl 190.801†	-7.1	-0.0062	mg/L	0.00021				3.34%
V 292.402†	193.6	0.0026	mg/L	0.00016				6.00%
Zn 206.200†	71.2	0.0036	mg/L	0.00044				12.07%
Ca 227.546†	4082.3	27.68	mg/L	0.020				0.07%
Sr 421.552†	28291.3	0.2446	mg/L	0.00013				0.05%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 68
Sample ID: R1403765-010
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 77
Date Collected: 6/7/2014 2:58:01 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403765-010

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7525073.2	1.030	mg/L	0.0086				0.84%
Ag 328.068†	-460.3	-0.0002	mg/L	0.00016				70.57%
Al 308.215†	99960.7	6.687	mg/L	0.0765				1.14%
As 188.979†	-0.6	-0.0004	mg/L	0.00178				483.85%
B 249.772†	13719.3	0.0870	mg/L	0.00114				1.31%
Ba 233.527†	14352.0	0.1711	mg/L	0.00113				0.66%
Be 313.107†	1710.5	0.0005	mg/L	0.00003				5.50%
Cd 226.502†	31.5	-0.0003	mg/L	0.00005				20.48%
Co 228.616†	13.5	0.0007	mg/L	0.00002				2.87%
Cr 267.716†	139.3	0.0050	mg/L	0.00003				0.63%
Cu 324.752†	1626.0	0.0064	mg/L	0.00036				5.65%
Fe 259.939†	321925.5	5.150	mg/L	0.0503				0.98%
K 766.490†	3185.9	7.629	mg/L	0.0997				1.31%
Mg 279.077†	373994.2	30.96	mg/L	0.300				0.97%
Mn 257.610†	38737.2	0.1012	mg/L	0.00114				1.13%
Mo 202.031†	32.4	0.0033	mg/L	0.00015				4.69%
Ni 231.604†	126.9	0.0030	mg/L	0.00018				6.07%
Na 589.592†	84240.2	13.99	mg/L	0.224				1.60%
Pb 220.353†	34.5	0.0082	mg/L	0.00236				28.79%
Sb 206.836†	2.9	0.0019	mg/L	0.00152				82.42%
Se 196.026†	0.5	0.0021	mg/L	0.00119				56.34%
Sn 189.927†	-245.3	-0.0715	mg/L	0.00025				0.35%
Ti 337.279†	133922.7	0.2176	mg/L	0.00207				0.95%
Tl 190.801†	-6.6	-0.0062	mg/L	0.00022				3.64%
V 292.402†	849.1	0.0113	mg/L	0.00002				0.19%
Zn 206.200†	286.5	0.0146	mg/L	0.00000				0.02%

Ca 227.546†	6470.6	44.12 mg/L	0.229		0.52%
Sr 421.552†	64189.3	0.5549 mg/L	0.00893		1.61%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 69
Sample ID: R1403765-011
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 78
Date Collected: 6/7/2014 3:04:04 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403765-011

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7457528.6	1.020	mg/L	0.0077				0.75%
Ag 328.068†	-179.7	-0.0006	mg/L	0.00015				22.72%
Al 308.215†	27.5	0.0018	mg/L	0.01336				727.35%
As 188.979†	-1.1	-0.0012	mg/L	0.00127				106.97%
B 249.772†	10569.4	0.0845	mg/L	0.00021				0.24%
Ba 233.527†	8422.6	0.1004	mg/L	0.00004				0.04%
Be 313.107†	181.9	0.0001	mg/L	0.00004				82.46%
Cd 226.502†	-15.1	-0.0002	mg/L	0.00006				30.61%
Co 228.616†	-32.7	-0.0016	mg/L	0.00008				5.04%
Cr 267.716†	-906.7	-0.0036	mg/L	0.00026				7.09%
Cu 324.752†	261.9	0.0009	mg/L	0.00022				23.49%
Fe 259.939†	-148.2	-0.0024	mg/L	0.00136				57.17%
K 766.490†	2063.8	4.942	mg/L	0.0292				0.59%
Mg 279.077†	309325.0	25.61	mg/L	0.221				0.86%
Mn 257.610†	3146.1	0.0082	mg/L	0.00017				2.07%
Mo 202.031†	25.1	0.0025	mg/L	0.00015				5.88%
Ni 231.604†	-57.4	-0.0014	mg/L	0.00011				8.46%
Na 589.592†	79143.6	13.14	mg/L	0.093				0.71%
Pb 220.353†	-1.1	-0.0002	mg/L	0.00144				611.08%
Sb 206.836†	2.5	0.0022	mg/L	0.00013				6.26%
Se 196.026†	0.7	0.0012	mg/L	0.00102				84.89%
Sn 189.927†	-234.1	-0.0682	mg/L	0.00039				0.57%
Ti 337.279†	1587.8	0.0026	mg/L	0.00007				2.73%
Tl 190.801†	-3.1	-0.0029	mg/L	0.00407				141.37%
V 292.402†	8.4	0.0001	mg/L	0.00006				53.58%
Zn 206.200†	31.6	0.0016	mg/L	0.00001				0.48%
Ca 227.546†	5130.0	34.74	mg/L	0.380				1.09%
Sr 421.552†	63843.7	0.5519	mg/L	0.00410				0.74%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 70
Sample ID: R1403765-012
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 79
Date Collected: 6/7/2014 3:10:06 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403765-012

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7447921.6	1.019	mg/L	0.0003				0.03%
Ag 328.068†	-165.6	-0.0005	mg/L	0.00015				31.70%
Al 308.215†	9172.8	0.6136	mg/L	0.01764				2.87%
As 188.979†	-0.3	-0.0003	mg/L	0.00192				577.84%
B 249.772†	10030.8	0.0783	mg/L	0.00110				1.40%
Ba 233.527†	5328.3	0.0635	mg/L	0.00030				0.47%
Be 313.107†	244.1	0.0001	mg/L	0.00004				54.15%
Cd 226.502†	-17.2	-0.0003	mg/L	0.00000				1.51%
Co 228.616†	-34.7	-0.0017	mg/L	0.00037				21.77%
Cr 267.716†	-783.0	-0.0030	mg/L	0.00022				7.31%
Cu 324.752†	316.3	0.0012	mg/L	0.00030				25.36%
Fe 259.939†	27341.4	0.4374	mg/L	0.00655				1.50%
K 766.490†	2409.9	5.771	mg/L	0.1153				2.00%
Mg 279.077†	280256.0	23.20	mg/L	0.294				1.27%
Mn 257.610†	6890.8	0.0179	mg/L	0.00016				0.88%
Mo 202.031†	29.4	0.0030	mg/L	0.00036				12.06%

Ni 231.604†	-72.5	-0.0017	mg/L	0.00009	5.44%
Na 589.592†	88466.6	14.69	mg/L	0.015	0.10%
Pb 220.353†	-3.1	-0.0006	mg/L	0.00108	176.41%
Sb 206.836†	3.3	0.0027	mg/L	0.00109	40.09%
Se 196.026†	1.5	0.0026	mg/L	0.00047	17.76%
Sn 189.927†	-234.9	-0.0685	mg/L	0.00005	0.07%
Ti 337.279†	12729.8	0.0207	mg/L	0.00025	1.23%
Tl 190.801†	-7.8	-0.0068	mg/L	0.00056	8.19%
V 292.402†	109.2	0.0015	mg/L	0.00054	37.24%
Zn 206.200†	8.4	0.0004	mg/L	0.00002	3.62%
Ca 227.546†	5278.9	35.78	mg/L	0.541	1.51%
Sr 421.552†	43225.8	0.3737	mg/L	0.00024	0.06%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 71
Sample ID: R1403765-013
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 80
Date Collected: 6/7/2014 3:16:07 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403765-013

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7475537.2	1.023	mg/L	0.0078				0.76%
Ag 328.068†	-187.5	-0.0006	mg/L	0.00001				0.93%
Al 308.215†	-122.9	-0.0082	mg/L	0.00470				57.15%
As 188.979†	0.7	0.0008	mg/L	0.00015				17.11%
B 249.772†	9.8	-0.0012	mg/L	0.00015				12.30%
Ba 233.527†	2497.9	0.0298	mg/L	0.00002				0.05%
Be 313.107†	341.5	0.0001	mg/L	0.00003				26.28%
Cd 226.502†	-39.7	-0.0005	mg/L	0.00006				10.44%
Co 228.616†	-23.8	-0.0012	mg/L	0.00028				24.52%
Cr 267.716†	-931.9	-0.0034	mg/L	0.00051				14.99%
Cu 324.752†	499.1	0.0018	mg/L	0.00023				12.82%
Fe 259.939†	18131.7	0.2900	mg/L	0.00434				1.49%
K 766.490†	218.6	0.5236	mg/L	0.05894				11.26%
Mg 279.077†	348643.7	28.86	mg/L	0.283				0.98%
Mn 257.610†	21165.2	0.0550	mg/L	0.00050				0.90%
Mo 202.031†	28.3	0.0029	mg/L	0.00016				5.46%
Ni 231.604†	800.9	0.0189	mg/L	0.00022				1.15%
Na 589.592†	12685.2	2.106	mg/L	0.0121				0.57%
Pb 220.353†	-3.6	-0.0008	mg/L	0.00099				123.40%
Sb 206.836†	1.3	0.0011	mg/L	0.00157				138.86%
Se 196.026†	1.2	0.0021	mg/L	0.00096				45.41%
Sn 189.927†	-262.0	-0.0764	mg/L	0.00015				0.19%
Ti 337.279†	1066.9	0.0017	mg/L	0.00002				1.00%
Tl 190.801†	-2.4	-0.0025	mg/L	0.00196				78.37%
V 292.402†	36.3	0.0005	mg/L	0.00017				35.04%
Zn 206.200†	472.3	0.0240	mg/L	0.00037				1.55%
Ca 227.546†	8331.9	56.44	mg/L	0.774				1.37%
Sr 421.552†	10099.8	0.0873	mg/L	0.00081				0.93%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 72
Sample ID: R1404023-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 81
Date Collected: 6/7/2014 3:22:11 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1404023-001

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7327347.8	1.003	mg/L	0.0099				0.98%
Ag 328.068†	-1520.5	-0.0007	mg/L	0.00008				11.32%
Al 308.215†	-329.4	-0.0220	mg/L	0.01079				48.97%
As 188.979†	33.7	0.0390	mg/L	0.00170				4.35%
B 249.772†	26847.4	0.1394	mg/L	0.00294				2.11%
Ba 233.527†	72056.6	0.8591	mg/L	0.01306				1.52%

Be 313.107†	-238.8	-0.0001 mg/L		0.00007	94.92%
Cd 226.502†	134.6	-0.0006 mg/L		0.00015	27.39%
Co 228.616†	-26.9	-0.0013 mg/L		0.00005	4.03%
Cr 267.716†	-596.5	-0.0013 mg/L		0.00012	9.17%
Cu 324.752†	7242.1	0.0279 mg/L		0.00061	2.18%
Fe 259.939†	1067057.0	17.07 mg/L		0.009	0.05%
K 766.490†	3073.0	7.358 mg/L		0.0896	1.22%
Mg 279.077†	285690.2	23.65 mg/L		0.366	1.55%
Mn 257.610†	1264784.9	3.286 mg/L		0.0002	0.01%
Mo 202.031†	35.0	0.0035 mg/L		0.00014	4.03%
Ni 231.604†	280.6	0.0066 mg/L		0.00008	1.20%
Na 589.592†	719872.3	119.5 mg/L		1.93	1.62%
Pb 220.353†	7.5	0.0009 mg/L		0.00110	124.21%
Sb 206.836†	5.1	0.0043 mg/L		0.00079	18.27%
Se 196.026†	-1.3	0.0014 mg/L		0.00066	46.79%
Sn 189.927†	-289.3	-0.0844 mg/L		0.00038	0.45%
Ti 337.279†	405.7	0.0007 mg/L		0.00001	1.59%
Tl 190.801†	-0.2	-0.0007 mg/L		0.00190	257.28%
V 292.402†	38.3	-0.0002 mg/L		0.00010	42.82%
Zn 206.200†	8736.5	0.4442 mg/L		0.00437	0.98%
Ca 227.546†	19383.0	132.2 mg/L	LL	1.89	1.43%
Sr 421.552†	84560.1	0.7310 mg/L		0.01733	2.37%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 73
Sample ID: R1404023-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 82
Date Collected: 6/7/2014 3:28:24 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1404023-002

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7019966.4	0.9606	mg/L	0.00890				0.93%
Ag 328.068†	-406.0	-0.0011	mg/L	0.00023				21.40%
Al 308.215†	346.2	0.0232	mg/L	0.00799				34.48%
As 188.979†	16.8	0.0189	mg/L	0.00081				4.29%
B 249.772†	406660.9	3.245	mg/L	0.0008				0.03%
Ba 233.527†	28912.8	0.3447	mg/L	0.00303				0.88%
Be 313.107†	-732.9	-0.0002	mg/L	0.00004				18.18%
Cd 226.502†	-16.1	-0.0004	mg/L	0.00002				4.74%
Co 228.616†	182.0	0.0089	mg/L	0.00013				1.50%
Cr 267.716†	-505.9	0.0088	mg/L	0.00038				4.28%
Cu 324.752†	2049.3	0.0075	mg/L	0.00003				0.43%
Fe 259.939†	84421.9	1.350	mg/L	0.0137				1.01%
K 766.490†	84241.7	201.7	mg/L LL	1.80				0.89%
Mg 279.077†	1204398.3	99.71	mg/L	0.049				0.05%
Mn 257.610†	152673.8	0.3965	mg/L	0.00360				0.91%
Mo 202.031†	72.4	0.0073	mg/L	0.00031				4.22%
Ni 231.604†	5340.1	0.1257	mg/L	0.00100				0.80%
Na 589.592†	5573587.9	925.3	mg/L LR	0.90				0.10%
Pb 220.353†	-0.3	-0.0001	mg/L	0.00215				>999.9%
Sb 206.836†	10.1	0.0085	mg/L	0.00165				19.28%
Se 196.026†	2.3	0.0043	mg/L	0.00356				83.35%
Sn 189.927†	-274.3	-0.0800	mg/L	0.00006				0.07%
Ti 337.279†	1095.9	0.0018	mg/L	0.00005				2.88%
Tl 190.801†	1.2	-0.0001	mg/L	0.00091				>999.9%
V 292.402†	194.8	0.0026	mg/L	0.00006				2.19%
Zn 206.200†	777.1	0.0395	mg/L	0.00069				1.75%
Ca 227.546†	16007.3	108.5	mg/L LR	0.16				0.15%
Sr 421.552†	553708.0	4.786	mg/L	0.0502				1.05%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 74
Sample ID: R1404023-003
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 83
Date Collected: 6/7/2014 3:34:40 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1404023-003

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7483048.7	1.024	mg/L	0.0055				0.54%
Ag 328.068†	-47.0	-0.0002	mg/L	0.00006				35.76%
Al 308.215†	642.3	0.0430	mg/L	0.00562				13.09%
As 188.979†	1.4	0.0015	mg/L	0.00026				17.32%
B 249.772†	5902.1	0.0474	mg/L	0.00434				9.16%
Ba 233.527†	1819.5	0.0217	mg/L	0.00012				0.53%
Be 313.107†	61.7	0.0000	mg/L	0.00001				54.73%
Cd 226.502†	-26.7	-0.0003	mg/L	0.00011				34.11%
Co 228.616†	-30.5	-0.0015	mg/L	0.00034				22.53%
Cr 267.716†	-301.8	-0.0021	mg/L	0.00010				4.63%
Cu 324.752†	666.2	0.0024	mg/L	0.00036				15.21%
Fe 259.939†	-2670.4	-0.0427	mg/L	0.00048				1.13%
K 766.490†	16697.8	39.98	mg/L	0.101				0.25%
Mg 279.077†	19623.8	1.625	mg/L	0.0253				1.55%
Mn 257.610†	555.4	0.0014	mg/L	0.00004				2.88%
Mo 202.031†	19.5	0.0020	mg/L	0.00025				12.66%
Ni 231.604†	-41.5	-0.0010	mg/L	0.00014				14.81%
Na 589.592†	810174.6	134.5	mg/L	1.22				0.91%
Pb 220.353†	5.1	0.0011	mg/L	0.00136				120.46%
Sb 206.836†	3.9	0.0033	mg/L	0.00045				13.57%
Se 196.026†	0.9	0.0015	mg/L	0.00094				61.03%
Sn 189.927†	-202.7	-0.0591	mg/L	0.00001				0.02%
Ti 337.279†	614.6	0.0010	mg/L	0.00003				2.77%
Tl 190.801†	-4.0	-0.0035	mg/L	0.00043				12.20%
V 292.402†	222.6	0.0030	mg/L	0.00017				5.58%
Zn 206.200†	32.4	0.0016	mg/L	0.00013				8.08%
Ca 227.546†	2631.6	17.82	mg/L	0.060				0.34%
Sr 421.552†	19932.1	0.1723	mg/L	0.00018				0.10%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 75
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 6/7/2014 3:41:02 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7499514.4	1.026	mg/L	0.0109				1.06%
Ag 328.068†	140793.0	0.5068	mg/L	0.00637	0.5068	mg/L	0.00637	1.26%
QC value within limits for Ag 328.068 Recovery = 101.35%								
Al 308.215†	143822.3	9.621	mg/L	0.1404	9.621	mg/L	0.1404	1.46%
QC value within limits for Al 308.215 Recovery = 96.21%								
As 188.979†	908.6	1.016	mg/L	0.0112	1.016	mg/L	0.0112	1.10%
QC value within limits for As 188.979 Recovery = 101.59%								
B 249.772†	311426.9	2.467	mg/L	0.0195	2.467	mg/L	0.0195	0.79%
QC value within limits for B 249.772 Recovery = 98.70%								
Ba 233.527†	863682.2	10.30	mg/L	0.162	10.30	mg/L	0.162	1.57%
QC value within limits for Ba 233.527 Recovery = 102.97%								
Be 313.107†	868516.3	0.2522	mg/L	0.00397	0.2522	mg/L	0.00397	1.57%
QC value within limits for Be 313.107 Recovery = 100.86%								
Cd 226.502†	40249.8	0.5139	mg/L	0.00602	0.5139	mg/L	0.00602	1.17%
QC value within limits for Cd 226.502 Recovery = 102.78%								
Co 228.616†	51859.9	2.531	mg/L	0.0288	2.531	mg/L	0.0288	1.14%
QC value within limits for Co 228.616 Recovery = 101.23%								
Cr 267.716†	67702.8	0.5151	mg/L	0.00681	0.5151	mg/L	0.00681	1.32%
QC value within limits for Cr 267.716 Recovery = 103.03%								
Cu 324.752†	342025.0	1.227	mg/L	0.0136	1.227	mg/L	0.0136	1.11%
QC value within limits for Cu 324.752 Recovery = 98.12%								
Fe 259.939†	310032.5	4.959	mg/L	0.0621	4.959	mg/L	0.0621	1.25%
QC value within limits for Fe 259.939 Recovery = 99.19%								
K 766.490†	10350.6	24.78	mg/L	0.342	24.78	mg/L	0.342	1.38%
QC value within limits for K 766.490 Recovery = 99.14%								
Mg 279.077†	303213.7	25.10	mg/L	0.335	25.10	mg/L	0.335	1.33%
QC value within limits for Mg 279.077 Recovery = 100.41%								

Mn 257.610†	291432.7	0.7572 mg/L	0.00983	0.7572 mg/L	0.00983	1.30%
QC value within limits for Mn 257.610 Recovery = 100.97%						
Mo 202.031†	24767.7	2.493 mg/L	0.0258	2.493 mg/L	0.0258	1.04%
QC value within limits for Mo 202.031 Recovery = 99.71%						
Ni 231.604†	87208.5	2.053 mg/L	0.0246	2.053 mg/L	0.0246	1.20%
QC value within limits for Ni 231.604 Recovery = 102.66%						
Na 589.592†	153953.7	25.56 mg/L	0.299	25.56 mg/L	0.299	1.17%
QC value within limits for Na 589.592 Recovery = 102.23%						
Pb 220.353†	2329.9	0.5090 mg/L	0.00587	0.5090 mg/L	0.00587	1.15%
QC value within limits for Pb 220.353 Recovery = 101.80%						
Sb 206.836†	5992.8	5.070 mg/L	0.0422	5.070 mg/L	0.0422	0.83%
QC value within limits for Sb 206.836 Recovery = 101.40%						
Se 196.026†	293.3	0.5010 mg/L	0.00110	0.5010 mg/L	0.00110	0.22%
QC value within limits for Se 196.026 Recovery = 100.20%						
Sn 189.927†	17156.4	5.003 mg/L	0.0768	5.003 mg/L	0.0768	1.53%
QC value within limits for Sn 189.927 Recovery = 100.05%						
Ti 337.279†	1535154.8	2.494 mg/L	0.0385	2.494 mg/L	0.0385	1.54%
QC value within limits for Ti 337.279 Recovery = 99.75%						
Tl 190.801†	1208.3	0.9999 mg/L	0.00668	0.9999 mg/L	0.00668	0.67%
QC value within limits for Tl 190.801 Recovery = 99.99%						
V 292.402†	188296.7	2.555 mg/L	0.0437	2.555 mg/L	0.0437	1.71%
QC value within limits for V 292.402 Recovery = 102.21%						
Zn 206.200†	20528.5	1.044 mg/L	0.0094	1.044 mg/L	0.0094	0.90%
QC value within limits for Zn 206.200 Recovery = 104.37%						
Ca 227.546†	3595.6	24.65 mg/L	0.263	24.65 mg/L	0.263	1.07%
QC value within limits for Ca 227.546 Recovery = 98.59%						
Sr 421.552†	291121.1	2.517 mg/L	0.0193	2.517 mg/L	0.0193	0.77%
QC value within limits for Sr 421.552 Recovery = 100.66%						

All analyte(s) passed QC.

Sequence No.: 76
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 6/7/2014 3:47:28 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7601458.5	1.040	mg/L	0.0042				0.40%
Ag 328.068†	36.0	0.0001	mg/L	0.00048	0.0001	mg/L	0.00048	434.38%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-818.6	-0.0548	mg/L	0.00427	-0.0548	mg/L	0.00427	7.80%
QC value less than the lower limit for Al 308.215 Recovery = Not calculated								
As 188.979†	1.6	0.0017	mg/L	0.00016	0.0017	mg/L	0.00016	9.27%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	4494.9	0.0362	mg/L	0.00404	0.0362	mg/L	0.00404	11.17%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	252.9	0.0030	mg/L	0.00060	0.0030	mg/L	0.00060	19.87%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	799.4	0.0002	mg/L	0.00005	0.0002	mg/L	0.00005	20.34%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	3.0	0.0000	mg/L	0.00004	0.0000	mg/L	0.00004	94.81%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	11.3	0.0006	mg/L	0.00033	0.0006	mg/L	0.00033	59.46%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-307.6	-0.0023	mg/L	0.00004	-0.0023	mg/L	0.00004	1.88%
QC value less than the lower limit for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	1282.7	0.0046	mg/L	0.00045	0.0046	mg/L	0.00045	9.83%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	-4042.0	-0.0647	mg/L	0.00026	-0.0647	mg/L	0.00026	0.40%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	27.9	0.0669	mg/L	0.06220	0.0669	mg/L	0.06220	92.96%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	-1322.6	-0.1095	mg/L	0.00139	-0.1095	mg/L	0.00139	1.27%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-420.1	-0.0011	mg/L	0.00004	-0.0011	mg/L	0.00004	4.09%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	15.3	0.0015	mg/L	0.00013	0.0015	mg/L	0.00013	8.60%
QC value within limits for Mo 202.031 Recovery = Not calculated								

Ni 231.604†	25.7	0.0006 mg/L	0.00044	0.0006 mg/L	0.00044	72.31%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Na 589.592†	985.5	0.1636 mg/L	0.00239	0.1636 mg/L	0.00239	1.46%
QC value within limits for Na 589.592 Recovery = Not calculated						
Pb 220.353†	9.1	0.0020 mg/L	0.00019	0.0020 mg/L	0.00019	9.72%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	3.0	0.0025 mg/L	0.00087	0.0025 mg/L	0.00087	34.45%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	0.5	0.0008 mg/L	0.00274	0.0008 mg/L	0.00274	357.92%
QC value within limits for Se 196.026 Recovery = Not calculated						
Sn 189.927†	-73.2	-0.0213 mg/L	0.00184	-0.0213 mg/L	0.00184	8.64%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 337.279†	618.3	0.0010 mg/L	0.00012	0.0010 mg/L	0.00012	11.95%
QC value within limits for Ti 337.279 Recovery = Not calculated						
Tl 190.801†	1.8	0.0015 mg/L	0.00056	0.0015 mg/L	0.00056	38.61%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	90.7	0.0012 mg/L	0.00009	0.0012 mg/L	0.00009	7.61%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	74.8	0.0038 mg/L	0.00025	0.0038 mg/L	0.00025	6.56%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	1.4	0.0061 mg/L	0.00888	0.0061 mg/L	0.00888	145.94%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Sr 421.552†	104.3	0.0009 mg/L	0.00014	0.0009 mg/L	0.00014	15.83%
QC value within limits for Sr 421.552 Recovery = Not calculated						

QC Failed. Continue with analysis.

Sequence No.: 77
Sample ID: R1404023-004
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 84
Date Collected: 6/7/2014 3:53:31 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1404023-004

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7535219.8	1.031	mg/L	0.0073				0.71%
Ag 328.068†	-96.6	0.0001	mg/L	0.00040				365.14%
Al 308.215†	30460.1	2.038	mg/L	0.0167				0.82%
As 188.979†	1.1	0.0014	mg/L	0.00041				29.84%
B 249.772†	4091.3	0.0255	mg/L	0.00256				10.07%
Ba 233.527†	2216.9	0.0264	mg/L	0.00039				1.49%
Be 313.107†	530.1	0.0002	mg/L	0.00001				5.79%
Cd 226.502†	-3.4	-0.0003	mg/L	0.00008				29.92%
Co 228.616†	-9.5	-0.0005	mg/L	0.00017				36.68%
Cr 267.716†	20.6	0.0003	mg/L	0.00012				39.11%
Cu 324.752†	1527.3	0.0057	mg/L	0.00035				6.25%
Fe 259.939†	102535.6	1.640	mg/L	0.0137				0.84%
K 766.490†	2395.8	5.737	mg/L	0.0129				0.22%
Mg 279.077†	13795.9	1.142	mg/L	0.0063				0.55%
Mn 257.610†	5402.9	0.0142	mg/L	0.00008				0.54%
Mo 202.031†	17.0	0.0017	mg/L	0.00016				9.42%
Ni 231.604†	2.3	0.0001	mg/L	0.00008				150.60%
Na 589.592†	143234.1	23.78	mg/L	0.113				0.48%
Pb 220.353†	14.1	0.0033	mg/L	0.00048				14.74%
Sb 206.836†	6.3	0.0051	mg/L	0.00009				1.69%
Se 196.026†	-0.9	-0.0011	mg/L	0.00329				312.62%
Sn 189.927†	-178.9	-0.0522	mg/L	0.00038				0.72%
Ti 337.279†	14216.3	0.0231	mg/L	0.00021				0.93%
Tl 190.801†	-2.8	-0.0026	mg/L	0.00119				46.31%
V 292.402†	352.0	0.0047	mg/L	0.00027				5.73%
Zn 206.200†	114.1	0.0058	mg/L	0.00010				1.72%
Ca 227.546†	2020.6	13.78	mg/L	0.108				0.79%
Sr 421.552†	16323.3	0.1411	mg/L	0.00070				0.49%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 78
Sample ID: R1404027-003
Analyst:
Initial Sample Wt:

Autosampler Location: 85
Date Collected: 6/7/2014 3:59:35 AM
Data Type: Original
Initial Sample Vol:

Dilution: Sample Prep Vol: 50 mL

Mean Data: R1404027-003

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6947192.4	0.9506	mg/L	0.01120				1.18%
Ag 328.068†	-1325.5	-0.0020	mg/L	0.00015				7.59%
Al 308.215†	625.0	0.0418	mg/L	0.01287				30.77%
As 188.979†	10.7	0.0127	mg/L	0.00137				10.81%
B 249.772†	20211.7	0.1183	mg/L	0.00303				2.56%
Ba 233.527†	9727.0	0.1160	mg/L	0.00113				0.97%
Be 313.107†	-1238.1	-0.0004	mg/L	0.00007				19.41%
Cd 226.502†	60.5	-0.0005	mg/L	0.00002				4.46%
Co 228.616†	34.6	0.0017	mg/L	0.00017				9.90%
Cr 267.716†	80413.9	0.6176	mg/L	0.00856				1.39%
Cu 324.752†	2281.8	0.0093	mg/L	0.00066				7.09%
Fe 259.939†	614270.3	9.826	mg/L	0.0089				0.09%
K 766.490†	856.9	2.052	mg/L	0.0866				4.22%
Mg 279.077†	898808.0	74.41	mg/L	0.026				0.03%
Mn 257.610†	2188455.2	5.683	mg/L	0.0035				0.06%
Mo 202.031†	127.2	0.0128	mg/L	0.00040				3.14%
Ni 231.604†	17204.6	0.4051	mg/L	0.00569				1.40%
Na 589.592†	3717472.2	617.2	mg/L	10.98				1.78%
Pb 220.353†	-4.7	-0.0014	mg/L	0.00017				12.08%
Sb 206.836†	3.9	0.0033	mg/L	0.00217				65.86%
Se 196.026†	0.1	0.0022	mg/L	0.00033				14.61%
Sn 189.927†	-315.5	-0.0920	mg/L	0.00054				0.58%
Ti 337.279†	424.2	0.0007	mg/L	0.00013				18.98%
Tl 190.801†	5.6	0.0023	mg/L	0.00061				26.56%
V 292.402†	-104.9	-0.0019	mg/L	0.00018				9.48%
Zn 206.200†	67.0	0.0034	mg/L	0.00004				1.12%
Ca 227.546†	41392.6	280.9	mg/L	5.60				2.00%
Sr 421.552†	142830.0	1.235	mg/L	0.0240				1.95%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 79
Sample ID: R1404027-004
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 86
Date Collected: 6/7/2014 4:06:02 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1404027-004

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6796289.5	0.9300	mg/L	0.00035				0.04%
Ag 328.068†	-712.9	-0.0022	mg/L	0.00023				10.57%
Al 308.215†	15008.9	1.004	mg/L	0.0023				0.23%
As 188.979†	3.4	0.0039	mg/L	0.00076				19.71%
B 249.772†	17063.9	0.1310	mg/L	0.00030				0.23%
Ba 233.527†	18657.7	0.2224	mg/L	0.00082				0.37%
Be 313.107†	-1540.2	-0.0004	mg/L	0.00000				0.16%
Cd 226.502†	-2.9	-0.0002	mg/L	0.00003				12.70%
Co 228.616†	-39.4	-0.0019	mg/L	0.00030				15.76%
Cr 267.716†	-2015.0	-0.0040	mg/L	0.00007				1.78%
Cu 324.752†	1030.8	0.0038	mg/L	0.00014				3.69%
Fe 259.939†	77115.0	1.234	mg/L	0.0069				0.56%
K 766.490†	13256.4	31.74	mg/L	0.600				1.89%
Mg 279.077†	1077235.8	89.18	mg/L	0.162				0.18%
Mn 257.610†	12731.0	0.0332	mg/L	0.00033				1.00%
Mo 202.031†	24.2	0.0024	mg/L	0.00003				1.35%
Ni 231.604†	-92.9	-0.0022	mg/L	0.00038				17.57%
Na 589.592†	9966953.3	1655	mg/L	11.3				0.68%
Pb 220.353†	-7.6	-0.0016	mg/L	0.00080				51.09%
Sb 206.836†	4.3	0.0035	mg/L	0.00019				5.25%
Se 196.026†	3.0	0.0053	mg/L	0.00138				25.79%
Sn 189.927†	-329.5	-0.0961	mg/L	0.00037				0.38%
Ti 337.279†	4234.1	0.0069	mg/L	0.00007				1.01%
Tl 190.801†	1.2	-0.0022	mg/L	0.00210				95.13%
V 292.402†	74.3	0.0010	mg/L	0.00015				15.34%

Zn 206.200†	72.8	0.0037 mg/L	0.00001		0.36%
Ca 227.546†	47051.8	318.7 mg/L	1.02		0.32%
Sr 421.552†	493665.8	4.267 mg/L	0.0232		0.54%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 80
Sample ID: R1404027-005
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 87
Date Collected: 6/7/2014 4:12:41 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1404027-005

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7285444.2	0.9969	mg/L	0.02685				2.69%
Ag 328.068†	-129.3	-0.0005	mg/L	0.00003				5.56%
Al 308.215†	-379.3	-0.0254	mg/L	0.02504				98.71%
As 188.979†	-0.1	-0.0001	mg/L	0.00055				441.79%
B 249.772†	1040.6	0.0087	mg/L	0.00084				9.66%
Ba 233.527†	833.0	0.0099	mg/L	0.00012				1.21%
Be 313.107†	29.2	0.0000	mg/L	0.00013				>999.9%
Cd 226.502†	-29.9	-0.0004	mg/L	0.00004				11.58%
Co 228.616†	-40.3	-0.0020	mg/L	0.00035				17.86%
Cr 267.716†	-772.0	-0.0032	mg/L	0.00044				13.65%
Cu 324.752†	318.0	0.0011	mg/L	0.00107				94.76%
Fe 259.939†	-5129.3	-0.0821	mg/L	0.00056				0.68%
K 766.490†	292.6	0.7007	mg/L	0.09018				12.87%
Mg 279.077†	251728.1	20.84	mg/L	0.565				2.71%
Mn 257.610†	-587.3	-0.0015	mg/L	0.00001				0.38%
Mo 202.031†	19.6	0.0020	mg/L	0.00006				3.03%
Ni 231.604†	-93.3	-0.0022	mg/L	0.00013				5.73%
Na 589.592†	561122.1	93.15	mg/L	2.455				2.64%
Pb 220.353†	-1.7	-0.0004	mg/L	0.00167				441.13%
Sb 206.836†	3.3	0.0028	mg/L	0.00201				71.46%
Se 196.026†	-0.3	-0.0006	mg/L	0.00215				385.74%
Sn 189.927†	-254.0	-0.0741	mg/L	0.00065				0.87%
Ti 337.279†	394.0	0.0006	mg/L	0.00002				3.83%
Tl 190.801†	-3.7	-0.0036	mg/L	0.00256				71.95%
V 292.402†	14.4	0.0002	mg/L	0.00031				154.48%
Zn 206.200†	2.4	0.0001	mg/L	0.00014				117.08%
Ca 227.546†	7067.2	47.86	mg/L	1.545				3.23%
Sr 421.552†	9448.1	0.0817	mg/L	0.00364				4.46%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 81
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 6/7/2014 4:18:53 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7253245.2	0.9925	mg/L	0.00172				0.17%
Ag 328.068†	142952.1	0.5145	mg/L	0.00256	0.5145	mg/L	0.00256	0.50%
QC value within limits for Ag 328.068 Recovery = 102.91%								
Al 308.215†	146382.3	9.792	mg/L	0.0564	9.792	mg/L	0.0564	0.58%
QC value within limits for Al 308.215 Recovery = 97.92%								
As 188.979†	915.9	1.024	mg/L	0.0014	1.024	mg/L	0.0014	0.14%
QC value within limits for As 188.979 Recovery = 102.40%								
B 249.772†	313567.2	2.484	mg/L	0.0050	2.484	mg/L	0.0050	0.20%
QC value within limits for B 249.772 Recovery = 99.37%								
Ba 233.527†	873351.0	10.41	mg/L	0.043	10.41	mg/L	0.043	0.42%
QC value within limits for Ba 233.527 Recovery = 104.13%								
Be 313.107†	879279.9	0.2553	mg/L	0.00143	0.2553	mg/L	0.00143	0.56%
QC value within limits for Be 313.107 Recovery = 102.11%								
Cd 226.502†	40858.5	0.5217	mg/L	0.00194	0.5217	mg/L	0.00194	0.37%
QC value within limits for Cd 226.502 Recovery = 104.33%								

Co 228.616†	52741.5	2.574 mg/L	0.0102	2.574 mg/L	0.0102	0.40%
QC value within limits for Co 228.616 Recovery = 102.95%						
Cr 267.716†	68689.4	0.5227 mg/L	0.00205	0.5227 mg/L	0.00205	0.39%
QC value within limits for Cr 267.716 Recovery = 104.53%						
Cu 324.752†	347353.8	1.246 mg/L	0.0040	1.246 mg/L	0.0040	0.32%
QC value within limits for Cu 324.752 Recovery = 99.65%						
Fe 259.939†	315557.2	5.048 mg/L	0.0167	5.048 mg/L	0.0167	0.33%
QC value within limits for Fe 259.939 Recovery = 100.96%						
K 766.490†	10448.9	25.02 mg/L	0.037	25.02 mg/L	0.037	0.15%
QC value within limits for K 766.490 Recovery = 100.08%						
Mg 279.077†	308178.0	25.51 mg/L	0.114	25.51 mg/L	0.114	0.45%
QC value within limits for Mg 279.077 Recovery = 102.05%						
Mn 257.610†	296377.7	0.7701 mg/L	0.00317	0.7701 mg/L	0.00317	0.41%
QC value within limits for Mn 257.610 Recovery = 102.68%						
Mo 202.031†	25063.2	2.523 mg/L	0.0100	2.523 mg/L	0.0100	0.39%
QC value within limits for Mo 202.031 Recovery = 100.90%						
Ni 231.604†	88429.2	2.082 mg/L	0.0069	2.082 mg/L	0.0069	0.33%
QC value within limits for Ni 231.604 Recovery = 104.10%						
Na 589.592†	156599.2	26.00 mg/L	0.035	26.00 mg/L	0.035	0.14%
QC value within limits for Na 589.592 Recovery = 103.99%						
Pb 220.353†	2361.2	0.5158 mg/L	0.00005	0.5158 mg/L	0.00005	0.01%
QC value within limits for Pb 220.353 Recovery = 103.17%						
Sb 206.836†	6028.0	5.100 mg/L	0.0034	5.100 mg/L	0.0034	0.07%
QC value within limits for Sb 206.836 Recovery = 101.99%						
Se 196.026†	299.8	0.5121 mg/L	0.00320	0.5121 mg/L	0.00320	0.62%
QC value within limits for Se 196.026 Recovery = 102.42%						
Sn 189.927†	17364.3	5.063 mg/L	0.0117	5.063 mg/L	0.0117	0.23%
QC value within limits for Sn 189.927 Recovery = 101.27%						
Ti 337.279†	1552445.9	2.522 mg/L	0.0141	2.522 mg/L	0.0141	0.56%
QC value within limits for Ti 337.279 Recovery = 100.88%						
Tl 190.801†	1226.2	1.015 mg/L	0.0003	1.015 mg/L	0.0003	0.03%
QC value within limits for Tl 190.801 Recovery = 101.47%						
V 292.402†	188642.0	2.560 mg/L	0.0053	2.560 mg/L	0.0053	0.21%
QC value within limits for V 292.402 Recovery = 102.40%						
Zn 206.200†	20792.4	1.057 mg/L	0.0006	1.057 mg/L	0.0006	0.06%
QC value within limits for Zn 206.200 Recovery = 105.71%						
Ca 227.546†	3628.5	24.87 mg/L	0.037	24.87 mg/L	0.037	0.15%
QC value within limits for Ca 227.546 Recovery = 99.50%						
Sr 421.552†	291733.6	2.522 mg/L	0.0121	2.522 mg/L	0.0121	0.48%
QC value within limits for Sr 421.552 Recovery = 100.87%						

All analyte(s) passed QC.

Sequence No.: 82
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 6/7/2014 4:25:12 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7491363.5	1.025	mg/L	0.0000				0.00%
Ag 328.068†	43.1	0.0001	mg/L	0.00013	0.0001	mg/L	0.00013	93.88%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-723.1	-0.0484	mg/L	0.00902	-0.0484	mg/L	0.00902	18.66%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	0.4	0.0005	mg/L	0.00130	0.0005	mg/L	0.00130	267.08%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	3403.3	0.0275	mg/L	0.00357	0.0275	mg/L	0.00357	12.99%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	279.7	0.0033	mg/L	0.00067	0.0033	mg/L	0.00067	19.95%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	947.9	0.0003	mg/L	0.00009	0.0003	mg/L	0.00009	32.15%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	3.3	0.0001	mg/L	0.00004	0.0001	mg/L	0.00004	86.70%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	4.0	0.0002	mg/L	0.00004	0.0002	mg/L	0.00004	21.35%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-325.1	-0.0025	mg/L	0.00008	-0.0025	mg/L	0.00008	3.24%
QC value less than the lower limit for Cr 267.716 Recovery = Not calculated								

Cu 324.752†	1287.7	0.0046 mg/L	0.00029	0.0046 mg/L	0.00029	6.26%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 259.939†	-4138.9	-0.0662 mg/L	0.00035	-0.0662 mg/L	0.00035	0.53%
QC value within limits for Fe 259.939 Recovery = Not calculated						
K 766.490†	31.1	0.0744 mg/L	0.03781	0.0744 mg/L	0.03781	50.84%
QC value within limits for K 766.490 Recovery = Not calculated						
Mg 279.077†	-1371.5	-0.1135 mg/L	0.00156	-0.1135 mg/L	0.00156	1.38%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	-445.9	-0.0012 mg/L	0.00003	-0.0012 mg/L	0.00003	2.67%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	15.5	0.0016 mg/L	0.00028	0.0016 mg/L	0.00028	17.79%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	10.9	0.0003 mg/L	0.00004	0.0003 mg/L	0.00004	15.34%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Na 589.592†	1681.9	0.2792 mg/L	0.00259	0.2792 mg/L	0.00259	0.93%
QC value within limits for Na 589.592 Recovery = Not calculated						
Pb 220.353†	5.2	0.0011 mg/L	0.00016	0.0011 mg/L	0.00016	13.92%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	5.0	0.0043 mg/L	0.00203	0.0043 mg/L	0.00203	47.57%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-0.9	-0.0015 mg/L	0.00132	-0.0015 mg/L	0.00132	89.67%
QC value within limits for Se 196.026 Recovery = Not calculated						
Sn 189.927†	-67.0	-0.0195 mg/L	0.00140	-0.0195 mg/L	0.00140	7.17%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 337.279†	625.5	0.0010 mg/L	0.00017	0.0010 mg/L	0.00017	16.82%
QC value within limits for Ti 337.279 Recovery = Not calculated						
Tl 190.801†	-0.3	-0.0002 mg/L	0.00050	-0.0002 mg/L	0.00050	209.81%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	92.1	0.0013 mg/L	0.00030	0.0013 mg/L	0.00030	24.00%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	68.8	0.0035 mg/L	0.00063	0.0035 mg/L	0.00063	17.88%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	1.1	0.0037 mg/L	0.02259	0.0037 mg/L	0.02259	607.63%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Sr 421.552†	105.6	0.0009 mg/L	0.00009	0.0009 mg/L	0.00009	9.51%
QC value within limits for Sr 421.552 Recovery = Not calculated						

QC Failed. Continue with analysis.

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Sequence No.: 83
Sample ID: MRL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 6/7/2014 4:31:12 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MRL

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7405802.0	1.013	mg/L	0.0008				0.08%
Ag 328.068†	2844.6	0.0102	mg/L	0.00006	0.0102	mg/L	0.00006	0.60%
QC value within limits for Ag 328.068 Recovery = 102.20%								
Al 308.215†	2122.0	0.1420	mg/L	0.00651	0.1420	mg/L	0.00651	4.58%
QC value less than the lower limit for Al 308.215 Recovery = 70.98%								
As 188.979†	20.2	0.0225	mg/L	0.00035	0.0225	mg/L	0.00035	1.57%
QC value within limits for As 188.979 Recovery = 112.71%								
B 249.772†	26852.5	0.2145	mg/L	0.00071	0.2145	mg/L	0.00071	0.33%
QC value within limits for B 249.772 Recovery = 107.24%								
Ba 233.527†	18071.3	0.2155	mg/L	0.00119	0.2155	mg/L	0.00119	0.55%
QC value within limits for Ba 233.527 Recovery = 107.73%								
Be 313.107†	18290.0	0.0053	mg/L	0.00000	0.0053	mg/L	0.00000	0.09%
QC value within limits for Be 313.107 Recovery = 106.20%								
Cd 226.502†	840.5	0.0107	mg/L	0.00001	0.0107	mg/L	0.00001	0.06%
QC value within limits for Cd 226.502 Recovery = 107.40%								
Co 228.616†	1054.0	0.0514	mg/L	0.00013	0.0514	mg/L	0.00013	0.25%
QC value within limits for Co 228.616 Recovery = 102.87%								
Cr 267.716†	1063.1	0.0082	mg/L	0.00024	0.0082	mg/L	0.00024	2.92%
QC value within limits for Cr 267.716 Recovery = 81.51%								
Cu 324.752†	7214.4	0.0259	mg/L	0.00073	0.0259	mg/L	0.00073	2.82%
QC value within limits for Cu 324.752 Recovery = 103.45%								
Fe 259.939†	2143.8	0.0343	mg/L	0.00122	0.0343	mg/L	0.00122	3.56%
QC value less than the lower limit for Fe 259.939 Recovery = 34.29%								

K 766.490†	358.8	0.8591 mg/L	0.11277	0.8591 mg/L	0.11277	13.13%
QC value within limits for K 766.490 Recovery = 85.91%						
Mg 279.077†	10775.6	0.8921 mg/L	0.00870	0.8921 mg/L	0.00870	0.98%
QC value within limits for Mg 279.077 Recovery = 89.21%						
Mn 257.610†	5243.3	0.0136 mg/L	0.00012	0.0136 mg/L	0.00012	0.90%
QC value within limits for Mn 257.610 Recovery = 90.78%						
Mo 202.031†	267.1	0.0269 mg/L	0.00032	0.0269 mg/L	0.00032	1.18%
QC value within limits for Mo 202.031 Recovery = 107.54%						
Ni 231.604†	1735.9	0.0409 mg/L	0.00016	0.0409 mg/L	0.00016	0.40%
QC value within limits for Ni 231.604 Recovery = 102.17%						
Na 589.592†	6790.6	1.127 mg/L	0.0043	1.127 mg/L	0.0043	0.38%
QC value within limits for Na 589.592 Recovery = 112.73%						
Pb 220.353†	52.1	0.0114 mg/L	0.00041	0.0114 mg/L	0.00041	3.61%
QC value within limits for Pb 220.353 Recovery = 113.80%						
Sb 206.836†	76.4	0.0646 mg/L	0.00078	0.0646 mg/L	0.00078	1.20%
QC value within limits for Sb 206.836 Recovery = 107.75%						
Se 196.026†	4.8	0.0082 mg/L	0.00226	0.0082 mg/L	0.00226	27.78%
QC value within limits for Se 196.026 Recovery = 81.52%						
Sn 189.927†	1718.2	0.5010 mg/L	0.00112	0.5010 mg/L	0.00112	0.22%
QC value within limits for Sn 189.927 Recovery = 100.21%						
Ti 337.279†	32177.4	0.0523 mg/L	0.00036	0.0523 mg/L	0.00036	0.68%
QC value within limits for Ti 337.279 Recovery = 104.54%						
Tl 190.801†	23.8	0.0197 mg/L	0.00004	0.0197 mg/L	0.00004	0.21%
QC value within limits for Tl 190.801 Recovery = 98.60%						
V 292.402†	3925.5	0.0533 mg/L	0.00082	0.0533 mg/L	0.00082	1.54%
QC value within limits for V 292.402 Recovery = 106.55%						
Zn 206.200†	399.6	0.0203 mg/L	0.00032	0.0203 mg/L	0.00032	1.58%
QC value within limits for Zn 206.200 Recovery = 101.58%						
Ca 227.546†	128.9	0.8749 mg/L	0.02684	0.8749 mg/L	0.02684	3.07%
QC value within limits for Ca 227.546 Recovery = 87.49%						
Sr 421.552†	11280.5	0.0975 mg/L	0.00067	0.0975 mg/L	0.00067	0.69%
QC value within limits for Sr 421.552 Recovery = 97.51%						

QC Failed. Continue with analysis.

Sequence No.: 84
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 6/7/2014 4:37:10 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7052779.7	0.9651	mg/L	0.00068				0.07%
Ag 328.068†	-7648.9	-0.0027	mg/L	0.00008	-0.0027	mg/L	0.00008	2.89%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	3774936.6	252.5	mg/L	2.17	252.5	mg/L	2.17	0.86%
QC value within limits for Al 308.215 Recovery = 101.01%								
As 188.979†	-0.1	0.0045	mg/L	0.00280	0.0045	mg/L	0.00280	62.21%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	43303.4	-0.0465	mg/L	0.00060	-0.0465	mg/L	0.00060	1.30%
Ba 233.527†	383.7	0.0046	mg/L	0.00031	0.0046	mg/L	0.00031	6.71%
Be 313.107†	-552.5	-0.0002	mg/L	0.00002	-0.0002	mg/L	0.00002	10.84%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	852.4	-0.0001	mg/L	0.00004	-0.0001	mg/L	0.00004	37.18%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	9.9	0.0005	mg/L	0.00006	0.0005	mg/L	0.00006	12.85%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-4331.2	0.0001	mg/L	0.00035	0.0001	mg/L	0.00035	234.03%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	-1800.0	0.0038	mg/L	0.00018	0.0038	mg/L	0.00018	4.76%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	5572588.5	89.14	mg/L	0.618	89.14	mg/L	0.618	0.69%
QC value within limits for Fe 259.939 Recovery = 89.14%								
K 766.490†	38.0	0.0909	mg/L	0.00592	0.0909	mg/L	0.00592	6.51%
Mg 279.077†	3104017.2	257.0	mg/L	1.96	257.0	mg/L	1.96	0.76%
QC value within limits for Mg 279.077 Recovery = 102.79%								
Mn 257.610†	-6292.4	-0.0050	mg/L	0.00018	-0.0050	mg/L	0.00018	3.48%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	13.5	0.0014	mg/L	0.00022	0.0014	mg/L	0.00022	16.00%

Ni 231.604†	-117.4	-0.0028 mg/L	0.00021	-0.0028 mg/L	0.00021	7.55%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Na 589.592†	1188.5	0.1973 mg/L	0.00128	0.1973 mg/L	0.00128	0.65%
Pb 220.353†	-129.8	0.0016 mg/L	0.00165	0.0016 mg/L	0.00165	104.25%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	27.4	-0.0009 mg/L	0.00025	-0.0009 mg/L	0.00025	27.55%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-17.7	-0.0041 mg/L	0.00381	-0.0041 mg/L	0.00381	93.66%
QC value within limits for Se 196.026 Recovery = Not calculated						
Sn 189.927†	-188.0	-0.0548 mg/L	0.00025	-0.0548 mg/L	0.00025	0.46%
Ti 337.279†	569.2	0.0009 mg/L	0.00011	0.0009 mg/L	0.00011	12.06%
Tl 190.801†	14.4	-0.0060 mg/L	0.00115	-0.0060 mg/L	0.00115	19.14%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	441.3	0.0021 mg/L	0.00028	0.0021 mg/L	0.00028	13.53%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	126.9	0.0064 mg/L	0.00032	0.0064 mg/L	0.00032	4.98%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	36840.5	255.0 mg/L	0.13	255.0 mg/L	0.13	0.05%
QC value within limits for Ca 227.546 Recovery = 102.02%						
Sr 421.552†	452.8	0.0039 mg/L	0.00019	0.0039 mg/L	0.00019	4.89%

All analyte(s) passed QC.

Sequence No.: 85
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 6/7/2014 4:43:11 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6905068.1	0.9448	mg/L	0.00334				0.35%
Ag 328.068†	51503.2	0.2100	mg/L	0.00039	0.2100	mg/L	0.00039	0.19%
QC value within limits for Ag 328.068 Recovery = 104.99%								
Al 308.215†	3800932.8	254.3	mg/L	0.46	254.3	mg/L	0.46	0.18%
QC value within limits for Al 308.215 Recovery = 101.71%								
As 188.979†	91.5	0.1070	mg/L	0.00226	0.1070	mg/L	0.00226	2.11%
QC value within limits for As 188.979 Recovery = 107.04%								
B 249.772†	43196.0	-0.0527	mg/L	0.00082	-0.0527	mg/L	0.00082	1.55%
Ba 233.527†	44586.4	0.5316	mg/L	0.00302	0.5316	mg/L	0.00302	0.57%
QC value within limits for Ba 233.527 Recovery = 106.32%								
Be 313.107†	1744909.8	0.5066	mg/L	0.00062	0.5066	mg/L	0.00062	0.12%
QC value within limits for Be 313.107 Recovery = 101.32%								
Cd 226.502†	78162.8	0.9880	mg/L	0.00364	0.9880	mg/L	0.00364	0.37%
QC value within limits for Cd 226.502 Recovery = 98.80%								
Co 228.616†	10021.6	0.4890	mg/L	0.00145	0.4890	mg/L	0.00145	0.30%
QC value within limits for Co 228.616 Recovery = 97.81%								
Cr 267.716†	63447.6	0.5132	mg/L	0.00207	0.5132	mg/L	0.00207	0.40%
QC value within limits for Cr 267.716 Recovery = 102.65%								
Cu 324.752†	142574.6	0.5214	mg/L	0.00544	0.5214	mg/L	0.00544	1.04%
QC value within limits for Cu 324.752 Recovery = 104.28%								
Fe 259.939†	5648461.7	90.36	mg/L	0.074	90.36	mg/L	0.074	0.08%
QC value within limits for Fe 259.939 Recovery = 90.36%								
K 766.490†	3.8	0.0092	mg/L	0.09680	0.0092	mg/L	0.09680	>999.9%
Mg 279.077†	3157774.2	261.4	mg/L	0.14	261.4	mg/L	0.14	0.05%
QC value within limits for Mg 279.077 Recovery = 104.57%								
Mn 257.610†	191972.8	0.5099	mg/L	0.00206	0.5099	mg/L	0.00206	0.40%
QC value within limits for Mn 257.610 Recovery = 101.97%								
Mo 202.031†	7.5	0.0008	mg/L	0.00006	0.0008	mg/L	0.00006	7.48%
Ni 231.604†	41264.1	0.9715	mg/L	0.00383	0.9715	mg/L	0.00383	0.39%
QC value within limits for Ni 231.604 Recovery = 97.15%								
Na 589.592†	919.6	0.1527	mg/L	0.01390	0.1527	mg/L	0.01390	9.11%
Pb 220.353†	98.8	0.0516	mg/L	0.00158	0.0516	mg/L	0.00158	3.06%
QC value within limits for Pb 220.353 Recovery = 103.21%								
Sb 206.836†	784.3	0.6393	mg/L	0.00293	0.6393	mg/L	0.00293	0.46%
QC value within limits for Sb 206.836 Recovery = 106.56%								
Se 196.026†	17.0	0.0552	mg/L	0.00121	0.0552	mg/L	0.00121	2.20%
QC value within limits for Se 196.026 Recovery = 110.48%								
Sn 189.927†	-184.3	-0.0537	mg/L	0.00028	-0.0537	mg/L	0.00028	0.53%
Ti 337.279†	368.6	0.0006	mg/L	0.00005	0.0006	mg/L	0.00005	8.92%

Tl 190.801†	147.7	0.1043 mg/L	0.00146	0.1043 mg/L	0.00146	1.40%
QC value within limits for Tl 190.801 Recovery = 104.33%						
V 292.402†	37421.7	0.5039 mg/L	0.00241	0.5039 mg/L	0.00241	0.48%
QC value within limits for V 292.402 Recovery = 100.79%						
Zn 206.200†	19621.9	0.9976 mg/L	0.00947	0.9976 mg/L	0.00947	0.95%
QC value within limits for Zn 206.200 Recovery = 99.76%						
Ca 227.546†	36952.3	255.9 mg/L	1.60	255.9 mg/L	1.60	0.62%
QC value within limits for Ca 227.546 Recovery = 102.35%						
Sr 421.552†	441.1	0.0038 mg/L	0.00008	0.0038 mg/L	0.00008	2.17%

All analyte(s) passed QC.

Sequence No.: 86
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 6/7/2014 4:49:11 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7274876.8	0.9954	mg/L	0.00115				0.12%
Ag 328.068†	142474.8	0.5128	mg/L	0.00029	0.5128	mg/L	0.00029	0.06%
QC value within limits for Ag 328.068 Recovery = 102.56%								
Al 308.215†	146477.9	9.799	mg/L	0.0036	9.799	mg/L	0.0036	0.04%
QC value within limits for Al 308.215 Recovery = 97.99%								
As 188.979†	917.5	1.026	mg/L	0.0021	1.026	mg/L	0.0021	0.20%
QC value within limits for As 188.979 Recovery = 102.58%								
B 249.772†	313582.7	2.484	mg/L	0.0181	2.484	mg/L	0.0181	0.73%
QC value within limits for B 249.772 Recovery = 99.37%								
Ba 233.527†	865628.6	10.32	mg/L	0.104	10.32	mg/L	0.104	1.01%
QC value within limits for Ba 233.527 Recovery = 103.21%								
Be 313.107†	872606.5	0.2533	mg/L	0.00230	0.2533	mg/L	0.00230	0.91%
QC value within limits for Be 313.107 Recovery = 101.34%								
Cd 226.502†	40799.4	0.5209	mg/L	0.00090	0.5209	mg/L	0.00090	0.17%
QC value within limits for Cd 226.502 Recovery = 104.18%								
Co 228.616†	52621.9	2.568	mg/L	0.0009	2.568	mg/L	0.0009	0.04%
QC value within limits for Co 228.616 Recovery = 102.71%								
Cr 267.716†	68672.8	0.5225	mg/L	0.00001	0.5225	mg/L	0.00001	0.00%
QC value within limits for Cr 267.716 Recovery = 104.51%								
Cu 324.752†	347501.0	1.246	mg/L	0.0026	1.246	mg/L	0.0026	0.21%
QC value within limits for Cu 324.752 Recovery = 99.69%								
Fe 259.939†	316627.6	5.065	mg/L	0.0019	5.065	mg/L	0.0019	0.04%
QC value within limits for Fe 259.939 Recovery = 101.30%								
K 766.490†	10227.2	24.49	mg/L	0.104	24.49	mg/L	0.104	0.42%
QC value within limits for K 766.490 Recovery = 97.96%								
Mg 279.077†	308755.4	25.56	mg/L	0.008	25.56	mg/L	0.008	0.03%
QC value within limits for Mg 279.077 Recovery = 102.24%								
Mn 257.610†	295305.3	0.7673	mg/L	0.00024	0.7673	mg/L	0.00024	0.03%
QC value within limits for Mn 257.610 Recovery = 102.31%								
Mo 202.031†	25034.9	2.520	mg/L	0.0016	2.520	mg/L	0.0016	0.06%
QC value within limits for Mo 202.031 Recovery = 100.79%								
Ni 231.604†	88180.6	2.076	mg/L	0.0025	2.076	mg/L	0.0025	0.12%
QC value within limits for Ni 231.604 Recovery = 103.81%								
Na 589.592†	149687.4	24.85	mg/L	0.038	24.85	mg/L	0.038	0.15%
QC value within limits for Na 589.592 Recovery = 99.40%								
Pb 220.353†	2357.5	0.5150	mg/L	0.00096	0.5150	mg/L	0.00096	0.19%
QC value within limits for Pb 220.353 Recovery = 103.01%								
Sb 206.836†	6038.7	5.109	mg/L	0.0021	5.109	mg/L	0.0021	0.04%
QC value within limits for Sb 206.836 Recovery = 102.18%								
Se 196.026†	300.2	0.5128	mg/L	0.00487	0.5128	mg/L	0.00487	0.95%
QC value within limits for Se 196.026 Recovery = 102.57%								
Sn 189.927†	17280.8	5.039	mg/L	0.0073	5.039	mg/L	0.0073	0.15%
QC value within limits for Sn 189.927 Recovery = 100.78%								
Ti 337.279†	1535461.6	2.494	mg/L	0.0235	2.494	mg/L	0.0235	0.94%
QC value within limits for Ti 337.279 Recovery = 99.77%								
Tl 190.801†	1224.4	1.013	mg/L	0.0046	1.013	mg/L	0.0046	0.46%
QC value within limits for Tl 190.801 Recovery = 101.32%								
V 292.402†	187647.4	2.547	mg/L	0.0189	2.547	mg/L	0.0189	0.74%
QC value within limits for V 292.402 Recovery = 101.86%								
Zn 206.200†	21069.4	1.071	mg/L	0.0030	1.071	mg/L	0.0030	0.28%

QC value within limits for Zn 206.200 Recovery = 107.12%

Ca 227.546†	3626.1	24.86 mg/L	0.083	24.86 mg/L	0.083	0.33%

QC value within limits for Ca 227.546 Recovery = 99.43%

Sr 421.552†	281307.7	2.432 mg/L	0.0015	2.432 mg/L	0.0015	0.06%

QC value within limits for Sr 421.552 Recovery = 97.27%

All analyte(s) passed QC.

Sequence No.: 87
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 6/7/2014 4:55:35 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7480440.9	1.024	mg/L	0.0107				1.04%
Ag 328.068†	48.8	0.0002	mg/L	0.00024	0.0002	mg/L	0.00024	150.07%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-361.3	-0.0242	mg/L	0.00798	-0.0242	mg/L	0.00798	33.02%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	0.8	0.0009	mg/L	0.00167	0.0009	mg/L	0.00167	186.72%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	3639.5	0.0293	mg/L	0.00403	0.0293	mg/L	0.00403	13.73%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	216.2	0.0026	mg/L	0.00041	0.0026	mg/L	0.00041	15.89%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	996.8	0.0003	mg/L	0.00001	0.0003	mg/L	0.00001	2.64%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	10.0	0.0001	mg/L	0.00009	0.0001	mg/L	0.00009	63.88%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	10.7	0.0005	mg/L	0.00011	0.0005	mg/L	0.00011	20.97%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-325.0	-0.0025	mg/L	0.00003	-0.0025	mg/L	0.00003	1.38%
QC value less than the lower limit for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	1396.3	0.0050	mg/L	0.00092	0.0050	mg/L	0.00092	18.35%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	-3317.2	-0.0531	mg/L	0.00218	-0.0531	mg/L	0.00218	4.10%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	-7.0	-0.0167	mg/L	0.02984	-0.0167	mg/L	0.02984	178.18%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	-698.2	-0.0578	mg/L	0.00422	-0.0578	mg/L	0.00422	7.30%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-477.4	-0.0012	mg/L	0.00004	-0.0012	mg/L	0.00004	2.86%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	12.3	0.0012	mg/L	0.00005	0.0012	mg/L	0.00005	3.81%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	55.8	0.0013	mg/L	0.00020	0.0013	mg/L	0.00020	15.41%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	843.3	0.1400	mg/L	0.00126	0.1400	mg/L	0.00126	0.90%
QC value within limits for Na 589.592 Recovery = Not calculated								
Pb 220.353†	1.0	0.0002	mg/L	0.00064	0.0002	mg/L	0.00064	286.16%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	3.8	0.0032	mg/L	0.00108	0.0032	mg/L	0.00108	33.14%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	0.6	0.0010	mg/L	0.00210	0.0010	mg/L	0.00210	206.95%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-63.5	-0.0185	mg/L	0.00196	-0.0185	mg/L	0.00196	10.57%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 337.279†	518.0	0.0008	mg/L	0.00031	0.0008	mg/L	0.00031	36.56%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	-2.2	-0.0019	mg/L	0.00065	-0.0019	mg/L	0.00065	34.68%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	78.1	0.0011	mg/L	0.00050	0.0011	mg/L	0.00050	47.32%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	83.5	0.0042	mg/L	0.00067	0.0042	mg/L	0.00067	15.70%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	-1.9	-0.0160	mg/L	0.01466	-0.0160	mg/L	0.01466	91.40%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Sr 421.552†	81.3	0.0007	mg/L	0.00009	0.0007	mg/L	0.00009	13.38%

QC value within limits for Sr 421.552 Recovery = Not calculated
QC Failed. Continue with analysis.

Sequence No.: 88
Sample ID: PBW-209799
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 88
Date Collected: 6/7/2014 5:01:36 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: PBW-209799

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7580069.2	1.037	mg/L	0.0114				1.10%
Ag 328.068†	-10.8	-0.0001	mg/L	0.00011				190.44%
Al 308.215†	-544.7	-0.0364	mg/L	0.00356				9.76%
As 188.979†	-0.1	-0.0002	mg/L	0.00128				754.96%
B 249.772†	1869.1	0.0153	mg/L	0.00093				6.07%
Ba 233.527†	129.2	0.0015	mg/L	0.00036				23.43%
Be 313.107†	642.0	0.0002	mg/L	0.00007				40.03%
Cd 226.502†	-18.5	-0.0002	mg/L	0.00005				24.00%
Co 228.616†	-22.2	-0.0011	mg/L	0.00004				3.83%
Cr 267.716†	-259.2	-0.0020	mg/L	0.00005				2.76%
Cu 324.752†	658.8	0.0024	mg/L	0.00014				5.75%
Fe 259.939†	-4402.9	-0.0704	mg/L	0.00248				3.52%
K 766.490†	38.2	0.0914	mg/L	0.05904				64.59%
Mg 279.077†	-1059.7	-0.0877	mg/L	0.01268				14.46%
Mn 257.610†	-458.8	-0.0012	mg/L	0.00004				3.37%
Mo 202.031†	4.3	0.0004	mg/L	0.00011				25.42%
Ni 231.604†	-13.0	-0.0003	mg/L	0.00011				34.96%
Na 589.592†	898.8	0.1492	mg/L	0.00382				2.56%
Pb 220.353†	2.6	0.0006	mg/L	0.00032				57.69%
Sb 206.836†	5.0	0.0042	mg/L	0.00124				29.47%
Se 196.026†	-0.2	-0.0003	mg/L	0.00368				>999.9%
Sn 189.927†	-106.0	-0.0309	mg/L	0.00068				2.18%
Ti 337.279†	790.8	0.0013	mg/L	0.00013				10.32%
Tl 190.801†	-5.4	-0.0044	mg/L	0.00447				100.59%
V 292.402†	58.0	0.0008	mg/L	0.00002				2.25%
Zn 206.200†	116.1	0.0059	mg/L	0.00005				0.92%
Ca 227.546†	16.7	0.1092	mg/L	0.02833				25.95%
Sr 421.552†	35.7	0.0003	mg/L	0.00024				76.71%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 89
Sample ID: LCSW-209799
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 89
Date Collected: 6/7/2014 5:07:35 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: LCSW-209799

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7470334.5	1.022	mg/L	0.0003				0.03%
Ag 328.068†	14113.0	0.0509	mg/L	0.00078				1.54%
Al 308.215†	27004.6	1.806	mg/L	0.0299				1.65%
As 188.979†	34.0	0.0381	mg/L	0.00086				2.26%
B 249.772†	119772.2	0.9533	mg/L	0.01701				1.78%
Ba 233.527†	166588.6	1.986	mg/L	0.0183				0.92%
Be 313.107†	167901.4	0.0487	mg/L	0.00008				0.16%
Cd 226.502†	3855.3	0.0492	mg/L	0.00012				0.25%
Co 228.616†	10056.7	0.4908	mg/L	0.00436				0.89%
Cr 267.716†	26865.1	0.2034	mg/L	0.00177				0.87%
Cu 324.752†	71886.6	0.2578	mg/L	0.00353				1.37%
Fe 259.939†	57988.8	0.9276	mg/L	0.00852				0.92%
K 766.490†	7539.1	18.05	mg/L	0.033				0.18%
Mg 279.077†	22196.7	1.838	mg/L	0.0235				1.28%
Mn 257.610†	190319.5	0.4942	mg/L	0.00470				0.95%
Mo 202.031†	4877.3	0.4909	mg/L	0.00042				0.09%
Ni 231.604†	21893.8	0.5155	mg/L	0.00324				0.63%

Na 589.592†	115135.2	19.11	mg/L	0.118	0.62%
Pb 220.353†	2294.2	0.5003	mg/L	0.00024	0.05%
Sb 206.836†	584.3	0.4943	mg/L	0.00139	0.28%
Se 196.026†	566.6	0.9656	mg/L	0.00279	0.29%
Sn 189.927†	17185.3	5.011	mg/L	0.0655	1.31%
Ti 337.279†	301635.7	0.4900	mg/L	0.00569	1.16%
Tl 190.801†	2259.3	1.871	mg/L	0.0001	0.01%
V 292.402†	36888.7	0.5006	mg/L	0.00489	0.98%
Zn 206.200†	10626.1	0.5403	mg/L	0.00251	0.46%
Ca 227.546†	290.7	2.024	mg/L	0.0207	1.02%
Sr 421.552†	0.3	0.0000	mg/L	0.00012	>999.9%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 90
Sample ID: R1403915-009
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 90
Date Collected: 6/7/2014 5:13:47 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403915-009

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7536017.2	1.031	mg/L	0.0075				0.72%
Ag 328.068†	-35509.2	-0.0510	mg/L	0.00061				1.20%
Al 308.215†	4625750.9	309.4	mg/L	0.20				0.07%
As 188.979†	137.2	0.1723	mg/L	0.00103				0.60%
B 249.772†	226884.4	0.6011	mg/L	0.00141				0.23%
Ba 233.527†	155018.8	1.848	mg/L	0.0086				0.47%
Be 313.107†	43820.5	0.0127	mg/L	0.00006				0.48%
Cd 226.502†	4791.3	0.0256	mg/L	0.00023				0.89%
Co 228.616†	4129.5	0.2015	mg/L	0.00227				1.12%
Cr 267.716†	54874.0	0.4620	mg/L	0.00271				0.59%
Cu 324.752†	475202.8	1.735	mg/L	0.0061				0.35%
Fe 259.939†	17208111.5	275.3	mg/L	2.77				1.01%
K 766.490†	37219.6	89.12	mg/L	0.109				0.12%
Mg 279.077†	4230720.4	350.2	mg/L	1.82				0.52%
Mn 257.610†	8356663.3	21.73	mg/L	0.234				1.08%
Mo 202.031†	286.8	0.0289	mg/L	0.00019				0.66%
Ni 231.604†	13748.0	0.3237	mg/L	0.00365				1.13%
Na 589.592†	98094.5	16.29	mg/L	0.007				0.05%
Pb 220.353†	891.4	0.2237	mg/L	0.00571				2.55%
Sb 206.836†	44.2	0.0079	mg/L	0.00139				17.52%
Se 196.026†	-50.9	-0.0196	mg/L	0.00128				6.52%
Sn 189.927†	-335.9	-0.0979	mg/L	0.00105				1.07%
Ti 337.279†	3480185.6	5.654	mg/L	0.0156				0.28%
Tl 190.801†	64.1	0.0256	mg/L	0.00371				14.52%
V 292.402†	46769.3	0.6227	mg/L	0.00299				0.48%
Zn 206.200†	22736.2	1.156	mg/L	0.0201				1.74%
Ca 227.546†	233969.4	1600	mg/L	1.2				0.08%
Sr 421.552†	269464.4	2.329	mg/L	0.0001				0.00%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 91
Sample ID: R1403915-010
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 91
Date Collected: 6/7/2014 5:20:17 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403915-010

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7423882.9	1.016	mg/L	0.0040				0.39%
Ag 328.068†	-181.2	-0.0006	mg/L	0.00016				25.26%
Al 308.215†	883.1	0.0591	mg/L	0.03192				54.03%
As 188.979†	3.4	0.0038	mg/L	0.00132				34.61%
B 249.772†	8507.7	0.0676	mg/L	0.00110				1.63%
Ba 233.527†	6059.1	0.0722	mg/L	0.00014				0.20%
Be 313.107†	410.3	0.0001	mg/L	0.00003				21.33%

Cd 226.502†	-16.9	-0.0002	mg/L	0.00013	58.04%
Co 228.616†	-24.1	-0.0012	mg/L	0.00031	26.72%
Cr 267.716†	-350.6	-0.0021	mg/L	0.00013	6.02%
Cu 324.752†	2649.6	0.0095	mg/L	0.00119	12.54%
Fe 259.939†	6092.0	0.0975	mg/L	0.06350	65.16%
K 766.490†	2201.7	5.272	mg/L	0.0426	0.81%
Mg 279.077†	51124.1	4.232	mg/L	0.0624	1.47%
Mn 257.610†	12938.2	0.0336	mg/L	0.00355	10.57%
Mo 202.031†	252.9	0.0255	mg/L	0.00040	1.56%
Ni 231.604†	35.9	0.0008	mg/L	0.00020	23.68%
Na 589.592†	74049.8	12.29	mg/L	0.084	0.68%
Pb 220.353†	3.7	0.0008	mg/L	0.00058	71.94%
Sb 206.836†	3.9	0.0033	mg/L	0.00088	26.50%
Se 196.026†	1.3	0.0023	mg/L	0.00185	81.97%
Sn 189.927†	-252.3	-0.0736	mg/L	0.00067	0.91%
Ti 337.279†	1883.5	0.0031	mg/L	0.00086	28.26%
Tl 190.801†	-2.6	-0.0028	mg/L	0.00236	84.80%
V 292.402†	168.6	0.0023	mg/L	0.00034	14.73%
Zn 206.200†	166.5	0.0085	mg/L	0.00104	12.34%
Ca 227.546†	9234.6	62.55	mg/L	0.160	0.26%
Sr 421.552†	29486.6	0.2549	mg/L	0.00183	0.72%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 92
Sample ID: R1403915-010D
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 92
Date Collected: 6/7/2014 5:26:21 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403915-010D

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7461551.1	1.021	mg/L	0.0103				1.01%
Ag 328.068†	-240.2	-0.0009	mg/L	0.00016				17.87%
Al 308.215†	26.7	0.0018	mg/L	0.00900				503.32%
As 188.979†	3.7	0.0041	mg/L	0.00449				109.04%
B 249.772†	7842.7	0.0629	mg/L	0.00042				0.67%
Ba 233.527†	6068.4	0.0724	mg/L	0.00007				0.10%
Be 313.107†	309.8	0.0001	mg/L	0.00003				31.28%
Cd 226.502†	-16.7	-0.0002	mg/L	0.00005				23.70%
Co 228.616†	-30.6	-0.0015	mg/L	0.00014				9.70%
Cr 267.716†	-387.0	-0.0024	mg/L	0.00009				3.88%
Cu 324.752†	1269.5	0.0045	mg/L	0.00048				10.50%
Fe 259.939†	-2627.9	-0.0420	mg/L	0.00700				16.65%
K 766.490†	2201.8	5.272	mg/L	0.0469				0.89%
Mg 279.077†	50344.1	4.168	mg/L	0.0319				0.77%
Mn 257.610†	10160.7	0.0264	mg/L	0.00039				1.49%
Mo 202.031†	255.1	0.0257	mg/L	0.00020				0.76%
Ni 231.604†	-2.0	0.0000	mg/L	0.00011				221.38%
Na 589.592†	76811.4	12.75	mg/L	0.110				0.86%
Pb 220.353†	0.8	0.0002	mg/L	0.00027				151.33%
Sb 206.836†	2.8	0.0024	mg/L	0.00065				27.34%
Se 196.026†	0.3	0.0005	mg/L	0.00319				581.98%
Sn 189.927†	-259.5	-0.0757	mg/L	0.00023				0.30%
Ti 337.279†	743.6	0.0012	mg/L	0.00009				7.45%
Tl 190.801†	-3.3	-0.0033	mg/L	0.00045				13.36%
V 292.402†	167.5	0.0023	mg/L	0.00035				15.42%
Zn 206.200†	68.0	0.0035	mg/L	0.00004				1.08%
Ca 227.546†	9318.9	63.11	mg/L	0.226				0.36%
Sr 421.552†	30783.7	0.2661	mg/L	0.00195				0.73%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 93
Sample ID: R1403915-010S
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 93
Date Collected: 6/7/2014 5:32:22 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403915-010S

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7532327.1	1.031	mg/L	0.0095				0.92%
Ag 328.068†	13794.0	0.0498	mg/L	0.00021				0.43%
Al 308.215†	28159.1	1.884	mg/L	0.0009				0.05%
As 188.979†	38.2	0.0428	mg/L	0.00139				3.25%
B 249.772†	128379.9	1.022	mg/L	0.0047				0.46%
Ba 233.527†	172356.8	2.055	mg/L	0.0005				0.03%
Be 313.107†	167966.8	0.0488	mg/L	0.00010				0.20%
Cd 226.502†	3759.5	0.0479	mg/L	0.00037				0.78%
Co 228.616†	9794.4	0.4779	mg/L	0.00321				0.67%
Cr 267.716†	26406.9	0.2004	mg/L	0.00064				0.32%
Cu 324.752†	70203.3	0.2517	mg/L	0.00034				0.14%
Fe 259.939†	59062.6	0.9448	mg/L	0.00158				0.17%
K 766.490†	9948.5	23.82	mg/L	0.230				0.96%
Mg 279.077†	72405.8	5.994	mg/L	0.0120				0.20%
Mn 257.610†	200929.5	0.5218	mg/L	0.00030				0.06%
Mo 202.031†	5131.9	0.5165	mg/L	0.00258				0.50%
Ni 231.604†	21193.7	0.4990	mg/L	0.00004				0.01%
Na 589.592†	187429.1	31.12	mg/L	0.331				1.06%
Pb 220.353†	2272.6	0.4956	mg/L	0.00150				0.30%
Sb 206.836†	579.8	0.4904	mg/L	0.00357				0.73%
Se 196.026†	559.6	0.9537	mg/L	0.00262				0.27%
Sn 189.927†	19332.3	5.637	mg/L	0.0008				0.01%
Ti 337.279†	301334.9	0.4895	mg/L	0.00052				0.11%
Tl 190.801†	2268.0	1.877	mg/L	0.0127				0.68%
V 292.402†	36969.2	0.5017	mg/L	0.00106				0.21%
Zn 206.200†	9747.9	0.4956	mg/L	0.00329				0.66%
Ca 227.546†	9516.6	64.51	mg/L	0.508				0.79%
Sr 421.552†	29188.9	0.2523	mg/L	0.00293				1.16%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 94
Sample ID: R1403915-010A
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 94
Date Collected: 6/7/2014 5:38:23 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403915-010A

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7553613.8	1.034	mg/L	0.0061				0.59%
Ag 328.068†	11635.9	0.0420	mg/L	0.00037				0.89%
Al 308.215†	26984.6	1.805	mg/L	0.0186				1.03%
As 188.979†	36.7	0.0411	mg/L	0.00092				2.24%
B 249.772†	124561.9	0.9917	mg/L	0.00066				0.07%
Ba 233.527†	164201.1	1.958	mg/L	0.0103				0.53%
Be 313.107†	163084.5	0.0473	mg/L	0.00000				0.01%
Cd 226.502†	3598.5	0.0459	mg/L	0.00028				0.61%
Co 228.616†	9498.2	0.4635	mg/L	0.00246				0.53%
Cr 267.716†	25365.8	0.1925	mg/L	0.00072				0.37%
Cu 324.752†	66794.6	0.2395	mg/L	0.00095				0.39%
Fe 259.939†	55788.3	0.8924	mg/L	0.00442				0.50%
K 766.490†	9693.6	23.21	mg/L	0.196				0.84%
Mg 279.077†	70307.8	5.821	mg/L	0.0316				0.54%
Mn 257.610†	192003.7	0.4986	mg/L	0.00297				0.60%
Mo 202.031†	5528.4	0.5564	mg/L	0.00257				0.46%
Ni 231.604†	20317.1	0.4783	mg/L	0.00287				0.60%
Na 589.592†	184017.6	30.55	mg/L	0.253				0.83%
Pb 220.353†	2176.6	0.4747	mg/L	0.00154				0.32%
Sb 206.836†	641.0	0.5422	mg/L	0.00126				0.23%
Se 196.026†	666.3	1.136	mg/L	0.0048				0.43%
Sn 189.927†	-243.2	-0.0709	mg/L	0.00100				1.41%
Ti 337.279†	326162.8	0.5299	mg/L	0.00354				0.67%
Tl 190.801†	2171.1	1.797	mg/L	0.0125				0.69%
V 292.402†	35340.6	0.4796	mg/L	0.00246				0.51%
Zn 206.200†	9562.2	0.4862	mg/L	0.00338				0.70%
Ca 227.546†	9411.2	63.79	mg/L	0.600				0.94%
Sr 421.552†	29039.7	0.2510	mg/L	0.00255				1.01%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 95
Sample ID: R1403915-010L
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 95
Date Collected: 6/7/2014 5:44:27 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403915-010L

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7595720.0	1.039	mg/L	0.0306				2.95%
Ag 328.068†	24.3	0.0001	mg/L	0.00007				97.73%
Al 308.215†	-715.9	-0.0479	mg/L	0.02651				55.35%
As 188.979†	1.6	0.0018	mg/L	0.00014				8.14%
B 249.772†	3132.8	0.0253	mg/L	0.00274				10.81%
Ba 233.527†	1254.3	0.0150	mg/L	0.00025				1.69%
Be 313.107†	554.7	0.0002	mg/L	0.00013				78.89%
Cd 226.502†	-6.7	-0.0001	mg/L	0.00005				58.30%
Co 228.616†	-20.6	-0.0010	mg/L	0.00006				6.17%
Cr 267.716†	-244.7	-0.0018	mg/L	0.00007				3.90%
Cu 324.752†	718.5	0.0026	mg/L	0.00121				47.00%
Fe 259.939†	-3775.0	-0.0604	mg/L	0.00099				1.64%
K 766.490†	404.0	0.9675	mg/L	0.11394				11.78%
Mg 279.077†	8849.7	0.7326	mg/L	0.02272				3.10%
Mn 257.610†	1588.8	0.0041	mg/L	0.00009				2.11%
Mo 202.031†	74.6	0.0075	mg/L	0.00043				5.79%
Ni 231.604†	-11.2	-0.0003	mg/L	0.00019				72.19%
Na 589.592†	15353.3	2.549	mg/L	0.1005				3.94%
Pb 220.353†	6.9	0.0015	mg/L	0.00097				64.24%
Sb 206.836†	0.0	0.0000	mg/L	0.00016				353.40%
Se 196.026†	0.5	0.0008	mg/L	0.00357				445.32%
Sn 189.927†	-171.4	-0.0500	mg/L	0.00036				0.73%
Ti 337.279†	310.6	0.0005	mg/L	0.00014				27.11%
Tl 190.801†	0.6	0.0004	mg/L	0.00041				105.86%
V 292.402†	50.8	0.0007	mg/L	0.00060				87.14%
Zn 206.200†	65.9	0.0033	mg/L	0.00057				16.88%
Ca 227.546†	1776.3	12.03	mg/L	0.226				1.88%
Sr 421.552†	5816.9	0.0503	mg/L	0.00167				3.31%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 96
Sample ID: R1403915-011
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 96
Date Collected: 6/7/2014 5:50:25 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403915-011

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7560870.5	1.035	mg/L	0.0046				0.44%
Ag 328.068†	-33881.8	-0.0447	mg/L	0.00049				1.09%
Al 308.215†	5679056.8	379.9	mg/L	1.24				0.33%
As 188.979†	44.2	0.0678	mg/L	0.00436				6.43%
B 249.772†	256580.9	0.8309	mg/L	0.01134				1.36%
Ba 233.527†	226729.6	2.703	mg/L	0.0254				0.94%
Be 313.107†	52068.7	0.0151	mg/L	0.00009				0.59%
Cd 226.502†	4549.9	0.0226	mg/L	0.00031				1.38%
Co 228.616†	3787.9	0.1848	mg/L	0.00176				0.95%
Cr 267.716†	53080.5	0.4285	mg/L	0.00309				0.72%
Cu 324.752†	445436.9	1.628	mg/L	0.0219				1.34%
Fe 259.939†	17315954.2	277.0	mg/L	2.12				0.77%
K 766.490†	53442.9	128.0	mg/L	0.97				0.76%
Mg 279.077†	2339510.7	193.7	mg/L	0.95				0.49%
Mn 257.610†	5862804.7	15.26	mg/L	0.080				0.52%
Mo 202.031†	504.9	0.0508	mg/L	0.00011				0.22%
Ni 231.604†	15544.6	0.3660	mg/L	0.00261				0.71%
Na 589.592†	145320.5	24.13	mg/L	0.229				0.95%

Pb 220.353†	775.2	0.2077 mg/L	0.00089	0.43%
Sb 206.836†	48.4	0.0047 mg/L	0.00368	78.11%
Se 196.026†	-51.2	-0.0177 mg/L	0.00122	6.91%
Sn 189.927†	-314.8	-0.0918 mg/L	0.00030	0.33%
Ti 337.279†	2515228.4	4.086 mg/L	0.0168	0.41%
Tl 190.801†	62.8	0.0247 mg/L	0.01047	42.38%
V 292.402†	48382.3	0.6445 mg/L	0.00695	1.08%
Zn 206.200†	22015.3	1.119 mg/L	0.0152	1.36%
Ca 227.546†	151789.9	1044 mg/L	9.1	0.87%
Sr 421.552†	171172.9	1.480 mg/L	0.0165	1.12%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 97
Sample ID: R1403915-012
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 97
Date Collected: 6/7/2014 5:56:51 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403915-012

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7660015.8	1.048	mg/L	0.0073				0.70%
Ag 328.068†	-2909.7	-0.0009	mg/L	0.00004				4.95%
Al 308.215†	491158.5	32.86	mg/L	0.860				2.62%
As 188.979†	7.9	0.0113	mg/L	0.00157				13.95%
B 249.772†	27850.6	0.0714	mg/L	0.00112				1.57%
Ba 233.527†	24952.1	0.2975	mg/L	0.00227				0.76%
Be 313.107†	4948.4	0.0014	mg/L	0.00005				3.68%
Cd 226.502†	340.6	-0.0001	mg/L	0.00009				83.07%
Co 228.616†	280.2	0.0137	mg/L	0.00023				1.66%
Cr 267.716†	4363.0	0.0352	mg/L	0.00032				0.92%
Cu 324.752†	36714.5	0.1355	mg/L	0.00220				1.63%
Fe 259.939†	2146717.8	34.34	mg/L	0.767				2.23%
K 766.490†	9748.6	23.34	mg/L	0.395				1.69%
Mg 279.077†	170670.5	14.13	mg/L	0.127				0.90%
Mn 257.610†	454809.7	1.185	mg/L	0.0271				2.28%
Mo 202.031†	576.9	0.0581	mg/L	0.00011				0.18%
Ni 231.604†	1283.5	0.0302	mg/L	0.00026				0.86%
Na 589.592†	234420.0	38.92	mg/L	0.215				0.55%
Pb 220.353†	61.0	0.0162	mg/L	0.00010				0.62%
Sb 206.836†	6.1	0.0021	mg/L	0.00038				18.50%
Se 196.026†	-1.3	0.0060	mg/L	0.00294				48.94%
Sn 189.927†	-278.2	-0.0811	mg/L	0.00076				0.94%
Ti 337.279†	344043.0	0.5589	mg/L	0.01264				2.26%
Tl 190.801†	5.0	0.0016	mg/L	0.00008				4.86%
V 292.402†	6477.5	0.0864	mg/L	0.00067				0.77%
Zn 206.200†	2386.2	0.1213	mg/L	0.00121				1.00%
Ca 227.546†	21469.2	147.3	mg/L	1.37				0.93%
Sr 421.552†	35855.8	0.3099	mg/L	0.00503				1.62%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 98
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 6/7/2014 6:03:16 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7613468.5	1.042	mg/L	0.0093				0.89%
Ag 328.068†	139446.8	0.5019	mg/L	0.00311	0.5019	mg/L	0.00311	0.62%
QC value within limits for Ag 328.068 Recovery = 100.39%								
Al 308.215†	144025.6	9.635	mg/L	0.0491	9.635	mg/L	0.0491	0.51%
QC value within limits for Al 308.215 Recovery = 96.35%								
As 188.979†	895.2	1.001	mg/L	0.0040	1.001	mg/L	0.0040	0.40%
QC value within limits for As 188.979 Recovery = 100.09%								
B 249.772†	305717.2	2.422	mg/L	0.0029	2.422	mg/L	0.0029	0.12%

QC value within limits for B 249.772 Recovery = 96.87%

Ba 233.527†	866482.7	10.33 mg/L	0.134	10.33 mg/L	0.134	1.30%

QC value within limits for Ba 233.527 Recovery = 103.31%

Be 313.107†	866312.0	0.2515 mg/L	0.00270	0.2515 mg/L	0.00270	1.07%

QC value within limits for Be 313.107 Recovery = 100.61%

Cd 226.502†	39887.3	0.5093 mg/L	0.00369	0.5093 mg/L	0.00369	0.72%

QC value within limits for Cd 226.502 Recovery = 101.85%

Co 228.616†	51481.8	2.512 mg/L	0.0152	2.512 mg/L	0.0152	0.60%

QC value within limits for Co 228.616 Recovery = 100.49%

Cr 267.716†	66905.4	0.5091 mg/L	0.00357	0.5091 mg/L	0.00357	0.70%

QC value within limits for Cr 267.716 Recovery = 101.82%

Cu 324.752†	343543.1	1.232 mg/L	0.0020	1.232 mg/L	0.0020	0.16%

QC value within limits for Cu 324.752 Recovery = 98.56%

Fe 259.939†	311159.2	4.977 mg/L	0.0428	4.977 mg/L	0.0428	0.86%

QC value within limits for Fe 259.939 Recovery = 99.55%

K 766.490†	10167.4	24.35 mg/L	0.177	24.35 mg/L	0.177	0.73%

QC value within limits for K 766.490 Recovery = 97.38%

Mg 279.077†	300405.6	24.87 mg/L	0.176	24.87 mg/L	0.176	0.71%

QC value within limits for Mg 279.077 Recovery = 99.48%

Mn 257.610†	290252.3	0.7542 mg/L	0.00438	0.7542 mg/L	0.00438	0.58%

QC value within limits for Mn 257.610 Recovery = 100.56%

Mo 202.031†	24483.4	2.464 mg/L	0.0183	2.464 mg/L	0.0183	0.74%

QC value within limits for Mo 202.031 Recovery = 98.57%

Ni 231.604†	86220.4	2.030 mg/L	0.0149	2.030 mg/L	0.0149	0.73%

QC value within limits for Ni 231.604 Recovery = 101.50%

Na 589.592†	149546.3	24.83 mg/L	0.175	24.83 mg/L	0.175	0.70%

QC value within limits for Na 589.592 Recovery = 99.31%

Pb 220.353†	2309.6	0.5046 mg/L	0.00397	0.5046 mg/L	0.00397	0.79%

QC value within limits for Pb 220.353 Recovery = 100.91%

Sb 206.836†	5911.7	5.001 mg/L	0.0371	5.001 mg/L	0.0371	0.74%

QC value within limits for Sb 206.836 Recovery = 100.03%

Se 196.026†	293.0	0.5005 mg/L	0.00122	0.5005 mg/L	0.00122	0.24%

QC value within limits for Se 196.026 Recovery = 100.09%

Sn 189.927†	16919.5	4.934 mg/L	0.0270	4.934 mg/L	0.0270	0.55%

QC value within limits for Sn 189.927 Recovery = 98.67%

Ti 337.279†	1536219.5	2.496 mg/L	0.0285	2.496 mg/L	0.0285	1.14%

QC value within limits for Ti 337.279 Recovery = 99.82%

Tl 190.801†	1201.4	0.9942 mg/L	0.00742	0.9942 mg/L	0.00742	0.75%

QC value within limits for Tl 190.801 Recovery = 99.42%

V 292.402†	187674.1	2.547 mg/L	0.0413	2.547 mg/L	0.0413	1.62%

QC value within limits for V 292.402 Recovery = 101.88%

Zn 206.200†	20326.3	1.033 mg/L	0.0080	1.033 mg/L	0.0080	0.77%

QC value within limits for Zn 206.200 Recovery = 103.34%

Ca 227.546†	3605.9	24.72 mg/L	0.084	24.72 mg/L	0.084	0.34%

QC value within limits for Ca 227.546 Recovery = 98.87%

Sr 421.552†	280620.3	2.426 mg/L	0.0392	2.426 mg/L	0.0392	1.61%

QC value within limits for Sr 421.552 Recovery = 97.03%

All analyte(s) passed QC.

Sequence No.: 99
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 6/7/2014 6:09:45 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7651571.5	1.047	mg/L	0.0021				0.20%
Ag 328.068†	62.2	0.0002	mg/L	0.00006	0.0002	mg/L	0.00006	29.28%

QC value within limits for Ag 328.068 Recovery = Not calculated

Al 308.215†	-656.1	-0.0439	mg/L	0.00517	-0.0439	mg/L	0.00517	11.78%

QC value within limits for Al 308.215 Recovery = Not calculated

As 188.979†	1.7	0.0019	mg/L	0.00024	0.0019	mg/L	0.00024	12.80%

QC value within limits for As 188.979 Recovery = Not calculated

B 249.772†	3486.5	0.0280	mg/L	0.00303	0.0280	mg/L	0.00303	10.80%

QC value within limits for B 249.772 Recovery = Not calculated

Ba 233.527†	299.4	0.0036	mg/L	0.00076	0.0036	mg/L	0.00076	21.36%

QC value within limits for Ba 233.527 Recovery = Not calculated

Be 313.107†	901.8	0.0003	mg/L	0.00004	0.0003	mg/L	0.00004	16.69%

	QC value within limits for Be 313.107 Recovery = Not calculated						
Cd 226.502†	10.0	0.0001 mg/L	0.00003	0.0001 mg/L	0.00003	22.29%	
	QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	8.6	0.0004 mg/L	0.00008	0.0004 mg/L	0.00008	19.85%	
	QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-278.7	-0.0021 mg/L	0.00003	-0.0021 mg/L	0.00003	1.36%	
	QC value less than the lower limit for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	1898.3	0.0068 mg/L	0.00072	0.0068 mg/L	0.00072	10.52%	
	QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 259.939†	-2420.5	-0.0387 mg/L	0.00189	-0.0387 mg/L	0.00189	4.89%	
	QC value within limits for Fe 259.939 Recovery = Not calculated						
K 766.490†	-0.1	-0.0003 mg/L	0.07711	-0.0003 mg/L	0.07711	>999.9%	
	QC value within limits for K 766.490 Recovery = Not calculated						
Mg 279.077†	-1165.5	-0.0965 mg/L	0.00487	-0.0965 mg/L	0.00487	5.05%	
	QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	-72.2	-0.0002 mg/L	0.00007	-0.0002 mg/L	0.00007	36.08%	
	QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	12.3	0.0012 mg/L	0.00028	0.0012 mg/L	0.00028	22.39%	
	QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	25.5	0.0006 mg/L	0.00008	0.0006 mg/L	0.00008	13.12%	
	QC value within limits for Ni 231.604 Recovery = Not calculated						
Na 589.592†	833.5	0.1384 mg/L	0.00256	0.1384 mg/L	0.00256	1.85%	
	QC value within limits for Na 589.592 Recovery = Not calculated						
Pb 220.353†	2.5	0.0005 mg/L	0.00018	0.0005 mg/L	0.00018	33.31%	
	QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	4.1	0.0035 mg/L	0.00185	0.0035 mg/L	0.00185	52.97%	
	QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-1.9	-0.0032 mg/L	0.00098	-0.0032 mg/L	0.00098	30.76%	
	QC value within limits for Se 196.026 Recovery = Not calculated						
Sn 189.927†	-64.6	-0.0188 mg/L	0.00221	-0.0188 mg/L	0.00221	11.72%	
	QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 337.279†	732.0	0.0012 mg/L	0.00022	0.0012 mg/L	0.00022	18.40%	
	QC value within limits for Ti 337.279 Recovery = Not calculated						
Tl 190.801†	-1.3	-0.0011 mg/L	0.00079	-0.0011 mg/L	0.00079	75.12%	
	QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	82.3	0.0011 mg/L	0.00028	0.0011 mg/L	0.00028	25.46%	
	QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	116.5	0.0059 mg/L	0.00055	0.0059 mg/L	0.00055	9.33%	
	QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	2.2	0.0128 mg/L	0.02309	0.0128 mg/L	0.02309	180.33%	
	QC value within limits for Ca 227.546 Recovery = Not calculated						
Sr 421.552†	87.1	0.0008 mg/L	0.00011	0.0008 mg/L	0.00011	13.94%	
	QC value within limits for Sr 421.552 Recovery = Not calculated						
QC Failed. Continue with analysis.							

Sequence No.: 100
Sample ID: R1403915-013
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 98
Date Collected: 6/7/2014 6:15:46 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403915-013

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7455375.1	1.020	mg/L	0.0001				0.01%
Ag 328.068†	-39520.6	-0.0561	mg/L neg	0.00053				0.95%
Al 308.215†	6268833.7	419.4	mg/L	0.41				0.10%
As 188.979†	89.6	0.1207	mg/L	0.00264				2.19%
B 249.772†	292879.2	0.9810	mg/L	0.00056				0.06%
Ba 233.527†	217980.5	2.599	mg/L	0.0000				0.00%
Be 313.107†	55891.9	0.0162	mg/L	0.00000				0.02%
Cd 226.502†	5627.4	0.0322	mg/L	0.00063				1.95%
Co 228.616†	4830.6	0.2357	mg/L	0.00021				0.09%
Cr 267.716†	66270.4	0.5282	mg/L	0.00030				0.06%
Cu 324.752†	701545.0	2.550	mg/L	0.0041				0.16%
Fe 259.939†	19303312.8	308.8	mg/L	0.78				0.25%
K 766.490†	58250.0	139.5	mg/L	0.32				0.23%
Mg 279.077†	2307216.6	191.0	mg/L	0.18				0.09%
Mn 257.610†	9248635.0	24.05	mg/L	0.099				0.41%
Mo 202.031†	424.6	0.0427	mg/L	0.00014				0.33%

Ni 231.604†	19041.3	0.4483	mg/L	0.00014	0.03%
Na 589.592†	117143.4	19.45	mg/L	0.053	0.27%
Pb 220.353†	1775.1	0.4295	mg/L	0.00014	0.03%
Sb 206.836†	59.7	0.0105	mg/L	0.00586	55.71%
Se 196.026†	-57.2	-0.0201	mg/L	0.00782	38.93%
Sn 189.927†	-259.0	-0.0755	mg/L	0.00131	1.73%
Ti 337.279†	3278158.4	5.325	mg/L	0.0078	0.15%
Tl 190.801†	79.6	0.0374	mg/L	0.00389	10.40%
V 292.402†	53538.6	0.7131	mg/L	0.00105	0.15%
Zn 206.200†	40632.2	2.066	mg/L	0.0165	0.80%
Ca 227.546†	145866.1	1006	mg/L	2.9	0.29%
Sr 421.552†	215769.6	1.865	mg/L	0.0039	0.21%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 101
Sample ID: R1403915-014
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 99
Date Collected: 6/7/2014 6:22:19 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403915-014

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7537363.6	1.031	mg/L	0.0067				0.65%
Ag 328.068†	-39876.3	-0.0575	mg/L	0.00248				4.32%
Al 308.215†	6276026.2	419.8	mg/L	0.72				0.17%
As 188.979†	90.4	0.1216	mg/L	0.00338				2.78%
B 249.772†	291658.1	0.9740	mg/L	0.02660				2.73%
Ba 233.527†	224388.8	2.675	mg/L	0.0443				1.66%
Be 313.107†	57071.5	0.0166	mg/L	0.00017				1.01%
Cd 226.502†	5611.0	0.0321	mg/L	0.00127				3.94%
Co 228.616†	4823.0	0.2354	mg/L	0.00196				0.83%
Cr 267.716†	67447.6	0.5351	mg/L	0.00691				1.29%
Cu 324.752†	747419.2	2.714	mg/L	0.0034				0.13%
Fe 259.939†	19263759.7	308.2	mg/L	1.60				0.52%
K 766.490†	56211.2	134.6	mg/L	0.88				0.66%
Mg 279.077†	2115264.6	175.1	mg/L	0.24				0.13%
Mn 257.610†	8914774.8	23.18	mg/L	0.027				0.12%
Mo 202.031†	455.5	0.0458	mg/L	0.00016				0.34%
Ni 231.604†	19259.4	0.4534	mg/L	0.00354				0.78%
Na 589.592†	124620.2	20.69	mg/L	0.187				0.90%
Pb 220.353†	1868.0	0.4499	mg/L	0.00153				0.34%
Sb 206.836†	53.9	0.0055	mg/L	0.00037				6.73%
Se 196.026†	-58.2	-0.0219	mg/L	0.00770				35.16%
Sn 189.927†	-272.6	-0.0795	mg/L	0.00054				0.68%
Ti 337.279†	3207366.1	5.210	mg/L	0.0054				0.10%
Tl 190.801†	79.9	0.0379	mg/L	0.00380				10.01%
V 292.402†	53245.7	0.7092	mg/L	0.01479				2.09%
Zn 206.200†	41956.4	2.133	mg/L	0.0215				1.01%
Ca 227.546†	140970.0	972.5	mg/L	20.27				2.08%
Sr 421.552†	210971.7	1.824	mg/L	0.0145				0.79%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 102
Sample ID: R1403915-015
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 100
Date Collected: 6/7/2014 6:28:51 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403915-015

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7655226.7	1.047	mg/L	0.0091				0.87%
Ag 328.068†	-10810.3	-0.0068	mg/L	0.00046				6.78%
Al 308.215†	1437777.5	96.18	mg/L	0.549				0.57%
As 188.979†	35.8	0.0483	mg/L	0.00095				1.97%
B 249.772†	78970.7	0.1237	mg/L	0.00564				4.56%
Ba 233.527†	75511.7	0.9003	mg/L	0.01098				1.22%

Be 313.107†	16582.2	0.0048 mg/L	0.00000	0.07%
Cd 226.502†	1354.0	0.0023 mg/L	0.00000	0.05%
Co 228.616†	1346.3	0.0657 mg/L	0.00006	0.09%
Cr 267.716†	13938.0	0.1217 mg/L	0.00135	1.11%
Cu 324.752†	160808.4	0.5896 mg/L	0.00986	1.67%
Fe 259.939†	7203660.0	115.2 mg/L	0.53	0.46%
K 766.490†	14333.5	34.32 mg/L	0.414	1.21%
Mg 279.077†	1439048.6	119.1 mg/L	0.64	0.54%
Mn 257.610†	3612119.5	9.392 mg/L	0.0438	0.47%
Mo 202.031†	86.9	0.0087 mg/L	0.00008	0.92%
Ni 231.604†	4937.4	0.1162 mg/L	0.00065	0.56%
Na 589.592†	115689.3	19.21 mg/L	0.195	1.01%
Pb 220.353†	251.5	0.0627 mg/L	0.00035	0.56%
Sb 206.836†	12.0	0.0010 mg/L	0.00331	331.68%
Se 196.026†	-14.0	0.0033 mg/L	0.00188	57.66%
Sn 189.927†	-324.3	-0.0946 mg/L	0.00060	0.63%
Ti 337.279†	1063641.9	1.728 mg/L	0.0104	0.60%
Tl 190.801†	16.7	0.0060 mg/L	0.00302	49.97%
V 292.402†	15009.7	0.1987 mg/L	0.00379	1.91%
Zn 206.200†	7917.7	0.4026 mg/L	0.00266	0.66%
Ca 227.546†	80597.3	552.3 mg/L	8.70	1.57%
Sr 421.552†	112184.5	0.9698 mg/L	0.01060	1.09%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 103
Sample ID: R1403915-016
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 101
Date Collected: 6/7/2014 6:35:10 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403915-016

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7622865.9	1.043	mg/L	0.0023				0.22%
Ag 328.068†	-308.8	-0.0010	mg/L	0.00018				18.81%
Al 308.215†	-193.4	-0.0129	mg/L	0.01687				130.34%
As 188.979†	2.8	0.0031	mg/L	0.00107				34.13%
B 249.772†	8120.0	0.0628	mg/L	0.00018				0.29%
Ba 233.527†	14322.4	0.1708	mg/L	0.00026				0.15%
Be 313.107†	575.1	0.0002	mg/L	0.00001				7.38%
Cd 226.502†	-10.3	-0.0002	mg/L	0.00001				6.33%
Co 228.616†	0.2	0.0000	mg/L	0.00032				>999.9%
Cr 267.716†	-554.3	-0.0026	mg/L	0.00001				0.37%
Cu 324.752†	3788.2	0.0136	mg/L	0.00087				6.38%
Fe 259.939†	29681.3	0.4748	mg/L	0.02775				5.84%
K 766.490†	2733.3	6.545	mg/L	0.0700				1.07%
Mg 279.077†	148864.4	12.32	mg/L	0.021				0.17%
Mn 257.610†	547392.7	1.421	mg/L	0.0031				0.22%
Mo 202.031†	78.0	0.0079	mg/L	0.00020				2.55%
Ni 231.604†	73.4	0.0017	mg/L	0.00003				1.86%
Na 589.592†	98211.1	16.30	mg/L	0.059				0.36%
Pb 220.353†	4.0	0.0008	mg/L	0.00049				57.60%
Sb 206.836†	2.5	0.0021	mg/L	0.00296				138.35%
Se 196.026†	0.1	0.0003	mg/L	0.00321				967.21%
Sn 189.927†	-276.7	-0.0807	mg/L	0.00063				0.78%
Ti 337.279†	1042.8	0.0017	mg/L	0.00040				23.35%
Tl 190.801†	0.6	-0.0004	mg/L	0.00192				480.80%
V 292.402†	8.9	0.0001	mg/L	0.00021				207.43%
Zn 206.200†	220.2	0.0112	mg/L	0.00065				5.83%
Ca 227.546†	13913.4	94.25	mg/L	0.017				0.02%
Sr 421.552†	40181.5	0.3473	mg/L	0.00140				0.40%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 104
Sample ID: R1403942-003
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 102
Date Collected: 6/7/2014 6:41:11 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403942-003

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6798701.2	0.9303	mg/L	0.06971				7.49%
Ag 328.068†	-1146.7	-0.0031	mg/L	0.00021				6.86%
Al 308.215†	3745.4	0.2506	mg/L	0.08580				34.25%
As 188.979†	-0.7	-0.0005	mg/L	0.00068				136.12%
B 249.772†	10243.2	0.0652	mg/L	0.00532				8.16%
Ba 233.527†	11736.6	0.1399	mg/L	0.01022				7.30%
Be 313.107†	-1361.3	-0.0004	mg/L	0.00035				89.20%
Cd 226.502†	45.9	0.0001	mg/L	0.00013				155.48%
Co 228.616†	140.3	0.0068	mg/L	0.00050				7.34%
Cr 267.716†	70278.0	0.5425	mg/L	0.04372				8.06%
Cu 324.752†	8822.6	0.0321	mg/L	0.00435				13.58%
Fe 259.939†	236987.2	3.791	mg/L	0.2946				7.77%
K 766.490†	1665.5	3.988	mg/L	0.3718				9.32%
Mg 279.077†	1057786.7	87.57	mg/L	8.438				9.64%
Mn 257.610†	38737.5	0.1011	mg/L	0.00786				7.78%
Mo 202.031†	150.4	0.0151	mg/L	0.00154				10.17%
Ni 231.604†	65194.8	1.535	mg/L	0.1217				7.93%
Na 589.592†	3498939.0	580.9	mg/L	46.26				7.96%
Pb 220.353†	-1.6	-0.0005	mg/L	0.00011				22.93%
Sb 206.836†	4.1	0.0034	mg/L	0.00252				73.55%
Se 196.026†	1.9	0.0040	mg/L	0.00146				36.67%
Sn 189.927†	-328.3	-0.0957	mg/L	0.00290				3.03%
Ti 337.279†	1447.0	0.0024	mg/L	0.00018				7.72%
Tl 190.801†	-2.9	-0.0058	mg/L	0.00165				28.61%
V 292.402†	-20.7	-0.0004	mg/L	0.00011				23.79%
Zn 206.200†	436.8	0.0222	mg/L	0.00191				8.58%
Ca 227.546†	51503.0	349.0	mg/L	29.00				8.31%
Sr 421.552†	157858.3	1.365	mg/L	0.1087				7.96%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 105
Sample ID: R1403942-004
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 103
Date Collected: 6/7/2014 6:47:23 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403942-004

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6990550.7	0.9565	mg/L	0.00184				0.19%
Ag 328.068†	-1759.1	-0.0012	mg/L	0.00010				8.76%
Al 308.215†	6343.0	0.4243	mg/L	0.00826				1.95%
As 188.979†	-7.2	-0.0066	mg/L	0.00094				14.34%
B 249.772†	22788.5	0.1004	mg/L	0.00129				1.28%
Ba 233.527†	11444.7	0.1365	mg/L	0.00030				0.22%
Be 313.107†	-2285.0	-0.0007	mg/L	0.00004				5.38%
Cd 226.502†	182.7	-0.0001	mg/L	0.00002				12.31%
Co 228.616†	84.5	0.0041	mg/L	0.00001				0.31%
Cr 267.716†	488179.3	3.701	mg/L	0.0228				0.62%
Cu 324.752†	18567.0	0.0687	mg/L	0.00068				0.99%
Fe 259.939†	1160118.2	18.56	mg/L	0.008				0.04%
K 766.490†	2935.0	7.028	mg/L	0.1739				2.47%
Mg 279.077†	905560.9	74.97	mg/L	0.002				0.00%
Mn 257.610†	71272.8	0.1874	mg/L	0.00099				0.53%
Mo 202.031†	499.1	0.0502	mg/L	0.00049				0.98%
Ni 231.604†	9076.7	0.2137	mg/L	0.00018				0.08%
Na 589.592†	7512310.0	1247	mg/L	3.6				0.29%
Pb 220.353†	2.1	-0.0003	mg/L	0.00194				644.96%
Sb 206.836†	7.2	0.0060	mg/L	0.00040				6.60%
Se 196.026†	0.2	0.0043	mg/L	0.00037				8.61%
Sn 189.927†	-300.9	-0.0877	mg/L	0.00123				1.40%
Ti 337.279†	2214.1	0.0036	mg/L	0.00003				0.76%
Tl 190.801†	-1.1	-0.0022	mg/L	0.00516				237.01%
V 292.402†	-434.3	-0.0067	mg/L	0.00013				1.90%
Zn 206.200†	200.0	0.0102	mg/L	0.00094				9.21%
Ca 227.546†	30278.4	206.1	mg/L	1.91				0.93%

Sr 421.552†	136496.5	1.180 mg/L	0.0051		0.43%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 106
Sample ID: R1403969-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 104
Date Collected: 6/7/2014 6:53:39 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403969-001

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7560999.5	1.035	mg/L	0.0027				0.26%
Ag 328.068†	-872.7	-0.0008	mg/L	0.00014				18.12%
Al 308.215†	465.1	0.0311	mg/L	0.00013				0.42%
As 188.979†	0.3	0.0010	mg/L	0.00154				158.46%
B 249.772†	32790.1	0.2251	mg/L	0.00143				0.63%
Ba 233.527†	9708.4	0.1157	mg/L	0.00024				0.21%
Be 313.107†	819.2	0.0002	mg/L	0.00000				0.15%
Cd 226.502†	66.3	-0.0003	mg/L	0.00002				6.48%
Co 228.616†	-20.1	-0.0010	mg/L	0.00005				5.55%
Cr 267.716†	-798.4	-0.0020	mg/L	0.00034				16.67%
Cu 324.752†	14250.6	0.0520	mg/L	0.00004				0.07%
Fe 259.939†	525395.6	8.405	mg/L	0.0150				0.18%
K 766.490†	6806.1	16.30	mg/L	0.092				0.57%
Mg 279.077†	370436.5	30.67	mg/L	0.058				0.19%
Mn 257.610†	179381.2	0.4668	mg/L	0.00119				0.26%
Mo 202.031†	26.1	0.0026	mg/L	0.00022				8.26%
Ni 231.604†	254.7	0.0060	mg/L	0.00016				2.69%
Na 589.592†	294807.7	48.94	mg/L	0.060				0.12%
Pb 220.353†	11.7	0.0022	mg/L	0.00055				25.43%
Sb 206.836†	1.6	0.0014	mg/L	0.00053				38.65%
Se 196.026†	-0.9	0.0003	mg/L	0.00518				>999.9%
Sn 189.927†	-278.8	-0.0813	mg/L	0.00049				0.60%
Ti 337.279†	1263.5	0.0021	mg/L	0.00024				11.50%
Tl 190.801†	-5.9	-0.0056	mg/L	0.00358				63.95%
V 292.402†	63.0	0.0005	mg/L	0.00005				9.58%
Zn 206.200†	576.9	0.0293	mg/L	0.00014				0.48%
Ca 227.546†	15759.9	107.2	mg/L	0.36				0.34%
Sr 421.552†	80187.9	0.6932	mg/L	0.00281				0.41%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 107
Sample ID: PBW-209654
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 105
Date Collected: 6/7/2014 6:59:49 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: PBW-209654

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7663230.5	1.049	mg/L	0.0090				0.86%
Ag 328.068†	-40.1	-0.0002	mg/L	0.00007				46.73%
Al 308.215†	-1162.0	-0.0777	mg/L	0.00114				1.47%
As 188.979†	-1.7	-0.0019	mg/L	0.00056				29.70%
B 249.772†	230.0	0.0021	mg/L	0.00049				23.56%
Ba 233.527†	4.4	0.0001	mg/L	0.00001				23.88%
Be 313.107†	854.5	0.0002	mg/L	0.00003				12.01%
Cd 226.502†	-18.7	-0.0002	mg/L	0.00001				4.38%
Co 228.616†	-30.0	-0.0015	mg/L	0.00005				3.66%
Cr 267.716†	-244.0	-0.0019	mg/L	0.00000				0.10%
Cu 324.752†	545.7	0.0019	mg/L	0.00011				5.70%
Fe 259.939†	-3687.5	-0.0590	mg/L	0.00172				2.91%
K 766.490†	59.2	0.1417	mg/L	0.02824				19.93%
Mg 279.077†	-1172.3	-0.0970	mg/L	0.00212				2.19%
Mn 257.610†	-44.8	-0.0001	mg/L	0.00008				68.56%
Mo 202.031†	-1.6	-0.0002	mg/L	0.00005				29.01%
Ni 231.604†	-56.8	-0.0013	mg/L	0.00006				4.30%

Na 589.592†	2774.8	0.4607 mg/L	0.00915		1.99%
Pb 220.353†	2.8	0.0006 mg/L	0.00135		228.22%
Sb 206.836†	1.6	0.0013 mg/L	0.00030		22.79%
Se 196.026†	-0.5	-0.0008 mg/L	0.00002		2.53%
Sn 189.927†	-131.9	-0.0385 mg/L	0.00039		1.01%
Ti 337.279†	321.9	0.0005 mg/L	0.00003		4.99%
Tl 190.801†	-6.8	-0.0056 mg/L	0.00139		24.65%
V 292.402†	34.3	0.0005 mg/L	0.00000		0.15%
Zn 206.200†	18.9	0.0010 mg/L	0.00004		4.66%
Ca 227.546†	3.4	0.0199 mg/L	0.01027		51.75%
Sr 421.552†	15.5	0.0001 mg/L	0.00028		212.59%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 108
Sample ID: LCSW-209654
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 106
Date Collected: 6/7/2014 7:05:51 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: LCSW-209654

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7709910.9	1.055	mg/L	0.0040				0.38%
Ag 328.068†	14456.5	0.0522	mg/L	0.00030				0.58%
Al 308.215†	27928.2	1.868	mg/L	0.0111				0.59%
As 188.979†	35.4	0.0396	mg/L	0.00069				1.74%
B 249.772†	121785.2	0.9691	mg/L	0.00232				0.24%
Ba 233.527†	175907.6	2.097	mg/L	0.0038				0.18%
Be 313.107†	176367.7	0.0512	mg/L	0.00007				0.14%
Cd 226.502†	4051.9	0.0517	mg/L	0.00008				0.16%
Co 228.616†	10590.0	0.5168	mg/L	0.00059				0.11%
Cr 267.716†	28481.1	0.2156	mg/L	0.00015				0.07%
Cu 324.752†	75326.9	0.2701	mg/L	0.00139				0.51%
Fe 259.939†	62377.0	0.9978	mg/L	0.00353				0.35%
K 766.490†	7714.7	18.47	mg/L	0.080				0.43%
Mg 279.077†	23535.3	1.948	mg/L	0.0038				0.20%
Mn 257.610†	200743.1	0.5213	mg/L	0.00166				0.32%
Mo 202.031†	5111.4	0.5145	mg/L	0.00052				0.10%
Ni 231.604†	23004.5	0.5416	mg/L	0.00127				0.23%
Na 589.592†	119919.8	19.91	mg/L	0.263				1.32%
Pb 220.353†	2412.1	0.5261	mg/L	0.00130				0.25%
Sb 206.836†	611.5	0.5172	mg/L	0.00164				0.32%
Se 196.026†	584.7	0.9964	mg/L	0.00333				0.33%
Sn 189.927†	18959.0	5.528	mg/L	0.0008				0.02%
Ti 337.279†	318916.7	0.5181	mg/L	0.00093				0.18%
Tl 190.801†	2342.6	1.940	mg/L	0.0042				0.22%
V 292.402†	39528.7	0.5364	mg/L	0.00186				0.35%
Zn 206.200†	10896.1	0.5540	mg/L	0.00135				0.24%
Ca 227.546†	291.6	2.034	mg/L	0.0213				1.05%
Sr 421.552†	-11.6	-0.0001	mg/L	0.00006				62.58%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 109
Sample ID: R1403747-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 107
Date Collected: 6/7/2014 7:12:02 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403747-001

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6767660.9	0.9260	mg/L	0.00344				0.37%
Ag 328.068†	-3041.5	-0.0017	mg/L	0.00001				0.30%
Al 308.215†	12791.0	0.8557	mg/L	0.01473				1.72%
As 188.979†	269.5	0.3039	mg/L	0.00023				0.08%
B 249.772†	1624648.2	12.84	mg/L	0.064				0.50%
Ba 233.527†	40604.0	0.4841	mg/L	0.00513				1.06%
Be 313.107†	-847.6	-0.0002	mg/L	0.00005				19.29%

Cd 226.502†	307.3	-0.0005 mg/L	0.00008	16.18%
Co 228.616†	305.6	0.0149 mg/L	0.00004	0.27%
Cr 267.716†	25539.6	0.2058 mg/L	0.00123	0.60%
Cu 324.752†	19724.6	0.0745 mg/L	0.00071	0.95%
Fe 259.939†	2078129.6	33.24 mg/L	0.004	0.01%
K 766.490†	197710.8	473.4 mg/L	0.23	0.05%
Mg 279.077†	1165707.3	96.50 mg/L	0.022	0.02%
Mn 257.610†	325173.4	0.8484 mg/L	0.00664	0.78%
Mo 202.031†	147.2	0.0148 mg/L	0.00032	2.14%
Ni 231.604†	3783.5	0.0891 mg/L	0.00110	1.24%
Na 589.592†	9446836.5	1568 mg/L	4.3	0.27%
Pb 220.353†	34.7	0.0062 mg/L	0.00038	6.14%
Sb 206.836†	61.6	0.0521 mg/L	0.00062	1.19%
Se 196.026†	0.8	0.0085 mg/L	0.00493	57.87%
Sn 189.927†	-181.0	-0.0528 mg/L	0.00068	1.28%
Ti 337.279†	96288.1	0.1564 mg/L	0.00129	0.82%
Tl 190.801†	10.8	0.0081 mg/L	0.00334	41.16%
V 292.402†	2394.1	0.0310 mg/L	0.00012	0.39%
Zn 206.200†	2282.7	0.1161 mg/L	0.00118	1.01%
Ca 227.546†	32868.4	224.4 mg/L	1.76	0.78%
Sr 421.552†	388368.6	3.357 mg/L	0.0153	0.46%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 110
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 6/7/2014 7:18:29 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7648234.2	1.047	mg/L	0.0336				3.21%
Ag 328.068†	140430.7	0.5054	mg/L	0.01220	0.5054	mg/L	0.01220	2.41%
QC value within limits for Ag 328.068 Recovery = 101.09%								
Al 308.215†	143196.3	9.579	mg/L	0.2070	9.579	mg/L	0.2070	2.16%
QC value within limits for Al 308.215 Recovery = 95.79%								
As 188.979†	907.3	1.014	mg/L	0.0360	1.014	mg/L	0.0360	3.55%
QC value within limits for As 188.979 Recovery = 101.44%								
B 249.772†	315588.9	2.501	mg/L	0.0509	2.501	mg/L	0.0509	2.04%
QC value within limits for B 249.772 Recovery = 100.04%								
Ba 233.527†	847962.1	10.11	mg/L	0.302	10.11	mg/L	0.302	2.99%
QC value within limits for Ba 233.527 Recovery = 101.10%								
Be 313.107†	847753.1	0.2461	mg/L	0.00667	0.2461	mg/L	0.00667	2.71%
QC value within limits for Be 313.107 Recovery = 98.45%								
Cd 226.502†	39886.0	0.5093	mg/L	0.01175	0.5093	mg/L	0.01175	2.31%
QC value within limits for Cd 226.502 Recovery = 101.85%								
Co 228.616†	51279.7	2.502	mg/L	0.0535	2.502	mg/L	0.0535	2.14%
QC value within limits for Co 228.616 Recovery = 100.09%								
Cr 267.716†	67019.8	0.5099	mg/L	0.01127	0.5099	mg/L	0.01127	2.21%
QC value within limits for Cr 267.716 Recovery = 101.99%								
Cu 324.752†	338936.8	1.215	mg/L	0.0212	1.215	mg/L	0.0212	1.74%
QC value within limits for Cu 324.752 Recovery = 97.23%								
Fe 259.939†	306013.4	4.895	mg/L	0.1091	4.895	mg/L	0.1091	2.23%
QC value within limits for Fe 259.939 Recovery = 97.90%								
K 766.490†	10595.4	25.37	mg/L	1.069	25.37	mg/L	1.069	4.21%
QC value within limits for K 766.490 Recovery = 101.48%								
Mg 279.077†	298936.1	24.75	mg/L	0.556	24.75	mg/L	0.556	2.25%
QC value within limits for Mg 279.077 Recovery = 98.99%								
Mn 257.610†	288893.8	0.7506	mg/L	0.01649	0.7506	mg/L	0.01649	2.20%
QC value within limits for Mn 257.610 Recovery = 100.09%								
Mo 202.031†	24411.0	2.457	mg/L	0.0531	2.457	mg/L	0.0531	2.16%
QC value within limits for Mo 202.031 Recovery = 98.28%								
Ni 231.604†	86313.2	2.032	mg/L	0.0449	2.032	mg/L	0.0449	2.21%
QC value within limits for Ni 231.604 Recovery = 101.61%								
Na 589.592†	154238.4	25.61	mg/L	1.218	25.61	mg/L	1.218	4.76%
QC value within limits for Na 589.592 Recovery = 102.42%								
Pb 220.353†	2320.3	0.5069	mg/L	0.01543	0.5069	mg/L	0.01543	3.04%
QC value within limits for Pb 220.353 Recovery = 101.38%								
Sb 206.836†	5995.2	5.072	mg/L	0.1853	5.072	mg/L	0.1853	3.65%

QC value within limits for Sb 206.836 Recovery = 101.44%

Se 196.026†	287.5	0.4912 mg/L	0.01857	0.4912 mg/L	0.01857	3.78%

QC value within limits for Se 196.026 Recovery = 98.23%

Sn 189.927†	17085.3	4.982 mg/L	0.1155	4.982 mg/L	0.1155	2.32%

QC value within limits for Sn 189.927 Recovery = 99.64%

Ti 337.279†	1507456.9	2.449 mg/L	0.0687	2.449 mg/L	0.0687	2.80%

QC value within limits for Ti 337.279 Recovery = 97.95%

Tl 190.801†	1195.7	0.9895 mg/L	0.03226	0.9895 mg/L	0.03226	3.26%

QC value within limits for Tl 190.801 Recovery = 98.95%

V 292.402†	191399.2	2.597 mg/L	0.0894	2.597 mg/L	0.0894	3.44%

QC value within limits for V 292.402 Recovery = 103.90%

Zn 206.200†	20061.8	1.020 mg/L	0.0234	1.020 mg/L	0.0234	2.29%

QC value within limits for Zn 206.200 Recovery = 102.00%

Ca 227.546†	3642.4	24.96 mg/L	0.849	24.96 mg/L	0.849	3.40%

QC value within limits for Ca 227.546 Recovery = 99.84%

Sr 421.552†	274031.4	2.369 mg/L	0.0772	2.369 mg/L	0.0772	3.26%

QC value within limits for Sr 421.552 Recovery = 94.75%

All analyte(s) passed QC.

==========

Sequence No.: 111
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 6/7/2014 7:24:56 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7610286.6	1.041	mg/L	0.0000				0.00%
Ag 328.068†	79.9	0.0003	mg/L	0.00012	0.0003	mg/L	0.00012	42.89%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-1029.9	-0.0689	mg/L	0.00085	-0.0689	mg/L	0.00085	1.24%
QC value less than the lower limit for Al 308.215 Recovery = Not calculated								
As 188.979†	0.8	0.0009	mg/L	0.00125	0.0009	mg/L	0.00125	145.14%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	8891.9	0.0713	mg/L	0.00566	0.0713	mg/L	0.00566	7.93%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	271.8	0.0032	mg/L	0.00086	0.0032	mg/L	0.00086	26.53%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	1132.7	0.0003	mg/L	0.00006	0.0003	mg/L	0.00006	17.92%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	11.8	0.0002	mg/L	0.00003	0.0002	mg/L	0.00003	21.11%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-2.4	-0.0001	mg/L	0.00002	-0.0001	mg/L	0.00002	20.21%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-281.9	-0.0021	mg/L	0.00003	-0.0021	mg/L	0.00003	1.30%
QC value less than the lower limit for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	2098.8	0.0075	mg/L	0.00135	0.0075	mg/L	0.00135	17.90%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	-3096.5	-0.0495	mg/L	0.00082	-0.0495	mg/L	0.00082	1.66%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	196.5	0.4705	mg/L	0.07881	0.4705	mg/L	0.07881	16.75%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	-1141.0	-0.0945	mg/L	0.00182	-0.0945	mg/L	0.00182	1.92%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-28.5	-0.0001	mg/L	0.00007	-0.0001	mg/L	0.00007	87.27%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	16.3	0.0016	mg/L	0.00041	0.0016	mg/L	0.00041	24.63%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	13.2	0.0003	mg/L	0.00015	0.0003	mg/L	0.00015	46.82%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	3731.7	0.6195	mg/L	0.00874	0.6195	mg/L	0.00874	1.41%
QC value within limits for Na 589.592 Recovery = Not calculated								
Pb 220.353†	3.9	0.0008	mg/L	0.00051	0.0008	mg/L	0.00051	61.32%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	1.4	0.0012	mg/L	0.00158	0.0012	mg/L	0.00158	134.72%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.8	-0.0014	mg/L	0.00086	-0.0014	mg/L	0.00086	59.94%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-86.0	-0.0251	mg/L	0.00060	-0.0251	mg/L	0.00060	2.40%

QC value within limits for Sn 189.927 Recovery = Not calculated

Ti 337.279†	757.1	0.0012 mg/L	0.00032	0.0012 mg/L	0.00032	26.34%

QC value within limits for Ti 337.279 Recovery = Not calculated

Tl 190.801†	2.0	0.0017 mg/L	0.00167	0.0017 mg/L	0.00167	99.06%

QC value within limits for Tl 190.801 Recovery = Not calculated

V 292.402†	106.8	0.0015 mg/L	0.00021	0.0015 mg/L	0.00021	14.75%

QC value within limits for V 292.402 Recovery = Not calculated

Zn 206.200†	119.4	0.0061 mg/L	0.00073	0.0061 mg/L	0.00073	12.03%

QC value within limits for Zn 206.200 Recovery = Not calculated

Ca 227.546†	10.5	0.0682 mg/L	0.02832	0.0682 mg/L	0.02832	41.55%

QC value within limits for Ca 227.546 Recovery = Not calculated

Sr 421.552†	138.0	0.0012 mg/L	0.00013	0.0012 mg/L	0.00013	10.58%

QC value within limits for Sr 421.552 Recovery = Not calculated

QC Failed. Continue with analysis.

Sequence No.: 112
Sample ID: R1403747-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 108
Date Collected: 6/7/2014 7:30:57 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403747-002

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7431277.5	1.017	mg/L	0.0056				0.55%
Ag 328.068†	-3821.2	-0.0013	mg/L	0.00025				18.36%
Al 308.215†	6687.5	0.4474	mg/L	0.00831				1.86%
As 188.979†	3.2	0.0072	mg/L	0.00008				1.14%
B 249.772†	46950.5	0.1792	mg/L	0.00404				2.25%
Ba 233.527†	5968.4	0.0712	mg/L	0.00066				0.93%
Be 313.107†	322.8	0.0001	mg/L	0.00001				15.80%
Cd 226.502†	401.0	-0.0008	mg/L	0.00010				12.36%
Co 228.616†	-16.3	-0.0008	mg/L	0.00014				18.23%
Cr 267.716†	-1873.8	-0.0029	mg/L	0.00024				8.35%
Cu 324.752†	6831.4	0.0296	mg/L	0.00043				1.45%
Fe 259.939†	2783163.2	44.52	mg/L	0.068				0.15%
K 766.490†	2335.3	5.592	mg/L	0.0193				0.34%
Mg 279.077†	1016165.8	84.12	mg/L	0.091				0.11%
Mn 257.610†	97104.1	0.2577	mg/L	0.00144				0.56%
Mo 202.031†	26.2	0.0026	mg/L	0.00021				7.94%
Ni 231.604†	153.9	0.0036	mg/L	0.00003				0.71%
Na 589.592†	269969.5	44.82	mg/L	0.598				1.33%
Pb 220.353†	1.9	-0.0015	mg/L	0.00030				20.29%
Sb 206.836†	3.6	0.0030	mg/L	0.00180				59.34%
Se 196.026†	-4.6	0.0017	mg/L	0.00126				75.71%
Sn 189.927†	-311.9	-0.0910	mg/L	0.00024				0.26%
Ti 337.279†	6081.4	0.0099	mg/L	0.00022				2.18%
Tl 190.801†	-4.3	-0.0041	mg/L	0.00022				5.46%
V 292.402†	314.2	0.0023	mg/L	0.00010				4.24%
Zn 206.200†	1207.5	0.0614	mg/L	0.00015				0.24%
Ca 227.546†	36394.6	248.9	mg/L	1.23				0.49%
Sr 421.552†	379699.7	3.282	mg/L	0.0445				1.36%

Sample conc..not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 113
Sample ID: R1403747-003
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 109
Date Collected: 6/7/2014 7:37:20 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403747-003

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7397370.7	1.012	mg/L	0.0015				0.15%
Ag 328.068†	-2144.7	-0.0016	mg/L	0.00017				10.93%
Al 308.215†	10080.3	0.6743	mg/L	0.00235				0.35%
As 188.979†	9.5	0.0124	mg/L	0.00163				13.15%
B 249.772†	45617.8	0.2675	mg/L	0.00196				0.73%

Ba 233.527†	25151.6	0.2999 mg/L	0.00069		0.23%
Be 313.107†	276.3	0.0001 mg/L	0.00002		30.75%
Cd 226.502†	186.3	-0.0006 mg/L	0.00004		6.55%
Co 228.616†	-12.7	-0.0006 mg/L	0.00004		5.90%
Cr 267.716†	-969.6	-0.0019 mg/L	0.00010		5.09%
Cu 324.752†	1759.0	0.0088 mg/L	0.00014		1.61%
Fe 259.939†	1379051.2	22.06 mg/L	0.019		0.08%
K 766.490†	2278.6	5.456 mg/L	0.0370		0.68%
Mg 279.077†	486823.3	40.30 mg/L	0.013		0.03%
Mn 257.610†	384676.3	1.001 mg/L	0.0008		0.08%
Mo 202.031†	19.8	0.0020 mg/L	0.00028		13.85%
Ni 231.604†	1679.8	0.0395 mg/L	0.00016		0.40%
Na 589.592†	479842.4	79.66 mg/L	0.219		0.27%
Pb 220.353†	6.9	0.0006 mg/L	0.00149		234.37%
Sb 206.836†	2.6	0.0021 mg/L	0.00190		90.62%
Se 196.026†	-1.6	0.0020 mg/L	0.00187		93.45%
Sn 189.927†	-312.7	-0.0912 mg/L	0.00147		1.61%
Ti 337.279†	12352.7	0.0201 mg/L	0.00016		0.78%
Tl 190.801†	-1.1	-0.0023 mg/L	0.00209		89.18%
V 292.402†	259.0	0.0026 mg/L	0.00006		2.37%
Zn 206.200†	1156.1	0.0588 mg/L	0.00008		0.14%
Ca 227.546†	34551.6	235.2 mg/L	0.96		0.41%
Sr 421.552†	374703.0	3.239 mg/L	0.0058		0.18%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

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Sequence No.: 114
Sample ID: R1403747-004
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 110
Date Collected: 6/7/2014 7:43:35 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403747-004

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7480004.9	1.024	mg/L	0.0009				0.09%
Ag 328.068†	-670.9	-0.0021	mg/L	0.00013				6.15%
Al 308.215†	-743.6	-0.0497	mg/L	0.00227				4.57%
As 188.979†	4.3	0.0050	mg/L	0.00126				25.30%
B 249.772†	30156.0	0.2356	mg/L	0.00126				0.54%
Ba 233.527†	32419.6	0.3865	mg/L	0.00194				0.50%
Be 313.107†	380.2	0.0001	mg/L	0.00001				7.49%
Cd 226.502†	0.0	-0.0002	mg/L	0.00010				59.90%
Co 228.616†	-36.9	-0.0018	mg/L	0.00012				6.71%
Cr 267.716†	-1586.1	-0.0039	mg/L	0.00000				0.03%
Cu 324.752†	466.9	0.0018	mg/L	0.00004				2.22%
Fe 259.939†	77478.7	1.239	mg/L	0.0142				1.14%
K 766.490†	2921.5	6.995	mg/L	0.0638				0.91%
Mg 279.077†	774546.2	64.12	mg/L	0.079				0.12%
Mn 257.610†	505555.0	1.313	mg/L	0.0022				0.17%
Mo 202.031†	23.8	0.0024	mg/L	0.00039				16.44%
Ni 231.604†	90.3	0.0021	mg/L	0.00033				15.72%
Na 589.592†	270396.8	44.89	mg/L	0.262				0.58%
Pb 220.353†	-2.4	-0.0006	mg/L	0.00119				203.78%
Sb 206.836†	-1.2	-0.0010	mg/L	0.00187				178.59%
Se 196.026†	0.3	0.0008	mg/L	0.00109				131.56%
Sn 189.927†	-308.9	-0.0901	mg/L	0.00124				1.38%
Ti 337.279†	714.8	0.0012	mg/L	0.00002				2.07%
Tl 190.801†	-1.3	-0.0032	mg/L	0.00026				8.14%
V 292.402†	68.1	0.0009	mg/L	0.00005				5.69%
Zn 206.200†	52.0	0.0026	mg/L	0.00022				8.38%
Ca 227.546†	32824.4	222.4	mg/L	1.82				0.82%
Sr 421.552†	311879.5	2.696	mg/L	0.0171				0.63%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

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Sequence No.: 115
Sample ID: R1403747-004L
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 111
Date Collected: 6/7/2014 7:49:47 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403747-004L

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7595401.0	1.039	mg/L	0.0012				0.12%
Ag 328.068†	-155.4	-0.0005	mg/L	0.00022				43.55%
Al 308.215†	-1105.4	-0.0739	mg/L	0.00773				10.45%
As 188.979†	1.4	0.0016	mg/L	0.00056				36.08%
B 249.772†	8063.2	0.0636	mg/L	0.00146				2.29%
Ba 233.527†	6383.5	0.0761	mg/L	0.00066				0.86%
Be 313.107†	607.3	0.0002	mg/L	0.00006				31.63%
Cd 226.502†	-4.3	-0.0001	mg/L	0.00014				177.70%
Co 228.616†	-33.1	-0.0016	mg/L	0.00002				1.14%
Cr 267.716†	-606.4	-0.0030	mg/L	0.00010				3.39%
Cu 324.752†	100.5	0.0004	mg/L	0.00013				34.68%
Fe 259.939†	11471.8	0.1835	mg/L	0.00184				1.00%
K 766.490†	565.7	1.355	mg/L	0.0365				2.70%
Mg 279.077†	150018.9	12.42	mg/L	0.103				0.83%
Mn 257.610†	99494.9	0.2583	mg/L	0.00195				0.75%
Mo 202.031†	13.0	0.0013	mg/L	0.00005				3.64%
Ni 231.604†	-36.6	-0.0009	mg/L	0.00009				9.93%
Na 589.592†	51348.2	8.525	mg/L	0.0189				0.22%
Pb 220.353†	-5.8	-0.0013	mg/L	0.00298				233.78%
Sb 206.836†	-1.3	-0.0011	mg/L	0.00009				7.72%
Se 196.026†	-1.0	-0.0017	mg/L	0.00268				156.67%
Sn 189.927†	-241.3	-0.0704	mg/L	0.00019				0.27%
Ti 337.279†	233.5	0.0004	mg/L	0.00004				11.61%
Tl 190.801†	-2.1	-0.0021	mg/L	0.00179				85.35%
V 292.402†	36.7	0.0005	mg/L	0.00027				55.87%
Zn 206.200†	16.0	0.0008	mg/L	0.00003				3.91%
Ca 227.546†	5921.0	40.11	mg/L	0.430				1.07%
Sr 421.552†	57711.2	0.4989	mg/L	0.00107				0.21%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 116
Sample ID: R1403747-005
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 112
Date Collected: 6/7/2014 7:55:48 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403747-005

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6243875.7	0.8544	mg/L	0.00340				0.40%
Ag 328.068†	-2015.4	-0.0013	mg/L	0.00000				0.04%
Al 308.215†	12384.1	0.8284	mg/L	0.00598				0.72%
As 188.979†	198.7	0.2238	mg/L	0.00169				0.76%
B 249.772†	2546686.3	20.26	mg/L	0.108				0.53%
Ba 233.527†	93515.6	1.115	mg/L	0.0017				0.15%
Be 313.107†	-1419.8	-0.0004	mg/L	0.00000				0.18%
Cd 226.502†	184.3	-0.0005	mg/L	0.00005				10.05%
Co 228.616†	791.5	0.0386	mg/L	0.00028				0.73%
Cr 267.716†	36720.8	0.3014	mg/L	0.00011				0.04%
Cu 324.752†	2382.9	0.0110	mg/L	0.00023				2.08%
Fe 259.939†	1341970.3	21.47	mg/L	0.023				0.11%
K 766.490†	593839.0	1422	mg/L	9.4				0.66%
Mg 279.077†	2243257.7	185.7	mg/L	0.21				0.11%
Mn 257.610†	420279.8	1.094	mg/L	0.0014				0.12%
Mo 202.031†	127.8	0.0129	mg/L	0.00014				1.09%
Ni 231.604†	13314.0	0.3135	mg/L	0.00109				0.35%
Na 589.592†	Saturated2							
Pb 220.353†	10.2	0.0014	mg/L	0.00103				73.53%
Sb 206.836†	20.7	0.0174	mg/L	0.00065				3.75%
Se 196.026†	-0.3	0.0041	mg/L	0.00207				50.12%
Sn 189.927†	-169.2	-0.0493	mg/L	0.00197				3.99%
Ti 337.279†	220630.0	0.3584	mg/L	0.00013				0.04%
Tl 190.801†	1.7	0.0005	mg/L	0.00187				366.16%
V 292.402†	5623.7	0.0754	mg/L	0.00014				0.18%
Zn 206.200†	2473.6	0.1258	mg/L	0.00034				0.27%

Ca 227.546†	25553.4	174.2 mg/L	0.37		0.21%
Sr 421.552†	371527.9	3.212 mg/L	0.0154		0.48%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 117
Sample ID: PBW-209457
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 113
Date Collected: 6/7/2014 8:01:56 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: PBW-209457

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7792919.2	1.066	mg/L	0.0107				1.00%
Ag 328.068†	-30.6	-0.0001	mg/L	0.00007				51.66%
Al 308.215†	-1238.2	-0.0828	mg/L	0.00318				3.84%
As 188.979†	-0.0	0.0000	mg/L	0.00120				>999.9%
B 249.772†	18282.4	0.1465	mg/L	0.01779				12.15%
Ba 233.527†	20.8	0.0002	mg/L	0.00020				82.37%
Be 313.107†	1069.6	0.0003	mg/L	0.00002				6.77%
Cd 226.502†	-16.1	-0.0002	mg/L	0.00002				10.32%
Co 228.616†	-33.0	-0.0016	mg/L	0.00008				5.06%
Cr 267.716†	-287.0	-0.0022	mg/L	0.00007				3.06%
Cu 324.752†	-97.5	-0.0004	mg/L	0.00030				82.59%
Fe 259.939†	-4626.2	-0.0740	mg/L	0.00235				3.18%
K 766.490†	1185.9	2.840	mg/L	0.0112				0.39%
Mg 279.077†	-806.8	-0.0668	mg/L	0.02538				38.00%
Mn 257.610†	-397.8	-0.0010	mg/L	0.00011				10.95%
Mo 202.031†	-2.0	-0.0002	mg/L	0.00005				24.59%
Ni 231.604†	-59.6	-0.0014	mg/L	0.00003				2.30%
Na 589.592†	18911.0	3.140	mg/L	0.1002				3.19%
Pb 220.353†	-3.7	-0.0008	mg/L	0.00002				3.00%
Sb 206.836†	1.9	0.0016	mg/L	0.00083				51.55%
Se 196.026†	-1.0	-0.0017	mg/L	0.00246				147.48%
Sn 189.927†	-116.1	-0.0338	mg/L	0.00012				0.36%
Ti 337.279†	403.5	0.0007	mg/L	0.00003				4.96%
Tl 190.801†	-5.4	-0.0045	mg/L	0.00182				40.35%
V 292.402†	23.4	0.0003	mg/L	0.00025				79.10%
Zn 206.200†	-11.8	-0.0006	mg/L	0.00001				1.86%
Ca 227.546†	5.6	0.0335	mg/L	0.00723				21.58%
Sr 421.552†	122.9	0.0011	mg/L	0.00000				0.21%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 118
Sample ID: LCSW-209457
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 114
Date Collected: 6/7/2014 8:07:56 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: LCSW-209457

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7705137.0	1.054	mg/L	0.0092				0.87%
Ag 328.068†	14064.3	0.0507	mg/L	0.00020				0.39%
Al 308.215†	26262.3	1.757	mg/L	0.0139				0.79%
As 188.979†	35.3	0.0395	mg/L	0.00117				2.97%
B 249.772†	126009.0	1.003	mg/L	0.0035				0.34%
Ba 233.527†	166489.9	1.985	mg/L	0.0133				0.67%
Be 313.107†	166188.6	0.0482	mg/L	0.00021				0.44%
Cd 226.502†	3862.2	0.0493	mg/L	0.00051				1.04%
Co 228.616†	9982.2	0.4871	mg/L	0.00222				0.46%
Cr 267.716†	26810.0	0.2030	mg/L	0.00086				0.42%
Cu 324.752†	70309.1	0.2521	mg/L	0.00153				0.61%
Fe 259.939†	56991.1	0.9117	mg/L	0.00636				0.70%
K 766.490†	8040.9	19.25	mg/L	0.106				0.55%
Mg 279.077†	21990.9	1.821	mg/L	0.0147				0.81%
Mn 257.610†	189501.3	0.4921	mg/L	0.00345				0.70%
Mo 202.031†	4843.0	0.4874	mg/L	0.00585				1.20%

Ni 231.604†	21744.1	0.5119 mg/L	0.00328		0.64%
Na 589.592†	122061.2	20.26 mg/L	0.292		1.44%
Pb 220.353†	2296.0	0.5007 mg/L	0.00710		1.42%
Sb 206.836†	581.0	0.4914 mg/L	0.00760		1.55%
Se 196.026†	553.1	0.9426 mg/L	0.01261		1.34%
Sn 189.927†	17870.8	5.211 mg/L	0.0150		0.29%
Ti 337.279†	301471.6	0.4897 mg/L	0.00230		0.47%
Tl 190.801†	2240.8	1.856 mg/L	0.0226		1.22%
V 292.402†	37946.3	0.5150 mg/L	0.00580		1.13%
Zn 206.200†	10235.5	0.5204 mg/L	0.00439		0.84%
Ca 227.546†	280.0	1.950 mg/L	0.0477		2.45%
Sr 421.552†	6.6	0.0001 mg/L	0.00019		329.86%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 119
Sample ID: R1403715-15 5X
Analyst:
Initial Sample Wt:
Dilution: 5X

Autosampler Location: 115
Date Collected: 6/7/2014 8:14:08 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403715-15 5X

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5516751.0	0.7549	mg/L	0.00749				0.99%
Ag 328.068†	-4071.7	-0.0146	mg/L	0.00002				0.16%
Al 308.215†	1658.0	0.1109	mg/L	0.00435				3.92%
As 188.979†	15.3	0.0171	mg/L	0.00111				6.49%
B 249.772†	70987.8	0.5675	mg/L	0.00663				1.17%
Ba 233.527†	6187548.2	73.77	mg/L	0.595				0.81%
Be 313.107†	-3488.4	-0.0010	mg/L	0.00003				2.49%
Cd 226.502†	-42.1	-0.0005	mg/L	0.00015				27.39%
Co 228.616†	-64.8	-0.0032	mg/L	0.00047				14.78%
Cr 267.716†	-3313.8	-0.0100	mg/L	0.00031				3.08%
Cu 324.752†	2403.7	0.0086	mg/L	0.00061				7.10%
Fe 259.939†	-1826.6	-0.0292	mg/L	0.00459				15.71%
K 766.490†	135436.8	324.3	mg/L	4.77				1.47%
Mg 279.077†	1439706.7	119.2	mg/L	0.95				0.80%
Mn 257.610†	51522.7	0.1338	mg/L	0.00200				1.50%
Mo 202.031†	-10.1	-0.0010	mg/L	0.00049				48.16%
Ni 231.604†	-90.7	-0.0021	mg/L	0.00023				10.58%
Na 589.592†	Saturated2							
Pb 220.353†	-63.0	-0.0137	mg/L	0.00120				8.77%
Sb 206.836†	2.1	0.0017	mg/L	0.00182				104.76%
Se 196.026†	10.4	0.0177	mg/L	0.00314				17.72%
Sn 189.927†	-430.9	-0.1256	mg/L	0.00110				0.87%
Ti 337.279†	-373.1	-0.0006	mg/L	0.00003				5.02%
Tl 190.801†	34.2	-0.0014	mg/L	0.00484				335.59%
V 292.402†	-14.5	-0.0002	mg/L	0.00001				5.57%
Zn 206.200†	100.0	0.0051	mg/L	0.00009				1.76%
Ca 227.546†	439274.6	2975	mg/L	5.9				0.20%
Sr 421.552†	Saturated2							

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 120
Sample ID: R1403517-015L 5X
Analyst:
Initial Sample Wt:
Dilution: 5X

Autosampler Location: 116
Date Collected: 6/7/2014 8:20:10 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1403517-015L 5X

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6605719.8	0.9039	mg/L	0.01020				1.13%
Ag 328.068†	-1147.8	-0.0041	mg/L	0.00031				7.39%
Al 308.215†	374.2	0.0250	mg/L	0.00701				27.99%
As 188.979†	3.5	0.0039	mg/L	0.00481				122.53%
B 249.772†	17769.0	0.1423	mg/L	0.00128				0.90%
Ba 233.527†	1422896.7	16.96	mg/L	0.036				0.21%

Be 313.107†	-1393.1	-0.0004 mg/L	0.00002	4.27%
Cd 226.502†	-10.9	-0.0001 mg/L	0.00000	0.52%
Co 228.616†	-40.7	-0.0020 mg/L	0.00008	3.84%
Cr 267.716†	-1077.1	-0.0050 mg/L	0.00008	1.49%
Cu 324.752†	709.2	0.0025 mg/L	0.00026	10.12%
Fe 259.939†	-4170.3	-0.0667 mg/L	0.00236	3.53%
K 766.490†	17154.6	41.08 mg/L	0.390	0.95%
Mg 279.077†	297390.4	24.62 mg/L	0.011	0.04%
Mn 257.610†	9695.1	0.0252 mg/L	0.00004	0.15%
Mo 202.031†	-11.2	-0.0011 mg/L	0.00028	24.76%
Ni 231.604†	-91.9	-0.0022 mg/L	0.00054	24.75%
Na 589.592†	8582296.2	1425 mg/L	24.8	1.74%
Pb 220.353†	-10.2	-0.0022 mg/L	0.00210	94.41%
Sb 206.836†	0.1	0.0001 mg/L	0.00025	217.37%
Se 196.026†	4.1	0.0070 mg/L	0.00584	83.75%
Sn 189.927†	-330.3	-0.0963 mg/L	0.00063	0.65%
Ti 337.279†	-70.2	-0.0001 mg/L	0.00002	14.43%
Tl 190.801†	10.6	0.0039 mg/L	0.00310	79.74%
V 292.402†	7.2	0.0001 mg/L	0.00007	70.53%
Zn 206.200†	16.0	0.0008 mg/L	0.00017	20.32%
Ca 227.546†	72758.3	492.7 mg/L	0.05	0.01%
Sr 421.552†	5298905.5	45.81 mg/L	0.762	1.66%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

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Sequence No.: 121
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 6/7/2014 8:26:27 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7189806.8	0.9838	mg/L	0.02161				2.20%
Ag 328.068†	141210.8	0.5082	mg/L	0.01271	0.5082	mg/L	0.01271	2.50%
QC value within limits for Ag 328.068 Recovery = 101.65%								
Al 308.215†	140963.8	9.430	mg/L	0.2702	9.430	mg/L	0.2702	2.87%
QC value within limits for Al 308.215 Recovery = 94.30%								
As 188.979†	905.6	1.012	mg/L	0.0173	1.012	mg/L	0.0173	1.71%
QC value within limits for As 188.979 Recovery = 101.25%								
B 249.772†	307653.9	2.438	mg/L	0.0753	2.438	mg/L	0.0753	3.09%
QC value within limits for B 249.772 Recovery = 97.51%								
Ba 233.527†	849075.2	10.12	mg/L	0.273	10.12	mg/L	0.273	2.70%
QC value within limits for Ba 233.527 Recovery = 101.23%								
Be 313.107†	858299.3	0.2492	mg/L	0.00726	0.2492	mg/L	0.00726	2.91%
QC value within limits for Be 313.107 Recovery = 99.68%								
Cd 226.502†	40120.1	0.5123	mg/L	0.01264	0.5123	mg/L	0.01264	2.47%
QC value within limits for Cd 226.502 Recovery = 102.45%								
Co 228.616†	51195.2	2.498	mg/L	0.0632	2.498	mg/L	0.0632	2.53%
QC value within limits for Co 228.616 Recovery = 99.93%								
Cr 267.716†	67399.7	0.5128	mg/L	0.01325	0.5128	mg/L	0.01325	2.58%
QC value within limits for Cr 267.716 Recovery = 102.56%								
Cu 324.752†	334763.2	1.200	mg/L	0.0367	1.200	mg/L	0.0367	3.06%
QC value within limits for Cu 324.752 Recovery = 96.04%								
Fe 259.939†	304886.7	4.877	mg/L	0.1237	4.877	mg/L	0.1237	2.54%
QC value within limits for Fe 259.939 Recovery = 97.54%								
K 766.490†	10856.9	26.00	mg/L	0.383	26.00	mg/L	0.383	1.47%
QC value within limits for K 766.490 Recovery = 103.99%								
Mg 279.077†	299263.6	24.77	mg/L	0.602	24.77	mg/L	0.602	2.43%
QC value within limits for Mg 279.077 Recovery = 99.10%								
Mn 257.610†	287305.6	0.7465	mg/L	0.01880	0.7465	mg/L	0.01880	2.52%
QC value within limits for Mn 257.610 Recovery = 99.54%								
Mo 202.031†	24280.9	2.444	mg/L	0.0629	2.444	mg/L	0.0629	2.58%
QC value within limits for Mo 202.031 Recovery = 97.75%								
Ni 231.604†	86674.9	2.041	mg/L	0.0514	2.041	mg/L	0.0514	2.52%
QC value within limits for Ni 231.604 Recovery = 102.03%								
Na 589.592†	168596.0	27.99	mg/L	0.410	27.99	mg/L	0.410	1.46%
QC value greater than the upper limit for Na 589.592 Recovery = 111.96%								
Pb 220.353†	2321.5	0.5071	mg/L	0.00880	0.5071	mg/L	0.00880	1.74%
QC value within limits for Pb 220.353 Recovery = 101.43%								

Sb 206.836†	5989.5	5.067 mg/L	0.0819	5.067 mg/L	0.0819	1.62%
QC value within limits for Sb 206.836 Recovery = 101.34%						
Se 196.026†	286.9	0.4901 mg/L	0.00533	0.4901 mg/L	0.00533	1.09%
QC value within limits for Se 196.026 Recovery = 98.02%						
Sn 189.927†	16753.2	4.885 mg/L	0.1228	4.885 mg/L	0.1228	2.51%
QC value within limits for Sn 189.927 Recovery = 97.70%						
Ti 337.279†	1515099.6	2.461 mg/L	0.0726	2.461 mg/L	0.0726	2.95%
QC value within limits for Ti 337.279 Recovery = 98.45%						
Tl 190.801†	1191.7	0.9861 mg/L	0.01647	0.9861 mg/L	0.01647	1.67%
QC value within limits for Tl 190.801 Recovery = 98.61%						
V 292.402†	192281.3	2.609 mg/L	0.0707	2.609 mg/L	0.0707	2.71%
QC value within limits for V 292.402 Recovery = 104.38%						
Zn 206.200†	20328.0	1.034 mg/L	0.0253	1.034 mg/L	0.0253	2.45%
QC value within limits for Zn 206.200 Recovery = 103.35%						
Ca 227.546†	3608.0	24.72 mg/L	0.326	24.72 mg/L	0.326	1.32%
QC value within limits for Ca 227.546 Recovery = 98.90%						
Sr 421.552†	285770.5	2.470 mg/L	0.0382	2.470 mg/L	0.0382	1.55%
QC value within limits for Sr 421.552 Recovery = 98.81%						
QC Failed. Continue with analysis.						

Sequence No.: 122
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 6/7/2014 8:32:50 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7319146.3	1.002	mg/L	0.0007				0.07%
Ag 328.068†	46.7	0.0002	mg/L	0.00026	0.0002	mg/L	0.00026	173.14%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-987.2	-0.0660	mg/L	0.00379	-0.0660	mg/L	0.00379	5.73%
QC value less than the lower limit for Al 308.215 Recovery = Not calculated								
As 188.979†	1.2	0.0013	mg/L	0.00045	0.0013	mg/L	0.00045	34.08%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	6332.9	0.0509	mg/L	0.00331	0.0509	mg/L	0.00331	6.50%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	987.7	0.0118	mg/L	0.00095	0.0118	mg/L	0.00095	8.07%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	982.0	0.0003	mg/L	0.00004	0.0003	mg/L	0.00004	14.91%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	4.8	0.0001	mg/L	0.00004	0.0001	mg/L	0.00004	51.56%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-8.7	-0.0004	mg/L	0.00012	-0.0004	mg/L	0.00012	27.94%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-349.2	-0.0027	mg/L	0.00002	-0.0027	mg/L	0.00002	0.91%
QC value less than the lower limit for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	1207.2	0.0043	mg/L	0.00051	0.0043	mg/L	0.00051	11.75%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	-3821.6	-0.0611	mg/L	0.00098	-0.0611	mg/L	0.00098	1.61%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	282.1	0.6755	mg/L	0.03601	0.6755	mg/L	0.03601	5.33%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	-1614.3	-0.1336	mg/L	0.00137	-0.1336	mg/L	0.00137	1.03%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-403.8	-0.0011	mg/L	0.00005	-0.0011	mg/L	0.00005	5.03%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	13.5	0.0014	mg/L	0.00014	0.0014	mg/L	0.00014	10.57%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	-13.2	-0.0003	mg/L	0.00046	-0.0003	mg/L	0.00046	150.05%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	8419.1	1.398	mg/L	0.0127	1.398	mg/L	0.0127	0.91%
QC value greater than the upper limit for Na 589.592 Recovery = Not calculated								
Pb 220.353†	4.1	0.0009	mg/L	0.00075	0.0009	mg/L	0.00075	85.19%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	3.5	0.0030	mg/L	0.00011	0.0030	mg/L	0.00011	3.84%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-2.3	-0.0038	mg/L	0.00227	-0.0038	mg/L	0.00227	59.07%
QC value within limits for Se 196.026 Recovery = Not calculated								

Sn 189.927†	-80.3	-0.0234 mg/L	0.00097	-0.0234 mg/L	0.00097	4.15%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 337.279†	567.6	0.0009 mg/L	0.00009	0.0009 mg/L	0.00009	9.44%
QC value within limits for Ti 337.279 Recovery = Not calculated						
Tl 190.801†	-2.1	-0.0018 mg/L	0.00004	-0.0018 mg/L	0.00004	2.47%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	78.0	0.0011 mg/L	0.00003	0.0011 mg/L	0.00003	2.40%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	61.9	0.0031 mg/L	0.00028	0.0031 mg/L	0.00028	8.90%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	9.0	0.0576 mg/L	0.03284	0.0576 mg/L	0.03284	56.97%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Sr 421.552†	904.1	0.0078 mg/L	0.00024	0.0078 mg/L	0.00024	3.11%
QC value within limits for Sr 421.552 Recovery = Not calculated						
QC Failed. Continue with analysis.						

Sequence No.: 123
Sample ID: MRL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 6/7/2014 8:38:49 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MRL

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7263818.8	0.9939	mg/L	0.00011				0.01%
Ag 328.068†	2814.4	0.0101	mg/L	0.00029	0.0101	mg/L	0.00029	2.91%
QC value within limits for Ag 328.068 Recovery = 101.12%								
Al 308.215†	1733.6	0.1160	mg/L	0.00479	0.1160	mg/L	0.00479	4.13%
QC value less than the lower limit for Al 308.215 Recovery = 57.99%								
As 188.979†	19.6	0.0219	mg/L	0.00122	0.0219	mg/L	0.00122	5.56%
QC value within limits for As 188.979 Recovery = 109.47%								
B 249.772†	28960.9	0.2313	mg/L	0.00072	0.2313	mg/L	0.00072	0.31%
QC value within limits for B 249.772 Recovery = 115.66%								
Ba 233.527†	18407.2	0.2195	mg/L	0.00058	0.2195	mg/L	0.00058	0.26%
QC value within limits for Ba 233.527 Recovery = 109.73%								
Be 313.107†	18496.1	0.0054	mg/L	0.00002	0.0054	mg/L	0.00002	0.36%
QC value within limits for Be 313.107 Recovery = 107.40%								
Cd 226.502†	833.9	0.0107	mg/L	0.00001	0.0107	mg/L	0.00001	0.08%
QC value within limits for Cd 226.502 Recovery = 106.55%								
Co 228.616†	1035.8	0.0505	mg/L	0.00002	0.0505	mg/L	0.00002	0.04%
QC value within limits for Co 228.616 Recovery = 101.10%								
Cr 267.716†	1008.0	0.0077	mg/L	0.00010	0.0077	mg/L	0.00010	1.23%
QC value less than the lower limit for Cr 267.716 Recovery = 77.32%								
Cu 324.752†	7063.2	0.0253	mg/L	0.00026	0.0253	mg/L	0.00026	1.03%
QC value within limits for Cu 324.752 Recovery = 101.28%								
Fe 259.939†	2311.5	0.0370	mg/L	0.00306	0.0370	mg/L	0.00306	8.26%
QC value less than the lower limit for Fe 259.939 Recovery = 36.98%								
K 766.490†	569.4	1.364	mg/L	0.0680	1.364	mg/L	0.0680	4.99%
QC value greater than the upper limit for K 766.490 Recovery = 136.35%								
Mg 279.077†	10438.6	0.8642	mg/L	0.00250	0.8642	mg/L	0.00250	0.29%
QC value within limits for Mg 279.077 Recovery = 86.42%								
Mn 257.610†	5276.1	0.0137	mg/L	0.00012	0.0137	mg/L	0.00012	0.85%
QC value within limits for Mn 257.610 Recovery = 91.35%								
Mo 202.031†	262.4	0.0264	mg/L	0.00007	0.0264	mg/L	0.00007	0.25%
QC value within limits for Mo 202.031 Recovery = 105.66%								
Ni 231.604†	1708.4	0.0402	mg/L	0.00017	0.0402	mg/L	0.00017	0.43%
QC value within limits for Ni 231.604 Recovery = 100.55%								
Na 589.592†	11712.6	1.944	mg/L	0.0023	1.944	mg/L	0.0023	0.12%
QC value greater than the upper limit for Na 589.592 Recovery = 194.45%								
Pb 220.353†	42.5	0.0093	mg/L	0.00009	0.0093	mg/L	0.00009	1.01%
QC value within limits for Pb 220.353 Recovery = 92.77%								
Sb 206.836†	73.4	0.0621	mg/L	0.00019	0.0621	mg/L	0.00019	0.31%
QC value within limits for Sb 206.836 Recovery = 103.46%								
Se 196.026†	6.9	0.0117	mg/L	0.00038	0.0117	mg/L	0.00038	3.27%
QC value within limits for Se 196.026 Recovery = 117.43%								
Sn 189.927†	1669.0	0.4867	mg/L	0.00231	0.4867	mg/L	0.00231	0.47%
QC value within limits for Sn 189.927 Recovery = 97.33%								
Ti 337.279†	31908.1	0.0518	mg/L	0.00015	0.0518	mg/L	0.00015	0.28%
QC value within limits for Ti 337.279 Recovery = 103.67%								

Tl 190.801†	20.1	0.0167 mg/L	0.00044	0.0167 mg/L	0.00044	2.66%
QC value within limits for Tl 190.801 Recovery = 83.32%						
V 292.402†	4049.1	0.0550 mg/L	0.00053	0.0550 mg/L	0.00053	0.96%
QC value within limits for V 292.402 Recovery = 109.91%						
Zn 206.200†	388.4	0.0197 mg/L	0.00005	0.0197 mg/L	0.00005	0.27%
QC value within limits for Zn 206.200 Recovery = 98.73%						
Ca 227.546†	137.9	0.9360 mg/L	0.00569	0.9360 mg/L	0.00569	0.61%
QC value within limits for Ca 227.546 Recovery = 93.60%						
Sr 421.552†	12070.1	0.1043 mg/L	0.00100	0.1043 mg/L	0.00100	0.95%
QC value within limits for Sr 421.552 Recovery = 104.34%						

QC Failed. Continue with analysis.

Sequence No.: 124
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 6/7/2014 8:44:45 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6911299.0	0.9457	mg/L	0.00172				0.18%
Ag 328.068†	-7328.2	-0.0019	mg/L	0.00008	-0.0019	mg/L	0.00008	4.42%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	3720586.0	248.9	mg/L	0.25	248.9	mg/L	0.25	0.10%
QC value within limits for Al 308.215 Recovery = 99.56%								
As 188.979†	-1.1	0.0033	mg/L	0.00521	0.0033	mg/L	0.00521	156.80%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	45831.2	-0.0207	mg/L	0.00008	-0.0207	mg/L	0.00008	0.39%
Ba 233.527†	895.5	0.0107	mg/L	0.00023	0.0107	mg/L	0.00023	2.18%
Be 313.107†	-84.2	0.0000	mg/L	0.00001	0.0000	mg/L	0.00001	35.85%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	842.0	-0.0001	mg/L	0.00003	-0.0001	mg/L	0.00003	45.52%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	9.1	0.0004	mg/L	0.00027	0.0004	mg/L	0.00027	59.78%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-4312.3	-0.0002	mg/L	0.00006	-0.0002	mg/L	0.00006	38.49%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	-1960.8	0.0030	mg/L	0.00006	0.0030	mg/L	0.00006	2.07%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	5493375.7	87.87	mg/L	0.075	87.87	mg/L	0.075	0.09%
QC value within limits for Fe 259.939 Recovery = 87.87%								
K 766.490†	282.6	0.6766	mg/L	0.03310	0.6766	mg/L	0.03310	4.89%
Mg 279.077†	3061034.7	253.4	mg/L	0.05	253.4	mg/L	0.05	0.02%
QC value within limits for Mg 279.077 Recovery = 101.36%								
Mn 257.610†	-6031.7	-0.0045	mg/L	0.00010	-0.0045	mg/L	0.00010	2.12%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	10.0	0.0010	mg/L	0.00037	0.0010	mg/L	0.00037	37.04%
Ni 231.604†	-96.0	-0.0023	mg/L	0.00016	-0.0023	mg/L	0.00016	7.17%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	6966.7	1.157	mg/L	0.0023	1.157	mg/L	0.0023	0.20%
Pb 220.353†	-132.8	0.0005	mg/L	0.00031	0.0005	mg/L	0.00031	59.84%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	24.6	-0.0029	mg/L	0.00283	-0.0029	mg/L	0.00283	98.03%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-14.5	0.0009	mg/L	0.00253	0.0009	mg/L	0.00253	283.54%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-201.8	-0.0588	mg/L	0.00042	-0.0588	mg/L	0.00042	0.71%
Ti 337.279†	427.7	0.0007	mg/L	0.00006	0.0007	mg/L	0.00006	8.91%
Tl 190.801†	14.0	-0.0060	mg/L	0.00141	-0.0060	mg/L	0.00141	23.29%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	374.0	0.0012	mg/L	0.00002	0.0012	mg/L	0.00002	1.98%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	112.3	0.0057	mg/L	0.00005	0.0057	mg/L	0.00005	0.94%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	36376.5	251.8	mg/L	0.62	251.8	mg/L	0.62	0.25%
QC value within limits for Ca 227.546 Recovery = 100.73%								
Sr 421.552†	881.3	0.0076	mg/L	0.00041	0.0076	mg/L	0.00041	5.41%

All analyte(s) passed QC.

Sequence No.: 125
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 6/7/2014 8:50:47 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6831202.1	0.9347	mg/L	0.00531				0.57%
Ag 328.068†	51167.8	0.2080	mg/L	0.00162	0.2080	mg/L	0.00162	0.78%
QC value within limits for Ag 328.068 Recovery = 104.00%								
Al 308.215†	3680738.4	246.2	mg/L	0.27	246.2	mg/L	0.27	0.11%
QC value within limits for Al 308.215 Recovery = 98.49%								
As 188.979†	89.1	0.1042	mg/L	0.00020	0.1042	mg/L	0.00020	0.20%
QC value within limits for As 188.979 Recovery = 104.21%								
B 249.772†	45406.9	-0.0229	mg/L	0.00258	-0.0229	mg/L	0.00258	11.25%
Ba 233.527†	43933.6	0.5238	mg/L	0.00351	0.5238	mg/L	0.00351	0.67%
QC value within limits for Ba 233.527 Recovery = 104.76%								
Be 313.107†	1687997.6	0.4901	mg/L	0.00058	0.4901	mg/L	0.00058	0.12%
QC value within limits for Be 313.107 Recovery = 98.02%								
Cd 226.502†	76688.0	0.9695	mg/L	0.00675	0.9695	mg/L	0.00675	0.70%
QC value within limits for Cd 226.502 Recovery = 96.95%								
Co 228.616†	9753.5	0.4760	mg/L	0.00168	0.4760	mg/L	0.00168	0.35%
QC value within limits for Co 228.616 Recovery = 95.19%								
Cr 267.716†	62598.1	0.5057	mg/L	0.00251	0.5057	mg/L	0.00251	0.50%
QC value within limits for Cr 267.716 Recovery = 101.15%								
Cu 324.752†	139210.9	0.5090	mg/L	0.00064	0.5090	mg/L	0.00064	0.13%
QC value within limits for Cu 324.752 Recovery = 101.80%								
Fe 259.939†	5476502.1	87.61	mg/L	0.158	87.61	mg/L	0.158	0.18%
QC value within limits for Fe 259.939 Recovery = 87.61%								
K 766.490†	254.9	0.6103	mg/L	0.08391	0.6103	mg/L	0.08391	13.75%
Mg 279.077†	3056504.0	253.0	mg/L	0.52	253.0	mg/L	0.52	0.21%
QC value within limits for Mg 279.077 Recovery = 101.21%								
Mn 257.610†	187498.3	0.4979	mg/L	0.00347	0.4979	mg/L	0.00347	0.70%
QC value within limits for Mn 257.610 Recovery = 99.58%								
Mo 202.031†	11.3	0.0011	mg/L	0.00014	0.0011	mg/L	0.00014	12.10%
Ni 231.604†	40525.0	0.9541	mg/L	0.00675	0.9541	mg/L	0.00675	0.71%
QC value within limits for Ni 231.604 Recovery = 95.41%								
Na 589.592†	5811.0	0.9647	mg/L	0.00089	0.9647	mg/L	0.00089	0.09%
Pb 220.353†	93.8	0.0496	mg/L	0.00173	0.0496	mg/L	0.00173	3.50%
QC value within limits for Pb 220.353 Recovery = 99.11%								
Sb 206.836†	772.0	0.6297	mg/L	0.00390	0.6297	mg/L	0.00390	0.62%
QC value within limits for Sb 206.836 Recovery = 104.96%								
Se 196.026†	15.6	0.0521	mg/L	0.00402	0.0521	mg/L	0.00402	7.73%
QC value within limits for Se 196.026 Recovery = 104.20%								
Sn 189.927†	-204.1	-0.0595	mg/L	0.00104	-0.0595	mg/L	0.00104	1.75%
Ti 337.279†	363.3	0.0006	mg/L	0.00002	0.0006	mg/L	0.00002	3.80%
Tl 190.801†	145.2	0.1027	mg/L	0.00109	0.1027	mg/L	0.00109	1.06%
QC value within limits for Tl 190.801 Recovery = 102.72%								
V 292.402†	37907.3	0.5107	mg/L	0.00295	0.5107	mg/L	0.00295	0.58%
QC value within limits for V 292.402 Recovery = 102.13%								
Zn 206.200†	19127.1	0.9725	mg/L	0.00071	0.9725	mg/L	0.00071	0.07%
QC value within limits for Zn 206.200 Recovery = 97.25%								
Ca 227.546†	36571.8	253.1	mg/L	1.51	253.1	mg/L	1.51	0.60%
QC value within limits for Ca 227.546 Recovery = 101.25%								
Sr 421.552†	822.4	0.0071	mg/L	0.00005	0.0071	mg/L	0.00005	0.71%

All analyte(s) passed QC.

Sequence No.: 126
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 6/7/2014 8:56:51 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD

Y 371.029	7156437.3	0.9792 mg/L	0.00551			0.56%
Ag 328.068†	140728.7	0.5065 mg/L	0.00496	0.5065 mg/L	0.00496	0.98%
QC value within limits for Ag 328.068 Recovery = 101.30%						
Al 308.215†	141777.6	9.484 mg/L	0.1311	9.484 mg/L	0.1311	1.38%
QC value within limits for Al 308.215 Recovery = 94.84%						
As 188.979†	909.3	1.017 mg/L	0.0055	1.017 mg/L	0.0055	0.54%
QC value within limits for As 188.979 Recovery = 101.67%						
B 249.772†	304411.1	2.412 mg/L	0.0119	2.412 mg/L	0.0119	0.49%
QC value within limits for B 249.772 Recovery = 96.47%						
Ba 233.527†	848287.2	10.11 mg/L	0.022	10.11 mg/L	0.022	0.22%
QC value within limits for Ba 233.527 Recovery = 101.14%						
Be 313.107†	857939.4	0.2491 mg/L	0.00058	0.2491 mg/L	0.00058	0.23%
QC value within limits for Be 313.107 Recovery = 99.63%						
Cd 226.502†	40036.6	0.5112 mg/L	0.00547	0.5112 mg/L	0.00547	1.07%
QC value within limits for Cd 226.502 Recovery = 102.24%						
Co 228.616†	51240.4	2.500 mg/L	0.0227	2.500 mg/L	0.0227	0.91%
QC value within limits for Co 228.616 Recovery = 100.02%						
Cr 267.716†	67407.6	0.5129 mg/L	0.00499	0.5129 mg/L	0.00499	0.97%
QC value within limits for Cr 267.716 Recovery = 102.58%						
Cu 324.752†	336493.5	1.207 mg/L	0.0107	1.207 mg/L	0.0107	0.89%
QC value within limits for Cu 324.752 Recovery = 96.53%						
Fe 259.939†	306129.7	4.897 mg/L	0.0629	4.897 mg/L	0.0629	1.28%
QC value within limits for Fe 259.939 Recovery = 97.94%						
K 766.490†	10326.5	24.73 mg/L	0.025	24.73 mg/L	0.025	0.10%
QC value within limits for K 766.490 Recovery = 98.91%						
Mg 279.077†	300091.0	24.84 mg/L	0.266	24.84 mg/L	0.266	1.07%
QC value within limits for Mg 279.077 Recovery = 99.37%						
Mn 257.610†	286991.1	0.7457 mg/L	0.00773	0.7457 mg/L	0.00773	1.04%
QC value within limits for Mn 257.610 Recovery = 99.43%						
Mo 202.031†	24289.0	2.445 mg/L	0.0218	2.445 mg/L	0.0218	0.89%
QC value within limits for Mo 202.031 Recovery = 97.78%						
Ni 231.604†	86706.8	2.041 mg/L	0.0184	2.041 mg/L	0.0184	0.90%
QC value within limits for Ni 231.604 Recovery = 102.07%						
Na 589.592†	153978.7	25.56 mg/L	0.138	25.56 mg/L	0.138	0.54%
QC value within limits for Na 589.592 Recovery = 102.25%						
Pb 220.353†	2319.3	0.5067 mg/L	0.00255	0.5067 mg/L	0.00255	0.50%
QC value within limits for Pb 220.353 Recovery = 101.33%						
Sb 206.836†	5999.2	5.075 mg/L	0.0256	5.075 mg/L	0.0256	0.50%
QC value within limits for Sb 206.836 Recovery = 101.51%						
Se 196.026†	288.6	0.4930 mg/L	0.00532	0.4930 mg/L	0.00532	1.08%
QC value within limits for Se 196.026 Recovery = 98.60%						
Sn 189.927†	16569.8	4.832 mg/L	0.0354	4.832 mg/L	0.0354	0.73%
QC value within limits for Sn 189.927 Recovery = 96.63%						
Ti 337.279†	1516772.5	2.464 mg/L	0.0048	2.464 mg/L	0.0048	0.20%
QC value within limits for Ti 337.279 Recovery = 98.56%						
Tl 190.801†	1192.0	0.9864 mg/L	0.00125	0.9864 mg/L	0.00125	0.13%
QC value within limits for Tl 190.801 Recovery = 98.64%						
V 292.402†	191066.5	2.593 mg/L	0.0326	2.593 mg/L	0.0326	1.26%
QC value within limits for V 292.402 Recovery = 103.72%						
Zn 206.200†	20614.2	1.048 mg/L	0.0131	1.048 mg/L	0.0131	1.25%
QC value within limits for Zn 206.200 Recovery = 104.81%						
Ca 227.546†	3586.4	24.58 mg/L	0.140	24.58 mg/L	0.140	0.57%
QC value within limits for Ca 227.546 Recovery = 98.32%						
Sr 421.552†	281303.5	2.432 mg/L	0.0202	2.432 mg/L	0.0202	0.83%
QC value within limits for Sr 421.552 Recovery = 97.27%						

All analyte(s) passed QC.

Sequence No.: 127
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 6/7/2014 9:03:07 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7300363.4	0.9989	mg/L	0.00221				0.22%
Ag 328.068†	47.9	0.0002	mg/L	0.00017	0.0002	mg/L	0.00017	109.95%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-751.7	-0.0503	mg/L	0.00442	-0.0503	mg/L	0.00442	8.80%

QC value less than the lower limit for Al 308.215 Recovery = Not calculated

As 188.979†	2.1	0.0023 mg/L	0.00204	0.0023 mg/L	0.00204	88.60%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.772†	4777.7	0.0384 mg/L	0.00298	0.0384 mg/L	0.00298	7.76%
QC value within limits for B 249.772 Recovery = Not calculated						
Ba 233.527†	567.4	0.0068 mg/L	0.00068	0.0068 mg/L	0.00068	10.06%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	1361.1	0.0004 mg/L	0.00005	0.0004 mg/L	0.00005	11.45%
QC value within limits for Be 313.107 Recovery = Not calculated						
Cd 226.502†	15.9	0.0002 mg/L	0.00015	0.0002 mg/L	0.00015	70.73%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	0.2	0.0000 mg/L	0.00035	0.0000 mg/L	0.00035	>999.9%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-332.4	-0.0025 mg/L	0.00009	-0.0025 mg/L	0.00009	3.75%
QC value less than the lower limit for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	1587.3	0.0057 mg/L	0.00073	0.0057 mg/L	0.00073	12.83%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 259.939†	-3638.0	-0.0582 mg/L	0.00177	-0.0582 mg/L	0.00177	3.04%
QC value within limits for Fe 259.939 Recovery = Not calculated						
K 766.490†	114.6	0.2745 mg/L	0.03749	0.2745 mg/L	0.03749	13.66%
QC value within limits for K 766.490 Recovery = Not calculated						
Mg 279.077†	-894.9	-0.0741 mg/L	0.00891	-0.0741 mg/L	0.00891	12.02%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	-390.8	-0.0010 mg/L	0.00008	-0.0010 mg/L	0.00008	8.12%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	11.8	0.0012 mg/L	0.00015	0.0012 mg/L	0.00015	12.30%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	39.4	0.0009 mg/L	0.00039	0.0009 mg/L	0.00039	42.34%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Na 589.592†	3562.3	0.5914 mg/L	0.02232	0.5914 mg/L	0.02232	3.77%
QC value within limits for Na 589.592 Recovery = Not calculated						
Pb 220.353†	3.6	0.0008 mg/L	0.00042	0.0008 mg/L	0.00042	53.93%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	5.0	0.0043 mg/L	0.00055	0.0043 mg/L	0.00055	12.83%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	0.1	0.0002 mg/L	0.00154	0.0002 mg/L	0.00154	926.25%
QC value within limits for Se 196.026 Recovery = Not calculated						
Sn 189.927†	-81.5	-0.0238 mg/L	0.00073	-0.0238 mg/L	0.00073	3.07%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 337.279†	626.0	0.0010 mg/L	0.00024	0.0010 mg/L	0.00024	23.76%
QC value within limits for Ti 337.279 Recovery = Not calculated						
Tl 190.801†	-2.5	-0.0021 mg/L	0.00225	-0.0021 mg/L	0.00225	106.50%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	109.4	0.0015 mg/L	0.00012	0.0015 mg/L	0.00012	8.20%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	67.1	0.0034 mg/L	0.00052	0.0034 mg/L	0.00052	15.14%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	14.6	0.0956 mg/L	0.01291	0.0956 mg/L	0.01291	13.50%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Sr 421.552†	349.8	0.0030 mg/L	0.00010	0.0030 mg/L	0.00010	3.15%
QC value within limits for Sr 421.552 Recovery = Not calculated						

QC Failed. Continue with analysis.

Sequence No.: 128
Sample ID: Sample117
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 117
Date Collected: 6/7/2014 9:09:08 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Sample117

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7337989.0	1.004	mg/L	0.0054				0.54%
Ag 328.068†	-1.5	0.0000	mg/L	0.00058	0.0000	mg/L	0.00058	>999.9%
Al 308.215†	-1024.5	-0.0685	mg/L	0.00616	-0.0685	mg/L	0.00616	8.99%
As 188.979†	1.1	0.0012	mg/L	0.00006	0.0012	mg/L	0.00006	5.06%
B 249.772†	2971.1	0.0241	mg/L	0.00082	0.0241	mg/L	0.00082	3.42%
Ba 233.527†	351.2	0.0042	mg/L	0.00025	0.0042	mg/L	0.00025	5.99%
Be 313.107†	1085.2	0.0003	mg/L	0.00001	0.0003	mg/L	0.00001	3.95%
Cd 226.502†	-4.1	0.0000	mg/L	0.00003	0.0000	mg/L	0.00003	59.77%

Co 228.616†	-24.0	-0.0012 mg/L	0.00017	-0.0012 mg/L	0.00017	14.49%
Cr 267.716†	-371.7	-0.0028 mg/L	0.00004	-0.0028 mg/L	0.00004	1.34%
Cu 324.752†	412.8	0.0015 mg/L	0.00040	0.0015 mg/L	0.00040	26.90%
Fe 259.939†	-4650.4	-0.0744 mg/L	0.00118	-0.0744 mg/L	0.00118	1.58%
K 766.490†	111.3	0.2666 mg/L	0.02719	0.2666 mg/L	0.02719	10.20%
Mg 279.077†	-1306.6	-0.1082 mg/L	0.00856	-0.1082 mg/L	0.00856	7.91%
Mn 257.610†	-671.7	-0.0018 mg/L	0.00001	-0.0018 mg/L	0.00001	0.45%
Mo 202.031†	-0.5	0.0000 mg/L	0.00012	0.0000 mg/L	0.00012	257.69%
Ni 231.604†	-38.7	-0.0009 mg/L	0.00004	-0.0009 mg/L	0.00004	4.82%
Na 589.592†	2978.0	0.4944 mg/L	0.00745	0.4944 mg/L	0.00745	1.51%
Pb 220.353†	-0.1	0.0000 mg/L	0.00006	0.0000 mg/L	0.00006	321.85%
Sb 206.836†	0.6	0.0005 mg/L	0.00008	0.0005 mg/L	0.00008	15.66%
Se 196.026†	-1.0	-0.0017 mg/L	0.00096	-0.0017 mg/L	0.00096	57.70%
Sn 189.927†	-108.4	-0.0316 mg/L	0.00037	-0.0316 mg/L	0.00037	1.18%
Ti 337.279†	213.5	0.0003 mg/L	0.00020	0.0003 mg/L	0.00020	56.85%
Tl 190.801†	-1.8	-0.0015 mg/L	0.00210	-0.0015 mg/L	0.00210	137.02%
V 292.402†	46.4	0.0006 mg/L	0.00006	0.0006 mg/L	0.00006	9.09%
Zn 206.200†	-2.8	-0.0001 mg/L	0.00009	-0.0001 mg/L	0.00009	63.46%
Ca 227.546†	-0.9	-0.0104 mg/L	0.01959	-0.0104 mg/L	0.01959	189.23%
Sr 421.552†	235.9	0.0020 mg/L	0.00031	0.0020 mg/L	0.00031	15.22%

Preparation Information Benchsheet

Prep Run#: 209881
Team: Metals/MCRIBBIN

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3010A

Status: Prepped
Prep Date/Time: 6/3/14 02:55 PM

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ1406009-07	MB		50mL	200.7/Ca T, Mg T				50.00mL	----		LIMS QC DRINKING WATER
2	RQ1406009-09	MB		50mL	200.7/Ag T, As T, Be T, Cd T, Cr T, Cu T, Fe T, Mn T, Mo T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, Zn T				50.00mL			
3	RQ1406009-02	LCS		50mL	200.7/Ag T, As T, Be T, Cd T, Cr T, Cu T, Fe T, Mn T, Mo T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, Zn T	<2			50.00mL	Colorless, Clear	0.2500 mL/69693; 0.0500 mL/57174; 0.5000 mL/70003; 0.5000 mL/70002	
4	RQ1406009-08	LCS		50mL	200.7/Ca T, Mg T				50.00mL	----		LIMS QC DRINKING WATER
5	R1403869-001	WT-6488-052314-SPDES	.01	50mL	200.7/Se T	<2			50.00mL	Colorless, Clear		
6	R1403922-001	Outfall 13	.01	50mL	200.7/Fe T	<2			50.00mL	Colorless, Clear		
7	R1403933-001	Outfall 004	.01	50mL	200.7/Fe T	<2			50.00mL	Colorless, Clear		
8	RQ1406009-03	R1403933-001 DUP	.01	50mL	200.7/Fe T	<2			50.00mL	Colorless, Clear		
9	RQ1406009-04	R1403933-001 MS	.01	50mL	200.7/Fe T	<2			50.00mL	Colorless, Clear	0.2500 mL/69693; 0.5000 mL/70003; 0.5000 mL/70002; 0.0500 mL/57174	
10	R1403941-001	IBM EF FINAL CLAR #2 COMP	.02	50mL	200.7/Na T	<2			50.00mL	Colorless, Clear		
11	R1403955-001	Outfall 1	.06	50mL	200.7/Zn T	<2			50.00mL	Colorless, Clear		
12	R1404042-001	PLATING LINE	.03	50mL	200.7/Ag T, Cd T, Cr T, Cu T, Ni T, Pb T, Zn T	<2			50.00mL	Colorless, Clear		
13	R1404042-002	VIBRATORY LINE	.03	50mL	200.7/Ag T, Cd T, Cr T, Cu T, Ni T, Pb T, Zn T	<2			50.00mL	Colorless, Clear		
14	R1404047-001	GLEASON	.03	50mL	200.7/Ca T, Mg T	<2			50.00mL	Colorless, Clear		
15	R1404047-002	EMPIRE	.03	50mL	200.7/Ca T, Mg T	<2			50.00mL	Colorless, Clear		
16	R1404049-001	633027 EFFLUENT	.06	50mL	200.7/Cd T, Cr T, Cu T, Ni T, Pb T, Zn T	<2			50.00mL	Colorless, Clear		TIER IV
17	R1404056-002	BENDERSON (BD) 0528	.02	50mL	200.7/Ag T, As T, Cd T, Cr T, Cu T, Mo T, Ni T, Pb T, Se T, Zn T	<2			50.00mL	Colorless, Clear		
18	R1404057-005	DRAIN A	.02	50mL	200.7/Ag T, As T, Be T, Cd T, Cr T, Cu T, Mo T, Ni T, Pb T, Sb T, Se T, Tl T, Zn T	<2			50.00mL	Colorless, Clear		
19	RQ1406009-05	R1404057-005 DUP	.02	50mL	200.7/Ag T, As T, Be T, Cd T, Cr T, Cu T, Mo T, Ni T, Pb T, Sb T, Se T, Tl T, Zn T	<2			50.00mL	Colorless, Clear		
20	RQ1406009-06	R1404057-005 MS	.02	50mL	200.7/Ag T, As T, Be T, Cd T, Cr T, Cu T, Mo T, Ni T, Pb T, Sb T, Se T, Tl T, Zn T	<2			50.00mL	Colorless, Clear	0.2500 mL/69693; 0.0500 mL/57174; 0.5000 mL/70002; 0.5000 mL/70003	
21	R1404057-006	DRAIN B	.02	50mL	200.7/Ag T, As T, Be T, Cd T, Cr T, Cu T, Mo T, Ni T, Pb T, Sb T, Se T, Tl T, Zn T	<2			50.00mL	Colorless, Clear		

Preparation Information Benchsheet

rep Run#: 209881 **Prep WorkFlow:** MetDigAqICP **Status:** Prepped
eam: Metals/MCRIBBIN **Prep Method:** EPA 3010A **Prep Date/Time:** 6/3/14 02:55 PM

22	R1404057-007	DRAIN C	.02	50mL	200.7/Ag T, As T, Be T, Cd T, Cr T, Cu T, Mo T, Ni T, Pb T, Sb T, Se T, Tl T, Zn T	<2			50.00mL	Colorless, Clear		
23	R1404057-008	DRAIN D	.02	50mL	200.7/Ag T, As T, Be T, Cd T, Cr T, Cu T, Mo T, Ni T, Pb T, Sb T, Se T, Tl T, Zn T	<2			50.00mL	Colorless, Clear		
24	R1404059-001	WTF0528	.02	50mL	200.7/Cu T, Fe T, Mn T, Ni T, Pb T, Zn T	<2			50.00mL	Colorless, Clear		

)iking Solutions

Name:	Selenium 1000 ug/mL Se	Inventory ID	57174	Logbook Ref:	M5280028BB	Expires On:	10/04/2014	Lot #:	1233330
Name:	Tin 1000 ug/mL Sn	Inventory ID	69693	Logbook Ref:	M5280037P	Expires On:	10/04/2015	Lot #:	13H087
Name:	Custom LCS STD A Metals	Inventory ID	70002	Logbook Ref:	M5280037CC	Expires On:	04/17/2015	Lot #:	14D125
Name:	Custom LCS STD B Metals	Inventory ID	70003	Logbook Ref:	M5280037DD	Expires On:	10/18/2015	Lot #:	14D123

Preparation Materials

1:1 HCl Metals Grade M5280036X (63957) Hot Block Cups 50 mL Lot 1306159 (63960) Nitric Acid Metals Grade HNO3 M5280037X (69879)
Thermometer 287 (12953)

Preparation Steps

Step: Digestion
Started: 6/3/14 14:55
Finished: 6/4/14 08:59
By: MCRIBBIN
Comments

mments:

viewed By: DBrad Date: 6/4/14 Spike Witness: CWINKSTERN Date:

ain of Custody

elinquished By: Date: 6/4/14 915

eceived By: RAO1 Date: 6/4/14 915

Extracts Examined
Yes No

OPTIMA 3,4,5 CALIBRATION STANDARD #1 (Standard is prepared weekly or as necessary)

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot#	Hydrochloric Acid Lot #	Expiration Date	Pipet ID
Cal Std.1	AL	m6700003A	20.0	1.00	1000	0.020	2%HNO3	DcB 6/6/14	A	m5280037x	m5280038D	6/13/14	m26 m25
Int.	AS		5.00			0.0050	5%HCl		B				
	CD		1.00			0.0010			C				
	CO		3.00			0.0030			D				
	CR		1.00			0.0010			E				
	NI		5.00			0.0050			F				
	PB		5.00			0.0050			G				
	SE		5.00			0.0050			H				
	V		3.00			0.0030			I				
Cal Std. 1	CA	m52800356	5000	0.100		0.500			J				
	K		5000			BELOW			K				
	MG		5000			0.500			L				
	NA		5000			0.500			M				
Single Element	BA	m52800 36V	1000	0.020		0.020			N				
	CU	m5280028U	1000	0.010		0.010			O				
	K	m52800 29K	10000	0.150		2.00			P				
	MN	m52800 37F	1000	0.010		0.010			Q				
	MO	m52800358	1000	0.025		0.025			R				
	SB	m52800 376	1000	0.010		0.010			S				
	TL	m52800 30Q	1000	0.010		0.010			T				
	ZN	m52800 34T	1000	0.010		0.010			U				
	P	———	1000	0.100		0.100			V				
									W				
									X				
									Y				
									Z				

00293

OPTIMA 3,4,5 CALIBRATION STANDARD #2
(Standard is prepared weekly or as necessary)

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot#	Hydrochloric Acid Lot #	Expiration Date	Pipet ID
Single Element	AL	M528 0030L	1000	0.100	1000	0.100	2%HNO3 5%HCl	TC 5/23/14	A	M528 00317	M528 00306	5/30/14	M23 M25
	AS	M528 0021E	1000	0.010		0.010		DeD 5/31/14	B	M528 0037X	M528 0038D	6/2/14	M23 M25
	B	35A	1000	0.200		0.200			C				
	BE (1/10)	27E	100	0.030		0.003			D				
	CA	32J	10000	0.100		1.00			E				
	CD (1/10)	28T	100	0.050		0.005			F				
	CU	28U	1000	0.020		0.020			G				
	K	29K	10000	0.200		2.00			H				
	MG	36T	10000	0.100		1.00			I				
	NA	28W	10000	0.100		1.00			J				
	SB	~~27A~~ 27G	1000	0.060		0.060			K				
	SE	28BB	1000	0.010		0.010			L				
	SN	33H	1000	0.500		0.500			M				
									N				
									O				
									P				
									Q				
									R				
									S				
									T				
									U				
									V				
									W				
									X				
									Y				
									Z				

09294

OPTIMA 3/4/5 CALIBRATION STANDARD #5 / HLCCV1 (Standard is prepared weekly or as necessary)

(CALIBRATION STANDARD #3 IS A 1/100 DILUTION OF THIS STANDARD)
(CALIBRATION STANDARD #4 IS A 1/5 DILUTION OF THIS STANDARD)

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot#	Hydrochloric Acid Lot #	Expiration Date	Pipet ID
Cal Std 1	CA	m52800325	5000	5.00	500	50.0	2%HNO3	DCA 5/8/14	A	m52800365	m52800364	5/15/14	m26 m23
	MG		5000			50.0	5%HCl	DCA 5/14/14	B	m52800365	m52800364	5/21/14	m26 m23
	K		5000			50.0		DCA 5/21/14	C	m52800378	m52800364	5/28/14	m26 m23
	NA		5000			50.0		DCA 5/28/14	D	m52800377	m52800364	6/4/14	m26 m23
Cal Std 2	AG	m52800350	100	5.00		1.00		DCA 6/3/14	E	m52800377	m52800380	6/16/14	m26 m23
	CR		100			1.00			F				
	MN		150			1.50			G				
	NI		400			4.00			H				
	ZN		200			2.00			I				
Cal Std 3	AL	m52800356	2000	5.00		20.0			J				
	BA		2000			20.0			K				
	BE		50			0.500			L				
	CO		500			5.00			M				
	CU		250			2.50			N				
	FE		1000			10.0			O				
	V		500			5.00			P				
Cal Std 4	AS	m52800376	100	10.00		2.00			Q				
	CD		50			1.00			R				
	PB		50			1.00			S				
	SE		50			1.00			T				
	TL		100			2.00			U				
Single Metals	SB	m52800376	1000	5.00		10.0			V				
	SN	m52800331H	1000	5.00		10.0			W				
	B	m52800356A	1000	2.50		5.00			X				
	MO	m52800358	1000	2.50		5.00			Y				
	TI	m52800348B	1000	2.50		5.00			Z				
	SR	m52800356	1000	2.50		5.00			AA				
	P	—	1000	5.00		10.0			BB				

OPTIMA 3/4/5 ICV/CCV (Standard is prepared daily)
(ICV FOR ILM5.3 IS A ½ DILUTION OF THIS STANDARD)

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot#	Hydrochloric Acid Lot #	Pipet ID
Cal Std 1	CA	m52800354	5000	1.00	200	25.0	2%HNO3	DCB 6/3/14	A	m52800374	m52800380	m26 m23
	MG		5000			25.0	5%HCl	DCB 6/4/14	B	m52800374	m52800380	m26 m23
	K		5000			25.0		DCB 6/5/14	C	m52800374	m52800380	m26 m23
	NA		5000			25.0		DCB 6/6/14	D	m52800374	m52800380	m26 m23
Cal Std 2	AG	m52800360	100	1.00		0.500			E			
	CR		100			0.500			F			
	MN		150			0.750			G			
	NI		400			2.00			H			
	ZN		200			1.00			I			
Cal Std 3	AL	m52800350	2000	1.00		10.0			J			
	BA		2000			10.0			K			
	BE		50			0.250			L			
	CO		500			2.50			M			
	CU		250			1.25			N			
	FE		1000			5.00			O			
	V		500			2.50			P			
Cal Std 4	AS	m52800375	100	2.00		1.00			Q			
	CD		50			0.500			R			
	PB		50			0.500			S			
	SE		50			0.500			T			
	TL		100			1.00			U			
Single Metals	SB	m52800351	1000	1.00		5.00			V			
	SN	m52800370	1000	1.00		5.00			W			
	B	m52800316	1000	0.500		2.50			X			
	MO	m52800311	1000	0.500		2.50			Y			
	TI	m52800311K	1000	0.500		2.50			Z			
	SR	m52800310	1000	0.500		2.50			AA			
	P	—	1000	1.00		5.00			BB			

OPTIMA 3/4 HLCCV2 (Standard is prepared every 2 weeks or as necessary)

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot#	Hydrochloric Acid Lot #	Expiration Date	Pipet ID
Cal Std 2	AG	M52800350	100	2.00	100	2.00	2%HNO3	JCS 7/1/14	A	M52800365	M52800360X	5/24/14	M23 M26
	CR		100			Below	5%HCl	DCB 5/19/14	B	M52800037X	M52800036X	6/2/14	M23 M26
	MN		150			Below		DCB 6/3/14	C	M52800037X	M52800038D	6/17/14	M23 M26
	NI		400			8.00			D				
	ZN		200			4.00			E				
Cal Std 3	AL	M52800350	2000	2.00		Below			F				
	BA		2000			40.0			G				
	BE		50			1.00			H				
	CO, V		500			10.0			I				
	CU		250			5.00			J				
	FE		1000			Below			K				
Cal Std 4	AS, TL	M52800370	100	4.00		4.00			L				
	CD, SE		50			2.00			M				
	PB		50			Below			N				
Single Metals	B	M52800350	1000	1.00		10.0			O				
	MO	M52800350	1000	1.00		10.0			P				
	TI	M52800340	1000	1.00		10.0			Q				
	SR	M52800350	1000	1.00		10.0			R				
	CA	M52800320	10000	2.50		250			S				
	MG	M52800360	10000	5.00		500			T				
	NA	M52800280	10000	1.50		150			U				
	CR	M52800260	1000	0.800		10.0			V				
	FE	M52800280	10000	0.300		50			W				
	AL	M52800370	10000	4.60		500			X				
	MN	M52800260	1000	0.700		10.00			Y				
	PB	M52800340	1000	0.800		10.0			Z				
	K	M52800290	10000	1.50		150			AA				

OPTIMA 3/4/5 MRL (Standard is prepared every 6 months or as needed)

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot#	Hydrochloric Acid Lot #	Expiration Date	Pipet ID
Cal Std 1	CA	m52800324	5000	0.200	1000	1.00	2%HNO3	DCB 3/27/14	A	m52800365	m52800350	9/27/14	m23 m11
	MG		5000			1.00	5%HCl	DCB 4/10/14	B	m52800365	m52800276X	10/10/14	m23 m25
	K		5000			1.00		DCB 4/23/14	C	m52800365	m52800276X	10/23/14	m23 m25
	NA		5000			1.00		DCB 5/8/14	D	m52800365	m52800364	11/12/14	m23 m25
Cal Std 2	AG	m52800350	100	0.100		0.0100		DCB 5/19/14	E	m52800378	m52800276X	11/19/14	m23 m25
	CR		100			0.0100		DCB 5/21/14	F	m52800374	m52800380	11/20/14	m23 m25
	MN		150			0.0150			G				
	NI		400			0.0400			H				
	ZN		200			0.0200			I				
Cal Std 3	AL	m52800356	2000	0.100		0.200			J				
	BA		2000			0.200			K				
	BE		50			0.0050			L				
	CO		500			0.0500			M				
	CU		250			0.0250			N				
	FE		1000			0.100			O				
	V		500			0.0500			P				
Cal Std 4	AS	m52800360	100	0.200		0.0200			Q				
	CD		50			0.0100			R				
	PB		50			0.0100			S				
	SE		50			0.0100			T				
	TL		100			0.0200			U				
Single Metals	B	m52800280	1000	0.200		0.200			V				
	MO	m52800350	1000	0.025		0.0250			W				
	SN	m52800334	1000	0.500		0.500			X				
	TI	m52800348R	1000	0.050		0.0500			Y				
	SB	m52800314	1000	0.060		0.0600			Z				
	SR	m52800356	1000	0.100		0.100			AA				
	P	—	1000	0.100		0.100			BB				

OPTIMA 3 & 5 ICSA STANDARD (Standard is prepared every 6 months or as necessary)

Element	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix
Int. A Sol'n	m528003 7I	Multi	50	1000	Multi	5% HCL
AL		5000			250	2%HNO3
CA		5000			250	
FE		2000			100	
MG		5000			250	

Analyst/ Date	ID Letter	Nitric Acid Lot #	Hydrochloric Acid Lot #	Expiration Date	Pipet ID
DCB 4/11/14	A	m5280036S	m5280036X	10/11/14	—
DCB 5/2/14	B	m5280036S	m5280036X	11/2/14	—
DCB 5/21/14	C	m5280037X	m5280036X	11/21/14	—
	D				
	E				
	F				
	G				
	H				
	I				
	J				
	K				
	L				
	M				
	N				
	O				
	P				
	Q				
	R				
	S				
	T				
	U				
	V				

09269

OPTIMA 3 & 5 ICSAB STANDARD (Standard is prepared every 6 months or as necessary)

Element	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	ID Letter	Nitric Acid Lot #	Hydrochloric Acid Lot #	Expiration Date	Pipet ID
Int. A Sol'n	M52800371	Multi	25	500	Multi	5 % HCl	TC 4/17/14	A	M52800365	M52800354	10/17/14	—
AL		5000			250	2%HNO3	DCB 4/29/14	B	M52800365	M52800364	10/29/14	—
CA		5000			250		CJW 5/01/14	C	M52800365	M52800362	11/3/14	—
FE		2000			100		DCB 5/21/14	D	M52800377	M52800376	11/21/14	—
MG		5000			250		DCB 5/21/14	E	M52800377	M52800378	11/20/14	—
Int. B Sol'n	M52800367	Multi	5		Multi			F				
AG		20			0.200			G				
BA		50			0.500			H				
BE		50			0.500			I				
CD		100			1.00			J				
CO		50			0.500			K				
CR		50			0.500			L				
CU		50			0.500			M				
MN		50			0.500			N				
NI		100			1.00			O				
PB		5			0.0500			P				
V		50			0.500			Q				
ZN		100			1.00			R				
AS		10			0.100			S				
SB		60			0.600			T				
SE		5			0.0500			U				
TL		10			0.100			V				

OPTIMA 3/4 INTERNAL STANDARD (ADDED ON-LINE)

Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot #	Hydro-chloric Acid Lot #	Expiration Date	Pipet ID
Y	MS28L033K	10000	2.0	2000	10.0	5 % HCl 2%HNO3	TC 5/21/14	A	MS28L037K	MS28L036K	11/21/14	M26
CS	MS28L033K	10000	2.0		10.0		CW 5/21/14	B	MS28L037K	MS28L036K	11/27/14	M4
							DCB 5/20/14	C	MS28L037K	MS28L038D	11/30/14	M26
							DCB 5/30/14	D	MS28L037K	MS28L038D	11/30/14	M26
							DCB 6/3/14	E	MS28L037K	MS28L038D	12/3/14	M26
							DCB 6/4/14	F	MS28L037K	MS28L038D	12/4/14	M26
							DCB 6/6/14	G	MS28L037K	MS28L038D	12/6/14	M26
								H				
								I				
								J				
								K				
								L				
								M				
								N				
								O				
								P				
								Q				
								R				
								S				
								T				
								V				

ALS Environmental

GENERAL CHEMISTRY DATA

ALS Environmental - Rochester, NY
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Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404049
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	5/29/14 0830
Sample Matrix:	Water	**Date Received:**	5/30/14
Sample Name:	633027 EFFLUENT		
Lab Code:	R1404049-001	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Cyanide, Total	9012B	0.010	U	mg/L	0.010	1	6/ 3/14	6/4/14 11:00	
pH	SM 4500-H+ B	7.20		pH Units		1	NA	6/2/14 16:15	H
Temperature of pH Analysis	SM 4500-H+ B	25.6		deg C		1	NA	6/2/14 16:15	H

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404049
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R1404049-MB	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Cyanide, Total	9012B	0.010	U	mg/L	0.010	1	6/3/14	6/4/14 10:38	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: AMEC Environmental & Infrustructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251-04
Sample Matrix: Water

Service Request: R1404049
Date Analyzed: 6/ 4/14

Lab Control Sample Summary
General Chemistry Parameters

Units: mg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R1404049-LCS1 Result	Spike Amount	% Rec	% Rec Limits
Cyanide, Total	9012B	0.101	0.100	101	85 - 115

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: AMEC Environmental & Infrustructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251-04
Sample Matrix: Water

Service Request: R1404049
Date Analyzed: 6/ 4/14

Lab Control Sample Summary
General Chemistry Parameters

Units: mg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R1404049-LCS2 Result	Spike Amount	% Rec	% Rec Limits
Cyanide, Total	9012B	0.400	0.400	100	85 - 115

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: AMEC Environmental & Infrustructure (Formerly MACTEC) **Service Request:** R1404049
Project: NYSDEC Primoshield/3612122251-04

Continuing Calibration Verification (CCV) Summary
Cyanide, Total

Analytical Method: 9012B **Units:** mg/L

	Analysis Lot	Lab Code	Date Analyzed	True Value	Measured Value	Percent Recovery	Acceptance Limits
CCV1	395529	RQ1406078-01	6/4/14 10:34	0.500	0.496	99	85 - 115
CCV2	395529	RQ1406078-03	6/4/14 10:44	0.500	0.493	99	85 - 115
CCV3	395529	RQ1406078-05	6/4/14 10:53	0.500	0.492	98	85 - 115
CCV4	395529	RQ1406078-07	6/4/14 11:01	0.500	0.484	97	85 - 115

Client: AMEC Environmental & Infrustructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251-04

Service Request: R1404049

Continuing Calibration Blank (CCB) Summary
Cyanide, Total

Analytical Method: 9012B

Units: mg/L

	Analysis Lot	Lab Code	Date Analyzed	MRL	Result	Q
CCB1	395529	RQ1406078-02	6/4/14 10:35	0.010	0.010	U
CCB2	395529	RQ1406078-04	6/4/14 10:45	0.010	0.010	U
CCB3	395529	RQ1406078-06	6/4/14 10:54	0.010	0.010	U
CCB4	395529	RQ1406078-08	6/4/14 11:02	0.010	0.010	U

Analytical Results Summary

Instrument Name: R-FIA-05 **Analyst:** GNITAJOUPPI **Analysis Lot:** 395529 **Method/Testcode:** SM 4500-CN-E-2001(2011)/CN T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ1406078-01	Cyanide	CCV		Water	0.50 mg/L	6 mL	0.496 mg/L	1					6/4/14 10:34:55	N	II
RQ1406078-01	Cyanide, Total	CCV		Water	0.50 mg/L	6 mL	0.496 mg/L	1					6/4/14 10:34:55	N	II
RQ1406078-02	Cyanide	CCB		Water	0.00 mg/L	6 mL	0.010 mg/L U	1	0.001	0.010			6/4/14 10:35:42	N	II
RQ1406078-02	Cyanide, Total	CCB		Water	0.00 mg/L	6 mL	0.010 mg/L U	1	0.003	0.010			6/4/14 10:35:42	N	II
RQ1406067-01	Cyanide	MB		Water	0.00 mg/L	6 mL	0.010 mg/L U	1	0.001	0.010			6/4/14 10:38:01	N	II
RQ1406067-01	Cyanide, Total	MB		Water	0.00 mg/L	6 mL	0.010 mg/L U	1	0.003	0.010			6/4/14 10:38:01	N	II
RQ1406067-02	Cyanide	LCS		Water	0.10 mg/L	6 mL	0.101 mg/L	1	0.001	0.010	101		6/4/14 10:38:48	N	II
RQ1406067-02	Cyanide, Total	LCS		Water	0.10 mg/L	6 mL	0.101 mg/L	1	0.003	0.010	101		6/4/14 10:38:48	N	II
RQ1406067-03	Cyanide	LCS		Water	0.40 mg/L	6 mL	0.400 mg/L	1	0.001	0.010	100		6/4/14 10:39:34	N	II
RQ1406067-03	Cyanide, Total	LCS		Water	0.40 mg/L	6 mL	0.400 mg/L	1	0.003	0.010	100		6/4/14 10:39:34	N	II
R1403953-001	Cyanide	N/A		Water	0.01 mg/L	6 mL	0.011 mg/L	1	0.001	0.010			6/4/14 10:40:20	N	II
R1403956-001	Cyanide	N/A		Water	0.01 mg/L	6 mL	0.010 mg/L U	1	0.001	0.010			6/4/14 10:41:08	N	II
R1403970-001	Cyanide	N/A		Water	0.56 mg/L	0.6000 mL	5.61 mg/L	1	0.01	0.10			6/4/14 10:41:56	N	II
R1403970-002	Cyanide	N/A		Water	0.01 mg/L	6 mL	0.011 mg/L	1	0.001	0.010			6/4/14 10:42:43	N	II
R1403970-003	Cyanide	N/A		Water	0.00 mg/L	6 mL	0.010 mg/L U	1	0.001	0.010			6/4/14 10:43:31	N	II
RQ1406078-03	Cyanide	CCV		Water	0.49 mg/L	6 mL	0.493 mg/L	1					6/4/14 10:44:18	N	II
RQ1406078-03	Cyanide, Total	CCV		Water	0.49 mg/L	6 mL	0.493 mg/L	1					6/4/14 10:44:18	N	II
RQ1406078-04	Cyanide	CCB		Water	0.00 mg/L	6 mL	0.001 mg/L J	1	0.001	0.010			6/4/14 10:45:05	N	II
RQ1406078-04	Cyanide, Total	CCB		Water	0.00 mg/L	6 mL	0.010 mg/L U	1	0.003	0.010			6/4/14 10:45:05	N	II
R1403970-004	Cyanide	N/A		Water	0.00 mg/L	6 mL	0.010 mg/L U	1	0.001	0.010			6/4/14 10:45:52	N	II
R1403970-005	Cyanide	N/A		Water	0.06 mg/L	6 mL	0.056 mg/L	1	0.001	0.010			6/4/14 10:46:38	N	II
R1403970-006	Cyanide	N/A		Water	0.00 mg/L	6 mL	0.010 mg/L U	1	0.001	0.010			6/4/14 10:47:25	N	II
R1403970-007	Cyanide	N/A		Water	0.02 mg/L	6 mL	0.019 mg/L	1	0.001	0.010			6/4/14 10:48:12	N	II
R1403970-008	Cyanide	N/A		Water	0.01 mg/L	6 mL	0.010 mg/L U	1	0.001	0.010			6/4/14 10:48:58	N	II
R1403970-009	Cyanide	N/A		Water	0.01 mg/L	6 mL	0.010 mg/L U	1	0.001	0.010			6/4/14 10:49:44	Y	II
RQ1406067-04	Cyanide	MS	R1403970-009	Water	0.09 mg/L	6 mL	0.086 mg/L	1	0.001	0.010	86		6/4/14 10:50:31	N	II
RQ1406067-05	Cyanide	DMS	R1403970-009	Water	0.10 mg/L	6 mL	0.096 mg/L	1	0.001	0.010	96	11	6/4/14 10:51:17	N	II
R1403970-010	Cyanide	N/A		Water	0.02 mg/L	6 mL	0.015 mg/L	1	0.001	0.010			6/4/14 10:52:03	N	II
R1403970-011	Cyanide	N/A		Water	0.06 mg/L	6 mL	0.056 mg/L	1	0.001	0.010			6/4/14 10:52:51	N	II
RQ1406078-05	Cyanide	CCV		Water	0.49 mg/L	6 mL	0.492 mg/L	1					6/4/14 10:53:39	N	II
RQ1406078-05	Cyanide, Total	CCV		Water	0.49 mg/L	6 mL	0.492 mg/L	1					6/4/14 10:53:39	N	II
RQ1406078-06	Cyanide	CCB		Water	0.00 mg/L	6 mL	0.010 mg/L U	1	0.001	0.010			6/4/14 10:54:27	N	II
RQ1406078-06	Cyanide, Total	CCB		Water	0.00 mg/L	6 mL	0.010 mg/L U	1	0.003	0.010			6/4/14 10:54:27	N	II
R1403970-012	Cyanide	N/A		Water	0.00 mg/L	6 mL	0.010 mg/L U	1	0.001	0.010			6/4/14 10:55:14	N	II
R1403970-013	Cyanide	N/A		Water	0.12 mg/L	6 mL	0.117 mg/L	1	0.001	0.010			6/4/14 10:56:01	Y	II
RQ1406067-06	Cyanide	MS	R1403970-013	Water	0.21 mg/L	6 mL	0.215 mg/L	1	0.001	0.010	97		6/4/14 10:56:48	N	II

indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-FIA-05 **Analyst:** GNITAJOUPPI **Analysis Lot:** 395529 **Method/Testcode:** SM 4500-CN-E-2001(2011)/CN T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ1406067-07	Cyanide	DMS	R1403970-013	Water	0.20 mg/L	6 mL	0.201 mg/L	1	0.001	0.010	84	6	6/4/14 10:57:35	N	II
R1403970-014	Cyanide	N/A		Water	0.00 mg/L	6 mL	0.010 mg/L U	1	0.001	0.010			6/4/14 10:58:22	N	II
R1403970-015	Cyanide	N/A		Water	0.00 mg/L	6 mL	0.010 mg/L U	1	0.001	0.010			6/4/14 10:59:08	N	II
R1403970-017	Cyanide	N/A		Water	0.00 mg/L	6 mL	0.010 mg/L U	1	0.001	0.010			6/4/14 10:59:55	N	II
R1404049-001	Cyanide, Total	N/A		Water	0.00 mg/L	6 mL	0.010 mg/L U	1	0.003	0.010			6/4/14 11:00:41	N	IV
RQ1406078-07	Cyanide	CCV		Water	0.48 mg/L	6 mL	0.484 mg/L	1					6/4/14 11:01:28	N	IV
RQ1406078-07	Cyanide, Total	CCV		Water	0.48 mg/L	6 mL	0.484 mg/L	1					6/4/14 11:01:28	N	IV
RQ1406078-08	Cyanide	CCB		Water	0.00 mg/L	6 mL	0.010 mg/L U	1	0.001	0.010			6/4/14 11:02:14	N	IV
RQ1406078-08	Cyanide, Total	CCB		Water	0.00 mg/L	6 mL	0.010 mg/L U	1	0.003	0.010			6/4/14 11:02:14	N	IV

indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Preparation Information Benchsheet

Prep Run#: 209987
Team: GenChem/GNITAJOUPPI

Prep WorkFlow: Gen Dist CN
Prep Method: Method

Status: Prepped
Prep Date/Time: 6/3/14 12:30 PM

27	R1403970-015	MW-018-0514	.06	6mL	SM 4500-CN-E-2001(2011)/CN T				6.00mL			
28	R1403970-017	MW-1036-012FBW	.04	6mL	SM 4500-CN-E-2001(2011)/CN T				6.00mL			
29	R1404049-001	633027 EFFLUENT	.04	6mL	9012B/CN Tot				6.00mL			

Spiking Solutions

Name: Cyanide 10 ppm as CN Inventory ID 59557 Logbook Ref: Fresh daily Expires On: 06/19/2014

Preparation Steps

Step: Distillation
Started: 6/3/14 12:30
Finished: 6/3/14 13:30
By: GNITAJOUPPI
Comments

Comments: _____

Reviewed By: _____ Date: _____ Spike Witness: CWOODS Date: _____

Chain of Custody

Relinquished By: _____ Date: _____ Extracts Examined

Received By: _____ Date: _____ Yes No

ALS Environmental

Analyte: Cyanide Micro Distillation

Analyst: GNITA Date: 6/3/14

Pipet ID: Harry Beta, Bottle Spk Witness: KM

Balance ID: NA

Distillation Start Time: 10:30 End Time: 12:00

Still #	Order #	Dist. Vol.	Final Vol.	Method	pH	H2S +/-	Comments
1	MB 1	6	6	335.4	NA	-	
2	LCS-LL 1	6	6	335.4	NA	-	0.060mL 10ppm
3	LCS-HL 1	6	6	335.4	NA	-	0.240mL 10ppm
4	R1403672-001	6	6	335.4	>12	-	
5	R1403673-001	6	6	335.4	>12	-	
6	R1403923-005	6	6	335.4	>12	-	
7	3923-005 MS	6	6	335.4	>12	-	0.060mL 10ppm
8	3923-005 MSD	6	6	335.4	>12	-	0.060mL 10ppm
9	R1403923-006	6	6	335.4	>12	-	
10	R1403923-008	6	6	335.4	>12	-	
11	R1404035-001	6	6	335.4	>12	-	
12	4035-001 DUP	6	6	335.4	>12	-	
13	4035-001 SPK	6	6	335.4	>12	-	0.060mL 10ppm
14	R1403765-008	6	6	335.4	>12	-	
15	R1403765-009	6	6	335.4	>12	-	
16	R1403765-010	6	6	335.4	>12	-	
17	R1403765-012	6	6	335.4	>12	-	
18	R1403765-013	6	6	335.4	>12	-	
19	R1403955-001	6	6	335.4	>12	-	
20	R1404042-001	6	6	335.4	>12	-	
21	R1404042-002	6	6	335.4	>12	-	
22	R1404056-002	6	6	335.4	>12	-	
23	R1404057-005	6	6	335.4	>12	-	
24	R1404057-006	6	6	335.4	>12	-	
25	R1404057-007	6	6	335.4	>12	-	
26	R1404057-008	6	6	335.4	>12	-	
27	R1404059-001	6	6	335.4	>12	-	
28	MB 2	6	6	9012B	NA	-	
29	LCS-LL 2	6	6	9012B	NA	-	0.060mL 10ppm
30	LCS-HL 2	6	6	9012B	NA	-	0.240mL 10ppm
31	R1403957-001	0.6	6	9012B	9	-	
32	R1403957-002	6	6	9012B	>12	-	
33	R1403957-003	0.6	6	9012B	10	-	
34	R1403957-004	6	6	9012B	>12	-	
35	R1403957-005	6	6	9012B	>12	-	
36	R1403957-006	0.6	6	9012B	10	-	
37	R1403957-007	6	6	9012B	>12	-	
38	R1403969-001	6	6	9012B	>12	-	
39	R1404010-001	6	6	9012B	>12	-	
40	4010-001 DUP	6	6	9012B	>12	-	
41	4010-001 SPK	6	6	9012B	>12	-	0.060mL 10ppm
42	R1404010-002	6	6	9012B	>12	-	

ALS Environmental

Analyte: Cyanide Micro Distillation

Analyst: GNITA Date: 6/3/14

Pipet ID: Harvey, Beta, Pseudo Spk Witness: CMW

Balance ID: NA

Distillation Start Time: 12:30 End Time: 13:30

Still #	Order #	Dist. Vol.	Final Vol.	Method	pH	H2S +/-	Comments
1	MB 3	6	6	SM4500/9012B	NA	—	
(2)	LCS-LL3	6	6	SM4500/9012B	NA	—	0.060mL 10ppm ✓
(3)	LCS-HL 3	6	6	SM4500/9012B	NA	—	0.240mL 10ppm ✓
4	R1403953-001	6	6	SM4500	>12	—	
5	R1403956-001	6	6	SM4500	>12	—	
6	R1403970-001	0.6	6	SM4500	10	—	
7	R1403970-002	GN 6	6	SM4500	>12	—	
8	R1403970-003	6/3/14 6	6	SM4500	>12	—	
9	R1403970-004	6	6	SM4500	>12	—	
10	R1403970-005	6	6	SM4500	>12	—	
11	R1403970-006	6	6	SM4500	>12	—	
12	R1403970-007	6	6	SM4500	>12	—	
13	R1403970-008	6	6	SM4500	>12	—	
14	R1403970-009	6	6	SM4500	>12	—	
(15)	3970-009 MS	6	6	SM4500	>12	—	0.060mL 10ppm ✓
(16)	3970-009 MSD	6	6	SM4500	>12	—	0.060mL 10ppm ✓
17	R1403970-010	6	6	SM4500	>12	—	
18	R1403970-011	6	6	SM4500	>12	—	
19	R1403970-012	6	6	SM4500	>12	—	
20	R1403970-013	6	6	SM4500	>12	—	
(21)	3970-013 MS	6	6	SM4500	>12	—	0.060mL 10ppm ✓
(22)	3970-013 MSD	6	6	SM4500	>12	—	0.060mL 10ppm ✓
23	R1403970-014	6	6	SM4500	>12	—	
24	R1403970-015	6	6	SM4500	>12	—	
25	R1403970-017	6	6	SM4500	>12	—	
26	R1404049-001	6	6	9012B	>12	—	
27	MB	6	6	Residual	>12	—	
28	LCS	6	6	Residual	>12	—	
29	R1403285-002	6	6	Residual	>12	—	
30	R1403953-001	6	6	Residual	>12	—	
31	3953-001 DUP	6	6	Residual	>12	—	
32		6	6				
33		6	6				
34	GN	6	6				
35	6/3/14	6	6				
36		6	6				
37		6	6				
38		6	6				
39		6	6				
40		6	6				
41		6	6				
42		6	6				

Creator : GABRIELA NITA-JOUPPI
Creation Date : 6/4/2014 9:45:22 AM
Last Modified : 6/4/2014 11:10:47 AM
Description :

Cup	Sample ID	MDF	Weight	Sample Type	Comments
S1	1.0 ppm CN			Calibration Standard	
S2	0.50 ppm CN			Calibration Standard	
S3	0.20 ppm CN			Calibration Standard	
S4	0.10 ppm CN			Calibration Standard	
S5	0.05 ppm CN			Calibration Standard	
S6	0.02 ppm CN			Calibration Standard	
S7	0.01 ppm CN			Calibration Standard	
S8	0.00 ppm CN			Calibration Standard	
1	ICV			Unknown	
2	ICB			Unknown	
3	CRDL - 0.0200			Unknown	
4	CRDL - 0.0100			Unknown	
5	CCV			Unknown	
6	CCB			Unknown	
7	MB-1			Unknown	
8	LCS-1 LL			Unknown	
9	LCS-1 HL			Unknown	
10	R1403672-001			Unknown	
11	R1403673-001			Unknown	
12	R1403923-005			Unknown	
13	3923-005 MS			Unknown	
14	3923-005 MSD			Unknown	
15	R1403923-006			Unknown	
16	R1403923-008			Unknown	
17	CCV			Unknown	
18	CCB			Unknown	
19	R1404035-001			Unknown	
20	4035-001 DUP			Unknown	
21	4035-001 SPK			Unknown	
22	R1403765-008			Unknown	
23	R1403765-009			Unknown	
24	R1403765-010			Unknown	
25	R1403765-012			Unknown	
26	R1403765-013			Unknown	
27	R1403955-001			Unknown	
28	R1404042-001			Unknown	
29	CCV			Unknown	
30	CCB			Unknown	
31	R1404042-002			Unknown	
32	R1404056-002			Unknown	

33	R1404057-005			Unknown	
34	R1404057-006			Unknown	
35	R1404057-007			Unknown	
36	R1404057-008			Unknown	
37	R1404059-001			Unknown	
38	MB 2			Unknown	
39	LCS 2 LL			Unknown	
40	LCS 2 HL			Unknown	
41	CCV			Unknown	
42	CCB			Unknown	
43	R1403957-001			Unknown	
44	R1403957-002			Unknown	
45	R1403957-003			Unknown	
46	R1403957-004			Unknown	
47	R1403957-005			Unknown	
48	R1403957-006			Unknown	
49	R1403957-007			Unknown	
50	R1403969-001			Unknown	
51	R1404010-001			Unknown	
52	4010-001 DUP			Unknown	
53	CCV			Unknown	
54	CCB			Unknown	
55	4010-001 SPK			Unknown	
56	R1404010-002			Unknown	
57	MB 3			Unknown	
58	LCS 3 LL			Unknown	
59	LCS 3 HL			Unknown	
60	R1403953-001			Unknown	
61	R1403956-001			Unknown	
62	R1403970-001			Unknown	
63	R1403970-002			Unknown	
64	R1403970-003			Unknown	
65	CCV			Unknown	
66	CCB			Unknown	
67	R1403970-004			Unknown	
68	R1403970-005			Unknown	
69	R1403970-006			Unknown	
70	R1403970-007			Unknown	
71	R1403970-008			Unknown	
72	R1403970-009			Unknown	
73	3970-009 MS			Unknown	
74	3970-009 MSD			Unknown	
75	R1403970-010			Unknown	
76	R1403970-011			Unknown	
77	CCV			Unknown	

78	CCB			Unknown	
79	R1403970-012			Unknown	
80	R1403970-013			Unknown	
81	3970-013 MS			Unknown	
82	3970-013 MSD			Unknown	
83	R1403970-014			Unknown	
84	R1403970-015			Unknown	
85	R1403970-017			Unknown	
86	R1404049-001			Unknown	
87	CCV			Unknown	
88	CCB			Unknown	
89	MB RES			Unknown	
90	LCS RES			Unknown	
91	R1403285-002 RES			Unknown	
92	R1403953-001 RES			Unknown	
93	3953-001 DUP RES			Unknown	
94	LCS-HL1 RPT			Unknown	
95	R1403970-009 RPT			Unknown	
96	CCV			Unknown	
97	CCB			Unknown	

Analyte Table	Cyanide 9012B/SM450
	(mg CN/L)
1.0 ppm CN	1.00000
0.50 ppm CN	0.50000
0.20 ppm CN	0.20000
0.10 ppm CN	0.10000
0.05 ppm CN	0.05000
0.02 ppm CN	0.02000
0.01 ppm CN	0.01000
0.00 ppm CN	0.00000

00316

Author: GABRIELA NITA-JOUPPI

Date : 6/4/2014

Original Run Filename: OM_6-4-2014_09-45-22AM.OMN Created: 6/4/2014 9:45:22 AM
Original Run Author's Signature: [GABRIELA NITA-JOUPPI]
Current Run Filename: OM_6-4-2014_09-45-22AM.OMN Last Modified: 6/4/2014 11:10:47 AM
Current Run Author's Signature: [GABRIELA NITA-JOUPPI]
Description: 10-204-00-1-A

Sample	Cup No.	Channel 2 Cyanide 9012B/SM4500CN QC8500 Conc. (mg CN/L)	Area (V.s)	Detection Time	MDF
1.0 ppm CN	S1	1.00000	10.00037	6/4/2014@9:46:33 AM	
0.50 ppm CN	S2	0.50000	5.21368	6/4/2014@9:47:20 AM	
0.20 ppm CN	S3	0.20000	2.11966	6/4/2014@9:48:06 AM	
0.10 ppm CN	S4	0.10000	1.09000	6/4/2014@9:48:53 AM	
0.05 ppm CN	S5	0.05000	0.54078	6/4/2014@9:49:40 AM	
0.02 ppm CN	S6	0.02000	0.21816	6/4/2014@9:50:26 AM	
0.01 ppm CN	S7	0.01000	0.11035	6/4/2014@9:51:13 AM	
0.00 ppm CN	S8	0.00000	-0.01719	6/4/2014@9:51:59 AM	
DQM Test: Minimum Correlation Coefficient					
Result:		0.99993 > 0.99700			
Message		Pass			
Action					
ICV	1	0.49435	5.07492	6/4/2014@9:54:18 AM	
Calibration:		Table/Fig. : 1			
ICB	2	0.00114	0.01570	6/4/2014@9:55:05 AM	
CRDL - 0.0200	3	0.02043	0.21362	6/4/2014@9:55:53 AM	
CRDL - 0.0100	4	0.01021	0.10877	6/4/2014@9:56:41 AM	
CCV	5	0.50059	5.13885	6/4/2014@9:57:28 AM	
CCB	6	-0.00090	-0.00516	6/4/2014@9:58:15 AM	
MB-1	7	-0.00069	-0.00301	6/4/2014@9:59:01 AM	
LCS-1 LL	8	0.09725	1.00163	6/4/2014@9:59:48 AM	
LCS-1 HL	9	0.35342	3.62929	6/4/2014@10:00:35 AM	
R1403672-001	10	0.00118	0.01614	6/4/2014@10:01:22 AM	
R1403673-001	11	0.00110	0.01531	6/4/2014@10:02:08 AM	
R1403923-005	12	0.00496	0.05494	6/4/2014@10:02:54 AM	
3923-005 MS	13	0.10428	1.07366	6/4/2014@10:03:40 AM	
3923-005 MSD	14	0.09087	0.93617	6/4/2014@10:04:27 AM	
R1403923-006	15	0.00382	0.04324	6/4/2014@10:05:13 AM	
R1403923-008	16	0.01973	0.20639	6/4/2014@10:06:00 AM	
CCV	17	0.49853	5.11772	6/4/2014@10:06:48 AM	
CCB	18	0.00009	0.00495	6/4/2014@10:07:36 AM	
R1404035-001	19	0.00249	0.02958	6/4/2014@10:08:23 AM	
4035-001 DUP	20	0.00227	0.02729	6/4/2014@10:09:11 AM	
4035-001 SPK	21	0.08847	0.91155	6/4/2014@10:09:57 AM	
R1403765-008	22	0.00103	0.01462	6/4/2014@10:10:44 AM	
R1403765-009	23	-0.00108	-0.00707	6/4/2014@10:11:30 AM	
R1403765-010	24	-0.00004	0.00358	6/4/2014@10:12:17 AM	
R1403765-012	25	0.00191	0.02360	6/4/2014@10:13:03 AM	
R1403765-013	26	-0.00021	0.00192	6/4/2014@10:13:50 AM	
R1403955-001	27	0.00145	0.01892	6/4/2014@10:14:36 AM	
R1404042-001	28	0.00138	0.01816	6/4/2014@10:15:22 AM	
CCV	29	0.49590	5.09080	6/4/2014@10:16:08 AM	
CCB	30	0.00105	0.01482	6/4/2014@10:16:54 AM	
R1404042-002	31	-0.00028	0.00120	6/4/2014@10:17:42 AM	
R1404056-002	32	0.00651	0.07076	6/4/2014@10:18:30 AM	
R1404057-005	33	0.00085	0.01273	6/4/2014@10:19:17 AM	
R1404057-006	34	0.00150	0.01937	6/4/2014@10:20:05 AM	
R1404057-007	35	0.00120	0.01636	6/4/2014@10:20:52 AM	
R1404057-008	36	0.02390	0.24914	6/4/2014@10:21:39 AM	
R1404059-001	37	0.00123	0.01664	6/4/2014@10:22:26 AM	
MB 2	38	-0.00085	-0.00473	6/4/2014@10:23:12 AM	
LCS 2 LL	39	0.09432	0.97157	6/4/2014@10:23:59 AM	
LCS 2 HL	40	0.35697	3.66572	6/4/2014@10:24:46 AM	
CCV	41	0.49940	5.12663	6/4/2014@10:25:32 AM	
CCB	42	0.00109	0.01520	6/4/2014@10:26:18 AM	
R1403957-001	43	0.00594	0.06494	6/4/2014@10:27:04 AM	
R1403957-002	44	0.00071	0.01137	6/4/2014@10:27:51 AM	

failed for 335.4
RPT std at 40 V

00317

R1403957-003	45	0.00746	0.08061	6/4/2014@10:28:37 AM	
R1403957-004	46	-0.00037	0.00029	6/4/2014@10:29:24 AM	
R1403957-005	47	0.00076	0.01184	6/4/2014@10:30:12 AM	
R1403957-006	48	0.00171	0.02157	6/4/2014@10:31:00 AM	
R1403957-007	49	0.00022	0.00629	6/4/2014@10:31:48 AM	
R1403969-001	50	0.00308	0.03559	6/4/2014@10:32:35 AM	
R1404010-001	51	0.00066	0.01079	6/4/2014@10:33:22 AM	
4010-001 DUP	52	0.00124	0.01674	6/4/2014@10:34:09 AM	
CCV	53	0.49555	5.08719	6/4/2014@10:34:55 AM	
CCB	54	0.00075	0.01172	6/4/2014@10:35:42 AM	
4010-001 SPK	55	0.09899	1.01945	6/4/2014@10:36:29 AM	
R1404010-002	56	0.00040	0.00813	6/4/2014@10:37:15 AM	
MB 3	57	-0.00058	-0.00189	6/4/2014@10:38:01 AM	
LCS 3 LL	58	0.10071	1.03706	6/4/2014@10:38:48 AM	
LCS 3 HL	59	0.39953	4.10226	6/4/2014@10:39:34 AM	
R1403953-001	60	0.01120	0.11893	6/4/2014@10:40:20 AM	
R1403956-001	61	0.00909	0.09724	6/4/2014@10:41:08 AM	
R1403970-001	62	0.56056	5.75403	6/4/2014@10:41:56 AM	
R1403970-002	63	0.01081	0.11492	6/4/2014@10:42:43 AM	
R1403970-003	64	0.00075	0.01171	6/4/2014@10:43:31 AM	
CCV	65	0.49328	5.06393	6/4/2014@10:44:18 AM	
CCB	66	0.00136	0.01796	6/4/2014@10:45:05 AM	
R1403970-004	67	0.00211	0.02573	6/4/2014@10:45:52 AM	
R1403970-005	68	0.05562	0.57455	6/4/2014@10:46:38 AM	
R1403970-006	69	0.00090	0.01327	6/4/2014@10:47:25 AM	
R1403970-007	70	0.01855	0.19430	6/4/2014@10:48:12 AM	
R1403970-008	71	0.00507	0.05601	6/4/2014@10:48:58 AM	
R1403970-009	72	0.00524	0.05780	6/4/2014@10:49:44 AM	air opr; RPT start #95
3970-009 MS	73	0.08646	0.89086	6/4/2014@10:50:31 AM	
3970-009 MSD	74	0.09611	0.98989	6/4/2014@10:51:17 AM	
R1403970-010	75	0.01511	0.15905	6/4/2014@10:52:03 AM	
R1403970-011	76	0.05623	0.58078	6/4/2014@10:52:51 AM	
CCV	77	0.49224	5.05326	6/4/2014@10:53:39 AM	
CCB	78	0.00064	0.01060	6/4/2014@10:54:27 AM	
R1403970-012	79	0.00271	0.03183	6/4/2014@10:55:14 AM	
R1403970-013	80	0.11743	1.20862	6/4/2014@10:56:01 AM	
3970-013 MS	81	0.21472	2.20657	6/4/2014@10:56:48 AM	
3970-013 MSD	82	0.20145	2.07040	6/4/2014@10:57:35 AM	
R1403970-014	83	0.00165	0.02099	6/4/2014@10:58:22 AM	
R1403970-015	84	-0.00003	0.00377	6/4/2014@10:59:08 AM	
R1403970-017	85	-0.00090	-0.00522	6/4/2014@10:59:55 AM	
R1404049-001	86	0.00472	0.05241	6/4/2014@11:00:41 AM	
CCV	87	0.48443	4.97307	6/4/2014@11:01:28 AM	
CCB	88	0.00066	0.01078	6/4/2014@11:02:14 AM	
MB RES	89	0.00007	0.00476	6/4/2014@11:03:00 AM	
LCS RES	90	0.00046	0.00874	6/4/2014@11:03:47 AM	
R1403285-002 RES	91	0.00217	0.02629	6/4/2014@11:04:34 AM	
R1403953-001 RES	92	0.00070	0.01126	6/4/2014@11:05:22 AM	
3953-001 DUP RES	93	0.00050	0.00913	6/4/2014@11:06:10 AM	
LCS-HL1 RPT	94	0.33972	3.48871	6/4/2014@11:06:58 AM	Confirm original
R1403970-009 RPT	95	0.00346	0.03955	6/4/2014@11:07:45 AM	Report original
CCV	96	0.47719	4.89887	6/4/2014@11:08:32 AM	
CCB	97	0.00126	0.01695	6/4/2014@11:09:18 AM	

Analyte Properties Table for : OM_6-4-2014_09-45-22AM.OMN

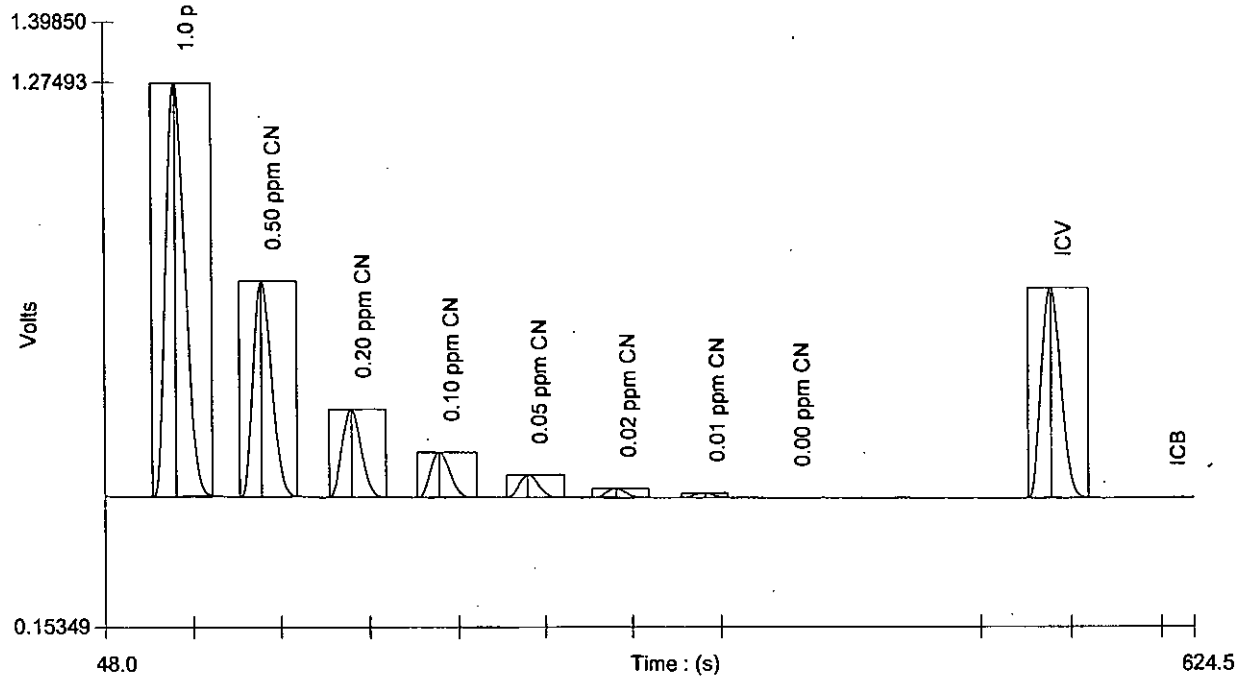
Property	Channel 2 Cyanide 9012B/SM450 0CN QC8500
Concentration Units	mg CN/L
Calibration Fit Type	First Order
Clear Calibration	Yes
Force through Zero	No
Calibration Weighting	1/x
Auto Dilution Trigger	No
% of High Standard	110
Quik Chem Method	10-204-00-1-A

Author: GABRIELA NITA-JOUPPI

Date : 6/4/2014

Chemistry	Direct/Bipolar
Calibration by Height	No
Inject to Peak Start	25
Peak Base Width	33

Channel 2 (cyanide) - Set: 1 / 11

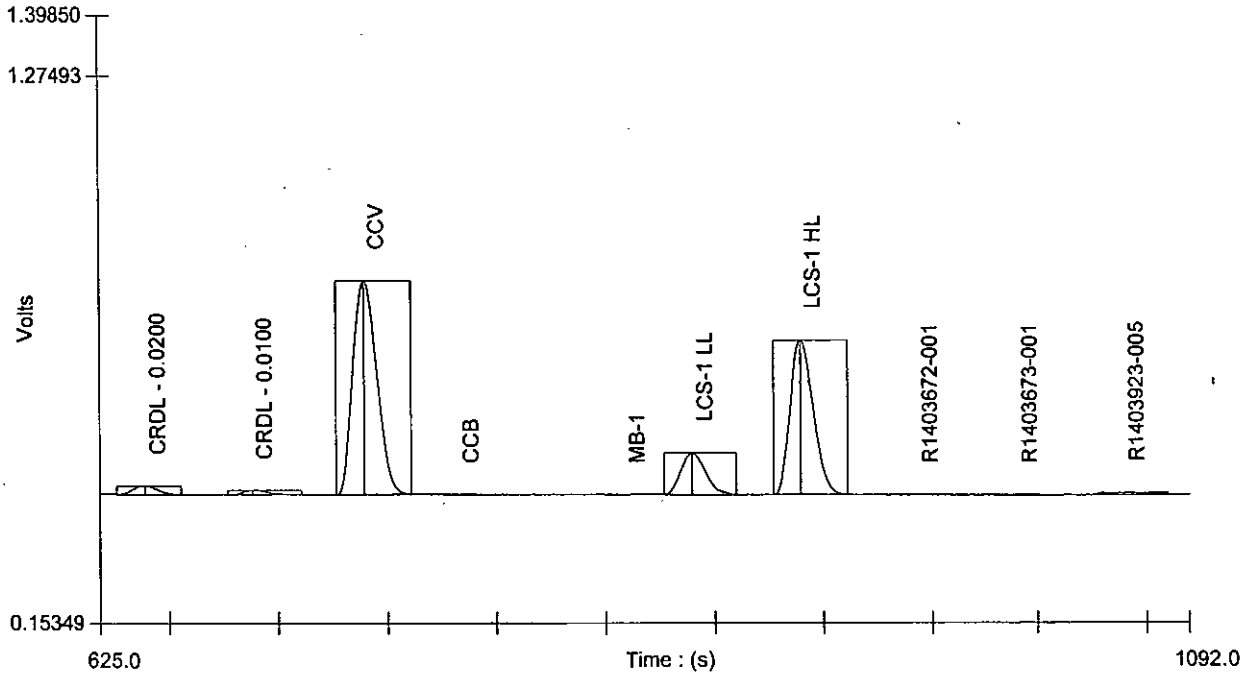


90319

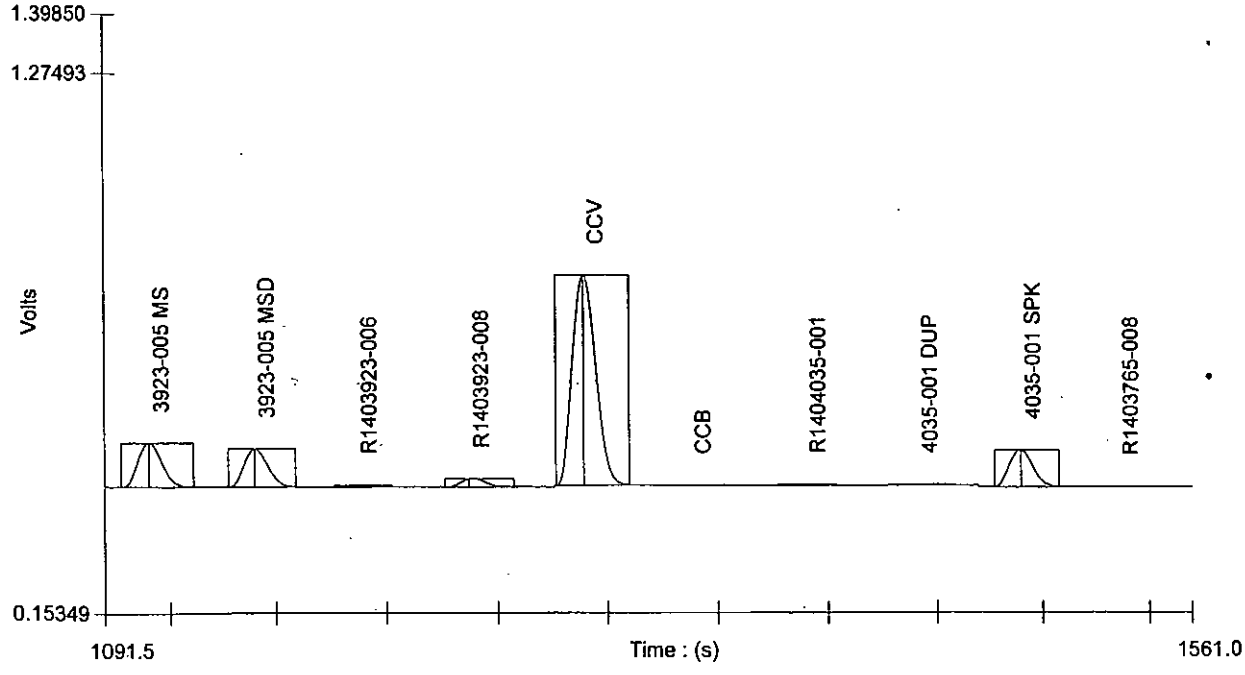
Author: GABRIELA NITA-JOUPPI

Date : 6/4/2014

Channel 2 (cyanide) - Set: 2 / 11



Channel 2 (cyanide) - Set: 3 / 11

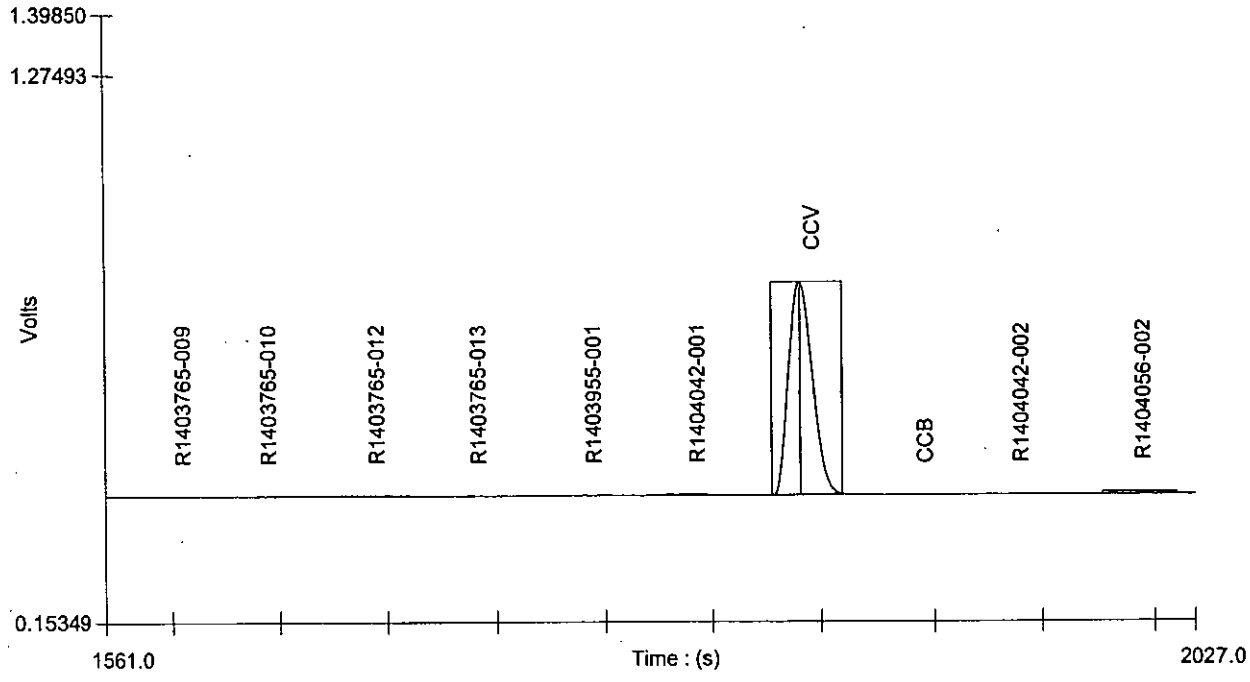


00320

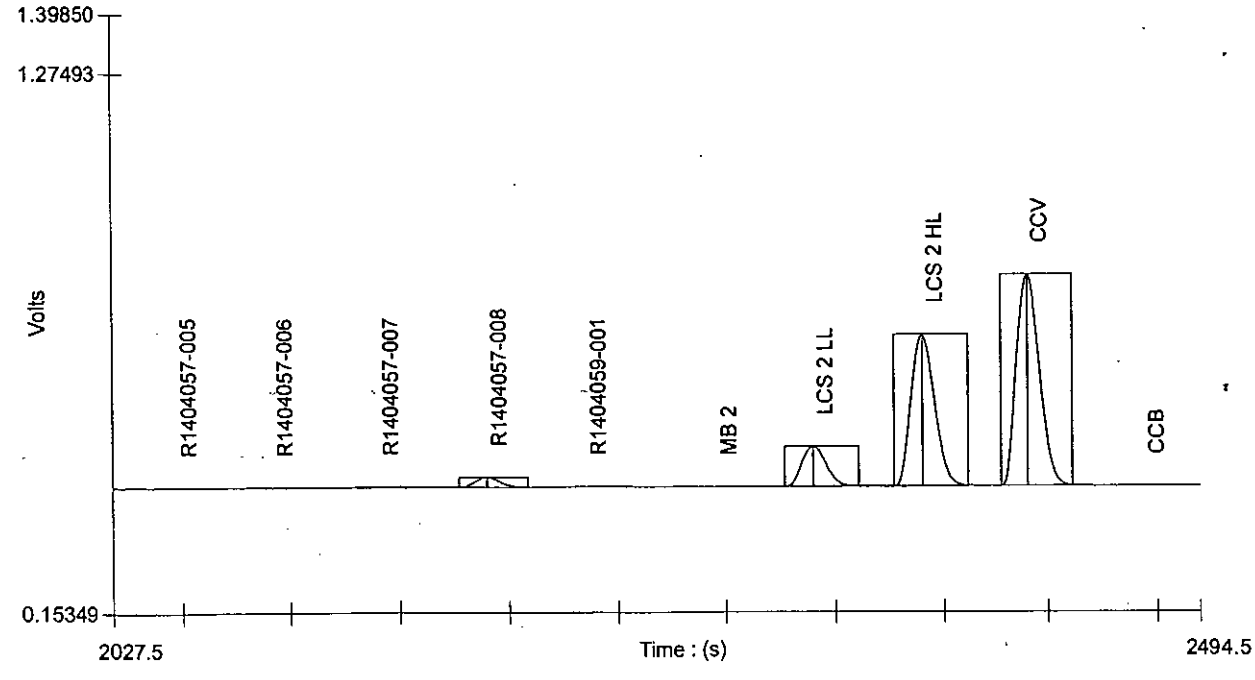
Author: GABRIELA NITA-JOUPPI

Date : 6/4/2014

Channel 2 (cyanide) - Set: 4 / 11



Channel 2 (cyanide) - Set: 5 / 11

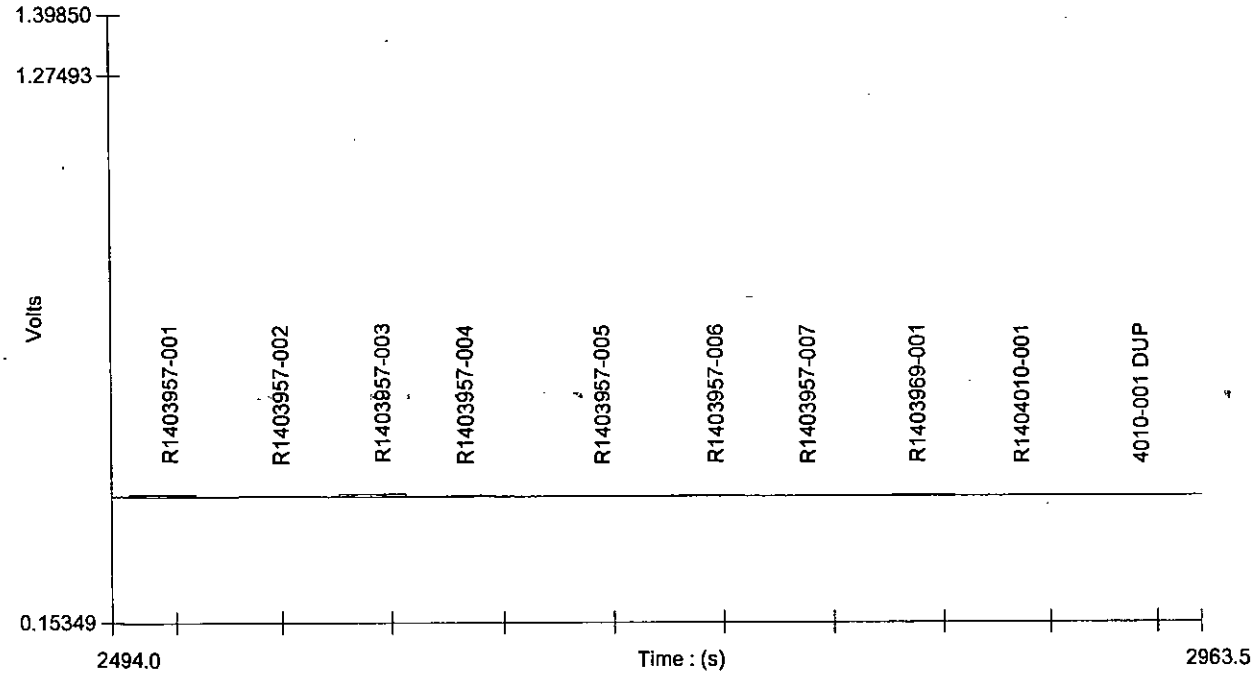


00321

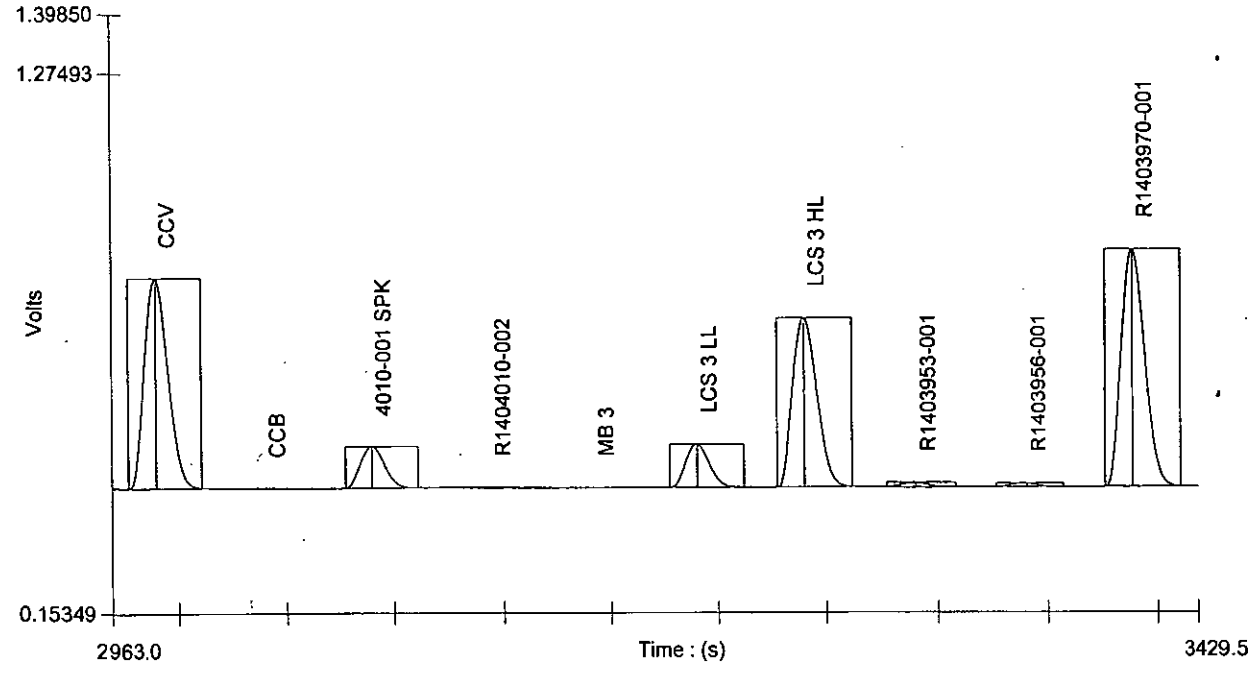
Author: GABRIELA NITA-JOUPPI

Date : 6/4/2014

Channel 2 (cyanide) - Set: 6 / 11



Channel 2 (cyanide) - Set: 7 / 11

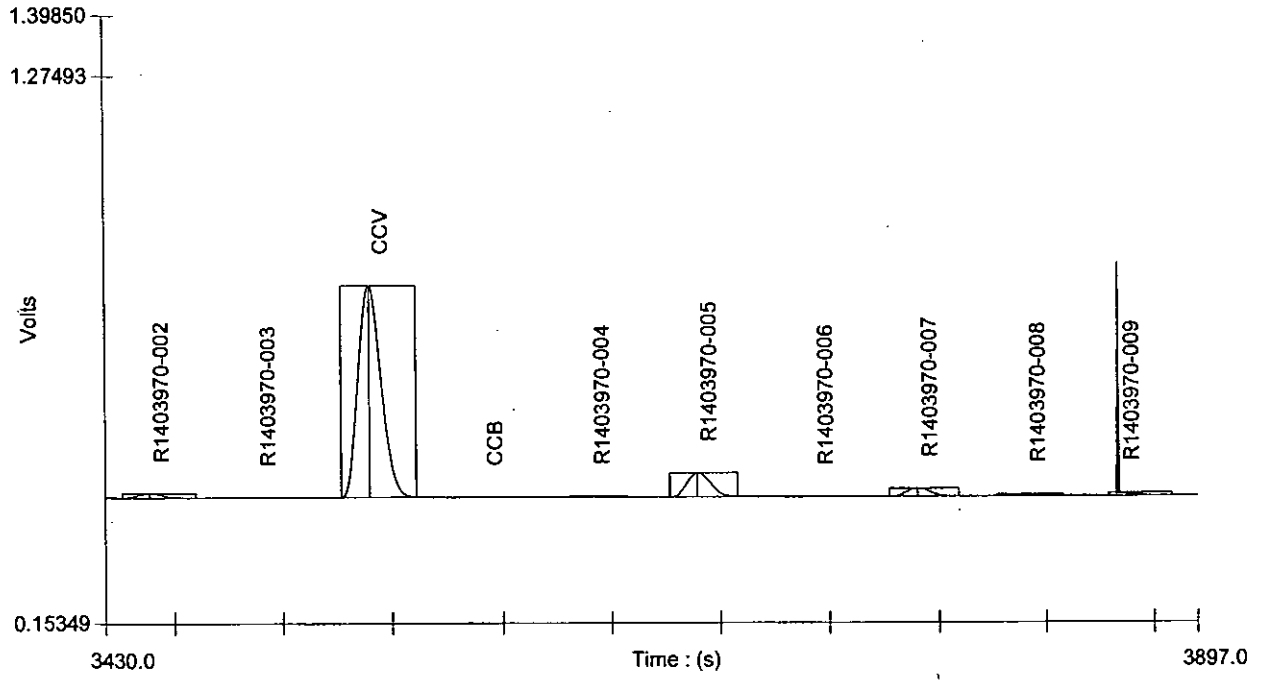


00322

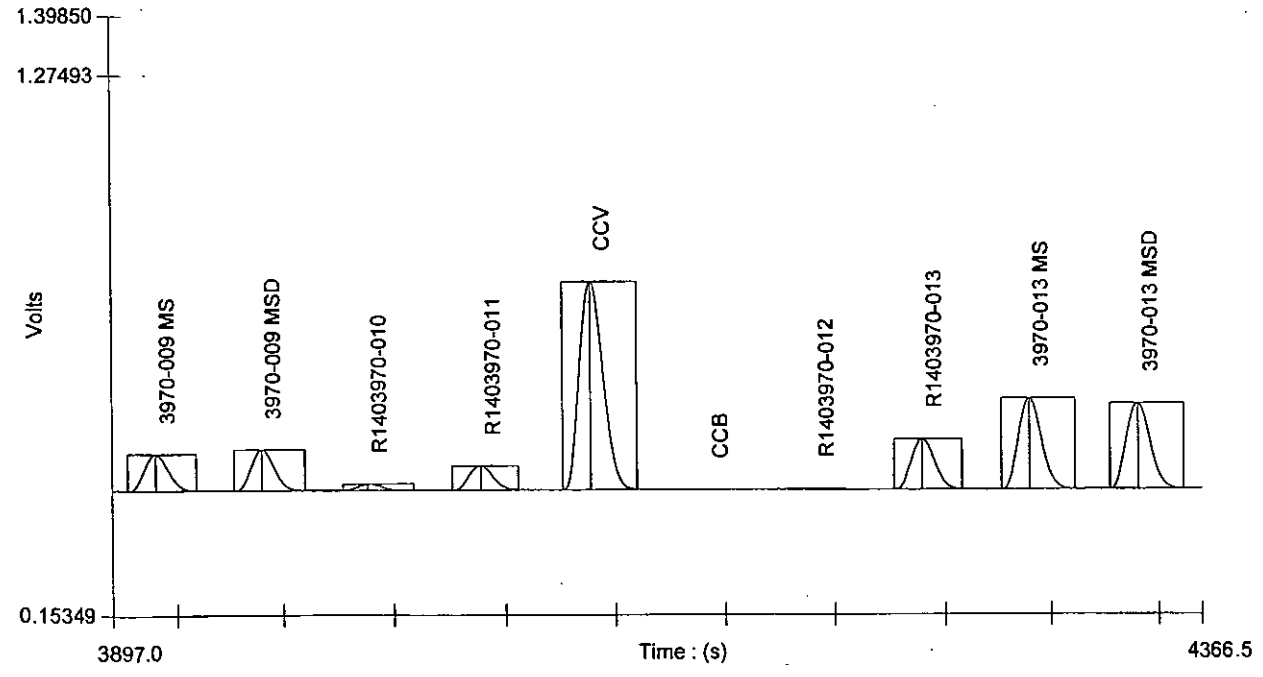
Author: GABRIELA NITA-JOUPPI

Date : 6/4/2014

Channel 2 (cyanide) - Set: 8 / 11



Channel 2 (cyanide) - Set: 9 / 11

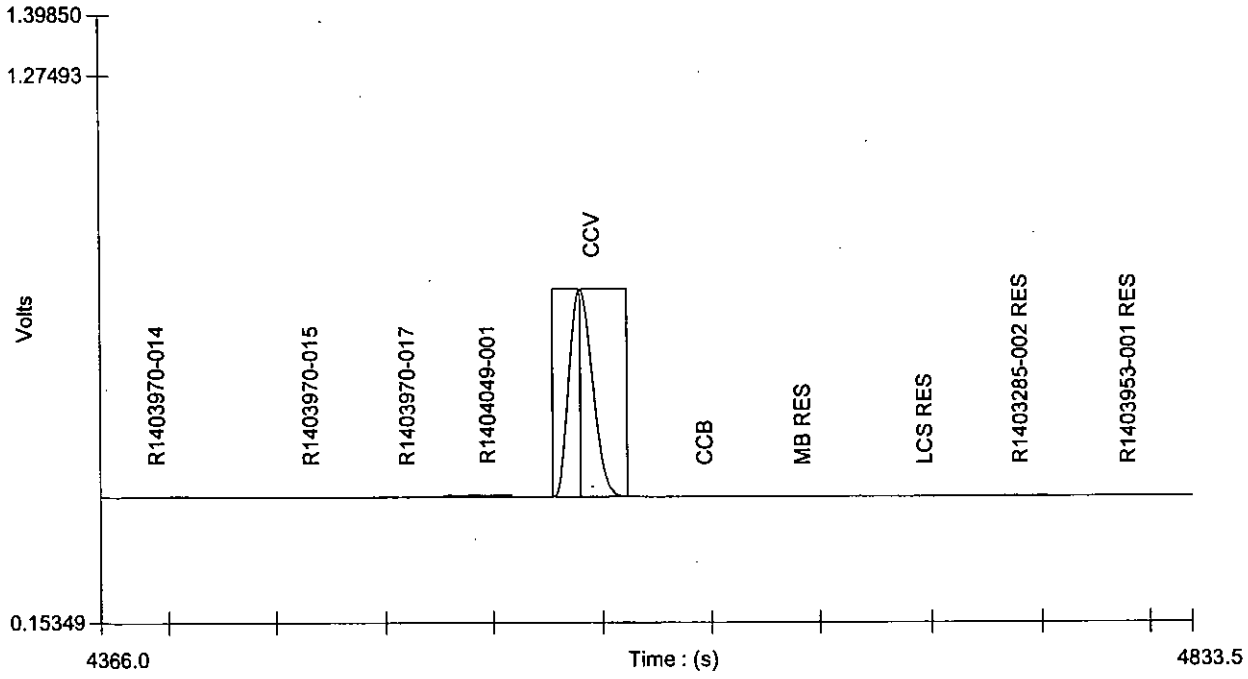


00323

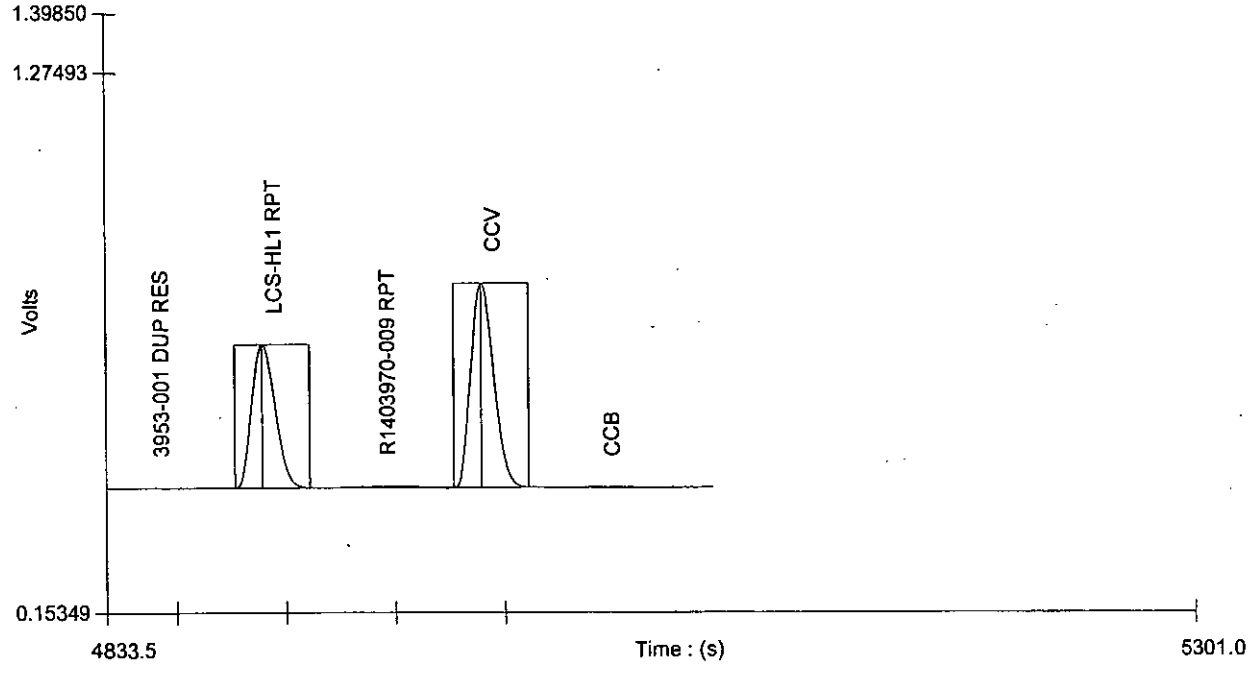
Author: GABRIELA NITA-JOUPPI

Date : 6/4/2014

Channel 2 (cyanide) - Set: 10 / 11



Channel 2 (cyanide) - Set: 11 / 11



00324

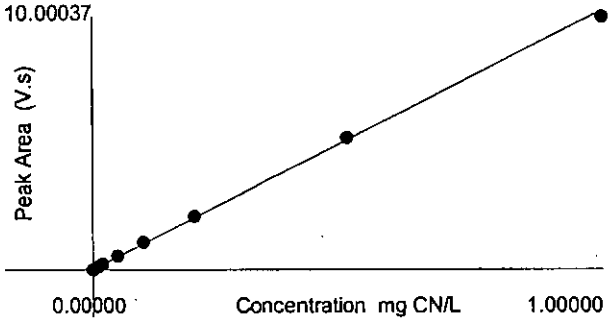
Author: GABRIELA NITA-JOUPPI

Date : 6/4/2014

Table : 1 (Cyanide 9012B/SM4500CN QC8500)

	Known Conc. (mg CN/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg CN/L)	Detection Date	Detection Time
1	1.00000	1	10.00037	0.84984	0.0	2.4	0.97453	6/4/2014	9:46:33 AM
2	0.50000	1	5.21368	0.44571	0.0	-1.7	0.50788	6/4/2014	9:47:20 AM
3	0.20000	1	2.11966	0.18166	0.0	-3.2	0.20625	6/4/2014	9:48:06 AM
4	0.10000	1	1.09000	0.09293	0.0	-5.9	0.10587	6/4/2014	9:48:53 AM
5	0.05000	1	0.54078	0.04636	0.0	-4.7	0.05233	6/4/2014	9:49:40 AM
6	0.02000	1	0.21816	0.01868	0.0	-4.3	0.02087	6/4/2014	9:50:26 AM
7	0.01000	1	0.11035	0.00945	0.0	-3.3	0.01036	6/4/2014	9:51:13 AM
8	0.00000	1	-0.01719	-0.00122			-0.00207	6/4/2014	9:51:59 AM

Figure : 1 (Cyanide 9012B/SM4500CN QC8500)



Area = 10.24618 * Conc + 0.00431
Conc = 0.09749 * Area - 0.00039
Correlation Coefficient (r) = 0.99993

Weighting : 1/x

Pipet used: Beta

00325

Columbia Analytical Services
Now part of the ALS Group
1565 Jefferson Rd., Rochester NY 14623

Analyst: GNISTA Distillation Date: 6/3/2014

Analysis: Total Cyanide Instrument: Lachat 8500 Analyzer Date: 6/4/2014

Quality Control:

	Same as Log #, Date	Stock Sol (mLs)	Stock Sol (mg/L)	Final Vol mLs	True Value (mg/L)
a) Stds. Prep. :	WC85134D, 4/3/08				
10 ppm Working Stock:	WC85134B, 4/3/08	0.984	1016.371	100	10.0
b) I/CCV (Ref.) Prep.:	WC92067D, 8/20/09	0.5	10	10	0.500
10 ppm Working Stock:	WC85134C, 4/3/08	0.979	1021.03	100	10.0
c) LCS (water) Prep:	WC92218B , 6/16/10	0.24	10	6	0.4
LCS (water) Prep:	WC92218A , 6/16/10	0.06	10	6	0.1
LCS (soil) Prep. :	WC92218B , 6/16/10	0.24	10	~1 g.	~ 2.4 (see bench sheet)
LCS (soil) Prep:	WC92218A , 6/16/10	0.06	10	~1 g.	~ 0.6 (see bench sheet)
d) Mtx Spk (water) Prep:	WC92218C , 6/16/10	0.06	10	6	0.1
Mtx Spk (soil) Prep:	WC92218C , 6/16/10	0.06	10	~1 g.	~0.6(see bench sheet)

Method Reference: EPA 335.4; 9012B

Instrument log filled in? (Y) (N)

Stock Prep:
1000 mg/L TCN Std. Stock prepared 6/19/13, WC112297A, standardized 6/19/13, WC115031C
1000 mg/L TCN Ref. Stock prepared 6/19/13, WC112297B, standardized 6/19/13, WC115031D

10 mg/L Std. And Ref. working stocks are prepared weekly using the above stock solutions, diluting to volume with 0.25N NaOH

Reagents, Distillation:	**Log Book #**	**Comments**
Sulfamic Acid	WC126185C	
H2SO4/MgCl2 Solution	WC126230D	
1M NaOH	WC126222E	
Calcium Hypochlorite	WC126245D	
Na2S2O3	WC103219A	
Acetate Buffer/Zinc Acetate	WC126135E	
Cadmium Carbonate	WC103273C	
Anti-foam	NA	

Reagents, Autoanalyzer:		
Buffer	WC126250G	Exp.06/14/2014
Pyridine Barbituric Acid	WC126192B	Exp:8/2014

Chloramine-T, fresh daily: 2.00 g Chloramine-T WC126240d diluted to 500 mL with DI

Comments:

00326

TITLE PROJECT

Continued from page

6/19/13 BB (A) 1000 ppm TCN Stock #1 : Standard Stock 59164
Same as WC112067A:
To a tared 500mL vol. flask, add:
1.26g KCN (WC92229B)
1.00g KOH (WC92229H)
~400mL DI
Dissolve and bring to volume w/DI. Standardize and store @ 4°C in amber glass. Expires 6/19/14

(B) 1000ppm TCN Stock #2: Reference Stock 59163
To a tared 500mL vol. flask, add:
1.26g KCN (WC92229G)
1.00g KOH (WC92229H)
~400mL DI
Dissolve and bring to volume w/DI. Standardize and store @ 4°C in amber glass. Expires 6/19/14

6/19/13 NM (C) Color Reagent - TKN
- same as WC112264B. Exp. 1 month, 7/19/13.

(D) Buffer - TKN
- same as WC112286F. Exp. 1 month, 7/19/13.

(E) Buffer - TDTN + NO2
- same as WC112278I. Exp. 1 year, 6/19/14

6/19/13 BB (F) 0.0192 N $AgNO_3$
To a 500mL vol. flask, add ~400mL DI and 1.6324g $AgNO_3$ (WC103013I), previously dried @ 104°C. Mix to dissolve, then bring to volume w/DI. Use to standardize TCN stocks. Prepare fresh each use.

Continued to page

SIGNATURE DATE

RL 6/19/13

(A) Standardization of 0.0250N Iodine

$(5.0 mLs\ I_2)N = (5.13 mLs\ Na_2S_2O_3)(0.0250N)$

$N = 0.02565$

(B) Standardization of Sulfide reference

$$\frac{16.03[(5.0 mLs\ I_2)(0.02565N) - (1.8 mLs\ Na_2S_2O_3)(0.0250N)]}{0.002} = 653.22 ppm$$

6/19/13 BB

TCN Stock Standardization

(C) Std's of 1000ppm Stock #1 (WC112297A)

Trial #	mLs Stock #1	mLs 0.0192N $AgNO_3$ (WC112297F)	-BLK
BLK	0.0	0.03	-
1	5.0	5.14	5.11
2	5.0	5.12	5.09
3	5.0	5.10	5.07
			$\bar{x} = 5.09$

$mg/L\ CN^- = \frac{(5.09 mL)(0.0192N)(52)(1000)}{5.0 mL\ Stock\ \#1} = 1016.3712$ (5.09 mL @ 6/19/13)

Dil'n factor: $1000/1016.3712 = 0.984 mL \rightarrow 100 mL$ for 10ppm

(D) Std'n of 1000ppm Stock #2 (WC112297B)

Trial #	mLs Stock #2	mLs 0.0192N $AgNO_3$ (WC112297F)	-BLK
BLK	0.0	0.03	-
1	5.0	5.15	5.12
2	5.0	5.15	5.12
3	5.0	5.13	~~5.00~~ 5.10 dd 6/19/13
			$\bar{x} = 5.11333$

$mg/L\ CN^- = \frac{(5.11333 mL)(0.0192N)(52)(1000)}{5.0 mL\ Stock\ \#2} = 1021.0303$

Dil'n factor: $1000/1021.0303 = 0.979 mL \rightarrow 100 mL$ for 10 ppm.

4/3/08 (A) 0.25N NaOH

26.14 mls conc. NaOH (WC85011C) → Liter w/ DI.

Fresh per run.

(B) 10ppm TCN Std. Stock

1.022 mls of the 978.432 ppm TCN Std. Stock (WC85007E)

→ 100 mls w/ 0.25N NaOH (WC85134A)

(C) 10ppm TCN Ref. Stock

1.002 mls of the 998.4 ppm TCN Ref. Stock (WC85007F)

→ 100 mls w/ 0.25N NaOH (WC85134A)

(D) TCN Calibration Stds. Fresh per run

Conc.	mls 10ppm TCN Std. Stock (WC85134B)	mls 0.25N NaOH
1.00	1.0	9.0
0.50	0.50	9.50
0.20	0.20	9.80
0.10	1/10 dilution of 1.00 ppm Std	
0.05	1/10 dilution of 0.50 ppm Std	
0.02	1/10 dilution of 0.20 ppm Std	
0.01	1/10 dilution of 0.10 ppm Std	
0.00	0.00	10.0

(E) ICV/CCV TV=0.70 Fresh per run

0.70 mls 10ppm TCN Ref. Stock (WC85134C) + 9.30 mls 0.25N NaOH (WC85134A)

4/3/08 NM (F) NH_3 Carrier/Diluent

-same as WC85073F. Prepared solution X 3.

(G) Hypochlorite - NH_3

-same as WC85109F. Prepare fresh each run.

4/3/08 JM (F) Iodide - Iodate Titrant - Sulfite

0.4458g KIO_3 (WC85007E) + 4.25g KI (WC76272E) + 0.310g $NaHCO_3$ (WC76115E) dissolved in DI in 1L volumetric flask, and brought to volume. Store at 4°C exp 4/3/09

(G) Ascorbic Acid - Konelab

Same as WC85113C Store at 4°C exp 2 weeks 4/17/08

4/3/08 MB

4/4/08 NM

4/4/08 NM

4/8/08 NM

Received fr

(A) (8) x 2

CPI L

(B) (4) x 2

CPI L

Received fr

(C) (1) x 4

Orion L

431-4

Expire

(D) Post-Di

To a 2-L

(WC85133C

Pour off 10

w/ uPDI.

(E) Hypochlor

-same as

(F) Color Re

To a t

-75.0g S

-0.50g S

-454g U

stir until

(G) Buffer - T

-same as V

(H) Post-Dic

-same as

(I) Hypochlo

-same as

TITLE PROJECT

Continued from page

8/20/09 (A) TDS Reference
EW 0.9153g NaCl (WC85215H) diluted volumetrically to 1 liter w/ DI. Store in plastic bottle @4°C.
TV = 915 mg/L Exp: 8/20/10 (11634)

8/20/09 (B) Color Reagent - TKN
NM - same as WC92059G. Exp 1 month, 9/20/09.

(C) NH3 Carrier/Diluent
To a 2 liter plastic bottle add:
- 998g UPDI
- 3.68g conc. insta-analyzed H_2SO_4 (WC92064B)
Prepared solution x4.

8/20/09 As of 8/18/09 for Konelab:
NM (D) ICV/CCV TCN TV = 0.50
0.50 mls 10ppm TCN Ref Stock (WC85134C) + 9.50 mls 0.25N NaOH (WC85134H) 9.50 chkm 8/20/09

(E) ICV/CCV OPO_4 TV = ~~0.45~~ 0.345 chkm 8/20/09
0.25 mls 1.80ppm OPO_4 Ref Stock (WC85130G) + 9.75 mls UPDI

(E) ICV/CCV OPO_4 TV = ~~0.45~~ 0.36 chkm 8/20/09
~~0.25ml~~ 0.20ml 18.0ppm OPO_4 Ref Stock (WC85130F) + ~~9.75~~ 9.80 mls UPDI

(G) ICV/CCV NO_2 TV = 0.45
0.25ml 18.0 ppm NO_2 Ref Stock (1/10 dil of ~~WC85135B~~ WC72CC7G chkm 8/20/09) + 9.75mls UPDI

(H) ICV/CCV Cr^{+6} TV = 0.25
0.25mls 10 ppm Cr^{+6} Ref Stock (WC85129G) + 9.75 mls UPDI

(I) ICV/CCV NH_3 TV = 0.90
0.30mls 180 ppm NH_3 Reference stock (1/10 dil of WC85257G) + 9.50mls diluent (WC92045D)

8/20/09 (J) ICV/CCV TKN's (TV=4.00)
NMead 9.9mls PDMM + 0.1 mls 400ppm Reference working stock (WC92042C)

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PROPRIETARY INFORMATION

Continued from page

6/16/10 (A) TCN/WAD Low Level LCS:

For waters add 0.06ml 10ppm Standard Working Stock (WC691160B) to 6 ml DI. TV= 0.1000

For soils add 0.06ml 10/100ppm Standard Working Stock to 1g Ottawa Sand and 5ml DI. TV= 0.600
cap 6/16/10

(B) TCN/WAD High Level LCS:

For waters add 0.24ml 10ppm Standard Working Stock (WC691160B) to 6ml DI. TV=0.400

For soils add 0.24 ml 10ppm Standard Working Stock to 1.0g Ottawa Sand and 5 ml DI. TV= 2.40

(C) TCN/WAD Matrix Spike

For waters add 0.06ml 10ppm Standard Working Stock (WC691160B) to 6ml sample. TV=0.1000

For soils add 0.06 ml 10ppm Standard Working Stock to 1g sample and 5ml DI. TV= 0.600

6/17/10 HLR (D) Eriochrome Black T: Hardness Indicator

Add 100.0g NaCl (WC92151B) an 0.50g Eriochrome Black-T (WC92197C) to a tared 8-cup. Cap and shake well to mix. Store @ RT.
exp: 5/13/15

RP 6/17/10 (E) 0.00564N Sodium Thiosulfate:

Dilute 28.2ml of 0.1N $Na_2S_2O_3$ (WC92138A) to 500mL w/ DI water (volumetrically).
Expires 2 weeks → 7/1/10

(F) 10% Phosphoric acid

Add 10.0mLs of Concentrated H_3PO_4 (WC92115F) to ~70mL of DI water, mix and dilute to 100mL volumetrically. Store at room temperature.
expires 1 yr 6/17/10

(G) Standard Iodate Titrant (0.00564N) (WC85239A)

Weigh out 0.2012g of dried KIO_3 into a 1 Liter volumetric flask, dissolve in DI water and dilute to volume.
Prepare fresh each run.

Continued to page

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Analytical Results Summary

Instrument Name: R-pH-05 **Analyst:** DWARD **Analysis Lot:** 395218 **Method/Testcode:** 9045D/pH

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
R1403671-001	pH	N/A		NonAq Liquid	3.27 pH Units		3.27 pH Units	1					6/2/14 17:35:00	N	II
R1404004-001	pH	N/A		Water	6.15 pH Units		6.15 pH Units	1					6/2/14 16:15:00	N	II
R1404004-001	Temperature of pH Analysis	N/A		Water	25.40 deg C		25.4 deg C	1					6/2/14 16:15:00	N	II
R1404004-002	pH	N/A		Water	6.80 pH Units		6.80 pH Units	1					6/2/14 16:15:00	N	II
R1404004-002	Temperature of pH Analysis	N/A		Water	25.20 deg C		25.2 deg C	1					6/2/14 16:15:00	N	II
R1404013-001	pH	N/A		Water	7.46 pH Units		7.46 pH Units	1					6/2/14 16:15:00	N	I
R1404013-001	Temperature of pH Analysis	N/A		Water	25.90 deg C		25.9 deg C	1					6/2/14 16:15:00	N	I
R1404023-003	pH	N/A		Water	8.14 pH Units	mL	8.14 pH Units	1					6/2/14 16:15:00	N	II
R1404023-004	pH	N/A		Water	7.73 pH Units	mL	7.73 pH Units	1					6/2/14 16:15:00	N	II
R1404049-001	pH	N/A		Water	7.20 pH Units		7.20 pH Units	1					6/2/14 16:15:00	N	IV
R1404049-001	Temperature of pH Analysis	N/A		Water	25.60 deg C		25.6 deg C	1					6/2/14 16:15:00	N	IV
RQ1405956-01	pH	DUP	R1403671-001	NonAq Liquid	3.29 pH Units		3.29 pH Units	1				<1	6/2/14 17:35:00	N	II
RQ1405956-02	pH	DUP	R1404023-003	Water	8.16 pH Units	mL	8.16 pH Units	1				<1	6/2/14 16:15:00	N	II

395218

indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Limits for DI Water if pH < 5.5, or > 7.5 Notify QA!

Limits for Spec. Cond. >= 1 - Notify QA! (Limit is 2 umohs/cm)

Date: 6/12/14

pH holding time is 15 minutes from collection

Folder #	Order #	pH SM4500H+B 9040C	Corrosivity 9045D	CONDUCTIVITY 120.1 raw data	units	umhos/cm	TEMP °C	Analyst	Time	HT** (y/n)
MB/ICB	DIH_2O	5.778		0.43	uS	0.43	25.1	DW	1025/1600	
R14-4023	003	8.136		800	uS	800	25.4			N/Y
	003dup	8.155		792	uS	792	25.3			
↓	004	7.732		2231	uS	2231	25.5			↓
CCV	2767			2558	uS	2558				
CCB	DIH_2O			0.56	uS	0.56				
R14-4004	001	6.152					25.4	DW	1615	~
↓	002	6.796					25.2			
R14-4013	001	7.462					25.9			
R14-4049	001	7.202					25.6			↓
CCV	4.01	4.055					24.4			
R14-3671	001		3.267				23.8	DW	1735	~
↓	001dup		3.293				23.8			↓
CCV	7.00	7.012					23.7			

DW 6/12/14

** HT = holding time

pH Meter Calibration

STANDARDS 4.01 ✓ @ 25.0 °C 10.01 ✓ @ 24.2 °C ICV check 7.00 7.00 @ 24.0 °C

LOT #: BD826132E exp'. 10/15 BD826129I exp'. 5/15 BD826135D exp'. 3/16

Conductivity Meter Calibration (calibrate to 1412 and test 2767 & 146.9 standard)

N KCL: 1412 Calibrated (Yes / No) LOT #: BD826133E exp'. 9/24/14

Cell Constant: 1.057

N KCL: 2767 LOT #: BD826130H exp'. 9/5/14 Reading 2559

10% Limits: 2490.3 to 3043.7

N KCL: 146.9 LOT #: BD826130I exp'. 9/5/14 Reading 157.2

10% Limits: 132.2 TO 161.6

uS = 1 umhos/cm mS = 1,000 umhos/cm S = 1,000,000 umhos/cm

Analyst: DW DATE: 6/12/14 TIME: 1315

(L) Re-cal to the low range @ 1722

2.00: ✓ @ 22.0° BD826126I exp'. 4/14

7.00: ✓ @ 24.0

ICV 4.01: 3.905 @ 24.0

APPENDIX B

JUNE 2014

New York Department of Environmental Conservation
Inactive Hazardous Waste Site
Inspection Form-Treatment Systems

Site Name: *Primoshield Inc.*	NYSDEC Site Number: *633027*	NYSDEC PM: *Will Welling*
Site Location: *St. Vincent Street, Utica, NY*	Site Classification # (circle): 1 2 2a 3 (4)	Primary Site Contact: *Will Welling*
Site Inspection Date: 6-23-14	Purpose of Inspection: Annual (15 month) Sampling + Inspection	
Name of Inspector: Karl Ladner	Title: Env Tech	Agency/Company: MACTEC/AMEC
Phone Number: 518-622-3014		Address: *511 Congress Streeet, Suite 200 Portland, ME 04101*

Treatment Systems

System Status				General Observations: Operated System in Hand For Inspection
System in Operation During Visit?	(Yes)	No		
Manned on a Fulltime basis?	Yes	(No)		
Maintenance Logs Current?	Yes	No	(NA)	
Equipment Calibration Logs Current?	Yes	No	(NA)	
Pump working?	(Yes)	No		
Initial flow rate (gpm):	30 gpm			
Pressure before basket strainers (P1):	0			
Pressure after basket strainers: (P2)	0			
Basket Strainer Inspected and cleaned?	Yes	(No)		Strainers Removed
Flow rate after cleaning filters (gpm):	NA			
Pressuer after cleaning basket strainers: (P1)	Yes	No		
Totalizer reading (gallons)	01217500			
Discharge Monitoring	(Yes)	No		
Does the system require a discharge permit or discharge to a POTW?	(Yes)	No		
Is Permit Performance Monitoring Implemented?	(Yes)	No		
Condition of Operational Controls	(Good)	Poor	NA	
Condition of Gauges	(Good)	Poor	NA	
Condition of flow meters	(Good)	Poor	NA	
Condition of System Alarms	(Good)	Poor	NA	
Condition of Pumps	(Good)	Poor	NA	
Condition of Flow Pipes or Hoses	(Good)	Poor	NA	
Pipes Labeled with Direction of Flow and Contents	Yes	(No)	NA	
Condition of Valves	(Good)	Poor	NA	
Condition of Containment Structures (berms etc.)	Good	Poor	(NA)	
Evidence of Leaking	Yes	(No)	NA	
Condition of Feed/Extraction Pumps	Good	Poor	(NA)	
Vaulted Area Condition	(Good)	Poor	NA	
Lighting in Work Areas Adequate	(Yes)	No	NA	
Condition of Collection/Discharge Trenches	(Good)	Poor	NA	
Clean of Debris	(Good)	Poor	NA	
Evidence of Sedimentation	Good	Poor	(NA)	Unknown
Air Stripper Condition	Good	Poor	(NA)	
Noticeable Odors	Yes	No	NA	
Air Emission Permit Required	Yes	No	NA	
Permit Performance Monitoring Implemented	Yes	No	NA	
Condition of Storage Tanks/Containers	Good	Poor	NA	
Evidence of Leaks	Yes	No	NA	
Tank Compatible with Contents	Yes	No	NA	
Evidence of Leaks	Yes	No	NA	
Labeled Appropriately	Yes	No	NA	
Condition of Filter Presses	Good	Poor	NA	
Condition of Extraction Wells/Recharge Wells	Good	Poor	NA	

List other applicable treatment systems/components and their overall condition:

Chemical Handling Practices

Are good management practices and handling requirements being applied?	Yes	No	(NA)	General Observations: No Chemicals in use
Does the usage of chemical for the treatment system appear to meet O&M specifications?	Yes	No	(NA)	

New York Department of Environmental Conservation
Inactive Hazardous Waste Site
Inspection Form-Treatment Systems

Interviews/Additional Contacts			
Name/Title	Phone:	Company/Entity	Contact Information

Additional Observation Notes:

1. Cleared Fence of Vines & Limbs to support top rail Installation
2. Arrow Fence on site TUES. 6/24/14. Completed installation of top rails of chain link fencing.
3. P-101D was damaged by heavy machinery possibly winter plowing initially I was unable to install bladder pump. Joel Carcinaldi of Metal Logix assisted by getting a forklift to straighten bent casing enough to allow installation of bladder pump.

Photograph Log:	
Photograph 1	First section of toprail installed on TUES June 24, 2014. Brush cleared from fence by K. Hadner.
Photograph 2	Second section of toprail installed.
Photograph 3	End cleanout for Trench #3, located just South of the back yard of adjacent residence
Photograph 4	Close up of cleanout to end of Trench #3, where a grab sample was collected.
Photograph 5	P-101D after being straightened by fork life allowing bladder pump to be installed for sample collection.
Photograph 6	Collection manhole where the 3 collection trenches discharge.
Photograph 7	Interior of collection manhole.
Photograph 8	looking West at site from St Vincent Street.
Photograph 9	
Photograph 10	

Performance Monitoring

Were check samples collected during this visit? (Yes) No

Sample type collected *(circle or write in other)*: Groundwater Effluent (Effluent collected during May 29, 2014 site inspection by Karl Hadner.)

List Parameters/Methods Collected Per Media:

15 month GW LTM samples from wells P-101D, P-103, P-104, P-105, P-106S, P-106D, P-107S, P-107D, P-108. Analyzed for VOCs, and selected metals. Collected grab sample from end cleanout of Trench 3 (near Rodrigues residence).

Analytical Laboratory/Location:

ALS Life Sciences/Environmental (ALS) 1565 Jefferson Road Building 300 Suite 360 Rochester, NY 14623

Sample Observations: No obvious odor, sheens, PID readings. Many wells are very low reading. P-107D has rock/low turbidity issues.



1. First section of top rail installed on Tues June 24, 2014. Brush cleared from fence by K. Ladner.



2. Second section of top rail installed.



3. End cleanout for Trench #3, located just south of the backyard of the adjacent residence.



4. Close up of cleanout to Trench #3, where a grab sample was collected.



5. P-101D after being straightened by fork lift allowing bladder pump to be installed for sample collection.



6. Collection manhole where the 3 collection trenches discharge.



7. Interior of collection manhole.



8. Looking west at site from St Vincent Street.

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

P10 10X4

JOB NUMBER: 3612122251-04.****

PROJECT: NYSDEC Primoshield Inc.

FIELD SAMPLE NUMBER: 633027 ~~633028~~

SITE ID: (MW) P- ~~1220~~ 101D

SITE TYPE: WELL

DATE: 6/24/14 - 6/25/14

ACTIVITY: START 6/24/14 ~~1450~~ 1505 END 6/25/14 1150

SAMPLE TIME: 1130

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT: [X] TOP OF WELL RISER [ ] TOP OF PROTECTIVE CASING

INITIAL DEPTH TO WATER	28.26 FT	WELL DEPTH (TOR)	87.0 FT	PROTECTIVE CASING STICKUP (FROM GROUND)	2.4 FT
FINAL DEPTH TO WATER	60.40 FT	SCREEN LENGTH	10' FT	CASING / WELL DIFFER.	0.44 FT
DRAWDOWN VOLUME	— GAL	PID AMBIENT AIR	— PPM	WELL DIAM.	2" IN
TOTAL VOL. PURGED	≈8 GAL	PID WELL MOUTH	— PPM	PRESSURE TO PUMP	45 PSI
		RATIO OF DRAWDOWN VOLUME TO TOTAL VOLUME PURGED: —		REFILL SETTING	12.5
				DISCHARGE SETTING	25

(Initial - final x 0.16 {2-inch} or x 0.65 {4-inch})

(purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter)

WELL INTERGRITY:

	YES	NO	N/A
CAP	X		
CASING	X	Cracked	
LOCKED COLLAR	X	Cracked	

PURGE DATA

TIME	DEPTH TO WATER (ft)	PURGE RATE (ml/m)	TEMP. (deg. c)	SPECIFIC CONDUCTANCE (mS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (ntu)	ORP REDOX (mv)	COMMENTS
1521	28.24								
1528	53.17								5 gallons
1532	60.41								6.5 gallons
1538	60.35	Pump has been pulled							
~~1545~~	59.68								
6/25/14									
0930	33.90								
1035	31.24	Start pump and set rate							
1040	33.53	120	14.4	1.030	8.0	1.1	32	-97	
1045	34.~~40~~	↓	15.1	1.213	7.9	0.6	36	-126	
1050	34.98	130	15.2	1.261	7.9	0.3	40	-125	
1055	35.41	80	15.9	1.268	7.9	0.3	34	-132	
1100	35.81	↓	16.2	1.270	7.9	0.3	35	-146	
1105	36.24	↓	16.4	1.267	7.9	0.2	31	-137	
1110	36.56	80	16.5	1.265	7.9	0.3	29	-149	
1115	37.01	↓	16.6	1.256	7.9	0.3	25	-150	
1120	37.32	↓	16.7	1.250	7.9	0.2	27	-150	Purged ≈1.4 gallons.
			17	1.25	7.9	0.2	27	-150	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: [ ] GEOPUMP (peristaltic) [X] QED BLADDER / whale

TYPE OF TUBING: [ ] HIGH DENSITY POLYETHYLENE [X] OTHER LDPE

TYPE OF PUMP MATERIAL: [X] STAINLESS STEEL [ ] OTHER

TYPE OF BLADDER MATERIAL: [X] TEFLON [ ] OTHER

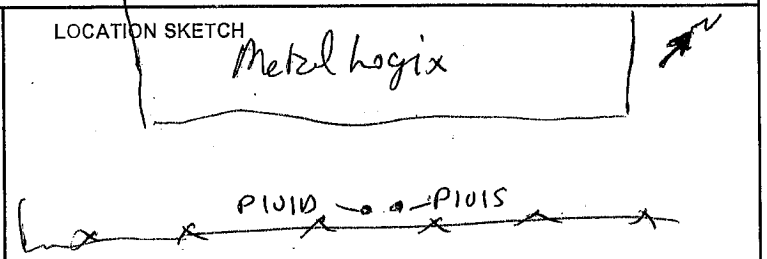
ANALYTICAL PARAMETERS

	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[X] VOC	8260B	HNO3 to pH <2	3 x 40ml	[X]
[ ] VOC	624	HNO3 to pH <2	2 x 40ml	[ ]
[X] TAL METALS	6010B/7470A/7141A	HNO3 to pH <2	250 ~~500~~ ml poly	[X] ~~Field-Filtered~~
[ ] TAL METALS (Dissolved)	6010B/7470A/7141A	HNO3 to pH <2	500 ml poly	[ ]
[ ] pH	150.1	4 DEG. C		[ ]
[ ] Cyanide	9010			[ ]
[ ] _____				[ ]

NOTES: Purged down to 60.4' with whale pump sampled recharge next day with bladder pump.

SIGNATURE: Jerry Rudolf BPW 6/30/14

LOCATION SKETCH



FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

JOB NUMBER: 3612122251-04.****

PROJECT: NYSDEC Primoshield Inc.
FIELD SAMPLE NUMBER: 633027P103XX
SITE ID: (MW) P-103
SITE TYPE: WELL
DATE: 6/23/14-6/24/14
ACTIVITY: START 6/23/14 1700 END 6/24/14 1305
SAMPLE TIME: 1255

WATER LEVEL / PUMP SETTINGS

INITIAL DEPTH TO WATER: 7.03 FT
FINAL DEPTH TO WATER: 8.97 FT
DRAWDOWN VOLUME: — GAL
(Initial - final x 0.16 {2-inch} or x 0.65 {4-inch})
TOTAL VOL. PURGED: 11.5 ~~10+1.5~~ 11.5 GAL
(purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter)

MEASUREMENT POINT
[X] TOP OF WELL RISER
[ ] TOP OF PROTECTIVE CASING

WELL DEPTH (TOR): 18.2 FT
SCREEN LENGTH: 10 FT
RATIO OF DRAWDOWN VOLUME TO TOTAL VOLUME PURGED: —

PROTECTIVE CASING STICKUP (FROM GROUND): 2.8 FT
PID AMBIENT AIR: — PPM
PID WELL MOUTH: — PPM
PRESSURE TO PUMP: — PSI
REFILL SETTING: —

CASING / WELL DIFFER.: 0.32 FT
WELL DIAM.: 2" IN

WELL INTERGRITY:

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED COLLAR	X	X	

DISCHARGE SETTING: —

PURGE DATA

TIME	DEPTH TO WATER (ft)	PURGE RATE (ml/m)	TEMP. (deg. c)	SPECIFIC CONDUCTANCE (mS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (ntu)	ORP REDOX (mv)	COMMENTS
1707	7.03	Start purge with whale pump.							Purged 5 Gallons
1717	17.15								
1727	15.87								
1732	17.90+								Purged total of 10 Gallons.
6/24/14									
1150	7.69								
1158	7.89	Start	Ck pump	and set rate					
1205	8.13	150	15.2	0.670	7.3	6.6	6.5	-35	
1210	8.26	110	15.7	0.668	7.2	4.6	5.9	-24	
1215	8.37	↓	15.9	0.668	7.2	4.3	4.1	-24	
1220	8.47	105	15.9	0.668	7.2	4.3	3.5	-23	
1225	8.54	↓	16.1	0.667	7.2	4.1	1.9	-21	
1230	8.63	↓	16.0	0.665	7.2	4.3	1.6	-21	
1235	8.72	100	16.0	0.665	7.2	4.4	1.4	-22	
1240	8.79	↓	16.2	0.663	7.3	4.0	1.5	-20	
1245	8.87	↓	16.2	0.662	7.3	4.2	1.1	-21	
1250	8.97	100	16.1	0.662	7.3	4.2	0.8	-20	Purged an additional 1.5 Gallons
			16	0.662	7.3	4.2	0.8	-20	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
[X] GEOPUMP (peristaltic)
[ ] QED BLADDER

TYPE OF TUBING
[ ] HIGH DENSITY POLYETHYLENE
[X] OTHER LDPE/Whalepump

TYPE OF PUMP MATERIAL
[ ] STAINLESS STEEL
[ ] OTHER _____

TYPE OF BLADDER MATERIAL
[ ] TEFLON
[ ] OTHER _____

ANALYTICAL PARAMETERS

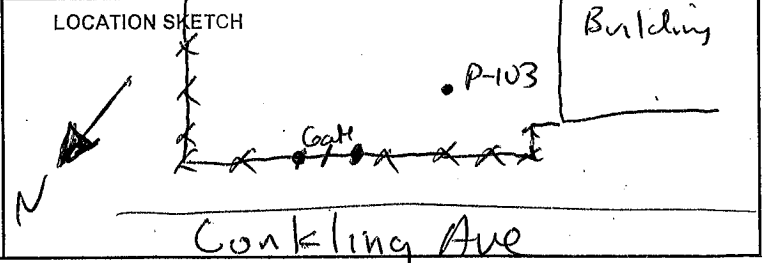
	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[X] VOC	8260B	HNO3 to pH <2	3 x 40ml	[X]
[ ] VOC	624	HNO3 to pH <2	2 x 40ml	[ ]
[X] TAL METALS	6010B/7470A/7141A	HNO3 to pH <2	250 ~~500~~ ml poly	[X] ~~Field Filtered~~
[ ] TAL METALS (Dissolved)	6010B/7470A/7141A	HNO3 to pH <2	500 ml poly	[ ]
[ ] pH	150.1	4 DEG. C		[ ]
[ ] Cyanide	9010			[ ]
[ ] _____				[ ]

P106D
P106S

NOTES: Purged dry with whale pump on 6/23/14.
Return to sample 6/24/14.

SIGNATURE: [signature] BGW 6/30/14

LOCATION SKETCH



FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

JOB NUMBER: 3612122251-04.****

PROJECT: NYSDEC Primoshield Inc.

FIELD SAMPLE NUMBER: 633027P104XX (XD)

SITE ID: (MW) P-104

SITE TYPE: WELL

DATE: 6/24/14

ACTIVITY: START 0815 END 1050

SAMPLE TIME: 0940

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT
- [X] TOP OF WELL RISER
- [ ] TOP OF PROTECTIVE CASING

INITIAL DEPTH TO WATER	6.27 FT	PROTECTIVE CASING STICKUP (FROM GROUND)	25 3/4" FT
FINAL DEPTH TO WATER	7.98 FT	WELL DEPTH (TOR)	17.5 FT
DRAWDOWN VOLUME	0.27 ~~1.72~~ GAL	SCREEN LENGTH	10 FT
TOTAL VOL. PURGED	3.5 GAL	RATIO OF DRAWDOWN VOLUME TO TOTAL VOLUME PURGED	.08
CASING / WELL DIFFER.	4" FT	PID AMBIENT AIR	NA PPM
WELL DIAM.	2 IN	PID WELL MOUTH	NA PPM
		PRESSURE TO PUMP	NA PSI
		REFILL SETTING	NA
		DISCHARGE SETTING	NA

(Initial - final x 0.16 {2-inch} or x 0.65 {4-inch})

(purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter)

WELL INTERGRITY:

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED	X		
COLLAR	X		

PURGE DATA

TIME	DEPTH TO WATER (ft)	PURGE RATE (ml/m)	TEMP. (deg. c)	SPECIFIC CONDUCTANCE (mS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (ntu)	REDOX (mv)	COMMENTS
0830	Began	Pumping							
0835	7.83	200	13.83	0.612	6.04	3.33	4.83	219.3	
0840	7.83	200	13.91	0.599	6.01	3.24	1.89	209.5	
0845	7.80	210	13.79	0.595	6.11	3.75	1.87	207.8	
0850	7.82	200	13.89	0.591	6.12	3.70	1.91	194.1	
0855	7.90	200	14.07	0.588	6.17	3.17	1.31	189.3	
0900	7.92	200	14.16	0.586	6.13	3.56	1.54	183.1	
0905	7.95	160	14.20	0.587	6.29	3.44	1.24	175.8	
0910	7.98	160	14.13	0.587	6.33	3.47	1.84	169.0	
0915	7.98	140	14.14	0.587	6.34	3.34	1.84	165.4	
0920	7.98	160	14.25	0.587	6.41	3.24	2.14	161.5	
0925	7.96	150	14.28	0.588	6.45	3.31	2.97	157.0	
0930	7.98	160	14.21	0.590	6.48	3.24	1.82	154.6	
0935	7.98	160	14.29	0.592	6.53	3.17	1.87	150.0	
	Also collected duplicate sample 633027P104XD								
			14	0.592	6.5	3.2	1.9	150	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] GEOPUMP (peristaltic)
- [ ] QED BLADDER

TYPE OF TUBING
- [ ] HIGH DENSITY POLYETHYLENE
- [X] OTHER LDPE

TYPE OF PUMP MATERIAL
- [ ] STAINLESS STEEL
- [ ] OTHER

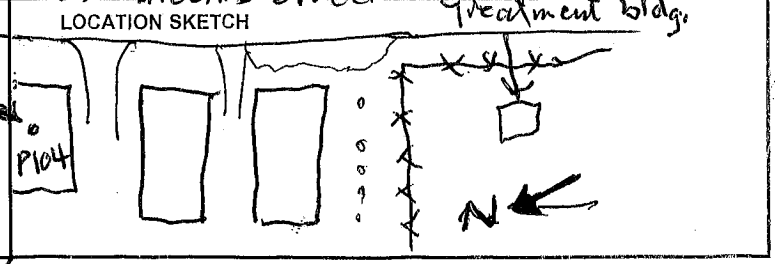
TYPE OF BLADDER MATERIAL
- [ ] TEFLON
- [ ] OTHER

ANALYTICAL PARAMETERS

	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[X] VOC	8260B	HNO3 to pH <2	3 2 x 40ml	[X]
[ ] VOC	624	HNO3 to pH <2	2 x 40ml	[ ]
[X] TAL METALS	6010B/7470A/7141A	HNO3 to pH <2	250 ~~500~~ ml poly	[X] ~~Field Filtered~~
[ ] TAL METALS (Dissolved)	6010B/7470A/7141A	HNO3 to pH <2	500 ml poly	[ ]
[ ] pH	150.1	4 DEG. C		[ ]
[ ] Cyanide	9010			[ ]
[ ]				[ ]

NOTES:

LOCATION SKETCH



SIGNATURE: Karl Fadrus JR 6/30/14

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

JOB NUMBER: 3612122251-04.****

PROJECT: NYSDEC Primoshield Inc.
FIELD SAMPLE NUMBER: 633027 P105XX
SITE ID: (MW) P- 105
SITE TYPE: WELL
DATE: 6/23/14
ACTIVITY: START 1250 END 1430
SAMPLE TIME: 1420

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT: [X] TOP OF WELL RISER [ ] TOP OF PROTECTIVE CASING

INITIAL DEPTH TO WATER	4.59 FT	WELL DEPTH (TOR)	17.97 FT	PROTECTIVE CASING STICKUP (FROM GROUND)	34 3/4 IN FT
FINAL DEPTH TO WATER	5.91 FT	SCREEN LENGTH	10 FT	PID AMBIENT AIR	— PPM
DRAWDOWN VOLUME (initial - final x 0.16 {2-inch} or x 0.65 {4-inch})	0.21 GAL	RATIO OF DRAWDOWN VOLUME TO TOTAL VOLUME PURGED	0.1	PID WELL MOUTH	— PPM
TOTAL VOL. PURGED (purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter)	2.1 Gallons ~~liters~~ GAL			PRESSURE TO PUMP	— PSI
				REFILL SETTING	—

CASING / WELL DIFFER.: 5 3/4 IN FT
WELL DIAM.: 2 IN
DISCHARGE SETTING: —

WELL INTERGRITY:

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED	X		
COLLAR		X	

PURGE DATA

TIME	DEPTH TO WATER (ft)	PURGE RATE (ml/m)	TEMP. (deg. c)	SPECIFIC CONDUCTANCE (mS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (ntu)	REDOX (mv)	COMMENTS
~~1250~~	4.59	Start pump + set rate							
1301	5.47	160	15.48	.854	7.0	0.75	6.2	-27	1250 Left to Assist Jerry
1307	5.73	150	16.69	.864	7.6	0.88	0.99	-14.9	90°
1341	5.89	80	20.43	.863	7.2	0.83	2.58	-41.0	
1349	5.89	80	20.22	.841	7.2	0.78	1.87	-42.0	
1355	5.91	80	20.13	.840	7.2	0.71	1.51	-42.2	
1400	5.91	80	20.25	.859	7.2	0.66	2.0	-42.6	
1405	5.92	80	20.04	.859	7.2	0.64	2.52	-42.5	
1410	5.91	80	20.17	.858	7.2	0.62	0.71	-42.8	
1415	5.91	80	20.21	.858	7.2	0.61	3.07	-43.1	
1420	5.91	80	20.18	.856	7.2	0.59	2.47	-43.1	
			20	0.856	7.2	0.6	2.7	-43	

EQUIPMENT DOCUMENTATION

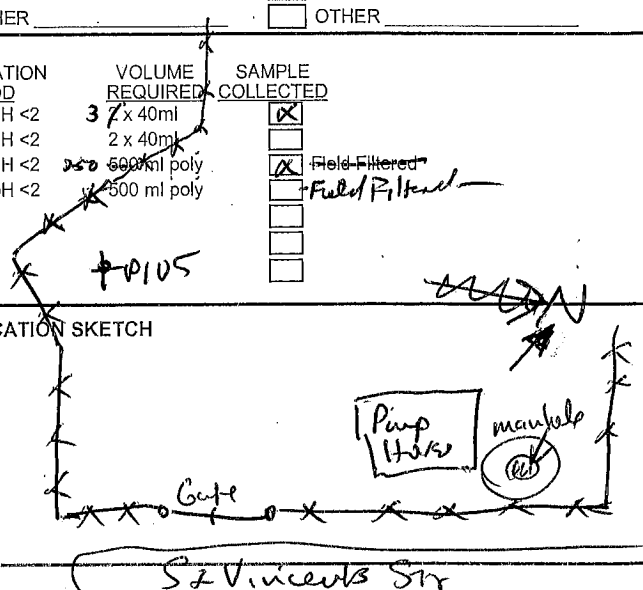
TYPE OF PUMP: [X] GEOPUMP (peristaltic) [ ] QED BLADDER
TYPE OF TUBING: [ ] HIGH DENSITY POLYETHYLENE [X] OTHER LDPE
TYPE OF PUMP MATERIAL: [ ] STAINLESS STEEL [ ] OTHER
TYPE OF BLADDER MATERIAL: [ ] TEFLON [ ] OTHER

ANALYTICAL PARAMETERS

	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[X] VOC	8260B	HNO3 to pH <2	3 x 40ml	[X]
[ ] VOC	624	HNO3 to pH <2	2 x 40ml	[ ]
[X] TAL METALS	6010B/7470A/7141A	HNO3 to pH <2	~~250~~ 500ml poly	[X] ~~Field Filtered~~ Field Filtered
[ ] TAL METALS (Dissolved)	6010B/7470A/7141A	HNO3 to pH <2	500 ml poly	[ ]
[ ] pH	150.1	4 DEG. C		[ ]
[ ] Cyanide	9010			[ ]
[ ] _____				[ ]

NOTES:

LOCATION SKETCH



SIGNATURE: JR for Karl Ladner JR 6/30/14

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

JOB NUMBER: 3612122251-04.****

PROJECT: NYSDEC Primoshield Inc.
FIELD SAMPLE NUMBER: 633027P1065xq
SITE ID: (MW) P-1065
SITE TYPE: WELL
DATE: 6/23/14 - 6/24/14
ACTIVITY: START 6/23/14 1625 END 6/24/14 1300
SAMPLE TIME: 1245

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT: [X] TOP OF WELL RISER [ ] TOP OF PROTECTIVE CASING

INITIAL DEPTH TO WATER	7.63 FT	PROTECTIVE CASING STICKUP (FROM GROUND)	4.1 FT
FINAL DEPTH TO WATER	10.20 FT	CASING / WELL DIFFER.	0.27 FT
DRAWDOWN VOLUME (Initial - final x 0.16 {2-inch} or x 0.65 {4-inch})	0.41 GAL	WELL DEPTH (TOR)	18.5' FT
TOTAL VOL. PURGED (purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter)	6.3+2=8.3 GAL	SCREEN LENGTH	10' FT
RATIO OF DRAWDOWN VOLUME TO TOTAL VOLUME PURGED	—	PID AMBIENT AIR	— PPM
		PID WELL MOUTH	— PPM
		PRESSURE TO PUMP	— PSI
		REFILL SETTING	—
		WELL DIAM.	2" IN
		DISCHARGE SETTING	—

WELL INTERGRITY:

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED	X		
COLLAR			

PURGE DATA

TIME	DEPTH TO WATER (ft)	PURGE RATE (ml/m)	TEMP. (deg. c)	SPECIFIC CONDUCTANCE (mS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (ntu)	REDOX (mv)	COMMENTS
1630	7.63	Purged dry with whale pump							Purged ≈4 gallons
1652	11.90	Purged dry again							Purged total 6.3 gallons.
1658	18.2								
6/24 1150	8.20	Began Pumping 6/24/14							
1150	8.45	200	15.02	0.634	6.03	2.47	5.03	98.1	
1200	8.65	140	15.33	0.627	6.08	1.91	1.97	99.9	
1205	8.85	150	15.81	0.609	6.10	2.42	3.20	98.9	
1210	9.08	150	16.09	0.604	6.10	3.81	1.97	97.6	
1215	9.25	150	15.75	0.598	6.06	4.24	2.42	97.3	
1220	9.56	150	15.94	0.594	6.06	4.76	1.31	98.4	
1225	9.72	150	15.92	0.596	6.04	5.07	1.41	98.8	
1230	9.91	150	15.80	0.596	6.05	5.13	2.96	99.2	
1235	10.07	150	15.86	0.595	6.05	5.20	1.43	99.0	
1240	10.20	150	15.41	0.594	6.04	5.06	1.25	98.5	
			16	0.594	6.0	5.1	1.3	99	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: [X] GEOPUMP (peristaltic) / whale pump; [ ] QED BLADDER
TYPE OF TUBING: [ ] HIGH DENSITY POLYETHYLENE; [X] OTHER LDPE
TYPE OF PUMP MATERIAL: [ ] STAINLESS STEEL; [ ] OTHER
TYPE OF BLADDER MATERIAL: [ ] TEFLON; [ ] OTHER

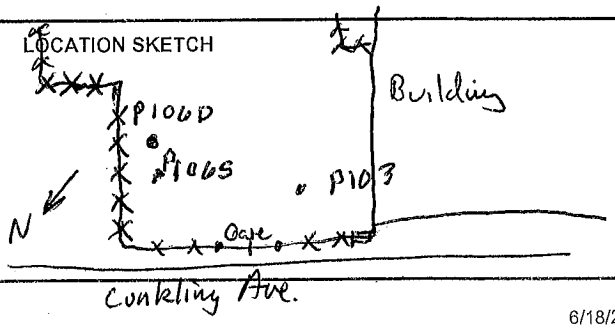
ANALYTICAL PARAMETERS

	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[X] VOC	8260B	HNO3 to pH <2	3 x 40ml	[X]
[ ] VOC	624	HNO3 to pH <2	2 x 40ml	[ ]
[X] TAL METALS	6010B/7470A/7141A	HNO3 to pH <2	250 ~~500~~ ml poly	[X] Field Filtered
[ ] TAL METALS (Dissolved)	6010B/7470A/7141A	HNO3 to pH <2	500 ml poly	[ ]
[ ] pH	150.1	4 DEG. C		[ ]
[ ] Cyanide	9010			[ ]
[ ]				[ ]

NOTES: Purged dry with whale pump on 6/23/14

SIGNATURE: Mark Jardine JR 6/30/14

LOCATION SKETCH



FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

JOB NUMBER: 3612122251-04.****

PROJECT: NYSDEC Primoshield Inc.
FIELD SAMPLE NUMBER: 633027P106DXX
SITE ID: (MW) P- 106D
SITE TYPE: WELL
DATE: 6/24/14
ACTIVITY: START 0835 END 1110
SAMPLE TIME: 1055

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT: [X] TOP OF WELL RISER [ ] TOP OF PROTECTIVE CASING

INITIAL DEPTH TO WATER	28.97 FT	PROTECTIVE CASING STICKUP (FROM GROUND)	4.0 FT
FINAL DEPTH TO WATER	30.85 FT	CASING / WELL DIFFER.	0.39 FT
DRAWDOWN VOLUME	0.3 GAL	WELL DEPTH (TOR)	~~77.7~~ FT
(initial - final x 0.16 {2-inch} or x 0.65 {4-inch})		WELL DIAM.	2 IN
TOTAL VOL. PURGED	≈2.6 GAL	SCREEN LENGTH	10' FT
(purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter)		PID AMBIENT AIR	— PPM
RATIO OF DRAWDOWN VOLUME TO TOTAL VOLUME PURGED	0.12	PID WELL MOUTH	— PPM
		PRESSURE TO PUMP	30 PSI
		REFILL SETTING	12
		DISCHARGE SETTING	3

WELL INTERGRITY:

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED COLLAR	X		

PURGE DATA

TIME	DEPTH TO WATER (ft)	PURGE RATE (ml/m)	TEMP. (deg. c)	SPECIFIC CONDUCTANCE (mS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (ntu)	REDOX (mv)	COMMENTS
0900	28.17	Start pump and set rate.							
0907	30.18	160	16.0	0.408	10.8	3.8	24	-28	
0915	30.80	↓	14.6	0.406	10.7	2.2	7.2	-42	
0920	31.13	160	14.3	0.408	10.8	2.1	5.9	-48	
0925	31.12	120	14.5	0.406	10.8	1.9	5.4	-53	
0930	31.12	↓	14.8	0.406	10.8	1.8	7.2	-57	
0935	31.14	↓	15.1	0.405	10.9	1.6	6.8	-59	
0940	31.14	120	15.1	0.404	10.9	1.5	7.0	-61	
0945	30.97	90	15.5	0.399	10.9	1.2	6.7	-65	
0950	30.91	↓	15.8	0.396	10.9	1.1	7.7	-72	
0955	30.84	↓	15.9	0.390	10.9	1.0	7.3	-83	
1000	30.81	90	16.0	0.383	11.0	0.9	7.8	-99	
1005	30.79	↓	16.2	0.375	10.9	0.9	7.6	-114	
1010	30.79	↓	16.2	0.371	10.9	0.8	7.6	-127	
1015	30.81	90	16.2	0.364	10.9	0.7	7.8	-131	
1020	30.81	↓	16.2	0.357	10.9	0.7	8.1	-137	
1025	30.82	↓	16.1	0.352	10.8	0.6	9.3	-143	
1030	30.82	90	16.0	0.345	10.8	0.6	8.5	-146	
1036	30.82	↓	15.9	0.337	10.6	0.5	7.9	-147	
1040	30.84	↓	15.9	0.335	10.5	0.5	7.4	-152	
1045	30.86	90	16.0	0.338	10.4	0.5	7.5	-152	
1050	30.85	↓	16.0	0.339	10.4	0.4	7.3	-153	
			16	0.339	10.4	0.4	7.3	-150	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: [ ] GEOPUMP (peristaltic) [X] QED BLADDER
TYPE OF TUBING: [ ] HIGH DENSITY POLYETHYLENE [X] OTHER LDPE
TYPE OF PUMP MATERIAL: [X] STAINLESS STEEL [ ] OTHER
TYPE OF BLADDER MATERIAL: [X] TEFLON [ ] OTHER

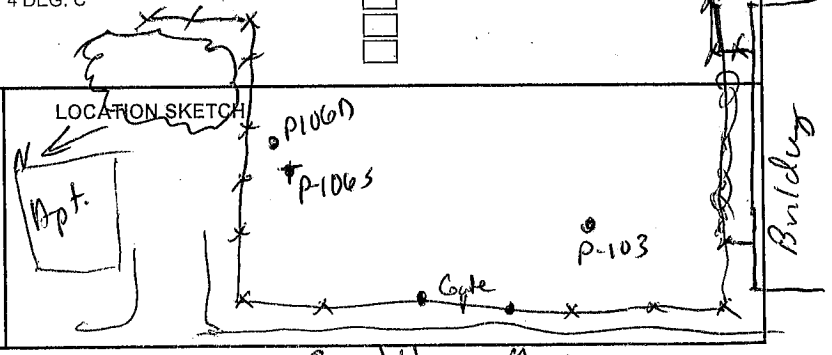
ANALYTICAL PARAMETERS

	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[X] VOC	8260B	HNO3 to pH <2	3 x 40ml	[X]
[ ] VOC	624	HNO3 to pH <2	2 x 40ml	[ ]
[X] TAL METALS	6010B/7470A/7141A	HNO3 to pH <2	~~250~~ 500 ml poly	[X] ~~Field Filtered~~
[ ] TAL METALS (Dissolved)	6010B/7470A/7141A	HNO3 to pH <2	500 ml poly	[ ]
[ ] pH	150.1	4 DEG. C		[ ]
[ ] Cyanide	9010			[ ]
[ ]				[ ]

NOTES: Pump 022318 (Pine)

SIGNATURE: Jerry Rankliff BFW 6/30/14

LOCATION SKETCH



FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

JOB NUMBER: 3612122251-04.****

PROJECT: NYSDEC Primoshield Inc.
FIELD SAMPLE NUMBER: 633027P1075XQ
SITE ID: (MW) P- 1075
SITE TYPE: WELL
DATE: 6/23/14 - 6/24/14
ACTIVITY: START 6/23/14 1405 END 6/24/14
SAMPLE TIME: 1105

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT: [X] TOP OF WELL RISER [ ] TOP OF PROTECTIVE CASING

INITIAL DEPTH TO WATER	8.18 FT	WELL DEPTH (TOR)	17.2 FT	PROTECTIVE CASING STICKUP (FROM GROUND)	2.9 FT
FINAL DEPTH TO WATER	12.37 FT	PID AMBIENT AIR	— PPM	CASING / WELL DIFFER.	0.72 FT
DRAWDOWN VOLUME	— GAL	SCREEN LENGTH	10' FT	PID WELL MOUTH	— PPM
(initial - final x 0.16 {2-inch} or x 0.65 {4-inch})		RATIO OF DRAWDOWN VOLUME TO TOTAL VOLUME PURGED	—	PRESSURE TO PUMP	— PSI
TOTAL VOL. PURGED	2.2 + 2 = 4.2 ~~2.4~~ 2.1 GAL (MS)			REFILL SETTING	—
(purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter)				DISCHARGE SETTING	—

WELL DIAM.: 2 IN

WELL INTERGRITY:

	YES	NO	N/A
CAP	[X]	[ ]	[ ]
CASING	[X]	[ ]	[ ]
LOCKED COLLAR	[X]	[ ]	[ ]

PURGE DATA

TIME	DEPTH TO WATER (ft)	PURGE RATE (ml/m)	TEMP. (deg. c)	SPECIFIC CONDUCTANCE (mS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (ntu)	REDOX (mv)	COMMENTS
1615	8.18	Start purging with whale pump							Purged 2 gallons
1638	—	Purged the pump in purged at total of ≈ 3.5 gallons							
1640	15.85								
6-24-14									
1035	8.65	Start time 1035							
1040	8.35	150	13.94	0.709	5.57	4.53	10.0	89.6	
1045	9.95	180	13.84	0.708	~~4.79~~ 5.46	4.73	12.1	105.2	
1050	10.31	160	14.21	0.727	5.49	5.24	18.4	110.9	
1055	10.75	180	14.12	0.759	5.52	5.60	24.9	114.1	
1110	11.40	180	13.69	0.744	5.72	5.95	15.8	110.6	
1115	11.66	180	13.98	0.723	5.75	4.18	9.0	111.0	
1120	11.98	180	14.05	0.706	5.83	6.04	10.5	107.0	
1125	12.37	180	14.07	0.715	5.83	5.94	—	105.5	
			14	0.715	5.8	5.9	10.5	110	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: [X] GEOPUMP (peristaltic) Whale [ ] QED BLADDER
TYPE OF TUBING: [ ] HIGH DENSITY POLYETHYLENE [X] OTHER LDPE
TYPE OF PUMP MATERIAL: [ ] STAINLESS STEEL [ ] OTHER
TYPE OF BLADDER MATERIAL: [ ] TEFLON [ ] OTHER

ANALYTICAL PARAMETERS

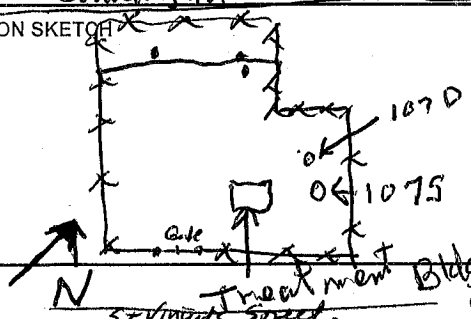
	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[X] VOC	8260B	HNO3 to pH <2	3 x 40ml	[X]
[ ] VOC	624	HNO3 to pH <2	2 x 40ml	[ ]
[X] TAL METALS	6010B/7470A/7141A	HNO3 to pH <2	250 ~~500~~ ml poly	[X] ~~Field Filtered~~
[ ] TAL METALS (Dissolved)	6010B/7470A/7141A	HNO3 to pH <2	500 ml poly	[ ]
[ ] pH	150.1	4 DEG. C		[ ]
[ ] Cyanide	9010			[ ]
[ ] _____				[ ]

Conklin Ave

NOTES: Purged dry with whale pump on 6/23/14. Low flow sampled recharge with a Geopump.

SIGNATURE: Karl Jaehn JR 6/30/14

LOCATION SKETCH



FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

JOB NUMBER: 3612122251-04.****

PROJECT: NYSDEC Primoshield Inc.
FIELD SAMPLE NUMBER: 633027P107DXX
SITE ID: (MW) P-107D
SITE TYPE: WELL
DATE: 6/23/14
ACTIVITY: START 1330 END 1550
SAMPLE TIME: 1525

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT: [X] TOP OF WELL RISER [ ] TOP OF PROTECTIVE CASING

INITIAL DEPTH TO WATER	29.45 FT	PROTECTIVE CASING STICKUP (FROM GROUND)	3.2 FT
FINAL DEPTH TO WATER	29.83 FT	CASING / WELL DIFFER.	0.47 FT
WELL DEPTH (TOR)	≈77.7 FT	WELL DIAM.	2" IN
SCREEN LENGTH	10' FT	PID AMBIENT AIR	— PPM
DRAWDOWN VOLUME	106 GAL	PID WELL MOUTH	— PPM
(Initial - final x 0.16 {2-inch} or x 0.65 {4-inch})		PRESSURE TO PUMP	30 PSI
RATIO OF DRAWDOWN VOLUME TO TOTAL VOLUME PURGED	1.02	REFILL SETTING	11.5
TOTAL VOL. PURGED	≈2.5 GAL	DISCHARGE SETTING	3.5
(purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter)			

WELL INTERGRITY:

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED	X		
COLLAR		X	

PURGE DATA

TIME	DEPTH TO WATER (ft)	PURGE RATE (ml/m)	TEMP. (deg. c)	SPECIFIC CONDUCTANCE (mS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (ntu)	REDOX (mv)	COMMENTS
1337	29.35	Start pump + set rate							In the depth ≈63' TOR
1345	29.80	150	20.5	0.429	11.0	3.2	46	-64	
1350	29.78	125	19.0	0.431	10.8	2.6	32	-68	
1355	29.79	↓	18.7	0.429	10.7	2.3	37	-72	
1400	29.81	↓	18.6	0.425	10.7	2.2	40	-80	
1405	29.83	120	18.8	0.421	10.7	2.1	38	-90	
1410	29.87		18.4	0.417	10.8	2.0	40	-99	
1415	29.92	60	17.8	0.413	10.8	2.0	42	-106	run out of N2 in lo tub. switching tubs.
1425	29.86	120	18.9	0.405	10.8	1.7	38	-112	
1435	29.80	90	19.5	0.401	10.8	1.7	37	-116	
1440	29.81	↓	19.8	0.399	10.9	1.7	41	-118	
1450	29.82	↓	20.4	0.395	10.9	1.7	46	-118	
1455	29.82	90	20.4	0.403	10.9	1.7	50	-116	
1500	29.82	↓	20.1	0.402	11.0	1.7	66	-114	
1505	29.83	↓	20.1	0.401	11.0	1.7	83	-110	
1510	29.83	90	20.0	0.400	11.0	1.7	102	-107	
All parameters stable except for turbidity which historically has been very high in this well. Going to grab a sample before the turbidity gets extremely high									
			20	0.400	11.0	1.7	102	-110	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: [ ] GEOPUMP (peristaltic) [X] QED BLADDER

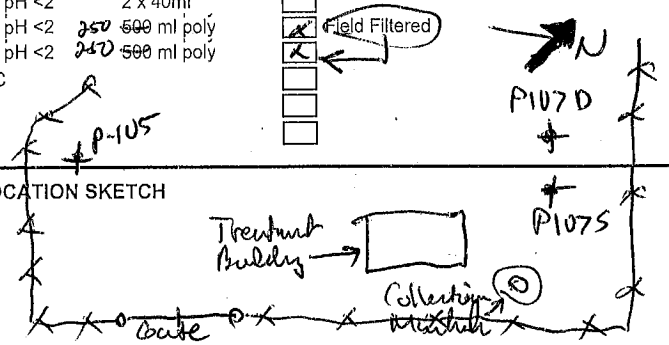
TYPE OF TUBING: [X] ~~HIGH DENSITY POLYETHYLENE~~ [X] OTHER LDPE

TYPE OF PUMP MATERIAL: [X] STAINLESS STEEL [ ] OTHER

TYPE OF BLADDER MATERIAL: [X] TEFLON [ ] OTHER

ANALYTICAL PARAMETERS

	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[X] VOC	8260B	HNO3 to pH <2	3 x 40ml	[X]
[ ] VOC	624	HNO3 to pH <2	2 x 40ml	[ ]
[X] TAL METALS	6010B/7470A/7141A	HNO3 to pH <2	~~250~~ ~~500~~ ml poly	[X] Field Filtered
[X] TAL METALS (Dissolved)	6010B/7470A/7141A	HNO3 to pH <2	~~250~~ ~~500~~ ml poly	[X]
[ ] pH	150.1	4 DEG. C		[ ]
[ ] Cyanide	9010			[ ]
[ ] _____				[ ]



NOTES: Pump # 9985 (Proactive)

SIGNATURE: Jerry Rankiffe BPW 6/30/14

LOCATION SKETCH

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

JOB NUMBER: 3612122251-04.****

PROJECT: NYSDEC Primoshield Inc.
FIELD SAMPLE NUMBER: 633027P108XX
SITE ID: (MW-) P-108
SITE TYPE: WELL
DATE: 6/24/14 - 6/25/14
ACTIVITY: START 6/24/14 1600 END 6/25/14 0900
SAMPLE TIME: 0850

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT: [X] TOP OF WELL RISER [ ] TOP OF PROTECTIVE CASING

INITIAL DEPTH TO WATER	6.05 FT	WELL DEPTH (TOR)	18.7 FT	PROTECTIVE CASING STICKUP (FROM GROUND)	2.8 FT
FINAL DEPTH TO WATER	7.83 FT	SCREEN LENGTH	10' FT	CASING / WELL DIFFER.	0.26 FT
DRAWDOWN VOLUME	— GAL	PID AMBIENT AIR	— PPM	WELL DIAM.	2" IN
(initial - final x 0.16 {2-Inch} or x 0.65 {4-Inch})		PID WELL MOUTH	— PPM		
RATIO OF DRAWDOWN VOLUME TO TOTAL VOLUME PURGED	—	PRESSURE TO PUMP	— PSI		
TOTAL VOL. PURGED	≈11.4 GAL	REFILL SETTING	—	DISCHARGE SETTING	—
(purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter)					

WELL INTERGRITY:

	YES	NO	N/A
CAP	X	—	—
CASING	X	—	—
LOCKED COLLAR	X		

Slightly recent

PURGE DATA

TIME	DEPTH TO WATER (ft)	PURGE RATE (ml/m)	TEMP. (deg. c)	SPECIFIC CONDUCTANCE (mS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (ntu)	ORP REDOX (mv)	COMMENTS
1604	6.05	Start purging	with whale pump						
1623	>18.2	Pulled pump	Final interface	>18.3' TOR					1 Gallons
6/25/14									
0754	6.23	Start low flow	purge						
0805	7.11	120	12.4	0.828	7.1	3.9	20	22	
0810	7.41	↓	12.7	0.825	7.2	3.7	18	12	
0815	7.60	↓	12.9	0.823	7.2	3.6	18	1	
0820	7.80	110	13.1	0.825	7.2	3.3	17	-7	
0825	7.97	↓	12.9	0.826	7.2	3.3	14	-11	
0830	8.02	↓	12.8	0.824	7.3	3.3	13	-4	
0835	8.04	110	12.7	0.825	7.3	3.5	11	-9	
0840	8.03	↓	13.0	0.822	7.3	3.3	11	-9	
0845	7.99	100	12.9	0.823	7.3	3.3	11	-8	Purged ≈1.4 gallons
Parameters stable collecting sample									
			13	0.823	7.3	3.3	11	-8	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: [X] GEOPUMP (peristaltic) [ ] QED BLADDER

TYPE OF TUBING: [ ] HIGH DENSITY POLYETHYLENE [X] OTHER LDPE/Whale

TYPE OF PUMP MATERIAL: [ ] STAINLESS STEEL [ ] OTHER

TYPE OF BLADDER MATERIAL: [ ] TEFLON [ ] OTHER

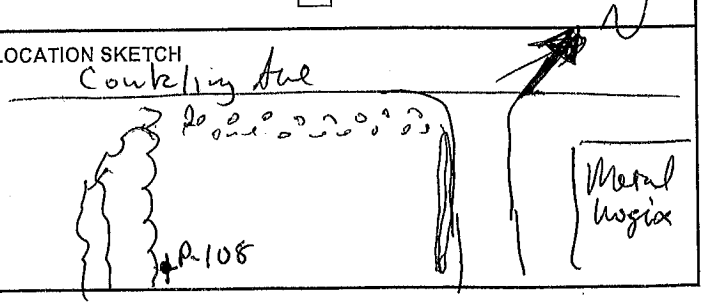
ANALYTICAL PARAMETERS

	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[X] VOC	8260B	HNO3 to pH <2	3 x 40ml	[X]
[ ] VOC	624	HNO3 to pH <2	2 x 40ml	[ ]
[X] TAL METALS	6010B/7470A/7141A	HNO3 to pH <2	250 ~~500~~ ml poly	[X] Field Filtered
[ ] TAL METALS (Dissolved)	6010B/7470A/7141A	HNO3 to pH <2	250 500 ml poly	[ ]
[ ] pH	150.1	4 DEG. C		[ ]
[ ] Cyanide	9010			[ ]
[ ] _____				[ ]

NOTES: Purged dry with whale pump on 6/24/14.
RETURNED TO SAMPLE 6/25/14

SIGNATURE: Jerry Reed BPW 6/30/14

LOCATION SKETCH



July 11, 2014

Service Request No: R1404899

Ms. Jayme Connolly
AMEC Environmental & Infrastructure
511 Congress Street
Portland, ME 04112-7050

Laboratory Results for: NYSDEC Primoshield/3612122251-04

Dear Ms. Connolly:

Enclosed are the results of the sample(s) submitted to our laboratory on June 26, 2014. For your reference, these analyses have been assigned our service request number **R1404899**.

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 7477. You may also contact me via email at Lauren.Falanga@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

Lauren Falanga
Project Manager

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ALS ENVIRONMENTAL

Client:	AMEC Environmental & Infrastructure	**Service Request No.:**	R1404899
Project:	NYSDEC Primoshield	**Date Received:**	6/26/14
Sample Matrix:	Water		

CASE NARRATIVE

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

Sample Receipt

Twelve water samples were received for analysis at ALS Environmental on 6/26/14. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were received within the 0-6°C temperature guidelines. The samples were stored in a refrigerator between 1°C and 6°C upon receipt at the laboratory.

Inorganics

Samples were analyzed for a client specific list of total metals and dissolved metals by method 6010C.

All Method Blanks were free of contamination.

No other analytical or quality control problems were encountered during analysis.

Volatile Organics

Samples were analyzed for a client specific list of analytes by GC/MS method 8260C.

The initial and continuing calibration criteria were met except for the Continuing Calibration Verification (CCV) compounds Acetone, 1,1-Dichloroethane, 2-Butanone(MEK), and 1,2-Dichcloroethane on the 7/2/14 run which was outside the ±20% Difference (%D) limits. Any hits for these compounds should be considered as estimated.

All surrogate standard recoveries were within acceptance limits for the samples.

The Method Blank on the 7/2/14 run contained a low level hit of Bromomethane between the Minimum Detection Limit (MDL) and the Method Reporting Limit (MRL) and is flagged as "J", estimated. Affected data has been flagged with "B". The Method Blank on the 7/3/14 run was free of contamination.

All Laboratory Control Sample (LCS) and Duplicate Laboratory Control Sample (LCSD) on the 7/2/14 run were within control limits except for compounds 2-Butanone (MEK), Acetone (LCS only), and Bromomethane (LCSD only) which were outside of the control limits and have been flagged with "*". All RPD values were within control limits except for Bromomethane which has been flagged with "*". All Laboratory Control Sample (LCS) on the 7/3/14 run were within control limits.

No analytical or quality control problems were encountered during analysis.

CASE NARRATIVE

This report contains analytical results for the following samples:
Service Request Number: R1404899

Lab ID	Client ID
R1404899-001	633027P105XX
R1404899-002	633027P107DXX
R1404899-003	633027P107DXX Dissolved
R1404899-004	633027P104XX
R1404899-005	633027P104XD
R1404899-006	633027P106DXX
R1404899-007	633027P107SXX
R1404899-008	633027P106SXX
R1404899-009	633027P103XX
R1404899-010	633027TRCHCO
R1404899-011	633027TB1
R1404899-012	633027P108XX
R1404899-013	633027P101DXX

ALS Environmental

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.

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/Arclors).

B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.

E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.

E Organics- Concentration has exceeded the calibration range for that specific analysis.

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.

* 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.

H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.

Spike was diluted out.

\+ Correlation coefficient for MSA is <0.995.

N Inorganics- Matrix spike recovery was outside laboratory limits.

N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.

S Concentration has been determined using Method of Standard Additions (MSA).

W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.

P Concentration >40% (25% for CLP) difference between the two GC columns.

C Confirmed by GC/MS

Q DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).

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 Certifications[1]

NELAP Accredited	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Connecticut ID # PH0556	Nebraska Accredited	
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

INORGANIC PREPARATION METHODS

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	3010A
200.8	ILM05.3
6010C	3010A
6020A	ILM05.3
9014 Cyanide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Acid Soluble	9030B
9056A Bomb (Halogens)	5050A
9066 Manual Distillation	9065
SM 4500-CN-E Residual Cyanide	SM 4500-CN-G
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C	3050B
6020A	3050B
6010C TCLP (1311) extract	3010A
6010 SPLP (1312) extract	3010A
7196A	3060A
7199	3060A
9056A Halogens/Halides	5050
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction

For analytical methods not listed, the preparation method is the same as the analytical method reference.

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	6/23/14 1420
Sample Matrix:	Water	**Date Received:**	6/26/14
Sample Name:	633027P105XX		
Lab Code:	R1404899-001	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Cadmium, Total	6010C	5.0	U	µg/L	5.0	0.5	1	7/ 7/14	7/9/14 16:06	
Chromium, Total	6010C	10	U	µg/L	10	0.9	1	7/ 7/14	7/9/14 16:06	
Copper, Total	6010C	6	J	µg/L	20	4	1	7/ 7/14	7/9/14 16:06	
Lead, Total	6010C	50	U	µg/L	50	2	1	7/ 7/14	7/9/14 16:06	
Nickel, Total	6010C	40	U	µg/L	40	2	1	7/ 7/14	7/9/14 16:06	
Zinc, Total	6010C	20	U	µg/L	20	5	1	7/ 7/14	7/9/14 16:06	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	6/23/14 1420
Sample Matrix:	Water	**Date Received:**	6/26/14
		Date Analyzed:	7/2/14 17:08
Sample Name:	633027P105XX	**Units:**	µg/L
Lab Code:	R1404899-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	399791
Data File Name:	I:\ACQUDATA\msvoa12\Data\070214\M7068.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	1.0	U	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.57	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.36	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.20	
78-93-3	2-Butanone (MEK)	5.0	U	5.0	0.81	
591-78-6	2-Hexanone	5.0	U	5.0	1.7	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.67	
67-64-1	Acetone	1.9	J	5.0	1.3	
71-43-2	Benzene	1.0	U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0	U	1.0	0.32	
75-25-2	Bromoform	1.0	U	1.0	0.42	
74-83-9	Bromomethane	1.0	U	1.0	0.29	
75-15-0	Carbon Disulfide	1.0	U	1.0	0.22	
56-23-5	Carbon Tetrachloride	1.0	U	1.0	0.45	
108-90-7	Chlorobenzene	1.0	U	1.0	0.29	
75-00-3	Chloroethane	1.0	U	1.0	0.24	
67-66-3	Chloroform	1.0	U	1.0	0.25	
74-87-3	Chloromethane	1.0	U	1.0	0.21	
124-48-1	Dibromochloromethane	1.0	U	1.0	0.31	
75-09-2	Dichloromethane	1.0	U	1.0	0.32	
100-41-4	Ethylbenzene	1.0	U	1.0	0.20	
100-42-5	Styrene	1.0	U	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	1.0	U	1.0	0.30	
108-88-3	Toluene	1.0	U	1.0	0.20	
79-01-6	Trichloroethene (TCE)	1.0	U	1.0	0.22	
75-01-4	Vinyl Chloride	1.0	U	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.24	
179601-23-1	m,p-Xylenes	2.0	U	2.0	0.33	
95-47-6	o-Xylene	1.0	U	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.20	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	6/23/14 1420
Sample Matrix:	Water	**Date Received:**	6/26/14
		Date Analyzed:	7/2/14 17:08
Sample Name:	633027P105XX	**Units:**	µg/L
Lab Code:	R1404899-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	399791
Data File Name:	I:\ACQUDATA\msvoa12\Data\070214\M7068.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	85-122	7/2/14 17:08	
Dibromofluoromethane	106	89-119	7/2/14 17:08	
Toluene-d8	104	87-121	7/2/14 17:08	

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Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	6/23/14 1525
Sample Matrix:	Water	**Date Received:**	6/26/14
Sample Name:	633027P107DXX		
Lab Code:	R1404899-002	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Cadmium, Total	6010C	5.0	U	µg/L	5.0	0.5	1	7/ 7/14	7/9/14 16:51	
Chromium, Total	6010C	**25**		µg/L	10	0.9	1	7/ 7/14	7/9/14 16:51	
Copper, Total	6010C	**25**		µg/L	20	4	1	7/ 7/14	7/9/14 16:51	
Lead, Total	6010C	**10**	J	µg/L	50	2	1	7/ 7/14	7/9/14 16:51	
Nickel, Total	6010C	**24**	J	µg/L	40	2	1	7/ 7/14	7/9/14 16:51	
Zinc, Total	6010C	**54**		µg/L	20	5	1	7/ 7/14	7/9/14 16:51	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	6/23/14 1525
Sample Matrix:	Water	**Date Received:**	6/26/14
		Date Analyzed:	7/2/14 17:40
Sample Name:	633027P107DXX	**Units:**	µg/L
Lab Code:	R1404899-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	399791
Data File Name:	I:\ACQUDATA\msvoa12\Data\070214\M7069.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	1.0	U	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.57	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.36	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.20	
78-93-3	2-Butanone (MEK)	5.0	U	5.0	0.81	
591-78-6	2-Hexanone	5.0	U	5.0	1.7	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.67	
67-64-1	Acetone	**2.0**	J	5.0	1.3	
71-43-2	Benzene	1.0	U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0	U	1.0	0.32	
75-25-2	Bromoform	1.0	U	1.0	0.42	
74-83-9	Bromomethane	1.0	U	1.0	0.29	
75-15-0	Carbon Disulfide	1.0	U	1.0	0.22	
56-23-5	Carbon Tetrachloride	1.0	U	1.0	0.45	
108-90-7	Chlorobenzene	1.0	U	1.0	0.29	
75-00-3	Chloroethane	1.0	U	1.0	0.24	
67-66-3	Chloroform	1.0	U	1.0	0.25	
74-87-3	Chloromethane	1.0	U	1.0	0.21	
124-48-1	Dibromochloromethane	1.0	U	1.0	0.31	
75-09-2	Dichloromethane	1.0	U	1.0	0.32	
100-41-4	Ethylbenzene	1.0	U	1.0	0.20	
100-42-5	Styrene	1.0	U	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	1.0	U	1.0	0.30	
108-88-3	Toluene	1.0	U	1.0	0.20	
79-01-6	Trichloroethene (TCE)	1.0	U	1.0	0.22	
75-01-4	Vinyl Chloride	1.0	U	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.24	
179601-23-1	m,p-Xylenes	2.0	U	2.0	0.33	
95-47-6	o-Xylene	1.0	U	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.20	

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Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	6/23/14 1525
Sample Matrix:	Water	**Date Received:**	6/26/14
		Date Analyzed:	7/2/14 17:40
Sample Name:	633027P107DXX	**Units:**	µg/L
Lab Code:	R1404899-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	399791
Data File Name:	I:\ACQUDATA\msvoa12\Data\070214\M7069.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	105	85-122	7/2/14 17:40	
Dibromofluoromethane	107	89-119	7/2/14 17:40	
Toluene-d8	103	87-121	7/2/14 17:40	

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Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	6/23/14 1525
Sample Matrix:	Water	**Date Received:**	6/26/14
Sample Name:	633027P107DXX Dissolved		
Lab Code:	R1404899-003	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Cadmium, Dissolved	6010C	5.0	U	µg/L	5.0	0.5	1	7/ 7/14	7/9/14 16:57	
Chromium, Dissolved	6010C	10	U	µg/L	10	0.9	1	7/ 7/14	7/9/14 16:57	
Copper, Dissolved	6010C	20	U	µg/L	20	4	1	7/ 7/14	7/9/14 16:57	
Lead, Dissolved	6010C	50	U	µg/L	50	2	1	7/ 7/14	7/9/14 16:57	
Nickel, Dissolved	6010C	**4**	J	µg/L	40	2	1	7/ 7/14	7/9/14 16:57	
Zinc, Dissolved	6010C	20	U	µg/L	20	5	1	7/ 7/14	7/9/14 16:57	

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Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	6/24/14 0940
Sample Matrix:	Water	**Date Received:**	6/26/14
Sample Name:	633027P104XX		
Lab Code:	R1404899-004	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Cadmium, Total	6010C	5.0	U	µg/L	5.0	0.5	1	7/ 7/14	7/9/14 17:04	
Chromium, Total	6010C	10	U	µg/L	10	0.9	1	7/ 7/14	7/9/14 17:04	
Copper, Total	6010C	20	U	µg/L	20	4	1	7/ 7/14	7/9/14 17:04	
Lead, Total	6010C	50	U	µg/L	50	2	1	7/ 7/14	7/9/14 17:04	
Nickel, Total	6010C	40	U	µg/L	40	2	1	7/ 7/14	7/9/14 17:04	
Zinc, Total	6010C	20	U	µg/L	20	5	1	7/ 7/14	7/9/14 17:04	

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Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	6/24/14 0940
Sample Matrix:	Water	**Date Received:**	6/26/14
		Date Analyzed:	7/2/14 18:13
Sample Name:	633027P104XX	**Units:**	µg/L
Lab Code:	R1404899-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	399791
Data File Name:	I:\ACQUDATA\msvoa12\Data\070214\M7070.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	1.0	U	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.57	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.36	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.20	
78-93-3	2-Butanone (MEK)	5.0	U	5.0	0.81	
591-78-6	2-Hexanone	5.0	U	5.0	1.7	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.67	
67-64-1	Acetone	5.0	U	5.0	1.3	
71-43-2	Benzene	1.0	U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0	U	1.0	0.32	
75-25-2	Bromoform	1.0	U	1.0	0.42	
74-83-9	Bromomethane	1.0	U	1.0	0.29	
75-15-0	Carbon Disulfide	1.0	U	1.0	0.22	
56-23-5	Carbon Tetrachloride	1.0	U	1.0	0.45	
108-90-7	Chlorobenzene	1.0	U	1.0	0.29	
75-00-3	Chloroethane	1.0	U	1.0	0.24	
67-66-3	Chloroform	1.0	U	1.0	0.25	
74-87-3	Chloromethane	1.0	U	1.0	0.21	
124-48-1	Dibromochloromethane	1.0	U	1.0	0.31	
75-09-2	Dichloromethane	1.0	U	1.0	0.32	
100-41-4	Ethylbenzene	1.0	U	1.0	0.20	
100-42-5	Styrene	1.0	U	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	1.0	U	1.0	0.30	
108-88-3	Toluene	1.0	U	1.0	0.20	
79-01-6	Trichloroethene (TCE)	1.0	U	1.0	0.22	
75-01-4	Vinyl Chloride	1.0	U	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.24	
179601-23-1	m,p-Xylenes	2.0	U	2.0	0.33	
95-47-6	o-Xylene	1.0	U	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.20	

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Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	6/24/14 0940
Sample Matrix:	Water	**Date Received:**	6/26/14
		Date Analyzed:	7/2/14 18:13
Sample Name:	633027P104XX	**Units:**	µg/L
Lab Code:	R1404899-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	399791
Data File Name:	I:\ACQUDATA\msvoa12\Data\070214\M7070.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	104	85-122	7/2/14 18:13	
Dibromofluoromethane	108	89-119	7/2/14 18:13	
Toluene-d8	105	87-121	7/2/14 18:13	

Client: AMEC Environmental & Infrustructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251-04
Sample Matrix: Water

Service Request: R1404899
Date Collected: 6/24/14 0940
Date Received: 6/26/14

Sample Name: 633027P104XD
Lab Code: R1404899-005

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Cadmium, Total	6010C	5.0	U	µg/L	5.0	0.5	1	7/ 7/14	7/9/14 17:10	
Chromium, Total	6010C	10	U	µg/L	10	0.9	1	7/ 7/14	7/9/14 17:10	
Copper, Total	6010C	20	U	µg/L	20	4	1	7/ 7/14	7/9/14 17:10	
Lead, Total	6010C	50	U	µg/L	50	2	1	7/ 7/14	7/9/14 17:10	
Nickel, Total	6010C	40	U	µg/L	40	2	1	7/ 7/14	7/9/14 17:10	
Zinc, Total	6010C	**12**	**J**	µg/L	20	5	1	7/ 7/14	7/9/14 17:10	

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Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	6/24/14 0940
Sample Matrix:	Water	**Date Received:**	6/26/14
		Date Analyzed:	7/2/14 18:45
Sample Name:	633027P104XD	**Units:**	µg/L
Lab Code:	R1404899-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	399791
Data File Name:	I:\ACQUDATA\msvoa12\Data\070214\M7071.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	1.0	U	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.57	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.36	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.20	
78-93-3	2-Butanone (MEK)	5.0	U	5.0	0.81	
591-78-6	2-Hexanone	5.0	U	5.0	1.7	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.67	
67-64-1	Acetone	5.0	U	5.0	1.3	
71-43-2	Benzene	1.0	U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0	U	1.0	0.32	
75-25-2	Bromoform	1.0	U	1.0	0.42	
74-83-9	Bromomethane	1.0	U	1.0	0.29	
75-15-0	Carbon Disulfide	1.0	U	1.0	0.22	
56-23-5	Carbon Tetrachloride	1.0	U	1.0	0.45	
108-90-7	Chlorobenzene	1.0	U	1.0	0.29	
75-00-3	Chloroethane	1.0	U	1.0	0.24	
67-66-3	Chloroform	1.0	U	1.0	0.25	
74-87-3	Chloromethane	1.0	U	1.0	0.21	
124-48-1	Dibromochloromethane	1.0	U	1.0	0.31	
75-09-2	Dichloromethane	1.0	U	1.0	0.32	
100-41-4	Ethylbenzene	1.0	U	1.0	0.20	
100-42-5	Styrene	1.0	U	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	1.0	U	1.0	0.30	
108-88-3	Toluene	1.0	U	1.0	0.20	
79-01-6	Trichloroethene (TCE)	1.0	U	1.0	0.22	
75-01-4	Vinyl Chloride	1.0	U	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.24	
179601-23-1	m,p-Xylenes	2.0	U	2.0	0.33	
95-47-6	o-Xylene	1.0	U	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.20	

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Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	6/24/14 0940
Sample Matrix:	Water	**Date Received:**	6/26/14
		Date Analyzed:	7/2/14 18:45
Sample Name:	633027P104XD	**Units:**	µg/L
Lab Code:	R1404899-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	399791
Data File Name:	I:\ACQUDATA\msvoa12\Data\070214\M7071.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	105	85-122	7/2/14 18:45	
Dibromofluoromethane	107	89-119	7/2/14 18:45	
Toluene-d8	104	87-121	7/2/14 18:45	

Analytical Report

Client: AMEC Environmental & Infrustructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251-04
Sample Matrix: Water

Service Request: R1404899
Date Collected: 6/24/14 1055
Date Received: 6/26/14

Sample Name: 633027P106DXX
Lab Code: R1404899-006

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Cadmium, Total	6010C	5.0	U	µg/L	5.0	0.5	1	7/ 7/14	7/9/14 17:16	
Chromium, Total	6010C	10	U	µg/L	10	0.9	1	7/ 7/14	7/9/14 17:16	
Copper, Total	6010C	20	U	µg/L	20	4	1	7/ 7/14	7/9/14 17:16	
Lead, Total	6010C	50	U	µg/L	50	2	1	7/ 7/14	7/9/14 17:16	
Nickel, Total	6010C	40	U	µg/L	40	2	1	7/ 7/14	7/9/14 17:16	
Zinc, Total	6010C	20	U	µg/L	20	5	1	7/ 7/14	7/9/14 17:16	

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Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	6/24/14 1055
Sample Matrix:	Water	**Date Received:**	6/26/14
		Date Analyzed:	7/2/14 21:26
Sample Name:	633027P106DXX	**Units:**	µg/L
Lab Code:	R1404899-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	399791
Data File Name:	I:\ACQUDATA\msvoa12\Data\070214\M7076.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	1.0	U	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.57	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.36	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.20	
78-93-3	2-Butanone (MEK)	5.0	U	5.0	0.81	
591-78-6	2-Hexanone	5.0	U	5.0	1.7	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.67	
67-64-1	Acetone	**1.4**	J	5.0	1.3	
71-43-2	Benzene	1.0	U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0	U	1.0	0.32	
75-25-2	Bromoform	1.0	U	1.0	0.42	
74-83-9	Bromomethane	1.0	U	1.0	0.29	
75-15-0	Carbon Disulfide	**0.83**	J	1.0	0.22	
56-23-5	Carbon Tetrachloride	1.0	U	1.0	0.45	
108-90-7	Chlorobenzene	1.0	U	1.0	0.29	
75-00-3	Chloroethane	1.0	U	1.0	0.24	
67-66-3	Chloroform	1.0	U	1.0	0.25	
74-87-3	Chloromethane	1.0	U	1.0	0.21	
124-48-1	Dibromochloromethane	1.0	U	1.0	0.31	
75-09-2	Dichloromethane	1.0	U	1.0	0.32	
100-41-4	Ethylbenzene	1.0	U	1.0	0.20	
100-42-5	Styrene	1.0	U	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	1.0	U	1.0	0.30	
108-88-3	Toluene	1.0	U	1.0	0.20	
79-01-6	Trichloroethene (TCE)	1.0	U	1.0	0.22	
75-01-4	Vinyl Chloride	1.0	U	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.24	
179601-23-1	m,p-Xylenes	2.0	U	2.0	0.33	
95-47-6	o-Xylene	1.0	U	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.20	

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Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	6/24/14 1055
Sample Matrix:	Water	**Date Received:**	6/26/14
		Date Analyzed:	7/2/14 21:26
Sample Name:	633027P106DXX	**Units:**	µg/L
Lab Code:	R1404899-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	399791
Data File Name:	I:\ACQUDATA\msvoa12\Data\070214\M7076.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	105	85-122	7/2/14 21:26	
Dibromofluoromethane	111	89-119	7/2/14 21:26	
Toluene-d8	105	87-121	7/2/14 21:26	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	6/24/14 1105
Sample Matrix:	Water	**Date Received:**	6/26/14
Sample Name:	633027P107SXX		
Lab Code:	R1404899-007	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Cadmium, Total	6010C	**1.4**	J	µg/L	5.0	0.5	1	7/ 7/14	7/9/14 17:23	
Chromium, Total	6010C	**5**	J	µg/L	10	0.9	1	7/ 7/14	7/9/14 17:23	
Copper, Total	6010C	**5**	J	µg/L	20	4	1	7/ 7/14	7/9/14 17:23	
Lead, Total	6010C	50	U	µg/L	50	2	1	7/ 7/14	7/9/14 17:23	
Nickel, Total	6010C	**129**		µg/L	40	2	1	7/ 7/14	7/9/14 17:23	
Zinc, Total	6010C	**13**	J	µg/L	20	5	1	7/ 7/14	7/9/14 17:23	

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Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	6/24/14 1105
Sample Matrix:	Water	**Date Received:**	6/26/14
		Date Analyzed:	7/2/14 19:17
Sample Name:	633027P107SXX	**Units:**	µg/L
Lab Code:	R1404899-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	399791
Data File Name:	I:\ACQUDATA\msvoa12\Data\070214\M7072.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	**1.5**		1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**2.0**		1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.57	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.36	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.20	
78-93-3	2-Butanone (MEK)	5.0	U	5.0	0.81	
591-78-6	2-Hexanone	5.0	U	5.0	1.7	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.67	
67-64-1	Acetone	**1.8**	J	5.0	1.3	
71-43-2	Benzene	1.0	U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0	U	1.0	0.32	
75-25-2	Bromoform	1.0	U	1.0	0.42	
74-83-9	Bromomethane	1.0	U	1.0	0.29	
75-15-0	Carbon Disulfide	1.0	U	1.0	0.22	
56-23-5	Carbon Tetrachloride	1.0	U	1.0	0.45	
108-90-7	Chlorobenzene	1.0	U	1.0	0.29	
75-00-3	Chloroethane	1.0	U	1.0	0.24	
67-66-3	Chloroform	1.0	U	1.0	0.25	
74-87-3	Chloromethane	1.0	U	1.0	0.21	
124-48-1	Dibromochloromethane	1.0	U	1.0	0.31	
75-09-2	Dichloromethane	1.0	U	1.0	0.32	
100-41-4	Ethylbenzene	1.0	U	1.0	0.20	
100-42-5	Styrene	1.0	U	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	1.0	U	1.0	0.30	
108-88-3	Toluene	1.0	U	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**7.8**		1.0	0.22	
75-01-4	Vinyl Chloride	1.0	U	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.24	
179601-23-1	m,p-Xylenes	2.0	U	2.0	0.33	
95-47-6	o-Xylene	1.0	U	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.20	

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	6/24/14 1105
Sample Matrix:	Water	**Date Received:**	6/26/14
		Date Analyzed:	7/2/14 19:17
Sample Name:	633027P107SXX	**Units:**	µg/L
Lab Code:	R1404899-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	399791
Data File Name:	I:\ACQUDATA\msvoa12\Data\070214\M7072.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	85-122	7/2/14 19:17	
Dibromofluoromethane	108	89-119	7/2/14 19:17	
Toluene-d8	102	87-121	7/2/14 19:17	

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Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	6/24/14 1245
Sample Matrix:	Water	**Date Received:**	6/26/14
Sample Name:	633027P106SXX		
Lab Code:	R1404899-008	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Cadmium, Total	6010C	5.0	U	µg/L	5.0	0.5	1	7/ 7/14	7/9/14 17:29	
Chromium, Total	6010C	**1**	**J**	µg/L	10	0.9	1	7/ 7/14	7/9/14 17:29	
Copper, Total	6010C	20	U	µg/L	20	4	1	7/ 7/14	7/9/14 17:29	
Lead, Total	6010C	50	U	µg/L	50	2	1	7/ 7/14	7/9/14 17:29	
Nickel, Total	6010C	**2**	J	µg/L	40	2	1	7/ 7/14	7/9/14 17:29	
Zinc, Total	6010C	20	U	µg/L	20	5	1	7/ 7/14	7/9/14 17:29	

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Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	6/24/14 1245
Sample Matrix:	Water	**Date Received:**	6/26/14
		Date Analyzed:	7/2/14 19:49
Sample Name:	633027P106SXX	**Units:**	µg/L
Lab Code:	R1404899-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	399791
Data File Name:	I:\ACQUDATA\msvoa12\Data\070214\M7073.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	**1.5**		1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.57	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.36	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.20	
78-93-3	2-Butanone (MEK)	5.0	U	5.0	0.81	
591-78-6	2-Hexanone	5.0	U	5.0	1.7	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.67	
67-64-1	Acetone	5.0	U	5.0	1.3	
71-43-2	Benzene	1.0	U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0	U	1.0	0.32	
75-25-2	Bromoform	1.0	U	1.0	0.42	
74-83-9	Bromomethane	1.0	U	1.0	0.29	
75-15-0	Carbon Disulfide	1.0	U	1.0	0.22	
56-23-5	Carbon Tetrachloride	1.0	U	1.0	0.45	
108-90-7	Chlorobenzene	1.0	U	1.0	0.29	
75-00-3	Chloroethane	1.0	U	1.0	0.24	
67-66-3	Chloroform	1.0	U	1.0	0.25	
74-87-3	Chloromethane	1.0	U	1.0	0.21	
124-48-1	Dibromochloromethane	1.0	U	1.0	0.31	
75-09-2	Dichloromethane	1.0	U	1.0	0.32	
100-41-4	Ethylbenzene	1.0	U	1.0	0.20	
100-42-5	Styrene	1.0	U	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	1.0	U	1.0	0.30	
108-88-3	Toluene	1.0	U	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**0.97**	J	1.0	0.22	
75-01-4	Vinyl Chloride	1.0	U	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.24	
179601-23-1	m,p-Xylenes	2.0	U	2.0	0.33	
95-47-6	o-Xylene	1.0	U	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.20	

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Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	6/24/14 1245
Sample Matrix:	Water	**Date Received:**	6/26/14
		Date Analyzed:	7/2/14 19:49
Sample Name:	633027P106SXX	**Units:**	µg/L
Lab Code:	R1404899-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	399791
Data File Name:	I:\ACQUDATA\msvoa12\Data\070214\M7073.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	104	85-122	7/2/14 19:49	
Dibromofluoromethane	105	89-119	7/2/14 19:49	
Toluene-d8	105	87-121	7/2/14 19:49	

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Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	6/24/14 1255
Sample Matrix:	Water	**Date Received:**	6/26/14
Sample Name:	633027P103XX		
Lab Code:	R1404899-009	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Cadmium, Total	6010C	5.0	U	µg/L	5.0	0.5	1	7/ 7/14	7/9/14 17:36	
Chromium, Total	6010C	10	U	µg/L	10	0.9	1	7/ 7/14	7/9/14 17:36	
Copper, Total	6010C	20	U	µg/L	20	4	1	7/ 7/14	7/9/14 17:36	
Lead, Total	6010C	50	U	µg/L	50	2	1	7/ 7/14	7/9/14 17:36	
Nickel, Total	6010C	40	U	µg/L	40	2	1	7/ 7/14	7/9/14 17:36	
Zinc, Total	6010C	20	U	µg/L	20	5	1	7/ 7/14	7/9/14 17:36	

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Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	6/24/14 1255
Sample Matrix:	Water	**Date Received:**	6/26/14
		Date Analyzed:	7/2/14 20:22
Sample Name:	633027P103XX	**Units:**	µg/L
Lab Code:	R1404899-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	399791
Data File Name:	I:\ACQUDATA\msvoa12\Data\070214\M7074.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	**5.9**		1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**1.8**		1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.57	
107-06-2	1,2-Dichloroethane	**1.1**		1.0	0.36	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.20	
78-93-3	2-Butanone (MEK)	5.0	U	5.0	0.81	
591-78-6	2-Hexanone	5.0	U	5.0	1.7	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.67	
67-64-1	Acetone	5.0	U	5.0	1.3	
71-43-2	Benzene	1.0	U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0	U	1.0	0.32	
75-25-2	Bromoform	1.0	U	1.0	0.42	
74-83-9	Bromomethane	1.0	U	1.0	0.29	
75-15-0	Carbon Disulfide	1.0	U	1.0	0.22	
56-23-5	Carbon Tetrachloride	1.0	U	1.0	0.45	
108-90-7	Chlorobenzene	1.0	U	1.0	0.29	
75-00-3	Chloroethane	1.0	U	1.0	0.24	
67-66-3	Chloroform	1.0	U	1.0	0.25	
74-87-3	Chloromethane	1.0	U	1.0	0.21	
124-48-1	Dibromochloromethane	1.0	U	1.0	0.31	
75-09-2	Dichloromethane	1.0	U	1.0	0.32	
100-41-4	Ethylbenzene	1.0	U	1.0	0.20	
100-42-5	Styrene	1.0	U	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	1.0	U	1.0	0.30	
108-88-3	Toluene	1.0	U	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**1.1**		1.0	0.22	
75-01-4	Vinyl Chloride	1.0	U	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.24	
179601-23-1	m,p-Xylenes	2.0	U	2.0	0.33	
95-47-6	o-Xylene	1.0	U	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.20	

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Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	6/24/14 1255
Sample Matrix:	Water	**Date Received:**	6/26/14
		Date Analyzed:	7/2/14 20:22
Sample Name:	633027P103XX	**Units:**	µg/L
Lab Code:	R1404899-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	399791
Data File Name:	I:\ACQUDATA\msvoa12\Data\070214\M7074.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	85-122	7/2/14 20:22	
Dibromofluoromethane	106	89-119	7/2/14 20:22	
Toluene-d8	104	87-121	7/2/14 20:22	

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Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	6/24/14 1350
Sample Matrix:	Water	**Date Received:**	6/26/14
Sample Name:	633027TRCHCO		
Lab Code:	R1404899-010	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Cadmium, Total	6010C	5.0	U	µg/L	5.0	0.5	1	7/ 7/14	7/9/14 17:42	
Chromium, Total	6010C	**2**	J	µg/L	10	0.9	1	7/ 7/14	7/9/14 17:42	
Copper, Total	6010C	**5**	J	µg/L	20	4	1	7/ 7/14	7/9/14 17:42	
Lead, Total	6010C	**3**	J	µg/L	50	2	1	7/ 7/14	7/9/14 17:42	
Nickel, Total	6010C	**87**		µg/L	40	2	1	7/ 7/14	7/9/14 17:42	
Zinc, Total	6010C	9	J	µg/L	20	5	1	7/ 7/14	7/9/14 17:42	

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Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	6/24/14 1350
Sample Matrix:	Water	**Date Received:**	6/26/14
		Date Analyzed:	7/2/14 20:54
Sample Name:	633027TRCHCO	**Units:**	µg/L
Lab Code:	R1404899-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	399791
Data File Name:	I:\ACQUDATA\msvoa12\Data\070214\M7075.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	**10**		1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**1.1**		1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**0.65**	J	1.0	0.57	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.36	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.20	
78-93-3	2-Butanone (MEK)	5.0	U	5.0	0.81	
591-78-6	2-Hexanone	5.0	U	5.0	1.7	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.67	
67-64-1	Acetone	**3.5**	J	5.0	1.3	
71-43-2	Benzene	1.0	U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0	U	1.0	0.32	
75-25-2	Bromoform	1.0	U	1.0	0.42	
74-83-9	Bromomethane	1.0	U	1.0	0.29	
75-15-0	Carbon Disulfide	1.0	U	1.0	0.22	
56-23-5	Carbon Tetrachloride	1.0	U	1.0	0.45	
108-90-7	Chlorobenzene	1.0	U	1.0	0.29	
75-00-3	Chloroethane	1.0	U	1.0	0.24	
67-66-3	Chloroform	1.0	U	1.0	0.25	
74-87-3	Chloromethane	1.0	U	1.0	0.21	
124-48-1	Dibromochloromethane	1.0	U	1.0	0.31	
75-09-2	Dichloromethane	1.0	U	1.0	0.32	
100-41-4	Ethylbenzene	1.0	U	1.0	0.20	
100-42-5	Styrene	1.0	U	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	1.0	U	1.0	0.30	
108-88-3	Toluene	1.0	U	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**16**		1.0	0.22	
75-01-4	Vinyl Chloride	1.0	U	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**2.5**		1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.24	
179601-23-1	m,p-Xylenes	2.0	U	2.0	0.33	
95-47-6	o-Xylene	1.0	U	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.20	

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Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	6/24/14 1350
Sample Matrix:	Water	**Date Received:**	6/26/14
		Date Analyzed:	7/2/14 20:54
Sample Name:	633027TRCHCO	**Units:**	µg/L
Lab Code:	R1404899-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	399791
Data File Name:	I:\ACQUDATA\msvoa12\Data\070214\M7075.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	104	85-122	7/2/14 20:54	
Dibromofluoromethane	108	89-119	7/2/14 20:54	
Toluene-d8	101	87-121	7/2/14 20:54	

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Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	6/24/14 0800
Sample Matrix:	Water	**Date Received:**	6/26/14
		Date Analyzed:	7/2/14 13:21
Sample Name:	633027TB1	**Units:**	µg/L
Lab Code:	R1404899-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	399791
Data File Name:	I:\ACQUDATA\msvoa12\Data\070214\M7061.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	1.0	U	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.57	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.36	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.20	
78-93-3	2-Butanone (MEK)	5.0	U	5.0	0.81	
591-78-6	2-Hexanone	5.0	U	5.0	1.7	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.67	
67-64-1	Acetone	**3.1**	J	5.0	1.3	
71-43-2	Benzene	1.0	U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0	U	1.0	0.32	
75-25-2	Bromoform	1.0	U	1.0	0.42	
74-83-9	Bromomethane	**0.45**	BJ	1.0	0.29	
75-15-0	Carbon Disulfide	**0.22**	J	1.0	0.22	
56-23-5	Carbon Tetrachloride	1.0	U	1.0	0.45	
108-90-7	Chlorobenzene	1.0	U	1.0	0.29	
75-00-3	Chloroethane	1.0	U	1.0	0.24	
67-66-3	Chloroform	1.0	U	1.0	0.25	
74-87-3	Chloromethane	1.0	U	1.0	0.21	
124-48-1	Dibromochloromethane	1.0	U	1.0	0.31	
75-09-2	Dichloromethane	1.0	U	1.0	0.32	
100-41-4	Ethylbenzene	1.0	U	1.0	0.20	
100-42-5	Styrene	1.0	U	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	1.0	U	1.0	0.30	
108-88-3	Toluene	1.0	U	1.0	0.20	
79-01-6	Trichloroethene (TCE)	1.0	U	1.0	0.22	
75-01-4	Vinyl Chloride	1.0	U	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.24	
179601-23-1	m,p-Xylenes	2.0	U	2.0	0.33	
95-47-6	o-Xylene	1.0	U	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.20	

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Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	6/24/14 0800
Sample Matrix:	Water	**Date Received:**	6/26/14
		Date Analyzed:	7/2/14 13:21
Sample Name:	633027TB1	**Units:**	µg/L
Lab Code:	R1404899-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	399791
Data File Name:	I:\ACQUDATA\msvoa12\Data\070214\M7061.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85-122	7/2/14 13:21	
Dibromofluoromethane	109	89-119	7/2/14 13:21	
Toluene-d8	91	87-121	7/2/14 13:21	

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Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	6/25/14 0850
Sample Matrix:	Water	**Date Received:**	6/26/14
Sample Name:	633027P108XX		
Lab Code:	R1404899-012	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Cadmium, Total	6010C	**1.4**	J	µg/L	5.0	0.5	1	7/ 7/14	7/9/14 18:01	
Chromium, Total	6010C	10	U	µg/L	10	0.9	1	7/ 7/14	7/9/14 18:01	
Copper, Total	6010C	6	J	µg/L	20	4	1	7/ 7/14	7/9/14 18:01	
Lead, Total	6010C	50	U	µg/L	50	2	1	7/ 7/14	7/9/14 18:01	
Nickel, Total	6010C	40	U	µg/L	40	2	1	7/ 7/14	7/9/14 18:01	
Zinc, Total	6010C	7	J	µg/L	20	5	1	7/ 7/14	7/9/14 18:01	

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Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	6/25/14 0850
Sample Matrix:	Water	**Date Received:**	6/26/14
		Date Analyzed:	7/3/14 14:40
Sample Name:	633027P108XX	**Units:**	µg/L
Lab Code:	R1404899-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	400006
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\070314\M7105.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	1.0	U	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.57	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.36	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.20	
78-93-3	2-Butanone (MEK)	5.0	U	5.0	0.81	
591-78-6	2-Hexanone	5.0	U	5.0	1.7	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.67	
67-64-1	Acetone	5.0	U	5.0	1.3	
71-43-2	Benzene	1.0	U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0	U	1.0	0.32	
75-25-2	Bromoform	1.0	U	1.0	0.42	
74-83-9	Bromomethane	1.0	U	1.0	0.29	
75-15-0	Carbon Disulfide	1.0	U	1.0	0.22	
56-23-5	Carbon Tetrachloride	1.0	U	1.0	0.45	
108-90-7	Chlorobenzene	1.0	U	1.0	0.29	
75-00-3	Chloroethane	1.0	U	1.0	0.24	
67-66-3	Chloroform	1.0	U	1.0	0.25	
74-87-3	Chloromethane	1.0	U	1.0	0.21	
124-48-1	Dibromochloromethane	1.0	U	1.0	0.31	
75-09-2	Dichloromethane	1.0	U	1.0	0.32	
100-41-4	Ethylbenzene	1.0	U	1.0	0.20	
100-42-5	Styrene	1.0	U	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	1.0	U	1.0	0.30	
108-88-3	Toluene	1.0	U	1.0	0.20	
79-01-6	Trichloroethene (TCE)	1.0	U	1.0	0.22	
75-01-4	Vinyl Chloride	1.0	U	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.24	
179601-23-1	m,p-Xylenes	2.0	U	2.0	0.33	
95-47-6	o-Xylene	1.0	U	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.20	

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Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	6/25/14 0850
Sample Matrix:	Water	**Date Received:**	6/26/14
		Date Analyzed:	7/3/14 14:40
Sample Name:	633027P108XX	**Units:**	µg/L
Lab Code:	R1404899-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	400006
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\070314\M7105.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85-122	7/3/14 14:40	
Dibromofluoromethane	106	89-119	7/3/14 14:40	
Toluene-d8	99	87-121	7/3/14 14:40	

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	6/25/14 1130
Sample Matrix:	Water	**Date Received:**	6/26/14
Sample Name:	633027P101DXX		
Lab Code:	R1404899-013	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Cadmium, Total	6010C	5.0	U	µg/L	5.0	0.5	1	7/ 7/14	7/9/14 18:07	
Chromium, Total	6010C	**2**	J	µg/L	10	0.9	1	7/ 7/14	7/9/14 18:07	
Copper, Total	6010C	**10**	J	µg/L	20	4	1	7/ 7/14	7/9/14 18:07	
Lead, Total	6010C	50	U	µg/L	50	2	1	7/ 7/14	7/9/14 18:07	
Nickel, Total	6010C	40	U	µg/L	40	2	1	7/ 7/14	7/9/14 18:07	
Zinc, Total	6010C	**20**		µg/L	20	5	1	7/ 7/14	7/9/14 18:07	

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Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	6/25/14 1130
Sample Matrix:	Water	**Date Received:**	6/26/14
		Date Analyzed:	7/3/14 15:13
Sample Name:	633027P101DXX	**Units:**	µg/L
Lab Code:	R1404899-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	400006
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\070314\M7106.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	1.0	U	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.57	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.36	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.20	
78-93-3	2-Butanone (MEK)	5.0	U	5.0	0.81	
591-78-6	2-Hexanone	5.0	U	5.0	1.7	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.67	
67-64-1	Acetone	**1.3**	J	5.0	1.3	
71-43-2	Benzene	1.0	U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0	U	1.0	0.32	
75-25-2	Bromoform	1.0	U	1.0	0.42	
74-83-9	Bromomethane	1.0	U	1.0	0.29	
75-15-0	Carbon Disulfide	1.0	U	1.0	0.22	
56-23-5	Carbon Tetrachloride	1.0	U	1.0	0.45	
108-90-7	Chlorobenzene	1.0	U	1.0	0.29	
75-00-3	Chloroethane	1.0	U	1.0	0.24	
67-66-3	Chloroform	1.0	U	1.0	0.25	
74-87-3	Chloromethane	1.0	U	1.0	0.21	
124-48-1	Dibromochloromethane	1.0	U	1.0	0.31	
75-09-2	Dichloromethane	1.0	U	1.0	0.32	
100-41-4	Ethylbenzene	1.0	U	1.0	0.20	
100-42-5	Styrene	1.0	U	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	1.0	U	1.0	0.30	
108-88-3	Toluene	**0.26**	J	1.0	0.20	
79-01-6	Trichloroethene (TCE)	1.0	U	1.0	0.22	
75-01-4	Vinyl Chloride	1.0	U	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.24	
179601-23-1	m,p-Xylenes	2.0	U	2.0	0.33	
95-47-6	o-Xylene	1.0	U	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.20	

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Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	6/25/14 1130
Sample Matrix:	Water	**Date Received:**	6/26/14
		Date Analyzed:	7/3/14 15:13
Sample Name:	633027P101DXX	**Units:**	µg/L
Lab Code:	R1404899-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	400006
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\070314\M7106.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	85-122	7/3/14 15:13	
Dibromofluoromethane	105	89-119	7/3/14 15:13	
Toluene-d8	102	87-121	7/3/14 15:13	

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R1404899-MB	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Cadmium, Dissolved	6010C	5.0	U	µg/L	5.0	0.5	1	7/ 7/14	7/9/14 15:53	
Cadmium, Total	6010C	5.0	U	µg/L	5.0	0.5	1	7/ 7/14	7/9/14 15:53	
Chromium, Dissolved	6010C	10	U	µg/L	10	0.9	1	7/ 7/14	7/9/14 15:53	
Chromium, Total	6010C	10	U	µg/L	10	0.9	1	7/ 7/14	7/9/14 15:53	
Copper, Dissolved	6010C	20	U	µg/L	20	4	1	7/ 7/14	7/9/14 15:53	
Copper, Total	6010C	20	U	µg/L	20	4	1	7/ 7/14	7/9/14 15:53	
Lead, Dissolved	6010C	50	U	µg/L	50	2	1	7/ 7/14	7/9/14 15:53	
Lead, Total	6010C	50	U	µg/L	50	2	1	7/ 7/14	7/9/14 15:53	
Nickel, Dissolved	6010C	40	U	µg/L	40	2	1	7/ 7/14	7/9/14 15:53	
Nickel, Total	6010C	40	U	µg/L	40	2	1	7/ 7/14	7/9/14 15:53	
Zinc, Dissolved	6010C	20	U	µg/L	20	5	1	7/ 7/14	7/9/14 15:53	
Zinc, Total	6010C	20	U	µg/L	20	5	1	7/ 7/14	7/9/14 15:53	

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Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	7/2/14 12:49
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1407501-05	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	399791
Data File Name:	I:\ACQUDATA\msvoa12\Data\070214\M7060.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	1.0	U	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.57	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.36	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.20	
78-93-3	2-Butanone (MEK)	5.0	U	5.0	0.81	
591-78-6	2-Hexanone	5.0	U	5.0	1.7	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.67	
67-64-1	Acetone	5.0	U	5.0	1.3	
71-43-2	Benzene	1.0	U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0	U	1.0	0.32	
75-25-2	Bromoform	1.0	U	1.0	0.42	
74-83-9	Bromomethane	0.57	J	1.0	0.29	
75-15-0	Carbon Disulfide	1.0	U	1.0	0.22	
56-23-5	Carbon Tetrachloride	1.0	U	1.0	0.45	
108-90-7	Chlorobenzene	1.0	U	1.0	0.29	
75-00-3	Chloroethane	1.0	U	1.0	0.24	
67-66-3	Chloroform	1.0	U	1.0	0.25	
74-87-3	Chloromethane	1.0	U	1.0	0.21	
124-48-1	Dibromochloromethane	1.0	U	1.0	0.31	
75-09-2	Dichloromethane	1.0	U	1.0	0.32	
100-41-4	Ethylbenzene	1.0	U	1.0	0.20	
100-42-5	Styrene	1.0	U	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	1.0	U	1.0	0.30	
108-88-3	Toluene	1.0	U	1.0	0.20	
79-01-6	Trichloroethene (TCE)	1.0	U	1.0	0.22	
75-01-4	Vinyl Chloride	1.0	U	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.24	
179601-23-1	m,p-Xylenes	2.0	U	2.0	0.33	
95-47-6	o-Xylene	1.0	U	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.20	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	7/2/14 12:49
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1407501-05	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	399791
Data File Name:	I:\ACQUDATA\msvoa12\Data\070214\M7060.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	85-122	7/2/14 12:49	
Dibromofluoromethane	105	89-119	7/2/14 12:49	
Toluene-d8	103	87-121	7/2/14 12:49	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	7/3/14 13:37
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1407585-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	400006
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\070314\M7103.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	1.0	U	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.57	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.36	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.20	
78-93-3	2-Butanone (MEK)	5.0	U	5.0	0.81	
591-78-6	2-Hexanone	5.0	U	5.0	1.7	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.67	
67-64-1	Acetone	5.0	U	5.0	1.3	
71-43-2	Benzene	1.0	U	1.0	0.20	
75-27-4	Bromodichloromethane	1.0	U	1.0	0.32	
75-25-2	Bromoform	1.0	U	1.0	0.42	
74-83-9	Bromomethane	1.0	U	1.0	0.29	
75-15-0	Carbon Disulfide	1.0	U	1.0	0.22	
56-23-5	Carbon Tetrachloride	1.0	U	1.0	0.45	
108-90-7	Chlorobenzene	1.0	U	1.0	0.29	
75-00-3	Chloroethane	1.0	U	1.0	0.24	
67-66-3	Chloroform	1.0	U	1.0	0.25	
74-87-3	Chloromethane	1.0	U	1.0	0.21	
124-48-1	Dibromochloromethane	1.0	U	1.0	0.31	
75-09-2	Dichloromethane	1.0	U	1.0	0.32	
100-41-4	Ethylbenzene	1.0	U	1.0	0.20	
100-42-5	Styrene	1.0	U	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	1.0	U	1.0	0.30	
108-88-3	Toluene	1.0	U	1.0	0.20	
79-01-6	Trichloroethene (TCE)	1.0	U	1.0	0.22	
75-01-4	Vinyl Chloride	1.0	U	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.24	
179601-23-1	m,p-Xylenes	2.0	U	2.0	0.33	
95-47-6	o-Xylene	1.0	U	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.20	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrustructure (Formerly MACTEC)	**Service Request:**	R1404899
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	7/3/14 13:37
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1407585-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	400006
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\070314\M7103.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	85-122	7/3/14 13:37	
Dibromofluoromethane	105	89-119	7/3/14 13:37	
Toluene-d8	103	87-121	7/3/14 13:37	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: AMEC Environmental & Infrustructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251-04
Sample Matrix: Water

Service Request: R1404899
Date Analyzed: 7/9/14

Lab Control Sample Summary
Inorganic Parameters

Units: µg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R1404899-LCS Result	Spike Amount	% Rec	% Rec Limits
Cadmium, Dissolved	6010C	51.2	50.0	102	80 - 120
Cadmium, Total	6010C	51.2	50.0	102	80 - 120
Chromium, Dissolved	6010C	213	200	106	80 - 120
Chromium, Total	6010C	213	200	106	80 - 120
Copper, Dissolved	6010C	269	250	108	80 - 120
Copper, Total	6010C	269	250	108	80 - 120
Lead, Dissolved	6010C	529	500	106	80 - 120
Lead, Total	6010C	529	500	106	80 - 120
Nickel, Dissolved	6010C	539	500	108	80 - 120
Nickel, Total	6010C	539	500	108	80 - 120
Zinc, Dissolved	6010C	540	500	108	80 - 120
Zinc, Total	6010C	540	500	108	80 - 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: AMEC Environmental & Infrustructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251-04
Sample Matrix: Water

Service Request: R1404899
Date Analyzed: 7/2/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 399791

Analyte Name	Lab Control Sample RQ1407501-03 Result	Spike Amount	% Rec		Duplicate Lab Control Sample RQ1407501-04 Result	Spike Amount	% Rec		% Rec Limits	RPD		RPD Limit
1,1,1-Trichloroethane (TCA)	20.7	20.0	104		22.8	20.0	114		71 - 123	10		30
1,1,2,2-Tetrachloroethane	22.7	20.0	114		22.1	20.0	111		74 - 127	3		30
1,1,2-Trichloroethane	20.2	20.0	101		19.6	20.0	98		79 - 117	3		30
1,1-Dichloroethane (1,1-DCA)	21.3	20.0	106		23.1	20.0	116		76 - 128	8		30
1,1-Dichloroethene (1,1-DCE)	20.2	20.0	101		22.4	20.0	112		74 - 135	10		30
1,2-Dichloroethane	23.7	20.0	118		23.6	20.0	118		72 - 130	<1		30
1,2-Dichloropropane	20.8	20.0	104		21.0	20.0	105		80 - 119	<1		30
2-Butanone (MEK)	27.2	20.0	136	*	27.1	20.0	136	*	66 - 129	<1		30
2-Hexanone	23.8	20.0	119		23.5	20.0	117		61 - 131	2		30
4-Methyl-2-pentanone	21.2	20.0	106		22.0	20.0	110		68 - 129	4		30
Acetone	31.1	20.0	156	*	25.6	20.0	128		51 - 146	19		30
Benzene	19.1	20.0	96		19.9	20.0	99		76 - 118	4		30
Bromodichloromethane	20.4	20.0	102		18.7	20.0	94		79 - 122	8		30
Bromoform	19.2	20.0	96		14.7	20.0	73		65 - 138	26		30
Bromomethane	16.5	20.0	82		6.82	20.0	34	*	41 - 159	83	*	30
Carbon Disulfide	18.9	20.0	95		15.9	20.0	79		63 - 141	17		30
Carbon Tetrachloride	18.4	20.0	92		17.9	20.0	89		66 - 128	3		30
Chlorobenzene	17.8	20.0	89		18.6	20.0	93		80 - 121	4		30
Chloroethane	16.4	20.0	82		18.6	20.0	93		71 - 128	12		30
Chloroform	22.0	20.0	110		23.8	20.0	119		76 - 120	8		30
Chloromethane	19.8	20.0	99		21.2	20.0	106		64 - 140	7		30
Dibromochloromethane	19.6	20.0	98		16.7	20.0	83		79 - 125	16		30
Dichloromethane	20.2	20.0	101		20.7	20.0	104		73 - 122	3		30
Ethylbenzene	15.8	20.0	79		17.1	20.0	85		76 - 120	8		30
Styrene	18.0	20.0	90		18.5	20.0	93		81 - 122	3		30
Tetrachloroethene (PCE)	16.2	20.0	81		17.3	20.0	87		69 - 124	7		30
Toluene	18.7	20.0	93		18.9	20.0	95		77 - 120	1		30
Trichloroethene (TCE)	16.3	20.0	82		17.0	20.0	85		76 - 123	4		30
Vinyl Chloride	17.7	20.0	88		19.1	20.0	95		69 - 136	7		30
cis-1,2-Dichloroethene	19.4	20.0	97		20.3	20.0	102		80 - 121	5		30
cis-1,3-Dichloropropene	20.3	20.0	102		17.8	20.0	89		77 - 125	13		30
m,p-Xylenes	34.7	40.0	87		36.4	40.0	91		78 - 123	5		30
o-Xylene	17.2	20.0	86		17.9	20.0	90		77 - 131	4		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.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: AMEC Environmental & Infrustructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251-04
Sample Matrix: Water

Service Request: R1404899
Date Analyzed: 7/ 2/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 399791

Analyte Name	Lab Control Sample RQ1407501-03 Result	Spike Amount	% Rec	Duplicate Lab Control Sample RQ1407501-04 Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
trans-1,2-Dichloroethene	19.8	20.0	99	20.2	20.0	101	78 - 124	2	30
trans-1,3-Dichloropropene	21.1	20.0	105	18.4	20.0	92	72 - 123	14	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.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: AMEC Environmental & Infrustructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251-04
Sample Matrix: Water

Service Request: R1404899
Date Analyzed: 7/ 3/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 400006

Lab Control Sample
RQ1407585-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	20.0	20.0	100	71 - 123
1,1,2,2-Tetrachloroethane	20.0	20.0	100	74 - 127
1,1,2-Trichloroethane	19.7	20.0	99	79 - 117
1,1-Dichloroethane (1,1-DCA)	19.5	20.0	98	76 - 128
1,1-Dichloroethene (1,1-DCE)	20.0	20.0	100	74 - 135
1,2-Dichloroethane	22.2	20.0	111	72 - 130
1,2-Dichloropropane	19.9	20.0	100	80 - 119
2-Butanone (MEK)	22.5	20.0	112	66 - 129
2-Hexanone	21.6	20.0	108	61 - 131
4-Methyl-2-pentanone	19.9	20.0	99	68 - 129
Acetone	27.2	20.0	136	51 - 146
Benzene	19.2	20.0	96	76 - 118
Bromodichloromethane	20.4	20.0	102	79 - 122
Bromoform	17.5	20.0	87	65 - 138
Bromomethane	19.5	20.0	97	41 - 159
Carbon Disulfide	18.1	20.0	90	63 - 141
Carbon Tetrachloride	18.4	20.0	92	66 - 128
Chlorobenzene	18.5	20.0	92	80 - 121
Chloroethane	15.8	20.0	79	71 - 128
Chloroform	20.3	20.0	102	76 - 120
Chloromethane	20.1	20.0	100	64 - 140
Dibromochloromethane	19.5	20.0	98	79 - 125
Dichloromethane	18.7	20.0	93	73 - 122
Ethylbenzene	17.1	20.0	86	76 - 120
Styrene	18.4	20.0	92	81 - 122
Tetrachloroethene (PCE)	18.5	20.0	92	69 - 124
Toluene	18.9	20.0	94	77 - 120
Trichloroethene (TCE)	17.8	20.0	89	76 - 123
Vinyl Chloride	17.3	20.0	86	69 - 136
cis-1,2-Dichloroethene	18.8	20.0	94	80 - 121
cis-1,3-Dichloropropene	19.3	20.0	96	77 - 125
m,p-Xylenes	37.0	40.0	93	78 - 123
o-Xylene	18.0	20.0	90	77 - 131

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: AMEC Environmental & Infrustructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251-04
Sample Matrix: Water

Service Request: R1404899
Date Analyzed: 7/ 3/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 400006

Lab Control Sample
RQ1407585-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
trans-1,2-Dichloroethene	18.8	20.0	94	78 - 124
trans-1,3-Dichloropropene	20.6	20.0	103	72 - 123

Results flagged with an asterisk (*) indicate values outside control criteria.
Pereent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

16583

ALS Environmental

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: Primoshield	Project Number: 36121227251-04
Project Manager: JeanFirth/JaymeCannulley	Report CC: TigeCunningham
Company/Address: AMEC E&C 511 Congress Str Portland, Me 04101	
Phone #: 207-828-3415	Email: tige.cunningham@amec.com
Sampler's Signature: Jerry Rawcliffe	Sampler's Printed Name: Jerry Rawcliffe

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: 1 | | | | | 3 | 3 | | | | | | | | |

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs • 8260 • 624 • CLP	GC/MS SVOAs • 8270 • 625	GC VOAs • 8021 • 601/602	PESTICIDES • 8081 • 608	PCBs • 8082 • 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	REMARKS/ ALTERNATE DESCRIPTION
633027P105XX		6/23/14	1420	GW	4	3					1		
633027P107DXX		↓	1525		5	3					1	1	
633027P104XX		6/24/14	0940		4	3					1		
633027P104XD			0940		4	3					1		
633027P106DXX			1055		4	3					1		
633027P107SXX			1105		4	3					1		
633027P106SXX			1245		4	3					1		
633027P103XX			1255		4	3					1		
633027TRCHCO		↓	1350		4	3					1		
633027TB1		6/24/14	0800		3								
633027P108XX		6/25/14	0850		4	3					1		
633027P101DXX		↓	1130	↓	4	3					1		

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See OAPP ☐

R1404899 5
AMEC Environmental & Infrastructure
NYSDEC Primoshield

STATE WHERE SAMPLES WERE COLLECTED

TURNAROUND REQUIREMENTS
_____ RUSH (SURCHARGES APPLY)
_____ 1 day _____ 2 day _____ 3 day
_____ 4 day _____ 5 day
REQUESTED REPORT DATE _____

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
Edata _____ Yes _____ No

INVOICE INFORMATION
PO # C01290946
BILL TO: AMEC

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature: Jerry Rawcliffe	Signature: Heather Arnhill 8370 3552 3242	Signature	Signature: J. Seaver	Signature	Signature
Printed Name: Jerry Rawcliffe	Printed Name	Printed Name	Printed Name: J. Seaver	Printed Name	Printed Name
Firm: AMEC	Firm	Firm	Firm: ALS	Firm	Firm
Date/Time: 6/25/14 1715	Date/Time: 6/25/14 1715	Date/Time	Date/Time: 6/24/14 0950	Date/Time	Date/Time

Distribution: White - Lab Copy; Yellow - Return to Originator

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Cooler Receipt and Preservation Check Form

Project/Client AMEC Folder Number R1404899

Cooler received on 6/24 by: JLS COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	(Y) N	5a	**Perchlorate** samples have required headspace?	Y N (NA)
2	**Custody papers** properly completed (ink, signed)?	(Y) N	5b	Did VOA vials, Alk,or Sulfide have sig* **bubbles**?	Y (N) NA
3	Did all bottles arrive in good **condition** (unbroken)?	(Y) N	6	Where did the bottles originate?	(ALS/ROC) CLIENT
4	Circle: **Wet Ice** **Dry Ice** **Gel packs** present?	(Y) N	7	Soil VOA received as: Bulk Encore 5035set	(NA)

8. Temperature Readings Date: 6/24/14 Time: 1011 ID: (IR#3) IR#4 From: Temp Blank (Sample Bottle)

Observed Temp (°C)	5.5	6.8	6.1				
Correction Factor (°C)	–	-1.8	-0.2				
Corrected Temp (°C)	5.5	5.0	5.9				
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: ROOM by JLS on 6/24 at 1011
5035 samples placed in storage location: _____ by _____ on _____ at _____

PC Secondary Review: _____

Cooler Breakdown: Date: 6/26/14 Time: 1520 by: _____

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	✓		RDB261368	5/15				
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add $Na_2S_2O_3$ (CN), ascorbic (phenol).					
	$Na_2S_2O_3$	-	-						
	ZnAcetate	-	-						
	HCl	**	**	4112120	5/15				

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

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 4-002-086-003, 010614-2AHO

Other Comments:

PC Secondary Review: _____

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

APPENDIX C

NOVEMBER 2014

New York Department of Environmental Conservation
Inactive Hazardous Waste Site
Inspection Form-Treatment Systems

Site Name: *Primoshield Inc.*	NYSDEC Site Number: *633027*	NYSDEC PM: *Will Welling*
Site Location: *St. Vincent Street, Utica, NY*	Site Classification # (circle): 1 2 2a 3 (4)	Primary Site Contact: *Will Welling*
Site Inspection Date: 11/11/14	Purpose of Inspection: QUARTERLY INSPECTION	
Name of Inspector: Caitlyn & Brael	Title:	Agency/Company: MACTEC/AMEC
Phone Number: 207-875-5401		Address: *511 Congress Street, Suite 200 Portland, ME 04101*

Treatment Systems

System Status			
System in Operation During Visit?	(Yes)	No	
Manned on a Fulltime basis?	Yes	(No)	
Maintenance Logs Current?	Yes	No	(NA)
Equipment Calibration Logs Current?	Yes	No	(NA)
Pump working?	Yes	(No)	
Initial flow rate (gpm):	0		
Pressure before basket strainers (P1):	N/A basket strainers permently removed		
Pressure after basket strainers: (P2)	N/A basket strainers permently removed		
Basket Strainer Inspected and cleaned?	Yes	(No)	
Flow rate after cleaning filters (gpm):	N/A basket strainers permently removed		
Pressuer after cleaning basket strainers: (P1)	Yes	(No)	
Totalizer reading (gallons)	09 021412690		
Discharge Monitoring	Yes	No	
Does the system require a discharge permit or discharge to a POTW?	Yes	No	
Is Permit Performance Monitoring Implemented?	Yes	No	

Condition of Operational Controls			
	Good	Poor	NA
Condition of Gauges	(Good)	Poor	NA
Condition of flow meters	(Good)	Poor	NA
Condition of System Alarms	(Good)	Poor	NA
Condition of Pumps	(Good)	Poor	NA
Condition of Flow Pipes or Hoses	(Good)	Poor	NA
Pipes Labeled with Direction of Flow and Contents	Yes	(No)	NA
Condition of Valves	(Good)	Poor	NA
Condition of Containment Structures (berms etc.)	Good	Poor	(NA)
Evidence of Leaking	Yes	(No)	NA
Condition of Feed/Extraction Pumps	(Good)	Poor	(NA)
Vaulted Area Condition	(Good)	Poor	NA
Lighting in Work Areas Adequate	(Yes)	No	NA
Condition of Collection/Discharge Trenches	(Good)	Poor	NA
Clean of Debris	(Good)	Poor	NA
Evidence of Sedimentation	Good	(Poor)	NA
Air Stripper Condition	Good	Poor	NA
Noticeable Odors	Yes	No	NA
Air Emission Permit Required	Yes	No	NA
Permit Performance Monitoring Implemented	Yes	No	NA
Condition of Storage Tanks/Containers	Good	Poor	NA
Evidence of Leaks	Yes	No	NA
Tank Compatible with Contents	Yes	No	NA
Evidence of Tanks	Yes	No	NA
Labeled Appropriately	Yes	No	NA
Condition of Filter Presses	Good	Poor	NA
Condition of Extraction Wells/Recharge Wells	Good	Poor	NA

General Observations:
→ Pump in vault is running but cavitating - water level was a third of the way up the pump.
→ strainers removed

List other applicable treatment systems/components and their overall condition:

Chemical Handling Practices

Are good management practices and handling requirements being applied?	Yes	No	(NA)
Does the usage of chemical for the treatment system appear to meet O&M specifications?	Yes	No	(NA)

General Observations:
No chemicals in use

New York Department of Environmental Conservation
Inactive Hazardous Waste Site
Inspection Form-Treatment Systems

Name/Title	Phone#	Company/Entity	Contact Information

Additional Observation Notes:

(1) Gap in fence along north/NW fence → Photo 2.

(2) All clean out well heads should be replaced - rusting and/or broken pieces → do not fit properly into liner.

For found/observed - Review and comment as to status (include photo documentation):

1. Integrety of perimeter fance repairs completed in May/June?
The two sections of toprail installed in June are in place and in good condition. Top rail does not extend to corner of fence as shown in Photo # 2 of June report.
2. Is there vegitation infringing on the perimeter fence? Remove infringing vegitation that can be removed without the use of power tools.
Yes. along west/NW side of fence where toprail had been installed Vegetation from neighboring property i.e. C.I.A. has grown up the fence as well as through/over. New barbed wire in Photo 1 of May report functioning as intended - minimal vegetation.
3. Inspect the previously documented gap between the fence post and neighboring building - has it increased?
Do not have photo of previous inspection of this area. Photo 1 documents current condition of gap. 1 1/2 - 3 1/2" gap.

Photograph Log

Photograph 1 Existing gap btw neighboring building and property
Photograph 2 hole/gap noted in fencing along
Photograph 3
Photograph 4
Photograph 5
Photograph 6
Photograph 7
Photograph 8
Photograph 9
Photograph 10

Performance Monitoring

Were check samples collected during this visit? Yes (No)

Sample type collected *(circle or write in other)*: Groundwater Effluent N/A

List Parameter's/Methods Collected Per Media: N/A

Analytical Laboratory/Location: N/A
Sample Observations: N/A

Attachment 1 – Air Sampling Photographic Log

Client:	NYSDEC	***Project Number:***	3612122251
Site Name:	Primoshield, Inc	***Site Location:***	Utica, New York.

Photographer:
Caitlyn Abbott

Date:
November 11, 2014

Photograph: 1

Direction:
n/a

Description:
Flow meter/totalizer reading



Photographer:
Caitlyn Abbott

Date:
November 11, 2014

Photograph: 2

Direction:
North

Description:
Hole in northeast section of fence.



Attachment 1 – Air Sampling Photographic Log

Client: NYSDEC ***Project Number:*** 3612122251

Site Name: Primoshield, Inc ***Site Location:*** Utica, New York.

Photographer:
Caitlyn Abbott

Date:
November 11, 2014

Photograph: 3

Direction:
Northeast

Description:
Fence without top rail.



Photographer:
Caitlyn Abbott

Date:
November 11, 2014

Photograph: 4

Direction:

Description:
Collection trench well cap. Rusted bolt and broken nut.



Attachment 1 – Air Sampling Photographic Log

Client:	NYSDEC	***Project Number:***	3612122251
Site Name:	Primoshield, Inc	***Site Location:***	Utica, New York.

Photographer:
Caitlyn Abbott

Date:
November 11, 2014

Photograph: 5

Direction:
West

Description:
Gap between the adjacent building and the Primoshield property.



Photographer:
Caitlyn Abbott

Date:
November 11, 2014

Photograph: 6

Direction:
North

Description:
Previous repair of fence.



New York Department of Environmental Conservation
Inactive Hazardous Waste Site
Inspection Form-Treatment Systems

Site Name: *Primoshield Inc.*	NYSDEC Site Number: *633027*	NYSDEC PM: *Will Welling*
Site Location: *St. Vincent Street, Utica, NY*	Site Classification # (circle): 1 2 2a 3 (4)	Primary Site Contact: *Will Welling*
Site Inspection Date: NOVEMBER 21 2014	Purpose of Inspection: SEMI-ANNUAL EFFLUENT SAMPLE	
Name of Inspector: KARL LADNER	Title:	Agency/Company: MACTEC/AMEC
Phone Number:		Address: *511 Congress Streeet, Suite 200 Portland, ME 04101*

Treatment Systems

System Status			
System in Operation During Visit?	(Yes)	No	
Manned on a Fulltime basis?	Yes	(No)	
Maintenance Logs Current?	Yes	No	(NA)
Equipment Calibration Logs Current?	Yes	No	(NA)
Pump working?	(Yes)	No	
Initial flow rate (gpm):	NOT COLLECTED		
Pressure before basket strainers (P1):	NOT COLLECTED		
Pressure after basket strainers: (P2)	NOT COLLECTED		
Basket Strainer Inspected and cleaned?	(Yes)	No	
Flow rate after cleaning filters (gpm):	NOT COLLECTED		
Pressuer after cleaning basket strainers: (P1)	Yes	No	
Totalizer reading (gallons)	N/A		
Discharge Monitoring	Yes	No	
Does the system require a discharge permit or discharge to a POTW?	(Yes)	No	
Is Permit Performance Monitoring Implemented?	(Yes)	No	
Condition of Operational Controls	(Good)	Poor	NA
Condition of Gauges	(Good)	Poor	NA
Condition of flow meters	(Good)	Poor	NA
Condition of System Alarms	(Good)	Poor	NA
Condition of Pumps	(Good)	Poor	NA
Condition of Flow Pipes or Hoses	(Good)	Poor	NA
Pipes Labeled with Direction of Flow and Contents	Yes	(No)	NA
Condition of Valves	(Good)	Poor	NA
Condition of Containment Structures (berms etc.)	Good	Poor	(NA)
Evidence of Leaking	Yes	(No)	NA
Condition of Feed/Extraction Pumps	Good	Poor	(NA)
Vaulted Area Condition	Good	Poor	NA
Lighting in Work Areas Adequate	(Yes)	No	NA
Condition of Collection/Discharge Trenches	Good	Poor	NA
Clean of Debris	Good	Poor	(NA)
Evidence of Sedimentation	Good	Poor	(NA)
Air Stripper Condition	Good	Poor	NA
Noticeable Odors	Yes	No	NA
Air Emission Permit Required	Yes	No	NA
Permit Performance Monitoring Implemented	Yes	No	NA
Condition of Storage Tanks/Containers	Good	Poor	NA
Evidence of Leaks	Yes	No	NA
Tank Compatible with Contents	Yes	No	NA
Evidence of Leaks	Yes	No	NA
Labeled Appropriately	Yes	No	NA
Condition of Filter Presses	Good	Poor	NA
Condition of Extraction Wells/Recharge Wells	Good	Poor	NA

General Observations:

RETURNED TO SITE TO FIX FLOAT SWITCH AND COLLECT EFFLUENT SAMPLE. TODAY.

List other applicable treatment systems/components and their overall condition:

Chemical Handling Practices

Are good management practices and handling requirements being applied?	Yes	No	(NA)
Does the usage of chemical for the treatment system appear to meet O&M specifications?	Yes	No	(NA)

General Observations:

NO CHEMICALS IN USE

New York Department of Environmental Conservation
Inactive Hazardous Waste Site
Inspection Form-Treatment Systems

Interviews/Additional Contacts

Name/Title	Phone:	Company/Entity	Contact Information

Additional Observation Notes:

AN EFFLUENT SAMPLE WAS COLLECTED @ 1300 FOR 8260 TOTAL METALS CYANIDE PH AND SUBMITTED TO ALS FOR ANALYSIS

Photograph Log:

Photograph 1

Photograph 2

Photograph 3

Photograph 4

Photograph 5

Photograph 6

Photograph 7

Photograph 8

Photograph 9

Photograph 10

Performance Monitoring

Were check samples collected during this visit? (Yes) No

Sample type collected *(circle or write in other)*: Groundwater (Effluent)

List Parameters/Methods Collected Per Media:

8260 - VOCS
METALS - METALS
9012B - CYANIDE
4500 - PH

Analytical Laboratory/Location: ALS, ROCHESTER N.Y.

Sample Observations:

COLLECTED 6 CONTAINERS

SOIL BORING LOG

MACTEC
511 Congress Street, Portland Maine 04101

Project Name: PRIMOSHIELD		Boring ID: GW-01	
Project Location: UTICA, N.Y.		Page No.	
Project No.:	Client:	of:	
Boring Location: 1208 ST. VINCENT ST.	Refusal Depth: 8'	Total Depth: 8'	Bore Hole ID/OD: 1"/4
Weather: CLEAR	Soil Drilled:	Method: HAND AUGER & GEOPROBE	Casing Size: 1" TEMPORARY WELL
Subcontractor: —		Protection Level: D	Sampler:
Driller: BRAD WOLFE	Date Started: 11/11/14	Date Completed:	Sampler ID/OD:
Rig Type/Model: HAND GEOPROBE	Logged By: BPW	Checked By:	
Reference Elevation:	Water Level: >8'	Time:	

Sample Information			Monitoring	Sample Description and Classification	USCS Group Symbol	Remarks
Depth (feet bgs)	Sample Number	Penetration/ Recovery (feet)	NA			
0.0				0-.5 GRASS.		
				.5-18" SANDY GRAVEL W/ SILT, BROWN 60% GRAVEL 35% SAND 5% SILT.		
				18"-2.5' SILTY SAND, BROWN.		
				2.5'-5' INCREASING SILT. SLIGHTLY PLASTIC.		POSSIBLY ▽ H_2O @ 5' ± ↓ NONE
				5' POORLY SORTED SAND BROWN, MOIST.		
				5.5' GRAY BROWN SANDY SILT.		
				6.5' MED TO HIGH PLASTICITY. MOIST		
				6.5-7.5' GRAY BROWN SILTY SAND W/ GRAVEL. MOIST LOW PLASTICITY		
				7.5-8.0' BROWN SANDY/ GRAVELY GRAVEL SAND DRY. ANGULAR GRAVEL.		
				TD @ 8' NO H_2O		

NOTES:

ALS Environmental
ALS Group USA, Corp
1565 Jefferson Rd, Building 300, Suite 360
Rochester, NY 14623
T: 585-288-5380
F: 585-288-8475
www.alsglobal.com

December 16, 2014

Analytical Report for Service Request No: R1409445

Mr. Tige Cunningham
AMEC Environmental & Infrastructure
511 Congress Street, Suite 200
Portland, ME 04101

Laboratory Results for: NYSDEC Primoshield/3612122251-04

Dear Mr. Cunningham:

Enclosed are the results of the sample(s) submitted to our laboratory on November 22, 2014. For your reference, these analyses have been assigned our service request number **R1409445**.

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

CC: Jayme Connolly

CASE NARRATIVE

Client:	AMEC	**Service Request:**	R1409445
Project:	NYSDEC Primoshield	**Project Number:**	
Sample Matrix:	Water	**Date Received:**	11/22/14

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 11/21/14 and received at ALS Rochester on 11/22/14 at a cooler temperature of 5.7 °C in good condition except as noted on the cooler receipt and preservation check form.

Inorganics

Water samples were analyzed for a site specific list of inorganics. Please see attached data pages for method numbers.

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

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

Site specific QC was not requested on these samples.

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.

Metals

Water samples were analyzed for Iron by Method 6010C from SW-846.

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

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

Site specific QC was not requested on these samples.

The Method Blanks associated with these samples were free of contamination above the Method Reporting Limit (MRL).

All samples were analyzed within recommended holding times.

No other analytical or QC problems were encountered.

Volatile Organics

Water samples were analyzed for a site list of Volatile Organics by Method 624.

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 not requested on these samples, however was performed on 633027 Effluent. All 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 #:	3612122251-04	Batch Complete:	Yes	Date Revised:	
Submission:	R1409445	Diskette Requested:	Yes	Date Due:	12/13/14
Client:	AMEC Environmental & Infrastruct	Date:	11/24/14	Protocol:	EPA
Client Rep:	JJAEGER	Custody Seal: Present/Absent:		Shipping No.:	
Project:	NYSDEC Primoshield	Chain of Custody: Present/Absent:		SDG #:	

CAS Job #	Client/EPA ID	Matrix	Requested Parameters	Date Sampled	Date Received	pH (Solids)	% Solids	Remarks Sample Condition
R1409445-001	633027 EFFLUENT	Water	624, SM 4500-H+ B, 200.7, 9012B	11/21/14	11/22/14			
R1409445-002	TRIP BLANK	Water	624	11/21/14	11/22/14			

Folder Comments:

ALS Environmental

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.

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/Arclors).

B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.

E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.

E Organics- Concentration has exceeded the calibration range for that specific analysis.

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.

* 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.

H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.

Spike was diluted out.

\+ Correlation coefficient for MSA is <0.995.

N Inorganics- Matrix spike recovery was outside laboratory limits.

N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.

S Concentration has been determined using Method of Standard Additions (MSA).

W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.

P Concentration >40% (25% for CLP) difference between the two GC columns.

C Confirmed by GC/MS

Q DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).

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.

ACCREDITED IN ACCORDANCE WITH nelac

Rochester Lab ID # for State Certifications[1]

NELAP Accredited	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Connecticut ID # PH0556	Nebraska Accredited	
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

INORGANIC PREPARATION METHODS

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	3010A
200.8	ILM05.3
6010C	3010A
6020A	ILM05.3
9014 Cyanide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Acid Soluble	9030B
9056A Bomb (Halogens)	5050A
9066 Manual Distillation	9065
SM 4500-CN-E Residual Cyanide	SM 4500-CN-G
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C	3050B
6020A	3050B
6010C TCLP (1311) extract	3010A
6010 SPLP (1312) extract	3010A
7196A	3060A
7199	3060A
9056A Halogens/Halides	5050
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction

For analytical methods not listed, the preparation method is the same as the analytical method reference.

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

20114

ALS Environmental

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: Primoshield	Project Number: 3612122251-04
Project Manager: Jayme Connolly	Report CC: Tyge Cunningham
Company/Address: AMEC Environmental Former Mactec 511 Congress St PO# C0129009446 Portland ME. 04101	
Phone #: 207-828-3457	Email: Tyge.Cunningham
Sampler's Signature: Karl Ladner	Sampler's Printed Name: Karl Ladner

ANALYSIS REQUESTED *(Include Method Number and Container Preservative)*

PRESERVATIVE

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GCMS VOAs ○ 8260 ○ 624 ○ CLP	GCMS SVOAs ○ 8270 ○ 625	GC VOAs ○ 8021 ○ 601/602	PESTICIDES ○ 8081 ○ 608	PCBs ○ 8082 ○ 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	Cyanide 9012B	PH- SM- 4500	REMARKS/ ALTERNATE DESCRIPTION
633027 Effluent		11/21/14	1300	GW	6	X					X		X	X	
Trip Blank		11/21/14	—	—		X									

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

SPECIAL INSTRUCTIONS/COMMENTS

Metals

Cadinium, Copper, Cr, Ni, ZN (200.7)
(Please report Lead also) NJ

See QAPP ☐

STATE WHERE SAMPLES WERE COLLECTED

TURNAROUND REQUIREMENTS

_____ RUSH (SURCHARGES APPLY)

_____ 1 day _____ 2 day _____ 3 day
_____ 4 day _____ 5 day

REQUESTED REPORT DATE

_____

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

Edata _____ Yes _____ No

INVOICE INFORMATION

PO #

BILL TO:

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Karl Ladner					
Signature: Karl Ladner	Signature:	Signature	Signature	Signature	
Printed Name	Printed Name:	Printed Name	Printed Name	Printed Name	
Firm: AMEC	Firm:	Firm	Firm	Firm	
Date/Time: 11-21-14 1500	Date/Time: 11/22/14 0940	Date/Time	Date/Time	Date/Time	

R1409445 5
AMEC Environmental & Infrastructure
NYSDEC Primoshield

Distribution: White - Lab Copy; Yellow - Return to Originator

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R1409445 5
AMEC Environmental & Infrastructure
NYSDEC Primoshield

Cooler Receipt and Preservation Check Form

Project/Client AMEC Folder Number 14-9445

Cooler received on 11/22/14 by: @ COURIER: ALS UPS (FEDEX) VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	Y (N)	5a	**Perchlorate** samples have required headspace?	Y N (NA)
2	**Custody papers** properly completed (ink, signed)?	(Y) N	5b	Did VOA vials, Alk,or Sulfide have sig* **bubbles**?	(Y) N NA
3	Did all bottles arrive in good **condition** (unbroken)?	(Y) N	6	Where did the bottles originate?	(ALS/ROC) CLIENT
4	Circle: (Wet Ice) **Dry Ice Gel packs** present?	(Y) N	7	Soil VOA received as: Bulk Encore 5035set	NA

8. Temperature Readings Date: 11/22/14 Time: 0943 ID: IR#3 (IR#4) From: (Temp Blank) Sample Bottle

Observed Temp (°C)	5.1						
Correction Factor (°C)	+0.6						
Corrected Temp (°C)	5.7°						
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: R-002 by @ on 11/22/14 at 0946
5035 samples placed in storage location: _____ by _____ on _____ at _____

PC Secondary Review: JMS 11/24/14

Cooler Breakdown: Date: 11/24/14 Time: 1231 by: JFS

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	✓		WC1403171H	10/15				
≤2	HNO_3	✓		BDB261408	10/15				
≤2	H_2SO_4	✓							
<4	$NaHSO_4$								
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add $Na_2S_2O_3$ (CN), ascorbic (phenol).					
	$Na_2S_2O_3$	-	-						
	ZnAcetate	-	-						
	HCl	**	**						

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

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 092214-2440, BDB261358, 4-162-02,
Other Comments:

Headspace: 2 vials tip blank

PC Secondary Review: JMS 12/2/14 *significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrastructure (Formerly MACTEC)	**Service Request:**	R1409445
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	11/21/14 1300
Sample Matrix:	Water	**Date Received:**	11/22/14
		Date Analyzed:	11/26/14 14:00
Sample Name:	633027 EFFLUENT	**Units:**	µg/L
Lab Code:	R1409445-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method:	624	**Analysis Lot:**	423263
Data File Name:	I:\ACQUDATA\MSVOA6\DATA\112614\L9154.D\	**Instrument Name:**	R-MS-06
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	**5.5**		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	
75-35-4	1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	
110-75-8	2-Chloroethyl Vinyl Ether	10	U	10	
107-02-8	Acrolein	10	U	10	
107-13-1	Acrylonitrile	10	U	10	
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
56-23-5	Carbon Tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
75-09-2	Methylene Chloride	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
127-18-4	Tetrachloroethene (PCE)	1.0	U	1.0	
108-88-3	Toluene	1.0	U	1.0	
79-01-6	Trichloroethene (TCE)	**11**		1.0	
75-69-4	Trichlorofluoromethane (CFC 11)	1.0	U	1.0	
75-01-4	Vinyl Chloride	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
179601-23-1	m,p-Xylenes	2.0	U	2.0	
95-47-6	o-Xylene	1.0	U	1.0	
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrastructure (Formerly MACTEC)	**Service Request:**	R1409445
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	11/21/14 1300
Sample Matrix:	Water	**Date Received:**	11/22/14
		Date Analyzed:	11/26/14 14:00
Sample Name:	633027 EFFLUENT	**Units:**	µg/L
Lab Code:	R1409445-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method:	624	**Analysis Lot:**	423263
Data File Name:	I:\ACQUDATA\MSVOA6\DATA\112614\L9154.D\	**Instrument Name:**	R-MS-06
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	96	81-127	11/26/14 14:00	
4-Bromofluorobenzene	99	79-123	11/26/14 14:00	
Toluene-d8	105	83-120	11/26/14 14:00	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrastructure (Formerly MACTEC)	**Service Request:**	R1409445
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	11/21/14 1300
Sample Matrix:	Water	**Date Received:**	11/22/14
		Date Analyzed:	11/26/14 14:30
Sample Name:	TRIP BLANK	**Units:**	µg/L
Lab Code:	R1409445-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method:	624	**Analysis Lot:**	423263
Data File Name:	I:\ACQUDATA\MSVOA6\DATA\112614\L9155.D\	**Instrument Name:**	R-MS-06
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	1.0	U	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	
75-35-4	1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	
110-75-8	2-Chloroethyl Vinyl Ether	10	U	10	
107-02-8	Acrolein	10	U	10	
107-13-1	Acrylonitrile	10	U	10	
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
56-23-5	Carbon Tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
75-09-2	Methylene Chloride	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
127-18-4	Tetrachloroethene (PCE)	1.0	U	1.0	
108-88-3	Toluene	1.0	U	1.0	
79-01-6	Trichloroethene (TCE)	1.0	U	1.0	
75-69-4	Trichlorofluoromethane (CFC 11)	1.0	U	1.0	
75-01-4	Vinyl Chloride	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
179601-23-1	m,p-Xylenes	2.0	U	2.0	
95-47-6	o-Xylene	1.0	U	1.0	
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrastructure (Formerly MACTEC)	**Service Request:**	R1409445
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	11/21/14 1300
Sample Matrix:	Water	**Date Received:**	11/22/14
		Date Analyzed:	11/26/14 14:30
Sample Name:	TRIP BLANK	**Units:**	µg/L
Lab Code:	R1409445-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method:	624	**Analysis Lot:**	423263
Data File Name:	I:\ACQUDATA\MSVOA6\DATA\112614\L9155.D\	**Instrument Name:**	R-MS-06
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	101	81-127	11/26/14 14:30	
4-Bromofluorobenzene	98	79-123	11/26/14 14:30	
Toluene-d8	106	83-120	11/26/14 14:30	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrastructure (Formerly MACTEC)	**Service Request:**	R1409445
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	11/26/14 11:24
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1414901-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method:	624	**Analysis Lot:**	423263
Data File Name:	I:\ACQUDATA\MSVOA6\DATA\112614\L9149.D\	**Instrument Name:**	R-MS-06
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	1.0	U	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	
75-35-4	1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	
110-75-8	2-Chloroethyl Vinyl Ether	10	U	10	
107-02-8	Acrolein	10	U	10	
107-13-1	Acrylonitrile	10	U	10	
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
56-23-5	Carbon Tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
75-09-2	Methylene Chloride	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
127-18-4	Tetrachloroethene (PCE)	1.0	U	1.0	
108-88-3	Toluene	1.0	U	1.0	
79-01-6	Trichloroethene (TCE)	1.0	U	1.0	
75-69-4	Trichlorofluoromethane (CFC 11)	1.0	U	1.0	
75-01-4	Vinyl Chloride	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
179601-23-1	m,p-Xylenes	2.0	U	2.0	
95-47-6	o-Xylene	1.0	U	1.0	
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrastructure (Formerly MACTEC)	**Service Request:**	R1409445
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	11/26/14 11:24
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1414901-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method:	624	**Analysis Lot:**	423263
Data File Name:	I:\ACQUDATA\MSVOA6\DATA\112614\L9149.D\	**Instrument Name:**	R-MS-06
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	92	81-127	11/26/14 11:24	
4-Bromofluorobenzene	100	79-123	11/26/14 11:24	
Toluene-d8	106	83-120	11/26/14 11:24	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: AMEC Environmental & Infrastructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251-04
Sample Matrix: Water

Service Request: R1409445
Date Collected: 11/21/14
Date Received: 11/22/14
Date Analyzed: 11/26/14

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

Sample Name: 633027 EFFLUENT
Lab Code: R1409445-001

Units: µg/L
Basis: NA

Analytical Method: 624

		633027 EFFLUENTMS Matrix Spike RQ1414901-05			633027 EFFLUENTDMS Duplicate Matrix Spike RQ1414901-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1-Trichloroethane (TCA)	5.5	24.9	20.0	97	23.3	20.0	89	52 - 162	6	30
1,1,2,2-Tetrachloroethane	ND	25.6	20.0	128	23.9	20.0	120	46 - 157	7	30
1,1,2-Trichloroethane	ND	24.6	20.0	123	23.2	20.0	116	52 - 150	6	30
1,1-Dichloroethane (1,1-DCA)	ND	21.7	20.0	108	20.4	20.0	102	59 - 155	6	30
1,1-Dichloroethene (1,1-DCE)	ND	21.2	20.0	106	20.3	20.0	101	10 - 234	5	30
1,2-Dichlorobenzene	ND	21.2	20.0	106	20.3	20.0	102	18 - 190	4	30
1,2-Dichloroethane	ND	20.2	20.0	101	18.9	20.0	95	49 - 155	7	30
1,2-Dichloropropane	ND	24.8	20.0	124	22.8	20.0	114	10 - 210	8	30
1,3-Dichlorobenzene	ND	21.2	20.0	106	20.3	20.0	102	59 - 156	4	30
1,4-Dichlorobenzene	ND	21.3	20.0	107	20.4	20.0	102	18 - 190	5	30
2-Chloroethyl Vinyl Ether	ND	25.8	20.0	129	24.3	20.0	121	10 - 305	6	30
Acrolein	ND	61.9	100	62	60.5	100	61	10 - 186	2	30
Acrylonitrile	ND	120	100	120	114	100	114	84 - 128	5	30
Benzene	ND	24.6	20.0	123	23.0	20.0	115	37 - 151	7	30
Bromodichloromethane	ND	22.4	20.0	112	20.3	20.0	102	35 - 155	9	30
Bromoform	ND	22.6	20.0	113	21.6	20.0	108	45 - 169	5	30
Bromomethane	ND	13.5	20.0	67	15.4	20.0	77	10 - 242	13	30
Carbon Tetrachloride	ND	22.9	20.0	114	21.3	20.0	107	70 - 140	7	30
Chlorobenzene	ND	22.6	20.0	113	21.4	20.0	107	37 - 160	5	30
Chloroethane	ND	21.5	20.0	107	19.5	20.0	98	14 - 230	10	30
Chloroform	ND	21.3	20.0	106	20.3	20.0	101	51 - 138	5	30
Chloromethane	ND	21.8	20.0	109	21.0	20.0	105	10 - 273	4	30
Dibromochloromethane	ND	22.5	20.0	112	21.9	20.0	110	53 - 149	3	30
Methylene Chloride	ND	27.2	20.0	136	26.4	20.0	132	10 - 221	3	30
Ethylbenzene	ND	22.9	20.0	115	21.6	20.0	108	37 - 162	6	30
Tetrachloroethene (PCE)	ND	20.4	20.0	102	19.1	20.0	96	64 - 148	7	30
Toluene	ND	24.2	20.0	121	22.8	20.0	114	47 - 150	6	30
Trichloroethene (TCE)	11	32.6	20.0	109	30.9	20.0	100	71 - 157	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: AMEC Environmental & Infrastructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251-04
Sample Matrix: Water

Service Request: R1409445
Date Collected: 11/21/14
Date Received: 11/22/14
Date Analyzed: 11/26/14

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

Sample Name: 633027 EFFLUENT
Lab Code: R1409445-001

Units: µg/L
Basis: NA

Analytical Method: 624

Analyte Name	Sample Result	633027 EFFLUENTMS Matrix Spike RQ1414901-05 Result	Spike Amount	% Rec	633027 EFFLUENTDMS Duplicate Matrix Spike RQ1414901-06 Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Trichlorofluoromethane (CFC 11)	ND	17.8	20.0	89	16.8	20.0	84	17 - 181	5	30
Vinyl Chloride	ND	26.5	20.0	132	25.0	20.0	125	10 - 251	6	30
cis-1,3-Dichloropropene	ND	23.9	20.0	120	22.1	20.0	110	10 - 227	8	30
m,p-Xylenes	ND	45.2	40.0	113	43.0	40.0	108	76 - 131	5	30
o-Xylene	ND	23.4	20.0	117	22.7	20.0	113	78 - 127	3	30
trans-1,2-Dichloroethene	ND	21.9	20.0	109	21.1	20.0	106	54 - 156	3	30
trans-1,3-Dichloropropene	ND	24.0	20.0	120	22.1	20.0	111	17 - 183	8	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: AMEC Environmental & Infrastructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251-04
Sample Matrix: Water

Service Request: R1409445
Date Analyzed: 11/26/14

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

Analytical Method: 624

Units: µg/L
Basis: NA

Analysis Lot: 423263

Analyte Name	Lab Control Sample RQ1414901-03 Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	18.2	20.0	91	52 - 162
1,1,2,2-Tetrachloroethane	22.9	20.0	114	46 - 157
1,1,2-Trichloroethane	22.3	20.0	111	52 - 150
1,1-Dichloroethane (1,1-DCA)	19.6	20.0	98	59 - 155
1,1-Dichloroethene (1,1-DCE)	19.5	20.0	98	10 - 234
1,2-Dichlorobenzene	19.5	20.0	98	18 - 190
1,2-Dichloroethane	18.8	20.0	94	49 - 155
1,2-Dichloropropane	21.7	20.0	109	10 - 210
1,3-Dichlorobenzene	19.4	20.0	97	59 - 156
1,4-Dichlorobenzene	19.2	20.0	96	18 - 190
2-Chloroethyl Vinyl Ether	23.6	20.0	118	10 - 305
Acrolein	68.3	100	68	10 - 186
Acrylonitrile	126	100	126	84 - 128
Benzene	21.8	20.0	109	37 - 151
Bromodichloromethane	19.7	20.0	99	35 - 155
Bromoform	20.7	20.0	104	45 - 169
Bromomethane	14.2	20.0	71	10 - 242
Carbon Tetrachloride	20.3	20.0	102	70 - 140
Chlorobenzene	20.4	20.0	102	37 - 160
Chloroethane	20.9	20.0	105	14 - 230
Chloroform	19.1	20.0	95	51 - 138
Chloromethane	21.1	20.0	106	10 - 273
Dibromochloromethane	20.9	20.0	104	53 - 149
Methylene Chloride	25.5	20.0	127	10 - 221
Ethylbenzene	20.5	20.0	102	37 - 162
Tetrachloroethene (PCE)	18.7	20.0	94	64 - 148
Toluene	21.2	20.0	106	47 - 150
Trichloroethene (TCE)	19.7	20.0	98	71 - 157
Trichlorofluoromethane (CFC 11)	16.0	20.0	80	17 - 181
Vinyl Chloride	24.7	20.0	124	10 - 251
cis-1,3-Dichloropropene	21.9	20.0	110	10 - 227
m,p-Xylenes	40.3	40.0	101	76 - 131
o-Xylene	21.2	20.0	106	78 - 127

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: AMEC Environmental & Infrastructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251-04
Sample Matrix: Water

Service Request: R1409445
Date Analyzed: 11/26/14

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

Analytical Method: 624

Units: µg/L
Basis: NA

Analysis Lot: 423263

Analyte Name	Lab Control Sample RQ1414901-03 Result	Spike Amount	% Rec	% Rec Limits
trans-1,2-Dichloroethene	20.3	20.0	102	54 - 156
trans-1,3-Dichloropropene	21.4	20.0	107	17 - 183

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.

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COVER PAGE - INORGANIC ANALYSIS DATA PACKAGE

Contract: R1409445 SDG No.: 633027 EFFL

Lab Code: _____ Case No.: _____ SAS No.: _____

SOW No.: EPA200SERIES

Sample ID.	Lab Sample No.
633027 EFFLUENT	R1409445-001

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments: See Attatched Case Narrative

Signature: [signature] Name: Janice Jaeger

Date: 12/16/14 Title: Project Manager

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

633027 EFFLUENT

Contract: R1409445

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027 EFFLU

Matrix (soil/water): WATER Lab Sample ID: R1409445-001

Level (low/med): LOW Date Received: 11/22/2014

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	5.0	U		P
7440-47-3	Chromium	10.0	U		P
7440-50-8	Copper	20.0	U		P
7440-02-0	Nickel	57.4			P
7439-92-1	Lead	50.0	U		P
7440-66-6	Zinc	20.0	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

METALS

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BLANKS

Contract: R1409445

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027 EFFLU

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L, ppt, or mg/kg): UG/L

Analyte	Initial Calib. Blank ug/L	C	Continuing Calibration Blank ug/L 1	C	2	C	3	C	Preparation Blank	C	M
Cadmium	5.00	U	5.00	U	5.00	U	5.00	U	5.000	U	P
Chromium	10.00	U	10.00	U	10.00	U	10.00	U	10.000	U	P
Copper	20.00	U	20.00	U	20.00	U	20.00	U	20.000	U	P
Nickel	40.00	U	40.00	U	40.00	U	40.00	U	40.000	U	P
Lead	50.00	U	50.00	U	50.00	U	50.00	U	50.000	U	P
Zinc	20.00	U	20.00	U	20.00	U	20.00	U	20.000	U	P

Comments:

METALS

-3-

BLANKS

Contract: R1409445

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027 EFFLU

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L, ppt, or mg/kg): UG/L

Analyte	Initial Calib. Blank ug/L	C	Continuing Calibration Blank ug/L 1	C	2	C	3	C	Preparation Blank	C	M
Cadmium			5.00	U	5.00	U	5.00	U			P
Chromium			10.00	U	10.00	U	10.00	U			P
Copper			20.00	U	20.00	U	20.00	U			P
Nickel			40.00	U	40.00	U	40.00	U			P
Lead			50.00	U	50.00	U	50.00	U			P
Zinc			20.00	U	20.00	U	20.00	U			P

Comments:

METALS

-7-

LABORATORY CONTROL SAMPLE

Contract: R1409445

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027 EFFLU

Solid LCS Source: _____

Aqueous LCS Source: CPI

Analyte	Aqueous (ug/L			Solid (mg/K				
	True	Found	%R	True	Found	C	Limits	%R
Cadmium	50	48	96					
Chromium	200	200	100					
Copper	250	265	106					
Nickel	500	500	100					
Lead	500	497	99					
Zinc	500	500	100					

Comments: _____

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrastructure (Formerly MACTEC)	**Service Request:**	R1409445
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	11/21/14 1300
Sample Matrix:	Water	**Date Received:**	11/22/14
Sample Name:	633027 EFFLUENT		
Lab Code:	R1409445-001	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Cyanide, Total	9012B	0.010	U	mg/L	0.010	1	11/24/14	11/25/14 11:20	
pH	SM 4500-H+ B	7.40		pH Units		1	NA	11/24/14 11:35	H
Temperature of pH Analysis	SM 4500-H+ B	18.2		deg C		1	NA	11/24/14 11:35	H

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrastructure (Formerly MACTEC)	**Service Request:**	R1409445
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R1409445-MB	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Cyanide, Total	9012B	0.010	U	mg/L	0.010	1	11/24/14	11/25/14 11:00	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: AMEC Environmental & Infrastructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251-04
Sample Matrix: Water

Service Request: R1409445
Date Analyzed: 11/25/14

Lab Control Sample Summary
General Chemistry Parameters

Units: mg/L
Basis: NA

		Lab Control Sample R1409445-LCS1			
Analyte Name	**Method**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**
Cyanide, Total	9012B	0.101	0.100	101	85 - 115

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: AMEC Environmental & Infrastructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251-04
Sample Matrix: Water

Service Request: R1409445
Date Analyzed: 11/25/14

Lab Control Sample Summary
General Chemistry Parameters

Units: mg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R1409445-LCS2 Result	Spike Amount	% Rec	% Rec Limits
Cyanide, Total	9012B	0.399	0.400	100	85 - 115

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.

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December 16, 2014

Analytical Report for Service Request No: R1409445

Mr. Tige Cunningham
AMEC Environmental & Infrastructure
511 Congress Street, Suite 200
Portland, ME 04101

Laboratory Results for: NYSDEC Primoshield/3612122251-04

Dear Mr. Cunningham:

Enclosed are the results of the sample(s) submitted to our laboratory on November 22, 2014. For your reference, these analyses have been assigned our service request number **R1409445**.

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

CC: Jayme Connolly

ALS Environmental

SDG NARRATIVE

ALS Environmental - Rochester, NY
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Phone (585) 288-5380 Fax (585) 288-8475
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CASE NARRATIVE

Client:	AMEC	**Service Request:**	R1409445
Project:	NYSDEC Primoshield	**Project Number:**	
Sample Matrix:	Water	**Date Received:**	11/22/14

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 11/21/14 and received at ALS Rochester on 11/22/14 at a cooler temperature of 5.7 °C in good condition except as noted on the cooler receipt and preservation check form.

Inorganics

Water samples were analyzed for a site specific list of inorganics. Please see attached data pages for method numbers.

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

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

Site specific QC was not requested on these samples.

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.

Metals

Water samples were analyzed for Iron by Method 6010C from SW-846.

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

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

Site specific QC was not requested on these samples.

The Method Blanks associated with these samples were free of contamination above the Method Reporting Limit (MRL).

All samples were analyzed within recommended holding times.

No other analytical or QC problems were encountered.

Volatile Organics

Water samples were analyzed for a site list of Volatile Organics by Method 624.

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 not requested on these samples, however was performed on 633027 Effluent. All 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 #:	3612122251-04	Batch Complete:	Yes	Date Revised:	
Submission:	R1409445	Diskette Requested:	Yes	Date Due:	12/13/14
Client:	AMEC Environmental & Infrastruct	Date:	11/24/14	Protocol:	EPA
Client Rep:	JJAEGER	Custody Seal: Present/Absent:		Shipping No.:	
Project:	NYSDEC Primoshield	Chain of Custody: Present/Absent:		SDG #:	

CAS Job #	Client/EPA ID	Matrix	Requested Parameters	Date Sampled	Date Received	pH (Solids)	% Solids	Remarks Sample Condition
R1409445-001	633027 EFFLUENT	Water	624, SM 4500-H+ B, 200.7, 9012B	11/21/14	11/22/14			
R1409445-002	TRIP BLANK	Water	624	11/21/14	11/22/14			

Folder Comments:

ALS Environmental

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.

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/Arclors).

B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.

E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.

E Organics- Concentration has exceeded the calibration range for that specific analysis.

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.

* 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.

H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.

Spike was diluted out.

\+ Correlation coefficient for MSA is <0.995.

N Inorganics- Matrix spike recovery was outside laboratory limits.

N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.

S Concentration has been determined using Method of Standard Additions (MSA).

W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.

P Concentration >40% (25% for CLP) difference between the two GC columns.

C Confirmed by GC/MS

Q DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).

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 Certifications[1]

NELAP Accredited	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Connecticut ID # PH0556	Nebraska Accredited	
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

INORGANIC PREPARATION METHODS

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	3010A
200.8	ILM05.3
6010C	3010A
6020A	ILM05.3
9014 Cyanide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Acid Soluble	9030B
9056A Bomb (Halogens)	5050A
9066 Manual Distillation	9065
SM 4500-CN-E Residual Cyanide	SM 4500-CN-G
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C	3050B
6020A	3050B
6010C TCLP (1311) extract	3010A
6010 SPLP (1312) extract	3010A
7196A	3060A
7199	3060A
9056A Halogens/Halides	5050
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction

For analytical methods not listed, the preparation method is the same as the analytical method reference.

ALS Environmental

CHAINS OF CUSTODY

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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

20114

ALS Environmental

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: Primoshield	Project Number: 36121222251-04
Project Manager: Jayme Connolly	Report CC: Tyge Cunningham
Company/Address: AMEC Environmental Former Mactec 511 Congress St PO# C012900946 Portland ME. 04101	
Phone #: 207-828-3457	Email: Tyge.Cunningham
Sampler's Signature: Karl Ladner	Sampler's Printed Name: Karl Ladner

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs ○ 8260 ○ 624 ○ CLP	GC/MS SVOAs ○ 8270 ○ 625	GC VOAs ○ 8021 ○ 601/602	PESTICIDES ○ 8081 ○ 608	PCBs ○ 8082 ○ 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	Cyanide 9012B	PH - SM - 4500
633027 Effluent		11/21/14	1300	GW	6	X					X		X	X
Trip Blank		11/21/14	—	—		X								

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

REMARKS/ ALTERNATE DESCRIPTION

SPECIAL INSTRUCTIONS/COMMENTS
Metals
Cadinium, Copper, Cr, Ni, ZN (200.7)
(Please report Lead also) KL

See OAPP ☐

STATE WHERE SAMPLES WERE COLLECTED

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 1 day ____ 2 day ____ 3 day
____ 4 day ____ 5 day

REQUESTED REPORT DATE _____

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

Edata ____ Yes ____ No

INVOICE INFORMATION
PO #
BILL TO:

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Karl Ladner					
Signature: Karl Ladner	Signature:	Signature	Signature	Signature	
Printed Name	Printed Name: Tyge Cunningham	Printed Name	Printed Name	Printed Name	
Firm: AMEC	Firm: AMEC	Firm	Firm	Firm	
Date/Time: 11-21-14 1500	Date/Time: 11/22/14 0940	Date/Time	Date/Time	Date/Time	

R1409445 5
AMEC Environmental & Infrastructure
NYSDEC Primoshield

Distribution: White - Lab Copy; Yellow - Return to Originator

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R1409445 5
AMEC Environmental & Infrastructure
NYSDEC Primoshield

Cooler Receipt and Preservation Check Form

Project/Client AMEC Folder Number 14-9445

Cooler received on 11/22/14 by: @

COURIER: ALS UPS (FEDEX) VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	Y (N)	5a	**Perchlorate** samples have required headspace?	Y N (NA)
2	**Custody papers** properly completed (ink, signed)?	(Y) N	5b	Did VOA vials, Alk,or Sulfide have sig* **bubbles**?	(Y) N NA
3	Did all bottles arrive in good **condition** (unbroken)?	(Y) N	6	Where did the bottles originate?	(ALS/ROC) CLIENT
4	Circle: (Wet Ice) **Dry Ice Gel packs** present?	(Y) N	7	Soil VOA received as: Bulk Encore 5035set	NA

8. Temperature Readings Date: 11/22/14 Time: 0943 ID: IR#3 (IR#4) From: (Temp Blank) Sample Bottle

Observed Temp (°C)	5.1						
Correction Factor (°C)	+0.6						
Corrected Temp (°C)	5.7°						
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: R-002 by @ on 11/22/14 at 0946
5035 samples placed in storage location: _____ by _____ on _____ at _____

PC Secondary Review: JMS 11/24/14

Cooler Breakdown: Date: 11/24/14 Time: 1231 by: JS

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	✓		WC1400117H	10/15				
≤2	HNO_3	✓		BDB2141408	10/15				
≤2	H_2SO_4	✓							
<4	$NaHSO_4$								
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add $Na_2S_2O_3$ (CN), ascorbic (phenol).					
	$Na_2S_2O_3$	-	-						
	ZnAcetate	-	-						
	HCl	**	**						

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

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 092214-ZMA0, BDB2101358, 4-162-012,
Other Comments:

Headspace: 2 vials trip blank

PC Secondary Review: JMS 12/2/14 *significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

ALS ENVIRONMENTAL

Chain of Custody Report

Client: AMEC Environmental & Infrastructure
Project: NYSDEC Primoshield/3612122251-04

Service Request: R1409445

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1409445-001.01					
	624				
		11/24/14	1232	SMO / JSEWARD	
		11/24/14	1232	R-001 / JSEWARD	
		11/26/14	1042	In Lab / DLIPANI	
		11/26/14	1828	R-001-S11 / DLIPANI	
R1409445-001.02					
		11/24/14	1232	SMO / JSEWARD	
		11/24/14	1232	R-001 / JSEWARD	
R1409445-001.03					
		11/24/14	1232	SMO / JSEWARD	
		11/24/14	1232	R-001 / JSEWARD	
R1409445-001.04					
	9012B				
		11/24/14	1232	SMO / JSEWARD	
		11/24/14	1232	R-002 / JSEWARD	
		11/24/14	1522	In Lab / GNITAJOUPPI	
		11/24/14	1940	R-002 / LDOLGOS	
R1409445-001.05					
	SM 4500-H+ B				
		11/24/14	1232	SMO / JSEWARD	
		11/24/14	1232	R-002 / JSEWARD	
R1409445-001.06					
		11/24/14	1232	SMO / JSEWARD	
		11/24/14	1233	R-A01 / JSEWARD	
		11/25/14	2107	R-002 / CWINKSTERN	
R1409445-001.07					
		11/24/14	1232	SMO / JSEWARD	
		11/24/14	1232	R-001 / JSEWARD	
		11/26/14	1042	In Lab / DLIPANI	
R1409445-001.08					
		11/24/14	1232	SMO / JSEWARD	
		11/24/14	1232	R-001 / JSEWARD	
R1409445-001.09					
		11/24/14	1232	SMO / JSEWARD	
		11/24/14	1232	R-001 / JSEWARD	
R1409445-001.10					
		11/24/14	1232	SMO / JSEWARD	
		11/24/14	1232	R-002 / JSEWARD	
R1409445-001.11					

ALS ENVIRONMENTAL
Chain of Custody Report

Client: AMEC Environmental & Infrastructure
Project: NYSDEC Primoshield/3612122251-04

Service Request: R1409445

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
		11/24/14	1232	SMO / JSEWARD	
		11/24/14	1232	R-002 / JSEWARD	
R1409445-001.12					
	200.7				
		11/24/14	1232	SMO / JSEWARD	
		11/24/14	1233	R-A01 / JSEWARD	
		11/25/14	2107	R-002 / CWINKSTERN	
R1409445-002.01					
	624				
		11/24/14	1232	SMO / JSEWARD	
		11/24/14	1232	R-001 / JSEWARD	
		11/26/14	1042	In Lab / DLIPANI	
		11/26/14	1829	R-001-S11 / DLIPANI	
R1409445-002.02					
		11/24/14	1232	SMO / JSEWARD	
		11/24/14	1232	R-001 / JSEWARD	
R1409445-002.03					
		11/24/14	1232	SMO / JSEWARD	
		11/24/14	1232	R-001 / JSEWARD	

ALS Environmental

VOLATILE ORGANICS
QC SUMMARY

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ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: AMEC Environmental & Infrastructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251-04
Sample Matrix: Water

Service Request: R1409445
Date Collected: 11/21/14
Date Received: 11/22/14
Date Analyzed: 11/26/14

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

Sample Name: 633027 EFFLUENT
Lab Code: R1409445-001

Units: µg/L
Basis: NA

Analytical Method: 624

		633027 EFFLUENTMS Matrix Spike RQ1414901-05			633027 EFFLUENTDMS Duplicate Matrix Spike RQ1414901-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1-Trichloroethane (TCA)	5.5	24.9	20.0	97	23.3	20.0	89	52 - 162	6	30
1,1,2,2-Tetrachloroethane	ND	25.6	20.0	128	23.9	20.0	120	46 - 157	7	30
1,1,2-Trichloroethane	ND	24.6	20.0	123	23.2	20.0	116	52 - 150	6	30
1,1-Dichloroethane (1,1-DCA)	ND	21.7	20.0	108	20.4	20.0	102	59 - 155	6	30
1,1-Dichloroethene (1,1-DCE)	ND	21.2	20.0	106	20.3	20.0	101	10 - 234	5	30
1,2-Dichlorobenzene	ND	21.2	20.0	106	20.3	20.0	102	18 - 190	4	30
1,2-Dichloroethane	ND	20.2	20.0	101	18.9	20.0	95	49 - 155	7	30
1,2-Dichloropropane	ND	24.8	20.0	124	22.8	20.0	114	10 - 210	8	30
1,3-Dichlorobenzene	ND	21.2	20.0	106	20.3	20.0	102	59 - 156	4	30
1,4-Dichlorobenzene	ND	21.3	20.0	107	20.4	20.0	102	18 - 190	5	30
2-Chloroethyl Vinyl Ether	ND	25.8	20.0	129	24.3	20.0	121	10 - 305	6	30
Acrolein	ND	61.9	100	62	60.5	100	61	10 - 186	2	30
Acrylonitrile	ND	120	100	120	114	100	114	84 - 128	5	30
Benzene	ND	24.6	20.0	123	23.0	20.0	115	37 - 151	7	30
Bromodichloromethane	ND	22.4	20.0	112	20.3	20.0	102	35 - 155	9	30
Bromoform	ND	22.6	20.0	113	21.6	20.0	108	45 - 169	5	30
Bromomethane	ND	13.5	20.0	67	15.4	20.0	77	10 - 242	13	30
Carbon Tetrachloride	ND	22.9	20.0	114	21.3	20.0	107	70 - 140	7	30
Chlorobenzene	ND	22.6	20.0	113	21.4	20.0	107	37 - 160	5	30
Chloroethane	ND	21.5	20.0	107	19.5	20.0	98	14 - 230	10	30
Chloroform	ND	21.3	20.0	106	20.3	20.0	101	51 - 138	5	30
Chloromethane	ND	21.8	20.0	109	21.0	20.0	105	10 - 273	4	30
Dibromochloromethane	ND	22.5	20.0	112	21.9	20.0	110	53 - 149	3	30
Methylene Chloride	ND	27.2	20.0	136	26.4	20.0	132	10 - 221	3	30
Ethylbenzene	ND	22.9	20.0	115	21.6	20.0	108	37 - 162	6	30
Tetrachloroethene (PCE)	ND	20.4	20.0	102	19.1	20.0	96	64 - 148	7	30
Toluene	ND	24.2	20.0	121	22.8	20.0	114	47 - 150	6	30
Trichloroethene (TCE)	11	32.6	20.0	109	30.9	20.0	100	71 - 157	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: AMEC Environmental & Infrastructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251-04
Sample Matrix: Water

Service Request: R1409445
Date Collected: 11/21/14
Date Received: 11/22/14
Date Analyzed: 11/26/14

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

Sample Name: 633027 EFFLUENT
Lab Code: R1409445-001

Units: µg/L
Basis: NA

Analytical Method: 624

Analyte Name	Sample Result	633027 EFFLUENTMS Matrix Spike RQ1414901-05 Result	Spike Amount	% Rec	633027 EFFLUENTDMS Duplicate Matrix Spike RQ1414901-06 Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Trichlorofluoromethane (CFC 11)	ND	17.8	20.0	89	16.8	20.0	84	17 - 181	5	30
Vinyl Chloride	ND	26.5	20.0	132	25.0	20.0	125	10 - 251	6	30
cis-1,3-Dichloropropene	ND	23.9	20.0	120	22.1	20.0	110	10 - 227	8	30
m,p-Xylenes	ND	45.2	40.0	113	43.0	40.0	108	76 - 131	5	30
o-Xylene	ND	23.4	20.0	117	22.7	20.0	113	78 - 127	3	30
trans-1,2-Dichloroethene	ND	21.9	20.0	109	21.1	20.0	106	54 - 156	3	30
trans-1,3-Dichloropropene	ND	24.0	20.0	120	22.1	20.0	111	17 - 183	8	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: AMEC Environmental & Infrastructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251-04
Sample Matrix: Water

Service Request: R1409445
Date Analyzed: 11/26/14

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

Analytical Method: 624

Units: µg/L
Basis: NA

Analysis Lot: 423263

Lab Control Sample
RQ1414901-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	18.2	20.0	91	52 - 162
1,1,2,2-Tetrachloroethane	22.9	20.0	114	46 - 157
1,1,2-Trichloroethane	22.3	20.0	111	52 - 150
1,1-Dichloroethane (1,1-DCA)	19.6	20.0	98	59 - 155
1,1-Dichloroethene (1,1-DCE)	19.5	20.0	98	10 - 234
1,2-Dichlorobenzene	19.5	20.0	98	18 - 190
1,2-Dichloroethane	18.8	20.0	94	49 - 155
1,2-Dichloropropane	21.7	20.0	109	10 - 210
1,3-Dichlorobenzene	19.4	20.0	97	59 - 156
1,4-Dichlorobenzene	19.2	20.0	96	18 - 190
2-Chloroethyl Vinyl Ether	23.6	20.0	118	10 - 305
Acrolein	68.3	100	68	10 - 186
Acrylonitrile	126	100	126	84 - 128
Benzene	21.8	20.0	109	37 - 151
Bromodichloromethane	19.7	20.0	99	35 - 155
Bromoform	20.7	20.0	104	45 - 169
Bromomethane	14.2	20.0	71	10 - 242
Carbon Tetrachloride	20.3	20.0	102	70 - 140
Chlorobenzene	20.4	20.0	102	37 - 160
Chloroethane	20.9	20.0	105	14 - 230
Chloroform	19.1	20.0	95	51 - 138
Chloromethane	21.1	20.0	106	10 - 273
Dibromochloromethane	20.9	20.0	104	53 - 149
Methylene Chloride	25.5	20.0	127	10 - 221
Ethylbenzene	20.5	20.0	102	37 - 162
Tetrachloroethene (PCE)	18.7	20.0	94	64 - 148
Toluene	21.2	20.0	106	47 - 150
Trichloroethene (TCE)	19.7	20.0	98	71 - 157
Trichlorofluoromethane (CFC 11)	16.0	20.0	80	17 - 181
Vinyl Chloride	24.7	20.0	124	10 - 251
cis-1,3-Dichloropropene	21.9	20.0	110	10 - 227
m,p-Xylenes	40.3	40.0	101	76 - 131
o-Xylene	21.2	20.0	106	78 - 127

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: AMEC Environmental & Infrastructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251-04
Sample Matrix: Water

Service Request: R1409445
Date Analyzed: 11/26/14

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

Analytical Method: 624

Units: µg/L
Basis: NA

Analysis Lot: 423263

Analyte Name	Lab Control Sample RQ1414901-03 Result	Spike Amount	% Rec	% Rec Limits
trans-1,2-Dichloroethene	20.3	20.0	102	54 - 156
trans-1,3-Dichloropropene	21.4	20.0	107	17 - 183

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:	AMEC Environmental & Infrastructure (Formerly MACTEC)	**Service Request:**	R1409445
Project:	NYSDEC Primoshield/3612122251-04	**Date Analyzed:**	11/26/14 11:24
Sample Matrix:	Water		

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

Sample Name:	Method Blank	**Instrument ID:**	R-MS-06
Lab Code:	RQ1414901-04	**File ID:**	I:\ACQUDATA\MSVOA6\DATA\112614\L9149.D\
Analytical Method:	624		

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1414901-03	I:\ACQUDATA\MSVOA6\DATA\112614\L9146.D\	11/26/14 09:52
633027 EFFLUENT	R1409445-001	I:\ACQUDATA\MSVOA6\DATA\112614\L9154.D\	11/26/14 14:00
TRIP BLANK	R1409445-002	I:\ACQUDATA\MSVOA6\DATA\112614\L9155.D\	11/26/14 14:30
633027 EFFLUENTMS	RQ1414901-05	I:\ACQUDATA\MSVOA6\DATA\112614\L9170.D\	11/26/14 22:04
633027 EFFLUENTDMS	RQ1414901-06	I:\ACQUDATA\MSVOA6\DATA\112614\L9171.D\	11/26/14 22:34

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: AMEC Environmental & Infrastructure (Formerly MACTEC) **Service Request:** R1409445
Project: NYSDEC Primosheild/361212251-04 **Date Analyzed:** 9/11/14 10:16

Tune Summary
Volatile Organic Compounds by GC/MS

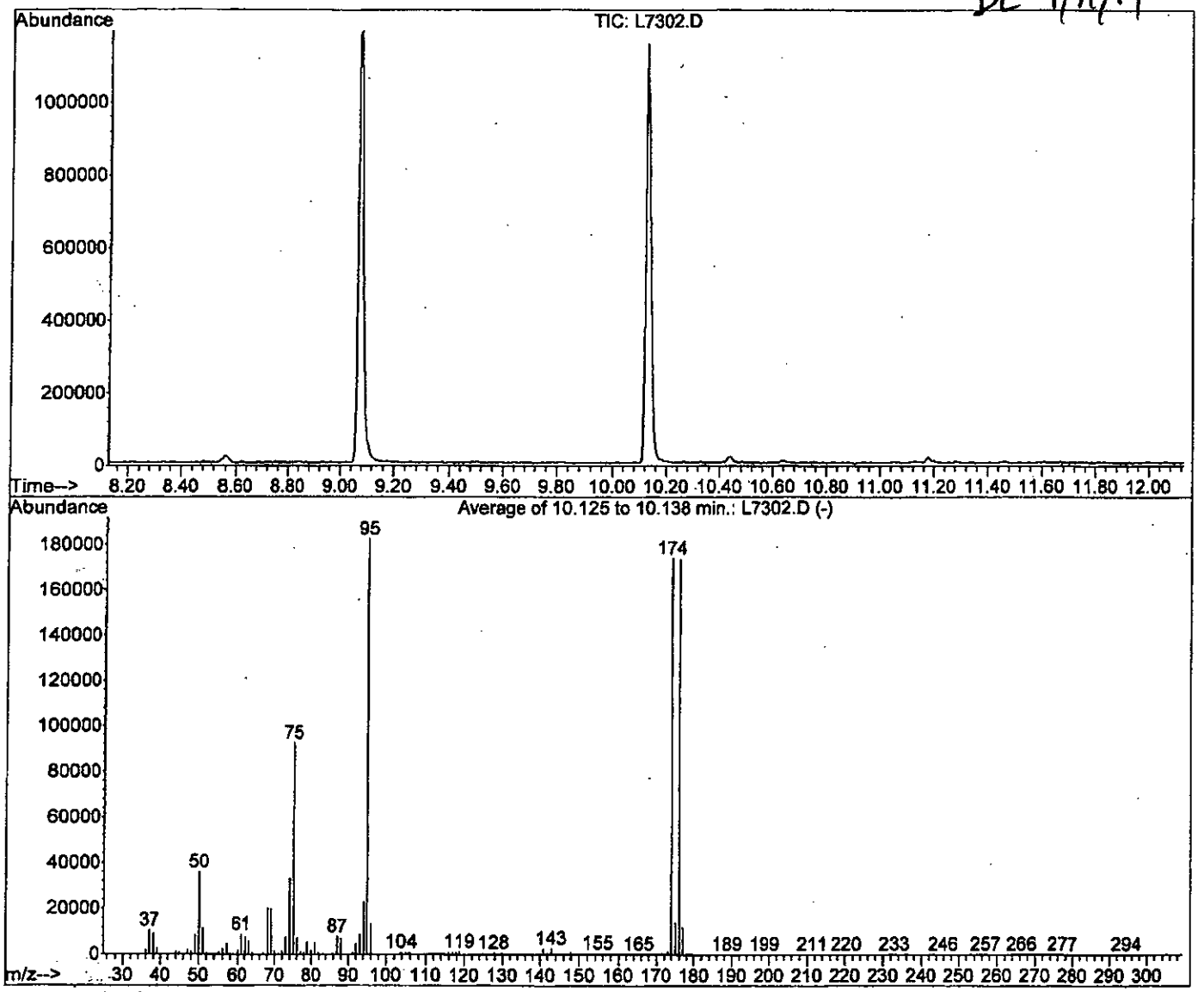
File ID: I:\ACQUDATA\MSVOA6\DATA\091114\L7302.D\ **Analytical Method:** 624
Instrument ID: R-MS-06 **Analysis Lot:**

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	19.7	35944	Pass
75	95	30	60	50.7	92597	Pass
95	95	100	100	100.00	182656	Pass
96	95	5	9	7.4	13465	Pass
173	174	0	2	0.6	1057	Pass
174	95	50	120	95.4	174183	Pass
175	174	5	9	8.0	13867	Pass
176	174	95	101	99.6	173483	Pass
177	176	5	9	6.7	11541	Pass

Sample Name	Lab Code	File ID	Date Analyzed	Q
Initial CalibrationICAL	0.5 ppb	I:\ACQUDATA\MSVOA6\DATA\091114\L7304.D\	9/11/14 11:31	
Initial CalibrationICAL	1.0 ppb	I:\ACQUDATA\MSVOA6\DATA\091114\L7305.D\	9/11/14 12:15	
Initial CalibrationICAL	2.0 ppb	I:\ACQUDATA\MSVOA6\DATA\091114\L7306.D\	9/11/14 12:50	
Initial CalibrationICAL	10 ppb	I:\ACQUDATA\MSVOA6\DATA\091114\L7308.D\	9/11/14 14:20	
Initial CalibrationICAL	20 ppb	I:\ACQUDATA\MSVOA6\DATA\091114\L7309.D\	9/11/14 14:54	
Initial CalibrationICAL	50 ppb	I:\ACQUDATA\MSVOA6\DATA\091114\L7310.D\	9/11/14 15:33	
Initial CalibrationICAL	100 ppb	I:\ACQUDATA\MSVOA6\DATA\091114\L7311.D\	9/11/14 16:24	
Initial CalibrationICAL	5.0 ppb	I:\ACQUDATA\MSVOA6\DATA\091114\L7315.D\	9/11/14 18:36	
Initial CalibrationICAL	200 ppb	I:\ACQUDATA\MSVOA6\DATA\091114\L7316.D\	9/11/14 19:20	

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7302.D Vial: 5
Acq On : 11 Sep 2014 10:16 am Operator: D.Lipani
Sample : TUNE CHECK Inst : MS#6
Misc : 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6

DL 9/11/14



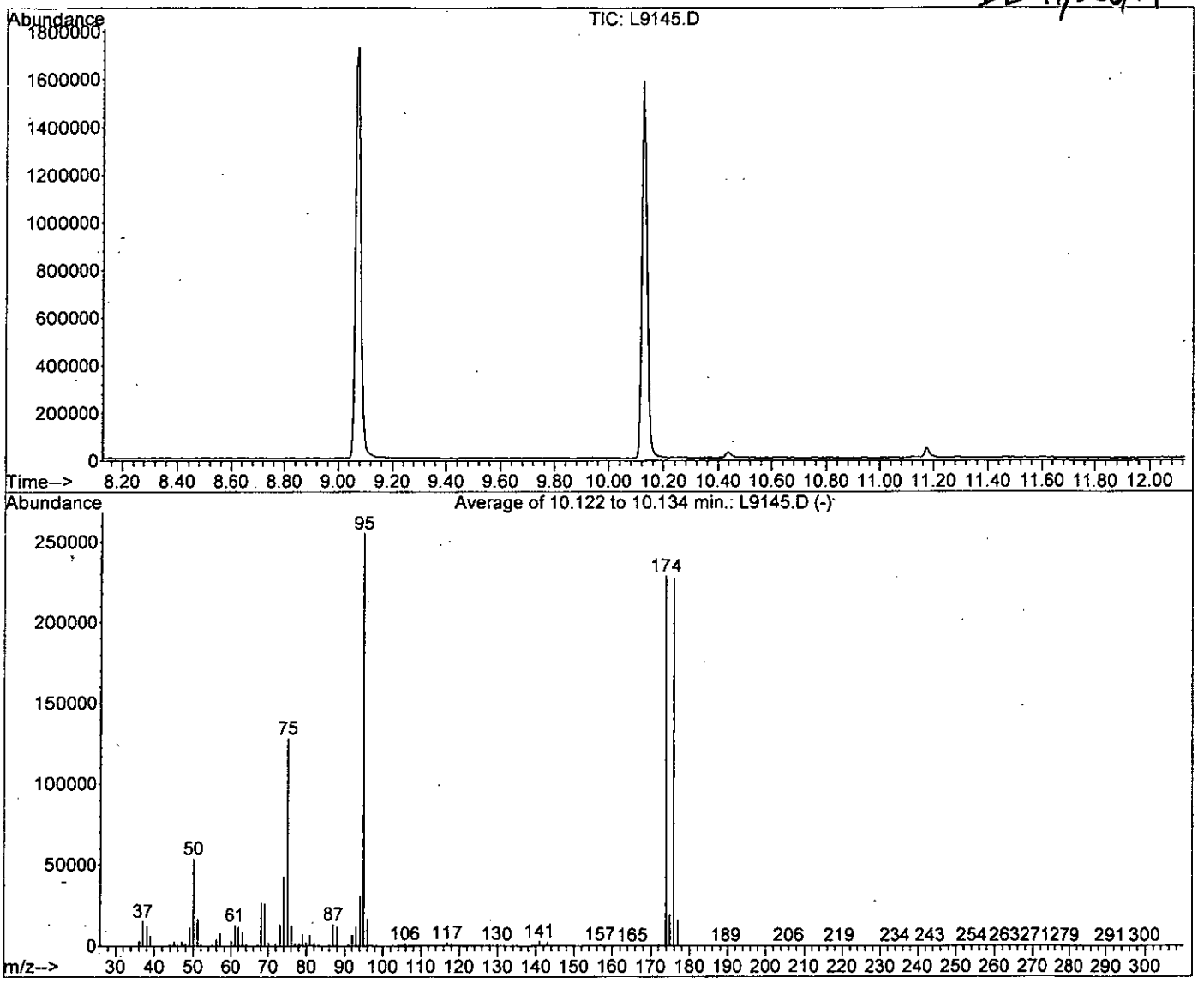
AutoFind: Scans 1508, 1509, 1510; Background Corrected with Scan 1503

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.7	35944	PASS
75	95	30	60	50.7	92597	PASS
95	95	100	100	100.0	182656	PASS
96	95	5	9	7.4	13465	PASS
173	174	0.00	2	0.6	1057	PASS
174	95	50	120	95.4	174183	PASS
175	174	5	9	8.0	13867	PASS
176	174	95	101	99.6	173483	PASS
177	176	5	9	6.7	11541	PASS

BFB

Data File : I:\ACQUDATA\MSVOA6\DATA\112614\L9145.D Vial: 4
Acq On : 26 Nov 2014 9:02 am Operator: D.Lipani
Sample : TUNE CHECK RQ1414901-01 Inst : MS#6
Misc : 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6

DL 11/26/14



AutoFind: Scans 1507, 1508, 1509; Background Corrected with Scan 1502

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.9	53444	PASS
75	95	30	60	50.1	127973	PASS
95	95	100	100	100.0	255240	PASS
96	95	5	9	6.4	16320	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	89.6	228751	PASS
175	174	5	9	8.3	18883	PASS
176	174	95	101	99.4	227435	PASS
177	176	5	9	7.0	15936	PASS

L9145.D 6240911.M Wed Nov 26 09:16:12 2014

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: AMEC Environmental & Infrastructure (Formerly MACTEC) **Service Request:** R1409445
Project: NYSDEC Primoshield/3612122251-04 **Date Analyzed:** 11/26/14 09:02

Tune Summary
Volatile Organic Compounds by GC/MS, Unpreserved

File ID: I:\ACQUDATA\MSVOA6\DATA\112614\L9145.D\ **Analytical Method:** 624
Instrument ID: R-MS-06 **Analysis Lot:** 423263

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	20.94	53444	Pass
75	95	30	60	50.14	127973	Pass
95	95	100	100	100.00	255240	Pass
96	95	5	9	6.39	16320	Pass
173	174	0	2	0.00	0	Pass
174	95	50	120	89.62	228751	Pass
175	174	5	9	8.25	18883	Pass
176	174	95	101	99.42	227435	Pass
177	176	5	9	7.01	15936	Pass

Sample Name	Lab Code	File ID	Date Analyzed	Q
Lab Control Sample	RQ1414901-03	I:\ACQUDATA\MSVOA6\DATA\112614\L9146.D\	11/26/14 09:52	
Continuing Calibration Verification	RQ1414901-02	I:\ACQUDATA\MSVOA6\DATA\112614\L9146.D\	11/26/14 09:52	
Method Blank	RQ1414901-04	I:\ACQUDATA\MSVOA6\DATA\112614\L9149.D\	11/26/14 11:24	
633027 EFFLUENT	R1409445-001	I:\ACQUDATA\MSVOA6\DATA\112614\L9154.D\	11/26/14 14:00	
TRIP BLANK	R1409445-002	I:\ACQUDATA\MSVOA6\DATA\112614\L9155.D\	11/26/14 14:30	
633027 EFFLUENTMS	RQ1414901-05	I:\ACQUDATA\MSVOA6\DATA\112614\L9170.D\	11/26/14 22:04	
633027 EFFLUENTDMS	RQ1414901-06	I:\ACQUDATA\MSVOA6\DATA\112614\L9171.D\	11/26/14 22:34	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: AMEC Environmental & Infrastructure (Formerly MACTEC) **Service Request:** R1409445
Project: NYSDEC Primoshield/3612122251-04 **Date Analyzed:** 11/26/14 09:52

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

File ID: I:\ACQUDATA\MSVOA6\DATA\112614\L9146.D\ **Lab Code:** RQ1414901-02
Instrument ID: R-MS-06 **Analysis Lot:** 423263
Analytical Method: 624 **Signal ID:**

		1,4-Difluorobenzene		Bromochloromethane		Chlorobenzene-d5	
		Area	RT	Area	RT	Area	RT
	Results ==>	795,785	5.68	128,864	3.43	747,282	9.08
	Upper Limit ==>	1,591,570	6.18	257,728	3.93	1,494,564	9.58
	Lower Limit ==>	397,893	5.18	64,432	2.93	373,641	8.58
	ICAL Result ==>	645,535	5.69	106,022	3.44	599,085	9.08
Associated Analyses							
Lab Control Sample	RQ1414901-03	795,785	5.68	128,864	3.43	747,282	9.08
Method Blank	RQ1414901-04	779,660	5.68	137,057	3.43	728,084	9.08
633027 EFFLUENT	R1409445-001	725,099	5.68	118,684	3.43	682,303	9.08
TRIP BLANK	R1409445-002	745,015	5.68	121,644	3.43	706,103	9.08
633027 EFFLUENTMS	RQ1414901-05	678,739	5.68	116,105	3.44	658,275	9.07
633027 EFFLUENTDMS	RQ1414901-06	727,997	5.69	122,235	3.44	693,897	9.08

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

ALS Environmental

VOLATILE ORGANICS SAMPLE DATA

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ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrastructure (Formerly MACTEC)	**Service Request:**	R1409445
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	11/21/14 1300
Sample Matrix:	Water	**Date Received:**	11/22/14
		Date Analyzed:	11/26/14 14:00
Sample Name:	633027 EFFLUENT	**Units:**	µg/L
Lab Code:	R1409445-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method:	624	**Analysis Lot:**	423263
Data File Name:	I:\ACQUDATA\MSVOA6\DATA\112614\L9154.D\	**Instrument Name:**	R-MS-06
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	**5.5**		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	
75-35-4	1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	
110-75-8	2-Chloroethyl Vinyl Ether	10	U	10	
107-02-8	Acrolein	10	U	10	
107-13-1	Acrylonitrile	10	U	10	
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
56-23-5	Carbon Tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
75-09-2	Methylene Chloride	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
127-18-4	Tetrachloroethene (PCE)	1.0	U	1.0	
108-88-3	Toluene	1.0	U	1.0	
79-01-6	Trichloroethene (TCE)	**11**		1.0	
75-69-4	Trichlorofluoromethane (CFC 11)	1.0	U	1.0	
75-01-4	Vinyl Chloride	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
179601-23-1	m,p-Xylenes	2.0	U	2.0	
95-47-6	o-Xylene	1.0	U	1.0	
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrastructure (Formerly MACTEC)	**Service Request:**	R1409445
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	11/21/14 1300
Sample Matrix:	Water	**Date Received:**	11/22/14
		Date Analyzed:	11/26/14 14:00
Sample Name:	633027 EFFLUENT	**Units:**	µg/L
Lab Code:	R1409445-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method:	624	**Analysis Lot:**	423263
Data File Name:	I:\ACQUDATA\MSVOA6\DATA\112614\L9154.D\	**Instrument Name:**	R-MS-06
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	96	81-127	11/26/14 14:00	
4-Bromofluorobenzene	99	79-123	11/26/14 14:00	
Toluene-d8	105	83-120	11/26/14 14:00	

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\112614\L9154.D Vial: 13
Acq On : 26 Nov 2014 2:00 pm Operator: D.Lipani
Sample : R1409445-001|1.0 Inst : MS#6
Misc : AMEC 624 11852 T4 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 2 14:22 2014 Quant Results File: 6240911.RES

Quant Method : I:\ACQUDATA\M...\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Tue Oct 14 13:19:09 2014
Response via : Initial Calibration
DataAcq Meth : 6240911

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	3.43	128	118684	30.00	ug/L	0.00
35) 1,4-Difluorobenzene	5.68	114	725099	30.00	ug/L	0.00
53) d5-Chlorobenzene	9.08	117	682303	30.00	ug/L	0.00
System Monitoring Compounds						
30) SURR1,1,2-Diclethane-d4	4.25	65	240322	28.91	ug/L	0.00
Spiked Amount 30.000	Range 81 - 127		Recovery = 96.37%			
51) SURR3,Toluene-d8	7.76	98	876066	31.37	ug/L	0.00
Spiked Amount 30.000	Range 83 - 120		Recovery = 104.57%			
68) SURR2,BFB	10.13	95	338178	29.78	ug/L	0.00
Spiked Amount 30.000	Range 79 - 123		Recovery = 99.27%			
Target Compounds						Qvalue
5) Bromomethane	1.32	94	3646	0.42	ug/L #	69
14) Acetone	1.73	43	3459	1.31	ug/L	84
15) 1,1-Diclethene	1.95	96	3669	0.36	ug/L #	80
23) 1,1-Diclethane	2.72	63	13622	0.68	ug/L #	83
25) cis-1,2-Dichloroethene	3.28	96	15922	1.37	ug/L	98
26) Chloroform	3.52	83	2762m	0.14	ug/L	
32) 1,1,1-Trichloroethane	4.48	97	102349	5.45	ug/L	96
39) Dibromomethane	6.01	93	1611	0.25	ug/L #	68
41) Trichloroethene	6.14	130	135048	10.82	ug/L	99

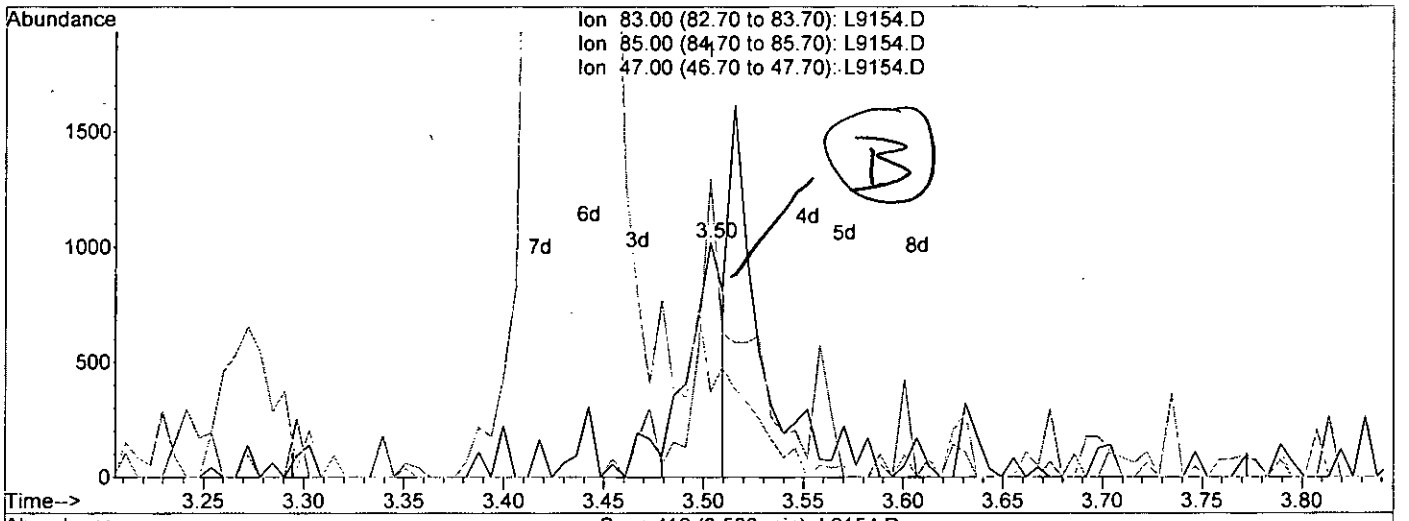
DL 12/2/14

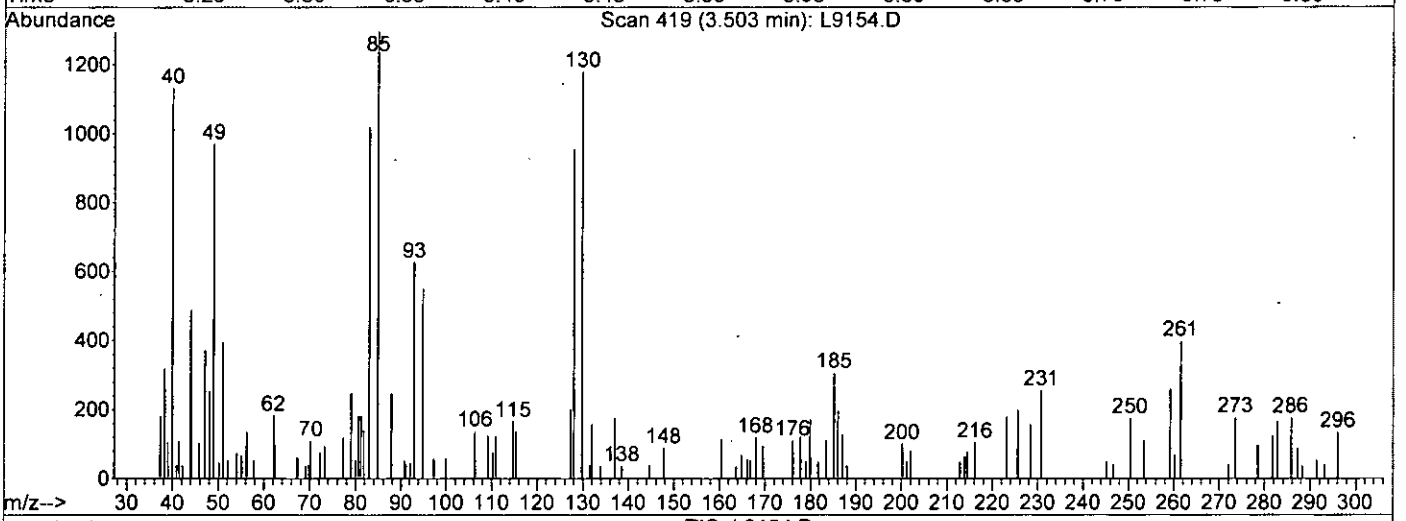
(#) = qualifier out of range (m) = manual integration
L9154.D 6240911.M Tue Dec 02 14:22:58 2014

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\112614\L9154.D Vial: 13
Acq On : 26 Nov 2014 2:00 pm Operator: D.Lipani
Sample : R1409445-001|1.0 Inst : MS#6
Misc : AMEC 624 11852 T4 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 2 14:21 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Tue Oct 14 13:19:09 2014
Response via : Multiple Level Calibration





TIC: L9154.D

(26) Chloroform

3.50min 0.06ug/L

response 1193

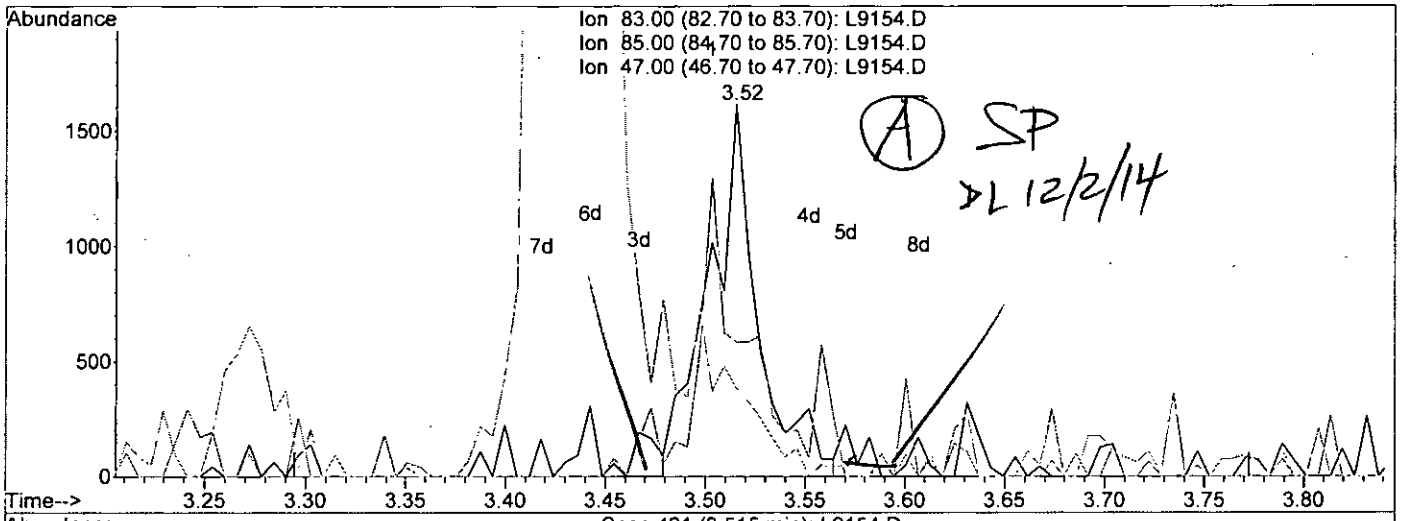
Ion	Exp%	Act%
83.00	100	100
85.00	67.20	127.21#
47.00	21.80	36.44#
0.00	0.00	0.00

L9154.D 6240911.M Tue Dec 02 14:21:44 2014

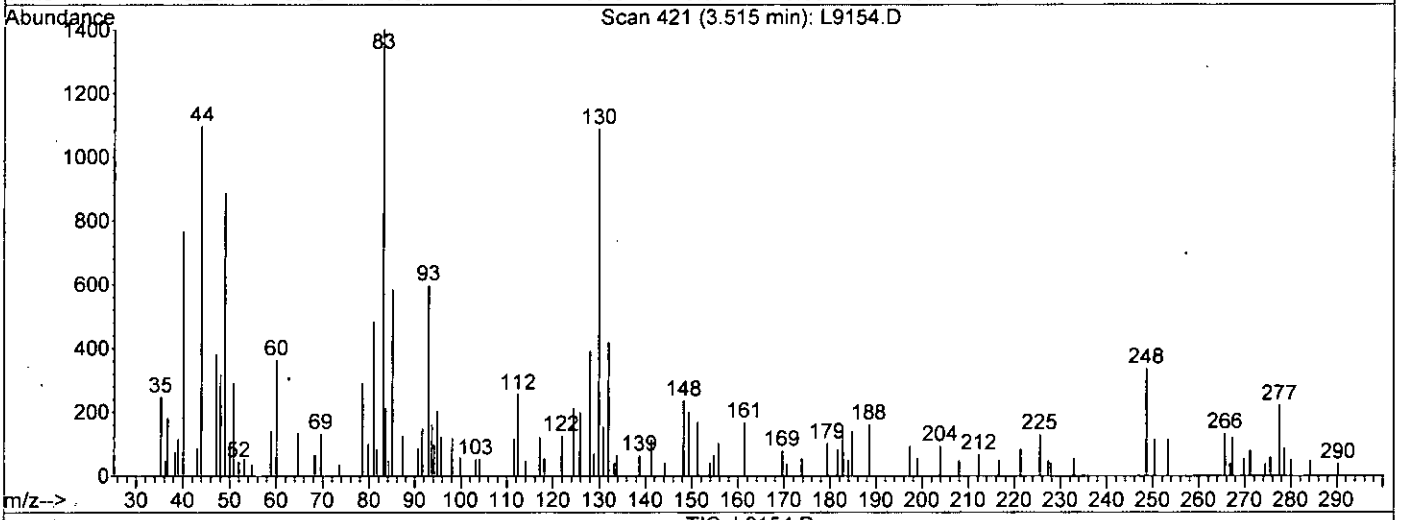
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\112614\L9154.D Vial: 13
Acq On : 26 Nov 2014 2:00 pm Operator: D.Lipani
Sample : R1409445-001|1.0 Inst : MS#6
Misc : AMEC 624 11852 T4 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 2 14:21 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Tue Oct 14 13:19:09 2014
Response via : Multiple Level Calibration



A SP 12/2/14



TIC: L9154.D

(26) Chloroform

3.52min 0.14ug/L m

response 2762

Ion	Exp%	Act%
83.00	100	100
85.00	67.20	41.68#
47.00	21.80	27.27#
0.00	0.00	0.00

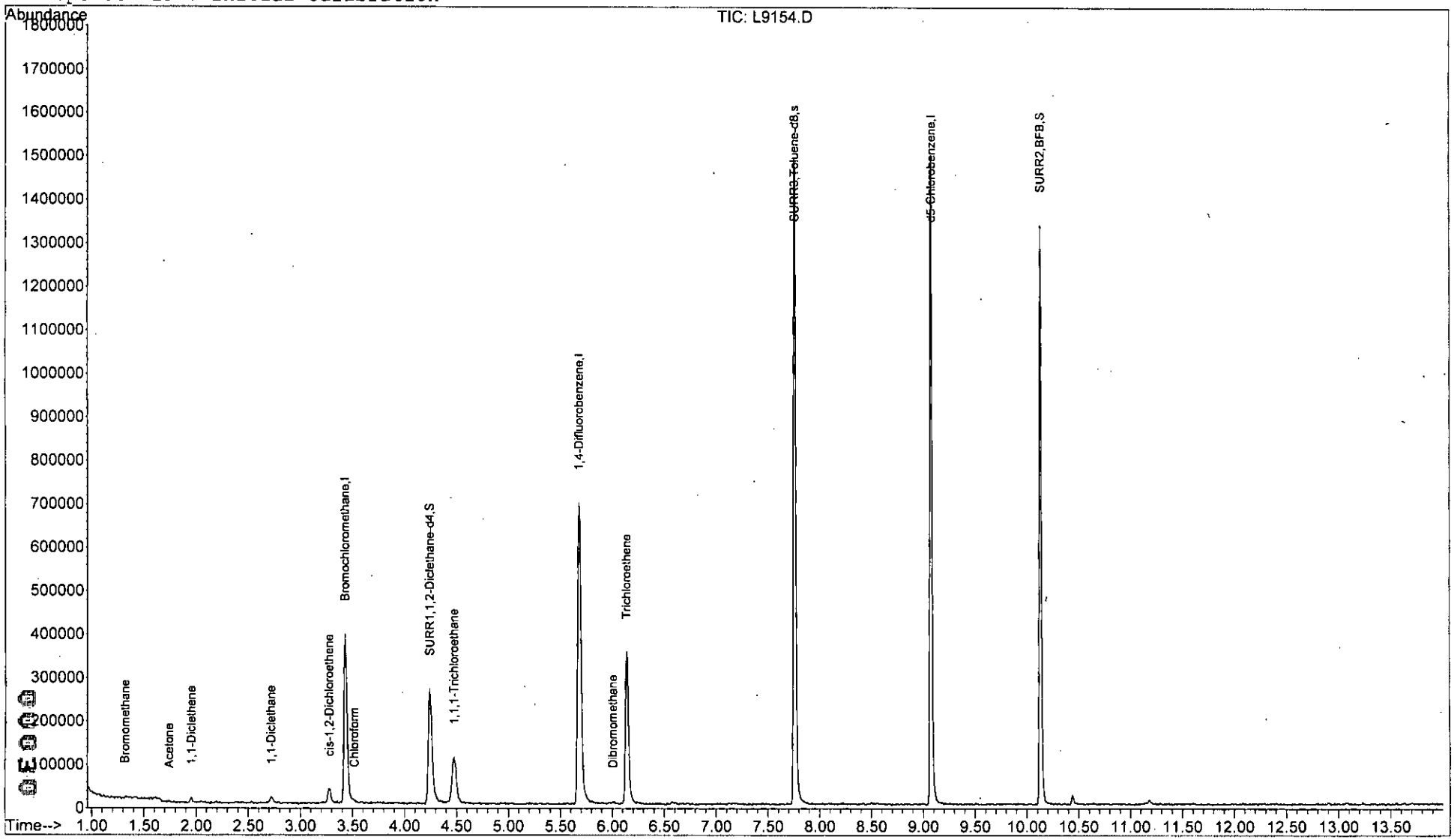
MJ 12/2

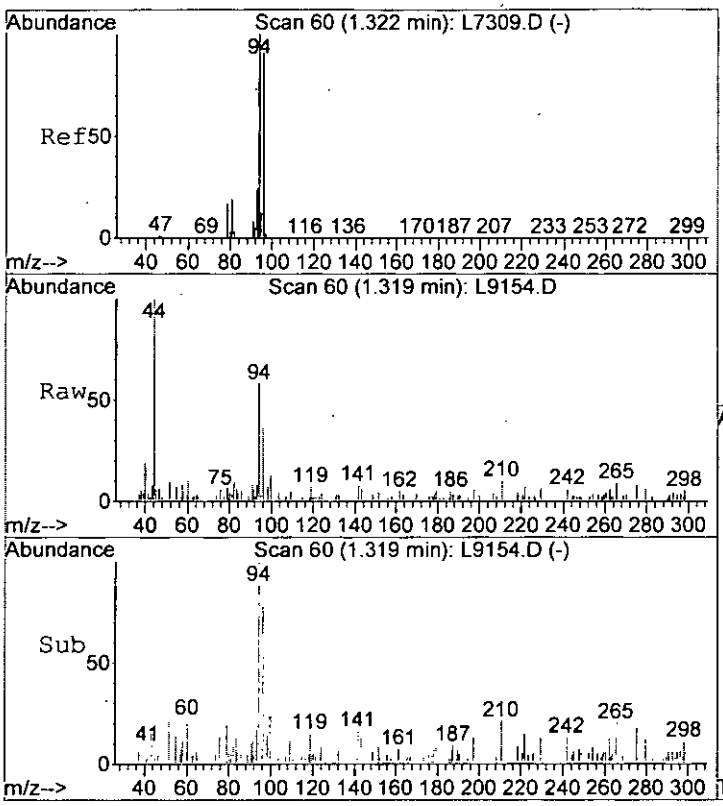
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Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\112614\L9154.D Vial: 13
Acq On : 26 Nov 2014 2:00 pm Operator: D.Lipani
Sample : R1409445-001|1.0 Inst : MS#6
Misc : AMEC 624 11852 T4 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 2 14:22 2014 Quant Results File: 6240911.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Tue Oct 14 13:19:09 2014
Response via : Initial Calibration

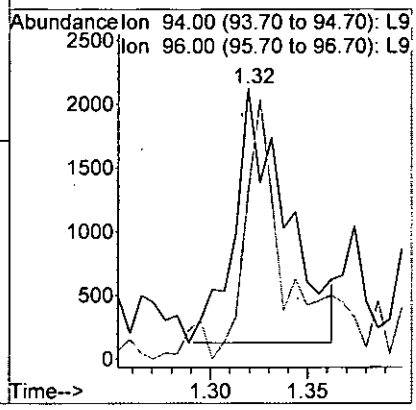


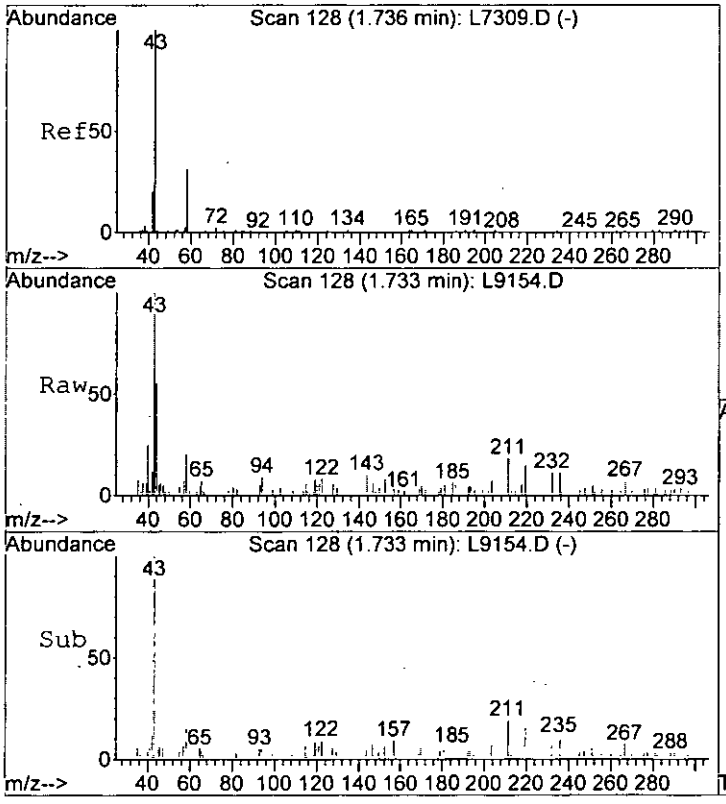


#5
Bromomethane
Concen: 0.42 ug/L
RT: 1.32 min Scan# 60
Delta R.T. -0.00 min
Lab File: L9154.D
Acq: 26 Nov 2014 2:00 pm

Tgt Ion: 94 Resp: 3646

Ion	Ratio	Lower	Upper
94	100		
96	61.8	70.9	110.9#

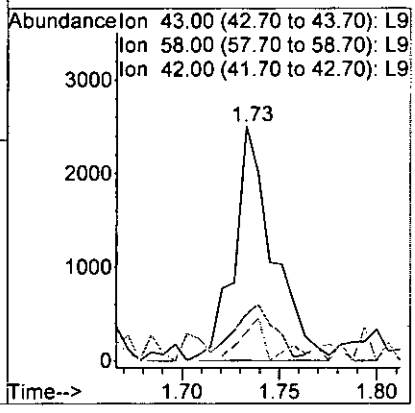


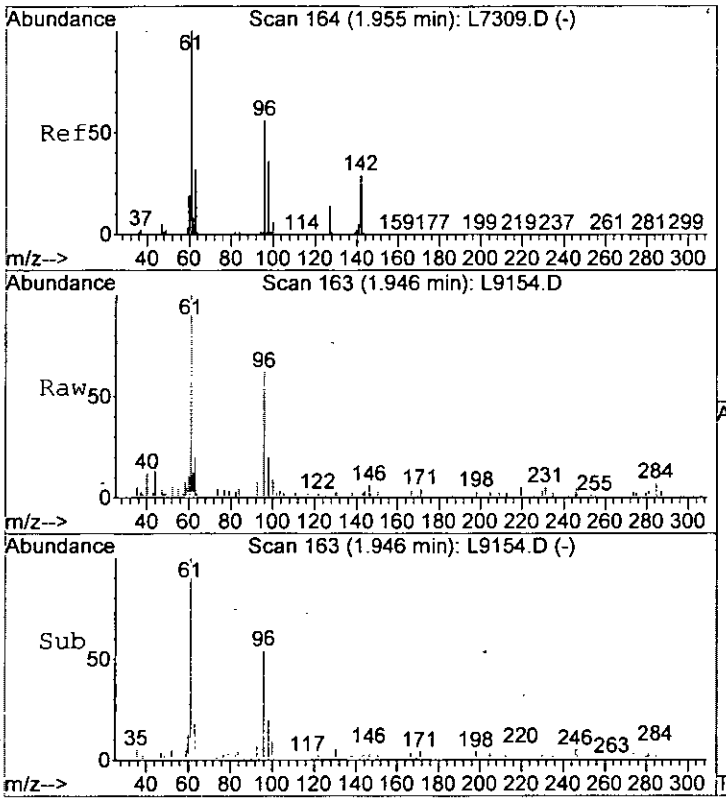


#14
Acetone
Concen: 1.31 ug/L
RT: 1.73 min Scan# 128
Delta R.T. -0.00 min
Lab File: L9154.D
Acq: 26 Nov 2014 2:00 pm

Tgt Ion: 43 Resp: 3459

Ion	Ratio	Lower	Upper
43	100		
58	19.6	7.4	47.4
42	12.0	0.4	40.4

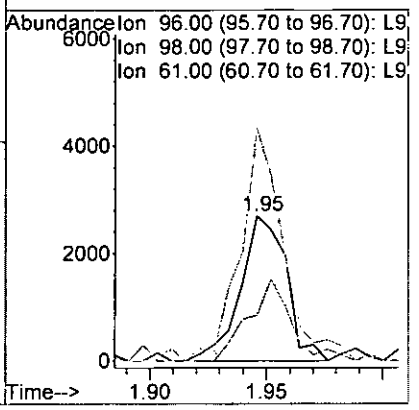


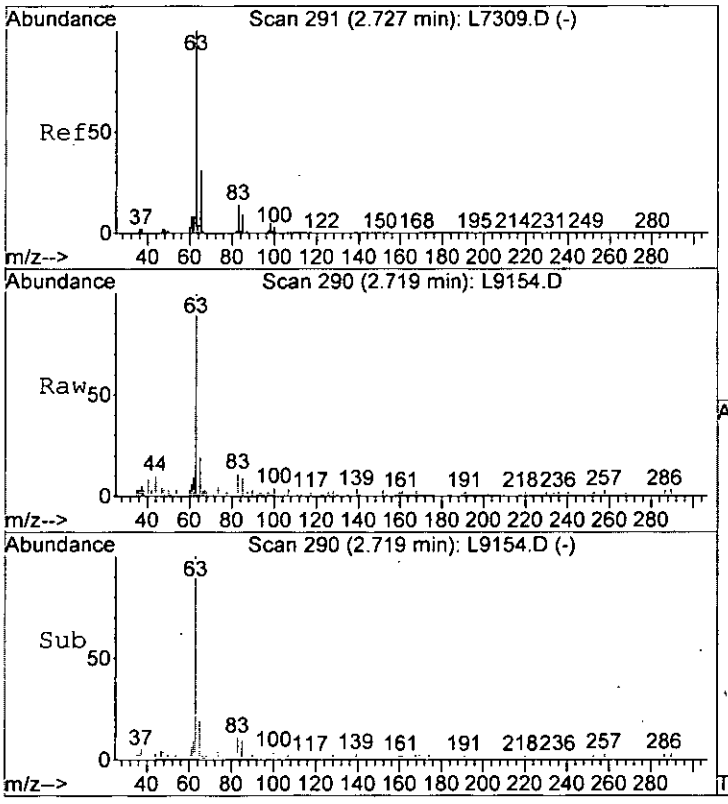


#15
1,1-Diclethene
Concen: 0.36 ug/L
RT: 1.95 min Scan# 163
Delta R.T. -0.01 min
Lab File: L9154.D
Acq: 26 Nov 2014 2:00 pm

Tgt Ion: 96 Resp: 3669

Ion	Ratio	Lower	Upper
96	100		
98	31.4	44.0	84.0#
61	160.6	157.3	197.3

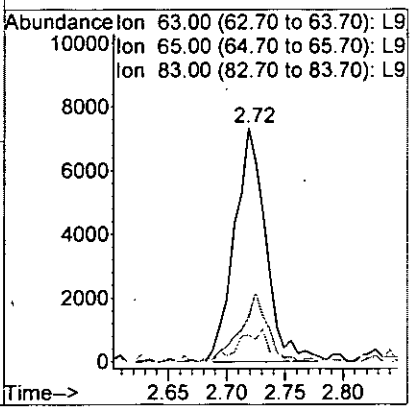


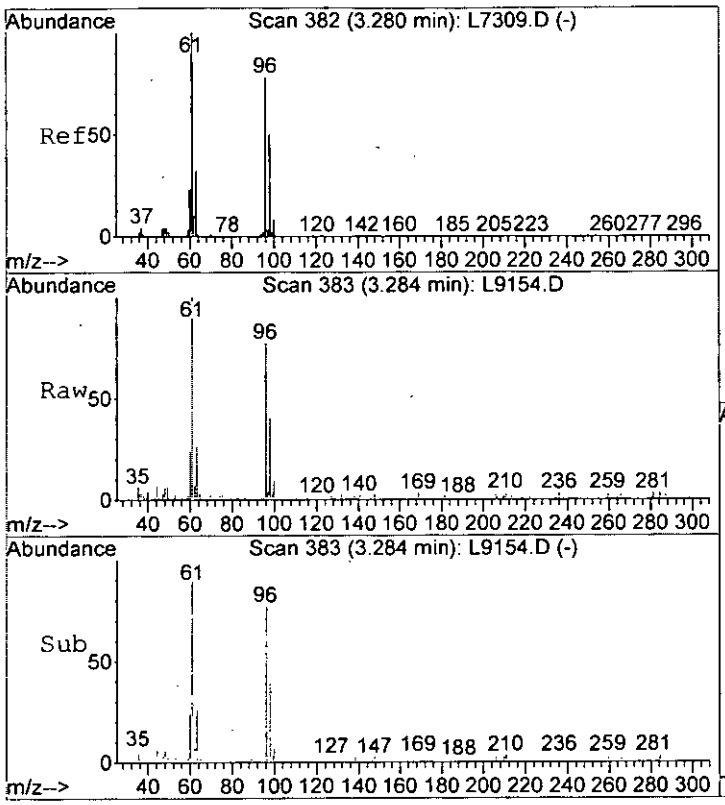


#23
1,1-Diclethane
Concen: 0.68 ug/L
RT: 2.72 min Scan# 290
Delta R.T. -0.01 min
Lab File: L9154.D
Acq: 26 Nov 2014 2:00 pm

Tgt Ion: 63 Resp: 13622

Ion	Ratio	Lower	Upper
63	100		
65	18.9	24.9	37.3#
83	11.4	11.1	16.7

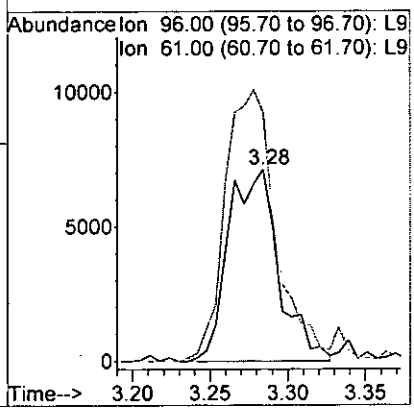


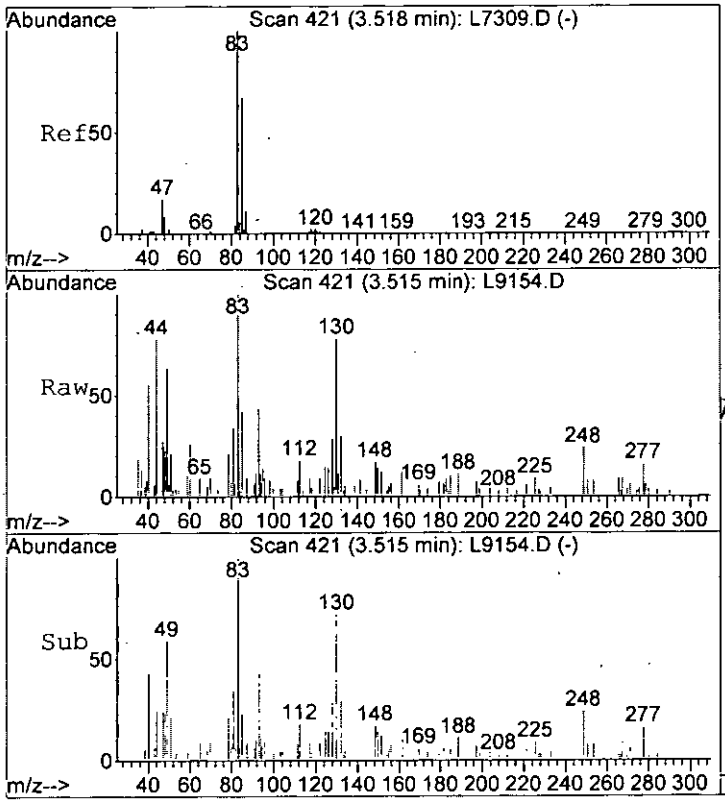


#25
cis-1,2-Dichloroethene
Concen: 1.37 ug/L
RT: 3.28 min Scan# 383
Delta R.T. 0.00 min
Lab File: L9154.D
Acq: 26 Nov 2014 2:00 pm

Tgt Ion: 96 Resp: 15922

Ion	Ratio	Lower	Upper
96	100		
61	129.9	102.0	153.0

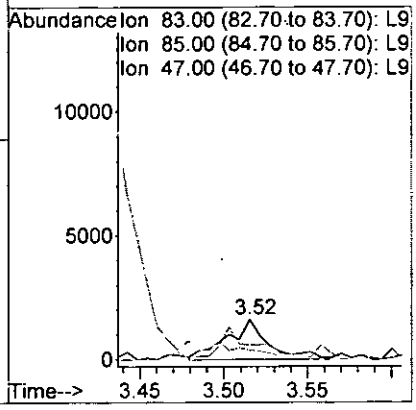


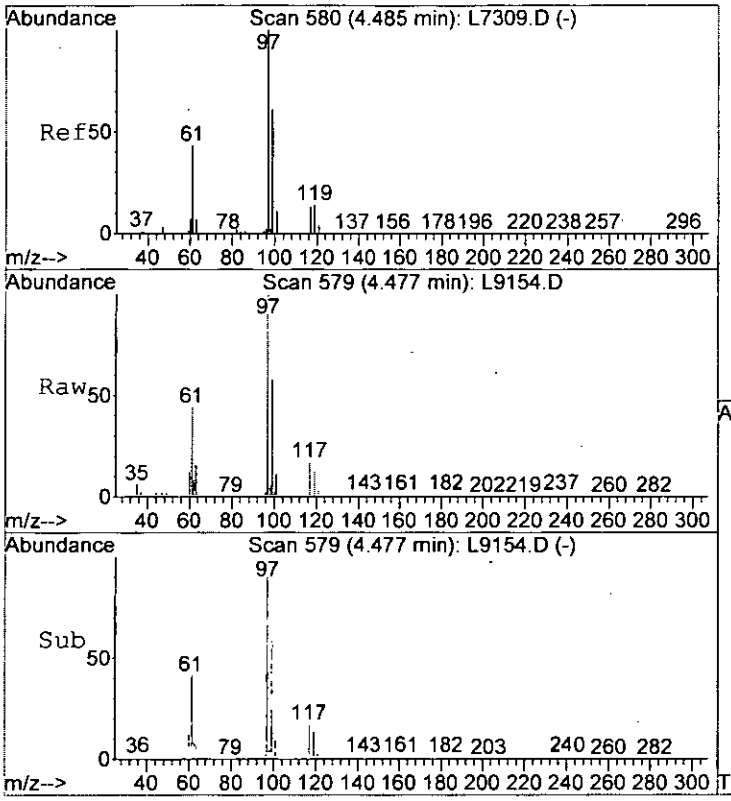


#26
Chloroform
Concen: 0.14 ug/L m
RT: 3.52 min Scan# 421
Delta R.T. -0.00 min
Lab File: L9154.D
Acq: 26 Nov 2014 2:00 pm

Tgt Ion: 83 Resp: 2762

Ion	Ratio	Lower	Upper
83	100		
85	41.7	53.8	80.6#
47	27.3	17.4	26.2#

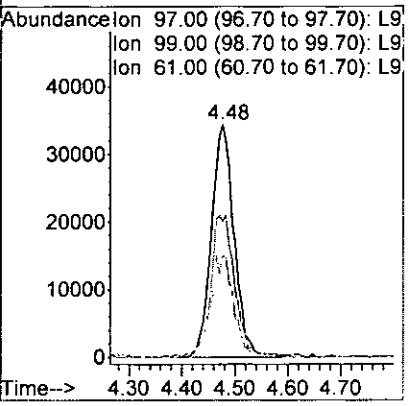


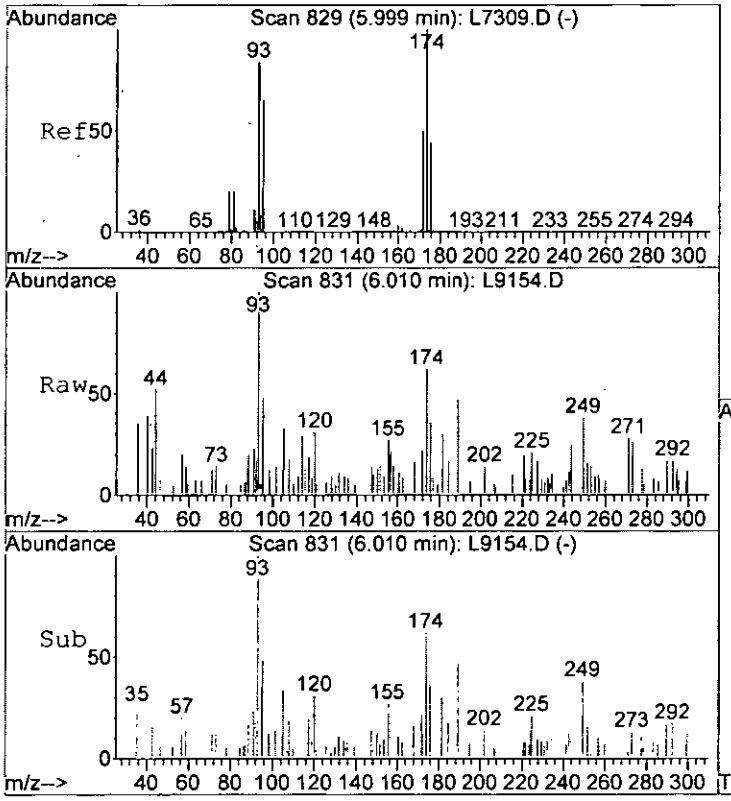


#32
1,1,1-Trichloroethane
Concen: 5.45 ug/L
RT: 4.48 min Scan# 579
Delta R.T. -0.01 min
Lab File: L9154.D
Acq: 26 Nov 2014 2:00 pm

Tgt Ion: 97 Resp: 102349

Ion	Ratio	Lower	Upper
97	100		
99	58.1	49.1	73.7
61	43.5	36.3	54.5

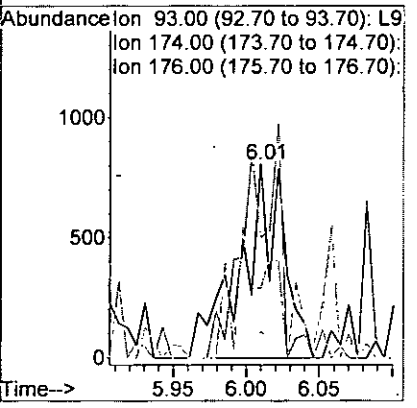


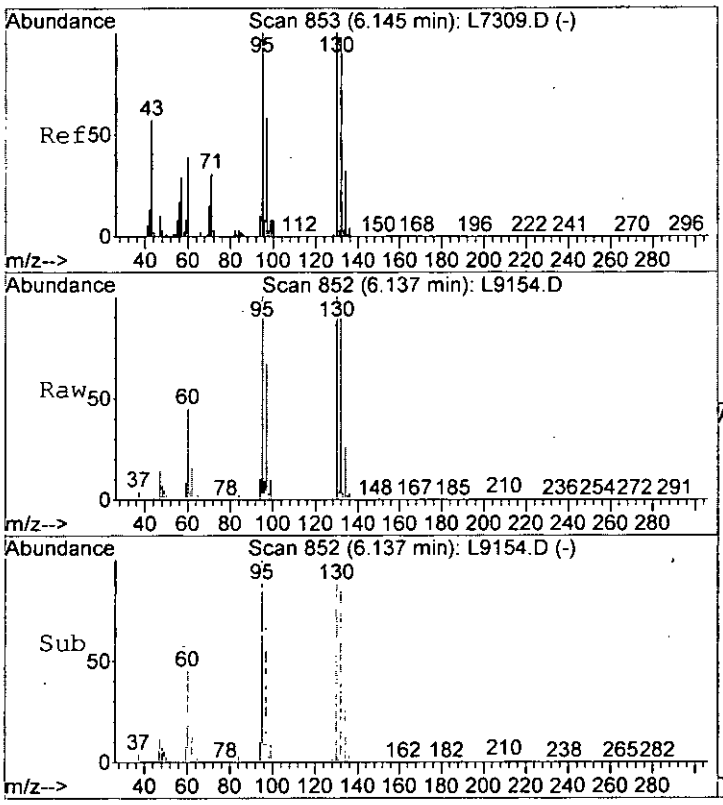


#39
Dibromomethane
Concen: 0.25 ug/L
RT: 6.01 min Scan# 831
Delta R.T. 0.01 min
Lab File: L9154.D
Acq: 26 Nov 2014 2:00 pm

Tgt Ion: 93 Resp: 1611

Ion	Ratio	Lower	Upper
93	100		
174	93.5	89.4	134.0
176	11.2	45.7	68.5#

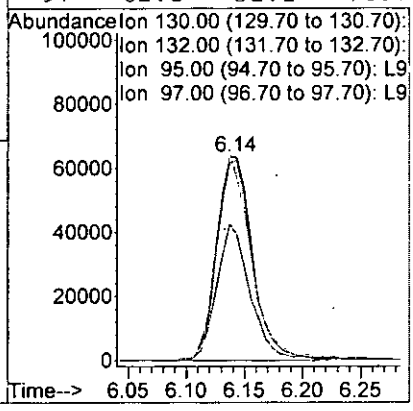




#41
Trichloroethene
Concen: 10.82 ug/L
RT: 6.14 min Scan# 852
Delta R.T. -0.01 min
Lab File: L9154.D
Acq: 26 Nov 2014 2:00 pm

Tgt Ion:130 Resp: 135048

Ion	Ratio	Lower	Upper
130	100		
132	95.7	76.7	115.1
95	95.7	77.8	116.6
97	62.5	51.1	76.7



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: AMEC Environmental & Infrastructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251-04
Sample Matrix: Water

Service Request: R1409445
Date Collected: 11/21/14 1300
Date Received: 11/22/14
Date Analyzed: 11/26/14 14:30

Sample Name: TRIP BLANK
Lab Code: R1409445-002

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 624
Data File Name: I:\ACQUDATA\MSVOA6\DATA\112614\L9155.D\

Analysis Lot: 423263
Instrument Name: R-MS-06
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	1.0	U	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	
75-35-4	1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	
110-75-8	2-Chloroethyl Vinyl Ether	10	U	10	
107-02-8	Acrolein	10	U	10	
107-13-1	Acrylonitrile	10	U	10	
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
56-23-5	Carbon Tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
75-09-2	Methylene Chloride	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
127-18-4	Tetrachloroethene (PCE)	1.0	U	1.0	
108-88-3	Toluene	1.0	U	1.0	
79-01-6	Trichloroethene (TCE)	1.0	U	1.0	
75-69-4	Trichlorofluoromethane (CFC 11)	1.0	U	1.0	
75-01-4	Vinyl Chloride	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
179601-23-1	m,p-Xylenes	2.0	U	2.0	
95-47-6	o-Xylene	1.0	U	1.0	
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrastructure (Formerly MACTEC)	**Service Request:**	R1409445
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	11/21/14 1300
Sample Matrix:	Water	**Date Received:**	11/22/14
		Date Analyzed:	11/26/14 14:30
Sample Name:	TRIP BLANK	**Units:**	µg/L
Lab Code:	R1409445-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method:	624	**Analysis Lot:**	423263
Data File Name:	I:\ACQUDATA\MSVOA6\DATA\112614\L9155.D\	**Instrument Name:**	R-MS-06
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	101	81-127	11/26/14 14:30	
4-Bromofluorobenzene	98	79-123	11/26/14 14:30	
Toluene-d8	106	83-120	11/26/14 14:30	

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\112614\L9155.D Vial: 14
Acq On : 26 Nov 2014 2:30 pm Operator: D.Lipani
Sample : R1409445-002|1.0 Inst : MS#6
Misc : AMEC 624 11852 T4 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 2 14:24 2014 Quant Results File: 6240911.RES

Quant Method : I:\ACQUDATA\M...\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Tue Oct 14 13:19:09 2014
Response via : Initial Calibration
DataAcq Meth : 6240911

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	3.43	128	121644	30.00	ug/L		0.00
35) 1,4-Difluorobenzene	5.68	114	745015	30.00	ug/L		0.00
53) d5-Chlorobenzene	9.08	117	706103	30.00	ug/L		0.00
System Monitoring Compounds							
30) SURR1,1,2-Diclethane-d4	4.25	65	257632	30.24	ug/L		0.00
Spiked Amount 30.000	Range 81 - 127		Recovery = 100.80%				
51) SURR3,Toluene-d8	7.76	98	913198	31.83	ug/L		0.00
Spiked Amount 30.000	Range 83 - 120		Recovery = 106.10%				
68) SURR2,BFB	10.13	95	344040	29.27	ug/L		0.00
Spiked Amount 30.000	Range 79 - 123		Recovery = 97.57%				
Target Compounds							Qvalue
5) Bromomethane	1.33	94	3427	0.38	ug/L		98
14) Acetone	1.74	43	4509	1.66	ug/L		90
18) Methylene Chloride	2.05	84	2265	0.23	ug/L	#	76
39) Dibromomethane	5.99	93	1497	0.23	ug/L		94

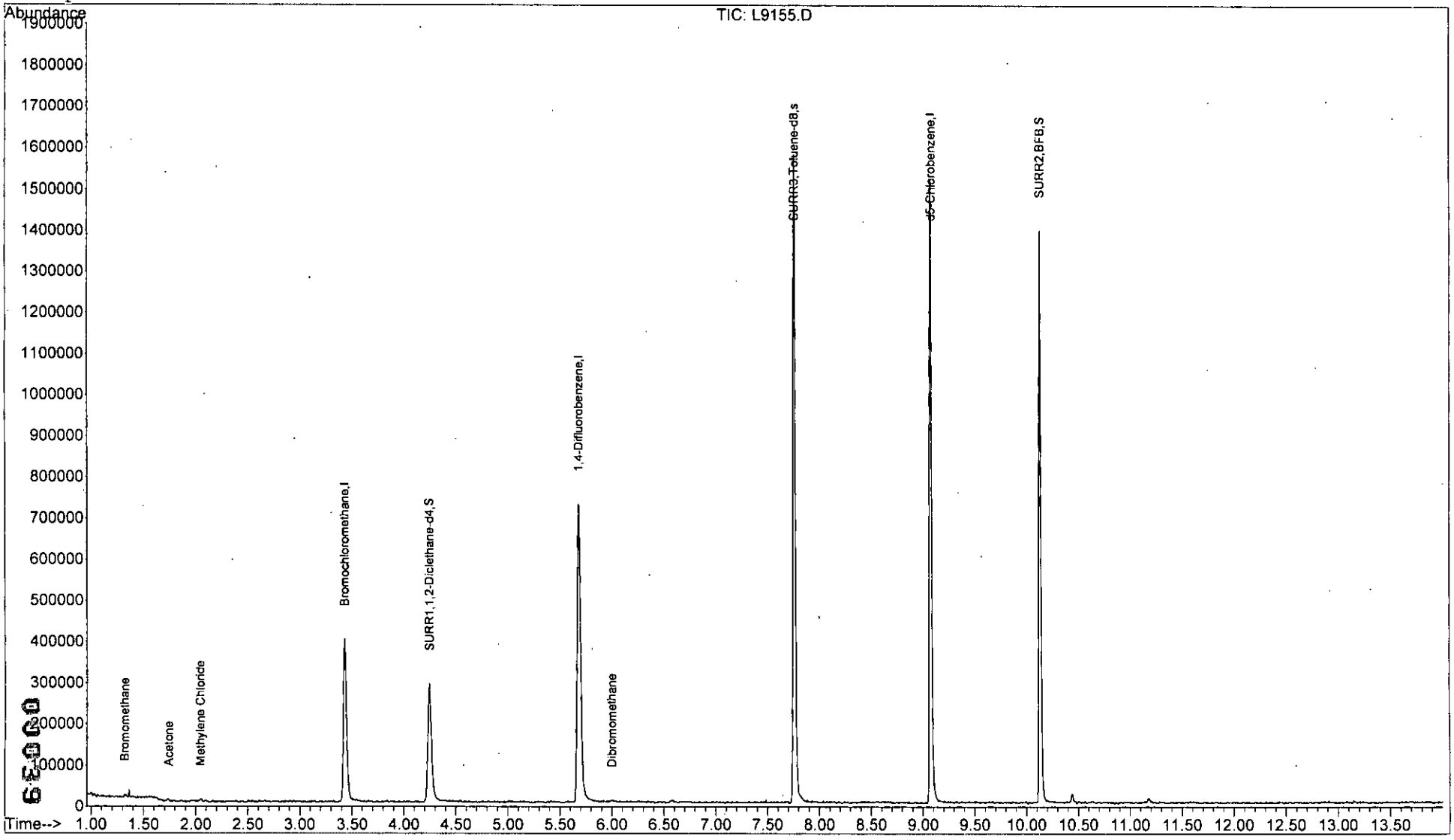
DL
12/2/14

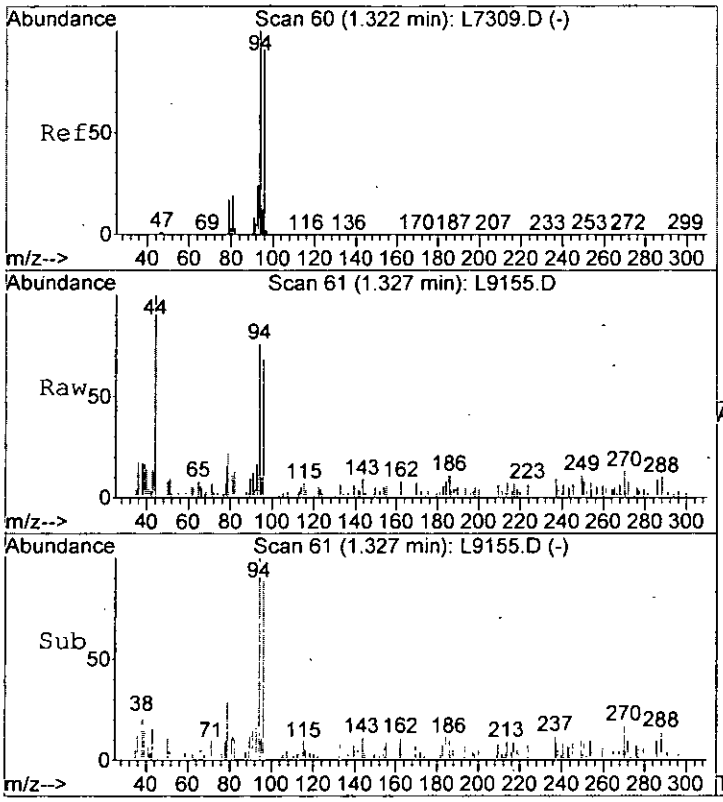
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\112614\L9155.D Vial: 14
Acq On : 26 Nov 2014 2:30 pm Operator: D.Lipani
Sample : R1409445-002|1.0 Inst : MS#6
Misc : AMEC 624 11852 T4 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 2 14:24 2014 Quant Results File: 6240911.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Tue Oct 14 13:19:09 2014
Response via : Initial Calibration

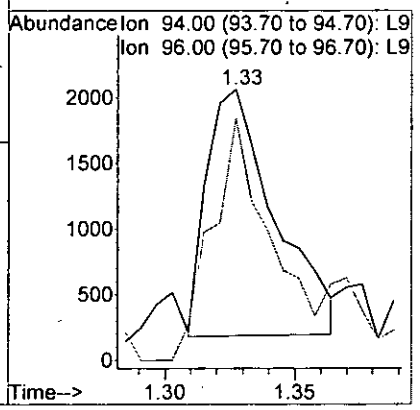


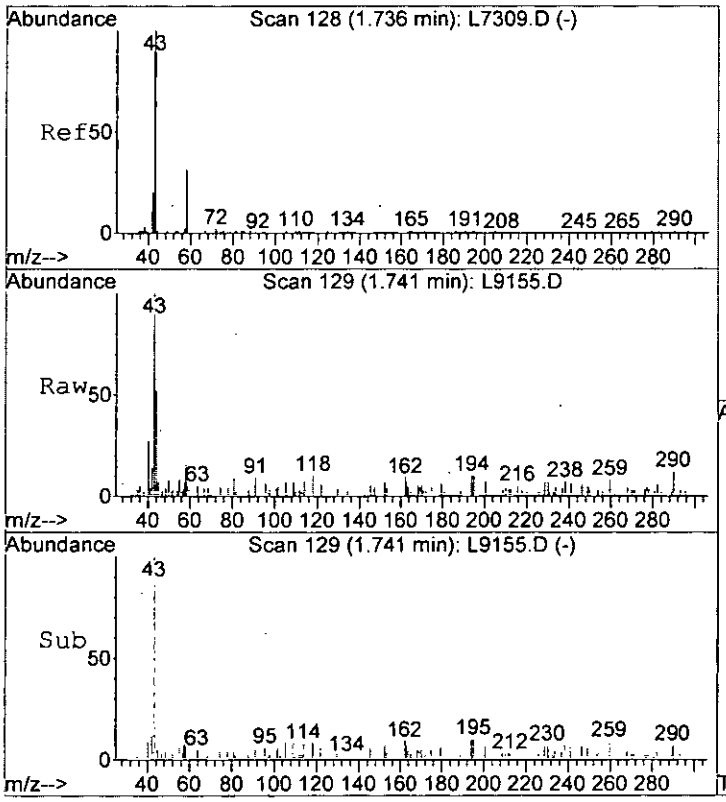


#5
Bromomethane
Concen: 0.38 ug/L
RT: 1.33 min Scan# 61
Delta R.T. 0.01 min
Lab File: L9155.D
Acq: 26 Nov 2014 2:30 pm

Tgt Ion: 94 Resp: 3427

Ion	Ratio	Lower	Upper
94	100		
96	89.3	70.9	110.9

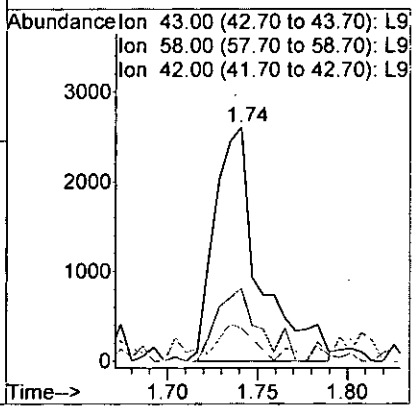


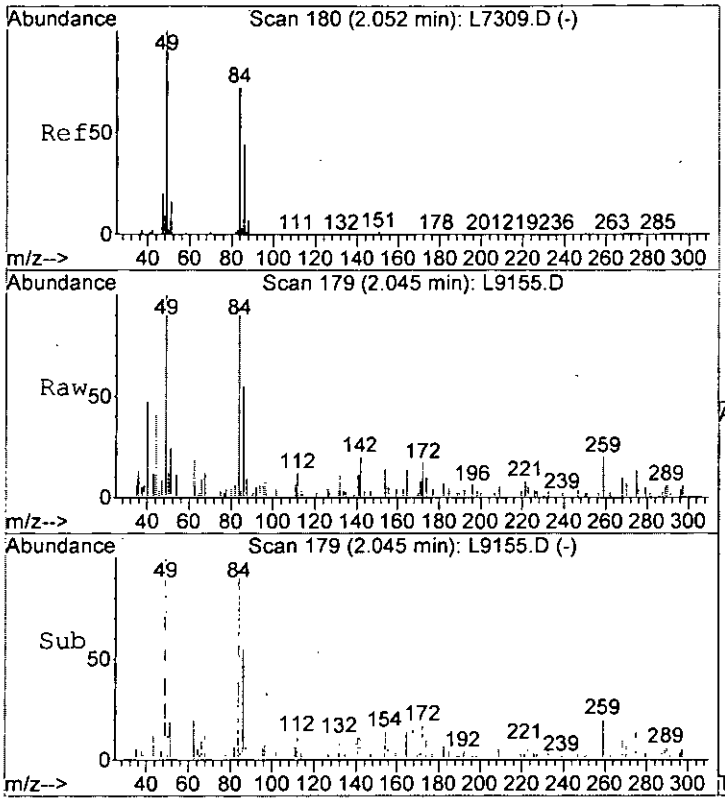


#14
Acetone
Concen: 1.66 ug/L
RT: 1.74 min Scan# 129
Delta R.T. 0.01 min
Lab File: L9155.D
Acq: 26 Nov 2014 2:30 pm

Tgt Ion: 43 Resp: 4509

Ion	Ratio	Lower	Upper
43	100		
58	30.9	7.4	47.4
42	13.9	0.4	40.4

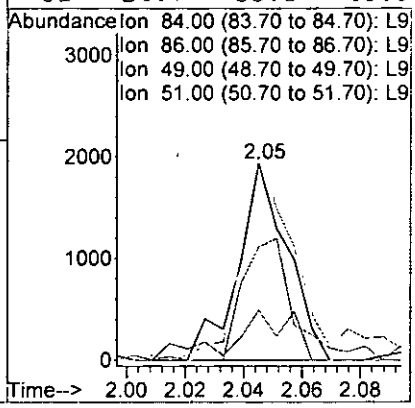


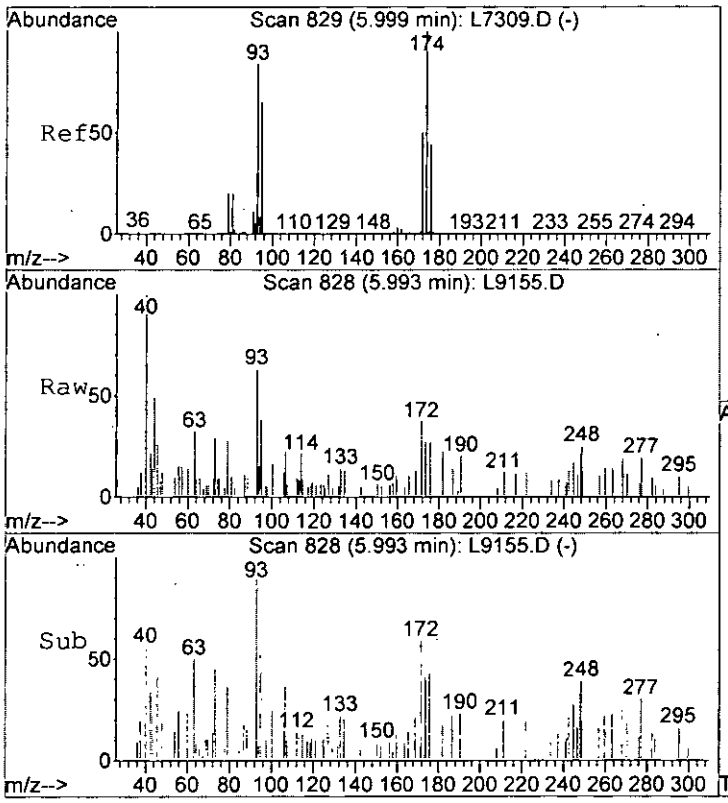


#18
Methylene Chloride
Concen: 0.23 ug/L
RT: 2.05 min Scan# 179
Delta R.T. -0.01 min
Lab File: L9155.D
Acq: 26 Nov 2014 2:30 pm

Tgt Ion: 84 Resp: 2265

Ion	Ratio	Lower	Upper
84	100		
86	55.9	49.1	73.7
49	101.1	111.0	166.4#
51	24.7	33.3	49.9#

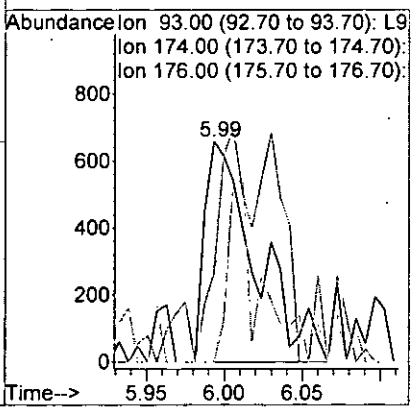




#39
Dibromomethane
Concen: 0.23 ug/L
RT: 5.99 min Scan# 828
Delta R.T. -0.01 min
Lab File: L9155.D
Acq: 26 Nov 2014 2:30 pm

Tgt Ion: 93 Resp: 1497

Ion	Ratio	Lower	Upper
93	100		
174	116.4	89.4	134.0
176	50.0	45.7	68.5



ALS Environmental

VOLATILE ORGANICS STANDARDS DATA

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Initial Calibration - Summary Report

DL 9/15/14

Calibration ID: RC1400082 **Instrument ID:** R-MS-06
Column Name: 1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
1,1,1-Trichloroethane (TCA)	T	Average RF			4.750	<=35	3.7
1,1,2,2-Tetrachloroethane	T	Average RF			0.4203	<=35	8.0
1,1,2-Trichloroethane	T	Average RF			0.3154	<=35	6.7
1,1,2-Trichlorotrifluoroethane	T	Average RF			2.879	<=35	6.6
1,1-Dichloroethane (1,1-DCA)	T	Average RF			5.063	<=35	8.9
1,1-Dichloroethene (1,1-DCE)	T	Average RF			2.604	<=35	4.7
1,2-Dibromoethane	T	Average RF			0.3788	<=35	8.3
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123	T	Average RF			3.725	<=35	7.6
1,2-Dichlorobenzene	T	Average RF			1.141	<=35	7.4
1,2-Dichloroethane	T	Average RF			3.337	<=35	4.8
1,2-Dichloropropane	T	Average RF			0.4571	<=35	5.1
1,3-Dichlorobenzene	T	Average RF			1.254	<=35	5.2
1,4-Dichlorobenzene	T	Average RF			1.249	<=35	7.7
1-Bromo-2-chloroethane	T	Average RF			0.5233	<=35	7.1
1-Chloro-4-(trifluoromethyl)benzene	T	Average RF			0.7862	<=35	5.0
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123	T	Average RF			4.274	<=35	6.6
2-Butanone (MEK)	T	Average RF			0.6032	<=35	13.7
2-Chloroethyl Vinyl Ether	T	Average RF			0.2014	<=35	5.5
2-Hexanone	T	Average RF			0.1904	<=35	9.5
2-Methyl-1,3-dioxolane	T	Average RF			0.1817	<=35	14.9
2-Methyl-1-propanol	T	Average RF			0.04963	<=35	6.5
2-Methyl-2-propanol	T	Average RF			0.1250	<=35	8.9
2-Propanol	T	Average RF			0.08030	<=35	8.2
4-Methyl-2-pentanone	T	Average RF			0.2485	<=35	5.7
Acetone	T	Average RF			0.6700	<=35	7.1
Acetonitrile	T	Average RF			0.2461	<=35	12.7
Acrolein	T	Average RF			0.3064	<=35	4.1
Acrylonitrile	T	Average RF			0.5466	<=35	11.5
Amyl Acetate	T	Average RF			0.5980	<=35	3.8
Benzene	T	Average RF			1.672	<=35	6.4
Bromodichloromethane	T	Average RF			0.6476	<=35	4.2
Bromoform	T	Average RF			0.3203	<=35	7.8
Bromomethane	T	Average RF			2.215	<=35	18.8
Carbon Disulfide	T	Average RF			8.732	<=35	7.6
Carbon Tetrachloride	T	Average RF			0.6486	<=35	3.1
Chlorobenzene	T	Average RF			1.372	<=35	4.7
Chloroethane	T	Average RF			1.944	<=35	7.8
Chloroform	T	Average RF			5.170	<=35	5.0
Chloromethane	T	Average RF			3.150	<=35	6.7
Cyclohexane	T	Average RF			4.157	<=35	6.5
Dibromochloromethane	T	Average RF			0.4933	<=35	2.6
Dibromomethane	T	Average RF			0.2667	<=35	6.1
Dichlorodifluoromethane (CFC 12)	T	Average RF			3.285	<=35	7.3
Dichloromethane	T	Average RF			2.391	<=35	7.1
Epichlorohydrin	T	Average RF			0.02161	<=35	8.4
Ethyl Acetate	T	Average RF			1.314	<=35	17.6
Ethylbenzene	T	Average RF			0.7128	<=35	5.2
Methyl tert-Butyl Ether	T	Average RF			6.095	<=35	7.0
Naphthalene	T	Average RF			1.034	<=35	9.0
Styrene	T	Average RF			1.468	<=35	3.5
Tetrachloroethene (PCE)	T	Average RF			0.4860	<=35	6.8
Tetrahydrofuran (THF)	T	Average RF			0.4549	<=35	6.9

Initial Calibration - Summary Report

Calibration ID:	RC1400082	**Instrument ID:**	R-MS-06
		Column Name:	1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
Toluene	T	Average RF			1.819	<=35	5.6
Trichloroethene (TCE)	T	Average RF			0.5162	<=35	5.8
Trichlorofluoromethane (CFC 11)	T	Average RF			5.465	<=35	4.2
Vinyl Chloride	T	Average RF			3.145	<=35	5.4
cis-1,2-Dichloroethene	T	Average RF			2.936	<=35	5.3
cis-1,3-Dichloropropene	T	Average RF			0.6734	<=35	5.9
m,p-Xylenes	T	Average RF			0.8922	<=35	4.9
n-Butyl Acetate	T	Average RF			0.4532	<=35	5.2
n-Heptane	T	Average RF			0.4244	<=35	9.5
o-Xylene	T	Average RF			0.8627	<=35	6.1
trans-1,2-Dichloroethene	T	Average RF			2.774	<=35	5.3
trans-1,3-Dichloropropene	T	Average RF			0.5861	<=35	5.8
1,2-Dichloroethane-d4	S	Average RF			2.101	<=35	4.8
4-Bromofluorobenzene	S	Average RF			0.4993	<=35	3.4
Toluene-d8	S	Average RF			1.155	<=35	2.2

Initial Calibration - Detailed Report

DL 9/15/14

Calibration ID:	RC1400082	**Instrument ID:**	R-MS-06
		Signal ID:	1

#	Lab Code	Sample Name	File Location	Acquisition Date
01	RC1400082-01	STD #1 - 0.5 PPB	I:\ACQUDATA\MSVOA6\DATA\091114\L7304.D	9/11/14 11:31
02	RC1400082-02	STD #2 - 1.0 PPB	I:\ACQUDATA\MSVOA6\DATA\091114\L7305.D	9/11/14 12:15
03	RC1400082-03	STD #3 - 2.0 PPB	I:\ACQUDATA\MSVOA6\DATA\091114\L7306.D	9/11/14 12:50
04	RC1400082-04	STD #5 - 10 PPB	I:\ACQUDATA\MSVOA6\DATA\091114\L7308.D	9/11/14 14:20
05	RC1400082-05	STD #6 - 20 PPB	I:\ACQUDATA\MSVOA6\DATA\091114\L7309.D	9/11/14 14:54
06	RC1400082-06	STD #7 - 50 PPB	I:\ACQUDATA\MSVOA6\DATA\091114\L7310.D	9/11/14 15:33
07	RC1400082-07	STD #8 - 100 PPB	I:\ACQUDATA\MSVOA6\DATA\091114\L7311.D	9/11/14 16:24
08	RC1400082-08	STD #4 - 5.0 PPB	I:\ACQUDATA\MSVOA6\DATA\091114\L7315.D	9/11/14 18:36
09	RC1400082-09	STD #10 - 200 PPB	I:\ACQUDATA\MSVOA6\DATA\091114\L7316.D	9/11/14 19:20

Analyte — **Curve Fit** — **Weighting**

1,1,1-Trichloroethane (TCA) — Average RF — RSD = 3.7 — Average RF = 4.750

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	4.862	02	1.000	4.816	03	2.000	4.977	08	5.000	4.713
04	10.000	4.891	05	20.000	4.623	06	50.000	4.583	07	100.000	4.858
09	200.000	4.432									

1,1,2,2-Tetrachloroethane — Average RF — RSD = 8.0 — Average RF = 0.4203

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5019	02	1.000	0.4287	03	2.000	0.4233	08	5.000	0.4212
04	10.000	0.4178	05	20.000	0.4101	06	50.000	0.3869	07	100.000	0.4002
09	200.000	0.3921									

1,1,2-Trichloroethane — Average RF — RSD = 6.7 — Average RF = 0.3154

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2866	02	1.000	0.3264	03	2.000	0.3535	08	5.000	0.3257
04	10.000	0.3149	05	20.000	0.3272	06	50.000	0.3136	07	100.000	0.3053
09	200.000	0.2858									

1,1,2-Trichlorotrifluoroethane — Average RF — RSD = 6.6 — Average RF = 2.879

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	3.039	02	1.000	2.764	03	2.000	3.071	08	5.000	2.949
04	10.000	2.980	05	20.000	2.880	06	50.000	2.698	07	100.000	3.032
09	200.000	2.498									

1,1-Dichloroethane (1,1-DCA) — Average RF — RSD = 8.9 — Average RF = 5.063

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	5.432	02	1.000	4.835	03	2.000	5.700	08	5.000	5.207
04	10.000	5.427	05	20.000	5.157	06	50.000	4.642	07	100.000	4.939
09	200.000	4.231									

1,1-Dichloroethene (1,1-DCE) — Average RF — RSD = 4.7 — Average RF = 2.604

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.667	02	1.000	2.401	03	2.000	2.812	08	5.000	2.600
04	10.000	2.655	05	20.000	2.584	06	50.000	2.490	07	100.000	2.623

1,2-Dibromoethane — Average RF — RSD = 8.3 — Average RF = 0.3788

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4506	02	1.000	0.3732	03	2.000	0.3368	08	5.000	0.3821
04	10.000	0.3778	05	20.000	0.3910	06	50.000	0.3557	07	100.000	0.3781
09	200.000	0.3638									

Initial Calibration - Detailed Report

Calibration ID:	RC1400082	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte **Curve Fit** **Weighting**

1,2-Dichloro-1,1,2-trifluoroethane (CFC Average RF RSD = 7.6 Average RF = 3.725

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	4.233	02	1.000	3.692	03	2.000	3.977	08	5.000	3.832
04	10.000	3.507	05	20.000	3.728	06	50.000	3.525	07	100.000	3.776
09	200.000	3.253									

1,2-Dichlorobenzene Average RF RSD = 7.4 Average RF = 1.141

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.289	02	1.000	1.235	03	2.000	1.140	08	5.000	1.152
04	10.000	1.113	05	20.000	1.097	06	50.000	1.034	07	100.000	1.068

1,2-Dichloroethane Average RF RSD = 4.8 Average RF = 3.337

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	3.256	02	1.000	3.190	03	2.000	3.461	08	5.000	3.613
04	10.000	3.488	05	20.000	3.372	06	50.000	3.244	07	100.000	3.308
09	200.000	3.101									

1,2-Dichloroethane-d4 Average RF RSD = 4.8 Average RF = 2.101

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
08	30.000	2.105	03	30.000	2.114	07	30.000	1.988	06	30.000	2.327
05	30.000	2.057	09	30.000	2.098	02	30.000	1.982	04	30.000	2.148
01	30.000	2.093									

1,2-Dichloropropane Average RF RSD = 5.1 Average RF = 0.4571

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4542	02	1.000	0.4187	03	2.000	0.4622	08	5.000	0.4777
04	10.000	0.4633	05	20.000	0.4697	06	50.000	0.4366	07	100.000	0.4943
09	200.000	0.4374									

1,3-Dichlorobenzene Average RF RSD = 5.2 Average RF = 1.254

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.298	02	1.000	1.331	03	2.000	1.281	08	5.000	1.295
04	10.000	1.288	05	20.000	1.206	06	50.000	1.144	07	100.000	1.191

1,4-Dichlorobenzene Average RF RSD = 7.7 Average RF = 1.249

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.401	02	1.000	1.361	03	2.000	1.223	08	5.000	1.279
04	10.000	1.241	05	20.000	1.211	06	50.000	1.118	07	100.000	1.158

1-Bromo-2-chloroethane Average RF RSD = 7.1 Average RF = 0.5233

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5436	02	1.000	0.5321	03	2.000	0.5619	08	5.000	0.5777
04	10.000	0.5017	05	20.000	0.5362	06	50.000	0.5066	07	100.000	0.4910
09	200.000	0.4586									

1-Chloro-4-(trifluoromethyl)benzene Average RF RSD = 5.0 Average RF = 0.7862

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8134	02	1.000	0.7964	03	2.000	0.8082	08	5.000	0.7971
04	10.000	0.8147	05	20.000	0.8124	06	50.000	0.7250	07	100.000	0.7956
09	200.000	0.7130									

2,2-Dichloro-1,1,1-trifluoroethane (CFC Average RF RSD = 6.6 Average RF = 4.274

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	4.671	02	1.000	4.400	03	2.000	4.372	08	5.000	4.253
04	10.000	4.359	05	20.000	4.435	06	50.000	4.017	07	100.000	4.271
09	200.000	3.684									

Initial Calibration - Detailed Report

Calibration ID:	RC1400082	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte **Curve Fit** **Weighting**

2-Butanone (MEK) Average RF RSD = 13.7 Average RF = 0.6032

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
08	5.000	0.4748	04	10.000	0.5260	05	20.000	0.6383	06	50.000	0.6634
07	100.000	0.6775	09	200.000	0.6393						

2-Chloroethyl Vinyl Ether Average RF RSD = 5.5 Average RF = 0.2014

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.2165	03	2.000	0.1947	08	5.000	0.2011	04	10.000	0.1916
05	20.000	0.2189	06	50.000	0.2010	07	100.000	0.2001	09	200.000	0.1876

2-Hexanone Average RF RSD = 9.5 Average RF = 0.1904

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
08	5.000	0.1699	04	10.000	0.1669	05	20.000	0.2015	06	50.000	0.2120
07	100.000	0.1960	09	200.000	0.1963						

2-Methyl-1,3-dioxolane Average RF RSD = 14.9 Average RF = 0.1817

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	5.000	0.1492	03	10.000	0.1447	08	25.000	0.1718	04	50.000	0.1677
05	100.000	0.2024	06	250.000	0.2069	07	500.000	0.1962	09	1000.000	0.2151

2-Methyl-1-propanol Average RF RSD = 6.5 Average RF = 0.04963

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
08	100.000	0.05453	04	200.000	0.04468	05	400.000	0.04896	06	1000.000	0.04857
07	2000.000	0.05126	09	4000.000	0.04978						

2-Methyl-2-propanol Average RF RSD = 8.9 Average RF = 0.1250

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	10.000	0.1356	02	20.000	0.1087	03	40.000	0.1335	08	100.000	0.1170
04	200.000	0.1177	05	400.000	0.1442	06	1000.000	0.1268	07	2000.000	0.1237
09	4000.000	0.1173									

2-Propanol Average RF RSD = 8.2 Average RF = 0.08030

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	20.000	0.07337	03	40.000	0.08164	08	100.000	0.07247	04	200.000	0.07688
05	400.000	0.09312	06	1000.000	0.08374	07	2000.000	0.07869	09	4000.000	0.08250

4-Bromofluorobenzene Average RF RSD = 3.4 Average RF = 0.4993

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	30.000	0.5050	03	30.000	0.4935	02	30.000	0.5049	06	30.000	0.4905
09	30.000	0.5316	05	30.000	0.4697	08	30.000	0.4978	07	30.000	0.4903
04	30.000	0.5106									

4-Methyl-2-pentanone Average RF RSD = 5.7 Average RF = 0.2485

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
08	5.000	0.2496	04	10.000	0.2266	05	20.000	0.2646	06	50.000	0.2631
07	100.000	0.2462	09	200.000	0.2407						

Acetone Average RF RSD = 7.1 Average RF = 0.6700

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
08	5.000	0.6911	04	10.000	0.6857	05	20.000	0.7450	06	50.000	0.6484
07	100.000	0.6381	09	200.000	0.6114						

Acetonitrile Average RF RSD = 12.7 Average RF = 0.2461

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	5.000	0.3126	03	10.000	0.2095	08	25.000	0.2473	04	50.000	0.2291
05	100.000	0.2651	06	250.000	0.2311	07	500.000	0.2373	09	1000.000	0.2368

Initial Calibration - Detailed Report

Calibration ID:	RC1400082	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte **Curve Fit** **Weighting**

Acrolein Average RF RSD = 4.1 Average RF = 0.3064

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	5.000	0.3015	03	10.000	0.2951	08	25.000	0.3232	04	50.000	0.3004
05	100.000	0.3266	06	250.000	0.2956	07	500.000	0.3121	09	1000.000	0.2964

Acrylonitrile Average RF RSD = 11.5 Average RF = 0.5466

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.6532	02	5.000	0.4451	03	10.000	0.5704	08	25.000	0.5101
04	50.000	0.5627	05	100.000	0.6051	06	250.000	0.5187	07	500.000	0.5631
09	1000.000	0.4912									

Amyl Acetate Average RF RSD = 3.8 Average RF = 0.5980

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.5534	08	5.000	0.5982	04	10.000	0.5942	05	20.000	0.6276
06	50.000	0.5948	07	100.000	0.6090	09	200.000	0.6090			

Benzene Average RF RSD = 6.4 Average RF = 1.672

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.764	02	1.000	1.713	03	2.000	1.732	08	5.000	1.788
04	10.000	1.714	05	20.000	1.698	06	50.000	1.561	07	100.000	1.622
09	200.000	1.454									

Bromodichloromethane Average RF RSD = 4.2 Average RF = 0.6476

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6871	02	1.000	0.6372	03	2.000	0.6579	08	5.000	0.6444
04	10.000	0.6544	05	20.000	0.6679	06	50.000	0.6163	07	100.000	0.6641
09	200.000	0.5992									

Bromoform Average RF RSD = 7.8 Average RF = 0.3203

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3029	02	1.000	0.3599	03	2.000	0.2751	08	5.000	0.3039
04	10.000	0.3185	05	20.000	0.3227	06	50.000	0.3201	07	100.000	0.3357
09	200.000	0.3444									

Bromomethane Average RF RSD = 18.8 Average RF = 2.215

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	3.091	02	1.000	2.128	03	2.000	2.558	08	5.000	2.184
04	10.000	1.941	05	20.000	1.893	06	50.000	1.870	07	100.000	2.057

Carbon Disulfide Average RF RSD = 7.6 Average RF = 8.732

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	9.391	02	1.000	8.102	03	2.000	9.619	08	5.000	8.519
04	10.000	8.814	05	20.000	9.309	06	50.000	7.755	07	100.000	8.348

Carbon Tetrachloride Average RF RSD = 3.1 Average RF = 0.6486

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6469	02	1.000	0.6472	03	2.000	0.6654	08	5.000	0.6695
04	10.000	0.6578	05	20.000	0.6488	06	50.000	0.6177	07	100.000	0.6673
09	200.000	0.6165									

Chlorobenzene Average RF RSD = 4.7 Average RF = 1.372

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.364	02	1.000	1.460	03	2.000	1.379	08	5.000	1.451
04	10.000	1.388	05	20.000	1.359	06	50.000	1.284	07	100.000	1.291

Initial Calibration - Detailed Report

Calibration ID: RC1400082 **Instrument ID:** R-MS-06
Signal ID: 1

Analyte **Curve Fit** **Weighting**

Chloroethane Average RF RSD = 7.8 Average RF = 1.944

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.979	02	1.000	2.295	03	2.000	1.946	08	5.000	1.898
04	10.000	1.920	05	20.000	1.836	06	50.000	1.813	07	100.000	1.865

Chloroform Average RF RSD = 5.0 Average RF = 5.170

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	5.503	02	1.000	5.030	03	2.000	5.163	08	5.000	5.214
04	10.000	5.561	05	20.000	5.077	06	50.000	5.065	07	100.000	5.227
09	200.000	4.693									

Chloromethane Average RF RSD = 6.7 Average RF = 3.150

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	3.382	02	1.000	2.948	03	2.000	3.081	08	5.000	3.185
04	10.000	3.483	05	20.000	3.057	06	50.000	2.849	07	100.000	3.215

Cyclohexane Average RF RSD = 6.5 Average RF = 4.157

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	3.770	02	1.000	3.960	03	2.000	4.247	08	5.000	4.641
04	10.000	4.090	05	20.000	4.281	06	50.000	3.858	07	100.000	4.244
09	200.000	4.325									

Dibromochloromethane Average RF RSD = 2.6 Average RF = 0.4933

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4969	02	1.000	0.4712	03	2.000	0.4945	08	5.000	0.5008
04	10.000	0.5049	05	20.000	0.4955	06	50.000	0.4869	07	100.000	0.5121
09	200.000	0.4770									

Dibromomethane Average RF RSD = 6.1 Average RF = 0.2667

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2870	02	1.000	0.2820	03	2.000	0.2823	08	5.000	0.2726
04	10.000	0.2529	05	20.000	0.2755	06	50.000	0.2443	07	100.000	0.2543
09	200.000	0.2496									

Dichlorodifluoromethane (CFC 12) Average RF RSD = 7.3 Average RF = 3.285

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.855	02	1.000	3.634	03	2.000	3.136	08	5.000	3.384
04	10.000	3.453	05	20.000	3.314	06	50.000	3.135	07	100.000	3.372

Dichlorofluoromethane (CFC 21) Average RF RSD = 4.9 Average RF = 5.597

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	5.926	02	1.000	5.337	03	2.000	5.792	08	5.000	5.854
04	10.000	5.723	05	20.000	5.613	06	50.000	5.216	07	100.000	5.318

Dichloromethane Average RF RSD = 7.1 Average RF = 2.391

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.487	02	1.000	2.528	03	2.000	2.559	08	5.000	2.474
04	10.000	2.426	05	20.000	2.420	06	50.000	2.228	07	100.000	2.383
09	200.000	2.017									

Epichlorohydrin Average RF RSD = 8.4 Average RF = 0.02161

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	5.000	0.02034	03	10.000	0.01826	08	25.000	0.02209	04	50.000	0.02033
05	100.000	0.02349	06	250.000	0.02317	07	500.000	0.02237	09	1000.000	0.02287

Initial Calibration - Detailed Report

Calibration ID:	RC1400082	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte — **Curve Fit** — **Weighting**

Ethyl Acetate — Average RF — RSD = 17.6 — Average RF = 1.314

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.8742	03	4.000	1.168	08	10.000	1.295	04	20.000	1.366
05	40.000	1.530	06	100.000	1.499	07	200.000	1.465			

Ethylbenzene — Average RF — RSD = 5.2 — Average RF = 0.7128

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7551	02	1.000	0.7054	03	2.000	0.7070	08	5.000	0.7392
04	10.000	0.7230	05	20.000	0.6967	06	50.000	0.6935	07	100.000	0.7574
09	200.000	0.6381									

Isopropyl Acetate — Average RF — RSD = 6.7 — Average RF = 0.5289

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.4955	08	5.000	0.4927	04	10.000	0.5144	05	20.000	0.5686
06	50.000	0.5167	07	100.000	0.5295	09	200.000	0.5847			

Methyl tert-Butyl Ether — Average RF — RSD = 7.0 — Average RF = 6.095

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	6.317	02	1.000	5.539	03	2.000	6.302	08	5.000	6.188
04	10.000	6.364	05	20.000	6.808	06	50.000	5.855	07	100.000	6.021
09	200.000	5.457									

Naphthalene — Average RF — RSD = 9.0 — Average RF = 1.034

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.231	02	1.000	1.040	03	2.000	1.000	08	5.000	0.9932
04	10.000	0.9364	05	20.000	1.103	06	50.000	0.9859	07	100.000	0.9860

Styrene — Average RF — RSD = 3.5 — Average RF = 1.468

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.545	02	1.000	1.407	03	2.000	1.471	08	5.000	1.506
04	10.000	1.495	05	20.000	1.480	06	50.000	1.389	07	100.000	1.453

Tetrachloroethene (PCE) — Average RF — RSD = 6.8 — Average RF = 0.4860

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4982	02	1.000	0.5186	03	2.000	0.5318	08	5.000	0.4999
04	10.000	0.5011	05	20.000	0.4665	06	50.000	0.4405	07	100.000	0.4835
09	200.000	0.4343									

Tetrahydrofuran (THF) — Average RF — RSD = 6.9 — Average RF = 0.4549

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.5011	08	5.000	0.4371	04	10.000	0.4138	05	20.000	0.4392
06	50.000	0.4399	07	100.000	0.4901	09	200.000	0.4632			

Toluene — Average RF — RSD = 5.6 — Average RF = 1.819

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.763	02	1.000	1.893	03	2.000	1.917	08	5.000	1.905
04	10.000	1.867	05	20.000	1.851	06	50.000	1.716	07	100.000	1.637

Toluene-d8 — Average RF — RSD = 2.2 — Average RF = 1.155

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	30.000	1.167	08	30.000	1.144	06	30.000	1.196	01	30.000	1.153
03	30.000	1.170	09	30.000	1.118	05	30.000	1.159	07	30.000	1.172
04	30.000	1.119									

Initial Calibration - Detailed Report

Calibration ID:	RC1400082	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte **Curve Fit** **Weighting**

Trichloroethene (TCE) Average RF RSD = 5.8 Average RF = 0.5162

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5182	02	1.000	0.5664	03	2.000	0.5245	08	5.000	0.5438
04	10.000	0.5078	05	20.000	0.5151	06	50.000	0.4822	07	100.000	0.5229
09	200.000	0.4652									

Trichlorofluoromethane (CFC 11) Average RF RSD = 4.2 Average RF = 5.465

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	5.303	02	1.000	5.598	03	2.000	5.714	08	5.000	5.730
04	10.000	5.616	05	20.000	5.340	06	50.000	5.123	07	100.000	5.293

Vinyl Chloride Average RF RSD = 5.4 Average RF = 3.145

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.985	02	1.000	3.258	03	2.000	3.198	08	5.000	3.138
04	10.000	3.449	05	20.000	3.021	06	50.000	2.927	07	100.000	3.184

cis-1,2-Dichloroethene Average RF RSD = 5.3 Average RF = 2.936

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	3.059	02	1.000	2.834	03	2.000	3.099	08	5.000	3.021
04	10.000	3.057	05	20.000	2.881	06	50.000	2.808	07	100.000	3.027
09	200.000	2.637									

cis-1,3-Dichloropropene Average RF RSD = 5.9 Average RF = 0.6734

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7322	02	1.000	0.6404	03	2.000	0.6784	08	5.000	0.6991
04	10.000	0.6753	05	20.000	0.6927	06	50.000	0.6791	07	100.000	0.6734
09	200.000	0.5897									

m,p-Xylenes Average RF RSD = 4.9 Average RF = 0.8922

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.9328	02	2.000	0.9243	03	4.000	0.9210	08	10.000	0.9307
04	20.000	0.9019	05	40.000	0.8577	06	100.000	0.8186	07	200.000	0.8510

n-Butyl Acetate Average RF RSD = 5.2 Average RF = 0.4532

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.4421	02	2.000	0.4325	03	4.000	0.4543	08	10.000	0.4294
04	20.000	0.4537	05	40.000	0.5043	06	100.000	0.4615	07	200.000	0.4481

n-Heptane Average RF RSD = 9.5 Average RF = 0.4244

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3629	02	1.000	0.4862	03	2.000	0.4273	08	5.000	0.4459
04	10.000	0.3827	05	20.000	0.4362	06	50.000	0.3865	07	100.000	0.4626
09	200.000	0.4295									

o-Xylene Average RF RSD = 6.1 Average RF = 0.8627

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8580	02	1.000	0.9166	03	2.000	0.9063	08	5.000	0.9059
04	10.000	0.8708	05	20.000	0.8713	06	50.000	0.8036	07	100.000	0.8769
09	200.000	0.7550									

trans-1,2-Dichloroethene Average RF RSD = 5.3 Average RF = 2.774

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.673	02	1.000	2.765	03	2.000	2.952	08	5.000	2.884
04	10.000	2.842	05	20.000	2.870	06	50.000	2.632	07	100.000	2.852
09	200.000	2.491									

Initial Calibration - Detailed Report

Calibration ID:	RC1400082	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte	**Curve Fit**	**Weighting**		
trans-1,3-Dichloropropene	Average RF		RSD = 5.8	Average RF = 0.5861

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5681	02	1.000	0.5465	03	2.000	0.5845	08	5.000	0.6209
04	10.000	0.6290	05	20.000	0.5979	06	50.000	0.5988	07	100.000	0.6033
09	200.000	0.5257									

Initial Calibration - Detailed Report

Calibration ID:	RC1400082	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte

1,1,1-Trichloroethane (TCA)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	2.3	02	1.000	1.01	1.4	03	2.000	2.10	4.8
08	5.000	4.96	-0.8	04	10.000	10.30	3.0	05	20.000	19.46	-2.7
06	50.000	48.24	-3.5	07	100.000	102.27	2.3	09	200.000	186.58	-6.7

1,1,2,2-Tetrachloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.60	19.4	02	1.000	1.02	2.0	03	2.000	2.01	0.7
08	5.000	5.01	0.2	04	10.000	9.94	-0.6	05	20.000	19.52	-2.4
06	50.000	46.03	-7.9	07	100.000	95.23	-4.8	09	200.000	186.62	-6.7

1,1,2-Trichloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-9.1	02	1.000	1.03	3.5	03	2.000	2.24	12.1
08	5.000	5.16	3.2	04	10.000	9.98	-0.2	05	20.000	20.74	3.7
06	50.000	49.70	-0.6	07	100.000	96.80	-3.2	09	200.000	181.23	-9.4

1,1,2-Trichlorotrifluoroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	5.5	02	1.000	0.96	-4.0	03	2.000	2.13	6.7
08	5.000	5.12	2.4	04	10.000	10.35	3.5	05	20.000	20.01	0.0
06	50.000	46.86	-6.3	07	100.000	105.31	5.3	09	200.000	173.53	-13.2

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

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	7.3	02	1.000	0.95	-4.5	03	2.000	2.25	12.6
08	5.000	5.14	2.8	04	10.000	10.72	7.2	05	20.000	20.37	1.9
06	50.000	45.84	-8.3	07	100.000	97.55	-2.5	09	200.000	167.12	-16.4

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

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	2.4	02	1.000	0.92	-7.8	03	2.000	2.16	8.0
08	5.000	4.99	-0.2	04	10.000	10.20	2.0	05	20.000	19.85	-0.8
06	50.000	47.81	-4.4	07	100.000	100.75	0.7				

1,2-Dibromoethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.59	19.0	02	1.000	0.99	-1.5	03	2.000	1.78	-11.1
08	5.000	5.04	0.9	04	10.000	9.97	-0.3	05	20.000	20.64	3.2
06	50.000	46.95	-6.1	07	100.000	99.82	-0.2	09	200.000	192.10	-3.9

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

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.57	13.7	02	1.000	0.99	-0.9	03	2.000	2.14	6.8
08	5.000	5.14	2.9	04	10.000	9.42	-5.8	05	20.000	20.02	0.1
06	50.000	47.31	-5.4	07	100.000	101.38	1.4	09	200.000	174.65	-12.7

Initial Calibration - Detailed Report

Calibration ID:	RC1400082	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte

1,2-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.56	13.0	02	1.000	1.08	8.3	03	2.000	2.00	-0.1
08	5.000	5.05	0.9	04	10.000	9.76	-2.4	05	20.000	19.22	-3.9
06	50.000	45.30	-9.4	07	100.000	93.62	-6.4				

1,2-Dichloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.4	02	1.000	0.96	-4.4	03	2.000	2.07	3.7
08	5.000	5.41	8.3	04	10.000	10.45	4.5	05	20.000	20.21	1.1
06	50.000	48.61	-2.8	07	100.000	99.14	-0.9	09	200.000	185.83	-7.1

1,2-Dichloroethane-d4

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
08	30.000	30.06	0.2	03	30.000	30.18	0.6	07	30.000	28.39	-5.4
06	30.000	33.22	10.7	05	30.000	29.37	-2.1	09	30.000	29.95	-0.2
02	30.000	28.30	-5.7	04	30.000	30.66	2.2	01	30.000	29.87	-0.4

1,2-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.6	02	1.000	0.92	-8.4	03	2.000	2.02	1.1
08	5.000	5.23	4.5	04	10.000	10.13	1.3	05	20.000	20.55	2.8
06	50.000	47.75	-4.5	07	100.000	108.14	8.1	09	200.000	191.36	-4.3

1,3-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.5	02	1.000	1.06	6.1	03	2.000	2.04	2.1
08	5.000	5.16	3.3	04	10.000	10.27	2.7	05	20.000	19.24	-3.8
06	50.000	45.59	-8.8	07	100.000	94.93	-5.1				

1,4-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.56	12.1	02	1.000	1.09	9.0	03	2.000	1.96	-2.1
08	5.000	5.12	2.4	04	10.000	9.94	-0.6	05	20.000	19.39	-3.1
06	50.000	44.75	-10.5	07	100.000	92.72	-7.3				

1-Bromo-2-chloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.9	02	1.000	1.02	1.7	03	2.000	2.15	7.4
08	5.000	5.52	10.4	04	10.000	9.59	-4.1	05	20.000	20.50	2.5
06	50.000	48.40	-3.2	07	100.000	93.83	-6.2	09	200.000	175.29	-12.4

1-Chloro-4-(trifluoromethyl)benzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.5	02	1.000	1.01	1.3	03	2.000	2.06	2.8
08	5.000	5.07	1.4	04	10.000	10.36	3.6	05	20.000	20.67	3.3
06	50.000	46.11	-7.8	07	100.000	101.20	1.2	09	200.000	181.39	-9.3

Initial Calibration - Detailed Report

Calibration ID:	RC1400082	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte

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

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	9.3	02	1.000	1.03	3.0	03	2.000	2.05	2.3
08	5.000	4.98	-0.5	04	10.000	10.20	2.0	05	20.000	20.75	3.8
06	50.000	47.00	-6.0	07	100.000	99.93	-0.1	09	200.000	172.42	-13.8

2-Butanone (MEK)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
08	5.000	3.94	-21.3	04	10.000	8.72	-12.8	05	20.000	21.16	5.8
06	50.000	54.99	10.0	07	100.000	112.32	12.3	09	200.000	211.98	6.0

2-Chloroethyl Vinyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	1.07	7.5	03	2.000	1.93	-3.4	08	5.000	4.99	-0.2
04	10.000	9.51	-4.9	05	20.000	21.73	8.7	06	50.000	49.89	-0.2
07	100.000	99.34	-0.7	09	200.000	186.29	-6.9				

2-Hexanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
08	5.000	4.46	-10.8	04	10.000	8.76	-12.4	05	20.000	21.16	5.8
06	50.000	55.67	11.3	07	100.000	102.94	2.9	09	200.000	206.12	3.1

2-Methyl-1,3-dioxolane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	5.000	4.10	-17.9	03	10.000	7.96	-20.4	08	25.000	23.64	-5.5
04	50.000	46.14	-7.7	05	100.000	111.37	11.4	06	250.000	284.59	13.8
07	500.000	539.69	7.9	09	1000.000	1,183.50	18.4				

2-Methyl-1-propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
08	100.000	109.87	9.9	04	200.000	180.06	-10.0	05	400.000	394.58	-1.4
06	1000.000	978.66	-2.1	07	2000.000	2,065.78	3.3	09	4000.000	4,011.88	0.3

2-Methyl-2-propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	10.000	10.85	8.5	02	20.000	17.41	-13.0	03	40.000	42.72	6.8
08	100.000	93.67	-6.3	04	200.000	188.40	-5.8	05	400.000	461.68	15.4
06	1000.000	1,014.94	1.5	07	2000.000	1,979.23	-1.0	09	4000.000	3,756.47	-6.1

2-Propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	20.000	18.27	-8.6	03	40.000	40.67	1.7	08	100.000	90.25	-9.8
04	200.000	191.49	-4.3	05	400.000	463.84	16.0	06	1000.000	1,042.81	4.3
07	2000.000	1,959.97	-2.0	09	4000.000	4,109.44	2.7				

Initial Calibration - Detailed Report

Calibration ID:	RC1400082	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte

4-Bromofluorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	30.000	30.34	1.1	03	30.000	29.65	-1.2	02	30.000	30.34	1.1
06	30.000	29.47	-1.8	09	30.000	31.94	6.5	05	30.000	28.22	-5.9
08	30.000	29.91	-0.3	07	30.000	29.46	-1.8	04	30.000	30.68	2.3

4-Methyl-2-pentanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
08	5.000	5.02	0.4	04	10.000	9.12	-8.8	05	20.000	21.30	6.5
06	50.000	52.95	5.9	07	100.000	99.09	-0.9	09	200.000	193.74	-3.1

Acetone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
08	5.000	5.16	3.2	04	10.000	10.23	2.3	05	20.000	22.24	11.2
06	50.000	48.39	-3.2	07	100.000	95.25	-4.8	09	200.000	182.51	-8.7

Acetonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	5.000	6.35	27.0	03	10.000	8.51	-14.9	08	25.000	25.12	0.5
04	50.000	46.55	-6.9	05	100.000	107.73	7.7	06	250.000	234.74	-6.1
07	500.000	482.18	-3.6	09	1000.000	962.11	-3.8				

Acrolein

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	5.000	4.92	-1.6	03	10.000	9.63	-3.7	08	25.000	26.38	5.5
04	50.000	49.03	-1.9	05	100.000	106.62	6.6	06	250.000	241.19	-3.5
07	500.000	509.30	1.9	09	1000.000	967.37	-3.3				

Acrylonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	2.500	2.99	19.5	02	5.000	4.07	-18.6	03	10.000	10.44	4.4
08	25.000	23.33	-6.7	04	50.000	51.47	2.9	05	100.000	110.70	10.7
06	250.000	237.22	-5.1	07	500.000	515.10	3.0	09	1000.000	898.58	-10.1

Amyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	1.85	-7.5	08	5.000	5.00	0.0	04	10.000	9.94	-0.6
05	20.000	20.99	4.9	06	50.000	49.73	-0.5	07	100.000	101.84	1.8
09	200.000	203.66	1.8								

Benzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	5.5	02	1.000	1.02	2.5	03	2.000	2.07	3.6
08	5.000	5.35	6.9	04	10.000	10.25	2.5	05	20.000	20.31	1.5
06	50.000	46.68	-6.6	07	100.000	97.04	-3.0	09	200.000	173.98	-13.0

Initial Calibration - Detailed Report

Calibration ID:	RC1400082	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte

Bromodichloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.1	02	1.000	0.98	-1.6	03	2.000	2.03	1.6
08	5.000	4.98	-0.5	04	10.000	10.10	1.0	05	20.000	20.63	3.1
06	50.000	47.58	-4.8	07	100.000	102.55	2.5	09	200.000	185.05	-7.5

Bromoform

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-5.5	02	1.000	1.12	12.3	03	2.000	1.72	-14.1
08	5.000	4.74	-5.1	04	10.000	9.94	-0.6	05	20.000	20.15	0.7
06	50.000	49.97	-0.1	07	100.000	104.79	4.8	09	200.000	215.00	7.5

Bromomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.70	**39.5**	02	1.000	0.96	-3.9	03	2.000	2.31	15.5
08	5.000	4.93	-1.4	04	10.000	8.76	-12.4	05	20.000	17.09	-14.5
06	50.000	42.22	-15.6	07	100.000	92.85	-7.2				

Carbon Disulfide

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	7.5	02	1.000	0.93	-7.2	03	2.000	2.20	10.2
08	5.000	4.88	-2.4	04	10.000	10.09	0.9	05	20.000	21.32	6.6
06	50.000	44.41	-11.2	07	100.000	95.60	-4.4				

Carbon Tetrachloride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.3	02	1.000	1.00	-0.2	03	2.000	2.05	2.6
08	5.000	5.16	3.2	04	10.000	10.14	1.4	05	20.000	20.01	0.0
06	50.000	47.62	-4.8	07	100.000	102.88	2.9	09	200.000	190.12	-4.9

Chlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.6	02	1.000	1.06	6.4	03	2.000	2.01	0.5
08	5.000	5.29	5.7	04	10.000	10.12	1.2	05	20.000	19.81	-1.0
06	50.000	46.81	-6.4	07	100.000	94.14	-5.9				

Chloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	1.8	02	1.000	1.18	18.1	03	2.000	2.00	0.1
08	5.000	4.88	-2.4	04	10.000	9.87	-1.3	05	20.000	18.89	-5.5
06	50.000	46.63	-6.7	07	100.000	95.94	-4.1				

Chloroform

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.4	02	1.000	0.97	-2.7	03	2.000	2.00	-0.1
08	5.000	5.04	0.8	04	10.000	10.76	7.6	05	20.000	19.64	-1.8
06	50.000	48.98	-2.0	07	100.000	101.10	1.1	09	200.000	181.54	-9.2

Initial Calibration - Detailed Report

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		Signal ID:	1

Analyte

Chloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	7.4	02	1.000	0.94	-6.4	03	2.000	1.96	-2.2
08	5.000	5.06	1.1	04	10.000	11.06	10.6	05	20.000	19.41	-2.9
06	50.000	45.22	-9.6	07	100.000	102.08	2.1				

Cyclohexane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-9.3	02	1.000	0.95	-4.7	03	2.000	2.04	2.2
08	5.000	5.58	11.6	04	10.000	9.84	-1.6	05	20.000	20.60	3.0
06	50.000	46.40	-7.2	07	100.000	102.08	2.1	09	200.000	208.04	4.0

Dibromochloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	0.7	02	1.000	0.96	-4.5	03	2.000	2.00	0.2
08	5.000	5.08	1.5	04	10.000	10.23	2.3	05	20.000	20.09	0.4
06	50.000	49.35	-1.3	07	100.000	103.80	3.8	09	200.000	193.40	-3.3

Dibromomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	7.6	02	1.000	1.06	5.7	03	2.000	2.12	5.9
08	5.000	5.11	2.2	04	10.000	9.48	-5.2	05	20.000	20.66	3.3
06	50.000	45.80	-8.4	07	100.000	95.36	-4.6	09	200.000	187.16	-6.4

Dichlorodifluoromethane (CFC 12)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.43	-13.1	02	1.000	1.11	10.6	03	2.000	1.91	-4.6
08	5.000	5.15	3.0	04	10.000	10.51	5.1	05	20.000	20.18	0.9
06	50.000	47.71	-4.6	07	100.000	102.65	2.6				

Dichlorofluoromethane (CFC 21)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	5.9	02	1.000	0.95	-4.6	03	2.000	2.07	3.5
08	5.000	5.23	4.6	04	10.000	10.22	2.2	05	20.000	20.05	0.3
06	50.000	46.60	-6.8	07	100.000	95.02	-5.0				

Dichloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.0	02	1.000	1.06	5.7	03	2.000	2.14	7.0
08	5.000	5.17	3.5	04	10.000	10.15	1.5	05	20.000	20.24	1.2
06	50.000	46.58	-6.8	07	100.000	99.63	-0.4	09	200.000	168.73	-15.6

Epichlorohydrin

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	5.000	4.70	-5.9	03	10.000	8.45	-15.5	08	25.000	25.56	2.2
04	50.000	47.02	-6.0	05	100.000	108.66	8.7	06	250.000	267.99	7.2
07	500.000	517.48	3.5	09	1000.000	1,058.07	5.8				

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Initial Calibration - Detailed Report

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		Signal ID:	1

Analyte

Ethyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	2.000	1.33	-33.5	03	4.000	3.56	-11.1	08	10.000	9.86	-1.4
04	20.000	20.79	3.9	05	40.000	46.59	16.5	06	100.000	114.10	14.1
07	200.000	222.99	11.5								

Ethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	5.9	02	1.000	0.99	-1.0	03	2.000	1.98	-0.8
08	5.000	5.18	3.7	04	10.000	10.14	1.4	05	20.000	19.55	-2.3
06	50.000	48.65	-2.7	07	100.000	106.25	6.3	09	200.000	179.04	-10.5

Isopropyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	1.87	-6.3	08	5.000	4.66	-6.8	04	10.000	9.73	-2.7
05	20.000	21.50	7.5	06	50.000	48.85	-2.3	07	100.000	100.11	0.1
09	200.000	221.12	10.6								

Methyl tert-Butyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.7	02	1.000	0.91	-9.1	03	2.000	2.07	3.4
08	5.000	5.08	1.5	04	10.000	10.44	4.4	05	20.000	22.34	11.7
06	50.000	48.03	-3.9	07	100.000	98.80	-1.2	09	200.000	179.08	-10.5

Naphthalene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.60	19.0	02	1.000	1.01	0.6	03	2.000	1.93	-3.3
08	5.000	4.80	-4.0	04	10.000	9.05	-9.5	05	20.000	21.32	6.6
06	50.000	47.65	-4.7	07	100.000	95.32	-4.7				

Styrene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	5.2	02	1.000	0.96	-4.2	03	2.000	2.00	0.2
08	5.000	5.13	2.6	04	10.000	10.18	1.8	05	20.000	20.16	0.8
06	50.000	47.29	-5.4	07	100.000	98.94	-1.1				

Tetrachloroethene (PCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	2.5	02	1.000	1.07	6.7	03	2.000	2.19	9.4
08	5.000	5.14	2.9	04	10.000	10.31	3.1	05	20.000	19.20	-4.0
06	50.000	45.31	-9.4	07	100.000	99.47	-0.5	09	200.000	178.71	-10.6

Tetrahydrofuran (THF)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	2.20	10.1	08	5.000	4.80	-3.9	04	10.000	9.10	-9.0
05	20.000	19.31	-3.5	06	50.000	48.35	-3.3	07	100.000	107.73	7.7
09	200.000	203.65	1.8								

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Initial Calibration - Detailed Report

Calibration ID:	RC1400082	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte

Toluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.0	02	1.000	1.04	4.1	03	2.000	2.11	5.4
08	5.000	5.24	4.7	04	10.000	10.26	2.6	05	20.000	20.36	1.8
06	50.000	47.17	-5.7	07	100.000	90.00	-10.0				

Toluene-d8

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	30.000	30.30	1.0	08	30.000	29.71	-1.0	06	30.000	31.06	3.5
01	30.000	29.94	-0.2	03	30.000	30.38	1.3	09	30.000	29.03	-3.2
05	30.000	30.10	0.3	07	30.000	30.43	1.4	04	30.000	29.05	-3.2

Trichloroethene (TCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	0.4	02	1.000	1.10	9.7	03	2.000	2.03	1.6
08	5.000	5.27	5.3	04	10.000	9.84	-1.6	05	20.000	19.96	-0.2
06	50.000	46.70	-6.6	07	100.000	101.30	1.3	09	200.000	180.24	-9.9

Trichlorofluoromethane (CFC 11)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-3.0	02	1.000	1.02	2.4	03	2.000	2.09	4.6
08	5.000	5.24	4.9	04	10.000	10.28	2.8	05	20.000	19.54	-2.3
06	50.000	46.87	-6.3	07	100.000	96.86	-3.1				

Vinyl Chloride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-5.1	02	1.000	1.04	3.6	03	2.000	2.03	1.7
08	5.000	4.99	-0.2	04	10.000	10.97	9.7	05	20.000	19.21	-3.9
06	50.000	46.53	-6.9	07	100.000	101.25	1.3				

cis-1,2-Dichloroethene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.2	02	1.000	0.97	-3.5	03	2.000	2.11	5.6
08	5.000	5.15	2.9	04	10.000	10.41	4.1	05	20.000	19.63	-1.9
06	50.000	47.81	-4.4	07	100.000	103.10	3.1	09	200.000	179.63	-10.2

cis-1,3-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	8.7	02	1.000	0.95	-4.9	03	2.000	2.01	0.7
08	5.000	5.19	3.8	04	10.000	10.03	0.3	05	20.000	20.57	2.9
06	50.000	50.43	0.9	07	100.000	100.00	0.0	09	200.000	175.15	-12.4

m,p-Xylenes

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.000	1.05	4.5	02	2.000	2.07	3.6	03	4.000	4.13	3.2
08	10.000	10.43	4.3	04	20.000	20.22	1.1	05	40.000	38.45	-3.9
06	100.000	91.74	-8.3	07	200.000	190.75	-4.6				

00060

Initial Calibration - Detailed Report

Calibration ID:	RC1400082	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte

n-Butyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.000	0.98	-2.5	02	2.000	1.91	-4.6	03	4.000	4.01	0.2
08	10.000	9.47	-5.3	04	20.000	20.02	0.1	05	40.000	44.51	11.3
06	100.000	101.83	1.8	07	200.000	197.73	-1.1				

n-Heptane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.43	-14.5	02	1.000	1.15	14.6	03	2.000	2.01	0.7
08	5.000	5.25	5.1	04	10.000	9.02	-9.8	05	20.000	20.55	2.8
06	50.000	45.53	-8.9	07	100.000	109.00	9.0	09	200.000	202.41	1.2

o-Xylene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.5	02	1.000	1.06	6.2	03	2.000	2.10	5.1
08	5.000	5.25	5.0	04	10.000	10.09	0.9	05	20.000	20.20	1.0
06	50.000	46.57	-6.9	07	100.000	101.65	1.6	09	200.000	175.04	-12.5

trans-1,2-Dichloroethene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.6	02	1.000	1.00	-0.3	03	2.000	2.13	6.4
08	5.000	5.20	4.0	04	10.000	10.25	2.5	05	20.000	20.70	3.5
06	50.000	47.45	-5.1	07	100.000	102.84	2.8	09	200.000	179.64	-10.2

trans-1,3-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.1	02	1.000	0.93	-6.8	03	2.000	1.99	-0.3
08	5.000	5.30	5.9	04	10.000	10.73	7.3	05	20.000	20.40	2.0
06	50.000	51.08	2.2	07	100.000	102.94	2.9	09	200.000	179.39	-10.3

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7304.D Vial: 7
Acq On : 11 Sep 2014 11:31 am Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:19 2014 Quant Results File: 6240911.RES

Quant Method : I:\ACQUDATA\M...\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:09:26 2014
Response via : Initial Calibration
DataAcq Meth : 6240911

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	3.44	128	104627	30.00	ug/L		0.00
35) 1,4-Difluorobenzene	5.69	114	609373	30.00	ug/L		0.00
53) d5-Chlorobenzene	9.08	117	555106	30.00	ug/L		0.00
System Monitoring Compounds							
30) SURR1,1,2-Diclethane-d4	4.25	65	218946	30.32	ug/L		0.00
Spiked Amount 30.000	Range 81 - 127		Recovery = 101.07%				
51) SURR3,Toluene-d8	7.76	98	702582	29.86	ug/L		0.00
Spiked Amount 30.000	Range 83 - 120		Recovery = 99.53%				
68) SURR2,BFB	10.13	95	280326	30.31	ug/L		0.00
Spiked Amount 30.000	Range 79 - 123		Recovery = 101.03%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.01	85	4978	0.43	ug/L		66
3) Chloromethane	1.08	50	5897	0.53	ug/L		97
4) Vinyl Chloride	1.16	62	5206	0.47	ug/L		92
5) Bromomethane	1.32	94	5390	0.71	ug/L		98
6) Chloroethane	1.39	64	3451	0.51	ug/L		89
7) Freon-21	1.41	67	10334	0.53	ug/L		91
8) Freon-123	1.58	83	8146	0.55	ug/L	#	95
9) Freon-123A	1.61	67	7382m	0.58	ug/L		
10) Acrolein	1.67	56	3570	3.32	ug/L		64
11) Trichlorofluoromethane	1.66	101	9247	0.49	ug/L		97
12) Acetonitrile	1.68	41	2562	2.91	ug/L		74
13) 2-Propanol	1.70	45	3968	14.40	ug/L		78
14) Acetone	1.74	43	5122	2.23	ug/L		72
15) 1,1-Diclethene	1.95	96	4651	0.51	ug/L		92
16) tert Butyl Alcohol	2.00	59	4729m	11.00	ug/L		
17) Acrylonitrile	2.02	53	5695	2.97	ug/L		68
18) Methylene Chloride	2.05	84	4337	0.52	ug/L		85
19) Freon 113	2.09	101	5299	0.53	ug/L		90
20) Carbon Disulfide	2.16	76	16375	0.54	ug/L	#	98
21) trans-1,2-Dichloroethene	2.52	96	4661	0.48	ug/L	#	83
22) Methyl-t-Butyl Ether	2.64	73	11016	0.52	ug/L	#	93
23) 1,1-Diclethane	2.73	63	9473	0.54	ug/L	#	88
25) cis-1,2-Dichloroethene	3.27	96	5335	0.52	ug/L	#	42
26) Chloroform	3.52	83	9596	0.53	ug/L		91
31) 1,2-Dichloroethane	4.38	62	5677	0.49	ug/L	#	62
32) 1,1,1-Trichloroethane	4.47	97	8478	0.51	ug/L	#	84
34) Cyclohexane	4.89	56	6574m	0.46	ug/L		
36) Carbontetrachloride	5.07	117	6570	0.49	ug/L		92
38) Benzene	5.18	78	17919	0.53	ug/L	#	92
39) Dibromomethane	6.00	93	2915	0.54	ug/L	#	21
40) 1,2-Diclpropane	6.08	63	4613m	0.50	ug/L		
41) Trichloroethene	6.14	130	5263m	0.50	ug/L		
42) Heptane	6.16	43	3686m	0.43	ug/L		
43) Bromodichloromethane	6.20	83	6978	0.53	ug/L	#	79
45) Ethane, 1-Bromo-2-Chloro-	6.72	63	5521	0.52	ug/L	#	91
47) cis-1,3-Dichloropropene	7.04	75	7436	0.54	ug/L	#	84
49) trans-1,3-Dichloropropene	7.55	75	5770	0.48	ug/L		98
50) 1,1,2-Trichloroethane	7.66	97	2911m	0.45	ug/L		

DL 9/15/14

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

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7304.D Vial: 7
Acq On : 11 Sep 2014 11:31 am Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:19 2014 Quant Results File: 6240911.RES

Quant Method : I:\ACQUDATA\M...\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:09:26 2014
Response via : Initial Calibration
DataAcq Meth : 6240911

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
52)	Toluene	7.83	91	17910	0.48	ug/L		93
54)	Dibromochloromethane	8.08	129	4597	0.50	ug/L		92
56)	1,2-Dibromoethane	8.31	107	4169	0.59	ug/L	#	80
57)	Tetrachloroethene	8.50	164	4609	0.51	ug/L		96
58)	N-Butyl Acetate	8.53	43	8180m	1.00	ug/L		
59)	Chlorobenzene	9.10	112	12619m	0.50	ug/L		
60)	4-Chlorobenzotrifluoride	9.21	180	7525	0.52	ug/L		93
61)	Ethylbenzene	9.32	106	6986	0.53	ug/L	#	91
62)	(m+p)Xylene	9.50	106	17260	1.05	ug/L		97
63)	Bromoform	9.50	173	2802	0.47	ug/L		92
64)	Styrene	9.76	104	14294	0.53	ug/L		90
65)	1,1,2,2-Tetrachloroethane	9.81	83	4643	0.60	ug/L		95
66)	o-Xylene	9.82	106	7938	0.50	ug/L	#	79
67)	Amyl Acetate	9.88	43	5127	0.47	ug/L	#	92
69)	1,3-Dclbenz	11.14	146	12009m	0.52	ug/L		
70)	1,4-Dclbenz	11.20	146	12958m	0.57	ug/L		
71)	1,2-Dclbenz	11.47	146	11923	0.56	ug/L		97
72)	Naphthalen	13.08	128	11392m	0.60	ug/L		

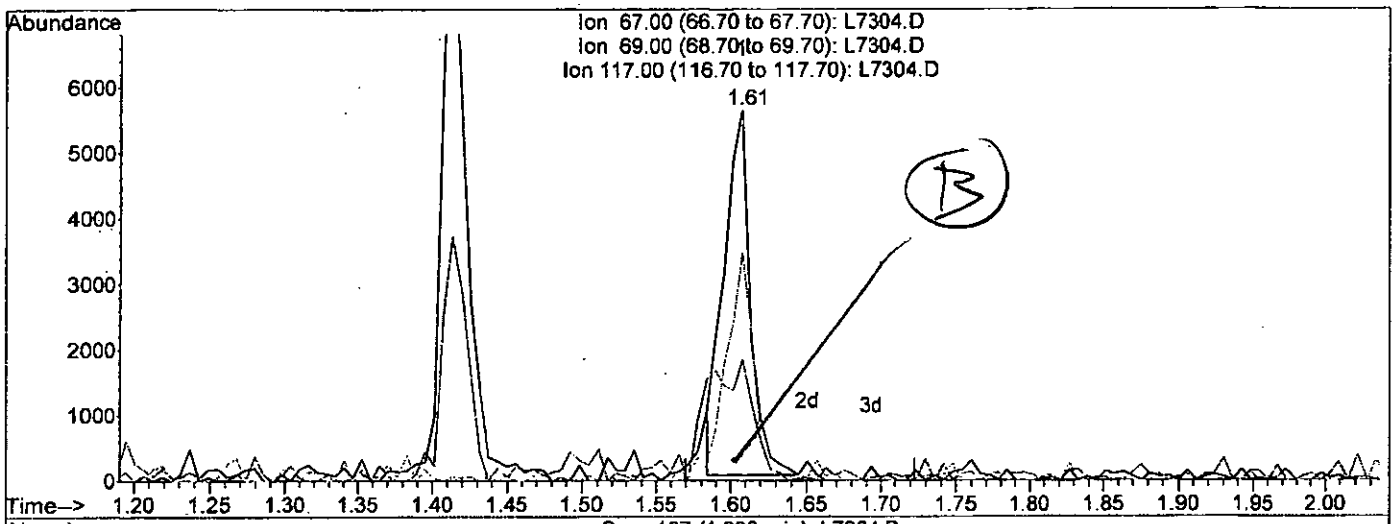
DL 9/15/14

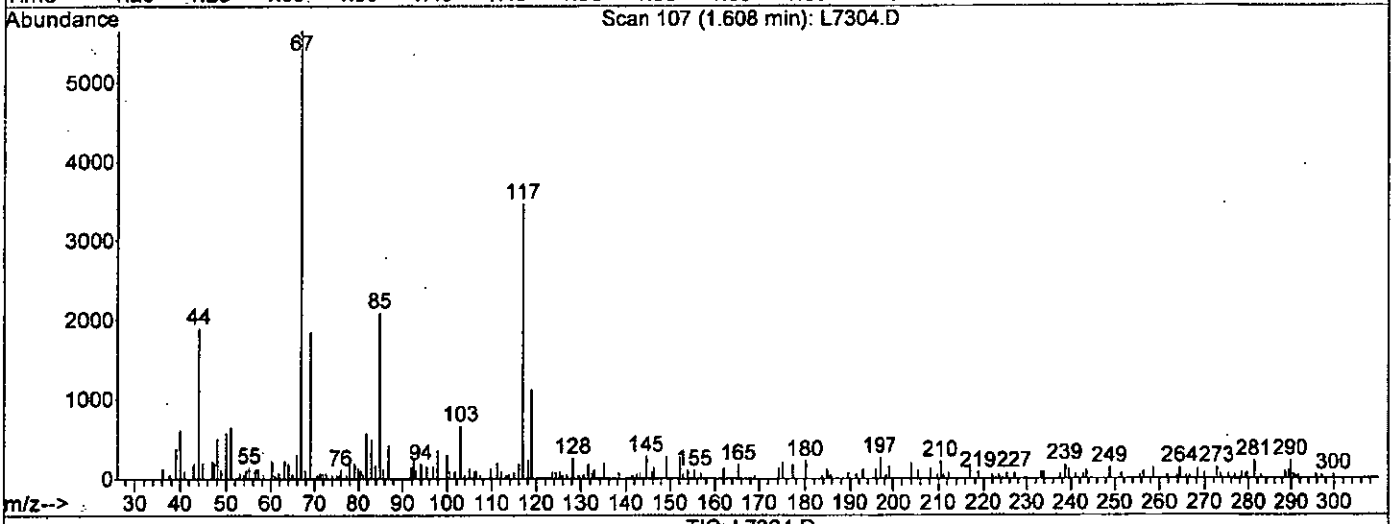
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7304.D Vial: 7
Acq On : 11 Sep 2014 11:31 am Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:10 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:09:26 2014
Response via : Multiple Level Calibration





TIC: L7304.D

(9) Freon-123A

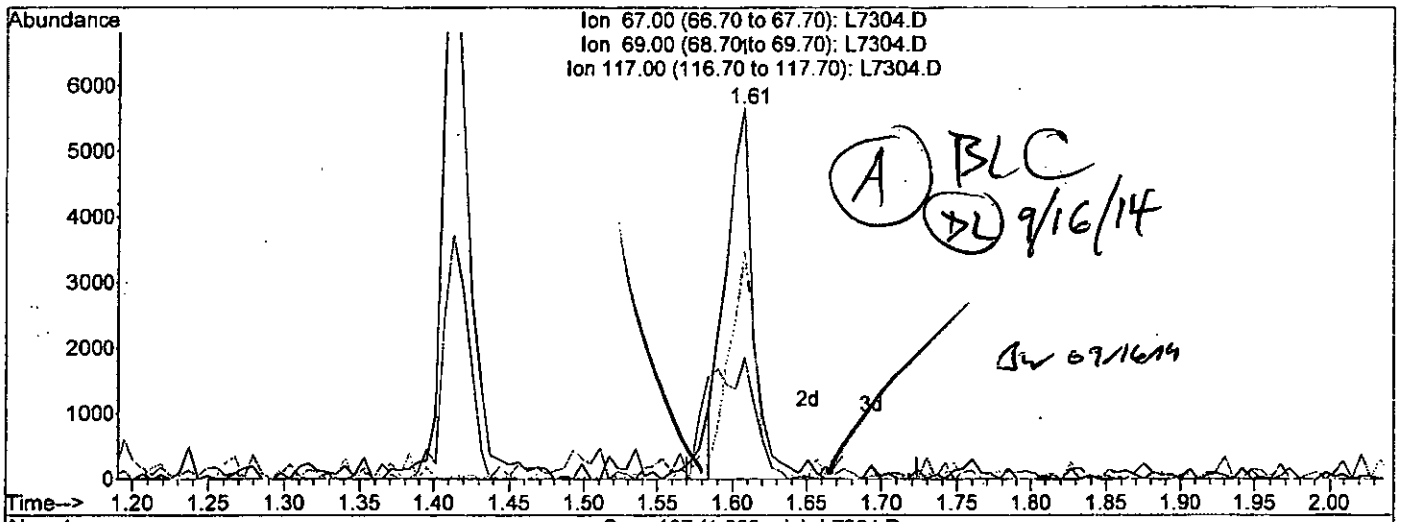
1.61min 0.55ug/L

response 6937

Ion	Exp%	Act%
67.00	100	100
69.00	34.40	32.66
117.00	70.60	61.22
0.00	0.00	0.00

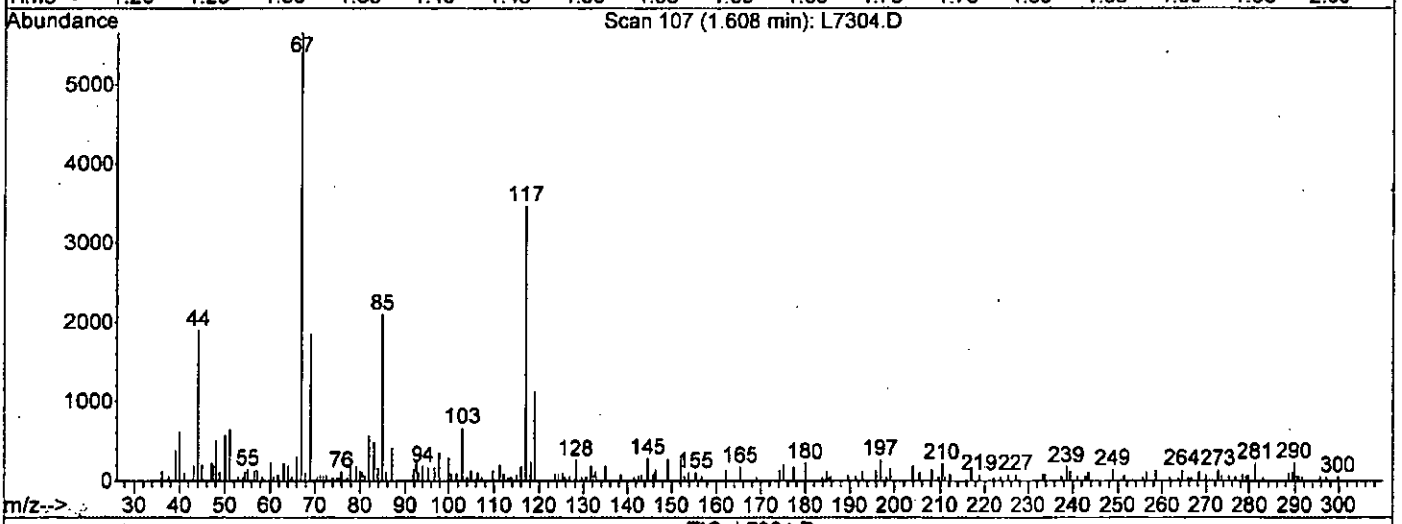
Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7304.D Vial: 7
Acq On : 11 Sep 2014 11:31 am Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:10 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:09:26 2014
Response via : Multiple Level Calibration



A BLC 9/16/14

DL 9/16/14



TIC: L7304.D

(9) Freon-123A

1.61min 0.58ug/L m

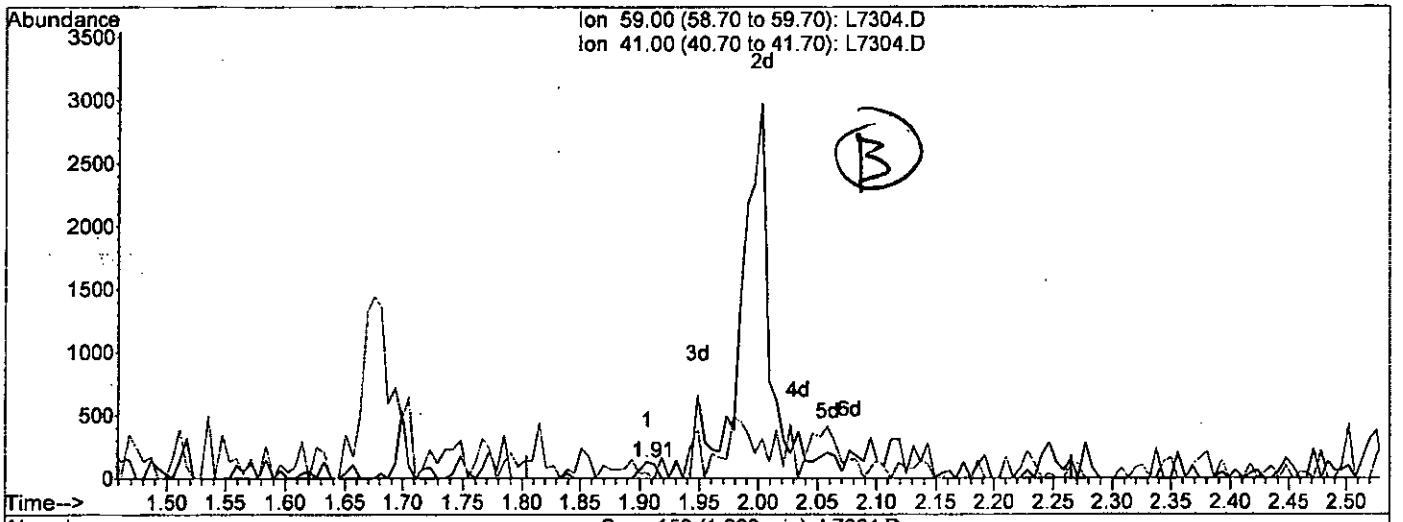
response 7382

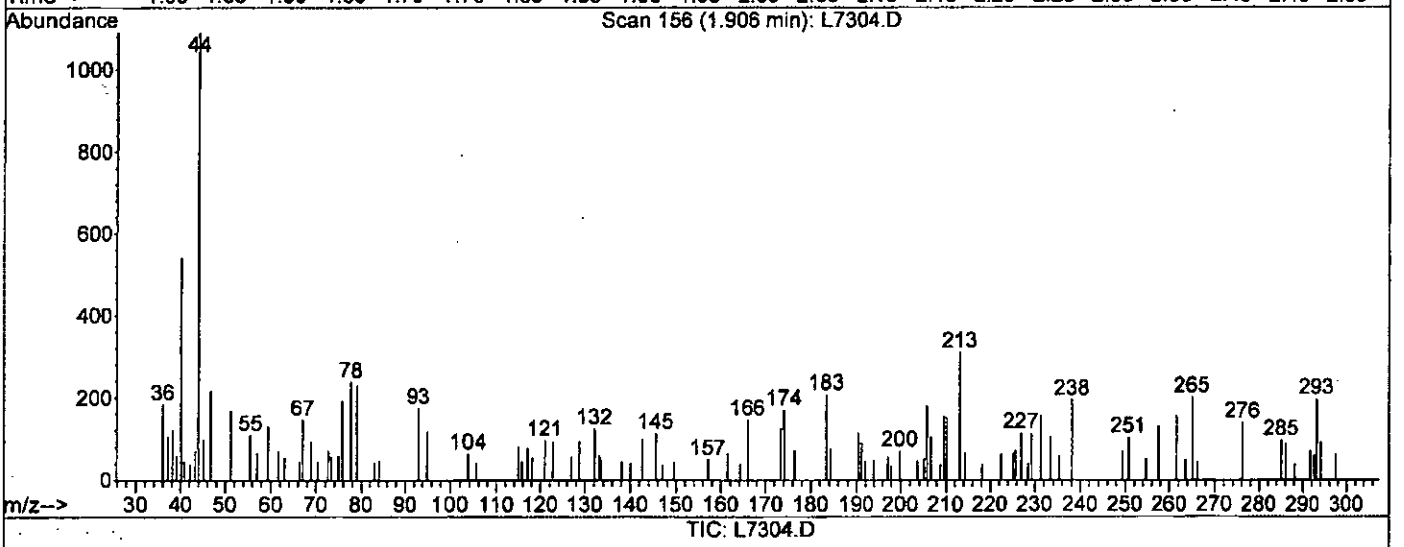
Ion	Exp%	Act%
67.00	100	100
69.00	34.40	32.66
117.00	70.60	61.22
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7304.D Vial: 7
Acq On : 11 Sep 2014 11:31 am Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:10 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:09:26 2014
Response via : Multiple Level Calibration





TIC: L7304.D

(16) tert Butyl Alcohol

1.91min 0.26ug/L

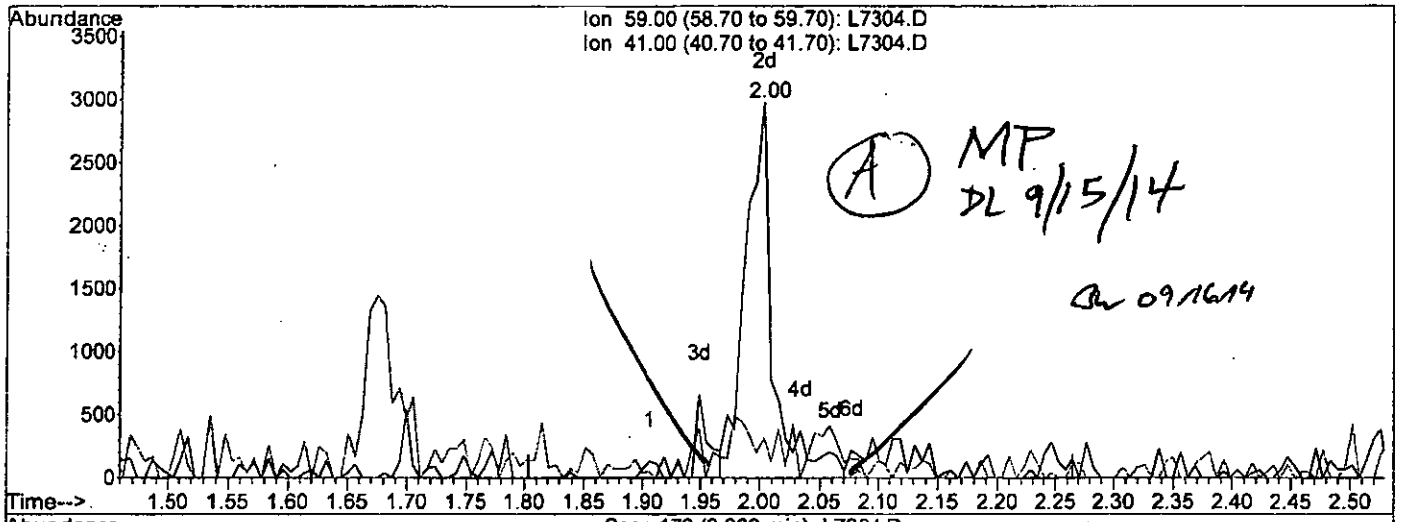
response 112

Ion	Exp%	Act%
59.00	100	100
41.00	23.50	34.62
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

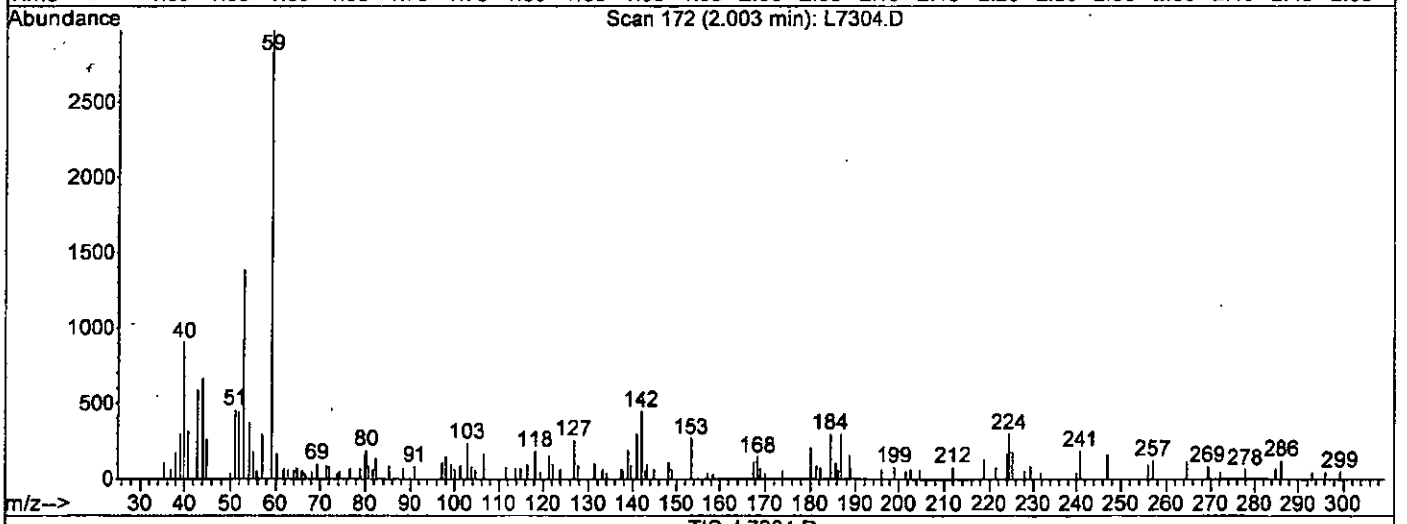
Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7304.D Vial: 7
Acq On : 11 Sep 2014 11:31 am Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:11 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:09:26 2014
Response via : Multiple Level Calibration



A MP DL 9/15/14

QA 09/16/14



TIC: L7304.D

(16) tert Butyl Alcohol

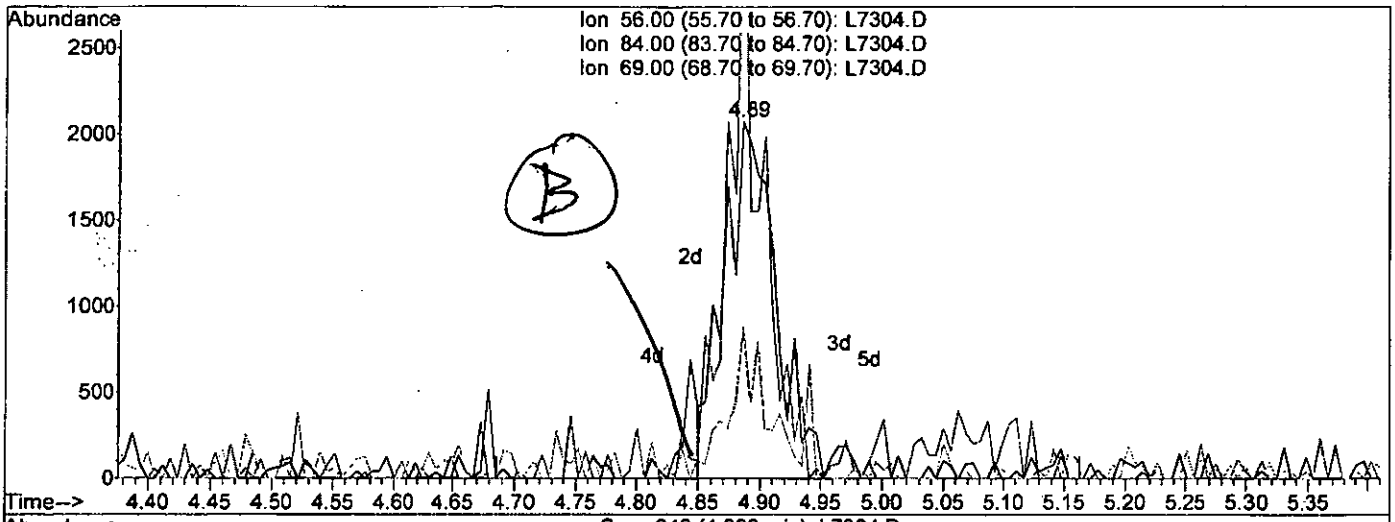
2.00min 11.00ug/L m

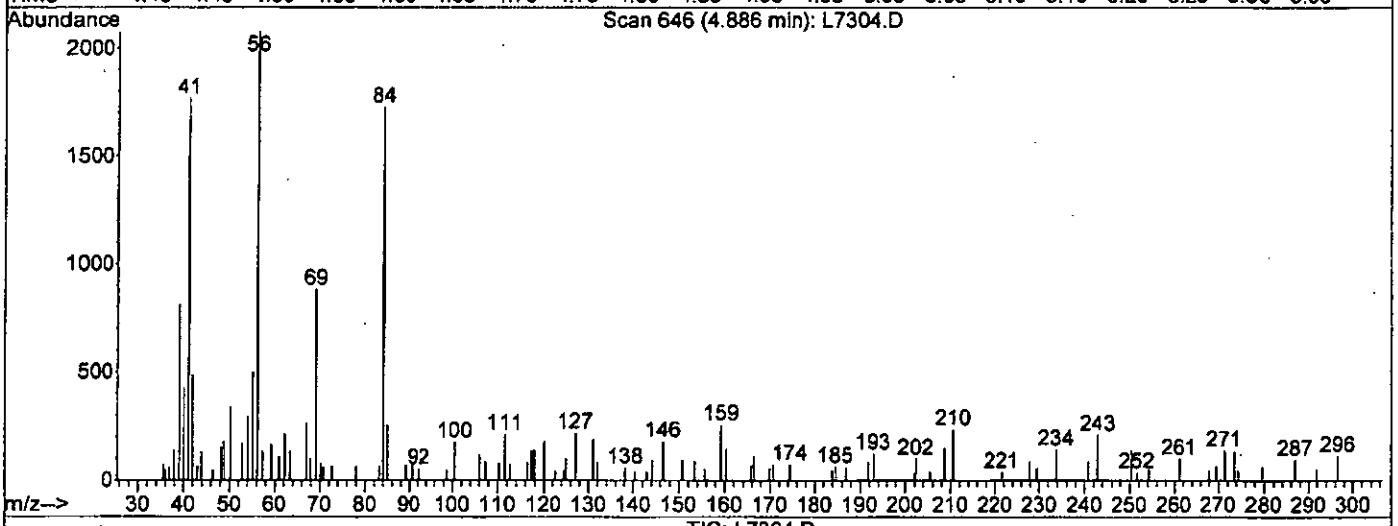
response 4729

Ion	Exp%	Act%
59.00	100	100
41.00	23.50	10.52#
0.00	0.00	0.00
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7304.D Vial: 7
Acq On : 11 Sep 2014 11:31 am Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:12 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:09:26 2014
Response via : Multiple Level Calibration





TIC: L7304.D

(34) Cyclohexane

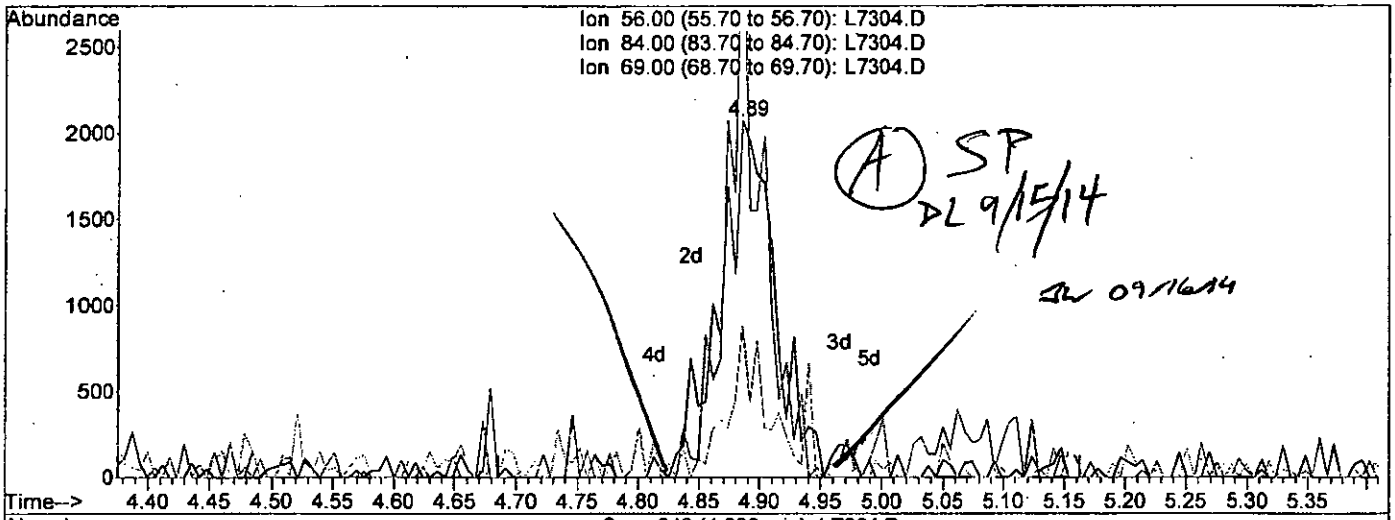
4.89min 0.42ug/L

response 6053

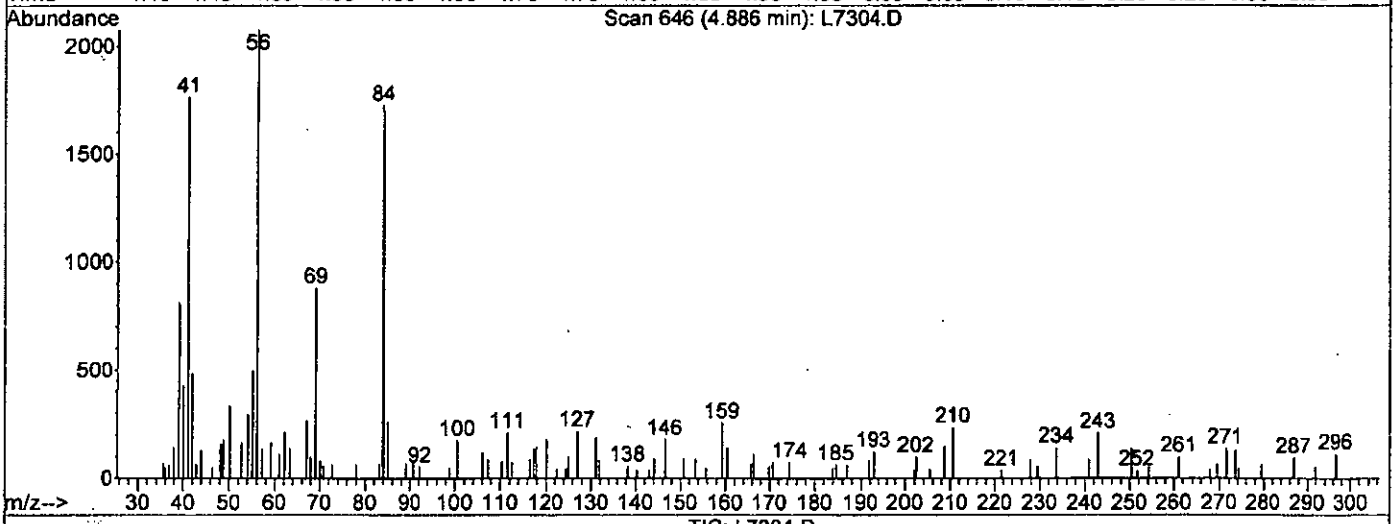
Ion	Exp%	Act%
56.00	100	100
84.00	79.70	165.04#
69.00	27.80	42.38#
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7304.D Vial: 7
Acq On : 11 Sep 2014 11:31 am Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:12 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:09:26 2014
Response via : Multiple Level Calibration



A SP DL 9/15/14
DL 09/16/14



TIC: L7304.D

(34) Cyclohexane

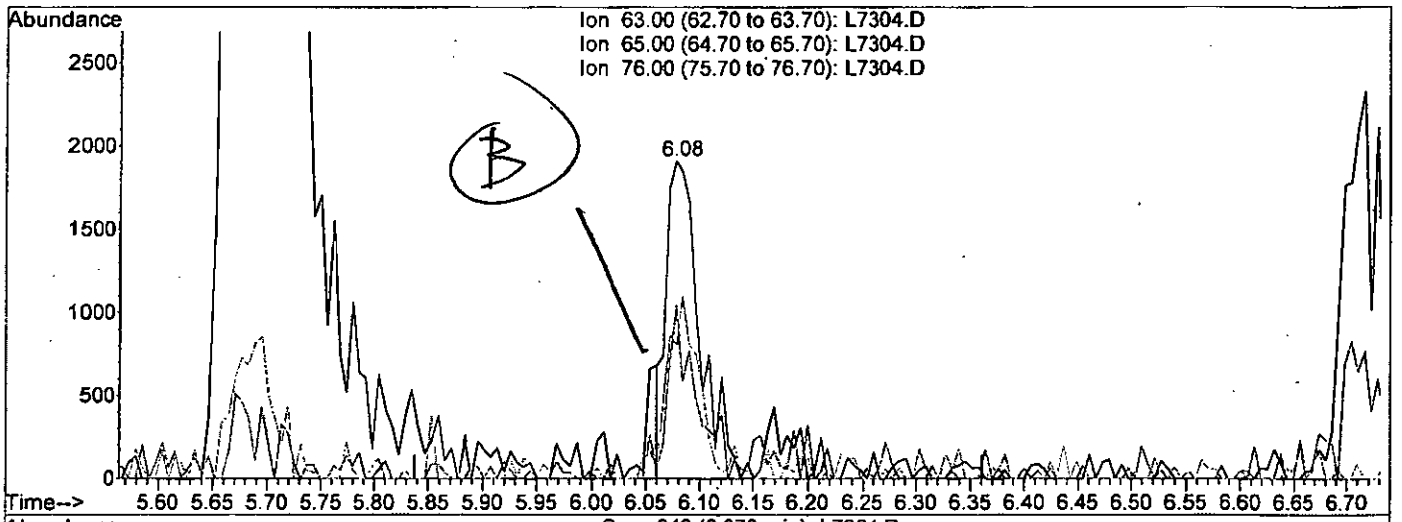
4.89min 0.46ug/L m

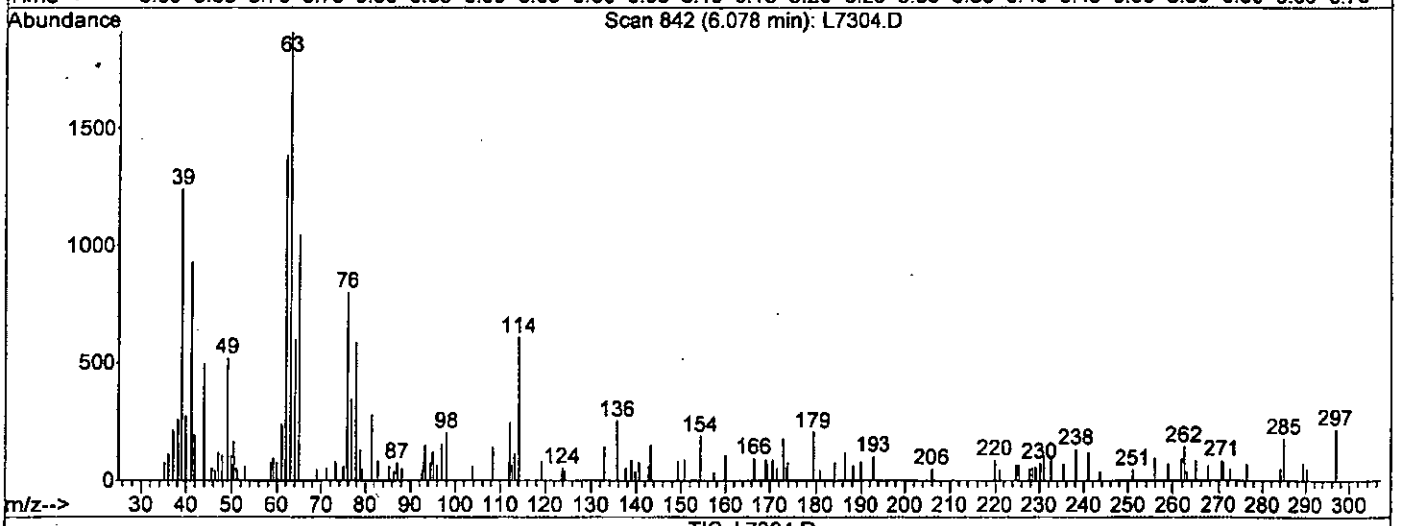
response 6574

Ion	Exp%	Act%
56.00	100	100
84.00	79.70	83.08
69.00	27.80	42.38#
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7304.D Vial: 7
Acq On : 11 Sep 2014 11:31 am Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:12 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:09:26 2014
Response via : Multiple Level Calibration





TIC: L7304.D

(40) 1,2-Dichloropropane

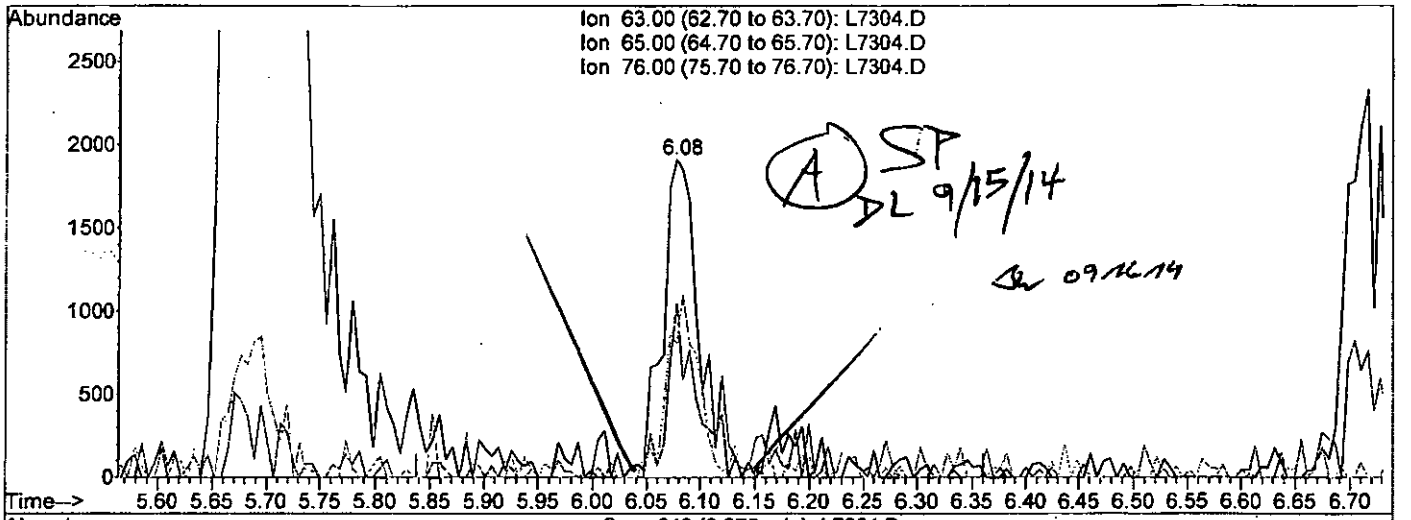
6.08min 0.45ug/L

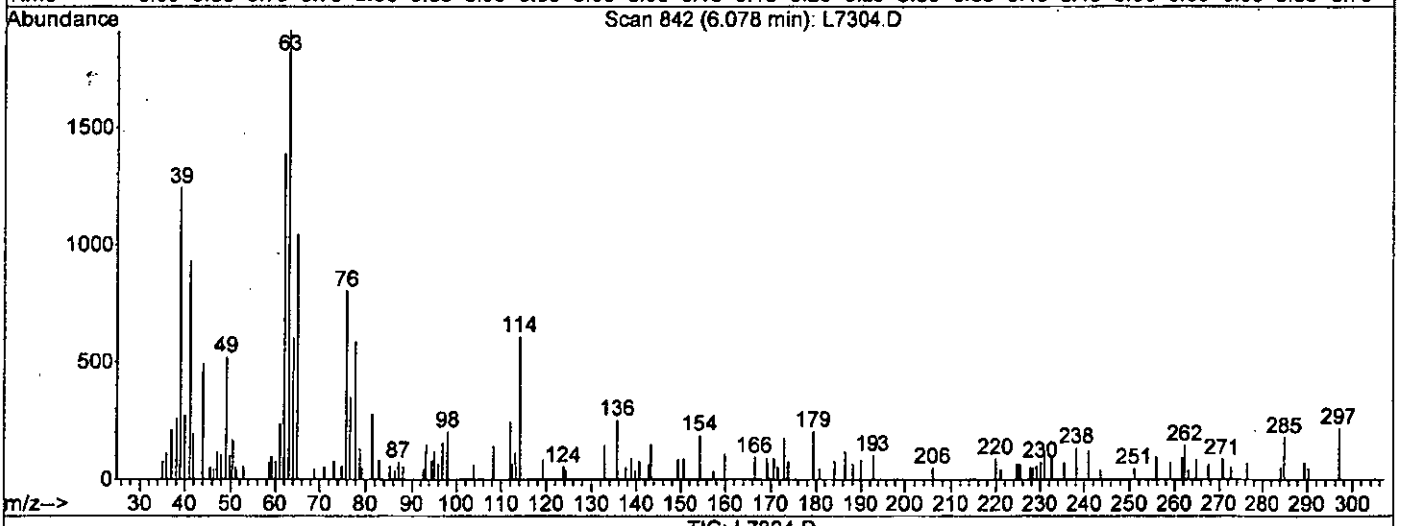
response 4125

Ion	Exp%	Act%
63.00	100	100
65.00	28.40	44.46#
76.00	44.50	48.19
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7304.D Vial: 7
Acq On : 11 Sep 2014 11:31 am Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:13 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:09:26 2014
Response via : Multiple Level Calibration





TIC: L7304.D

(40) 1,2-Dichlropane

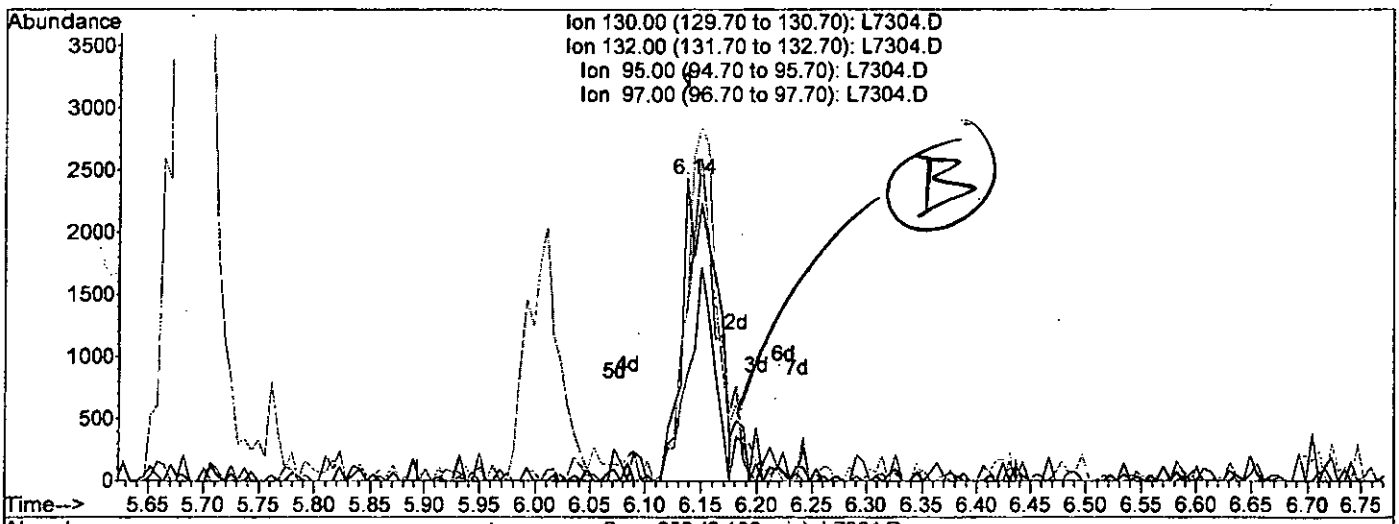
6.08min 0.50ug/L m

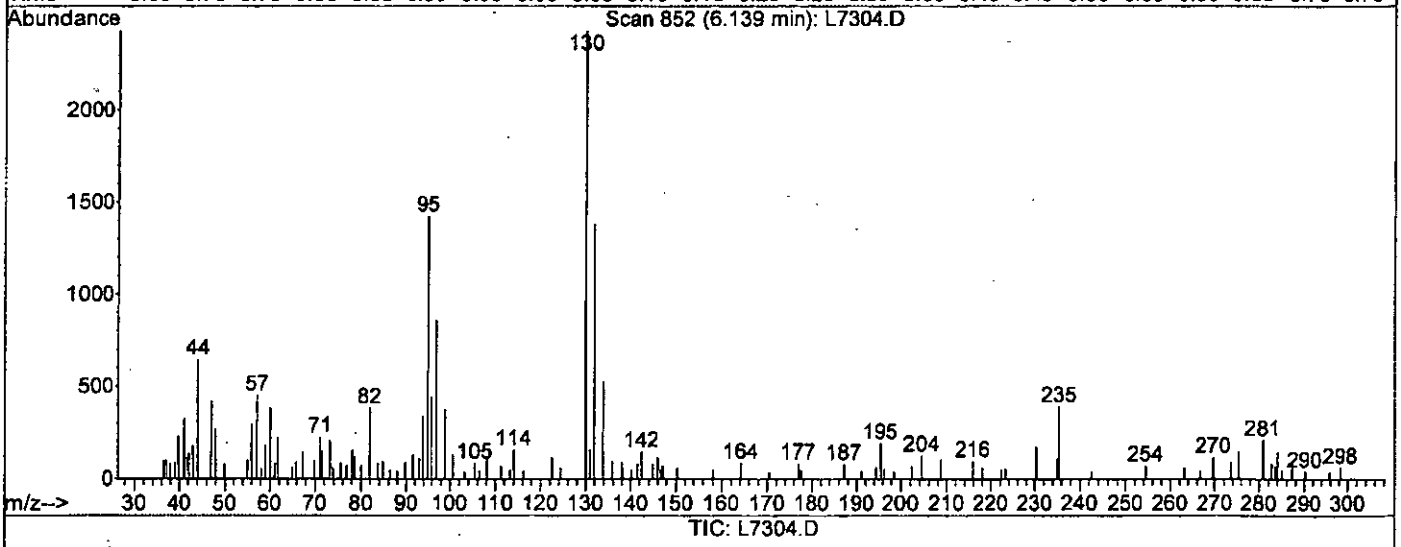
response 4613

Ion	Exp%	Act%
63.00	100	100
65.00	28.40	39.76#
76.00	44.50	43.10
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7304.D Vial: 7
Acq On : 11 Sep 2014 11:31 am Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:13 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:09:26 2014
Response via : Multiple Level Calibration





TIC: L7304.D

(41) Trichloroethene

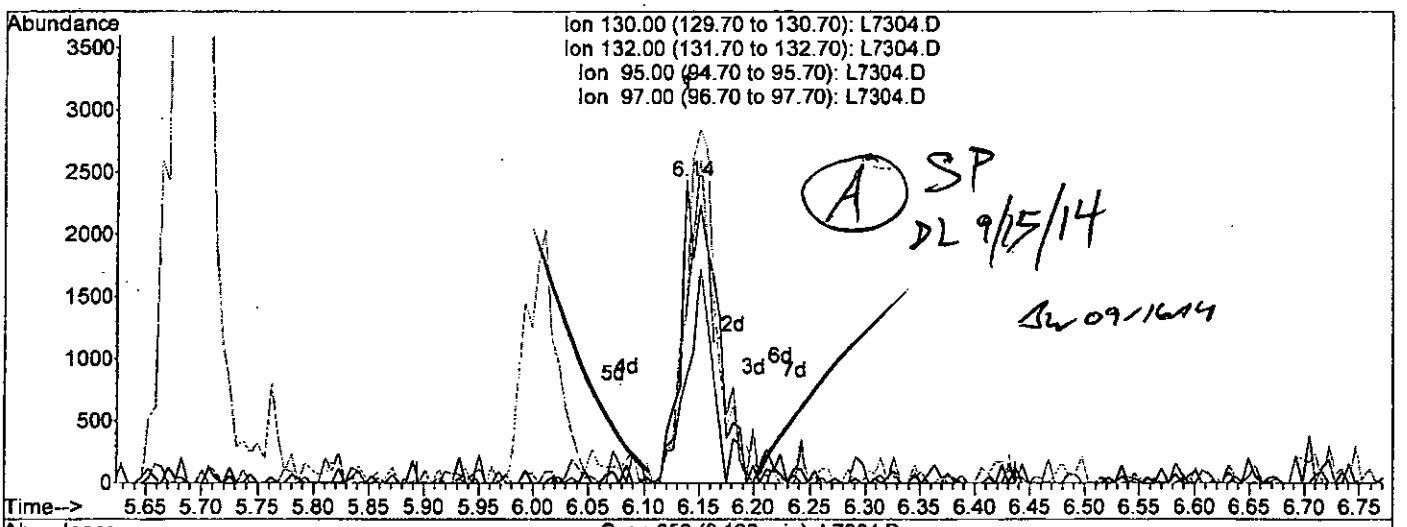
6.14min 0.47ug/L

response 4925

Ion	Exp%	Act%
130.00	100	100
132.00	95.90	99.86
95.00	97.20	116.26
97.00	63.90	55.33

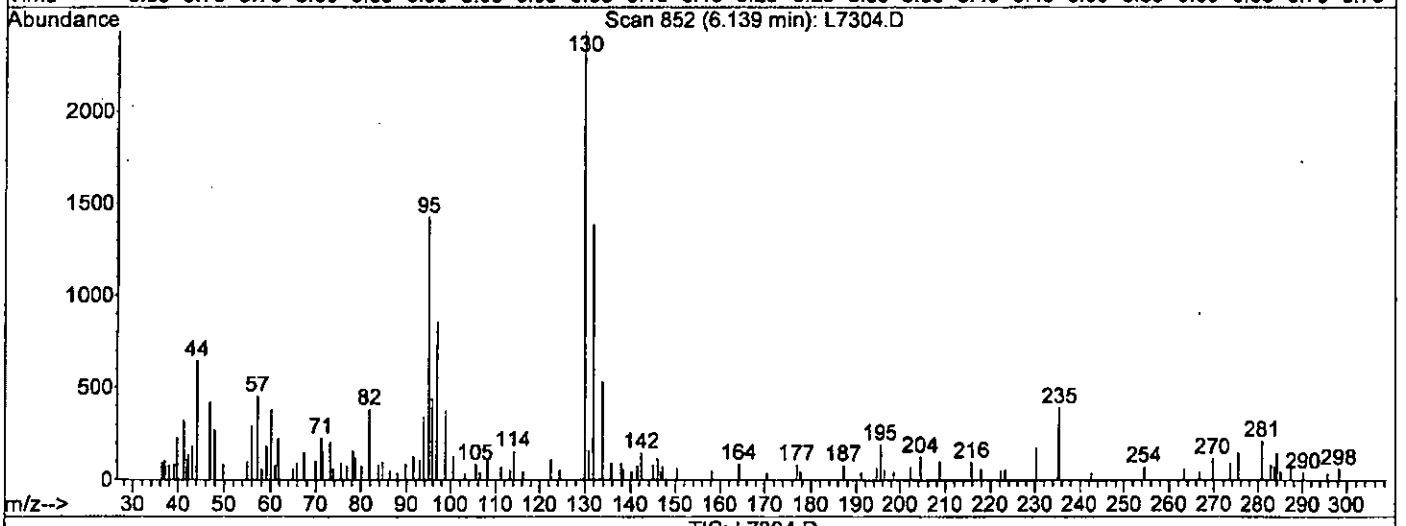
Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7304.D Vial: 7
Acq On : 11 Sep 2014 11:31 am Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:14 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:09:26 2014
Response via : Multiple Level Calibration



A SP DL 9/15/14

DW 09/16/14



TIC: L7304.D

(41) Trichloroethene

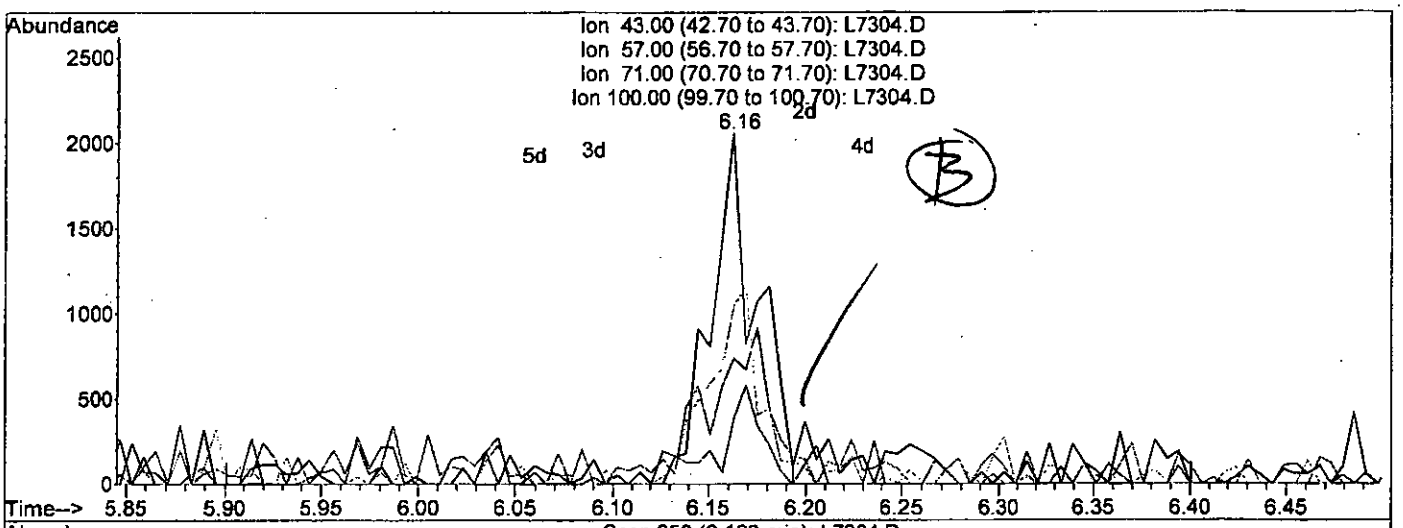
6.14min 0.50ug/L m

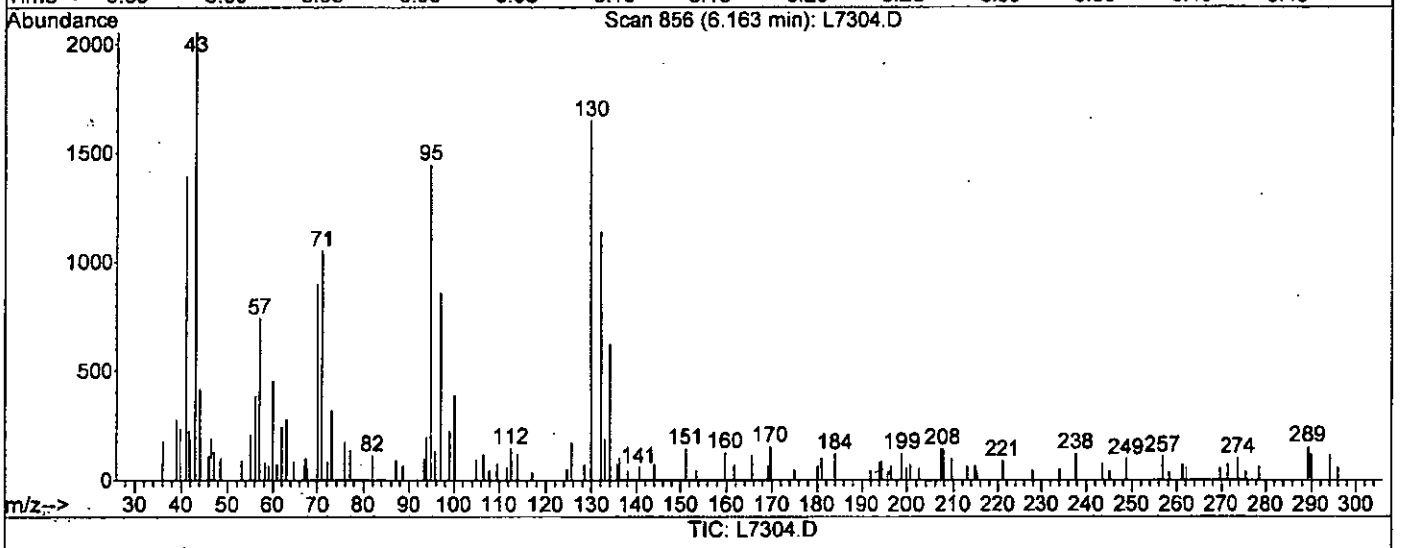
response 5263

Ion	Exp%	Act%
130.00	100	100
132.00	95.90	93.44
95.00	97.20	108.80
97.00	63.90	51.78

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7304.D Vial: 7
Acq On : 11 Sep 2014 11:31 am Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:14 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:09:26 2014
Response via : Multiple Level Calibration





TIC: L7304.D

(42) Heptane

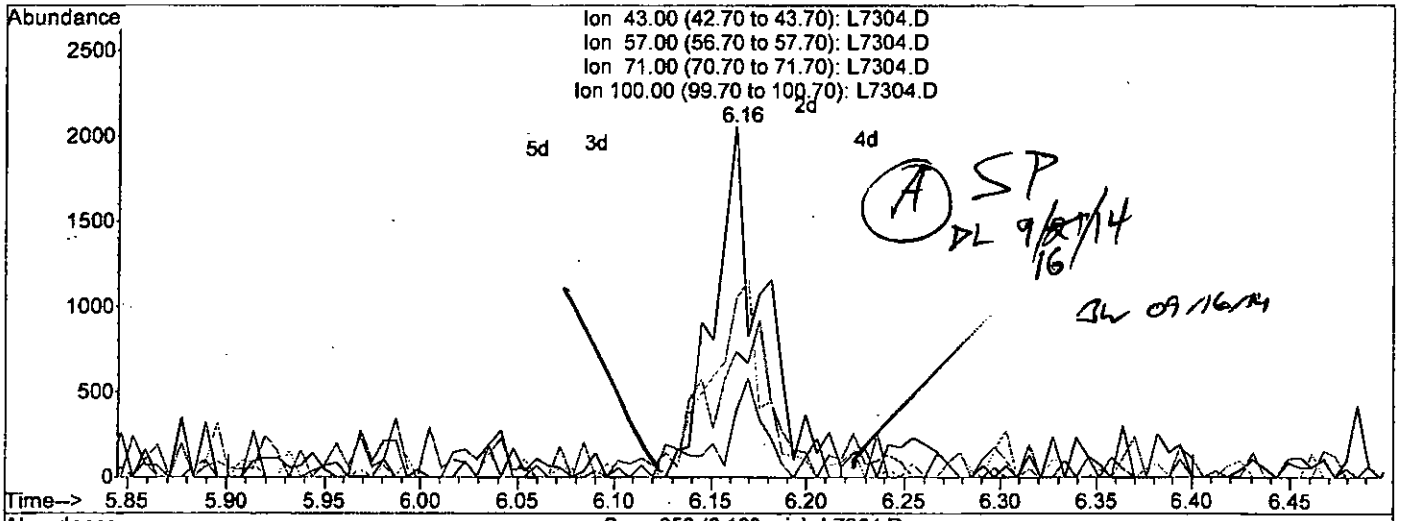
6.16min 0.39ug/L

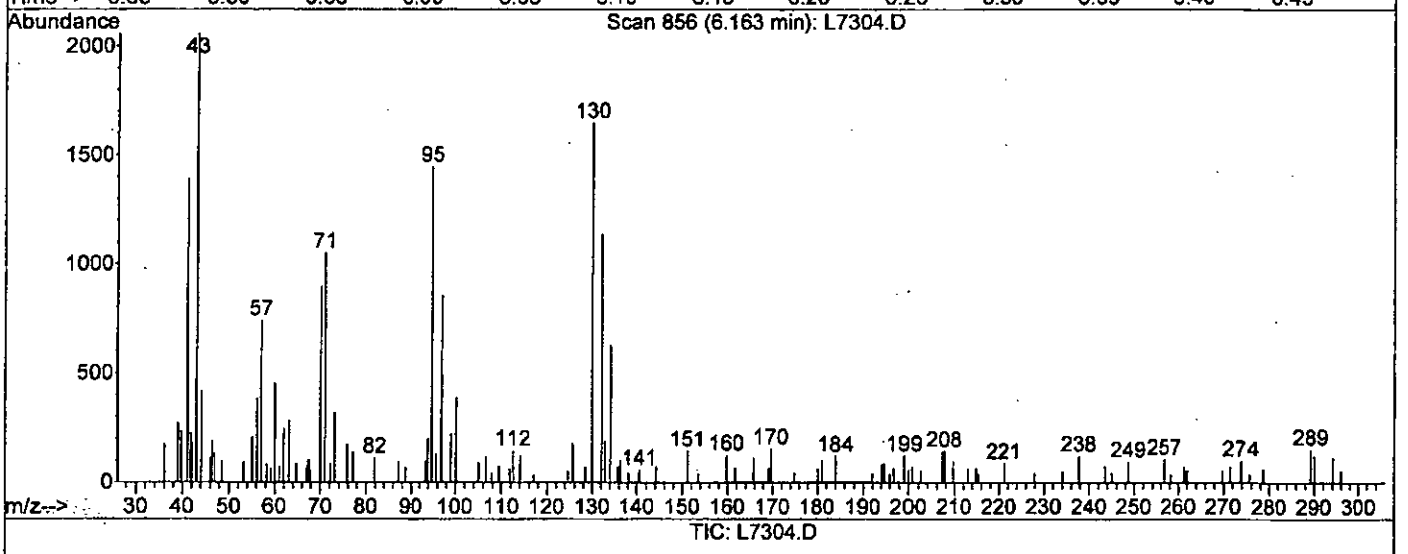
response 3384

Ion	Exp%	Act%
43.00	100	100
57.00	51.00	41.99
71.00	51.80	60.96
100.00	16.10	17.32

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7304.D Vial: 7
Acq On : 11 Sep 2014 11:31 am Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:14 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:09:26 2014
Response via : Multiple Level Calibration





TIC: L7304.D

(42) Heptane

6.16min 0.43ug/L m

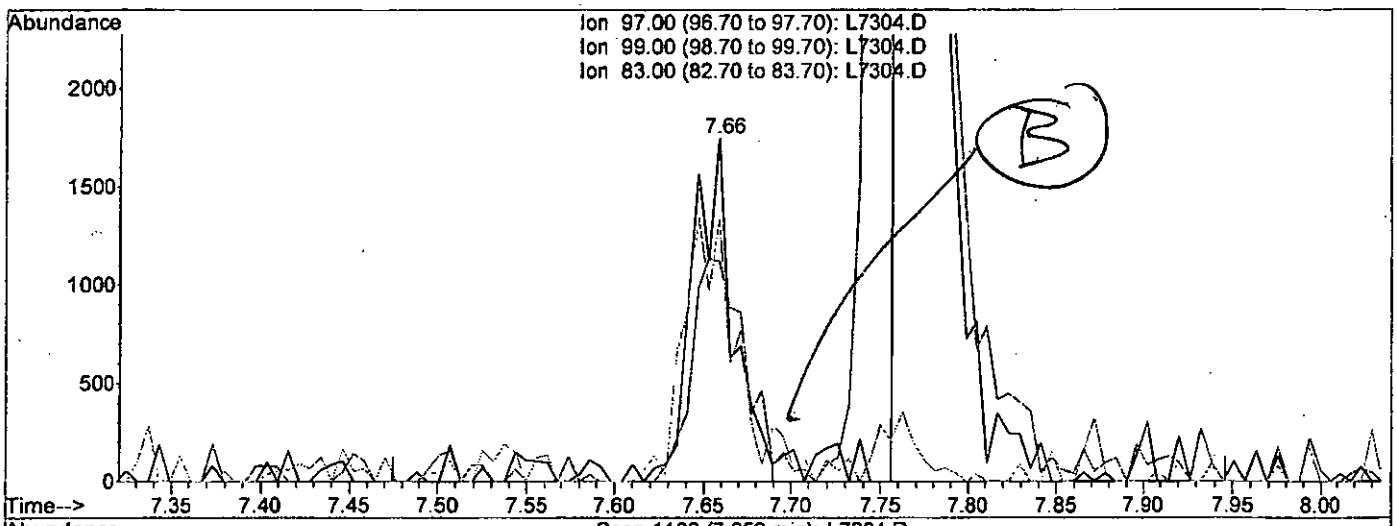
response 3686

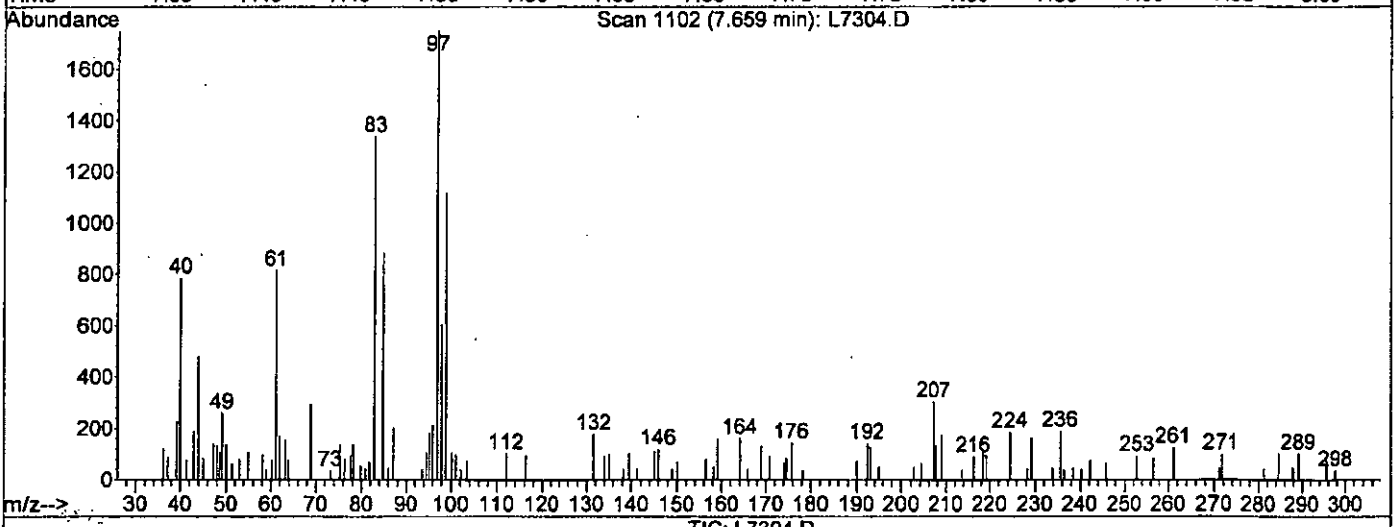
Ion	Exp%	Act%
43.00	100	100
57.00	51.00	38.55
71.00	51.80	55.97
100.00	16.10	15.90

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7304.D Vial: 7
Acq On : 11 Sep 2014 11:31 am Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:14 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:09:26 2014
Response via : Multiple Level Calibration





TIC: L7304.D

(50) 1,1,2-Trichloroethane

7.66min 0.44ug/L

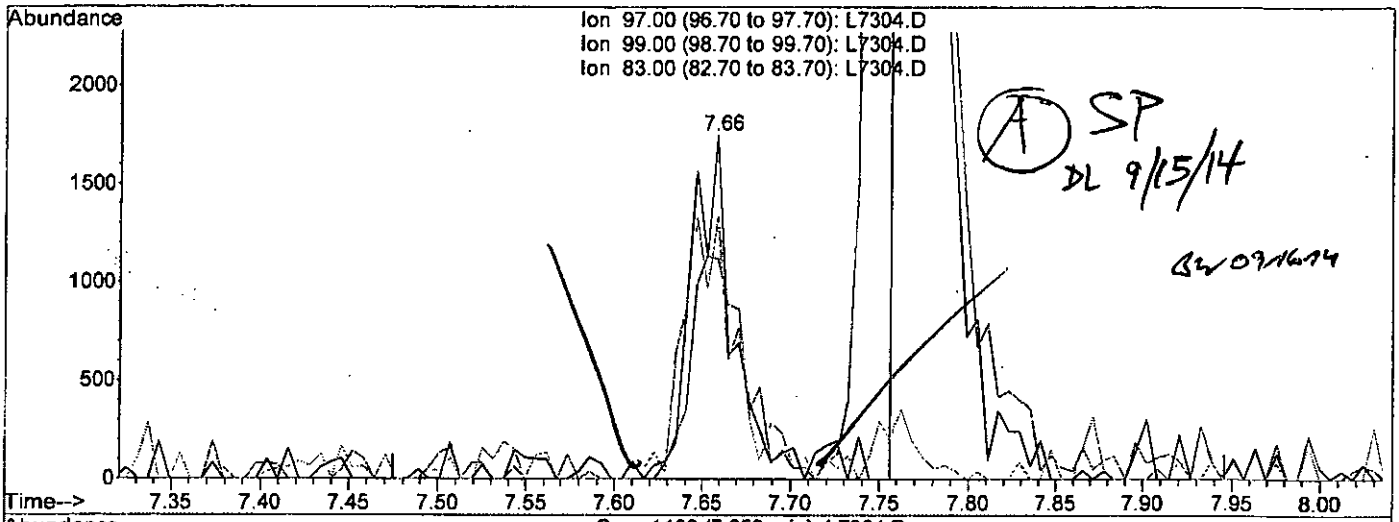
response 2804

Ion	Exp%	Act%
97.00	100	100
99.00	62.20	88.27#
83.00	84.60	90.41
0.00	0.00	0.00

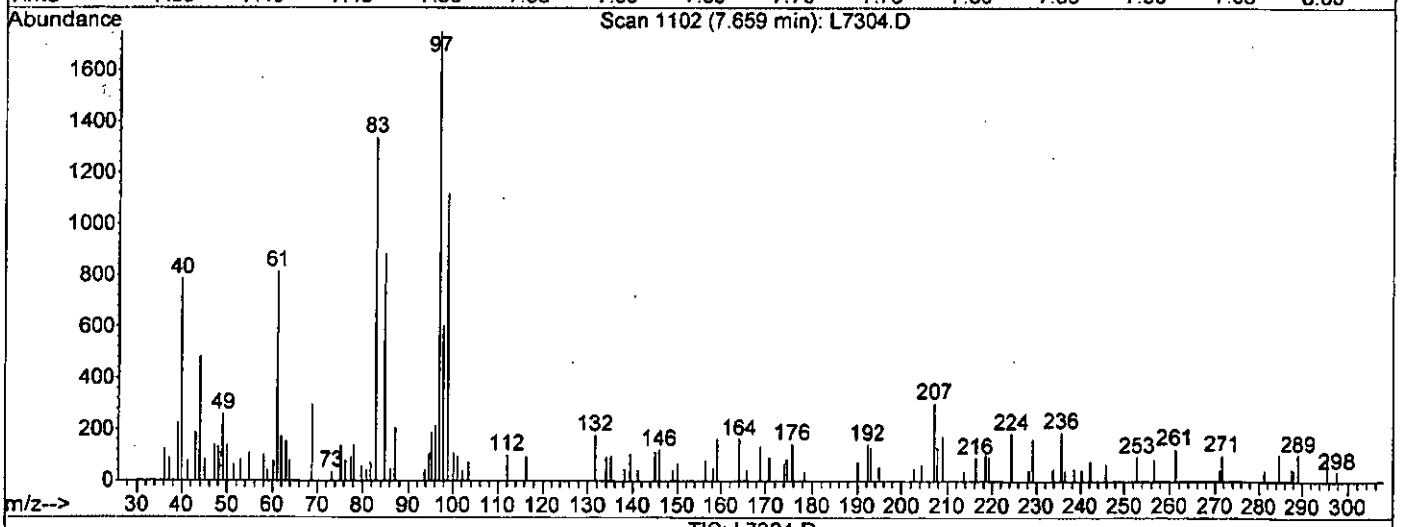
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7304.D Vial: 7
Acq On : 11 Sep 2014 11:31 am Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:15 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:09:26 2014
Response via : Multiple Level Calibration



SP
DL 9/15/14



TIC: L7304.D

(50) 1,1,2-Trichloroethane

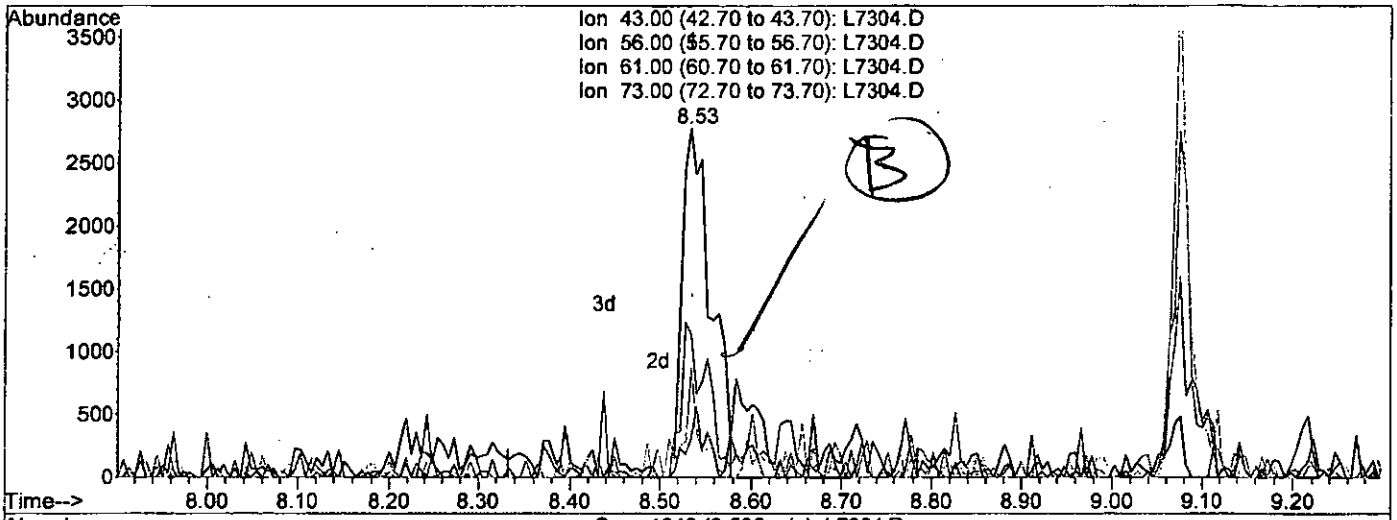
7.66min 0.45ug/L m

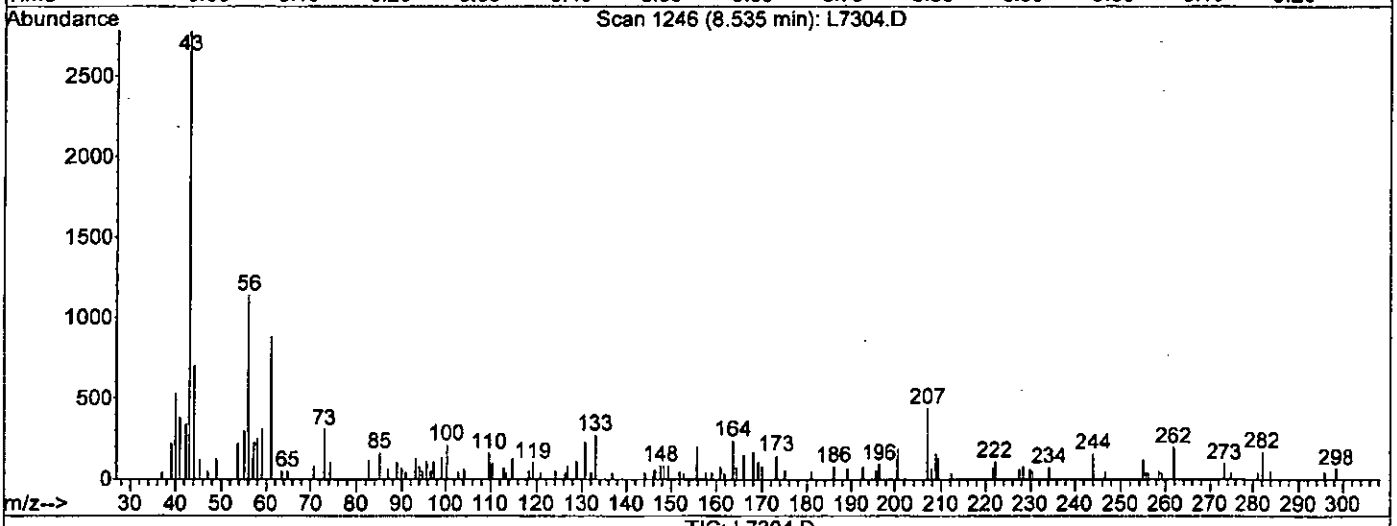
response 2911

Ion	Exp%	Act%
97.00	100	100
99.00	62.20	85.02#
83.00	84.60	87.08
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7304.D Vial: 7
Acq On : 11 Sep 2014 11:31 am Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:15 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:09:26 2014
Response via : Single Level Calibration





TIC: L7304.D

(58) N-Butyl Acetate

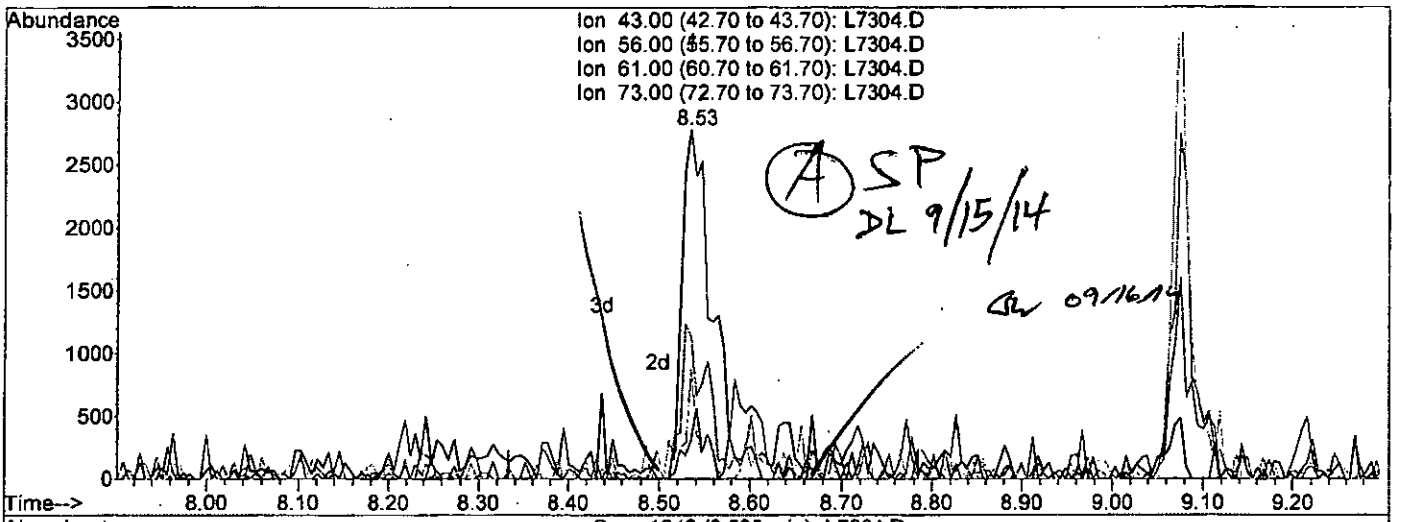
8.53min 0.76ug/L

response 6244

Ion	Exp%	Act%
43.00	100	100
56.00	37.30	37.89
61.00	17.60	18.59
73.00	13.40	12.41

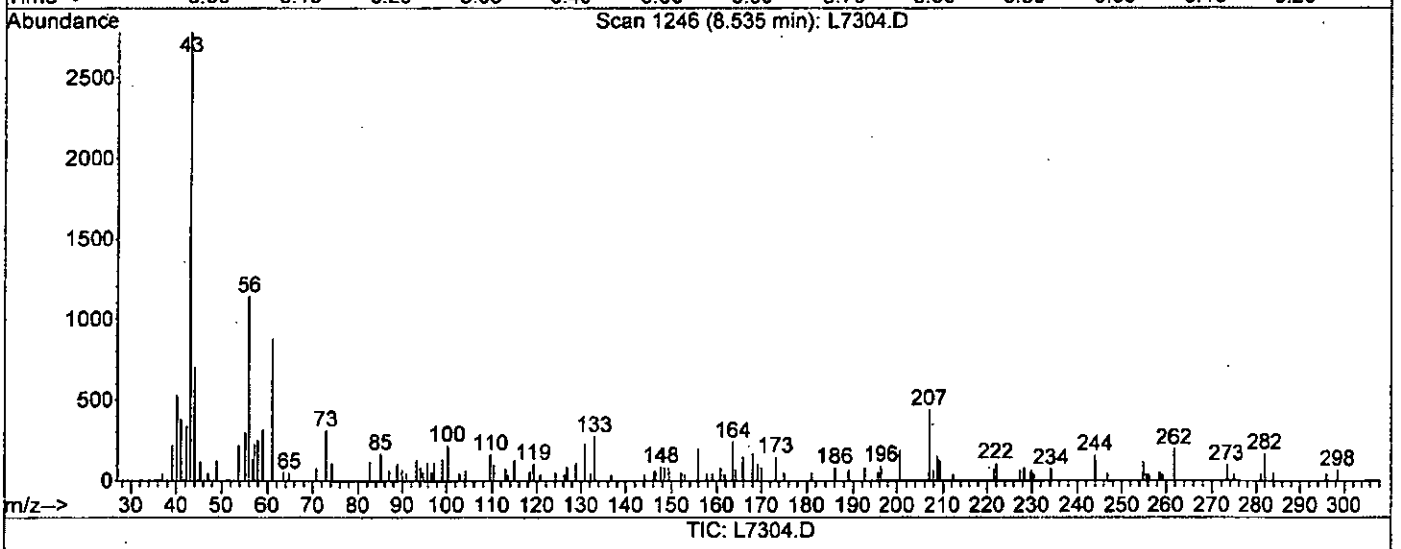
Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7304.D Vial: 7
Acq On : 11 Sep 2014 11:31 am Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:16 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:09:26 2014
Response via : Single Level Calibration



A SP DL 9/15/14

GL 09/16/14



TIC: L7304.D

(58) N-Butyl Acetate

8.53min 1.00ug/L m

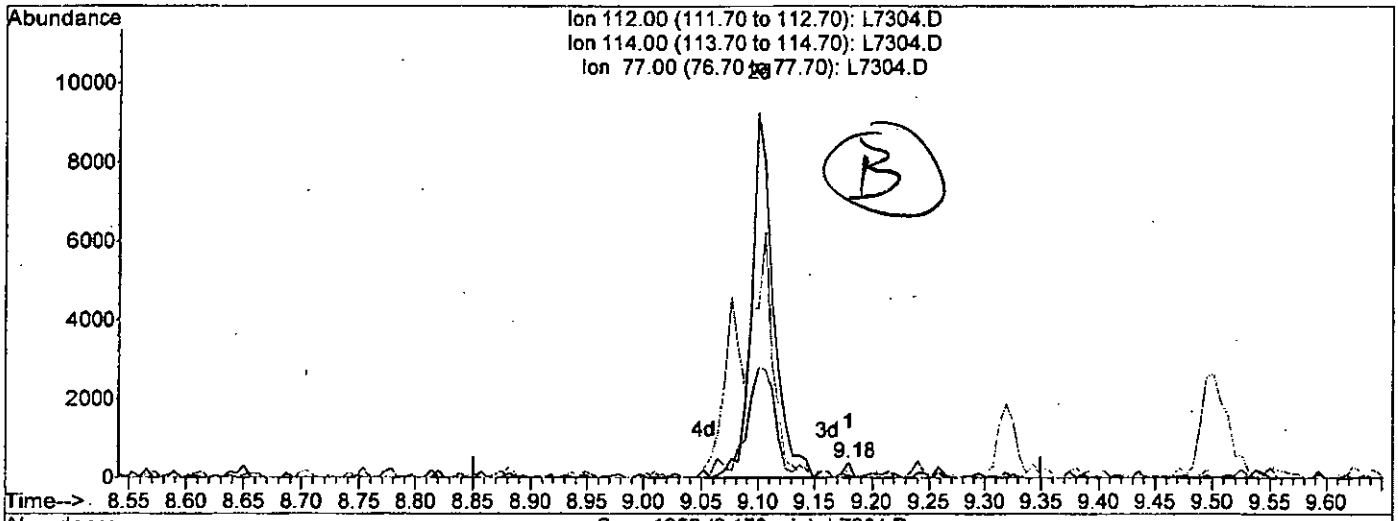
response 8180

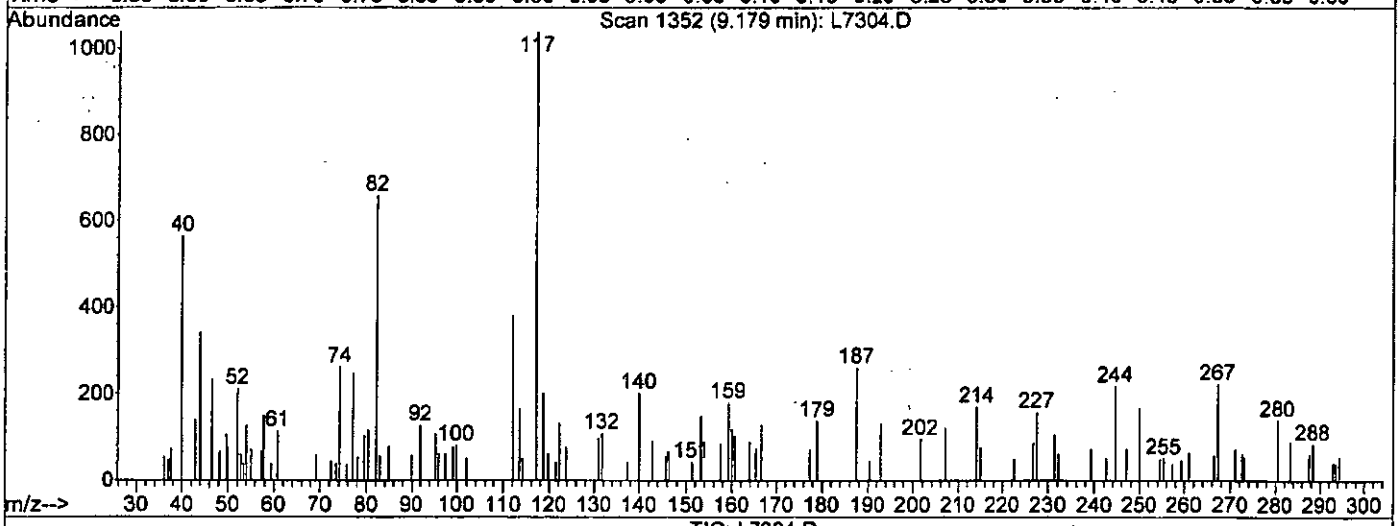
Ion	Exp%	Act%
43.00	100	100
56.00	37.30	28.92#
61.00	17.60	14.19
73.00	13.40	9.47#

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7304.D Vial: 7
Acq On : 11 Sep 2014 11:31 am Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:16 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:09:26 2014
Response via : Single Level Calibration





TIC: L7304.D

(59) Chlorobenzene

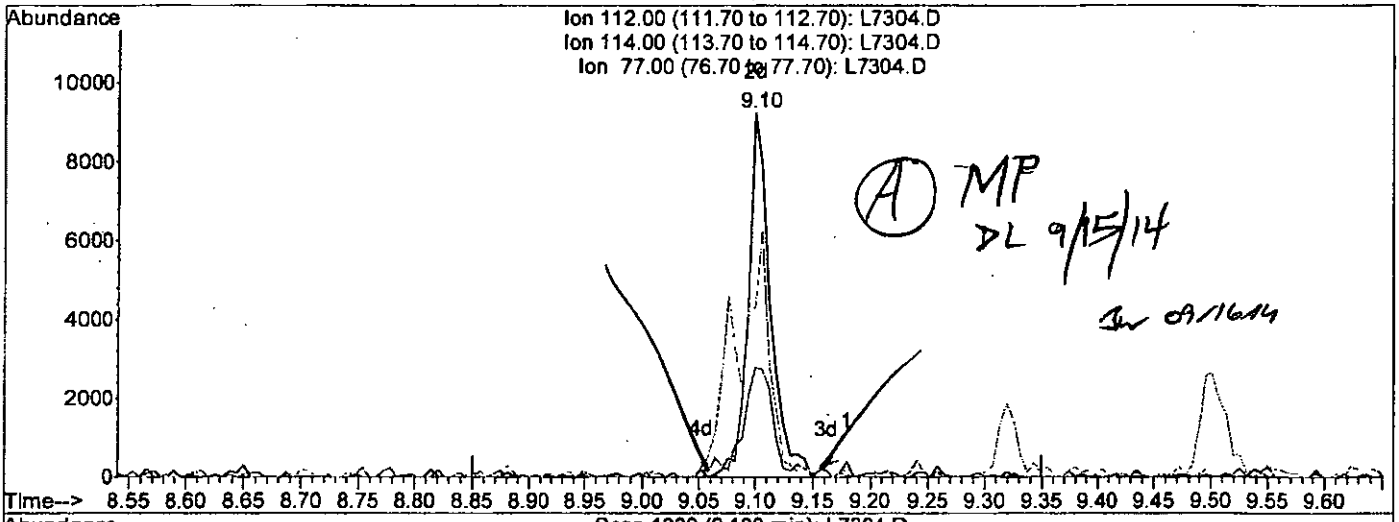
9.18min 0.01ug/L

response 175

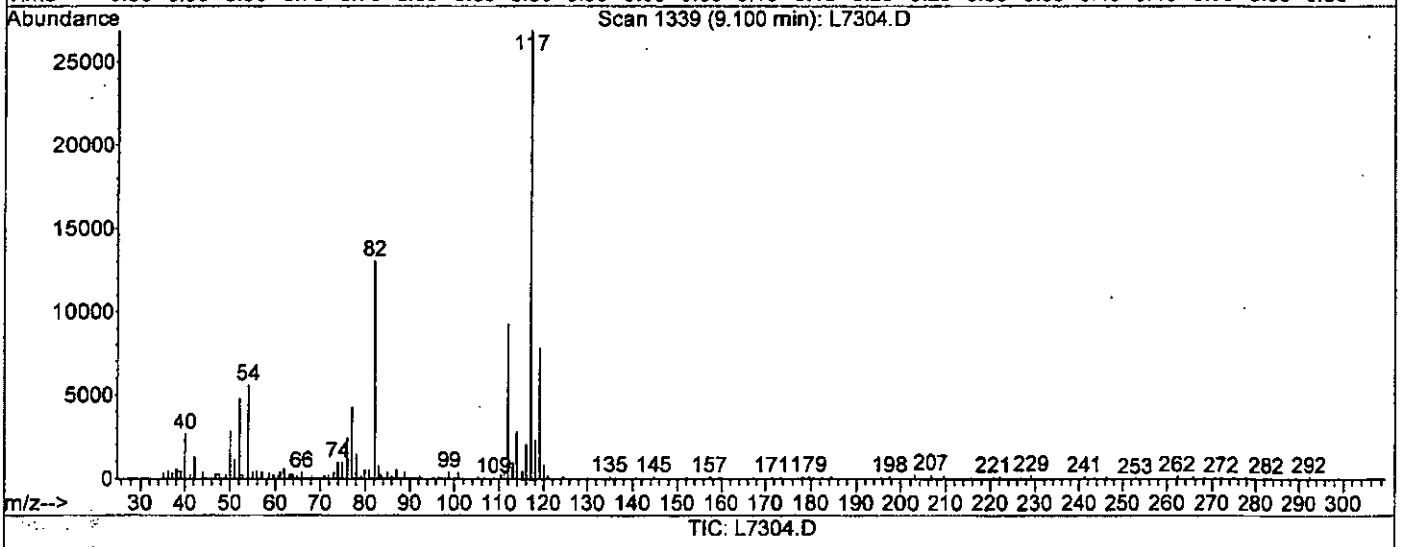
Ion	Exp%	Act%
112.00	100	100
114.00	33.20	30.86
77.00	60.50	63.43
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7304.D Vial: 7
Acq On : 11 Sep 2014 11:31 am Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:16 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:09:26 2014
Response via : Single Level Calibration



A MP
DL 9/15/14
JW 09/16/14



TIC: L7304.D

(59) Chlorobenzene

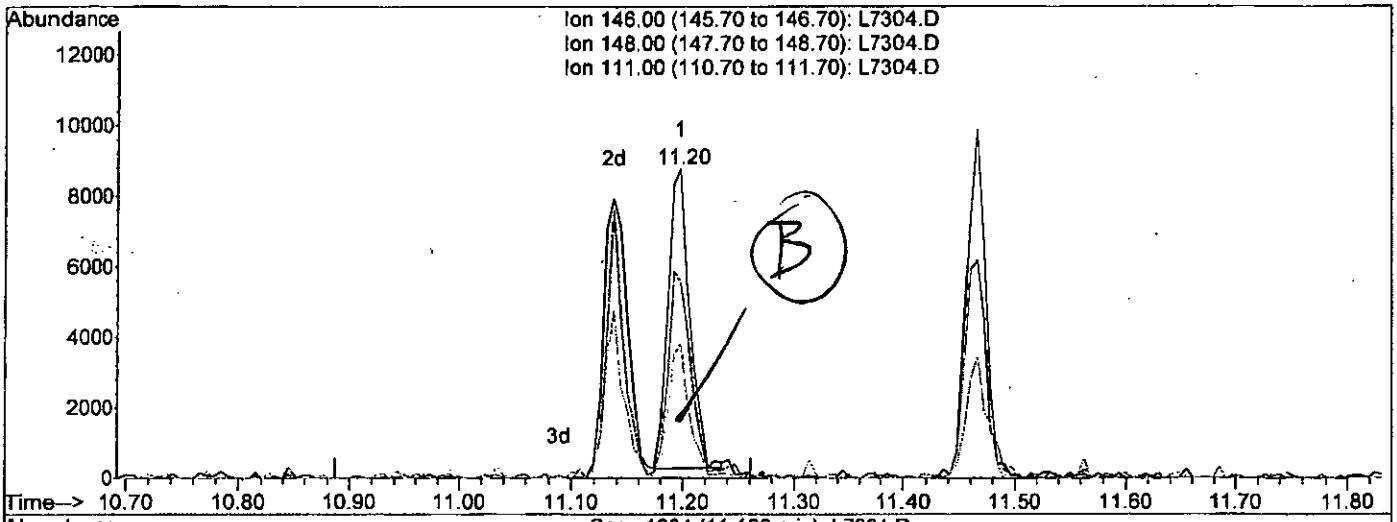
9.10min 0.50ug/L m

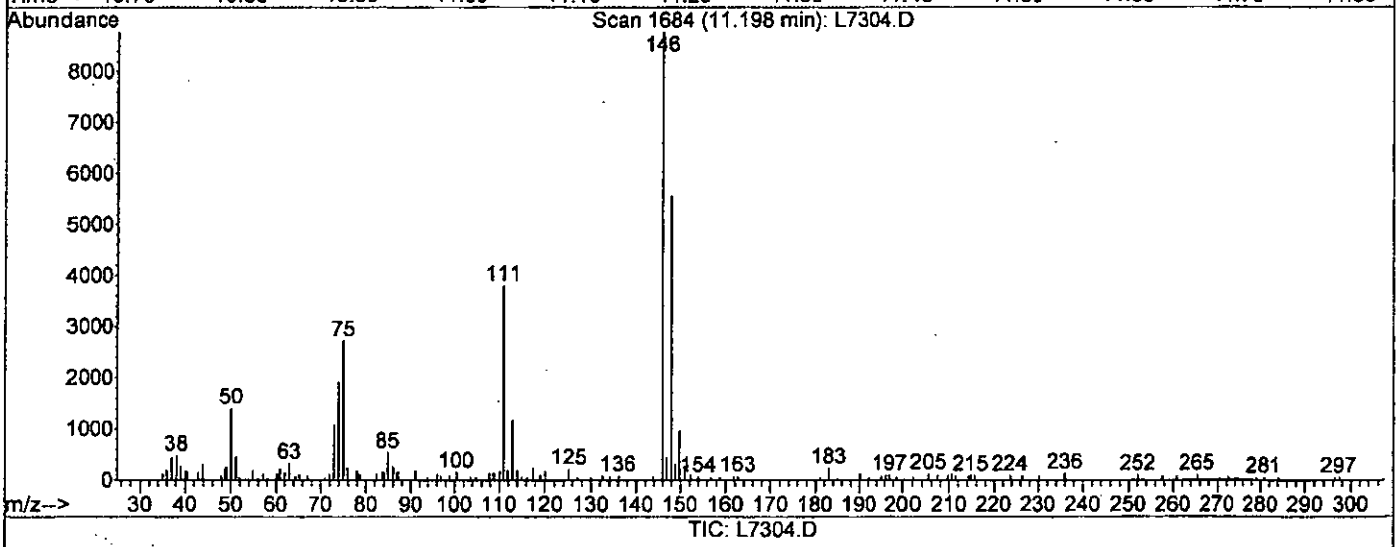
response 12619

Ion	Exp%	Act%
112.00	100	100
114.00	33.20	0.43#
77.00	60.50	0.88#
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7304.D Vial: 7
Acq On : 11 Sep 2014 11:31 am Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:16 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:09:26 2014
Response via : Single Level Calibration





TIC: L7304.D

(69) 1,3-Dclbenz

11.20min 0.50ug/L

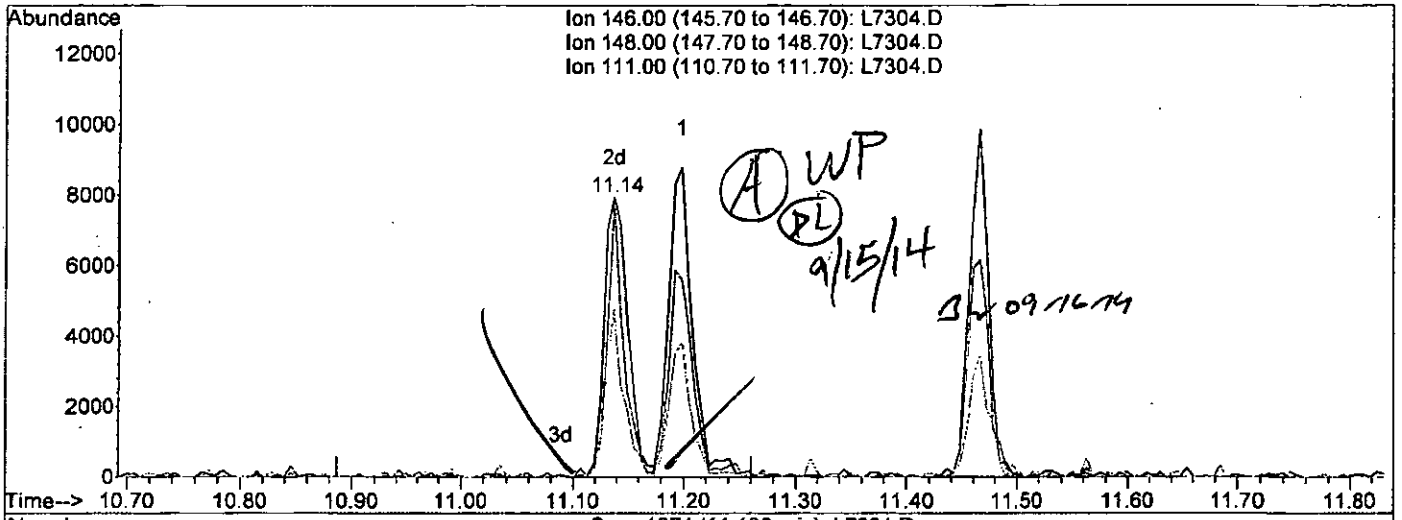
response 11696

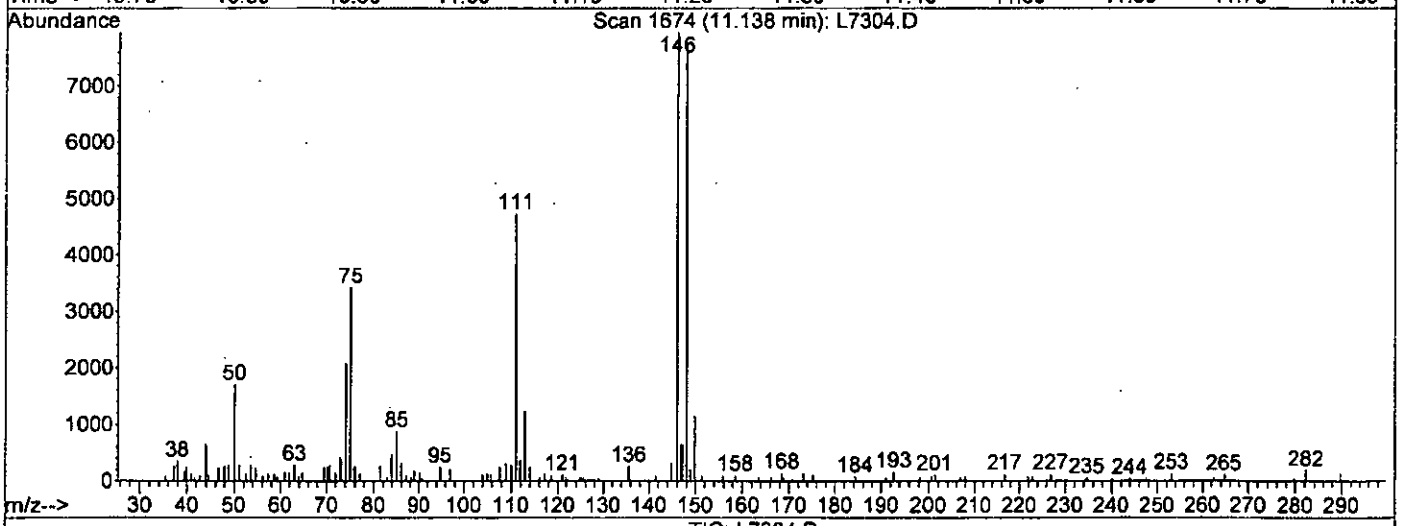
Ion	Exp%	Act%
146.00	100	100
148.00	65.80	70.29
111.00	38.20	43.31
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7304.D Vial: 7
Acq On : 11 Sep 2014 11:31 am Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:17 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:09:26 2014
Response via : Single Level Calibration





TIC: L7304.D

(69) 1,3-Dclbenz

11.14min 0.52ug/L m

response 12009

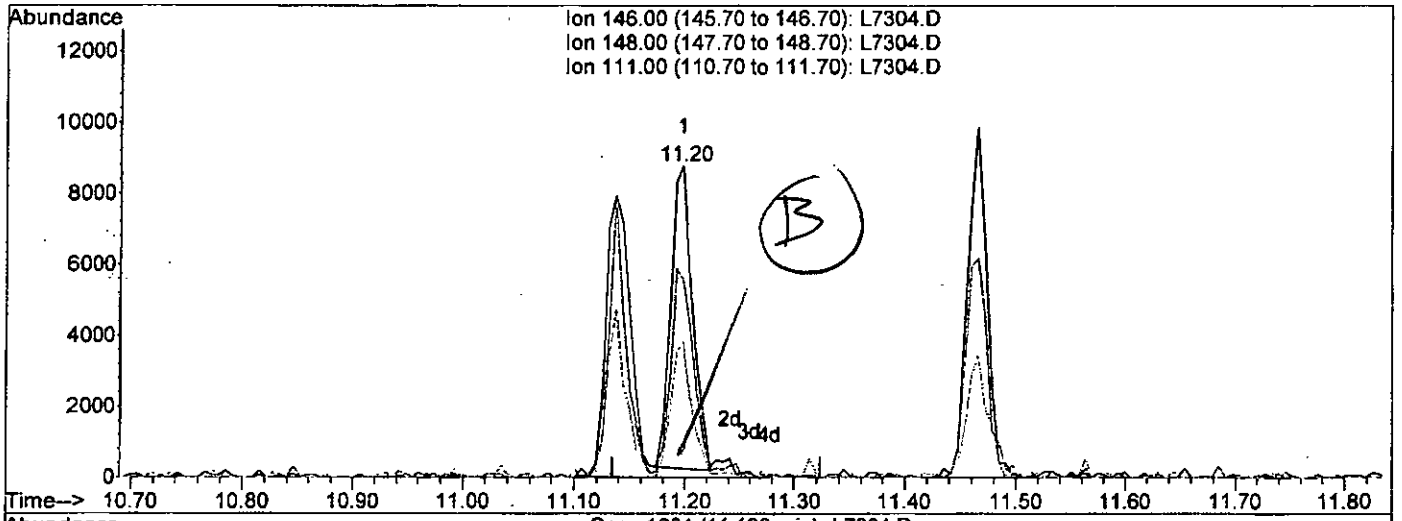
Ion	Exp%	Act%
146.00	100	100
148.00	65.80	68.46
111.00	38.20	42.19
0.00	0.00	0.00

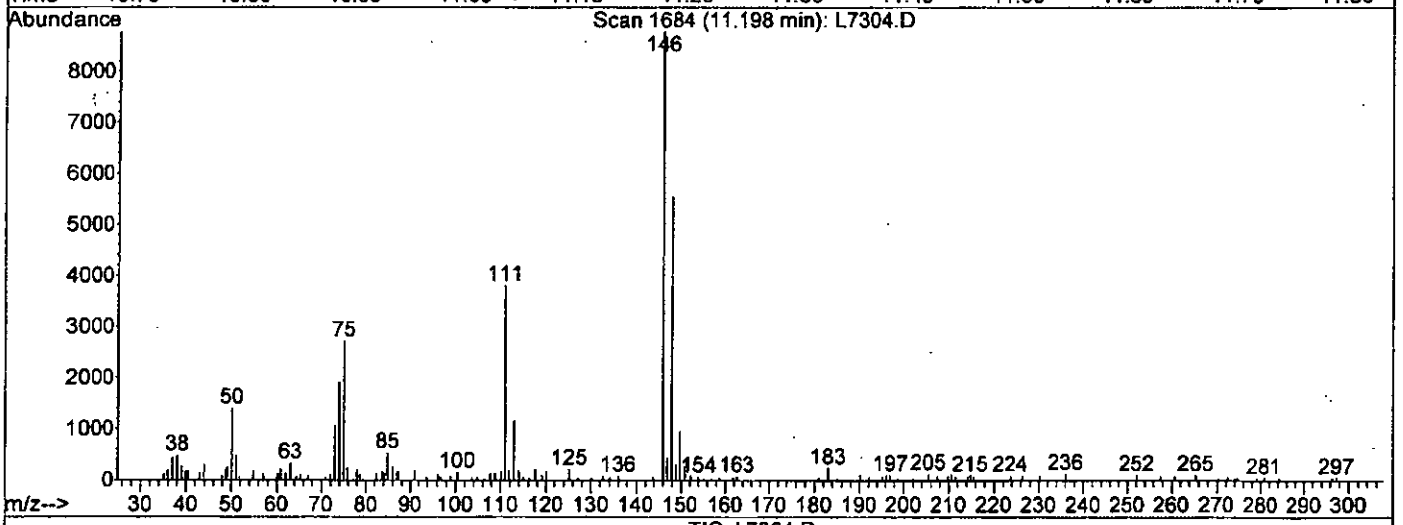
A WP RL 9/15/14 BH 09/16/14

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7304.D Vial: 7
Acq On : 11 Sep 2014 11:31 am Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:17 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:09:26 2014
Response via : Single Level Calibration





TIC: L7304.D

(70) 1,4-Dclbenz

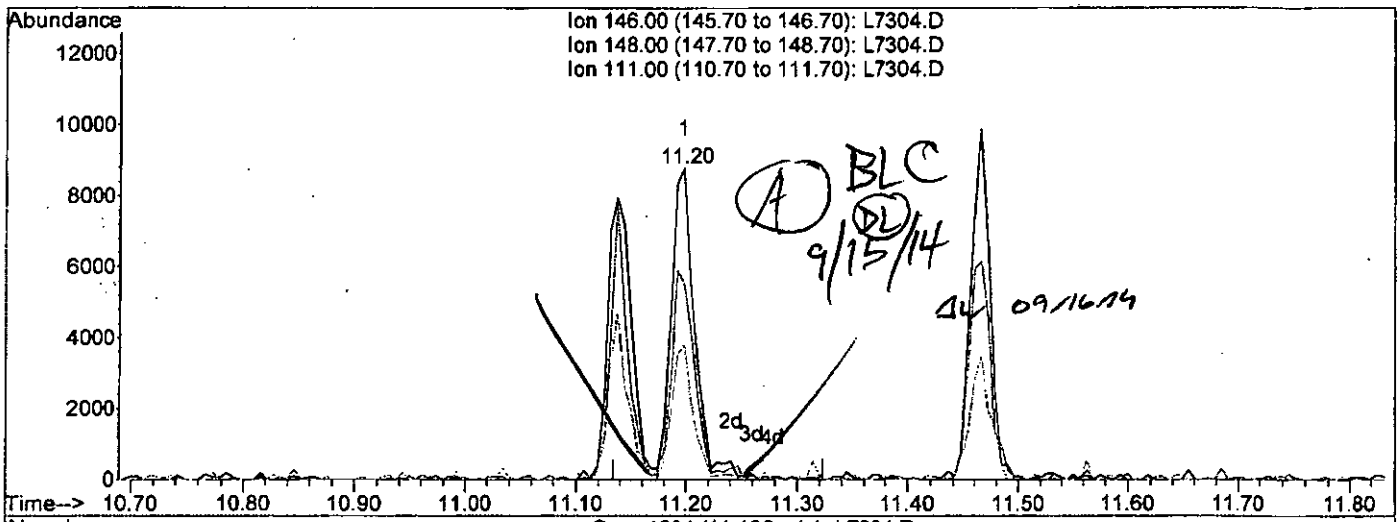
11.20min 0.51ug/L

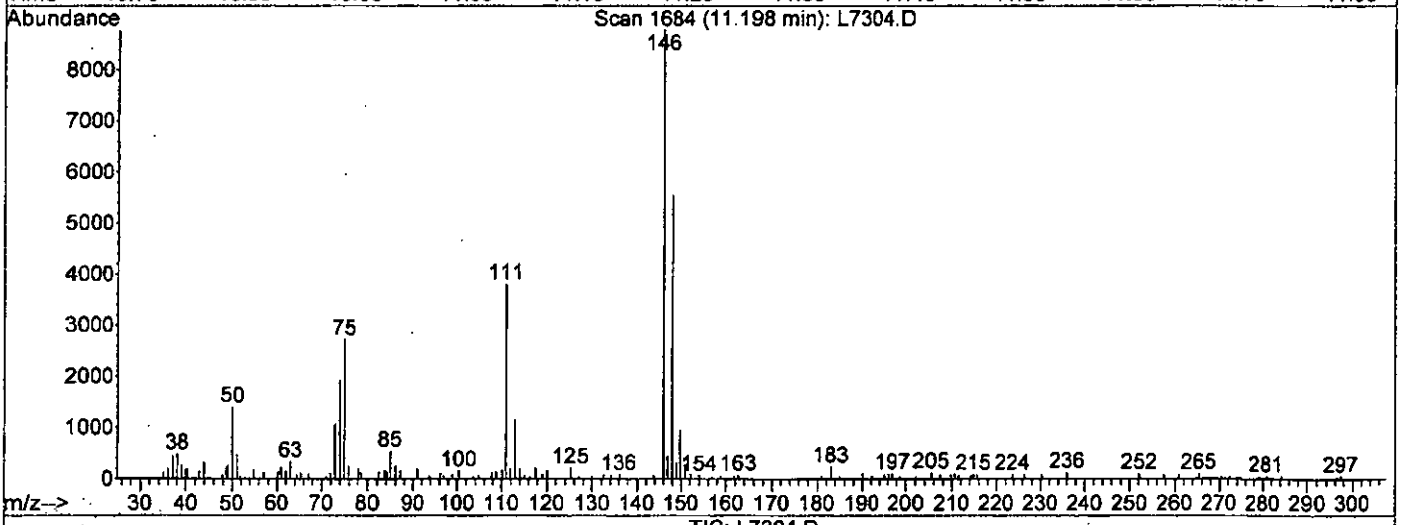
response 11692

Ion	Exp%	Act%
146.00	100	100
148.00	64.50	70.18
111.00	36.10	43.64#
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7304.D Vial: 7
Acq On : 11 Sep 2014 11:31 am Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:17 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:09:26 2014
Response via : Single Level Calibration





TIC: L7304.D

(70) 1,4-Dclbenz

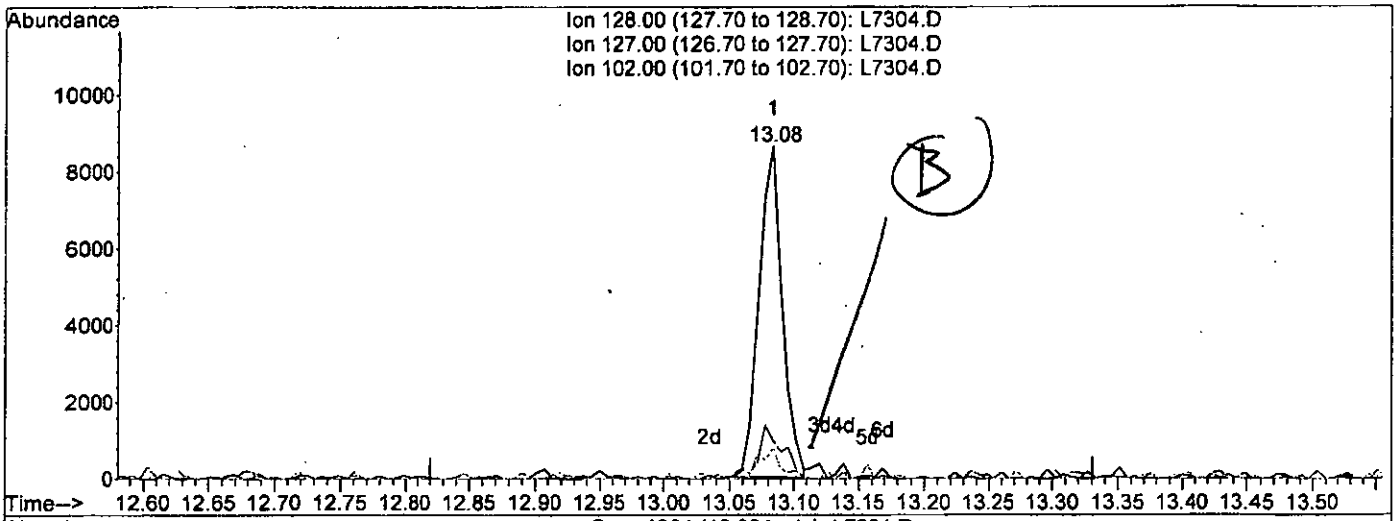
11.20min 0.57ug/L m

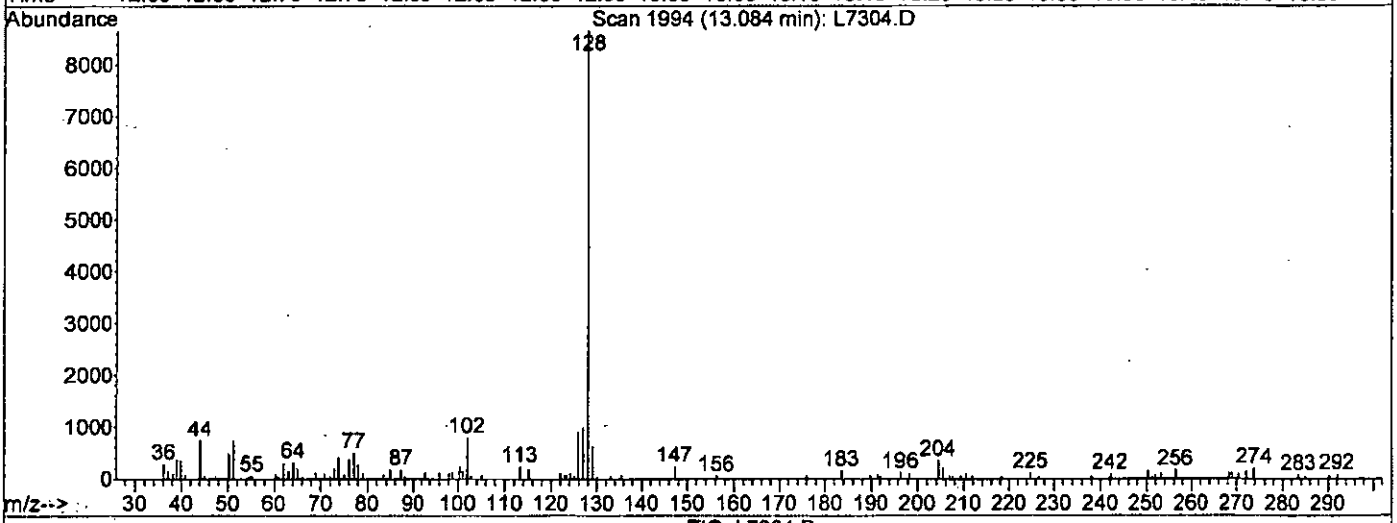
response 12958

Ion	Exp%	Act%
146.00	100	100
148.00	64.50	63.33
111.00	36.10	39.37
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7304.D Vial: 7
Acq On : 11 Sep 2014 11:31 am Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:17 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:09:26 2014
Response via : Single Level Calibration





TIC: L7304.D

(72) Naphthalen

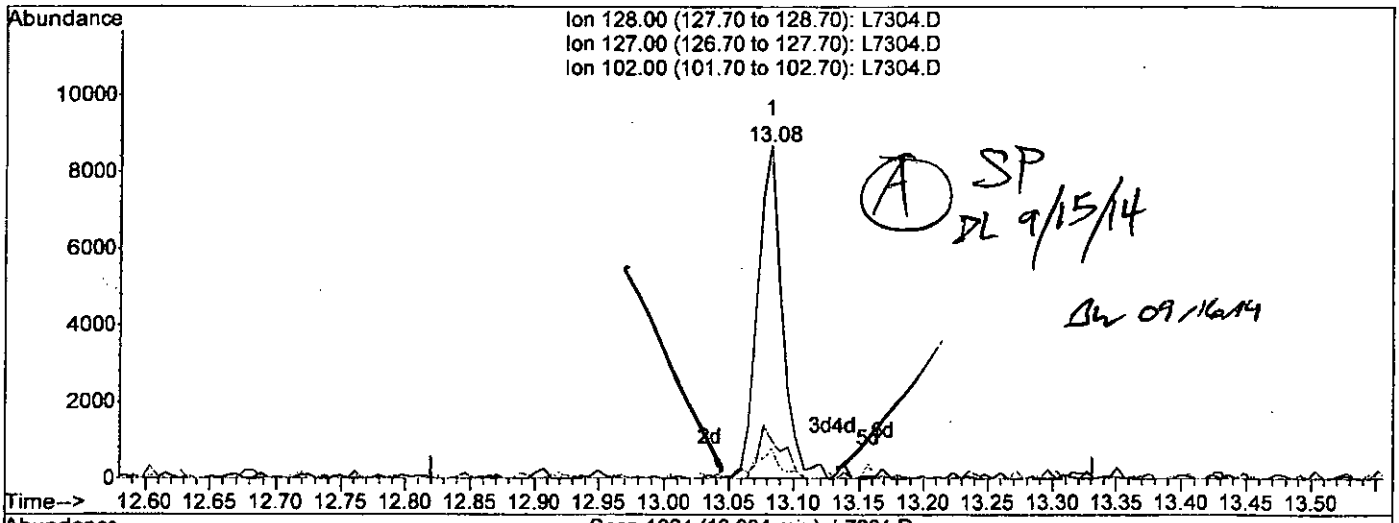
13.08min 0.58ug/L

response 11020

Ion	Exp%	Act%
128.00	100	100
127.00	13.50	15.03
102.00	8.80	8.87
0.00	0.00	0.00

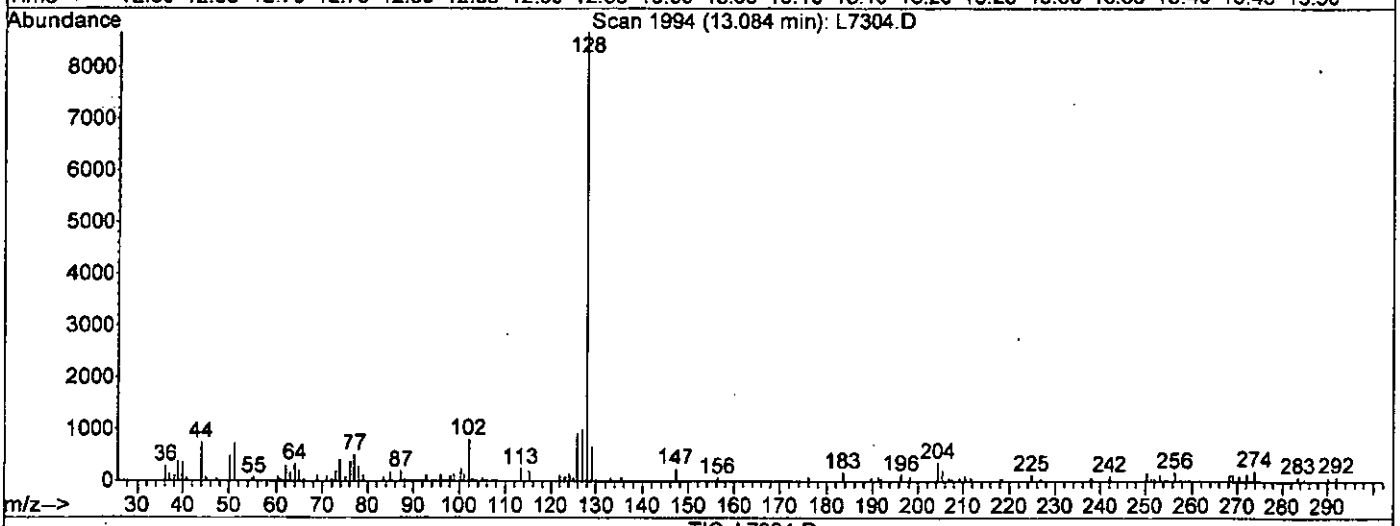
Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7304.D Vial: 7
Acq On : 11 Sep 2014 11:31 am Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:19 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:09:26 2014
Response via : Single Level Calibration



SP DL 9/15/14

BW 09/16/14



TIC: L7304.D

(72) Naphthalen

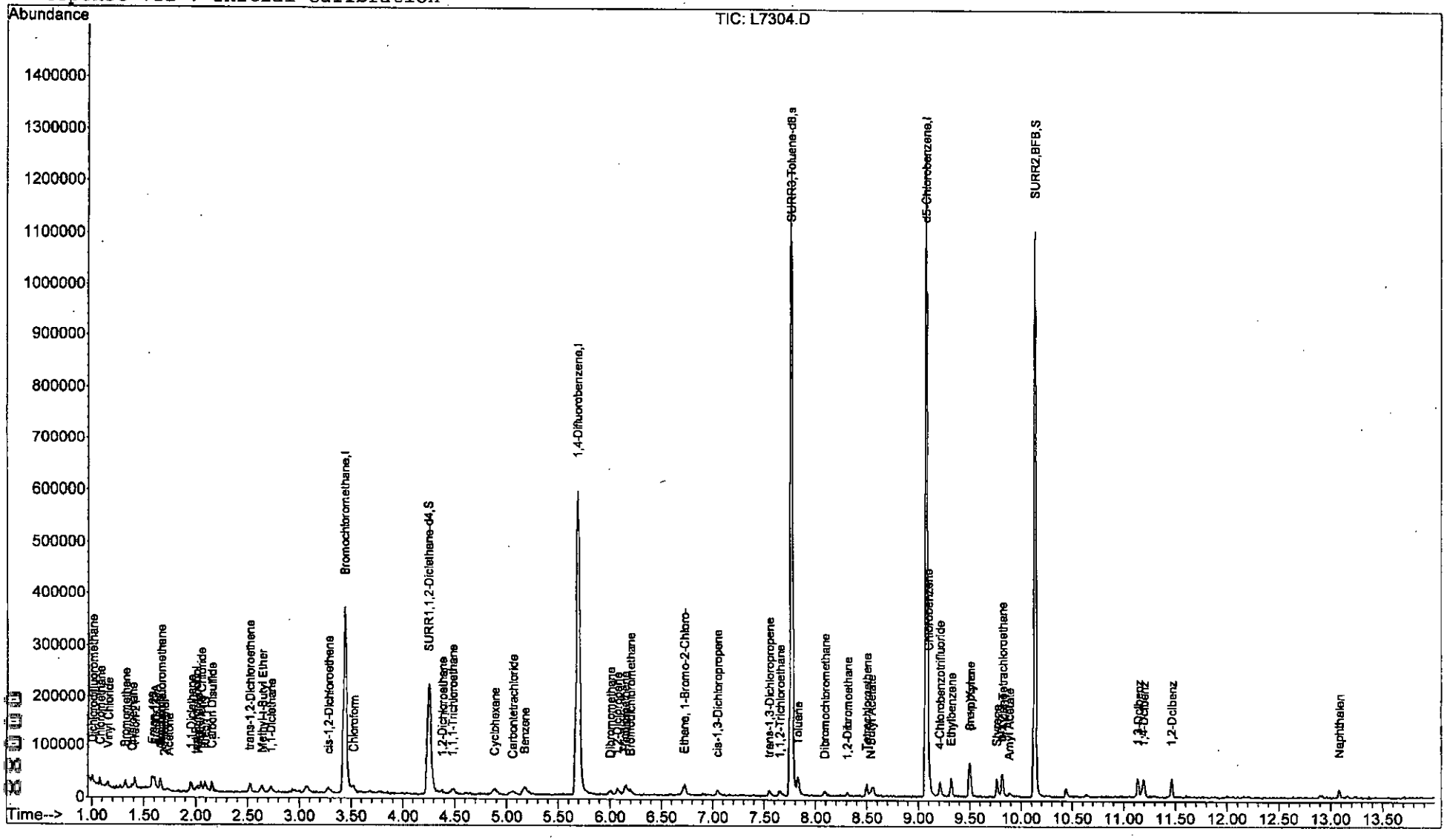
13.08min 0.60ug/L m

response 11392

Ion	Exp%	Act%
128.00	100	100
127.00	13.50	14.54
102.00	8.80	8.58
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7304.D Vial: 7
Acq On : 11 Sep 2014 11:31 am Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:19 2014 Quant Results File: 6240911.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:09:26 2014
Response via : Initial Calibration



Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7305.D Vial: 8
Acq On : 11 Sep 2014 12:15 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:27 2014 Quant Results File: 6240911.RES

Quant Method : I:\ACQUDATA\M...\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:19:32 2014
Response via : Initial Calibration
DataAcq Meth : 6240911

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	3.44	128	105409	30.00	ug/L		0.00
35) 1,4-Difluorobenzene	5.69	114	607133	30.00	ug/L		0.00
53) d5-Chlorobenzene	9.07	117	549105	30.00	ug/L		0.00
System Monitoring Compounds							
30) SURR1,1,2-Dichlethane-d4	4.25	65	208969	28.70	ug/L		0.00
Spiked Amount 30.000	Range 81 - 127		Recovery = 95.67%				
51) SURR3,Toluene-d8	7.76	98	708581	30.22	ug/L		0.00
Spiked Amount 30.000	Range 83 - 120		Recovery = 100.73%				
68) SURR2,BFB	10.13	95	277244	30.31	ug/L		0.00
Spiked Amount 30.000	Range 79 - 123		Recovery = 101.03%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.01	85	12770	1.11	ug/L		88
3) Chloromethane	1.08	50	10358	0.93	ug/L		91
4) Vinyl Chloride	1.15	62	11448	1.04	ug/L		95
5) Bromomethane	1.33	94	7477	0.97	ug/L		80
6) Chloroethane	1.39	64	8064	1.18	ug/L		94
7) Freon-21	1.42	67	18753	0.95	ug/L		90
8) Freon-123	1.58	83	15460	1.03	ug/L		89
9) Freon-123A	1.60	67	12971m	1.00	ug/L		
10) Acrolein	1.67	56	5296	4.89	ug/L		98
11) Trichlorofluoromethane	1.66	101	19670	1.02	ug/L		99
12) Acetonitrile	1.68	41	5492m	6.20	ug/L		
13) 2-Propanol	1.71	45	5156m	18.57	ug/L		
14) Acetone	1.73	43	5680	2.45	ug/L		72
15) 1,1-Dichlethene	1.95	96	8435	0.92	ug/L		93
16) tert Butyl Alcohol	1.99	59	7642m	17.55	ug/L		
17) Acrylonitrile	2.01	53	7819	4.08	ug/L		86
18) Methylene Chloride	2.05	84	8883	1.06	ug/L		97
19) Freon 113	2.09	101	9713	0.96	ug/L		92
20) Carbon Disulfide	2.16	76	28466	0.93	ug/L	#	92
21) trans-1,2-Dichloroethene	2.52	96	9714	1.00	ug/L		99
22) Methyl-t-Butyl Ether	2.64	73	19461	0.91	ug/L		98
23) 1,1-Dichlethane	2.72	63	16990	0.95	ug/L	#	90
25) cis-1,2-Dichloroethene	3.28	96	9958m	0.97	ug/L		
26) Chloroform	3.51	83	17672	0.97	ug/L		97
27) Ethyl Acetate	3.66	43	6143m	1.36	ug/L		
31) 1,2-Dichloroethane	4.38	62	11210	0.96	ug/L	#	90
32) 1,1,1-Trichloroethane	4.48	97	16921	1.01	ug/L	#	85
33) 2-Methyl-1,3-Dioxolane	4.66	73	2621m	4.09	ug/L		
34) Cyclohexane	4.88	56	13914	0.95	ug/L		94
36) Carbontetrachloride	5.05	117	13098	0.99	ug/L	#	70
37) Isopropyl Acetate	5.21	43	9014m	0.84	ug/L		
38) Benzene	5.18	78	34668	1.02	ug/L	#	92
39) Dibromomethane	6.00	93	5707	1.05	ug/L		89
40) 1,2-Dichpropane	6.07	63	8473	0.92	ug/L	#	88
41) Trichloroethene	6.15	130	11462	1.09	ug/L		93
42) Heptane	6.16	43	9840	1.15	ug/L		94
43) Bromodichloromethane	6.20	83	12896	0.98	ug/L		97
44) Epichlorohydrin	6.67	57	2058m	4.69	ug/L		

DL 9/15/14

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

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7305.D Vial: 8
Acq On : 11 Sep 2014 12:15 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:27 2014 Quant Results File: 6240911.RES

Quant Method : I:\ACQUDATA\M...\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:19:32 2014
Response via : Initial Calibration
DataAcq Meth : 6240911

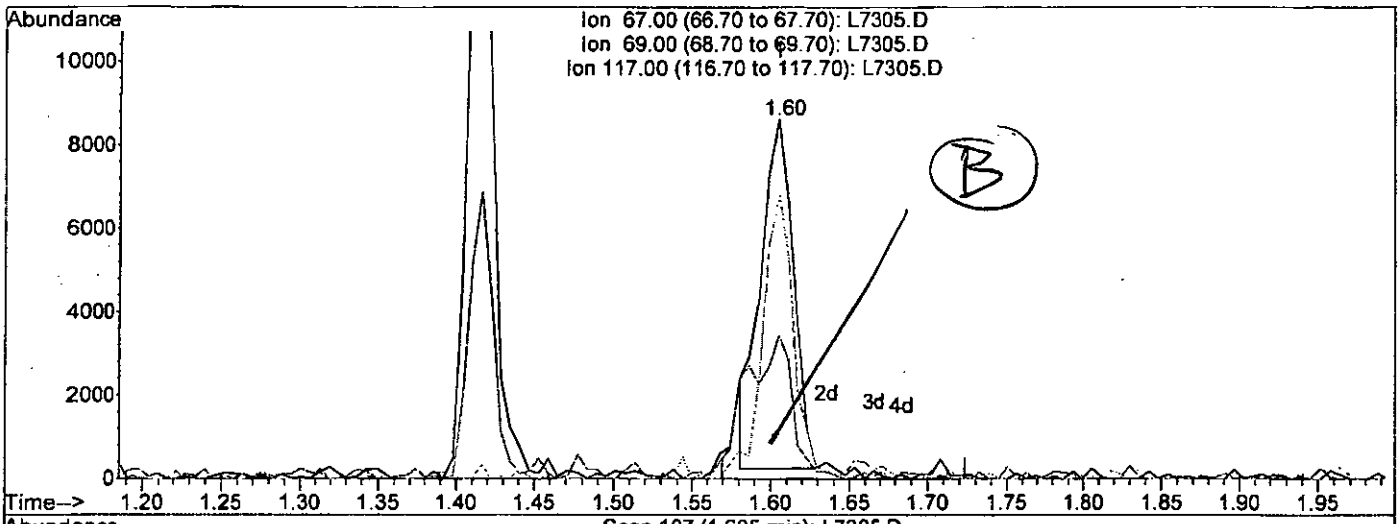
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
45)	Ethane, 1-Bromo-2-Chloro-	6.70	63	10769	1.02	ug/L	#	96
46)	2-Chloroethylvinyl Ether	6.90	63	4381	1.08	ug/L	#	69
47)	cis-1,3-Dichloropropene	7.04	75	12960	0.95	ug/L		95
49)	trans-1,3-Dichloropropene	7.54	75	11060	0.93	ug/L		99
50)	1,1,2-Trichloroethane	7.66	97	6605	1.03	ug/L		90
52)	Toluene	7.83	91	38314	1.04	ug/L		97
54)	Dibromochloromethane	8.09	129	8624	0.95	ug/L		90
56)	1,2-Dibromoethane	8.31	107	6831	0.98	ug/L	#	98
57)	Tetrachloroethene	8.50	164	9493	1.07	ug/L		94
58)	N-Butyl Acetate	8.53	43	15831m	1.94	ug/L		
59)	Chlorobenzene	9.10	112	26716	1.06	ug/L		94
60)	4-Chlorobenzotrifluoride	9.21	180	14577	1.01	ug/L		96
61)	Ethylbenzene	9.32	106	12912	0.99	ug/L		94
62)	(m+p)Xylene	9.50	106	33837	2.07	ug/L		97
63)	Bromoform	9.50	173	6587	1.12	ug/L	#	81
64)	Styrene	9.77	104	25749	0.96	ug/L		99
65)	1,1,2,2-Tetrachloroethane	9.81	83	7847	1.02	ug/L		90
66)	o-Xylene	9.81	106	16777	1.06	ug/L		96
67)	Amyl Acetate	9.88	43	9534m	0.88	ug/L		
69)	1,3-Dclbenz	11.14	146	24358	1.06	ug/L		98
70)	1,4-Dclbenz	11.20	146	24919	1.09	ug/L		89
71)	1,2-Dclbenz	11.46	146	22607	1.08	ug/L		94
72)	Naphthalen	13.08	128	19039	1.00	ug/L		98

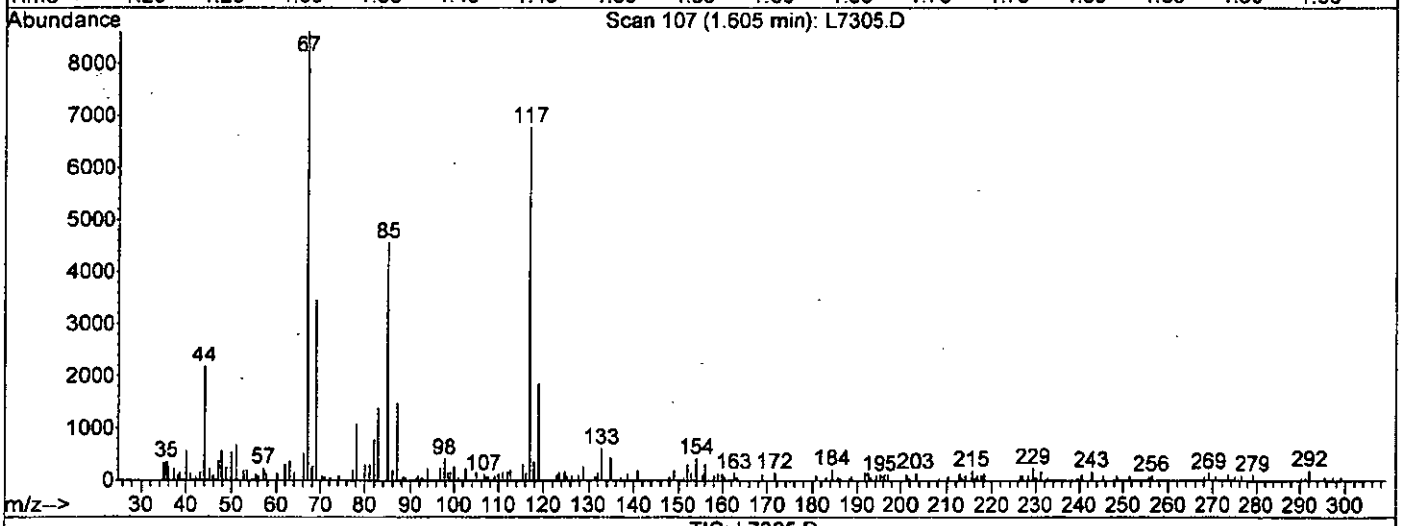
DL 9/15/14

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

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7305.D Vial: 8
Acq On : 11 Sep 2014 12:15 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:20 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:19:32 2014
Response via : Multiple Level Calibration





TIC: L7305.D

(9) Freon-123A

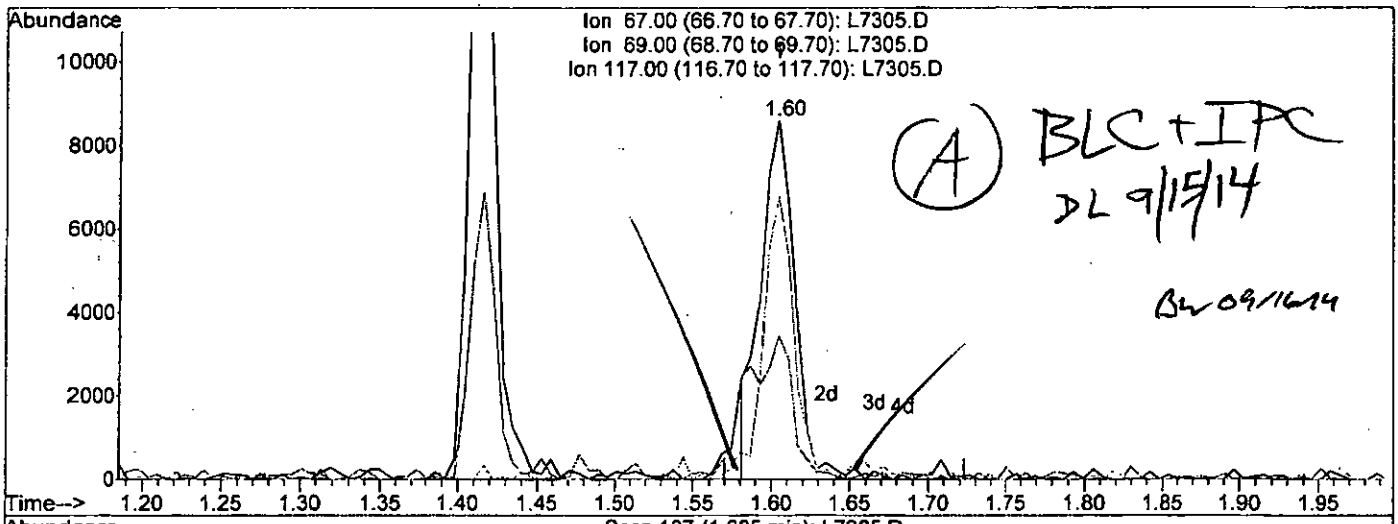
1.60min 0.92ug/L

response 11997

Ion	Exp%	Act%
67.00	100	100
69.00	34.40	40.02
117.00	70.60	78.72
0.00	0.00	0.00

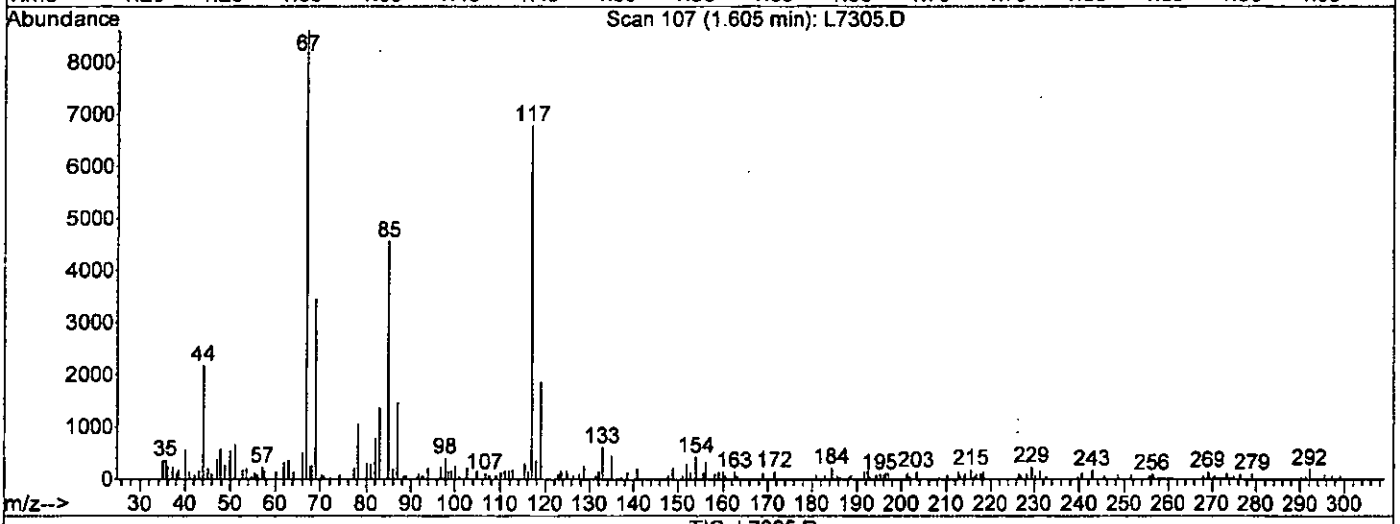
Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7305.D Vial: 8
Acq On : 11 Sep 2014 12:15 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:20 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:19:32 2014
Response via : Multiple Level Calibration



(A) BLC+IPC DL 9/15/14

BW 09/16/14



TIC: L7305.D

(9) Freon-123A

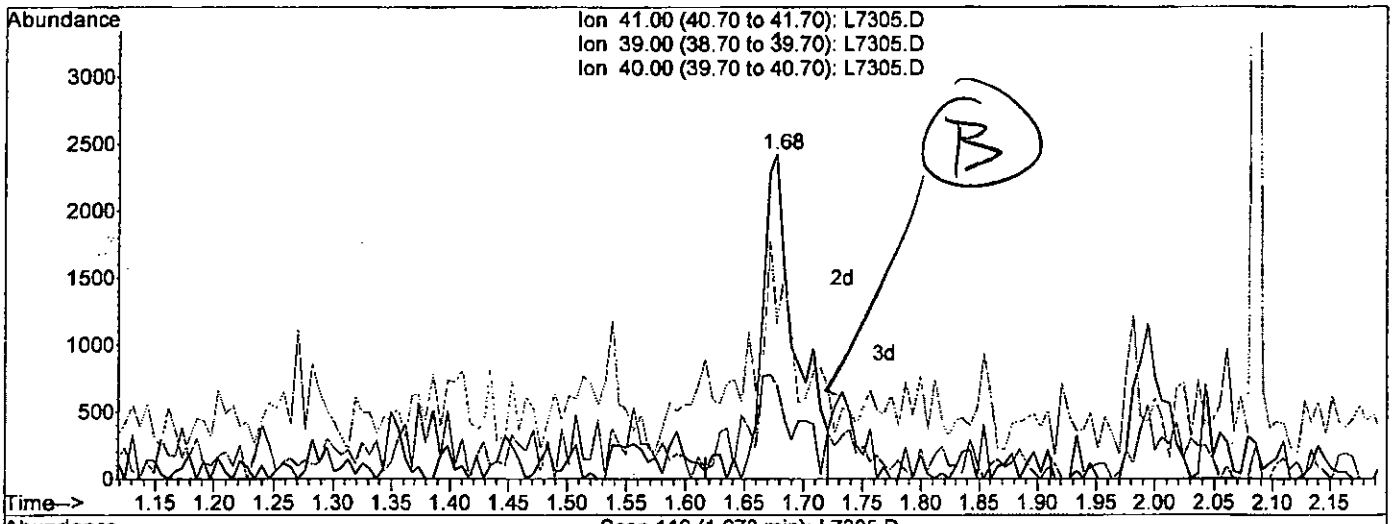
1.60min 1.00ug/L m

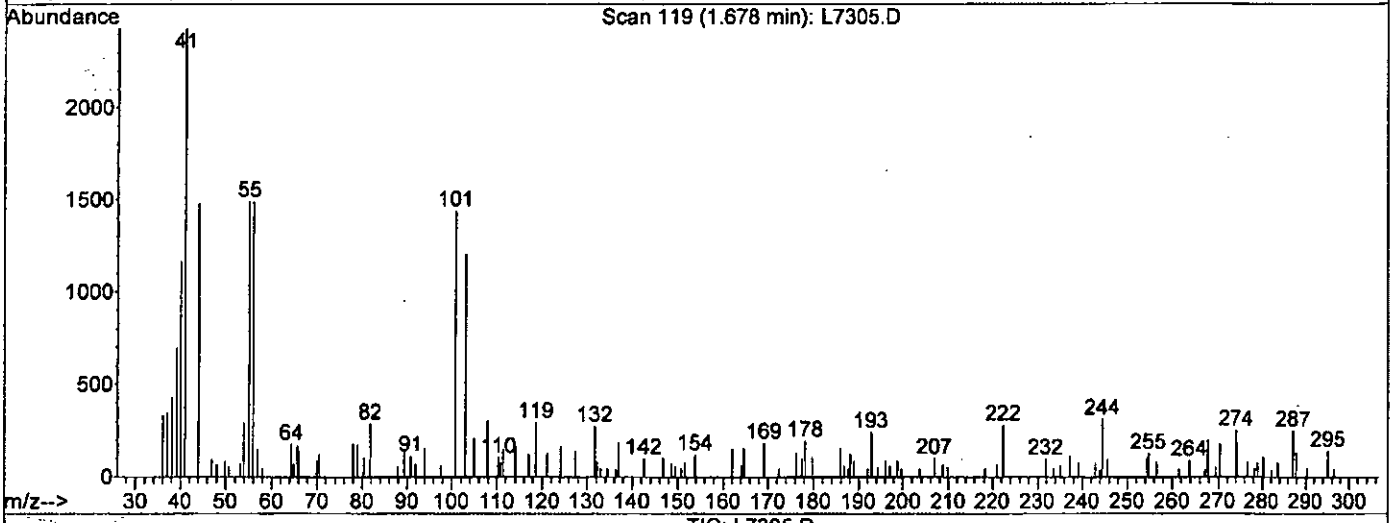
response 12971

Ion	Exp%	Act%
67.00	100	100
69.00	34.40	40.02
117.00	70.60	78.72
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7305.D Vial: 8
Acq On : 11 Sep 2014 12:15 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:20 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:19:32 2014
Response via : Multiple Level Calibration





TIC: L7305.D

(12) Acetonitrile

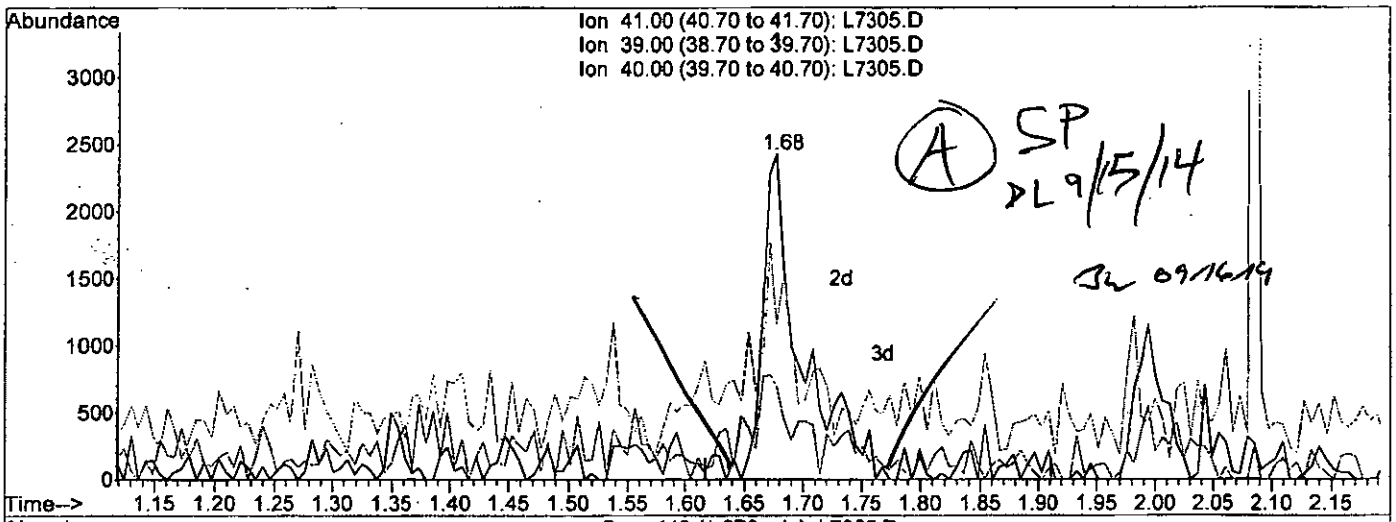
1.68min 5.17ug/L

response 4580

Ion	Exp%	Act%
41.00	100	100
39.00	24.30	28.62
40.00	50.80	47.82
0.00	0.00	0.00

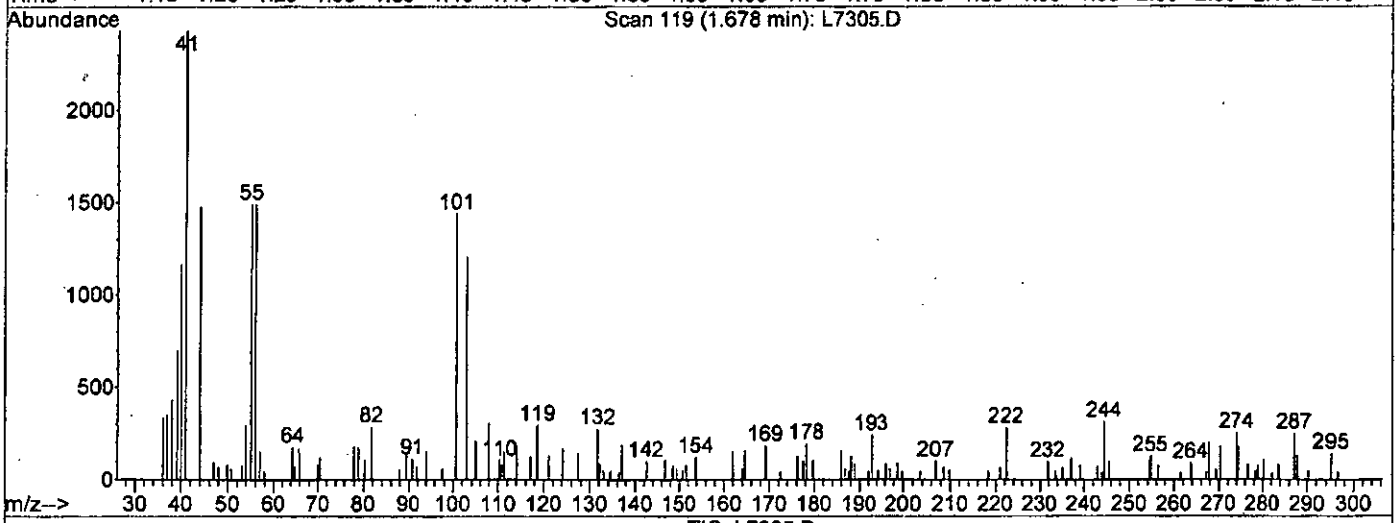
Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7305.D Vial: 8
Acq On : 11 Sep 2014 12:15 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:20 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:19:32 2014
Response via : Multiple Level Calibration



A SP 9/15/14

JL 09/16/14



TIC: L7305.D

(12) Acetonitrile

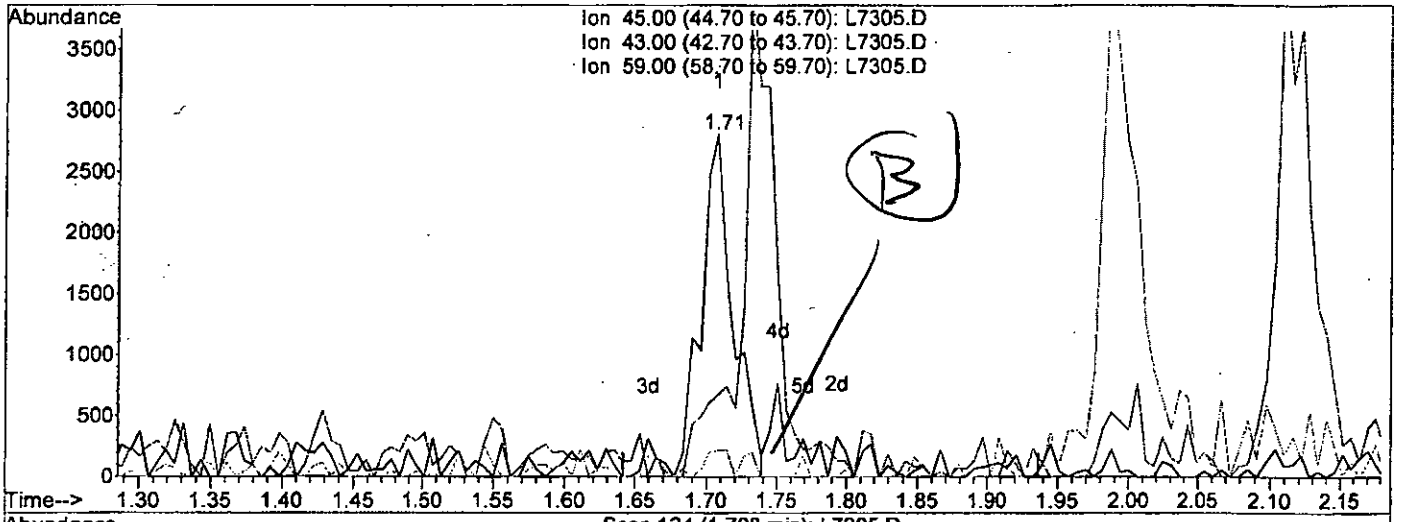
1.68min 6.20ug/L m

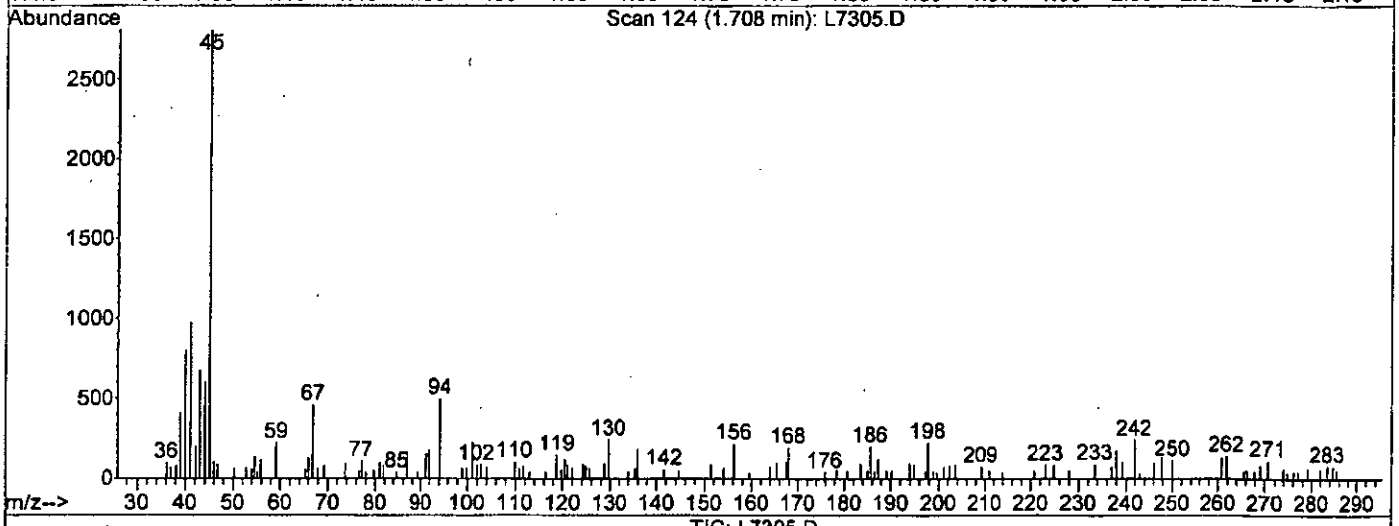
response 5492

Ion	Exp%	Act%
41.00	100	100
39.00	24.30	28.62
40.00	50.80	47.82
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7305.D Vial: 8
Acq On : 11 Sep 2014 12:15 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:20 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:19:32 2014
Response via : Multiple Level Calibration





TIC: L7305.D

(13) 2-Propanol

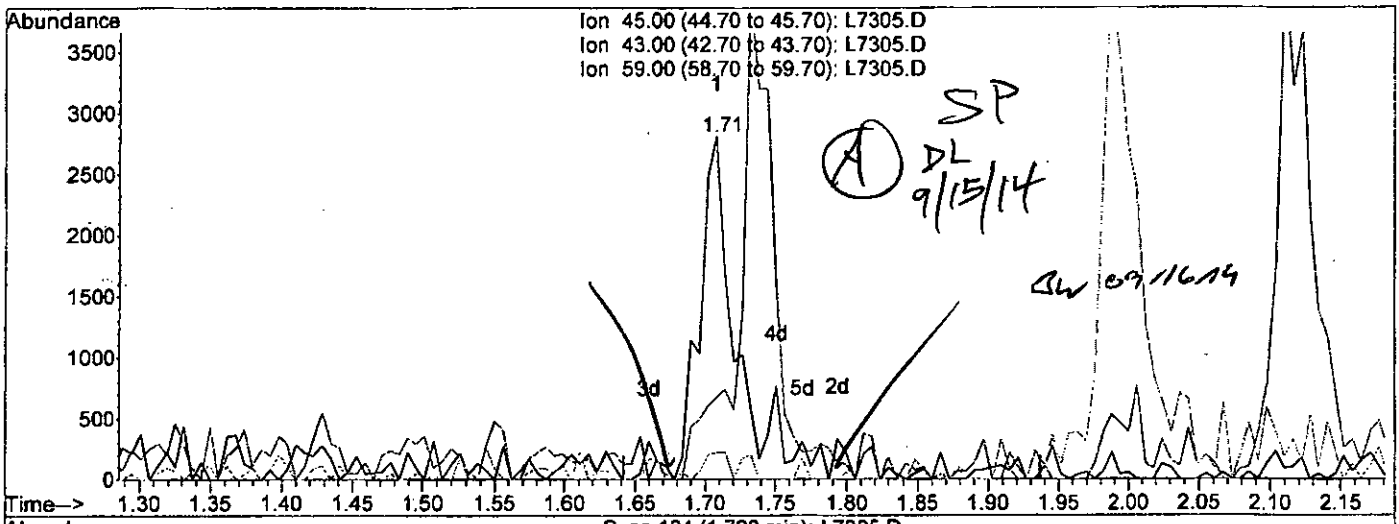
1.71min 15.80ug/L

response 4388

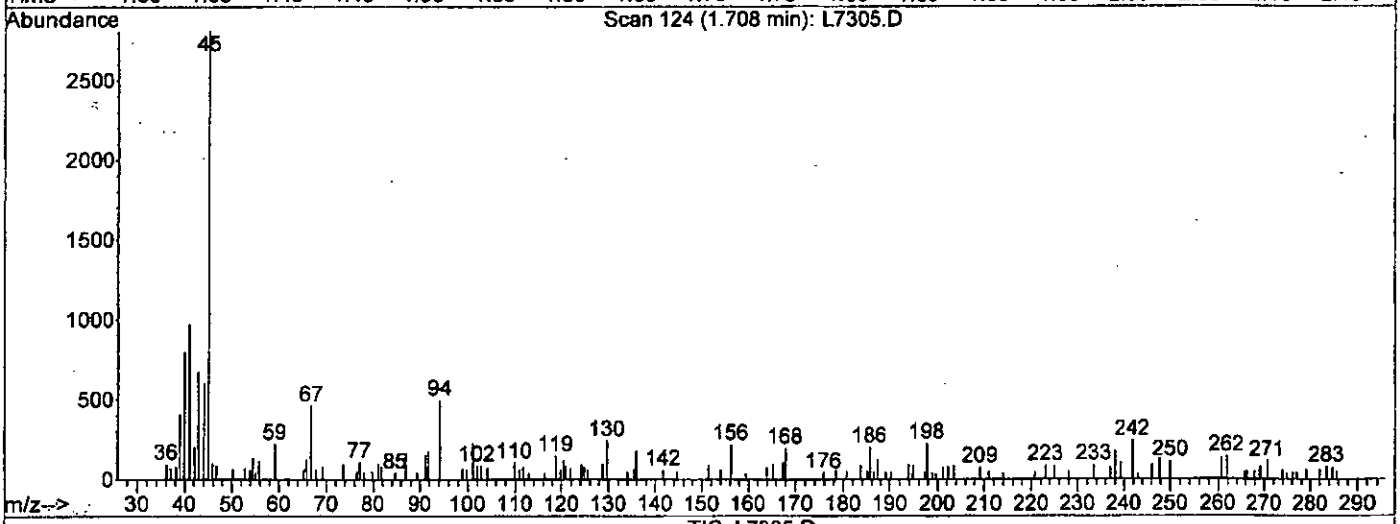
Ion	Exp%	Act%
45.00	100	100
43.00	20.00	23.90
59.00	4.30	7.87
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7305.D Vial: 8
Acq On : 11 Sep 2014 12:15 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:21 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:19:32 2014
Response via : Multiple Level Calibration



SP
DL 9/15/14
GW 09/16/14



TIC: L7305.D

(13) 2-Propanol

1.71min 18.57ug/L m

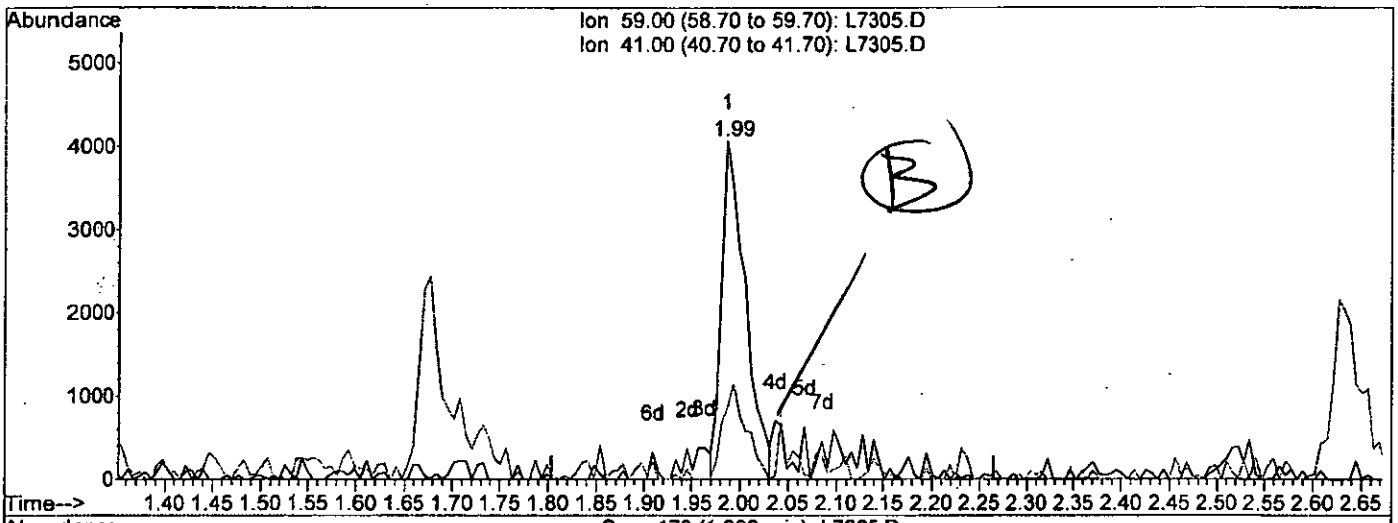
response 5156

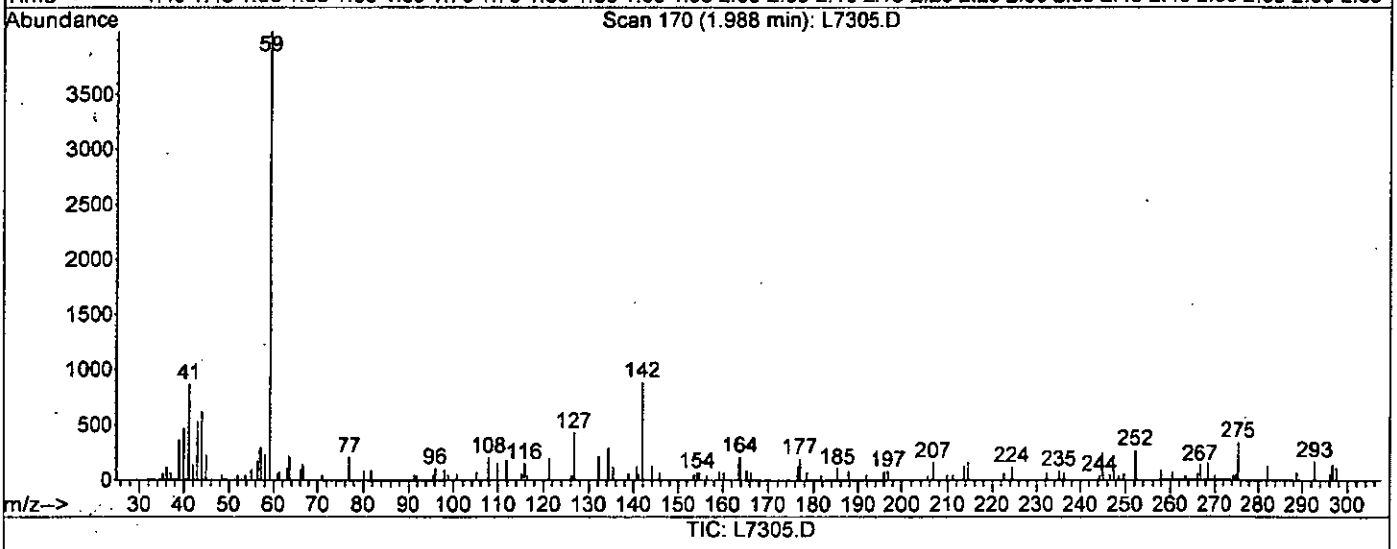
Ion	Exp%	Act%
45.00	100	100
43.00	20.00	23.90
59.00	4.30	7.87
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7305.D Vial: 8
Acq On : 11 Sep 2014 12:15 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:21 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:19:32 2014
Response via : Multiple Level Calibration





TIC: L7305.D

(16) tert Butyl Alcohol

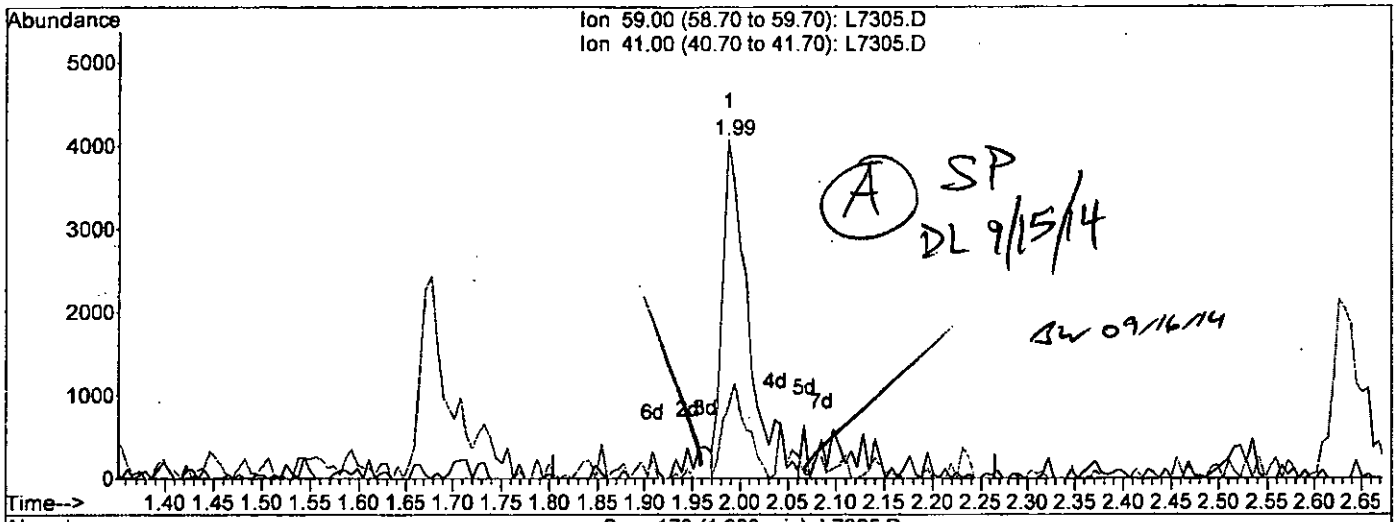
1.99min 16.07ug/L

response 7000

Ion	Exp%	Act%
59.00	100	100
41.00	23.50	21.26
0.00	0.00	0.00
0.00	0.00	0.00

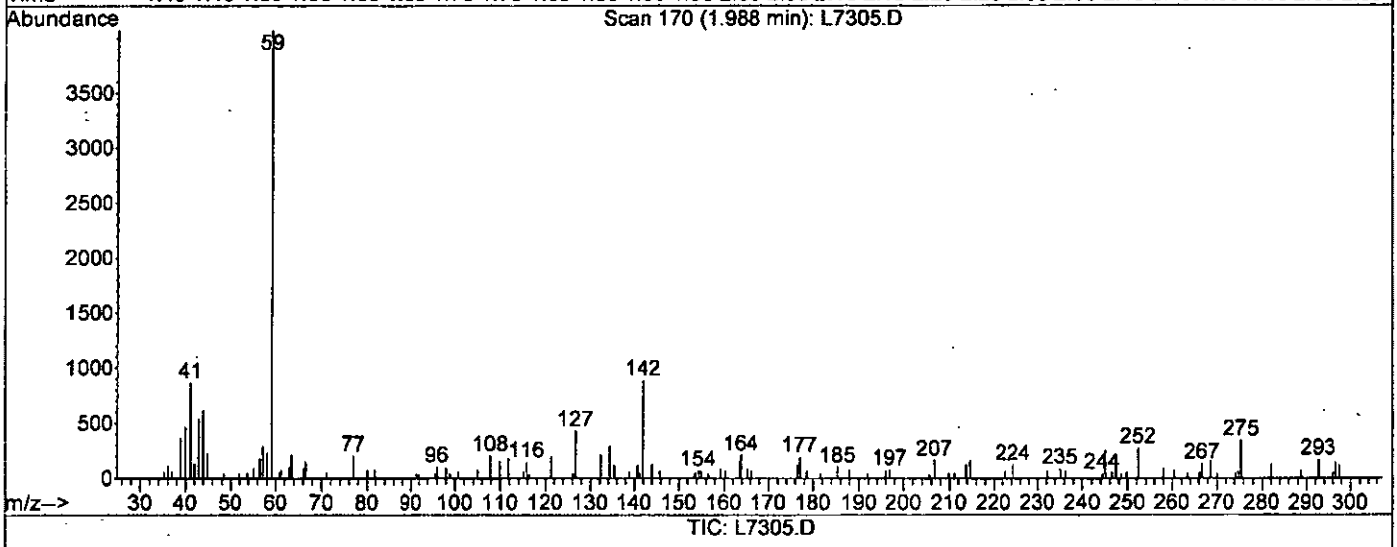
Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7305.D Vial: 8
Acq On : 11 Sep 2014 12:15 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:21 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:19:32 2014
Response via : Multiple Level Calibration



A SP DL 9/15/14

BW 09/16/14



TIC: L7305.D

(16) tert Butyl Alcohol

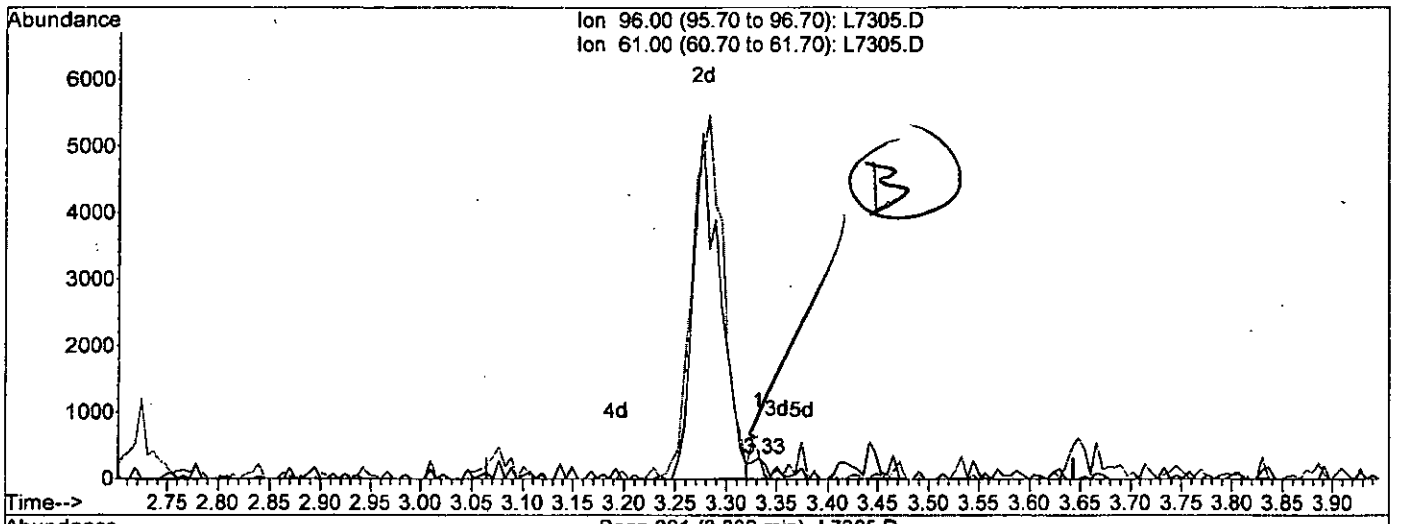
1.99min 17.55ug/L m

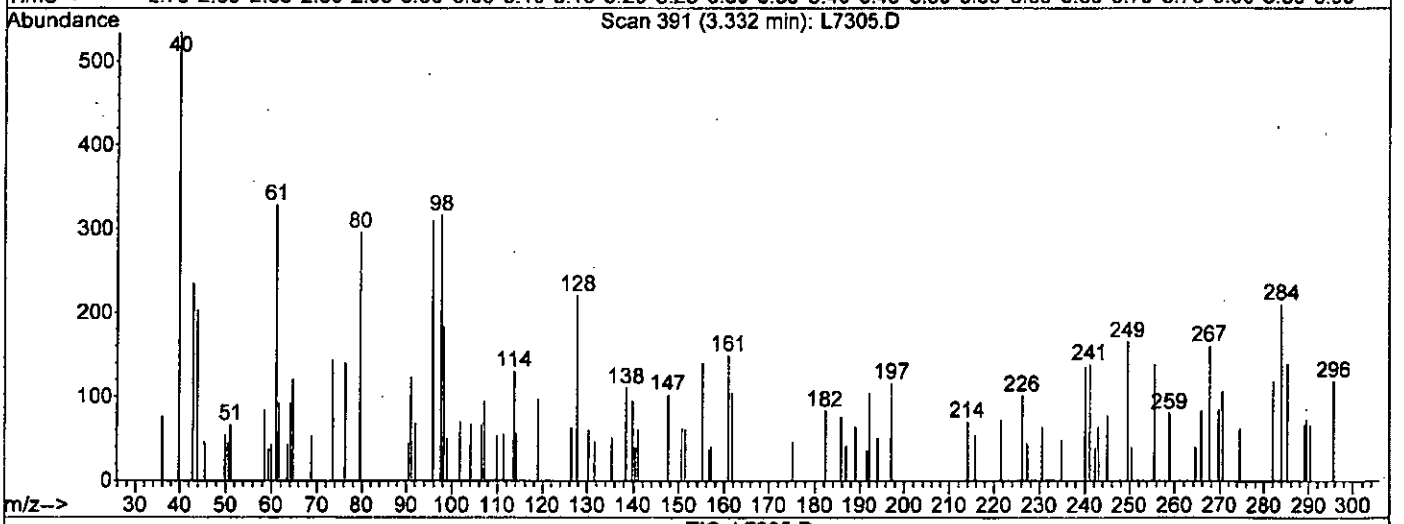
response 7642

Ion	Exp%	Act%
59.00	100	100
41.00	23.50	21.26
0.00	0.00	0.00
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7305.D Vial: 8
Acq On : 11 Sep 2014 12:15 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:21 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:19:32 2014
Response via : Multiple Level Calibration





TIC: L7305.D

(25) cis-1,2-Dichloroethene

3.33min 0.03ug/L

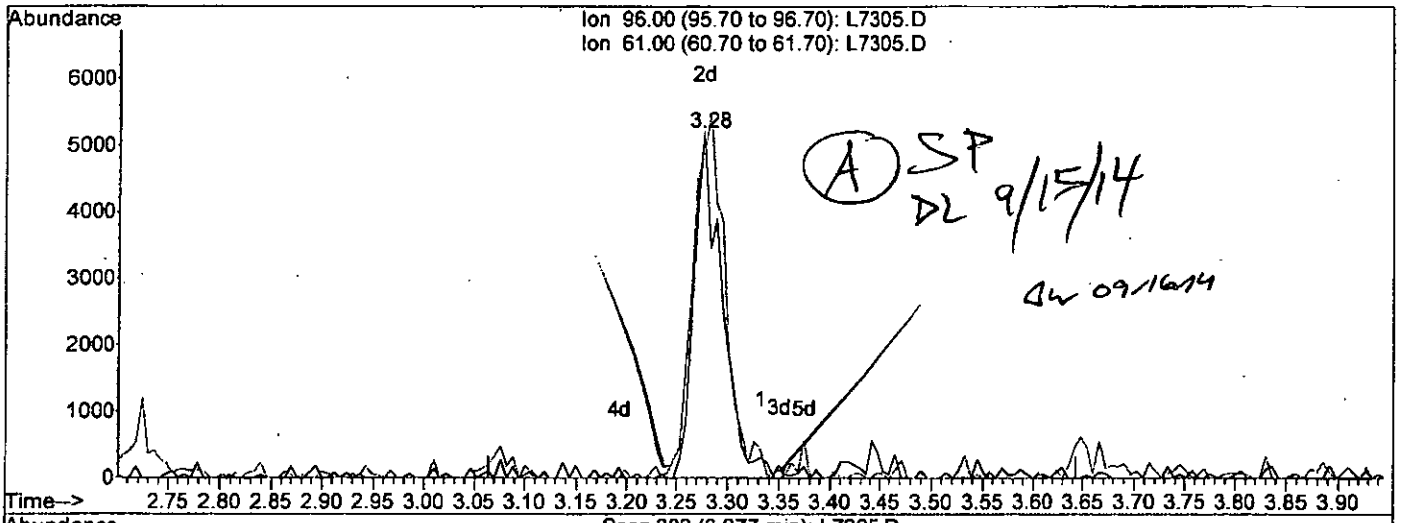
response 303

Ion	Exp%	Act%
96.00	100	100
61.00	127.50	135.92
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

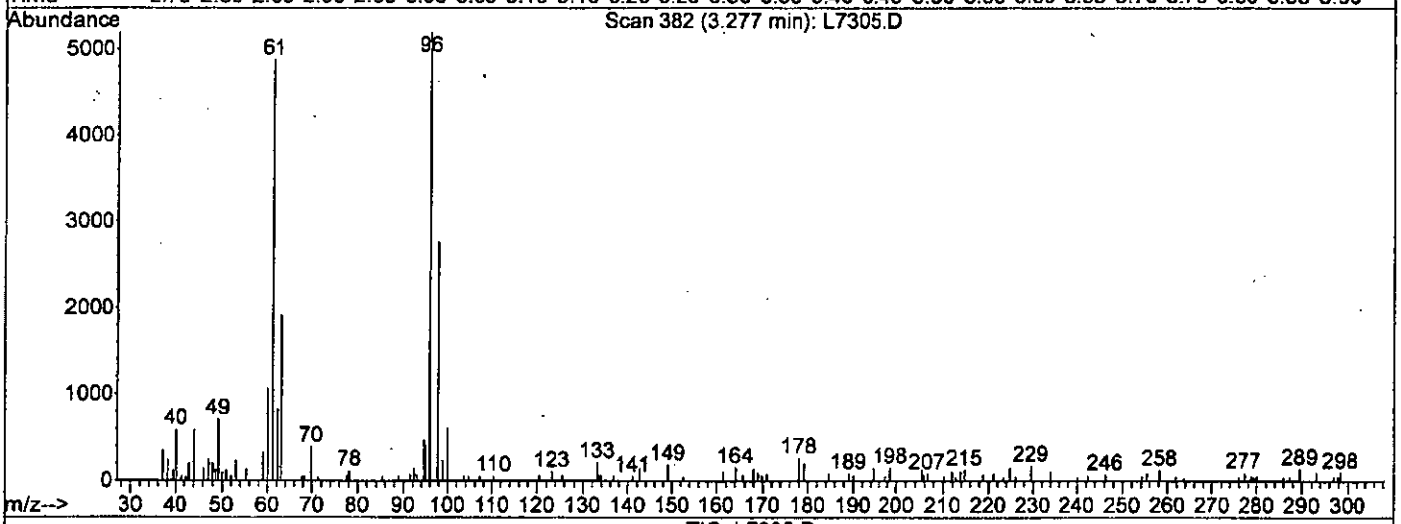
Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7305.D Vial: 8
Acq On : 11 Sep 2014 12:15 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:22 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:19:32 2014
Response via : Multiple Level Calibration



A SP DL 9/15/14

QA 09/16/14



TIC: L7305.D

(25) cis-1,2-Dichloroethene

3.28min 0.97ug/L m

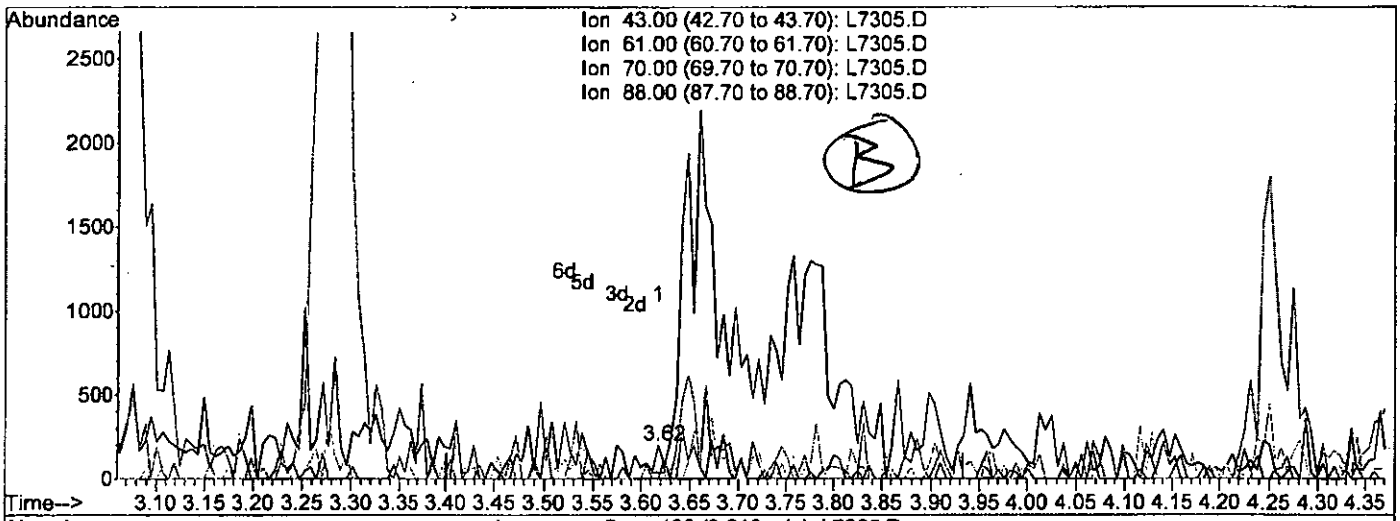
response 9958

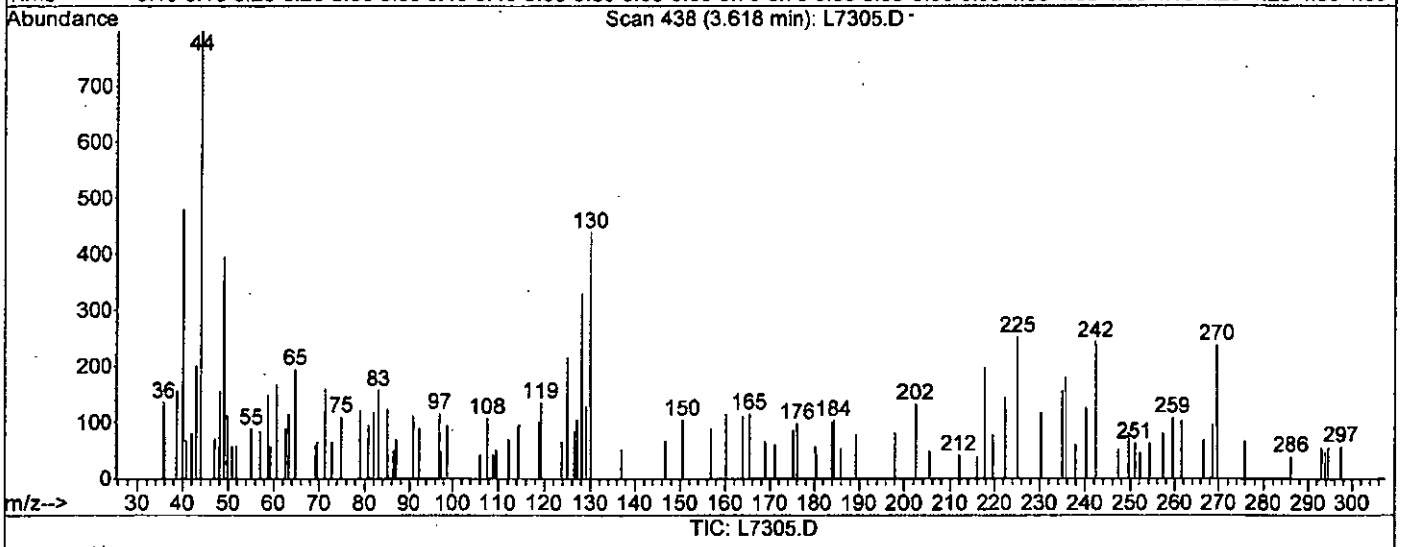
Ion	Exp%	Act%
96.00	100	100
61.00	127.50	93.87#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7305.D Vial: 8
Acq On : 11 Sep 2014 12:15 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:22 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:19:32 2014
Response via : Single Level Calibration





TIC: L7305.D

(27) Ethyl Acetate

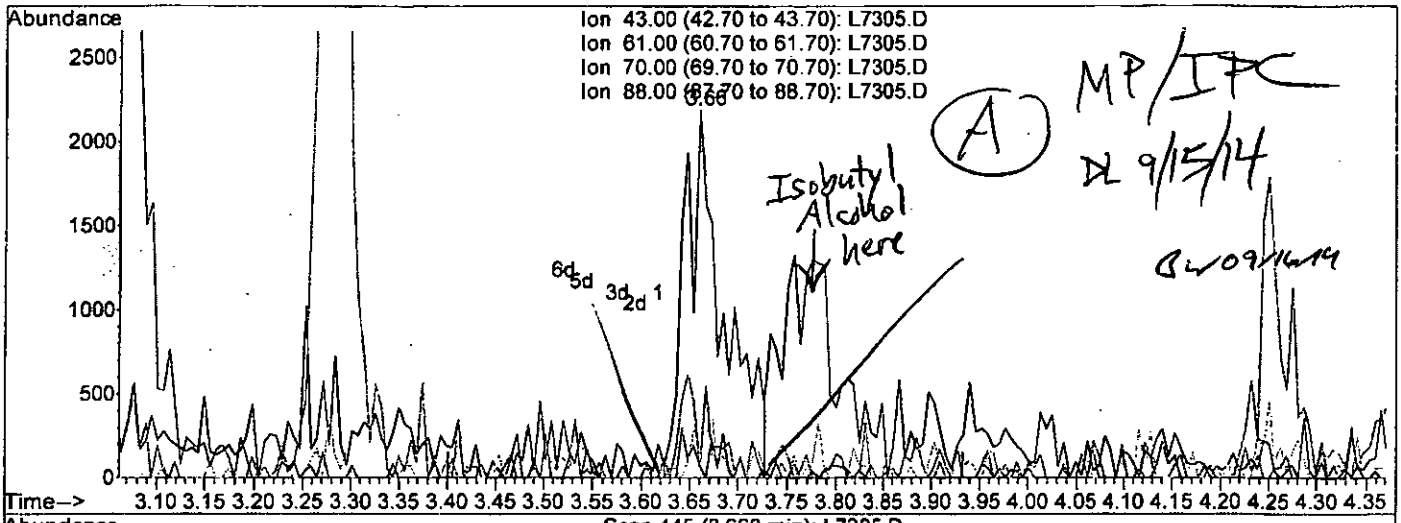
3.62min 0.02ug/L

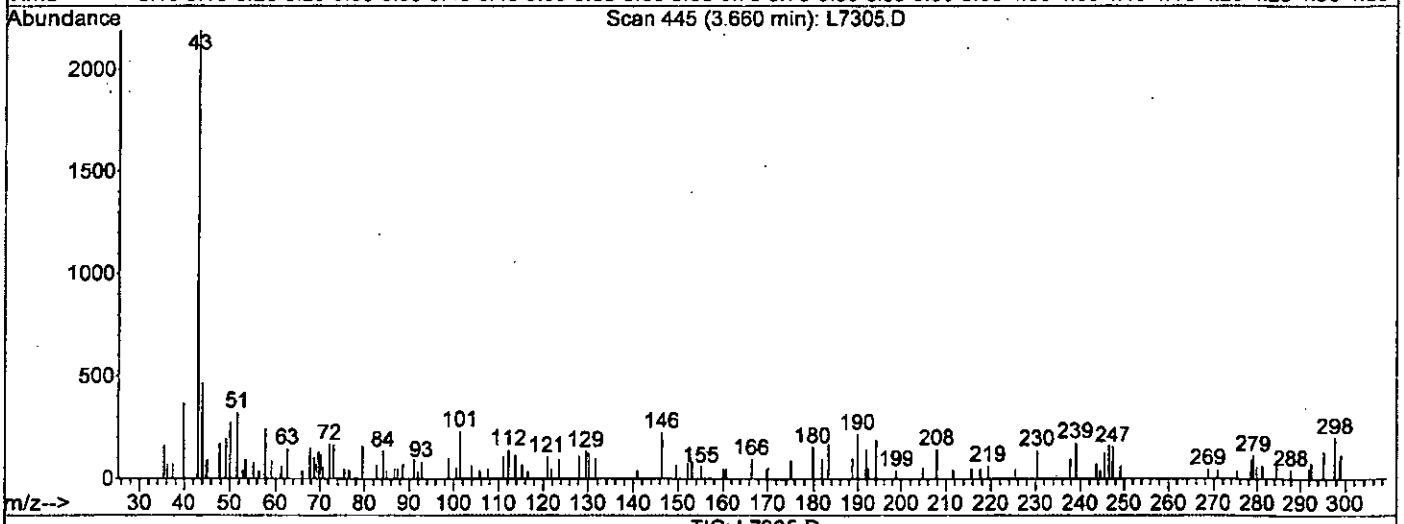
response 73

Ion	Exp%	Act%
43.00	100	100
61.00	12.60	0.00#
70.00	8.30	0.00#
88.00	4.00	0.00#

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7305.D Vial: 8
Acq On : 11 Sep 2014 12:15 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:22 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:19:32 2014
Response via : Single Level Calibration





TIC: L7305.D

(27) Ethyl Acetate

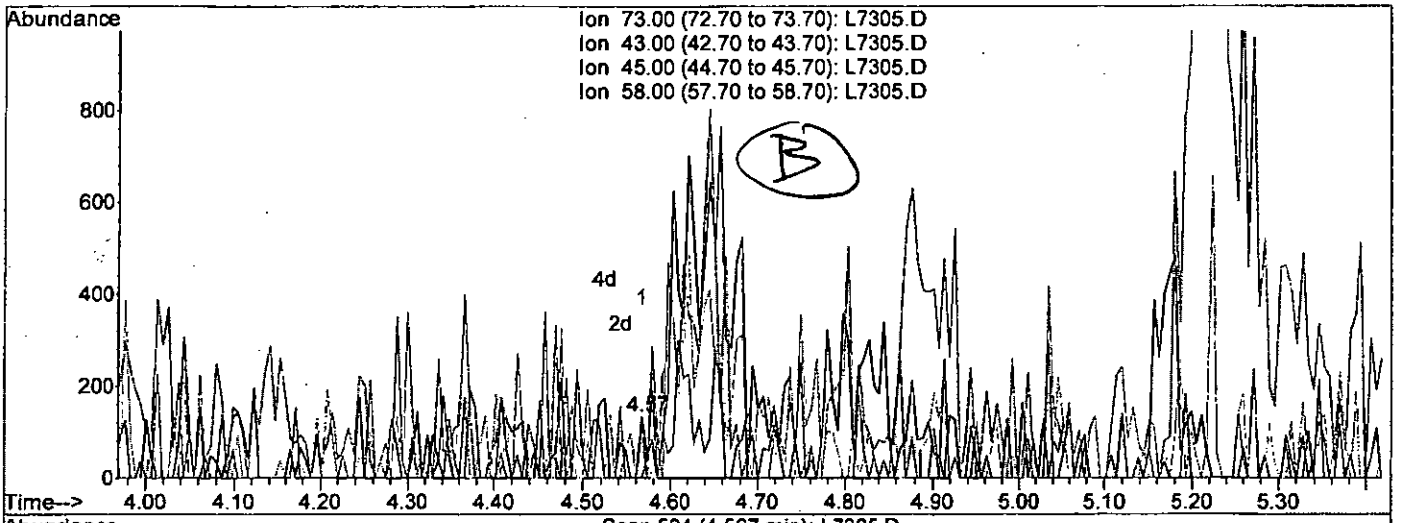
3.66min 1.36ug/L m

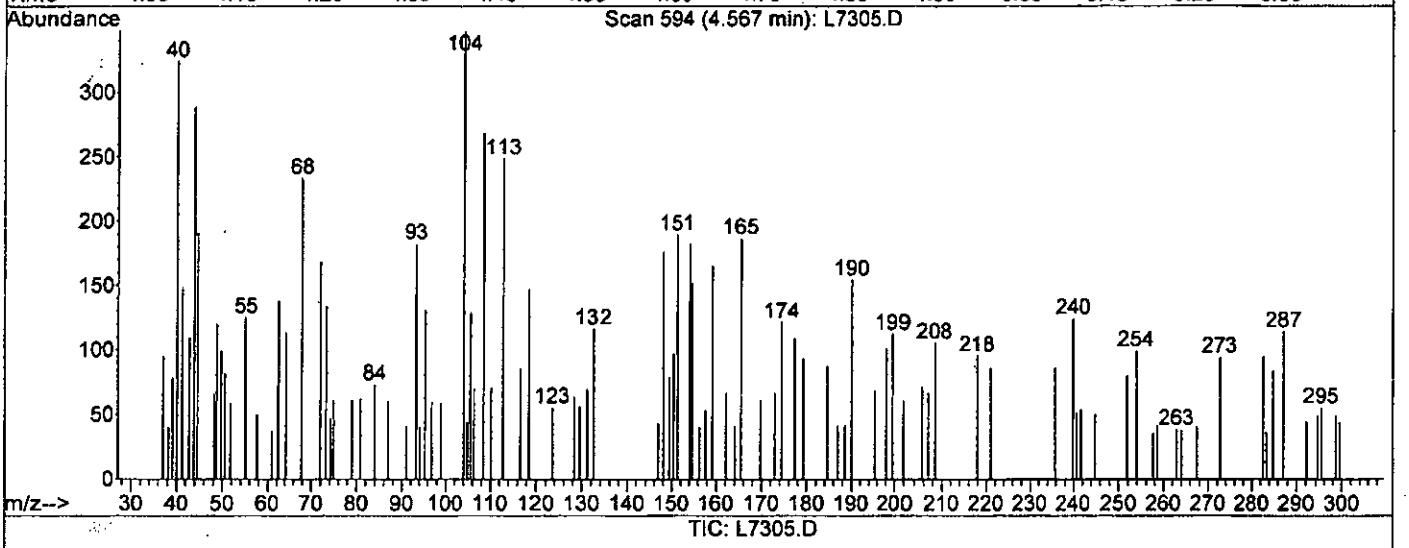
response 6143

Ion	Exp%	Act%
43.00	100	100
61.00	12.60	2.79#
70.00	8.30	5.94#
88.00	4.00	3.15#

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7305.D Vial: 8
Acq On : 11 Sep 2014 12:15 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:23 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:19:32 2014
Response via : Multiple Level Calibration





TIC: L7305.D

(33) 2-Methyl-1,3-Dioxolane

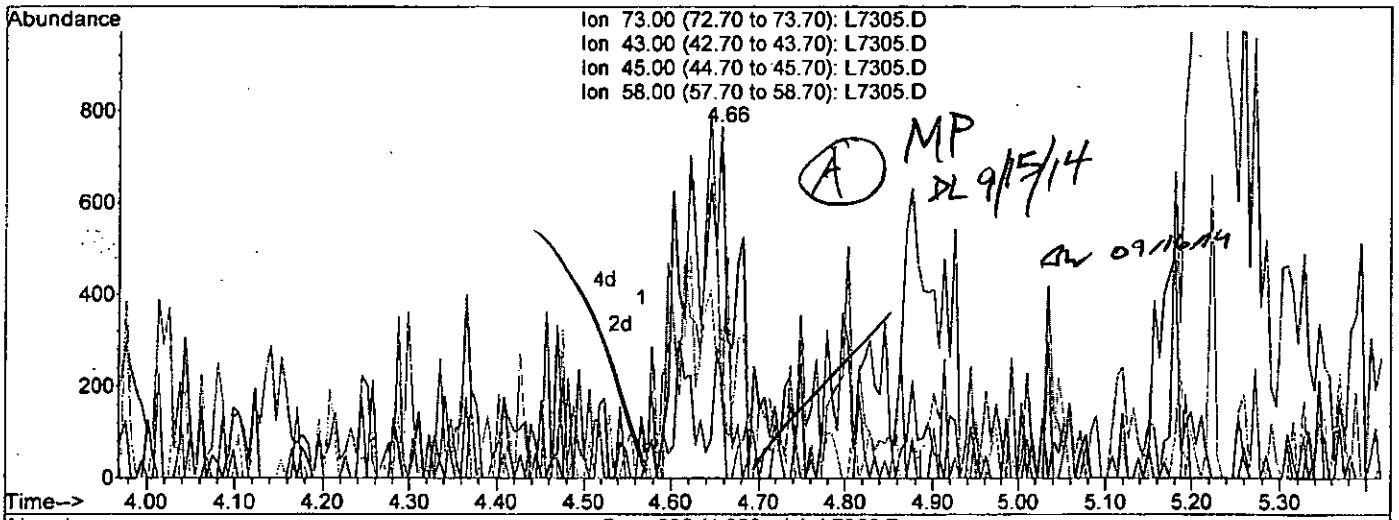
4.57min 0.15ug/L

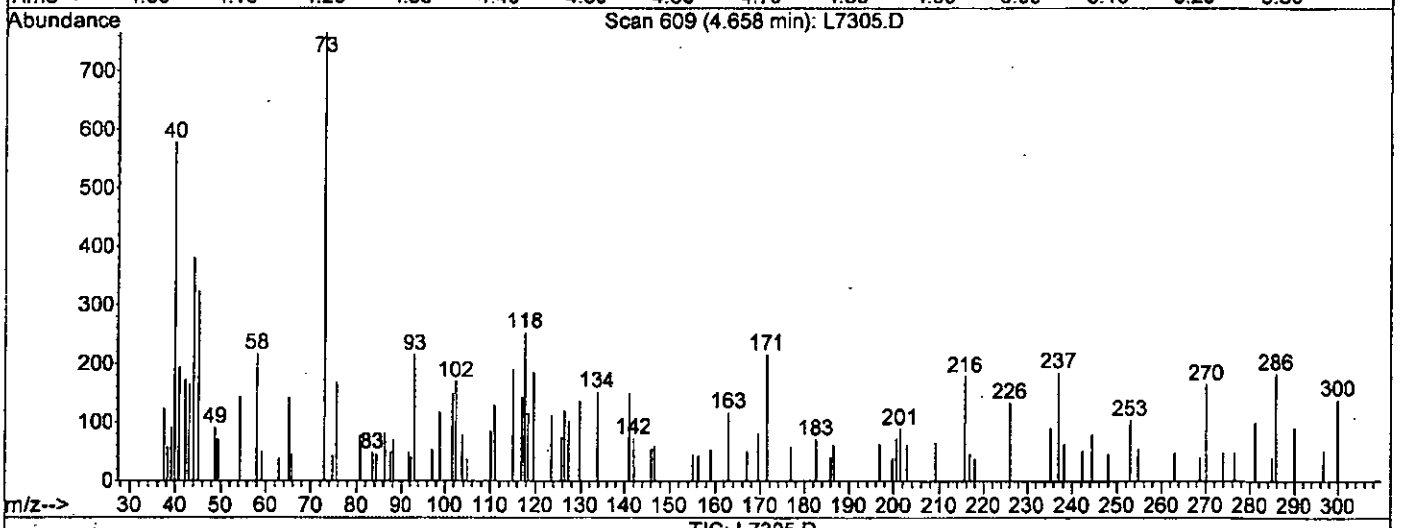
response 97

Ion	Exp%	Act%
73.00	100	100
43.00	44.50	81.34#
45.00	47.20	0.00#
58.00	20.50	0.00#

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7305.D Vial: 8
Acq On : 11 Sep 2014 12:15 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:23 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:19:32 2014
Response via : Multiple Level Calibration





TIC: L7305.D

(33) 2-Methyl-1,3-Dioxolane

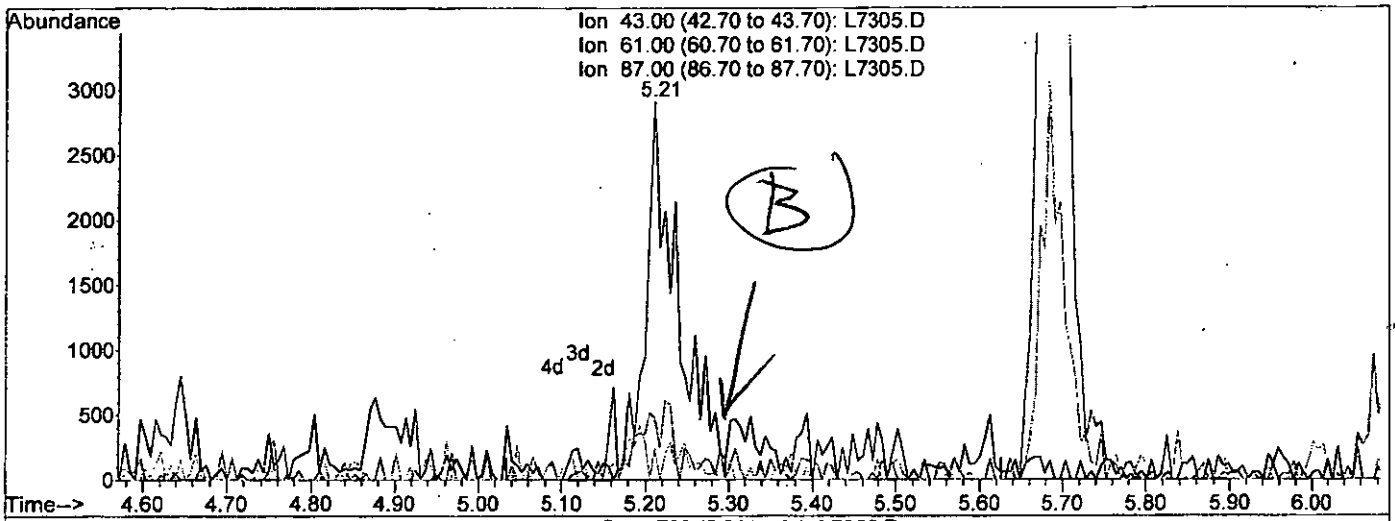
4.66min 4.09ug/L m

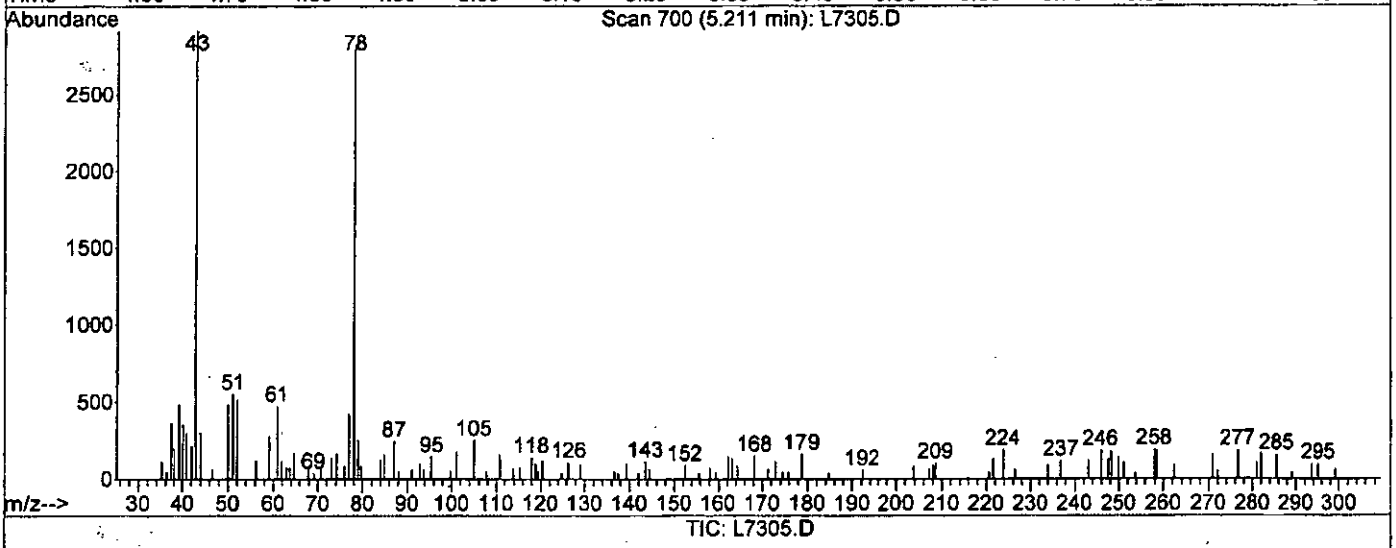
response 2621

Ion	Exp%	Act%
73.00	100	100
43.00	44.50	21.44#
45.00	47.20	42.22
58.00	20.50	28.24#

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7305.D Vial: 8
Acq On : 11 Sep 2014 12:15 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:23 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:19:32 2014
Response via : Multiple Level Calibration





TIC: L7305.D

(37) Isopropyl Acetate

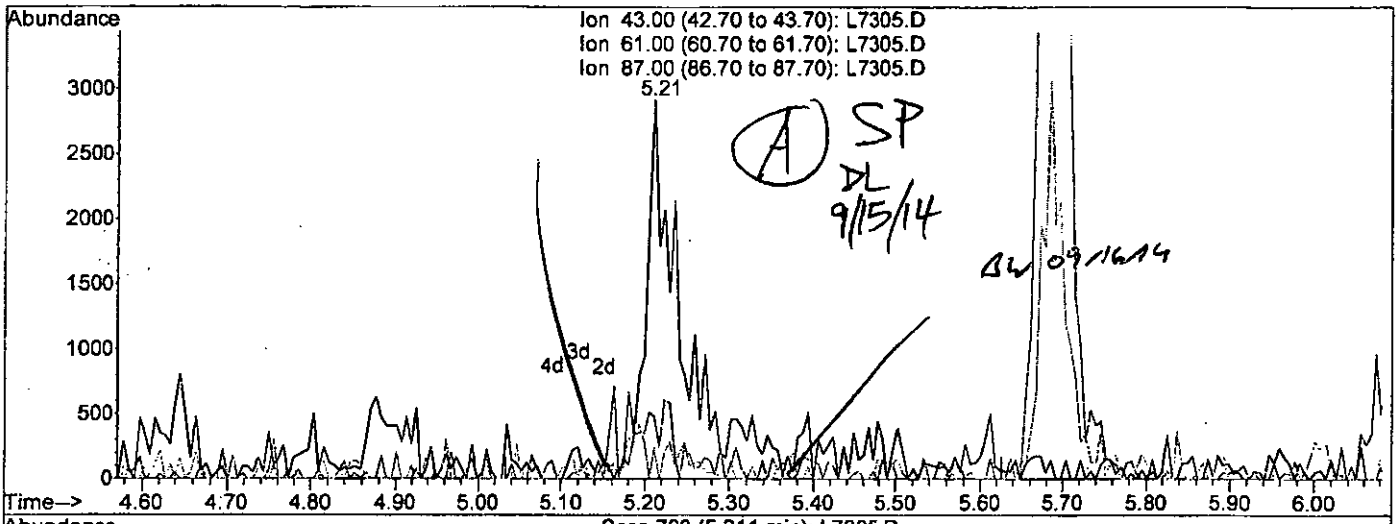
5.21min 0.72ug/L

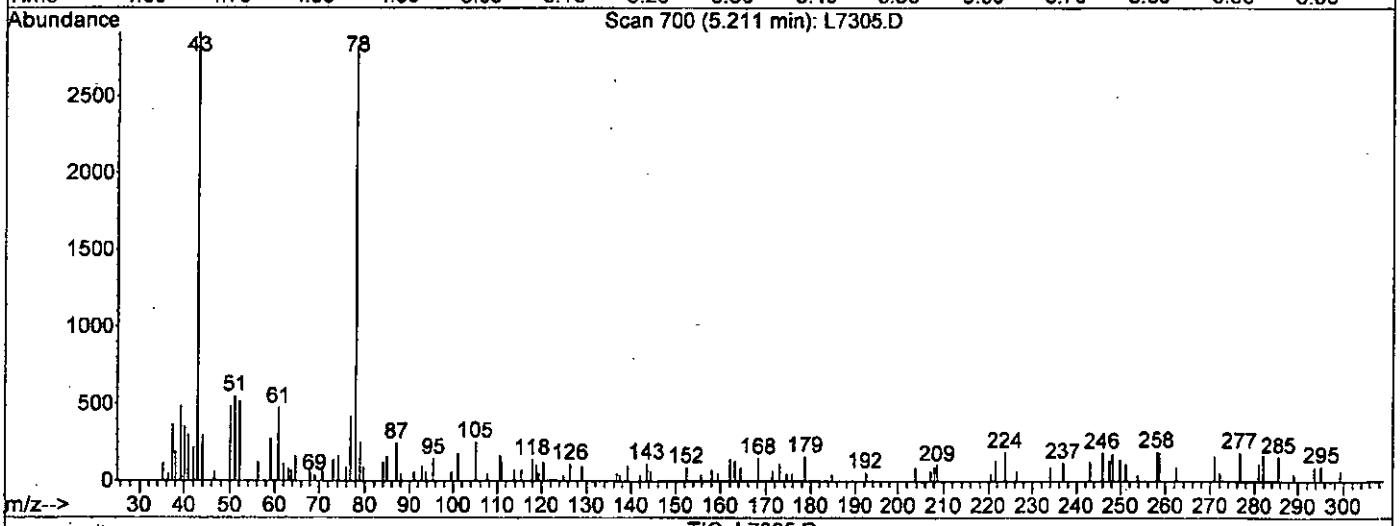
response 7779

Ion	Exp%	Act%
43.00	100	100
61.00	20.10	11.99#
87.00	10.70	1.14#
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7305.D Vial: 8
Acq On : 11 Sep 2014 12:15 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:24 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:19:32 2014
Response via : Multiple Level Calibration





TIC: L7305.D

(37) Isopropyl Acetate

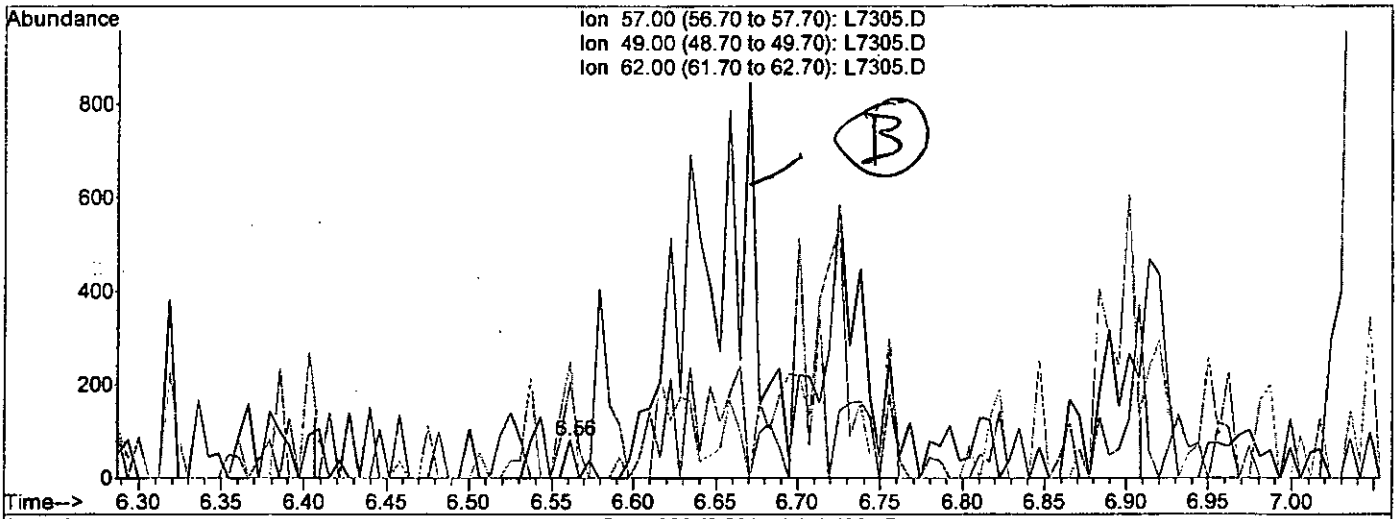
5.21min 0.84ug/L m

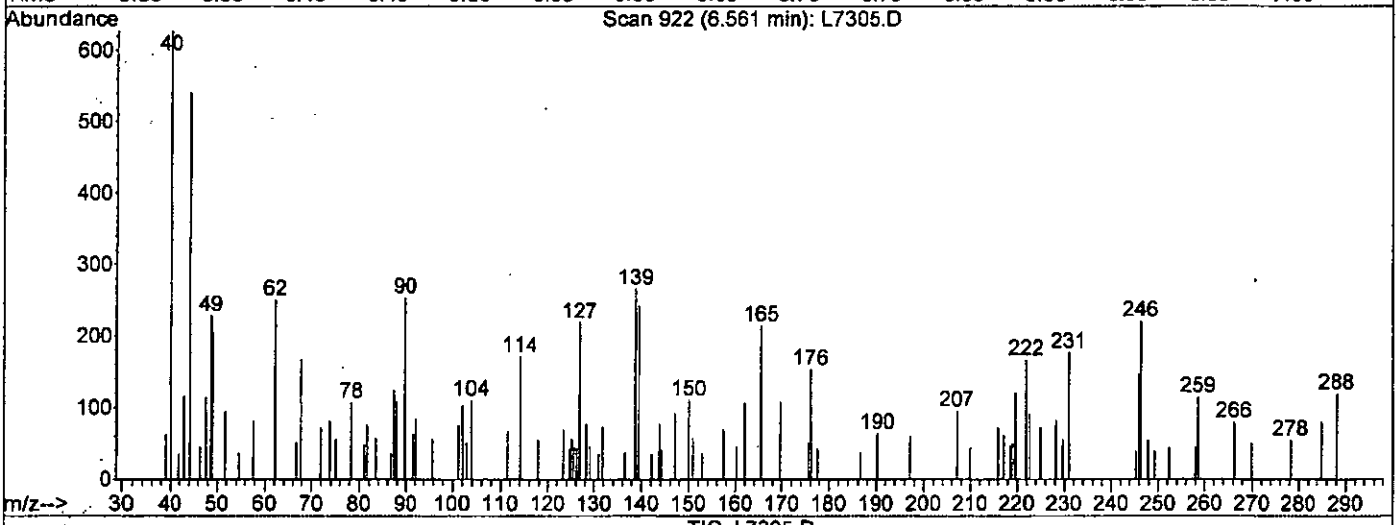
response 9014

Ion	Exp%	Act%
43.00	100	100
61.00	20.10	10.35#
87.00	10.70	0.99#
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7305.D Vial: 8
Acq On : 11 Sep 2014 12:15 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:24 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:19:32 2014
Response via : Multiple Level Calibration





TIC: L7305.D

(44) Epichlorohydrin

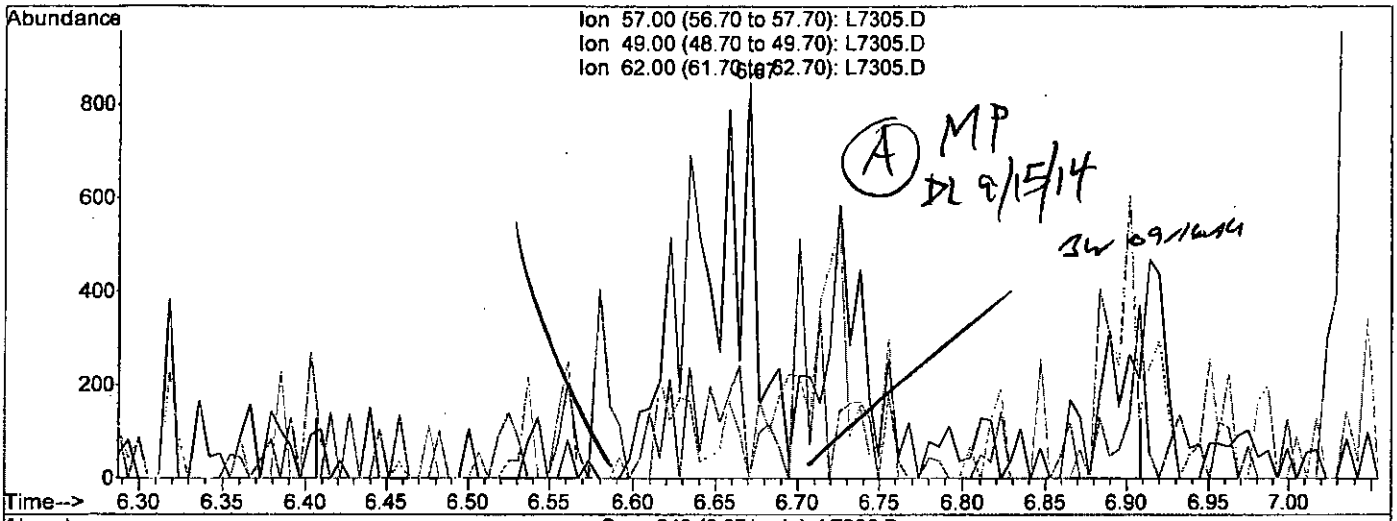
6.56min 0.10ug/L

response 43

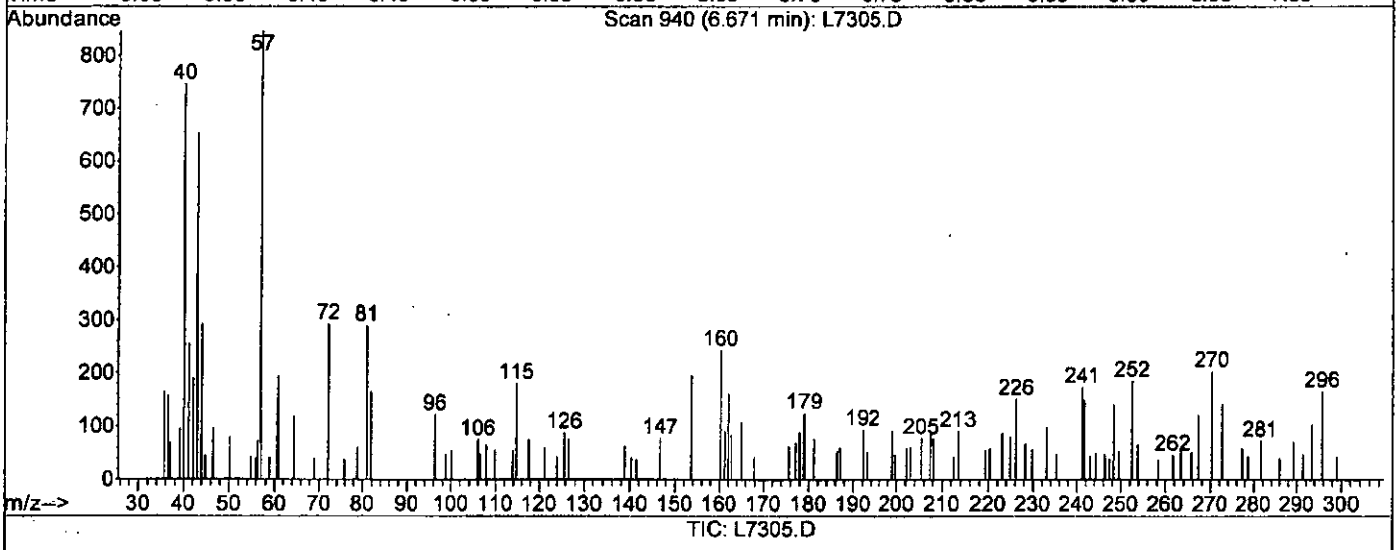
Ion	Exp%	Act%
57.00	100	100
49.00	22.40	253.09#
62.00	20.40	308.64#
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7305.D Vial: 8
Acq On : 11 Sep 2014 12:15 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:25 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:19:32 2014
Response via : Multiple Level Calibration



A MP DL 9/15/14



TIC: L7305.D

(44) Epichlorohydrin

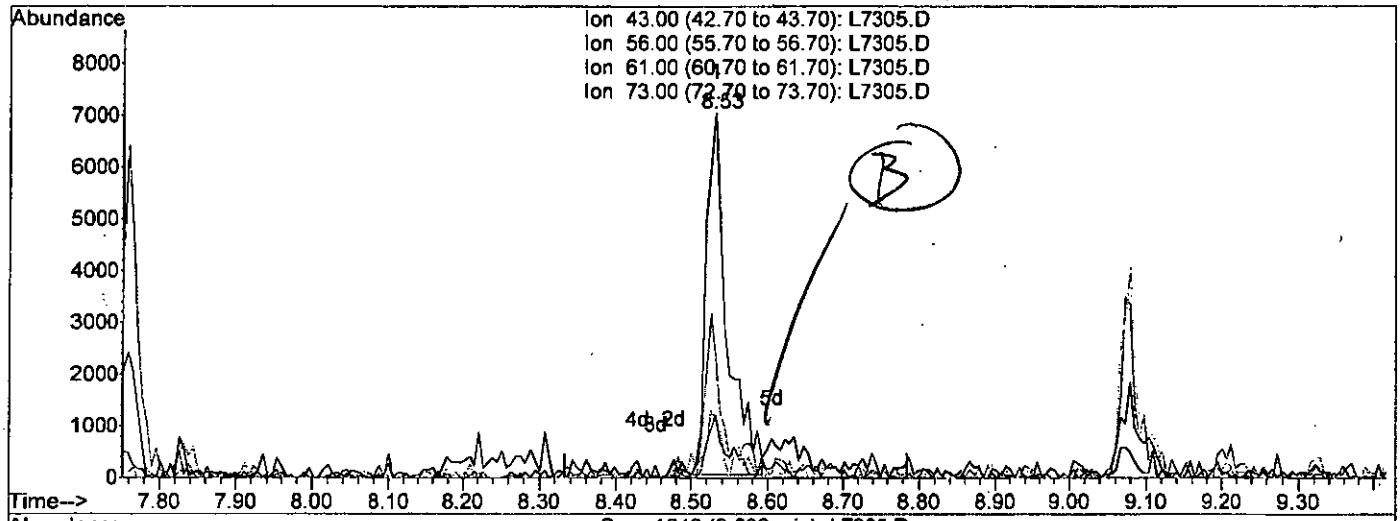
6.67min 4.69ug/L m

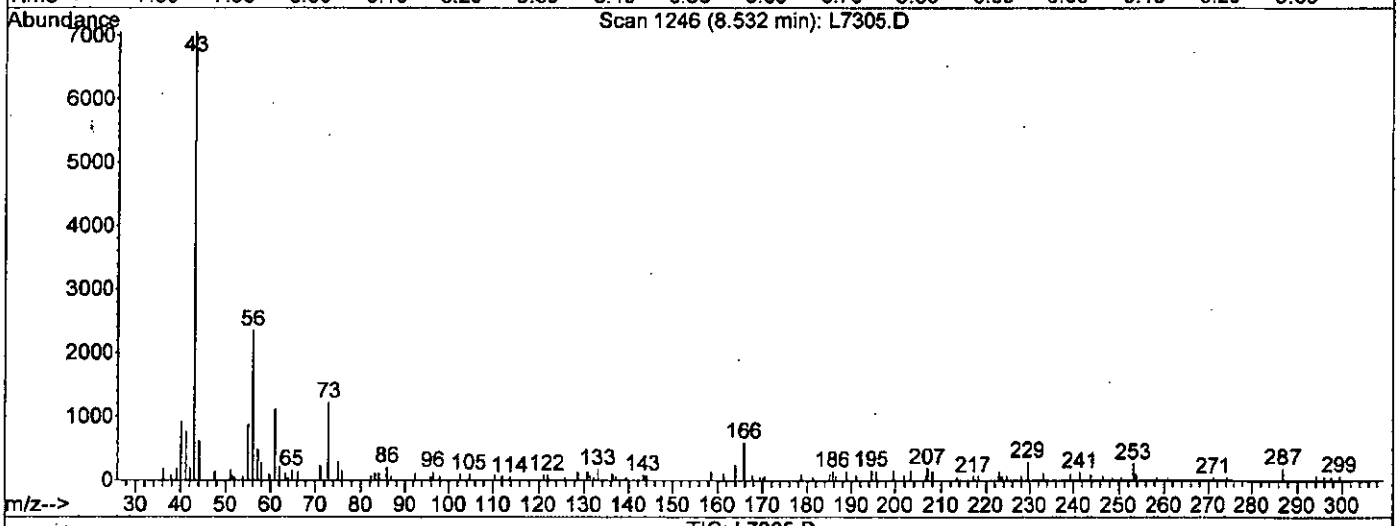
response 2058

Ion	Exp%	Act%
57.00	100	100
49.00	22.40	0.00#
62.00	20.40	0.00#
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7305.D Vial: 8
Acq On : 11 Sep 2014 12:15 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:25 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:19:32 2014
Response via : Single Level Calibration





TIC: L7305.D

(58) N-Butyl Acetate

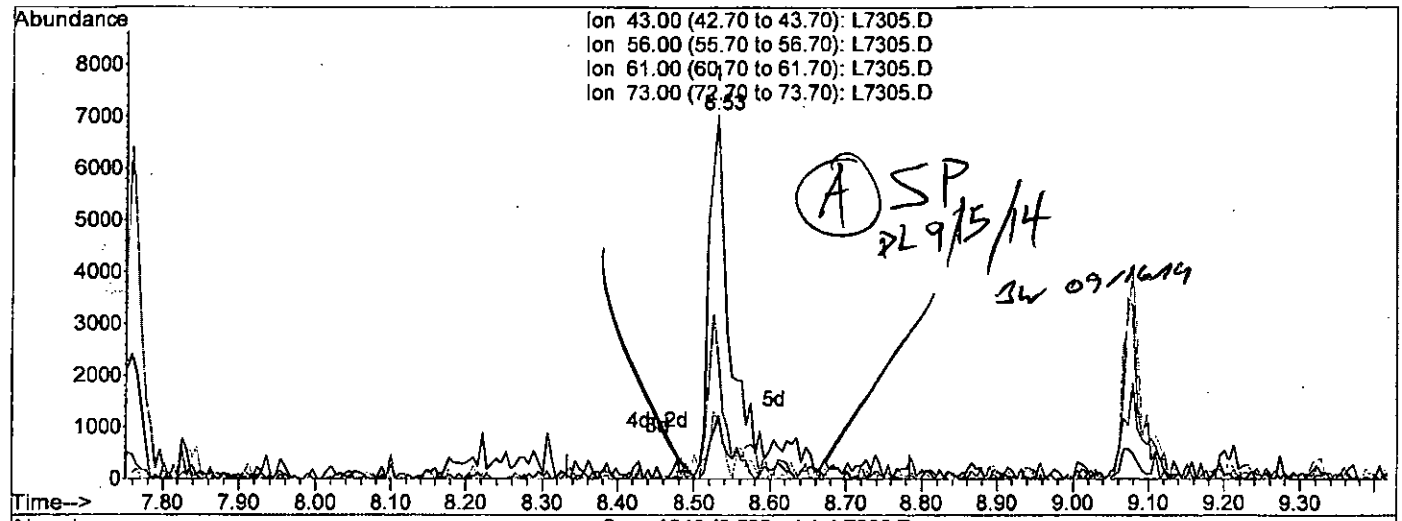
8.53min 1.62ug/L

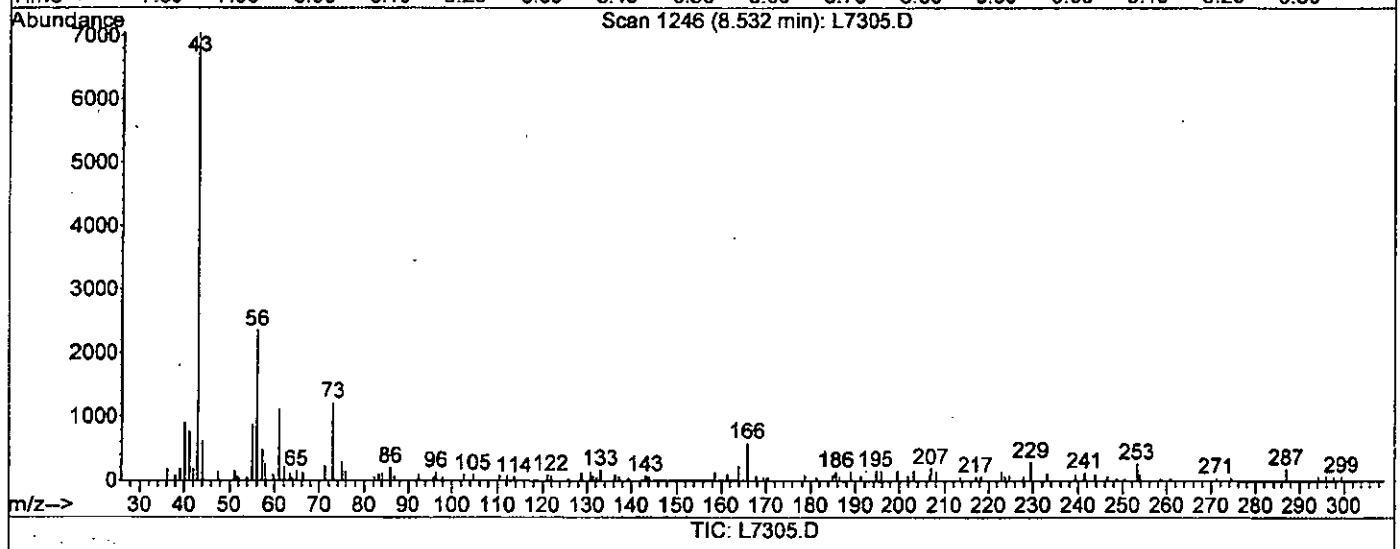
response 13228

Ion	Exp%	Act%
43.00	100	100
56.00	37.30	32.41
61.00	17.60	12.49#
73.00	13.40	12.35

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7305.D Vial: 8
Acq On : 11 Sep 2014 12:15 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:26 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:19:32 2014
Response via : Single Level Calibration





TIC: L7305.D

(58) N-Butyl Acetate

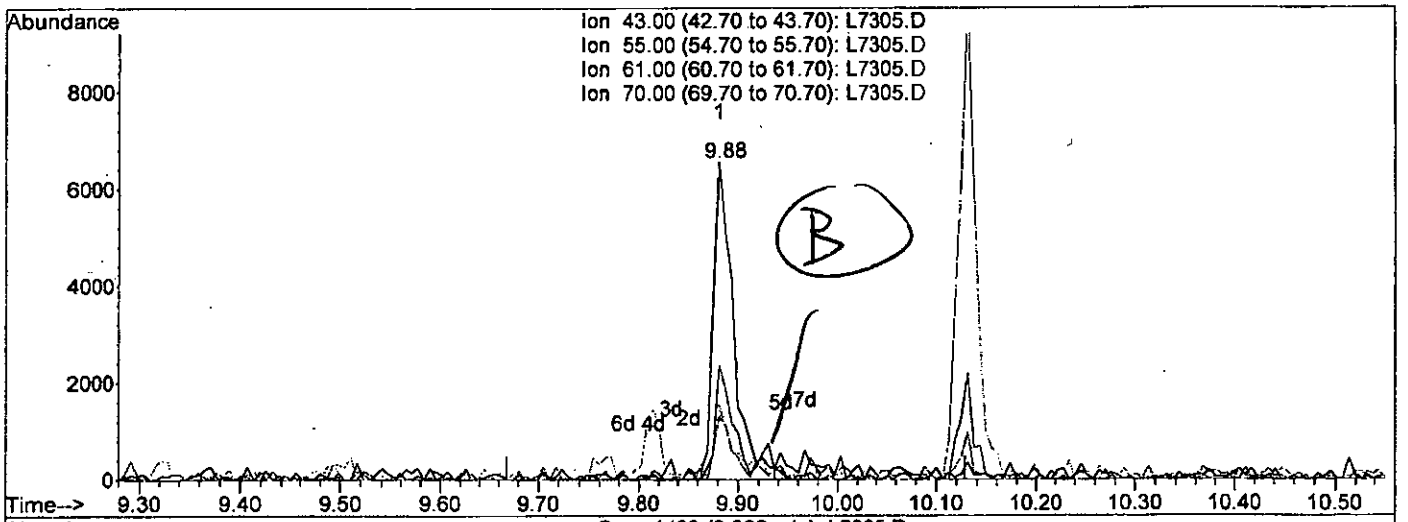
8.53min 1.94ug/L m

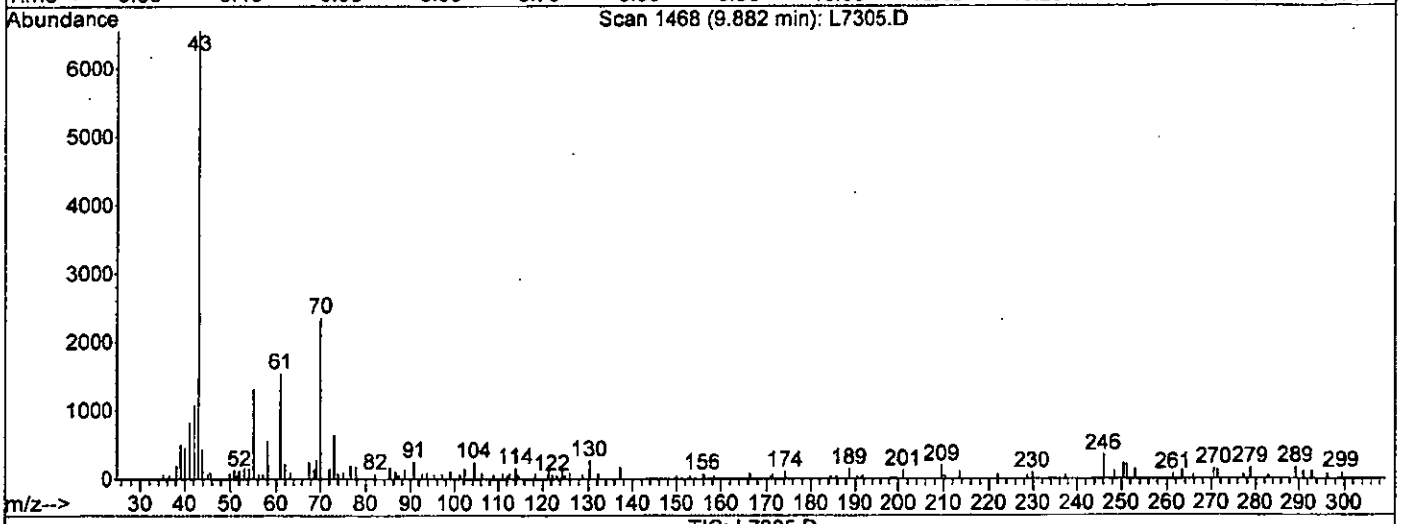
response 15831

Ion	Exp%	Act%
43.00	100	100
56.00	37.30	27.08#
61.00	17.60	10.44#
73.00	13.40	10.32#

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7305.D Vial: 8
Acq On : 11 Sep 2014 12:15 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:26 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:19:32 2014
Response via : Multiple Level Calibration





TIC: L7305.D

(67) Amyl Acetate

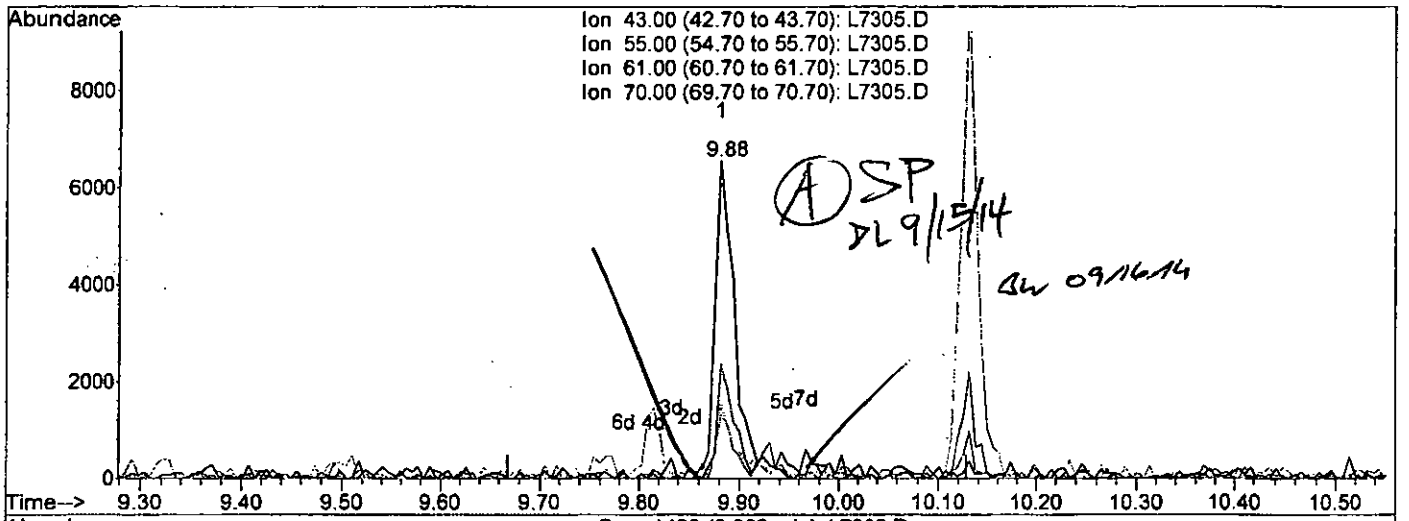
9.88min 0.83ug/L

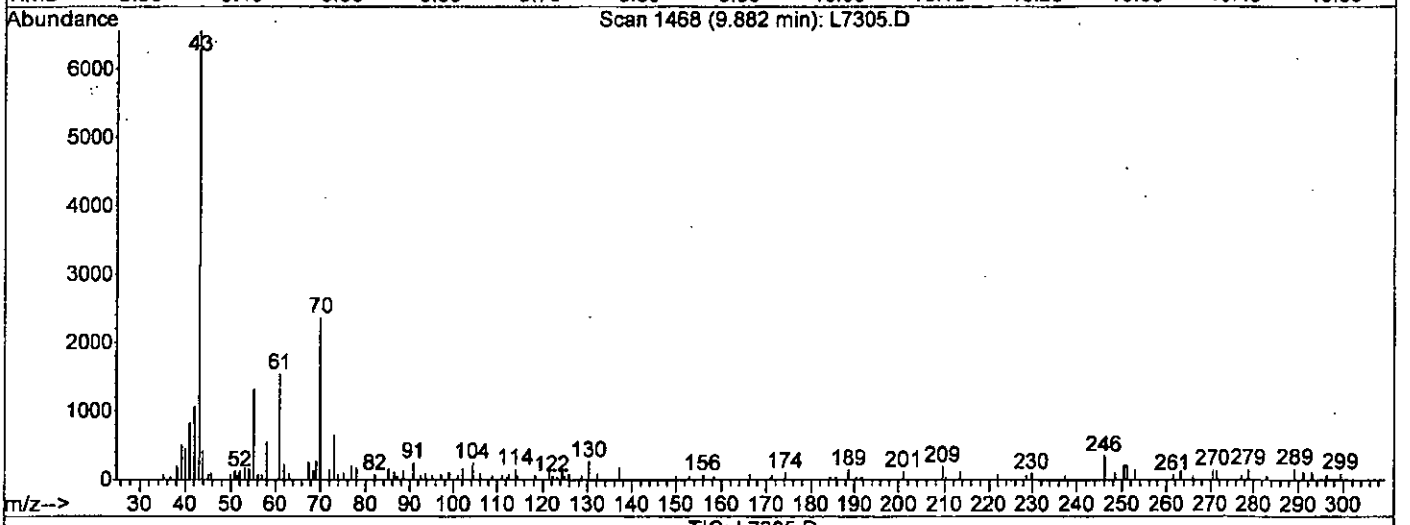
response 9021

Ion	Exp%	Act%
43.00	100	100
55.00	22.50	17.39#
61.00	22.80	26.23
70.00	36.10	31.03

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7305.D Vial: 8
Acq On : 11 Sep 2014 12:15 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:27 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:19:32 2014
Response via : Multiple Level Calibration





TIC: L7305.D

(67) Amyl Acetate

9.88min 0.88ug/L m

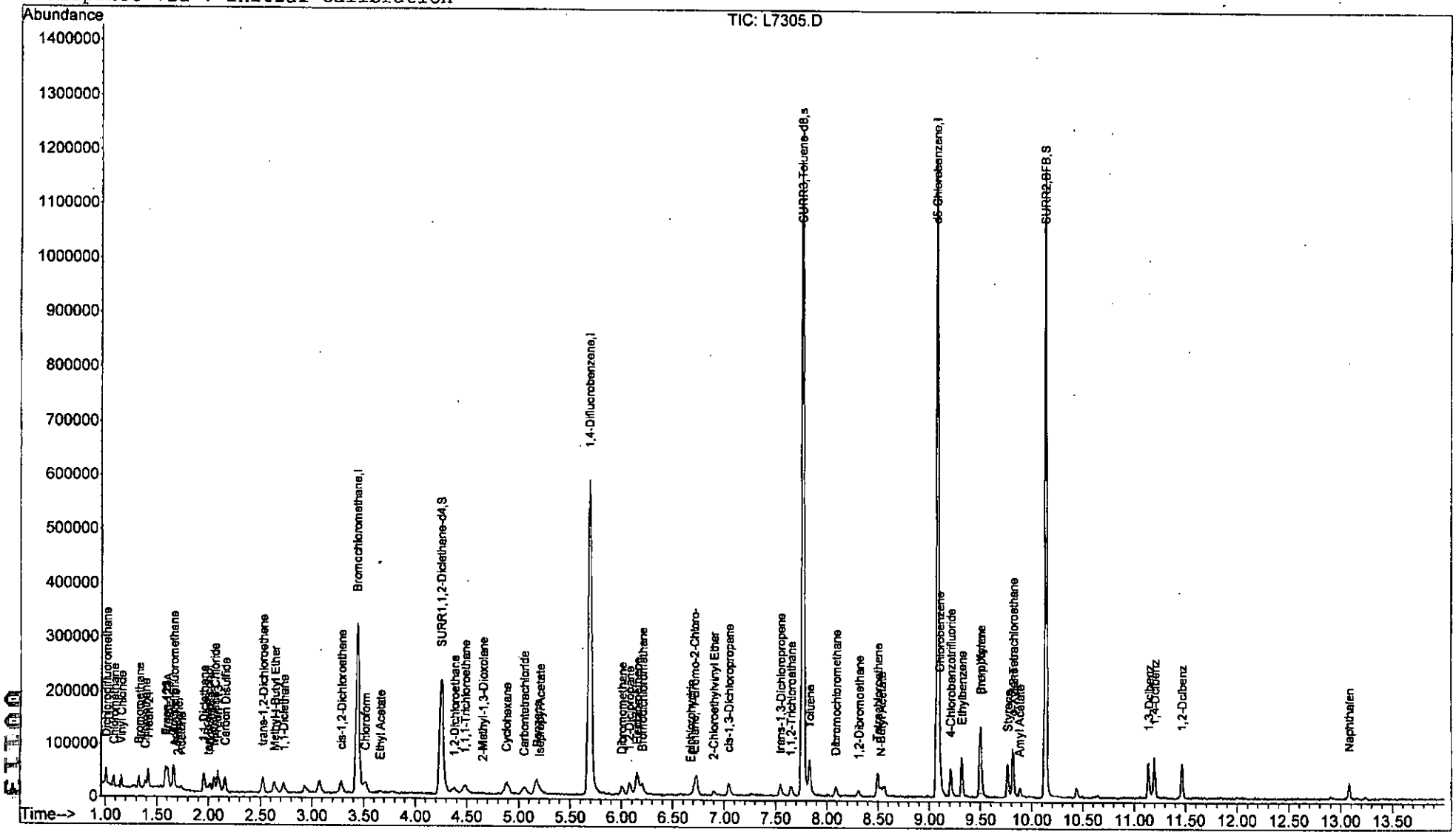
response 9534

Ion	Exp%	Act%
43.00	100	100
55.00	22.50	16.46#
61.00	22.80	24.82
70.00	36.10	29.36

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7305.D Vial: 8
Acq On : 11 Sep 2014 12:15 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:27 2014 Quant Results File: 6240911.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:19:32 2014
Response via : Initial Calibration



L7305.D 6240911.M Mon Sep 15 10:28:05 2014

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7306.D Vial: 9
Acq On : 11 Sep 2014 12:50 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:38 2014 Quant Results File: 6240911.RES

Quant Method : I:\ACQUDATA\M...\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:28:54 2014
Response via : Initial Calibration
DataAcq Meth : 6240911

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	3.44	128	97950	30.00	ug/L		0.00
35) 1,4-Difluorobenzene	5.69	114	585513	30.00	ug/L		0.00
53) d5-Chlorobenzene	9.08	117	540628	30.00	ug/L		0.00
System Monitoring Compounds							
30) SURR1,1,2-Diclethane-d4	4.25	65	207060	30.61	ug/L		0.00
Spiked Amount 30.000	Range 81 - 127		Recovery = 102.03%				
51) SURR3,Toluene-d8	7.76	98	685023	30.30	ug/L		0.00
Spiked Amount 30.000	Range 83 - 120		Recovery = 101.00%				
68) SURR2,BFB	10.13	95	266796	29.62	ug/L		0.00
Spiked Amount 30.000	Range 79 - 123		Recovery = 98.73%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.01	85	20477	1.91	ug/L		96
3) Chloromethane	1.08	50	20121	1.95	ug/L		86
4) Vinyl Chloride	1.16	62	20880	2.03	ug/L		92
5) Bromomethane	1.32	94	16701m	2.34	ug/L		
6) Chloroethane	1.39	64	12708	2.00	ug/L		83
7) Freon-21	1.41	67	37822	2.07	ug/L		98
8) Freon-123	1.58	83	28550	2.05	ug/L		98
9) Freon-123A	1.60	67	25970	2.13	ug/L		95
10) Acrolein	1.66	56	9636	9.63	ug/L		99
11) Trichlorofluoromethane	1.66	101	37314	2.09	ug/L		94
12) Acetonitrile	1.68	41	6840	8.31	ug/L		86
13) 2-Propanol	1.70	45	10662	40.62	ug/L		100
14) Acetone	1.74	43	7468	3.47	ug/L		91
15) 1,1-Diclethene	1.95	96	18361	2.16	ug/L		88
16) tert Butyl Alcohol	2.00	59	17429m	42.72	ug/L		
17) Acrylonitrile	2.02	53	18625	10.47	ug/L		88
18) Methylene Chloride	2.05	84	16712	2.14	ug/L		96
19) Freon 113	2.09	101	20051	2.13	ug/L		96
20) Carbon Disulfide	2.16	76	62809	2.20	ug/L		96
21) trans-1,2-Dichloroethene	2.52	96	19279	2.13	ug/L		84
22) Methyl-t-Butyl Ether	2.64	73	41152	2.07	ug/L	#	92
23) 1,1-Diclethane	2.73	63	37219	2.25	ug/L		96
25) cis-1,2-Dichloroethene	3.28	96	20239	2.11	ug/L		93
26) Chloroform	3.52	83	33714	2.00	ug/L		86
27) Ethyl Acetate	3.64	43	15253m	3.63	ug/L		
28) Isobutanol	3.75	43	6649m	41.01	ug/L		
29) Tetrahydrofuran	3.96	42	3272m	2.23	ug/L		
31) 1,2-Dichloroethane	4.38	62	22599	2.07	ug/L		92
32) 1,1,1-Trichloroethane	4.48	97	32497	2.09	ug/L		90
33) 2-Methyl-1,3-Dioxolane	4.61	73	4723	7.93	ug/L		92
34) Cyclohexane	4.88	56	27736	2.04	ug/L		92
36) Carbontetrachloride	5.07	117	25972	2.04	ug/L	#	91
37) Isopropyl Acetate	5.21	43	19340m	1.87	ug/L		
38) Benzene	5.17	78	67597	2.07	ug/L	#	92
39) Dibromomethane	6.00	93	11021	2.11	ug/L		95
40) 1,2-Diclpropane	6.08	63	18040m	2.04	ug/L		
41) Trichloroethene	6.15	130	20475	2.03	ug/L		98
42) Heptane	6.16	43	16679	2.02	ug/L		97

DL 9/15/14

(#) = qualifier out of range (m) = manual integration
L7306.D 6240911.M Mon Sep 15 10:38:36 2014

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7306.D Vial: 9
Acq On : 11 Sep 2014 12:50 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:38 2014 Quant Results File: 6240911.RES

Quant Method : I:\ACQUDATA\M...\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:28:54 2014
Response via : Initial Calibration
DataAcq Meth : 6240911

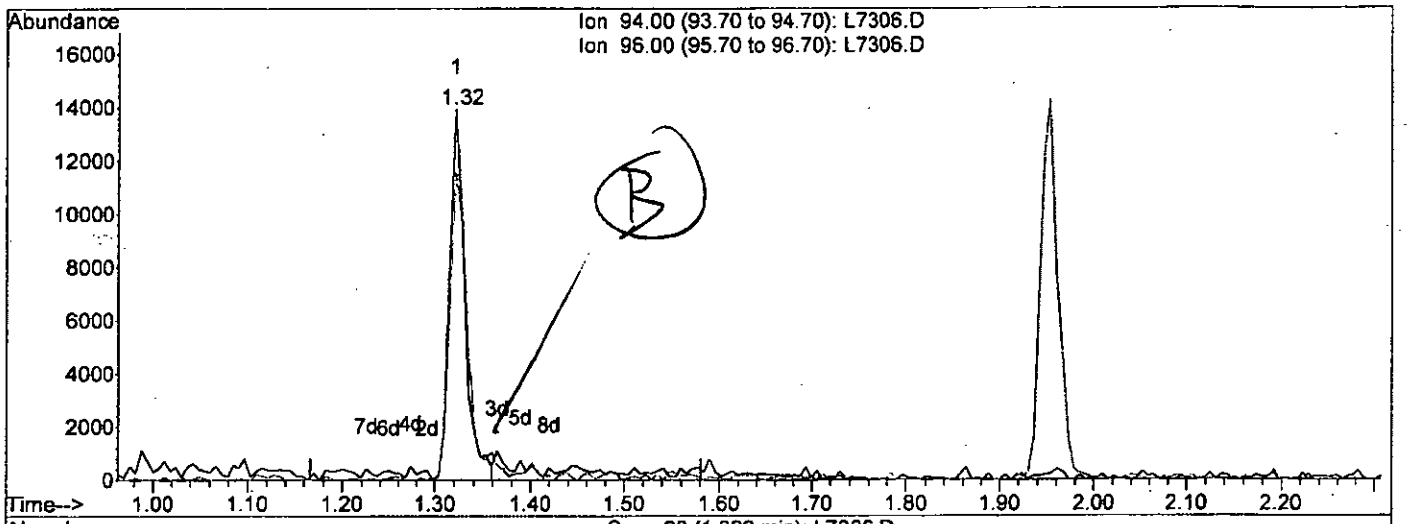
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
43)	Bromodichloromethane	6.20	83	25680	2.03	ug/L		99
44)	Epichlorohydrin	6.61	57	3564	8.42	ug/L	#	86
45)	Ethane, 1-Bromo-2-Chloro-	6.71	63	21932	2.14	ug/L		91
46)	2-Chloroethylvinyl Ether	6.89	63	7599m	1.94	ug/L		
47)	cis-1,3-Dichloropropene	7.04	75	26480	2.01	ug/L		97
49)	trans-1,3-Dichloropropene	7.54	75	22816	1.99	ug/L		97
50)	1,1,2-Trichloroethane	7.65	97	13797m	2.24	ug/L		
52)	Toluene	7.83	91	74834	2.10	ug/L		99
54)	Dibromochloromethane	8.08	129	17822	2.00	ug/L		97
56)	1,2-Dibromoethane	8.31	107	12138	1.78	ug/L	#	80
57)	Tetrachloroethene	8.50	164	19167	2.19	ug/L		97
58)	N-Butyl Acetate	8.52	43	32748m	4.07	ug/L		
59)	Chlorobenzene	9.10	112	49701	2.01	ug/L		95
60)	4-Chlorobenzotrifluoride	9.21	180	29129	2.05	ug/L		97
61)	Ethylbenzene	9.32	106	25480	1.98	ug/L		98
62)	(m+p)Xylene	9.50	106	66389	4.13	ug/L		97
63)	Bromoform	9.50	173	9914	1.72	ug/L		99
64)	Styrene	9.76	104	53035	2.01	ug/L		98
65)	1,1,2,2-Tetrachloroethane	9.81	83	15257	2.01	ug/L		99
66)	o-Xylene	9.82	106	32666	2.10	ug/L		93
67)	Amyl Acetate	9.88	43	19947m	1.86	ug/L		
69)	1,3-Dclbenz	11.14	146	46174	2.04	ug/L		99
70)	1,4-Dclbenz	11.20	146	44083	1.96	ug/L		96
71)	1,2-Dclbenz	11.47	146	41097	2.00	ug/L		98
72)	Naphthalen	13.08	128	36048	1.93	ug/L		97

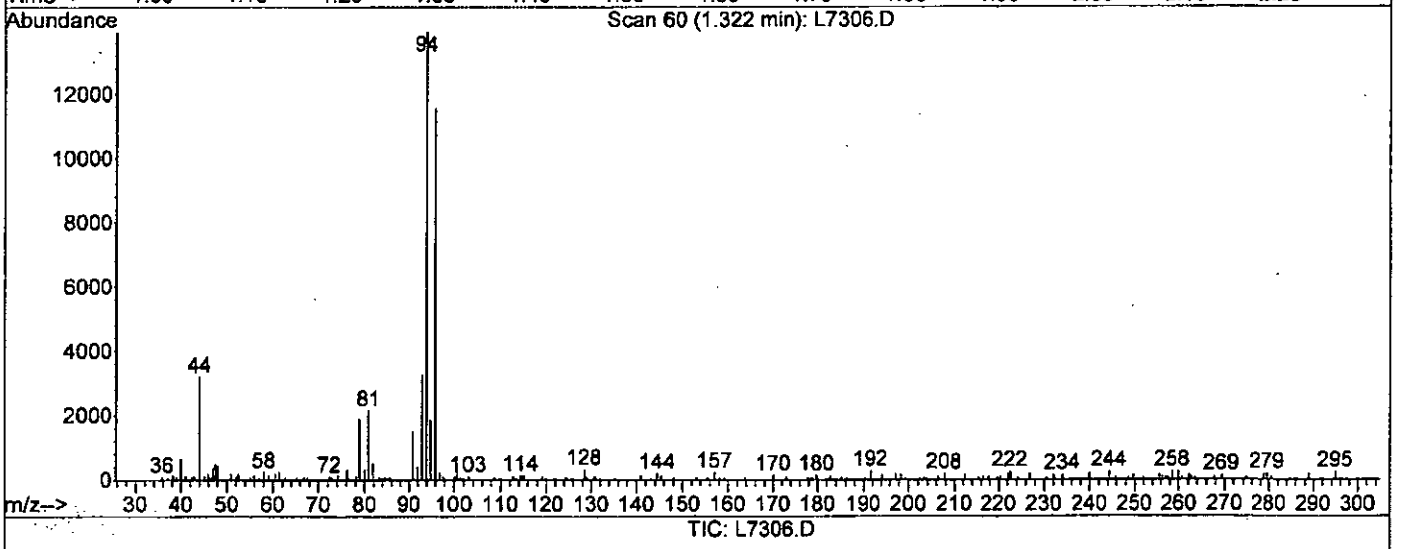
DL 9/15/14

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

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7306.D Vial: 9
Acq On : 11 Sep 2014 12:50 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:30 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:28:54 2014
Response via : Single Level Calibration





TIC: L7306.D

(5) Bromomethane

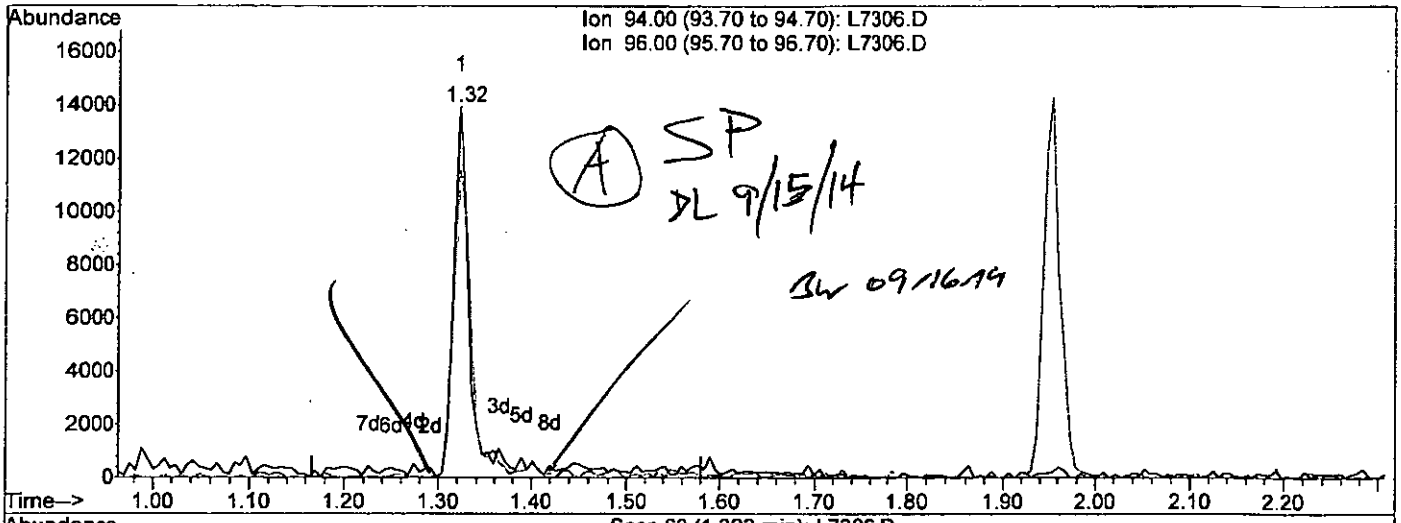
1.32min 2.11ug/L

response 15079

Ion	Exp%	Act%
94.00	100	100
96.00	90.90	82.87
0.00	0.00	0.00
0.00	0.00	0.00

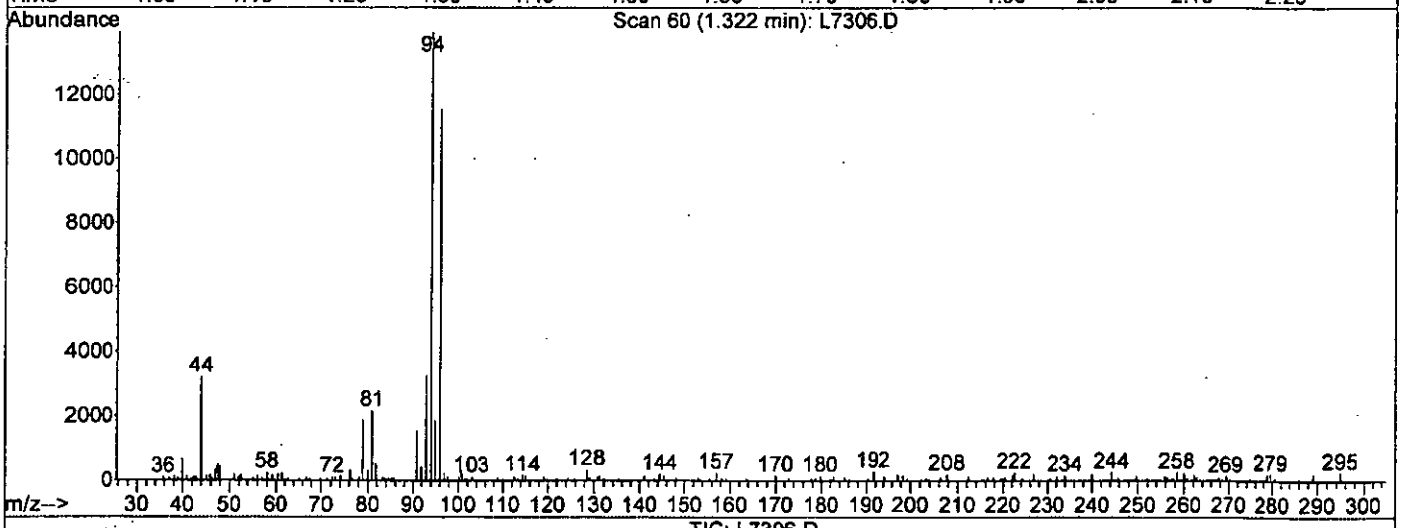
Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7306.D Vial: 9
Acq On : 11 Sep 2014 12:50 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:29 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:28:54 2014
Response via : Single Level Calibration



A SP DL 9/15/14

BW 09/16/14



TIC: L7306.D

(5) Bromomethane

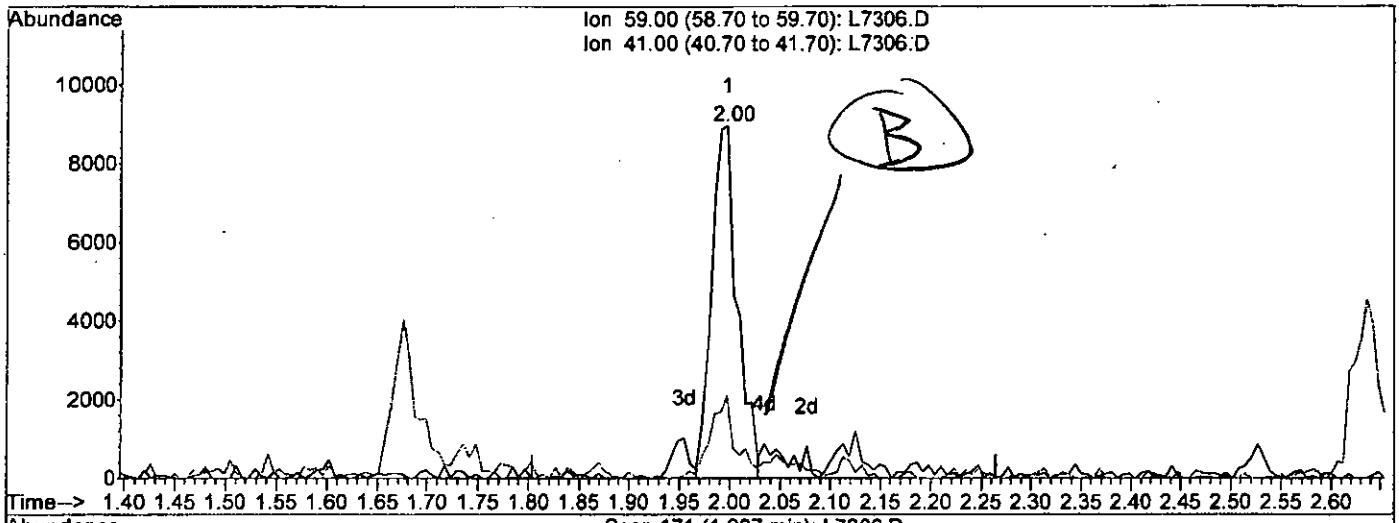
1.32min 2.34ug/L m

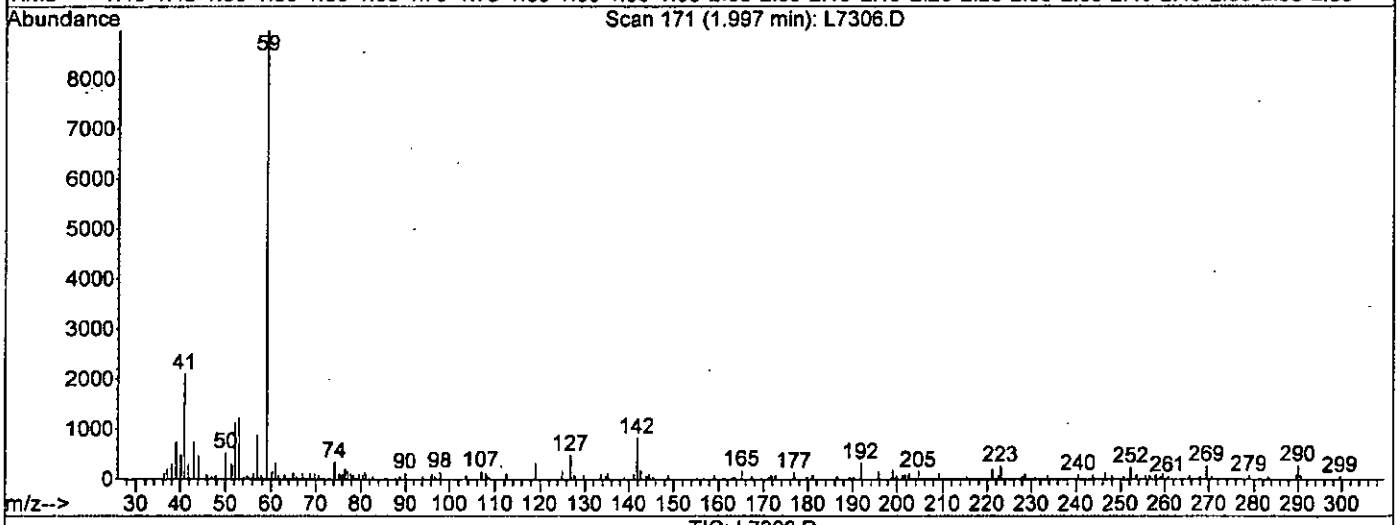
response 16701

Ion	Exp%	Act%
94.00	100	100
96.00	90.90	82.87
0.00	0.00	0.00
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7306.D Vial: 9
Acq On : 11 Sep 2014 12:50 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:29 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:28:54 2014
Response via : Multiple Level Calibration





TIC: L7306.D

(16) tert Butyl Alcohol

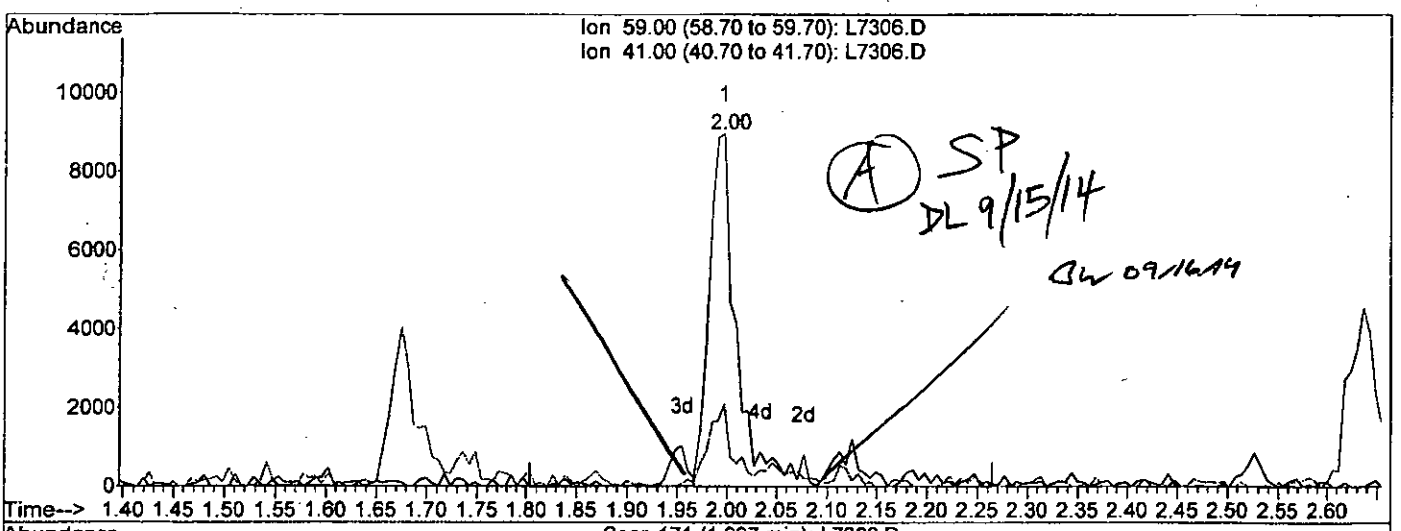
2.00min 38.53ug/L

response 15719

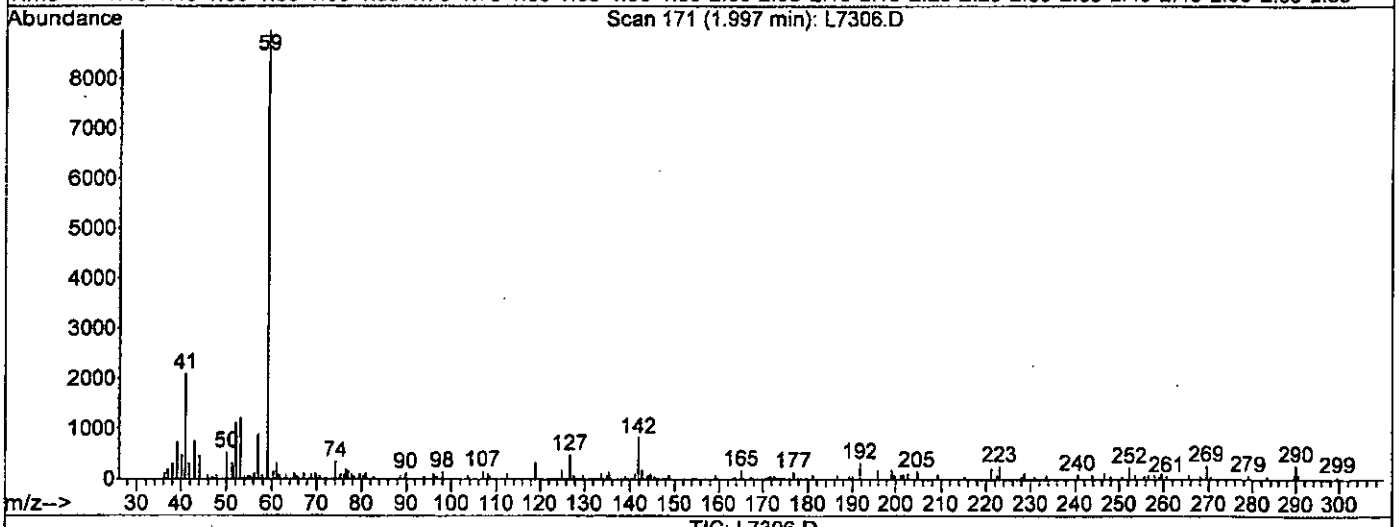
Ion	Exp%	Act%
59.00	100	100
41.00	23.50	23.34
0.00	0.00	0.00
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7306.D Vial: 9
Acq On : 11 Sep 2014 12:50 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:31 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:28:54 2014
Response via : Multiple Level Calibration



A SP DL 9/15/14 QA 09/16/14



TIC: L7306.D

(16) tert Butyl Alcohol

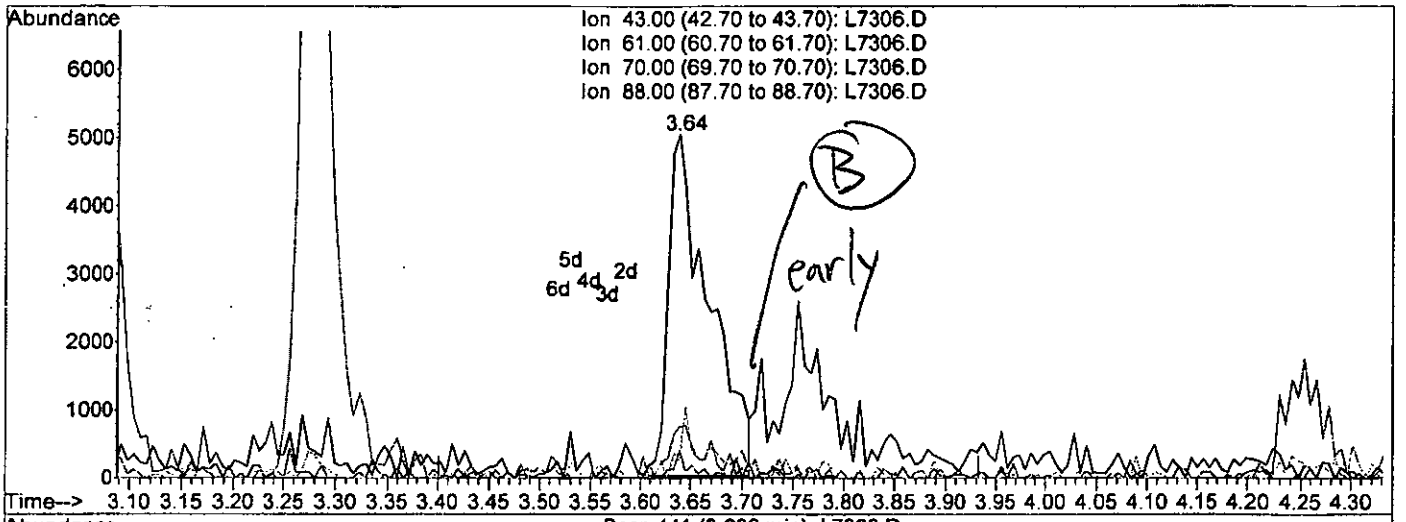
2.00min 42.72ug/L m

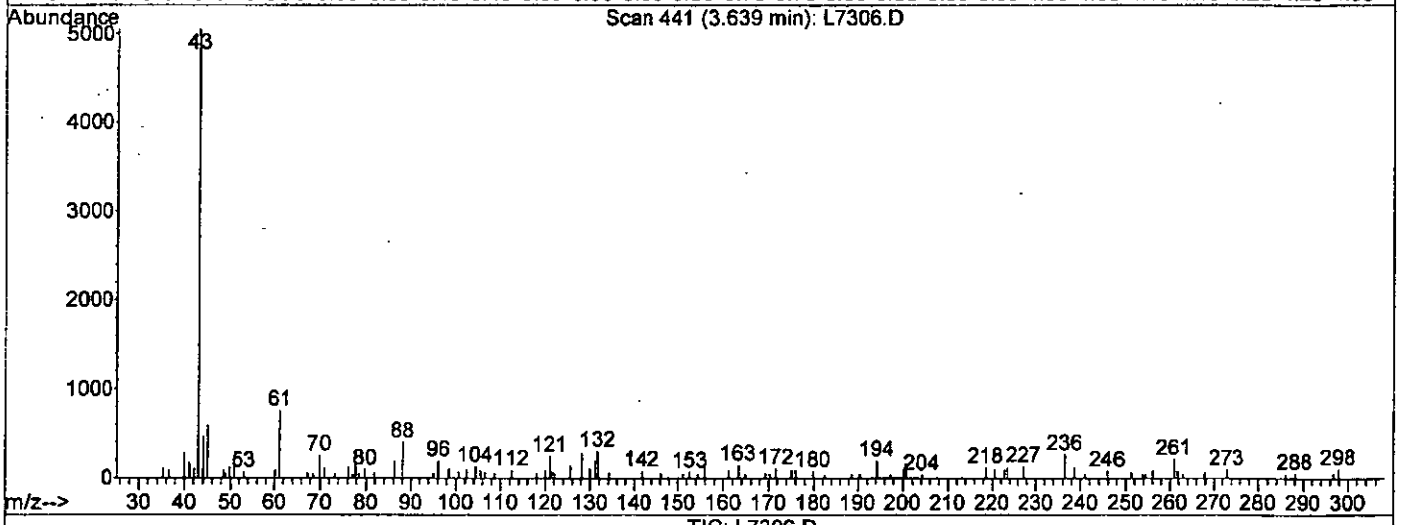
response 17429

Ion	Exp%	Act%
59.00	100	100
41.00	23.50	23.34
0.00	0.00	0.00
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7306.D Vial: 9
Acq On : 11 Sep 2014 12:50 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:32 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:28:54 2014
Response via : Single Level Calibration





TIC: L7306.D

(27) Ethyl Acetate

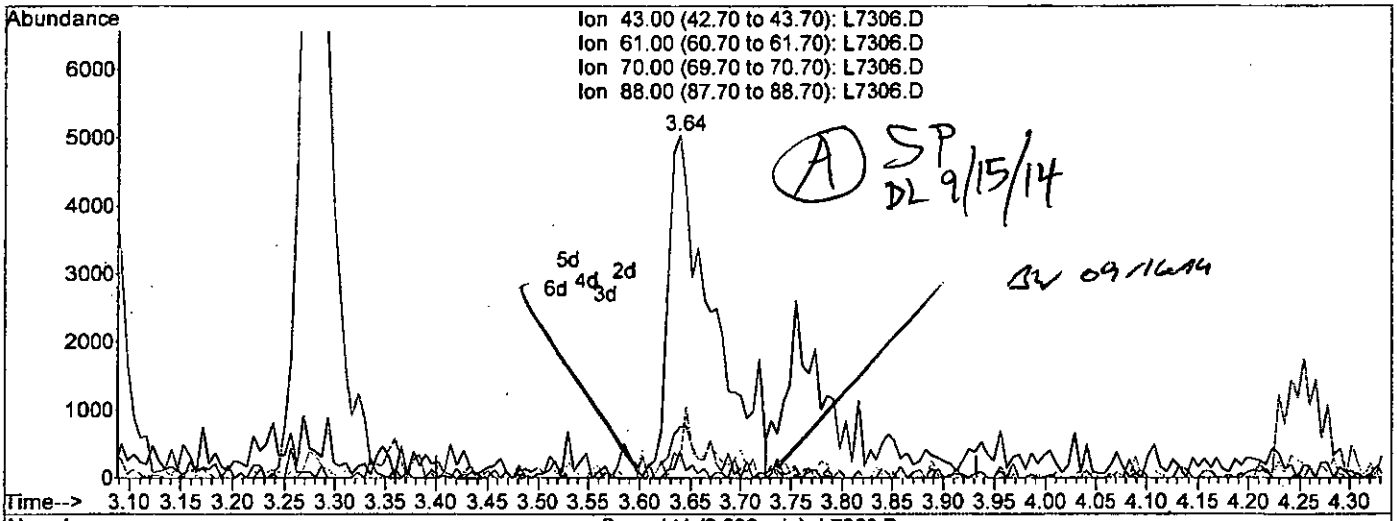
3.64min 3.29ug/L

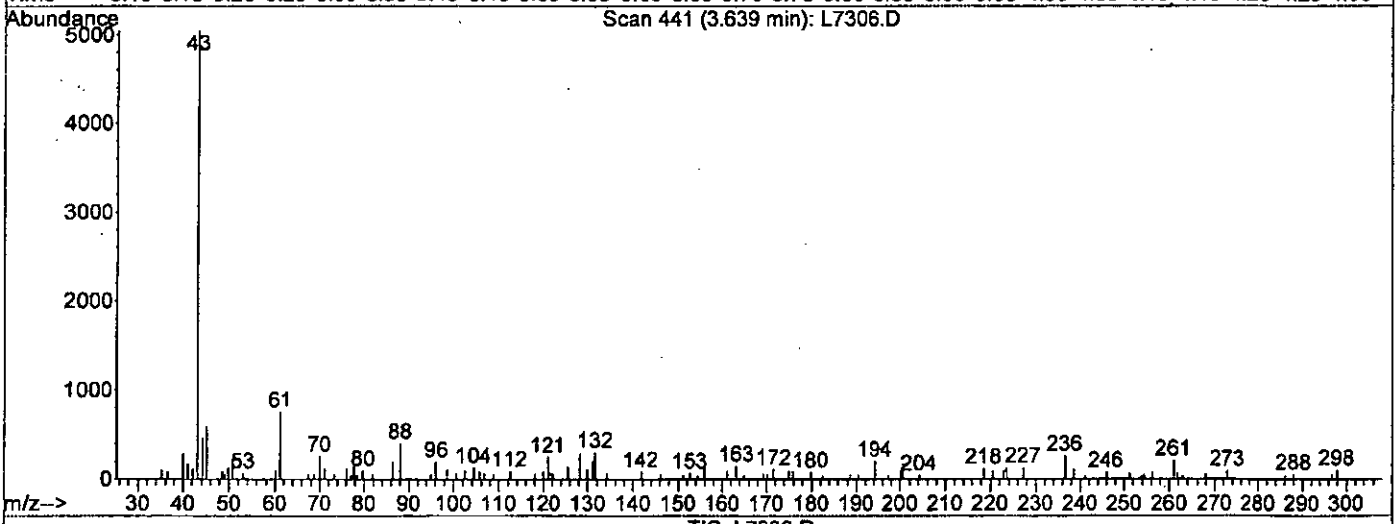
response 13826

Ion	Exp%	Act%
43.00	100	100
61.00	12.60	14.93
70.00	8.30	5.06#
88.00	4.00	7.95#

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7306.D Vial: 9
Acq On : 11 Sep 2014 12:50 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:32 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:28:54 2014
Response via : Single Level Calibration





TIC: L7306.D

(27) Ethyl Acetate

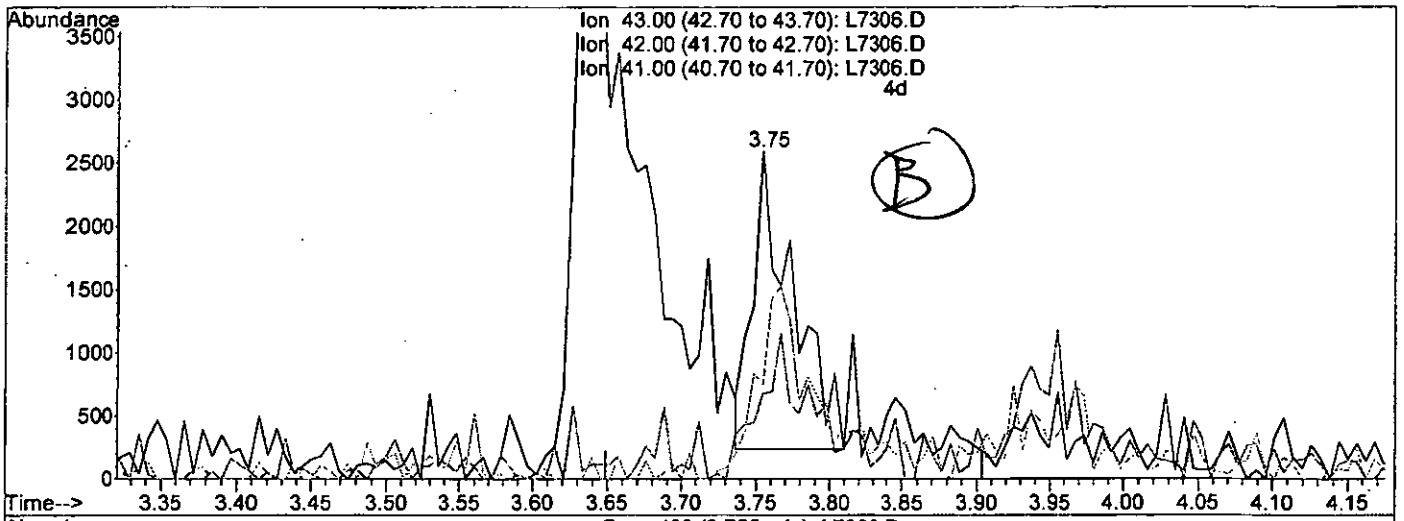
3.64min 3.63ug/L m

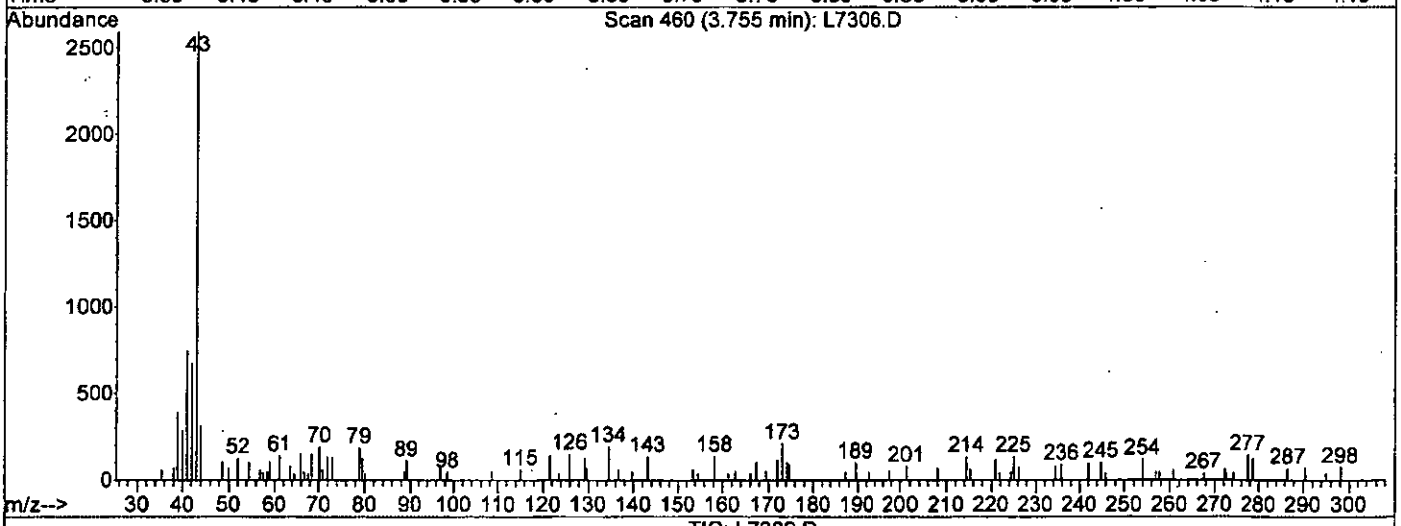
response 15253

Ion	Exp%	Act%
43.00	100	100
61.00	12.60	14.93
70.00	8.30	5.06#
88.00	4.00	7.95#

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7306.D Vial: 9
Acq On : 11 Sep 2014 12:50 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:32 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:28:54 2014
Response via : Multiple Level Calibration





TIC: L7306.D

(28) Isobutanol

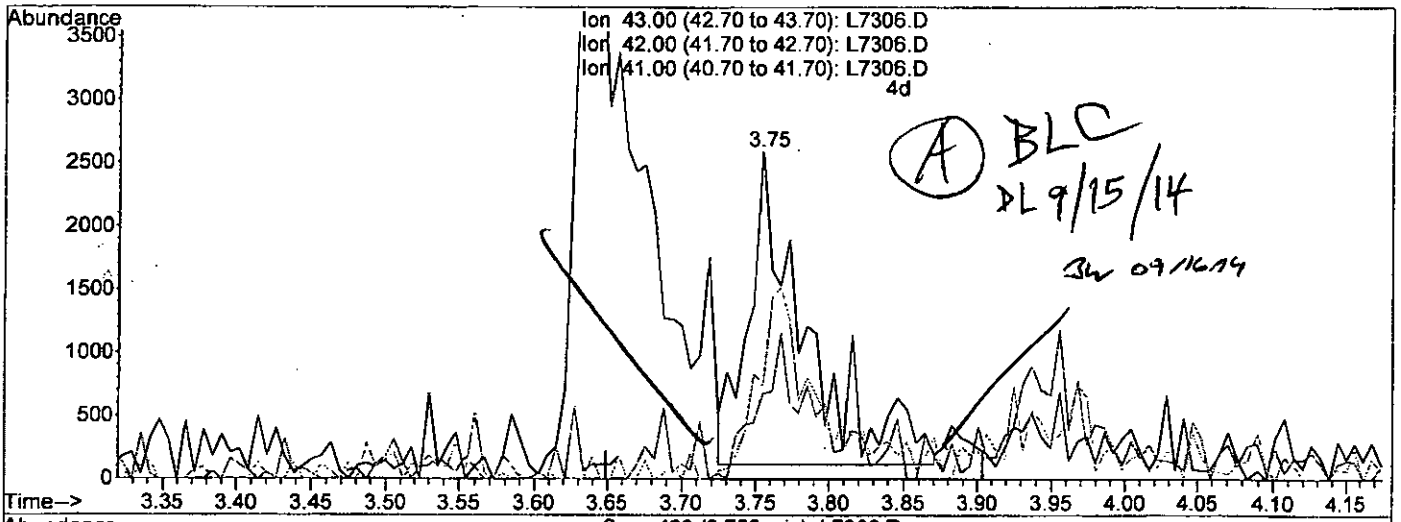
3.75min 27.40ug/L

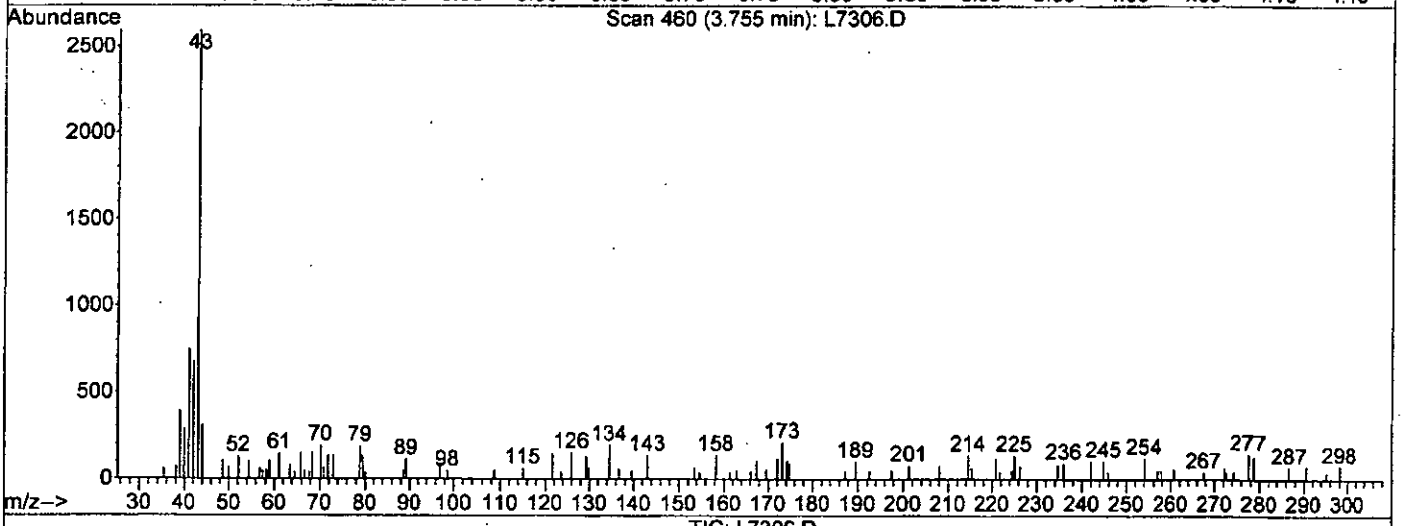
response 4442

Ion	Exp%	Act%
43.00	100	100
42.00	44.80	25.99#
41.00	70.90	28.77#
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7306.D Vial: 9
Acq On : 11 Sep 2014 12:50 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:33 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:28:54 2014
Response via : Multiple Level Calibration





TIC: L7306.D

(28) Isobutanol

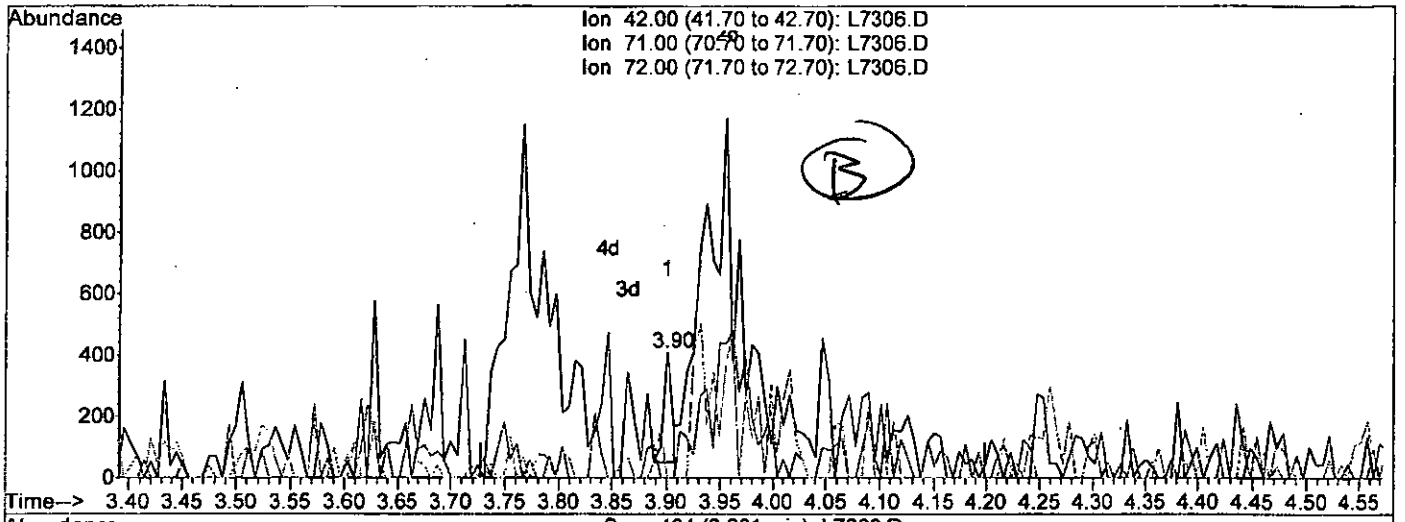
3.75min 41.01ug/L m

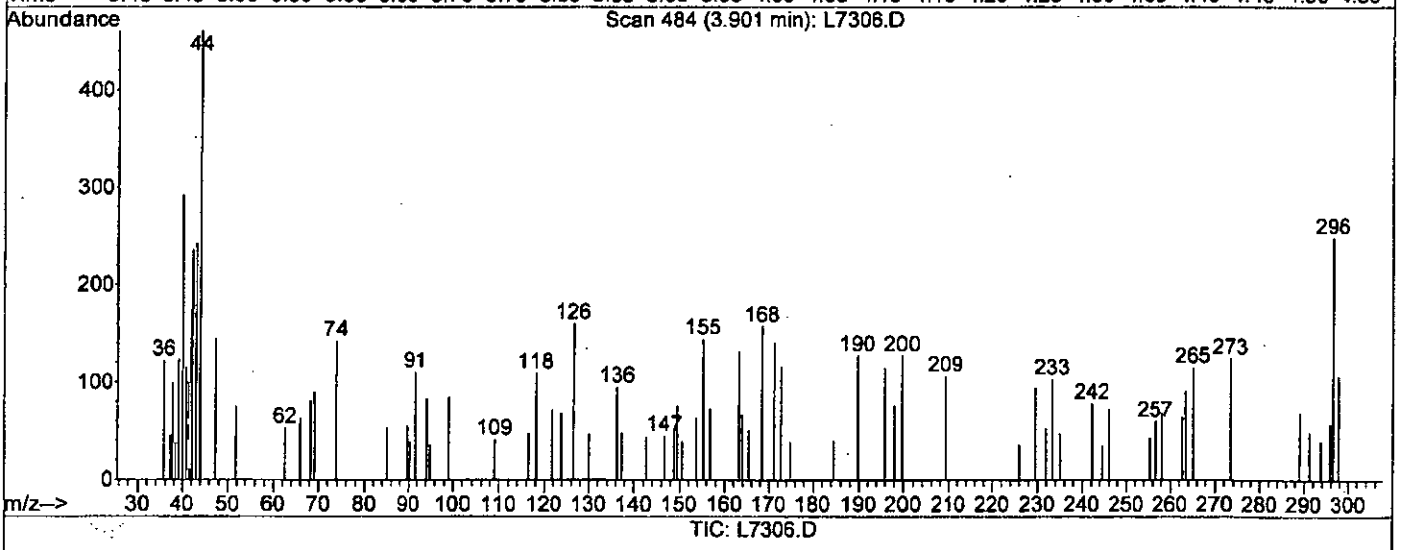
response 6649

Ion	Exp%	Act%
43.00	100	100
42.00	44.80	25.99#
41.00	70.90	28.77#
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7306.D Vial: 9
Acq On : 11 Sep 2014 12:50 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:33 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:28:54 2014
Response via : Multiple Level Calibration





TIC: L7306.D

(29) Tetrahydrofuran

3.90min 0.13ug/L

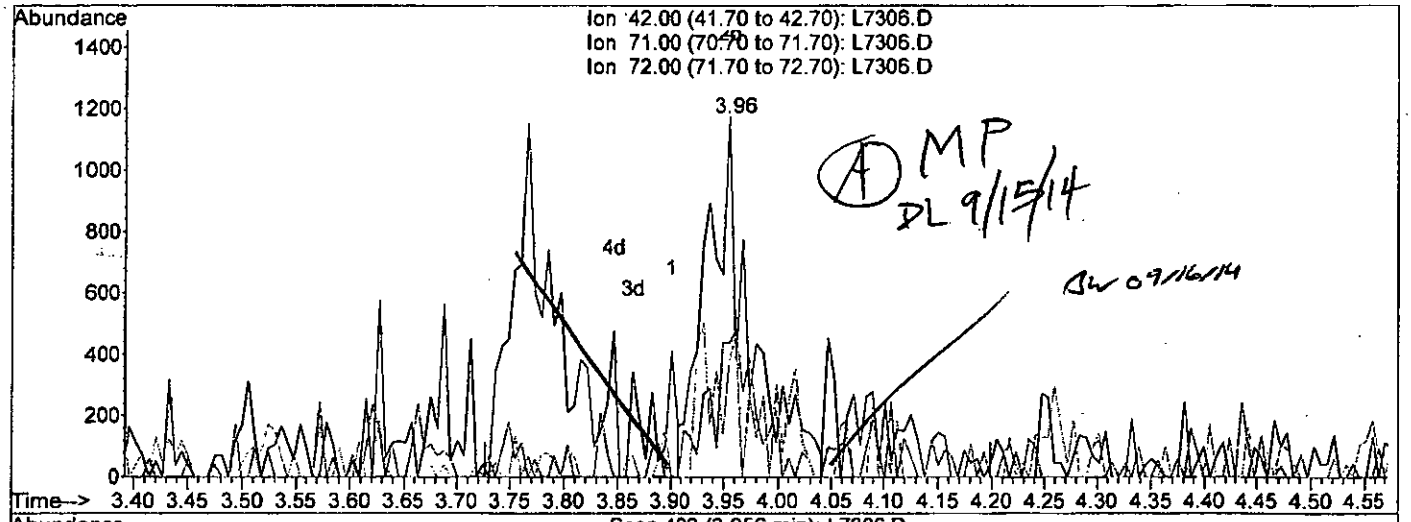
response 192

Ion	Exp%	Act%
42.00	100	100
71.00	52.10	0.00#
72.00	38.40	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

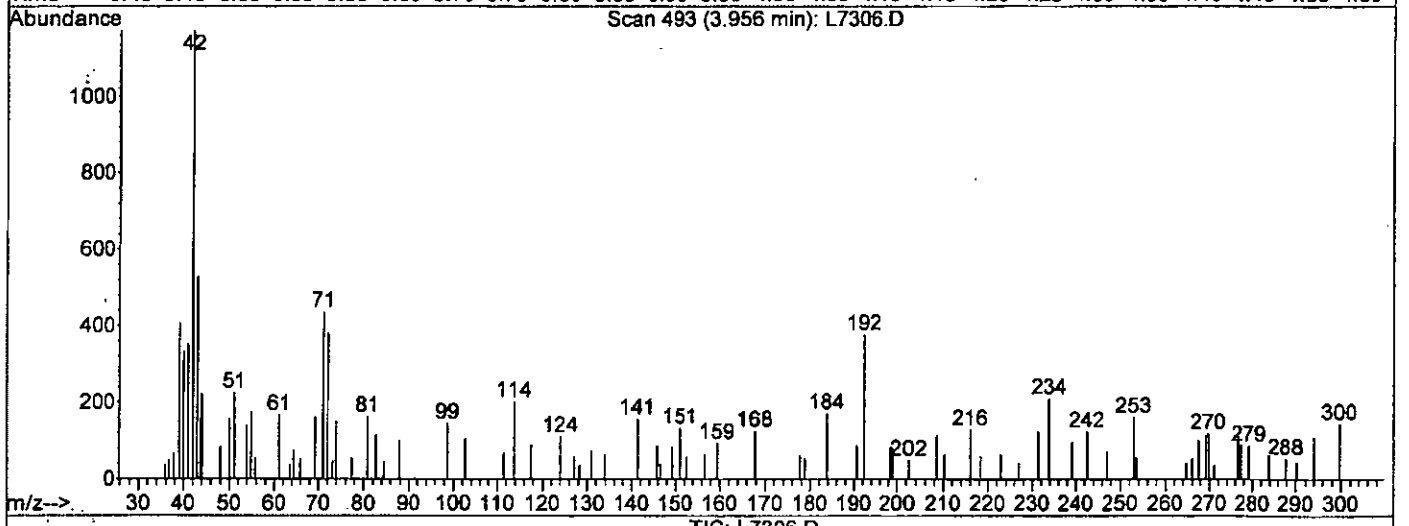
Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7306.D Vial: 9
Acq On : 11 Sep 2014 12:50 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:33 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:28:54 2014
Response via : Multiple Level Calibration



MP DL 9/15/14

BW 09/16/14



TIC: L7306.D

(29) Tetrahydrofuran

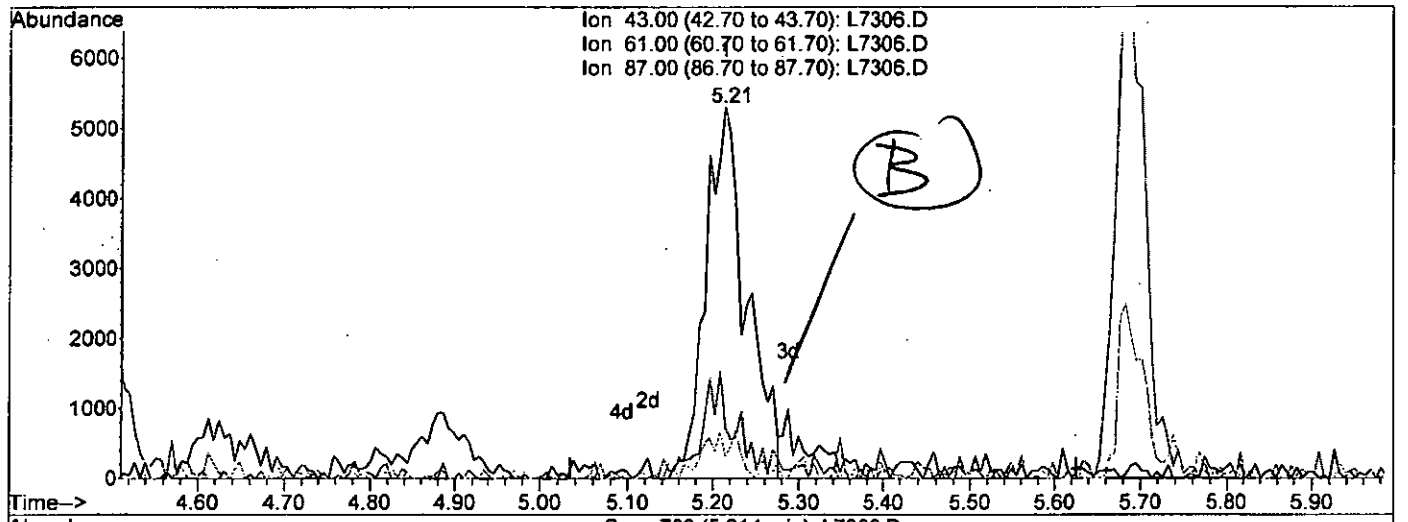
3.96min 2.23ug/L m

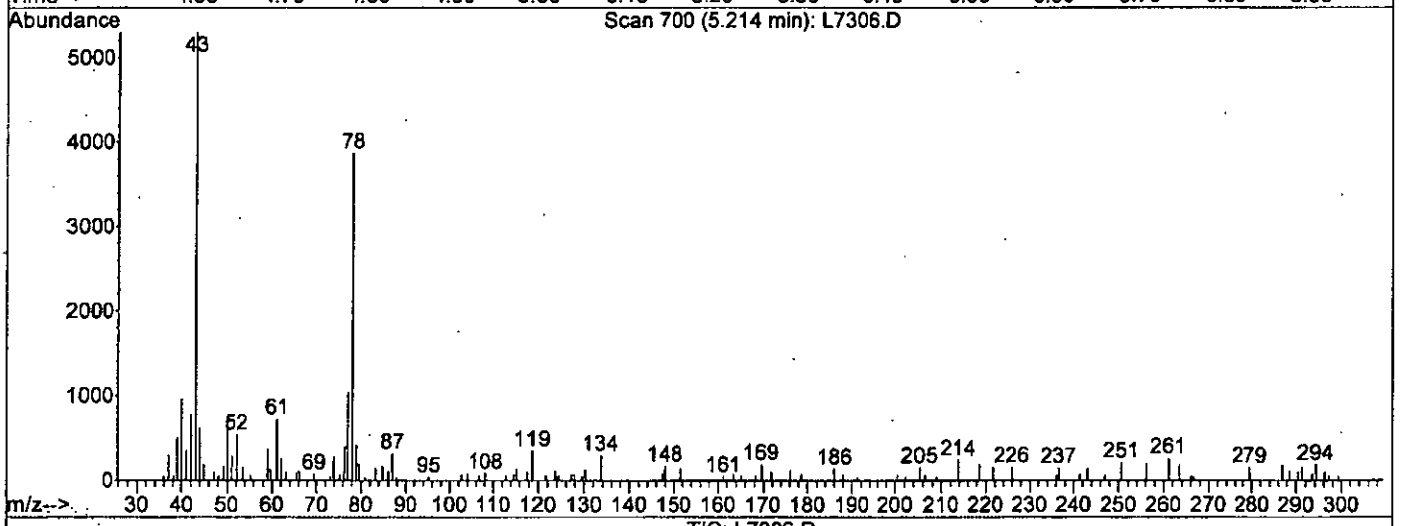
response 3272

Ion	Exp%	Act%
42.00	100	100
71.00	52.10	37.20#
72.00	38.40	32.51
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7306.D Vial: 9
Acq On : 11 Sep 2014 12:50 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:33 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:28:54 2014
Response via : Multiple Level Calibration





TIC: L7306.D

(37) Isopropyl Acetate

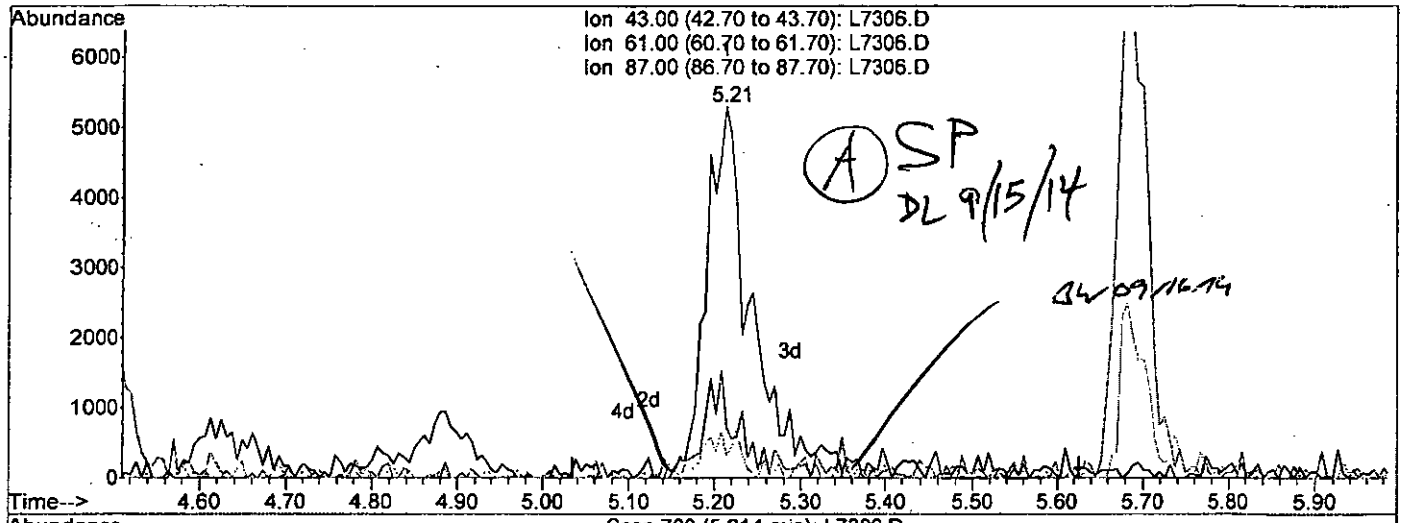
5.21min 1.68ug/L

response 17421

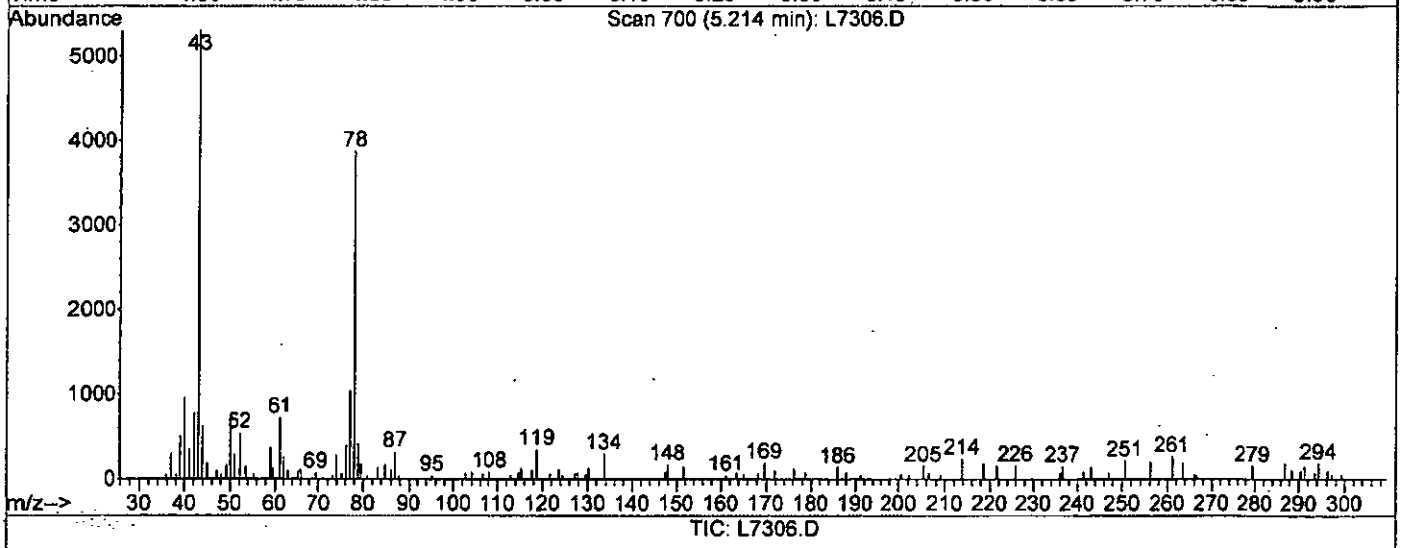
Ion	Exp%	Act%
43.00	100	100
61.00	20.10	13.31#
87.00	10.70	5.65#
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7306.D Vial: 9
Acq On : 11 Sep 2014 12:50 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:34 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:28:54 2014
Response via : Multiple Level Calibration



A SP DL 9/15/14



TIC: L7306.D

(37) Isopropyl Acetate

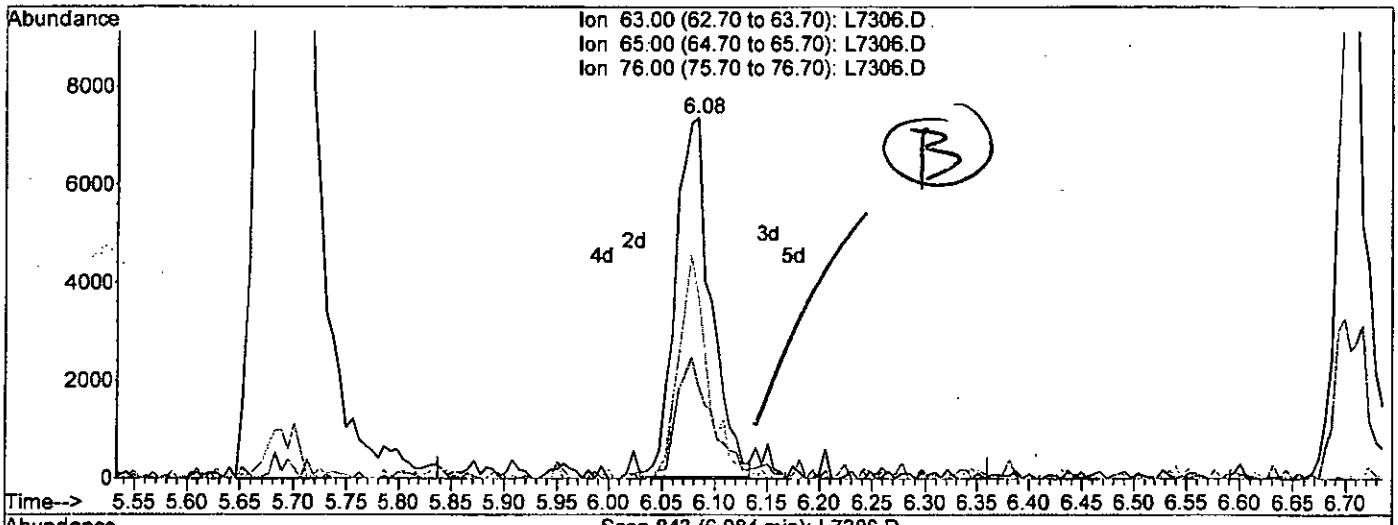
5.21min 1.87ug/L m

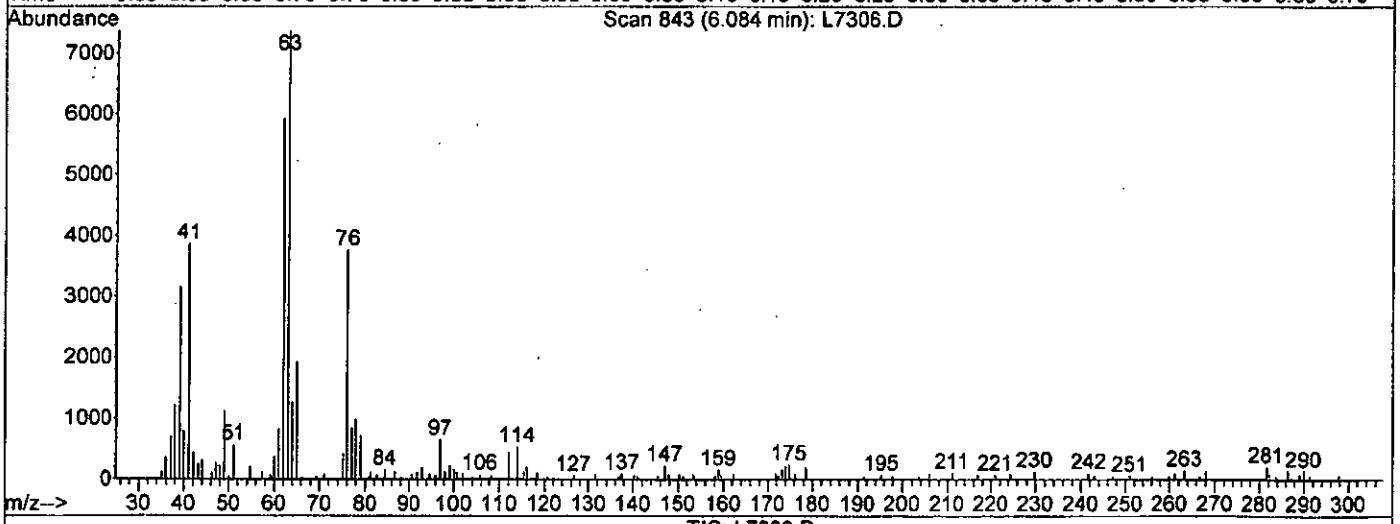
response 19340

Ion	Exp%	Act%
43.00	100	100
61.00	20.10	11.99#
87.00	10.70	5.09#
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7306.D Vial: 9
Acq On : 11 Sep 2014 12:50 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:34 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:28:54 2014
Response via : Multiple Level Calibration





TIC: L7306.D

(40) 1,2-Dichlpropane

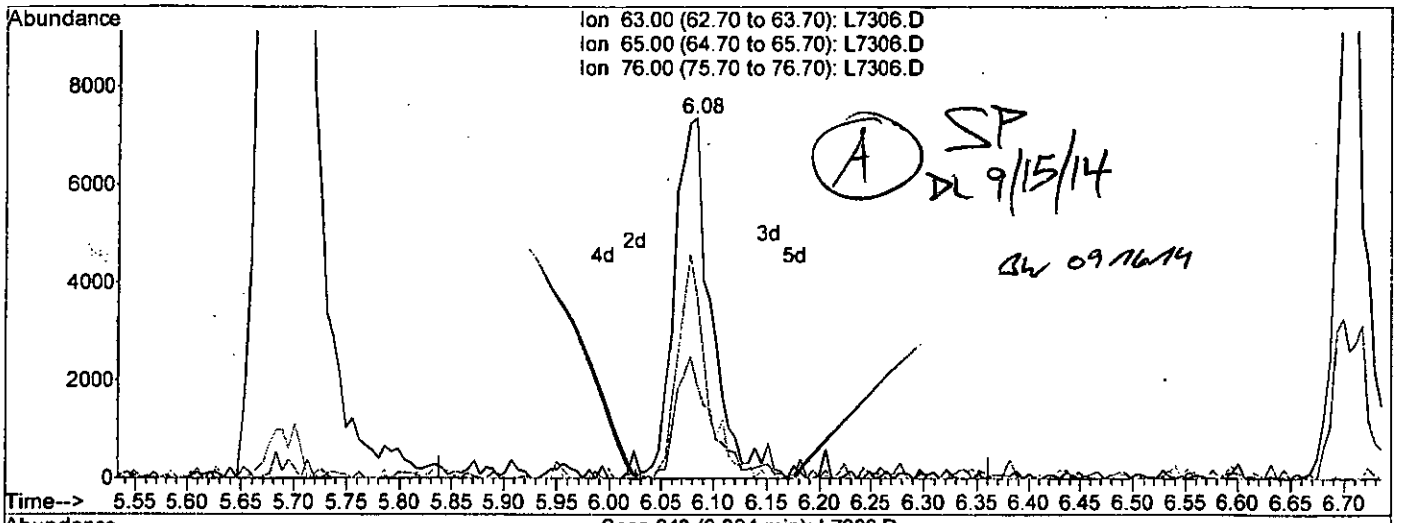
6.08min 1.93ug/L

response 17088

Ion	Exp%	Act%
63.00	100	100
65.00	28.40	35.37#
76.00	44.50	50.77
0.00	0.00	0.00

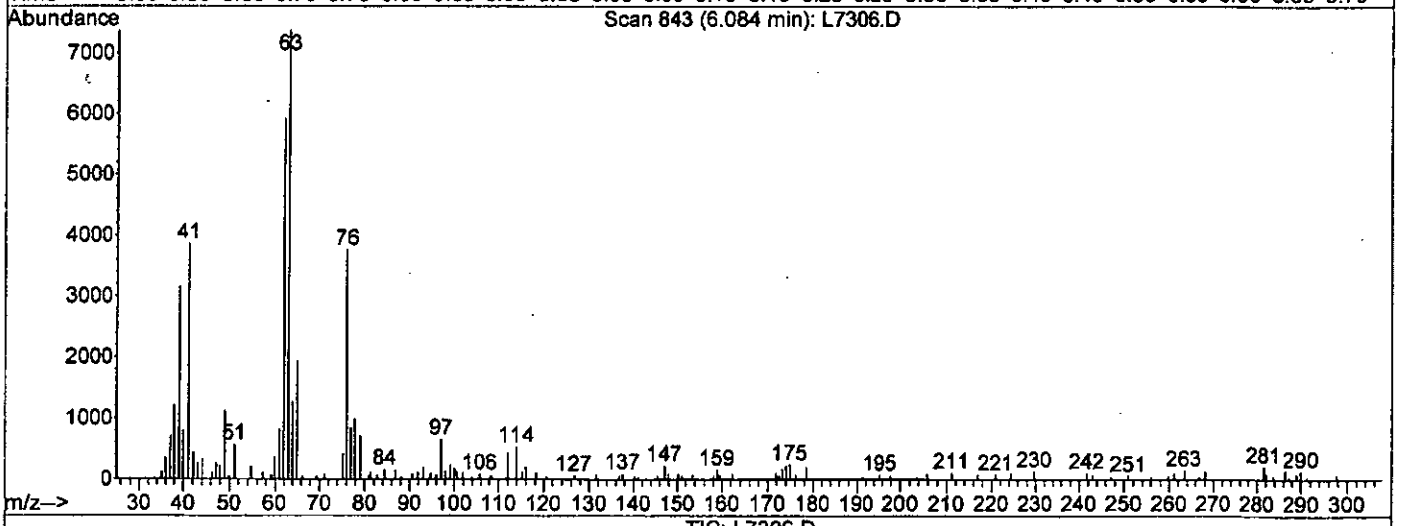
Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7306.D Vial: 9
Acq On : 11 Sep 2014 12:50 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:35 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:28:54 2014
Response via : Multiple Level Calibration



A SP DL 9/15/14

AW 09/16/14



TIC: L7306.D

(40) 1,2-Dichloropane

6.08min 2.04ug/L m

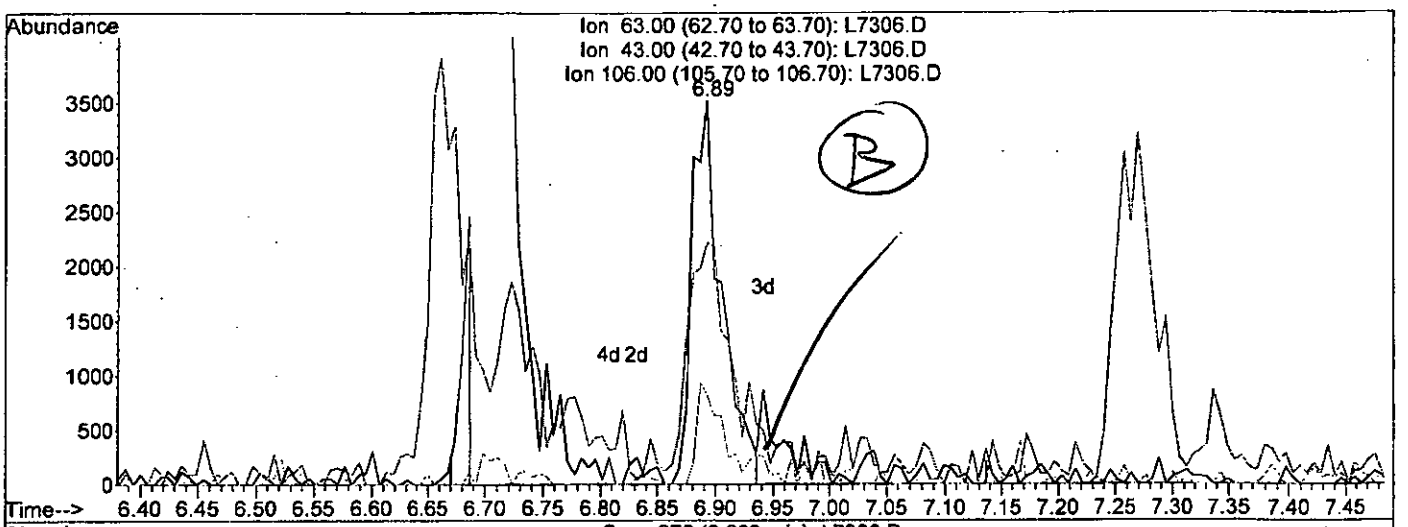
response 18040

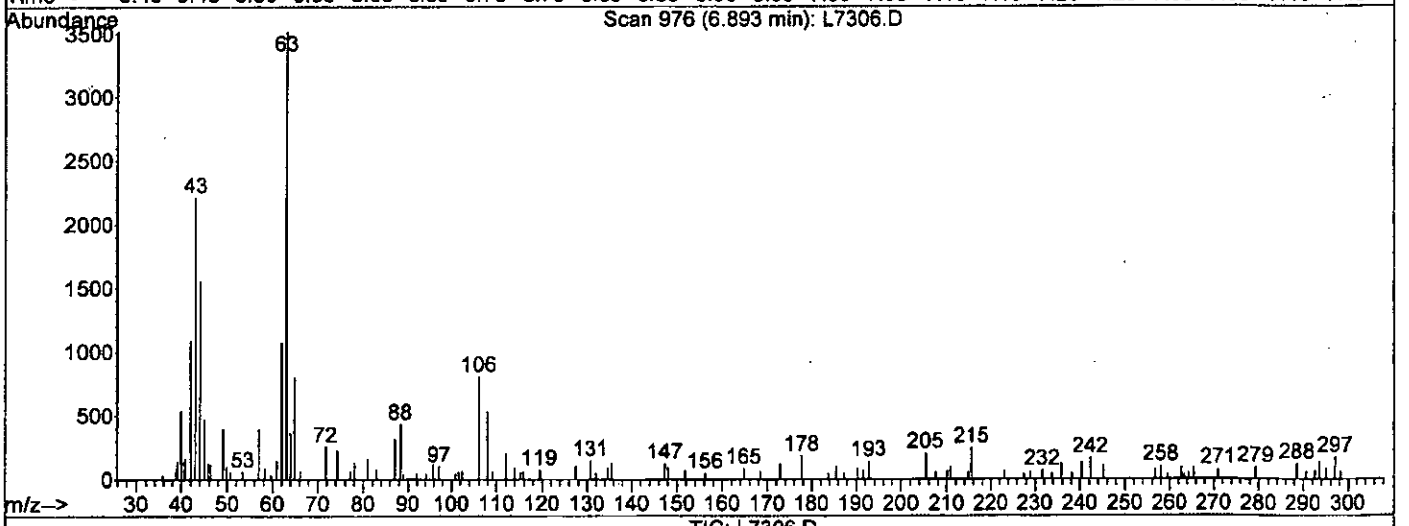
Ion	Exp%	Act%
63.00	100	100
65.00	28.40	33.50
76.00	44.50	48.09
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7306.D Vial: 9
Acq On : 11 Sep 2014 12:50 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:35 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:28:54 2014
Response via : Multiple Level Calibration





TIC: L7306.D

(46) 2-Chloroethylvinyl Ether

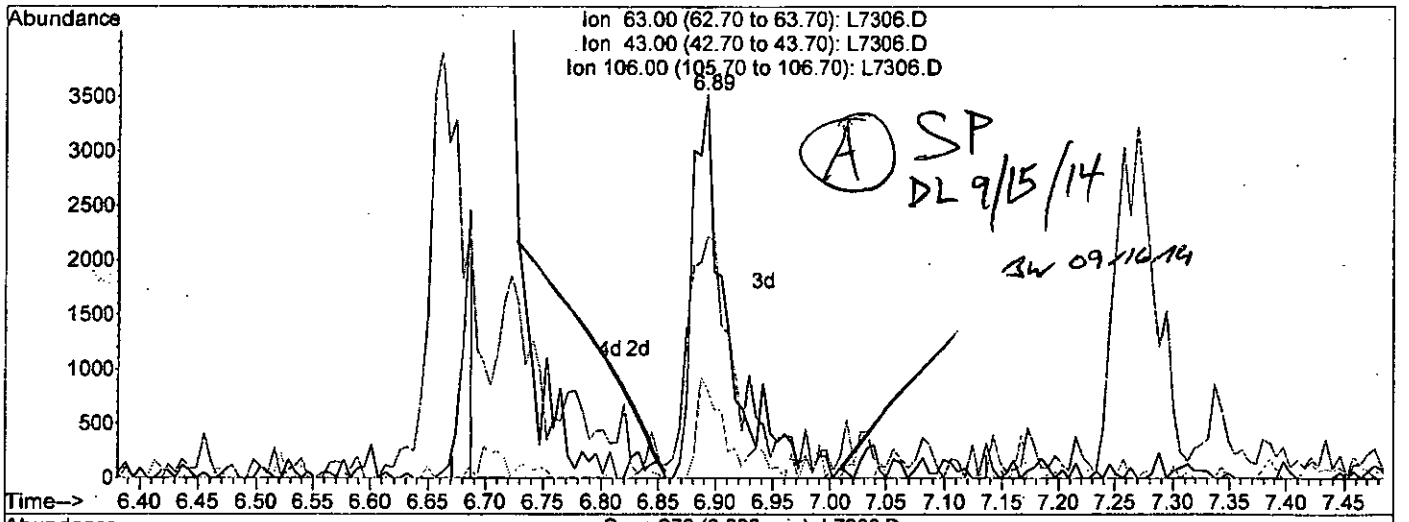
6.89min 1.63ug/L

response 6380

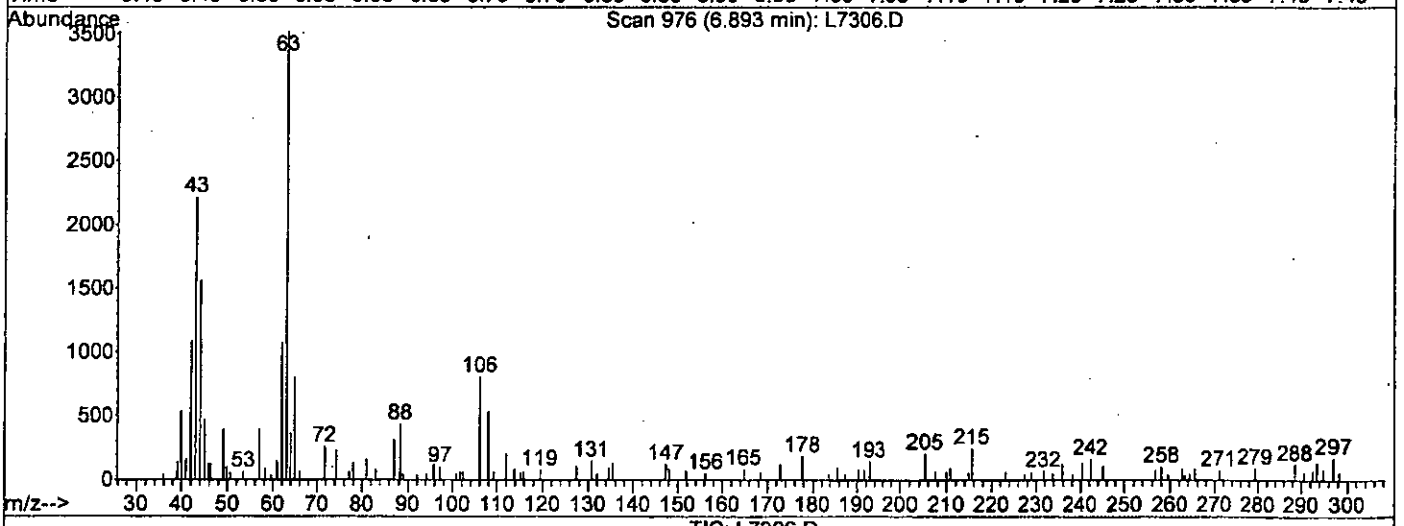
Ion	Exp%	Act%
63.00	100	100
43.00	67.60	101.27#
106.00	26.10	21.82
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7306.D Vial: 9
Acq On : 11 Sep 2014 12:50 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:35 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:28:54 2014
Response via : Multiple Level Calibration



A SP DL 9/15/14 SW 09/16/14



TIC: L7306.D

(46) 2-Chloroethylvinyl Ether

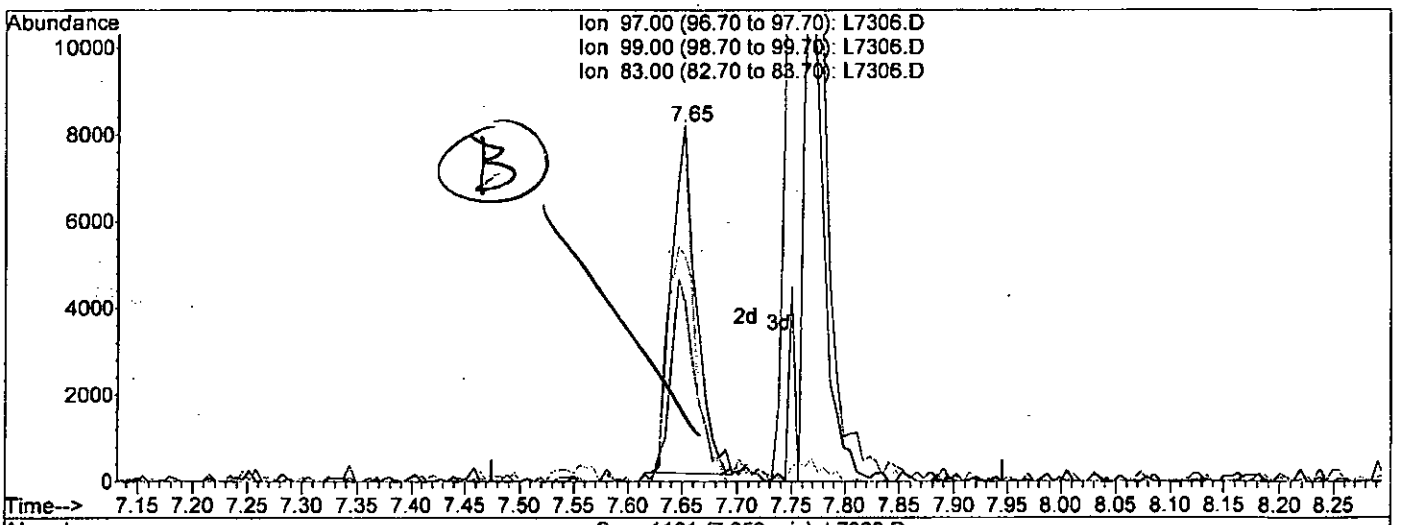
6.89min 1.94ug/L m

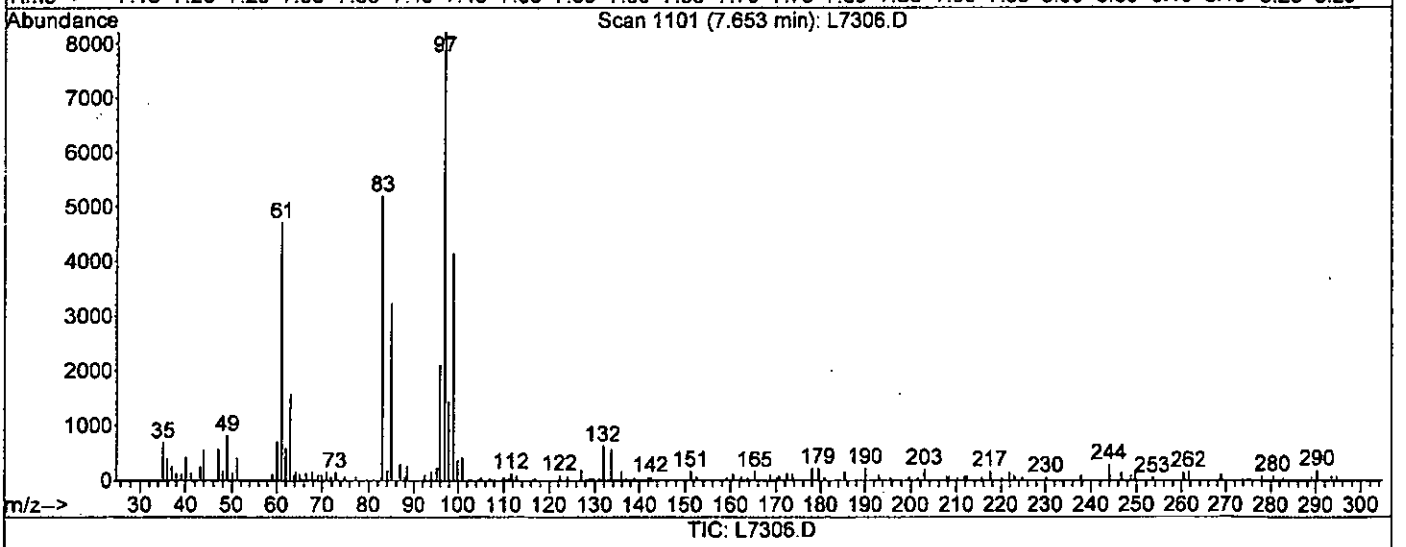
response 7599

Ion	Exp%	Act%
63.00	100	100
43.00	67.60	85.02#
106.00	26.10	18.32#
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7306.D Vial: 9
Acq On : 11 Sep 2014 12:50 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:36 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:28:54 2014
Response via : Multiple Level Calibration





TIC: L7306.D

(50) 1,1,2-Trichloroethane

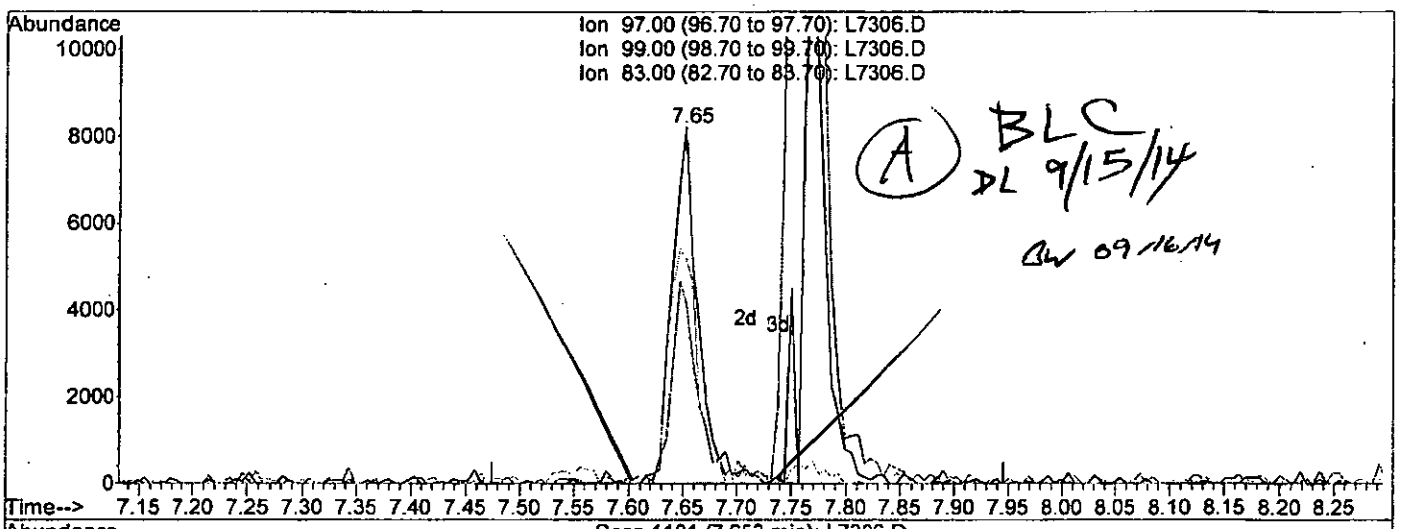
7.65min 2.03ug/L

response 12481

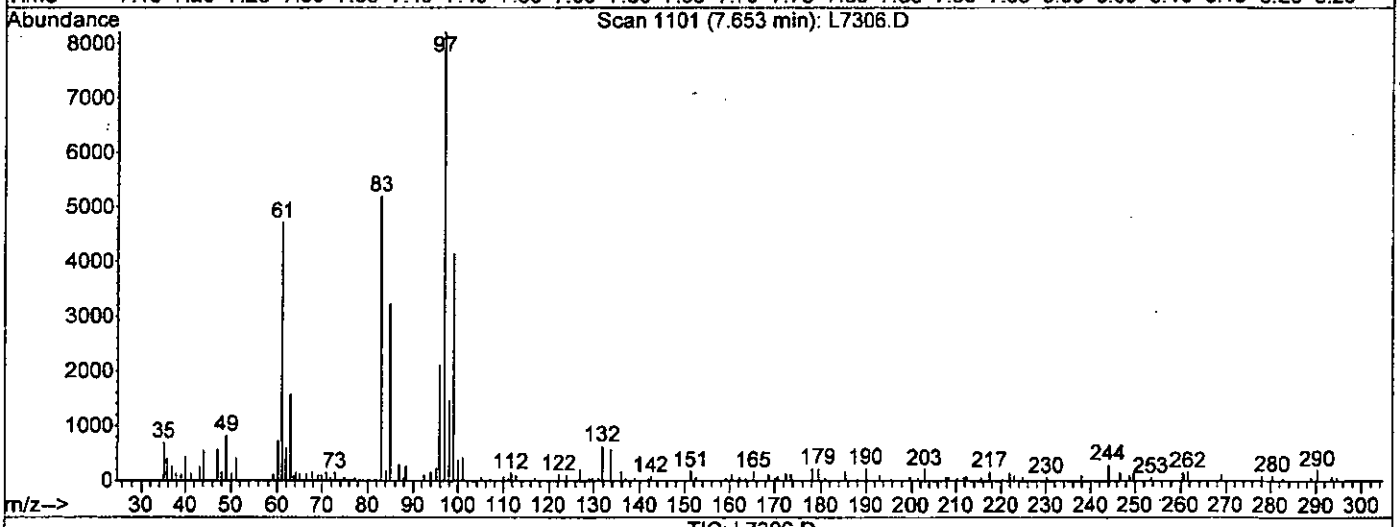
Ion	Exp%	Act%
97.00	100	100
99.00	62.20	64.49
83.00	84.60	79.55
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7306.D Vial: 9
Acq On : 11 Sep 2014 12:50 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:37 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:28:54 2014
Response via : Multiple Level Calibration



A BLC DL 9/15/14 QW 09/16/14



TIC: L7306.D

(50) 1,1,2-Trichloroethane

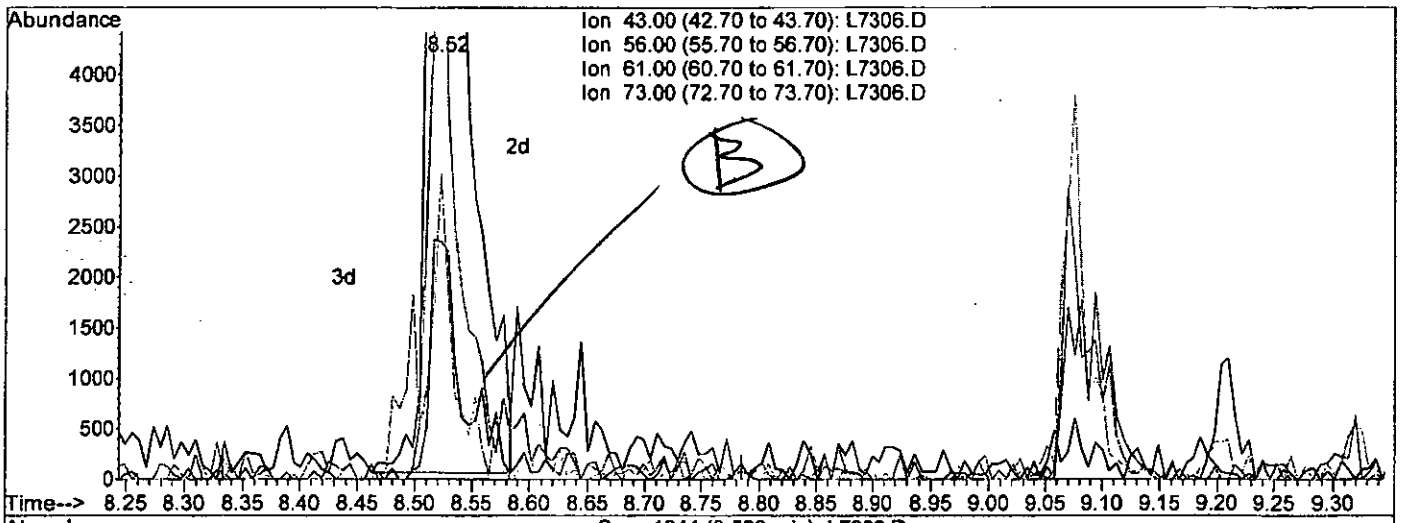
7.65min 2.24ug/L m

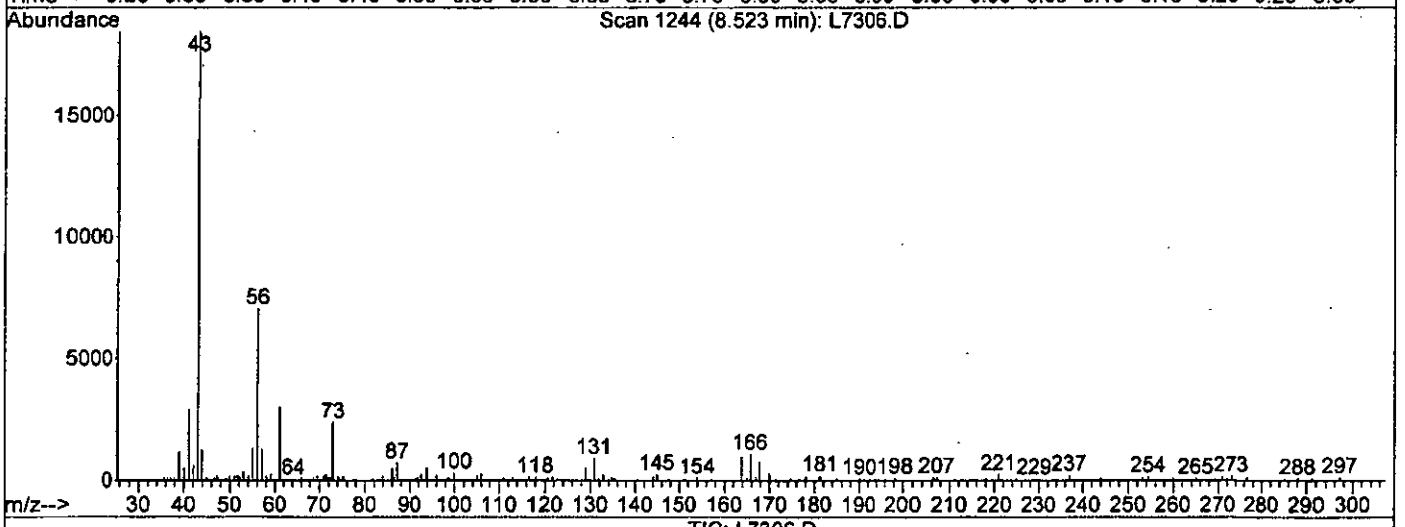
response 13797

Ion	Exp%	Act%
97.00	100	100
99.00	62.20	58.34
83.00	84.60	71.96
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7306.D Vial: 9
Acq On : 11 Sep 2014 12:50 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:37 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:28:54 2014
Response via : Single Level Calibration





TIC: L7306.D

(58) N-Butyl Acetate

8.52min 3.59ug/L

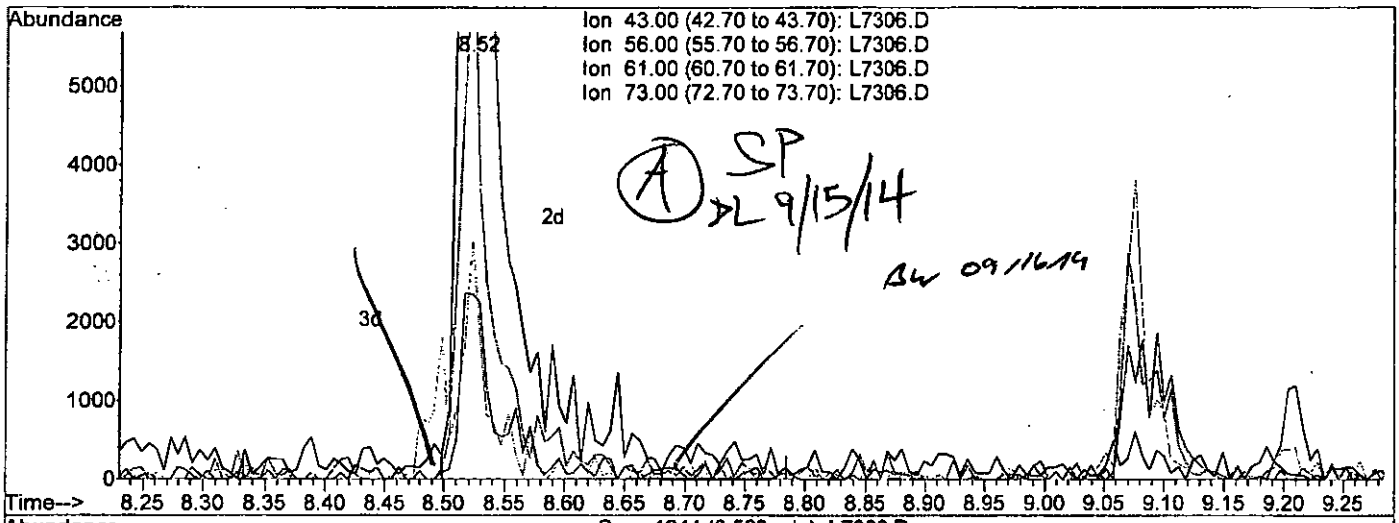
response 28895

Ion	Exp%	Act%
43.00	100	100
56.00	37.30	35.51
61.00	17.60	13.50#
73.00	13.40	12.65

Quantitation Report (Qedit)

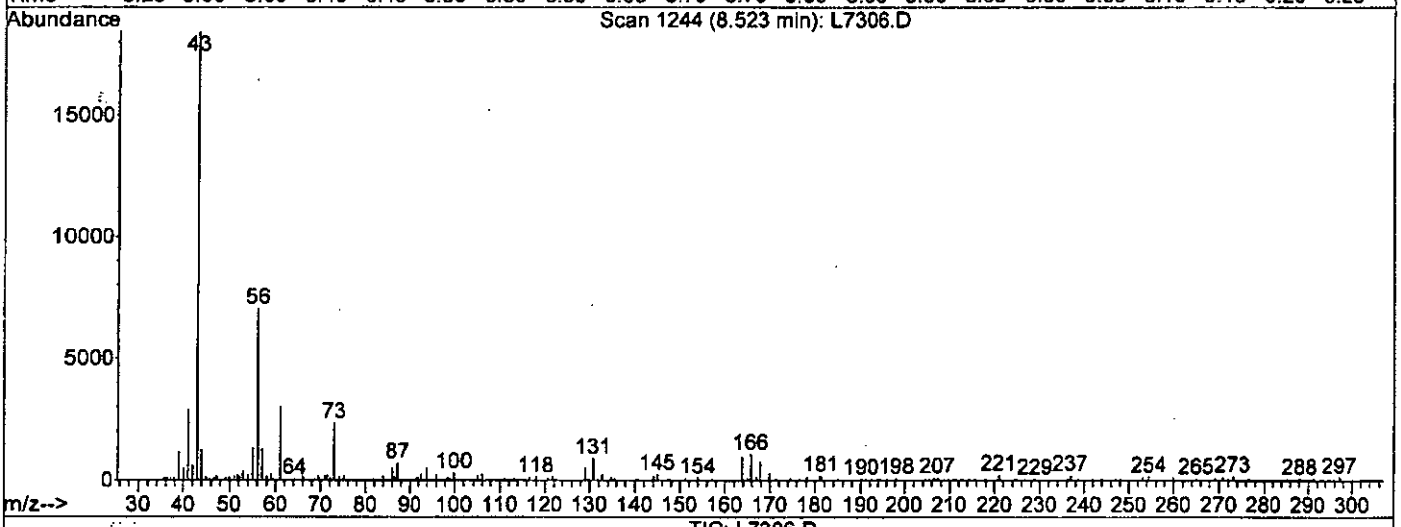
Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7306.D Vial: 9
Acq On : 11 Sep 2014 12:50 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:37 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:28:54 2014
Response via : Single Level Calibration



A SP 9/15/14

BW 09/16/14



TIC: L7306.D

(58) N-Butyl Acetate

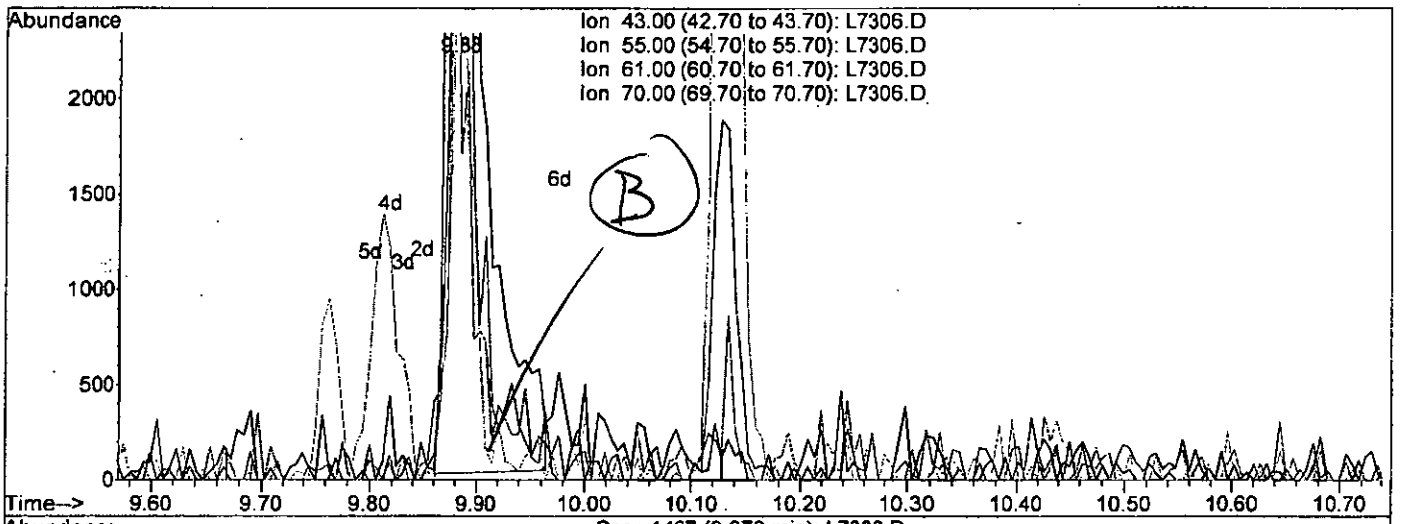
8.52min 4.07ug/L m

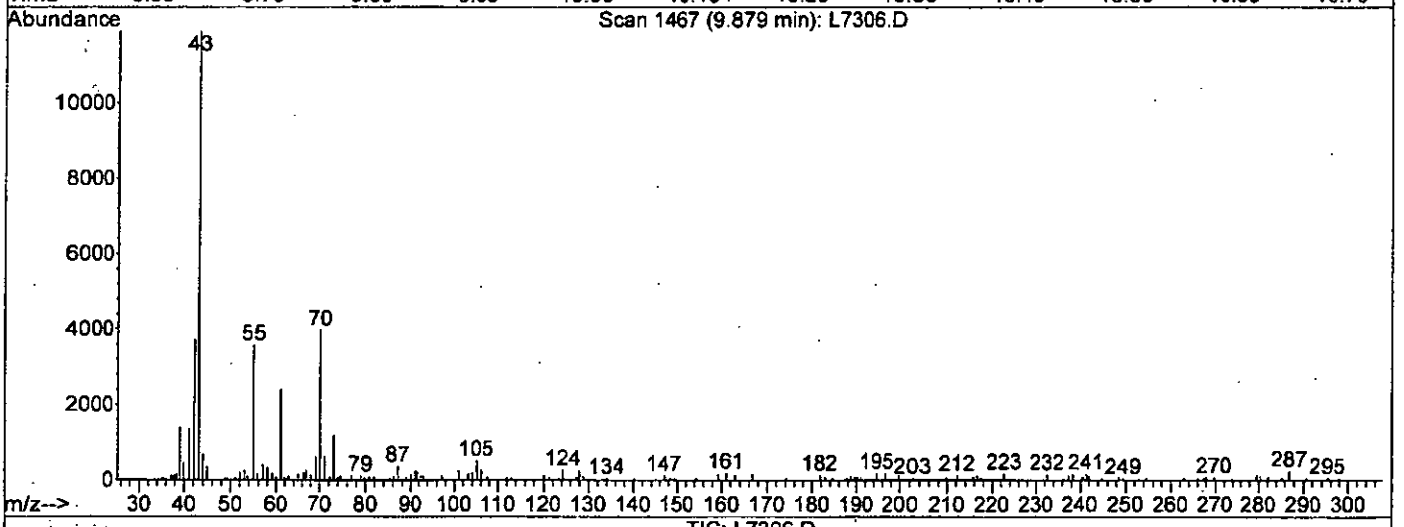
response 32748

Ion	Exp%	Act%
43.00	100	100
56.00	37.30	31.33
61.00	17.60	11.91#
73.00	13.40	11.16

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7306.D Vial: 9
Acq On : 11 Sep 2014 12:50 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:37 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:28:54 2014
Response via : Multiple Level Calibration





TIC: L7306.D

(67) Amyl Acetate

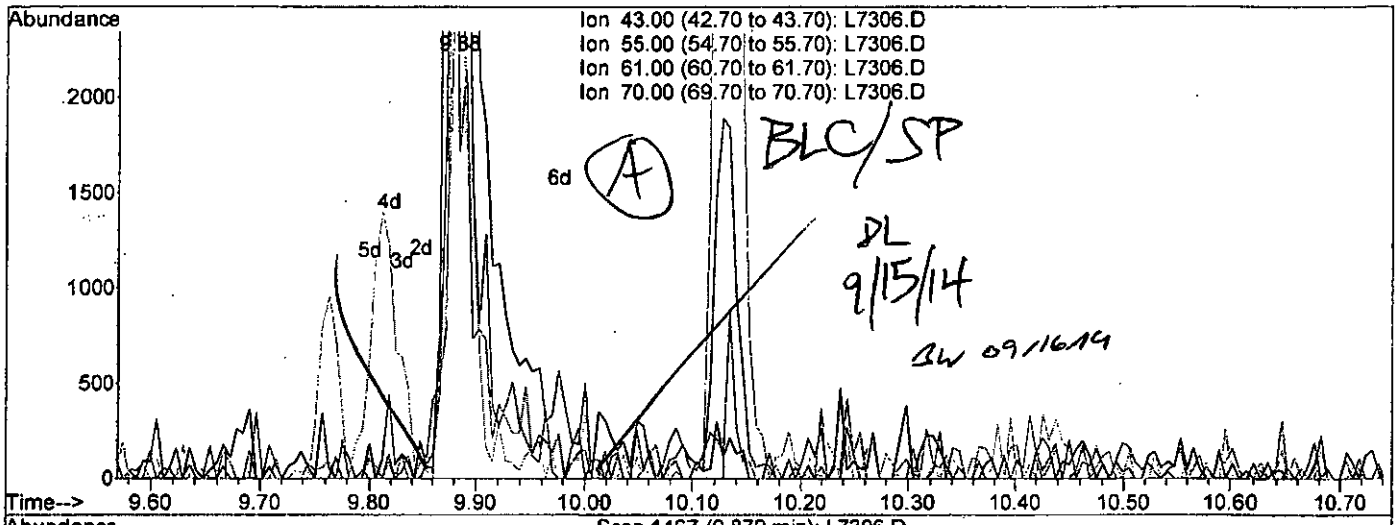
9.88min 1.76ug/L

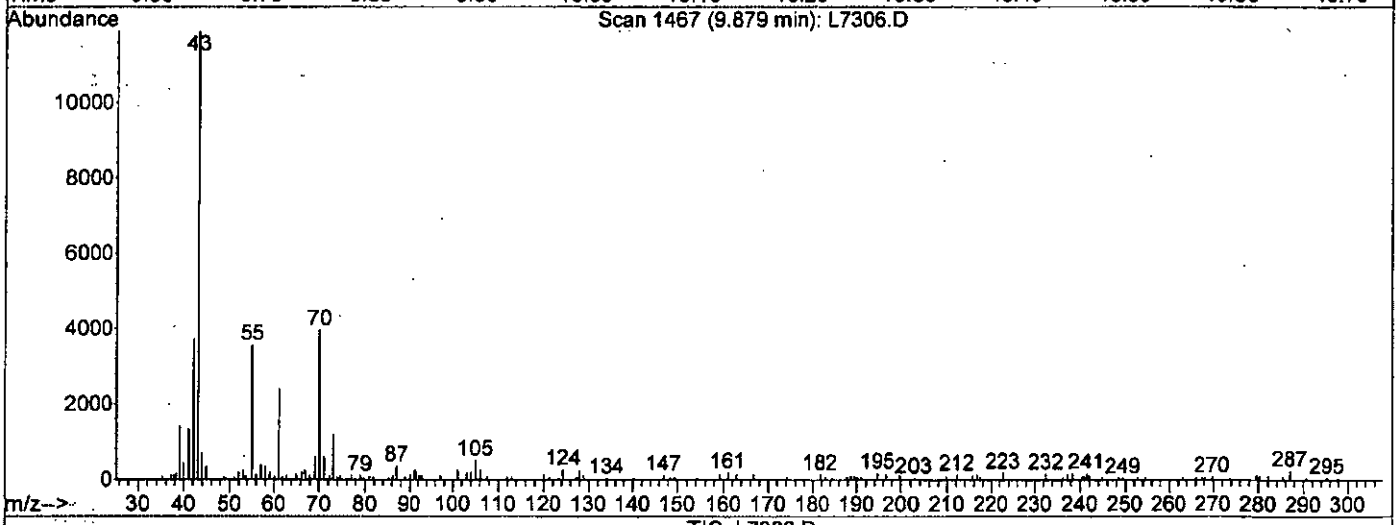
response 18906

Ion	Exp%	Act%
43.00	100	100
55.00	22.50	20.28
61.00	22.80	21.62
70.00	36.10	37.70

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7306.D Vial: 9
Acq On : 11 Sep 2014 12:50 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:38 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:28:54 2014
Response via : Multiple Level Calibration





TIC: L7306.D

(67) Amyl Acetate

9.88min 1.86ug/L m

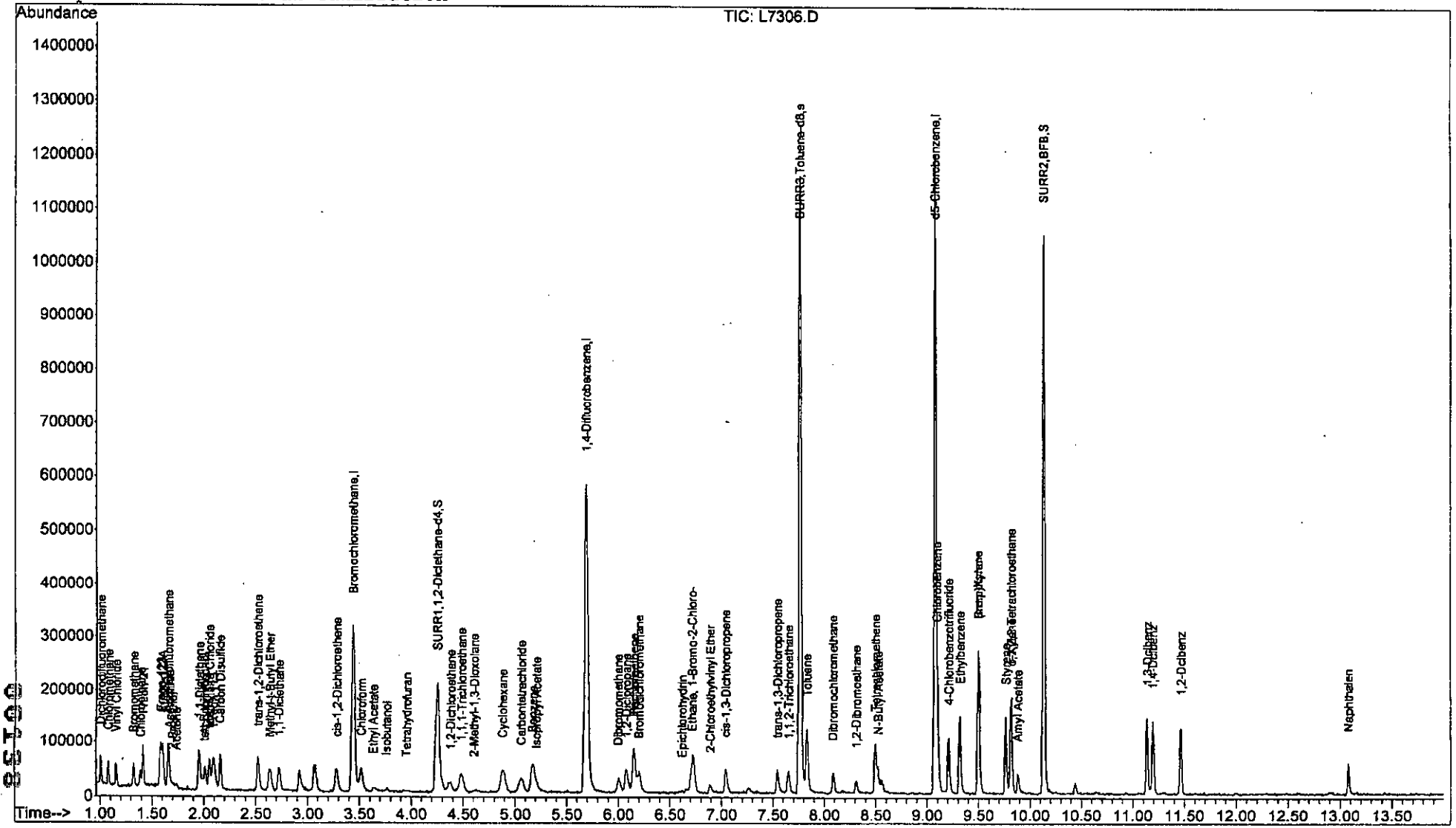
response 19947

Ion	Exp%	Act%
43.00	100	100
55.00	22.50	19.23
61.00	22.80	20.49
70.00	36.10	35.73

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7306.D Vial: 9
Acq On : 11 Sep 2014 12:50 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:38 2014 Quant Results File: 6240911.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:28:54 2014
Response via : Initial Calibration



Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7315.D Vial: 18
Acq On : 11 Sep 2014 6:36 pm Operator: D.Lipani
Sample : STD #4 - 5.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:48 2014 Quant Results File: 6240911.RES

Quant Method : I:\ACQUDATA\M...\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:38:46 2014
Response via : Initial Calibration
DataAcq Meth : 6240911

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	3.44	128	102968	30.00	ug/L		0.00
35) 1,4-Difluorobenzene	5.69	114	627189	30.00	ug/L		0.00
53) d5-Chlorobenzene	9.08	117	570924	30.00	ug/L		0.00
System Monitoring Compounds							
30) SURR1,1,2-Diclethane-d4	4.25	65	216782	30.49	ug/L		0.00
Spiked Amount 30.000	Range 81 - 127		Recovery = 101.63%				
51) SURR3,Toluene-d8	7.76	98	717617	29.65	ug/L		0.00
Spiked Amount 30.000	Range 83 - 120		Recovery = 98.83%				
68) SURR2,BFB	10.13	95	284213	29.87	ug/L		0.00
Spiked Amount 30.000	Range 79 - 123		Recovery = 99.57%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.01	85	58081	5.15	ug/L		91
3) Chloromethane	1.08	50	54654	5.06	ug/L		95
4) Vinyl Chloride	1.15	62	53850	4.99	ug/L		94
5) Bromomethane	1.32	94	37472	4.93	ug/L		98
6) Chloroethane	1.39	64	32578	4.88	ug/L		93
7) Freon-21	1.42	67	100455	5.23	ug/L		97
8) Freon-123	1.59	83	72991	4.98	ug/L	#	96
9) Freon-123A	1.60	67	65759	5.14	ug/L		93
10) Acrolein	1.66	56	27736	26.38	ug/L		88
11) Trichlorofluoromethane	1.66	101	98334	5.24	ug/L		97
12) Acetonitrile	1.68	41	21221	25.12	ug/L		88
13) 2-Propanol	1.70	45	24873	90.25	ug/L		96
14) Acetone	1.74	43	11861	5.24	ug/L		95
15) 1,1-Diclethene	1.95	96	44620	4.99	ug/L		98
16) tert Butyl Alcohol	1.99	59	40173	93.67	ug/L		93
17) Acrylonitrile	2.01	53	43769	23.40	ug/L		81
18) Methylene Chloride	2.05	84	42462	5.17	ug/L	#	88
19) Freon 113	2.09	101	50615	5.12	ug/L		75
20) Carbon Disulfide	2.16	76	146197	4.88	ug/L		97
21) trans-1,2-Dichloroethene	2.52	96	49495	5.20	ug/L		97
22) Methyl-t-Butyl Ether	2.64	73	106193	5.08	ug/L	#	98
23) 1,1-Diclethane	2.72	63	89353	5.14	ug/L		95
24) 2-Butanone	3.20	43	8148m	3.96	ug/L		
25) cis-1,2-Dichloroethene	3.28	96	51849	5.15	ug/L		96
26) Chloroform	3.51	83	89480	5.04	ug/L		98
27) Ethyl Acetate	3.62	43	44441	9.94	ug/L	#	90
28) Isobutanol	3.75	43	18716	109.81	ug/L	#	81
29) Tetrahydrofuran	3.95	42	7502m	4.86	ug/L		
31) 1,2-Dichloroethane	4.36	62	62011	5.41	ug/L	#	96
32) 1,1,1-Trichloroethane	4.49	97	80882	4.96	ug/L	#	91
33) 2-Methyl-1,3-Dioxolane	4.60	73	14745	23.73	ug/L	#	89
34) Cyclohexane	4.88	56	79643	5.58	ug/L		94
36) Carbontetrachloride	5.07	117	69989	5.15	ug/L	#	82
37) Isopropyl Acetate	5.20	43	51504	4.65	ug/L		97
38) Benzene	5.17	78	186863	5.33	ug/L		97
39) Dibromomethane	6.00	93	28491	5.10	ug/L		92
40) 1,2-Diclpropane	6.08	63	49939	5.23	ug/L		98
41) Trichloroethene	6.15	130	56844	5.26	ug/L		96

DL 9/15/14

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

00139

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7315.D Vial: 18
Acq On : 11 Sep 2014 6:36 pm Operator: D.Lipani
Sample : STD #4 - 5.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:48 2014 Quant Results File: 6240911.RES

Quant Method : I:\ACQUDATA\M...\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:38:46 2014
Response via : Initial Calibration
DataAcq Meth : 6240911

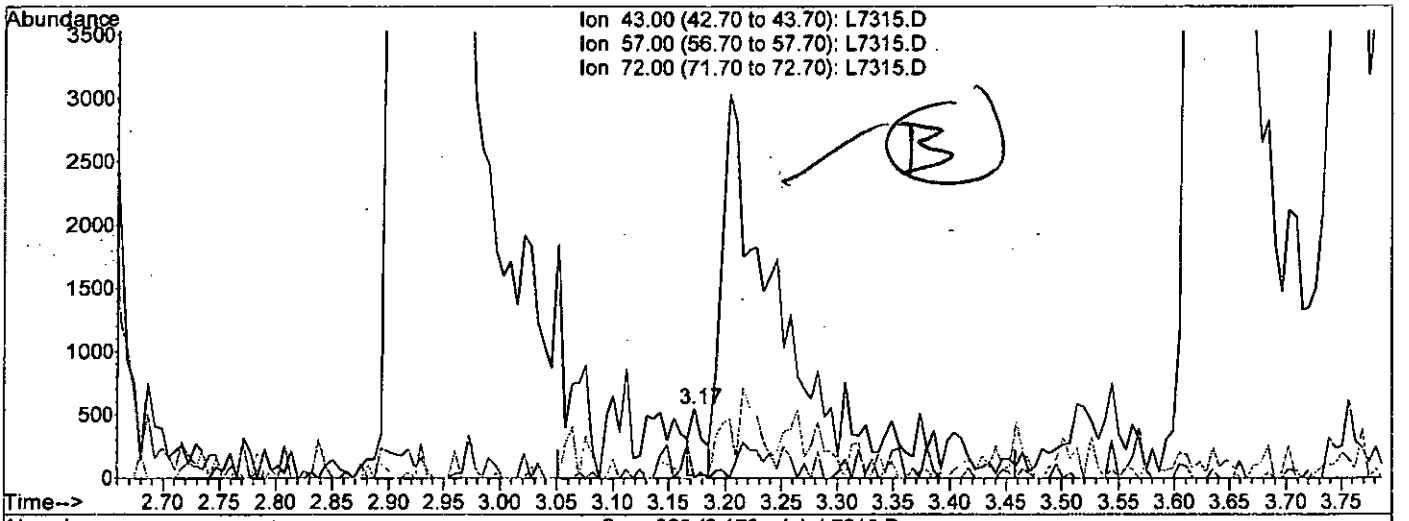
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
42)	Heptane	6.16	43	46608	5.27	ug/L		97
43)	Bromodichloromethane	6.20	83	67365	4.96	ug/L		97
44)	Epichlorohydrin	6.61	57	11548	25.49	ug/L	#	75
45)	Ethane, 1-Bromo-2-Chloro-	6.70	63	60389	5.51	ug/L		97
46)	2-Chloroethylvinyl Ether	6.88	63	21023	4.98	ug/L		96
47)	cis-1,3-Dichloropropene	7.03	75	73083	5.19	ug/L		98
48)	4-Methyl-2-pentanone	7.25	43	26088	4.97	ug/L		90
49)	trans-1,3-Dichloropropene	7.54	75	64906	5.29	ug/L		97
50)	1,1,2-Trichloroethane	7.65	97	34045	5.15	ug/L		93
52)	Toluene	7.83	91	199142	5.23	ug/L		96
54)	Dibromochloromethane	8.09	129	47657	5.07	ug/L		95
55)	2-Hexanone	8.15	43	16167m	4.63	ug/L		
56)	1,2-Dibromoethane	8.31	107	36363	5.04	ug/L		97
57)	Tetrachloroethene	8.49	164	47572	5.14	ug/L		96
58)	N-Butyl Acetate	8.51	43	81711	9.46	ug/L		98
59)	Chlorobenzene	9.10	112	138026	5.28	ug/L		96
60)	4-Chlorobenzotrifluoride	9.21	180	75844	5.06	ug/L		97
61)	Ethylbenzene	9.32	106	70334	5.18	ug/L		100
62)	(m+p)Xylene	9.50	106	177128	10.42	ug/L		98
63)	Bromoform	9.50	173	28916	4.74	ug/L		99
64)	Styrene	9.77	104	143314	5.12	ug/L		97
65)	1,1,2,2-Tetrachloroethane	9.81	83	40080	5.01	ug/L		99
66)	o-Xylene	9.81	106	86200	5.24	ug/L		93
67)	Amyl Acetate	9.88	43	56918	4.99	ug/L		98
69)	1,3-Dclbenz	11.14	146	123228	5.16	ug/L		99
70)	1,4-Dclbenz	11.19	146	121696	5.11	ug/L		98
71)	1,2-Dclbenz	11.46	146	109586	5.04	ug/L		96
72)	Naphthalen	13.08	128	94511	4.80	ug/L		97

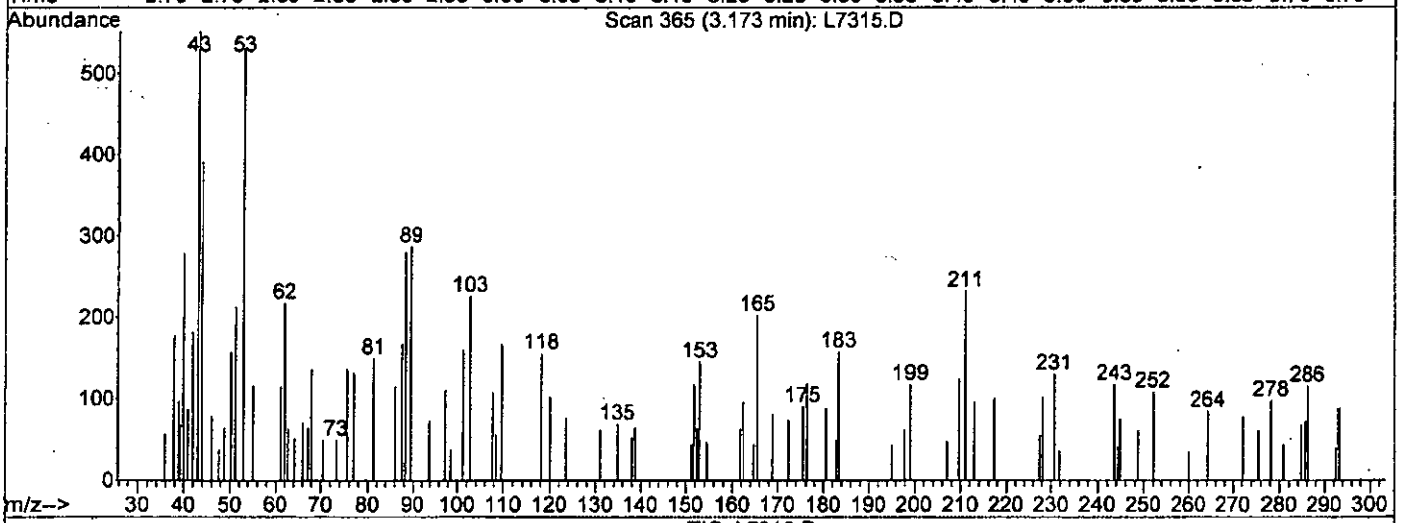
DL 9/15/14

(#) = qualifier out of range (m) = manual integration
L7315.D 6240911.M Mon Sep 15 10:48:56 2014

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7315.D Vial: 18
Acq On : 11 Sep 2014 6:36 pm Operator: D.Lipani
Sample : STD #4 - 5.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:43 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:38:46 2014
Response via : Multiple Level Calibration





TIC: L7315.D

(24) 2-Butanone

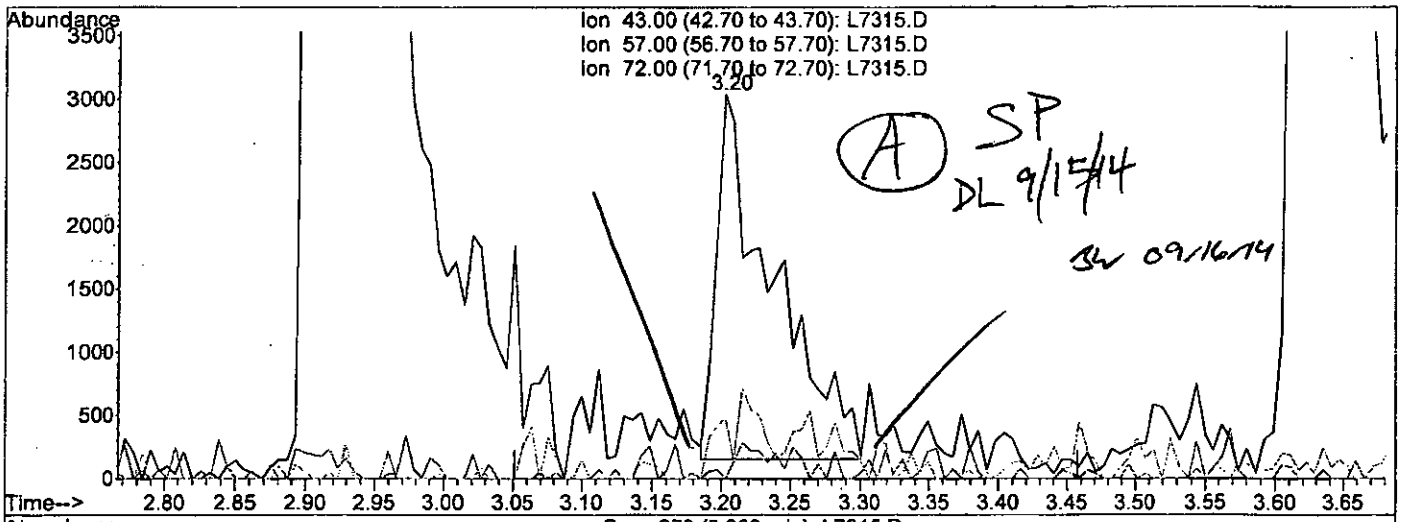
3.17min 0.18ug/L

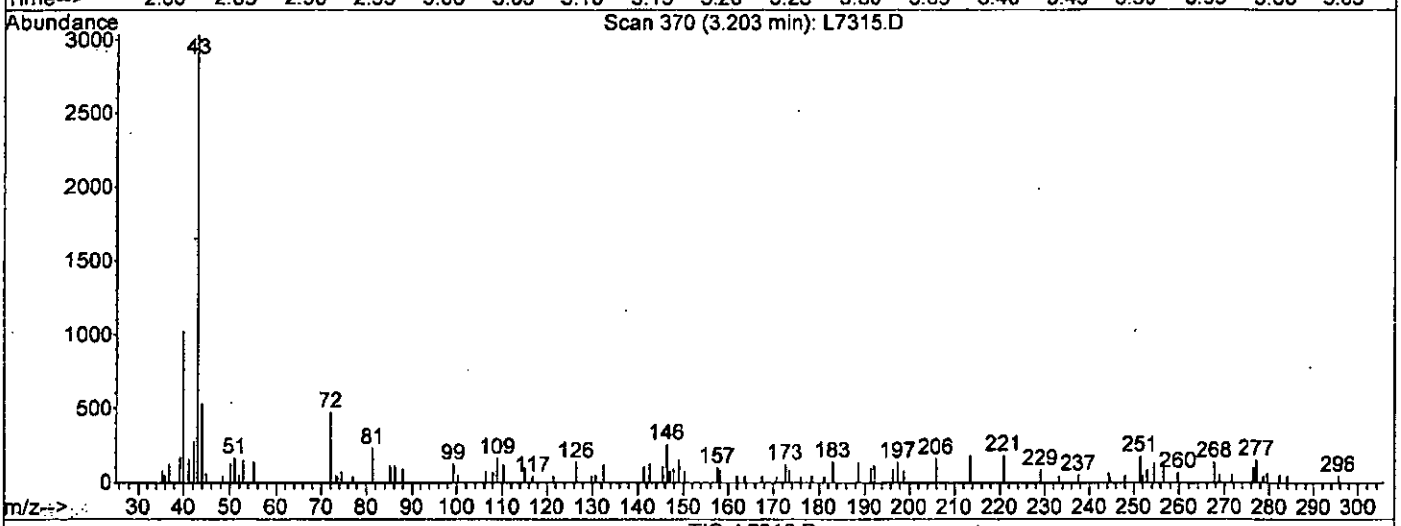
response 381

Ion	Exp%	Act%
43.00	100	100
57.00	5.40	0.00#
72.00	18.40	0.00#
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7315.D Vial: 18
Acq On : 11 Sep 2014 6:36 pm Operator: D.Lipani
Sample : STD #4 - 5.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:45 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:38:46 2014
Response via : Multiple Level Calibration





TIC: L7315.D

(24) 2-Butanone

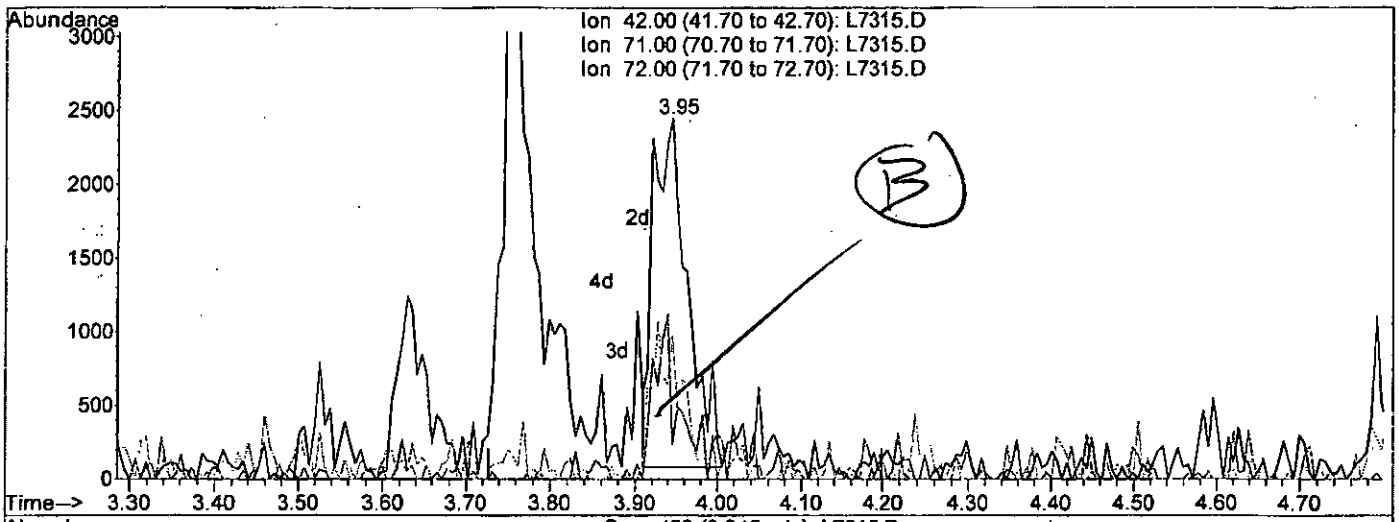
3.20min 3.96ug/L m

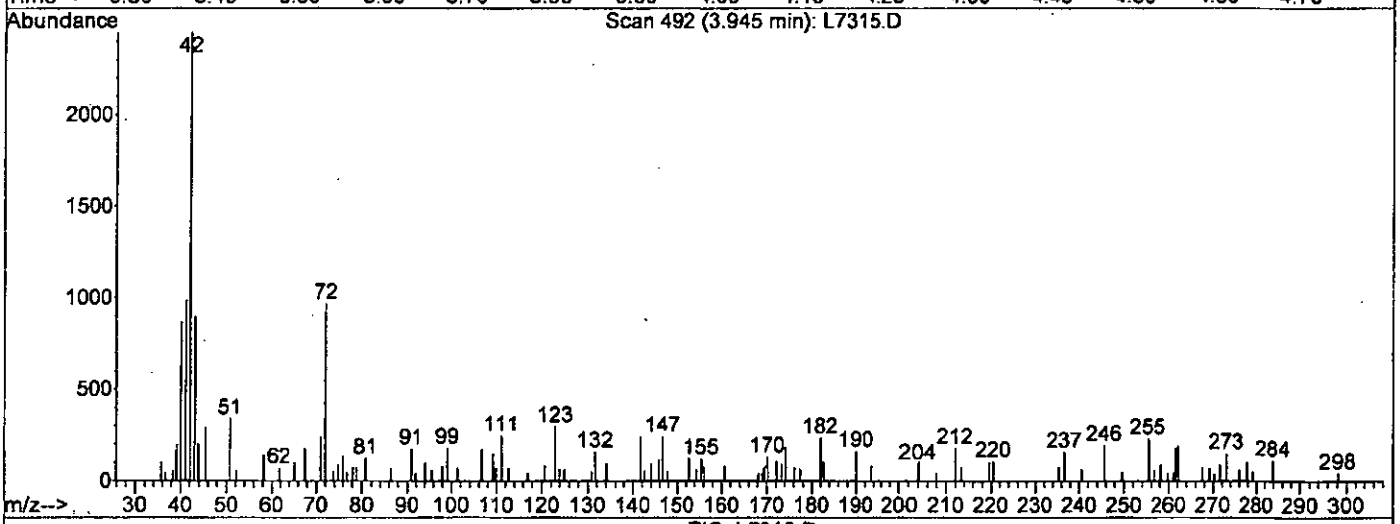
response 8148

Ion	Exp%	Act%
43.00	100	100
57.00	5.40	0.00#
72.00	18.40	15.59
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7315.D Vial: 18
Acq On : 11 Sep 2014 6:36 pm Operator: D.Lipani
Sample : STD #4 - 5.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:45 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:38:46 2014
Response via : Multiple Level Calibration





TIC: L7315.D

(29) Tetrahydrofuran

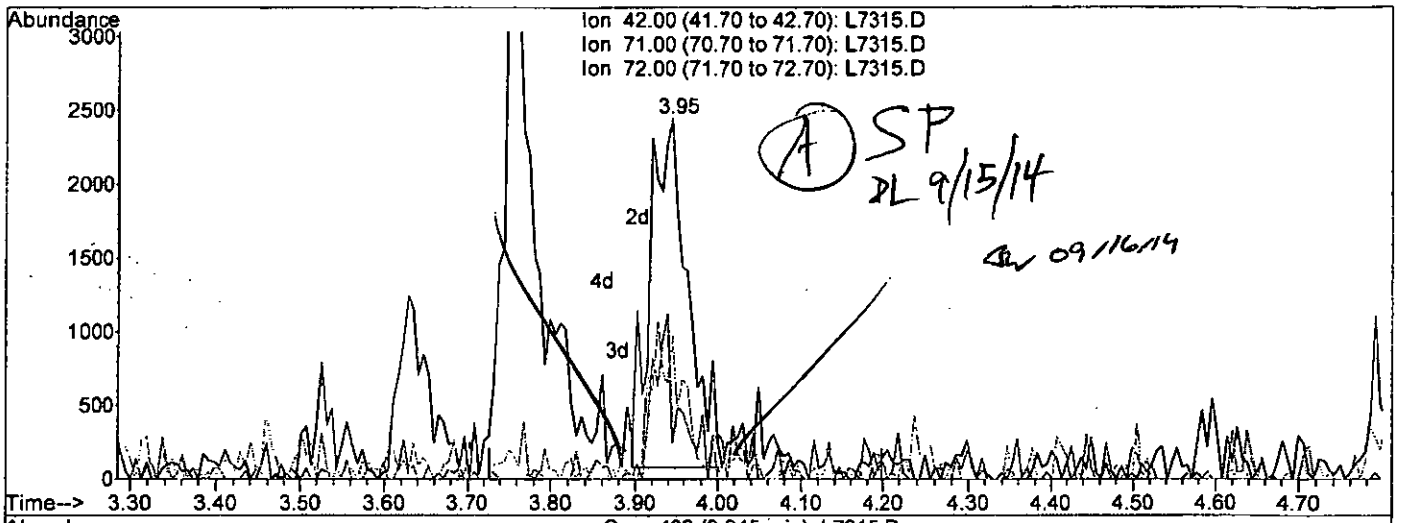
3.95min 4.48ug/L

response 6918

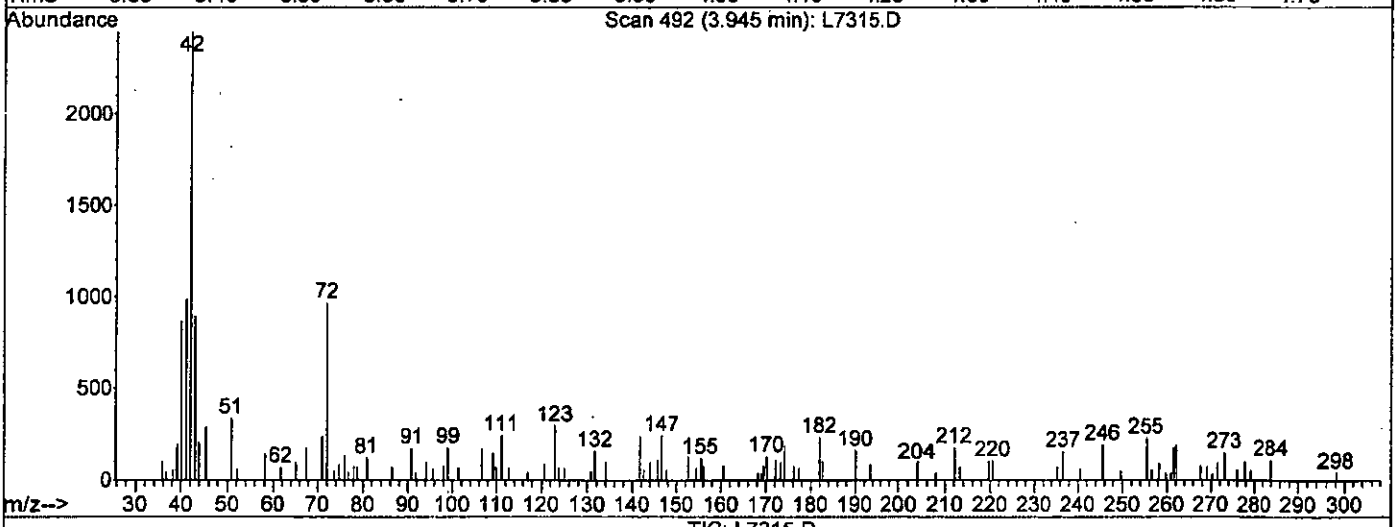
Ion	Exp%	Act%
42.00	100	100
71.00	52.10	9.68#
72.00	38.40	39.42
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7315.D Vial: 18
Acq On : 11 Sep 2014 6:36 pm Operator: D.Lipani
Sample : STD #4 - 5.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:46 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:38:46 2014
Response via : Multiple Level Calibration



SP DL 9/15/14 09/16/14



TIC: L7315.D

(29) Tetrahydrofuran

3.95min 4.86ug/L m

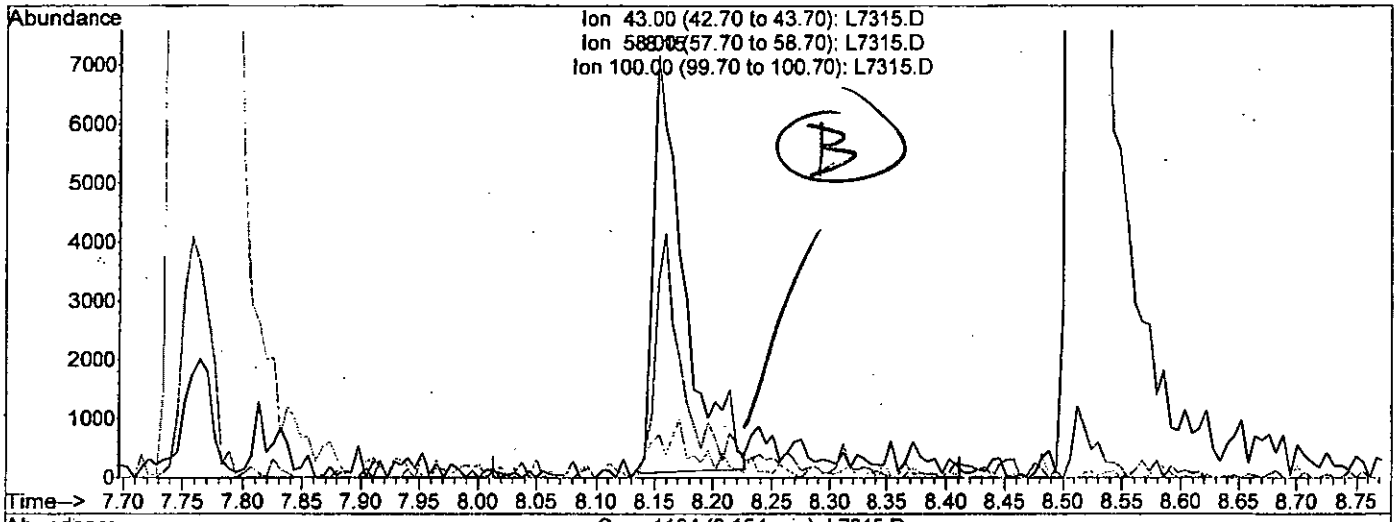
response 7502

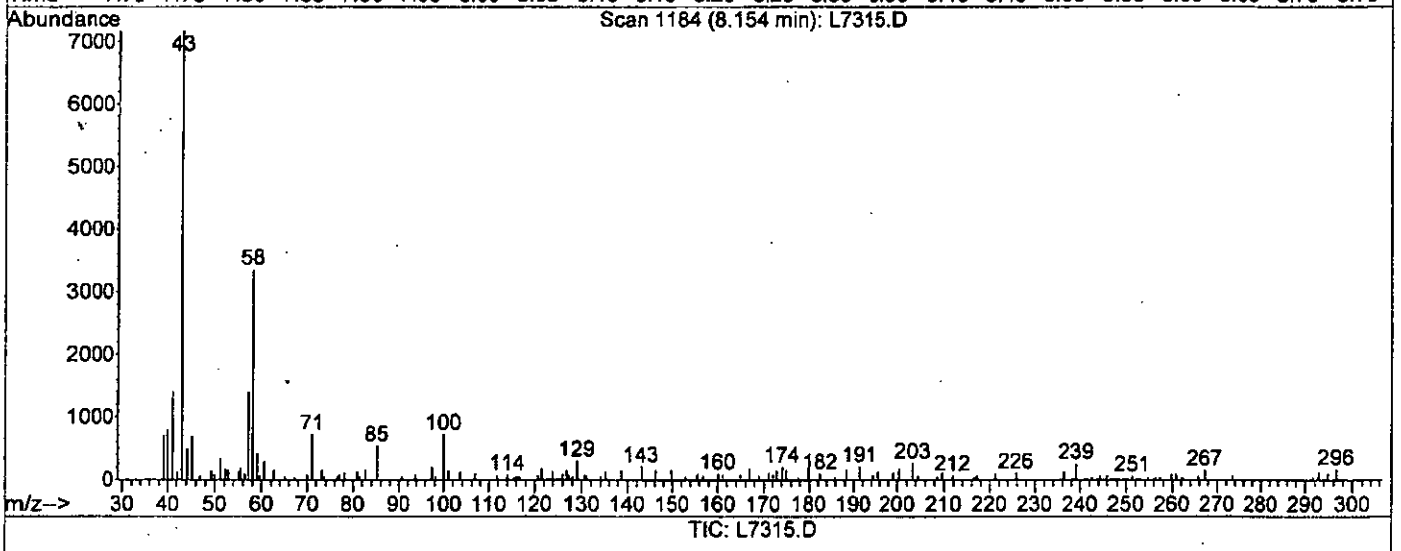
Ion	Exp%	Act%
42.00	100	100
71.00	52.10	9.68#
72.00	38.40	39.42
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7315.D Vial: 18
Acq On : 11 Sep 2014 6:36 pm Operator: D.Lipani
Sample : STD #4 - 5.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:46 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:38:46 2014
Response via : Multiple Level Calibration





TIC: L7315.D

(55) 2-Hexanone

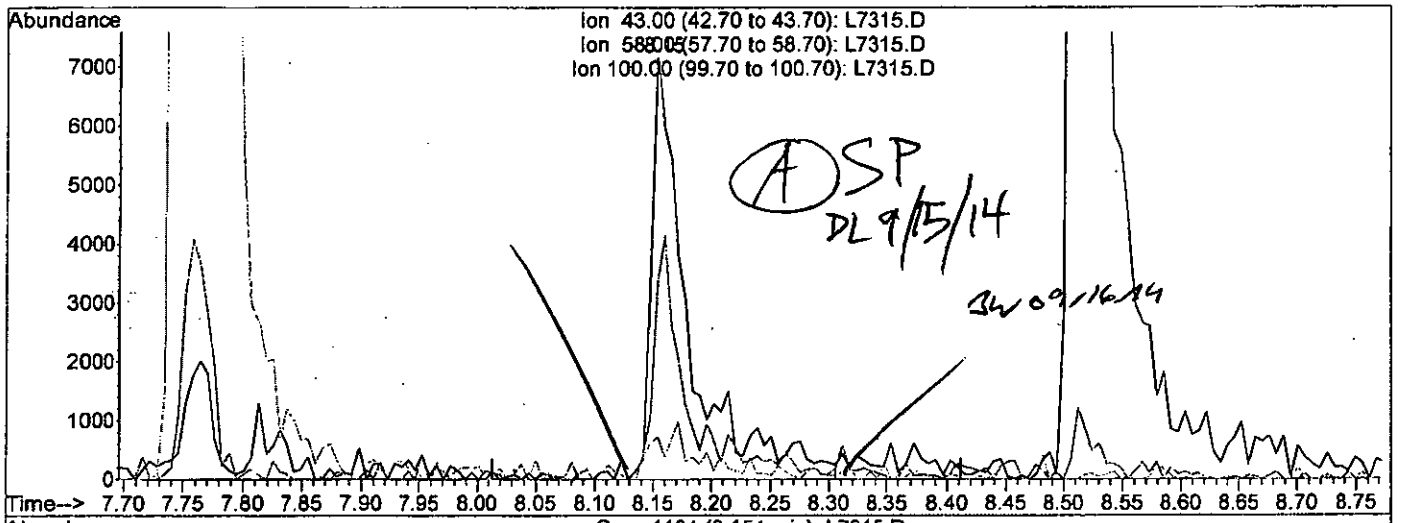
8.15min 3.78ug/L

response 13211

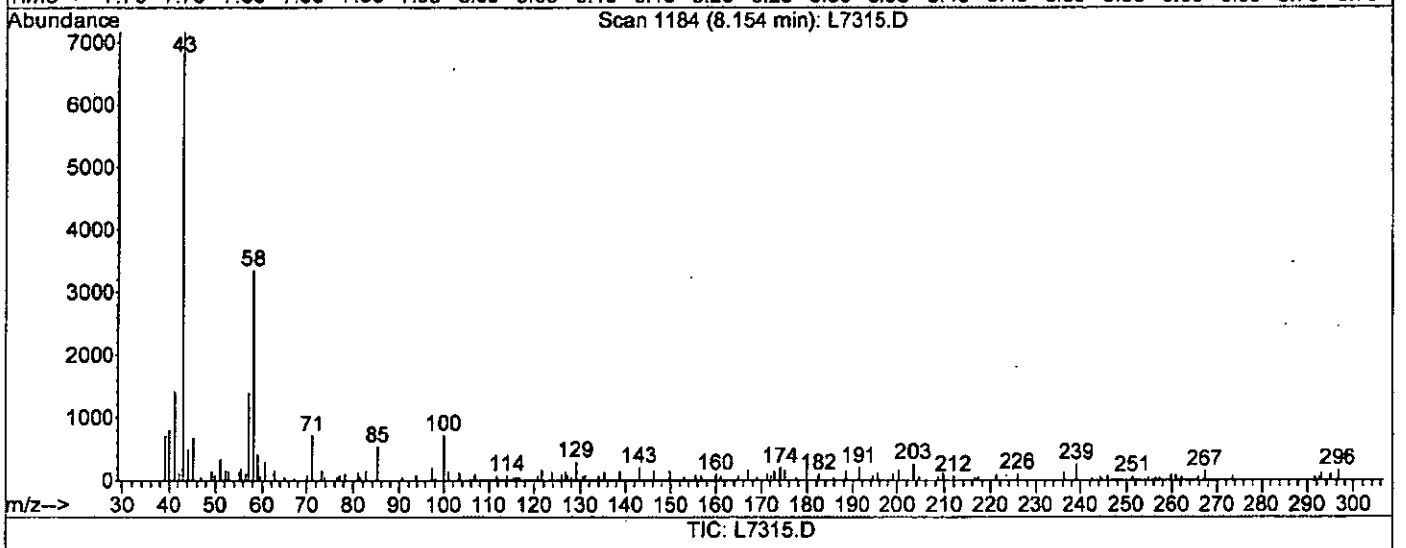
Ion	Exp%	Act%
43.00	100	100
58.00	51.80	50.05
100.00	8.40	5.76#
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7315.D Vial: 18
Acq On : 11 Sep 2014 6:36 pm Operator: D.Lipani
Sample : STD #4 - 5.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:48 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:38:46 2014
Response via : Multiple Level Calibration



ASP
DL 9/15/14
JW 09/16/14



TIC: L7315.D

(55) 2-Hexanone

8.15min 4.63ug/L m

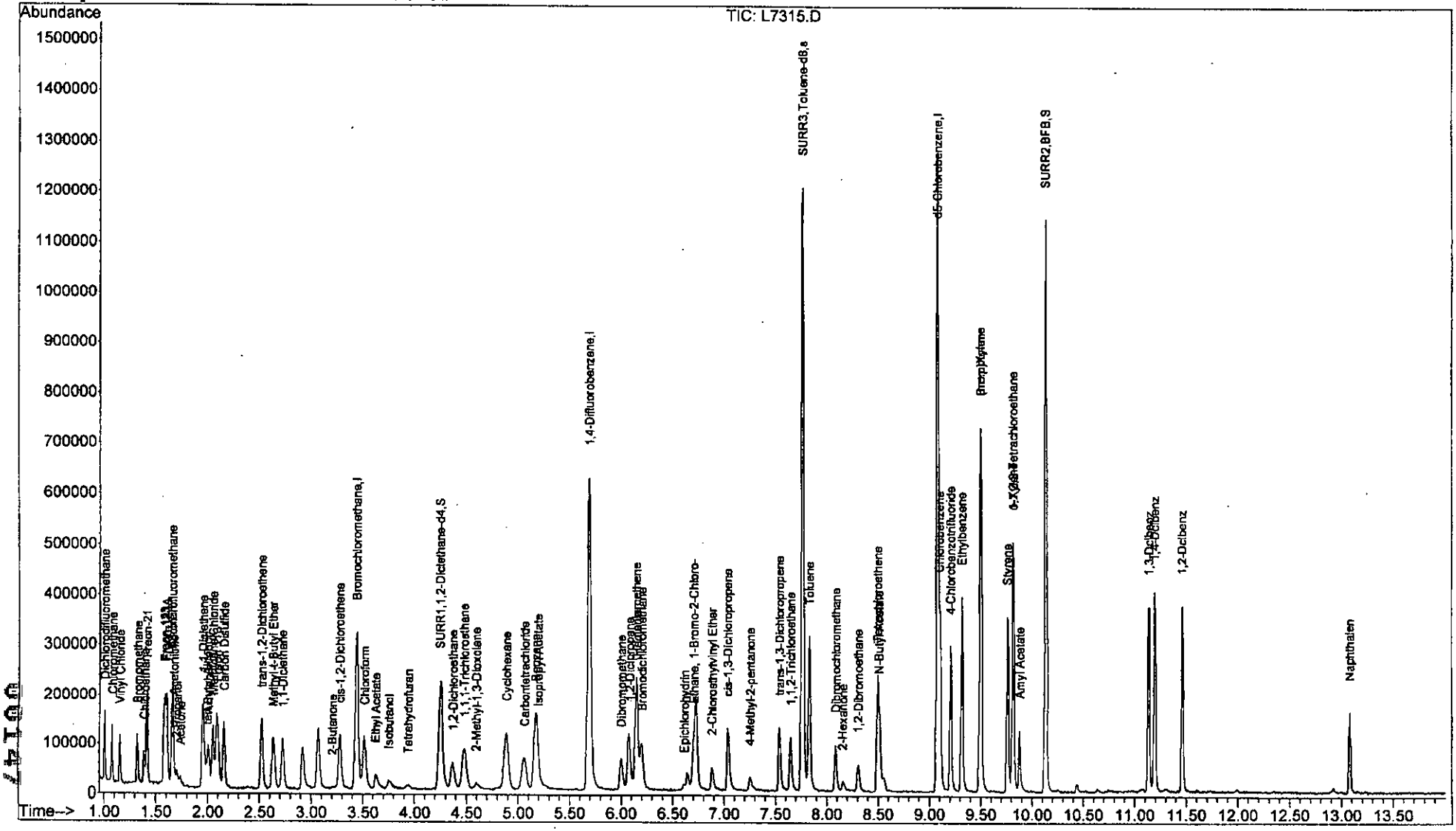
response 16167

Ion	Exp%	Act%
43.00	100	100
56.00	51.80	40.90#
100.00	8.40	4.71#
0.00	0.00	0.00

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7315.D Vial: 18
Acq On : 11 Sep 2014 6:36 pm Operator: D.Lipani
Sample : STD #4 - 5.0 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:48 2014 Quant Results File: 6240911.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:38:46 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7308.D Vial: 11
Acq On : 11 Sep 2014 2:20 pm Operator: D.Lipani
Sample : STD #5 - 10 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:54 2014 Quant Results File: 6240911.RES

Quant Method : I:\ACQUDATA\M...\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:49:42 2014
Response via : Initial Calibration
DataAcq Meth : 6240911

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	3.44	128	103798	30.00	ug/L		0.00
35) 1,4-Difluorobenzene	5.69	114	624482	30.00	ug/L		0.00
53) d5-Chlorobenzene	9.08	117	566902	30.00	ug/L		0.00
System Monitoring Compounds							
30) SURR1,1,2-Diclethane-d4	4.26	65	222945m	31.10	ug/L		0.00
Spiked Amount 30.000	Range 81 - 127		Recovery = 103.67%				
51) SURR3,Toluene-d8	7.76	98	698571	29.00	ug/L		0.00
Spiked Amount 30.000	Range 83 - 120		Recovery = 96.67%				
68) SURR2,BFB	10.13	95	289441	30.67	ug/L		0.00
Spiked Amount 30.000	Range 79 - 123		Recovery = 102.23%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.01	85	119455	10.51	ug/L		98
3) Chloromethane	1.08	50	120502	11.06	ug/L		93
4) Vinyl Chloride	1.15	62	119338	10.97	ug/L		94
5) Bromomethane	1.32	94	67168	8.76	ug/L		99
6) Chloroethane	1.39	64	66417	9.87	ug/L		100
7) Freon-21	1.42	67	197995	10.22	ug/L		99
8) Freon-123	1.58	83	150810	10.20	ug/L		96
9) Freon-123A	1.60	67	121350	9.42	ug/L		96
10) Acrolein	1.67	56	51974	49.03	ug/L		96
11) Trichlorofluoromethane	1.66	101	194299	10.28	ug/L		98
12) Acetonitrile	1.68	41	39636	46.55	ug/L		98
13) 2-Propanol	1.70	45	53202	191.49	ug/L		93
14) Acetone	1.73	43	23725m	10.40	ug/L		
15) 1,1-Diclethene	1.95	96	91865	10.20	ug/L		99
16) tert Butyl Alcohol	1.99	59	81455	188.40	ug/L		99
17) Acrylonitrile	2.01	53	97351	51.63	ug/L		95
18) Methylene Chloride	2.05	84	83949	10.15	ug/L		95
19) Freon 113	2.09	101	103103	10.35	ug/L		96
20) Carbon Disulfide	2.16	76	304951	10.09	ug/L		98
21) trans-1,2-Dichloroethene	2.52	96	98342	10.25	ug/L		97
22) Methyl-t-Butyl Ether	2.63	73	220185	10.44	ug/L		99
23) 1,1-Diclethane	2.72	63	187762	10.72	ug/L		95
24) 2-Butanone	3.19	43	18198	8.76	ug/L	#	97
25) cis-1,2-Dichloroethene	3.28	96	105773	10.41	ug/L		94
26) Chloroform	3.51	83	192406	10.76	ug/L		95
27) Ethyl Acetate	3.62	43	94492	20.81	ug/L	#	93
28) Isobutanol	3.75	43	30920	179.35	ug/L	#	86
29) Tetrahydrofuran	3.93	42	14316	9.10	ug/L	#	81
31) 1,2-Dichloroethane	4.37	62	120688	10.45	ug/L		95
32) 1,1,1-Trichloroethane	4.47	97	169214	10.30	ug/L		91
33) 2-Methyl-1,3-Dioxolane	4.58	73	29015	46.14	ug/L		90
34) Cyclohexane	4.88	56	141519	9.84	ug/L		94
36) Carbontetrachloride	5.06	117	136921	10.12	ug/L		98
37) Isopropyl Acetate	5.20	43	107070	9.71	ug/L		99
38) Benzene	5.17	78	356768	10.24	ug/L		97
39) Dibromomethane	6.00	93	52641	9.47	ug/L		97
40) 1,2-Diclpropane	6.07	63	96436	10.12	ug/L		98
41) Trichloroethene	6.14	130	105694	9.82	ug/L		98

DL 9/15/14

(#) = qualifier out of range (m) = manual integration
L7308.D 6240911.M Mon Sep 15 10:55:11 2014

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7308.D Vial: 11
Acq On : 11 Sep 2014 2:20 pm Operator: D.Lipani
Sample : STD #5 - 10 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:54 2014 Quant Results File: 6240911.RES

Quant Method : I:\ACQUDATA\M...\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:49:42 2014
Response via : Initial Calibration
DataAcq Meth : 6240911

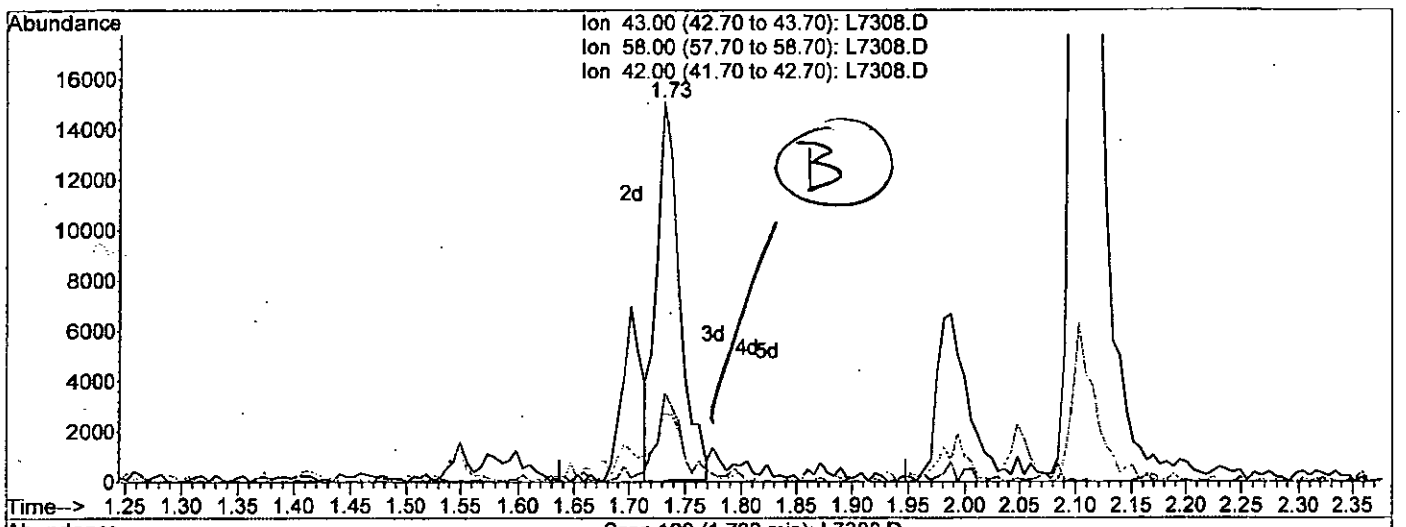
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
42)	Heptane	6.15	43	79657	9.02	ug/L		95
43)	Bromodichloromethane	6.20	83	136216	10.09	ug/L		98
44)	Epichlorohydrin	6.61	57	21156	46.94	ug/L	#	85
45)	Ethane, 1-Bromo-2-Chloro-	6.70	63	104442	9.57	ug/L		94
46)	2-Chloroethylvinyl Ether	6.88	63	39887	9.50	ug/L		95
47)	cis-1,3-Dichloropropene	7.04	75	140581	10.02	ug/L		97
48)	4-Methyl-2-pentanone	7.25	43	47176	9.03	ug/L		98
49)	trans-1,3-Dichloropropene	7.53	75	130924	10.71	ug/L		98
50)	1,1,2-Trichloroethane	7.65	97	65548	9.97	ug/L		98
52)	Toluene	7.83	91	388605	10.25	ug/L		99
54)	Dibromochloromethane	8.09	129	95408	10.23	ug/L		97
55)	2-Hexanone	8.15	43	31537m	8.85	ug/L		
56)	1,2-Dibromoethane	8.31	107	71389	9.97	ug/L		98
57)	Tetrachloroethene	8.49	164	94683	10.31	ug/L		99
58)	N-Butyl Acetate	8.51	43	171459	20.02	ug/L		98
59)	Chlorobenzene	9.10	112	262242	10.12	ug/L		99
60)	4-Chlorobenzotrifluoride	9.21	180	153954	10.36	ug/L		97
61)	Ethylbenzene	9.32	106	136630	10.14	ug/L		96
62)	(m+p)Xylene	9.50	106	340862	20.23	ug/L		96
63)	Bromoform	9.50	173	60185	9.94	ug/L		98
64)	Styrene	9.76	104	282498	10.18	ug/L		99
65)	1,1,2,2-Tetrachloroethane	9.81	83	78954	9.94	ug/L		96
66)	o-Xylene	9.81	106	164561	10.09	ug/L		90
67)	Amyl Acetate	9.88	43	112292	9.93	ug/L		99
69)	1,3-Dclbenz	11.14	146	243405	10.27	ug/L		98
70)	1,4-Dclbenz	11.19	146	234566	9.94	ug/L		100
71)	1,2-Dclbenz	11.46	146	210332	9.76	ug/L		99
72)	Naphthalen	13.08	128	176942	9.05	ug/L		99

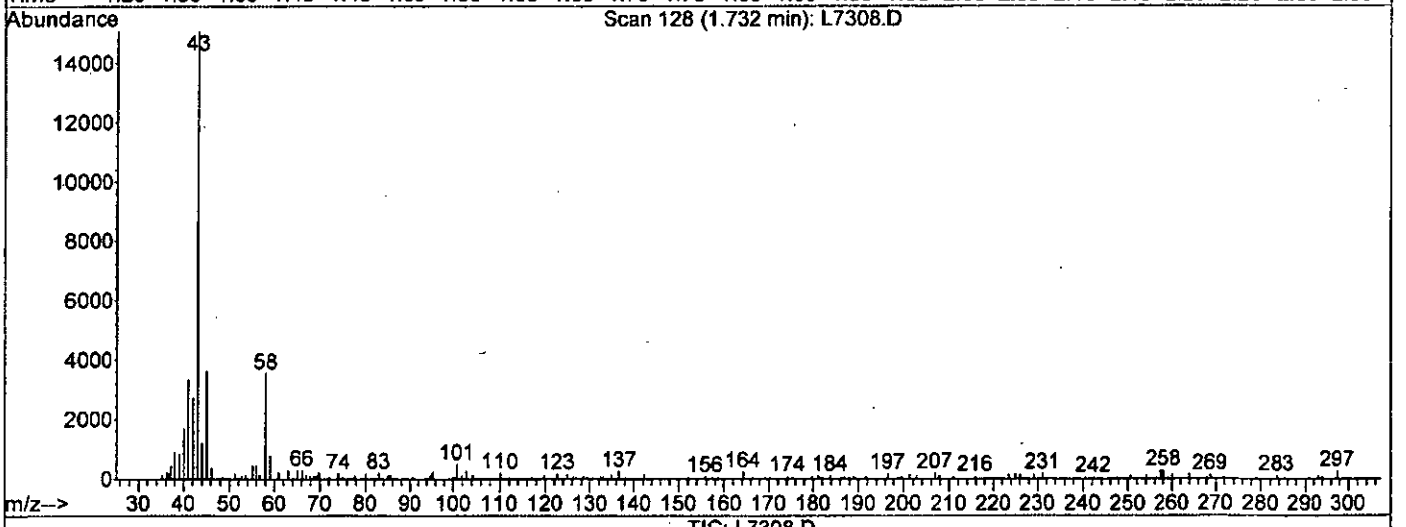
DL 9/15/14

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

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7308.D Vial: 11
Acq On : 11 Sep 2014 2:20 pm Operator: D.Lipani
Sample : STD #5 - 10 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:50 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:49:42 2014
Response via : Multiple Level Calibration





TIC: L7308.D

(14) Acetone

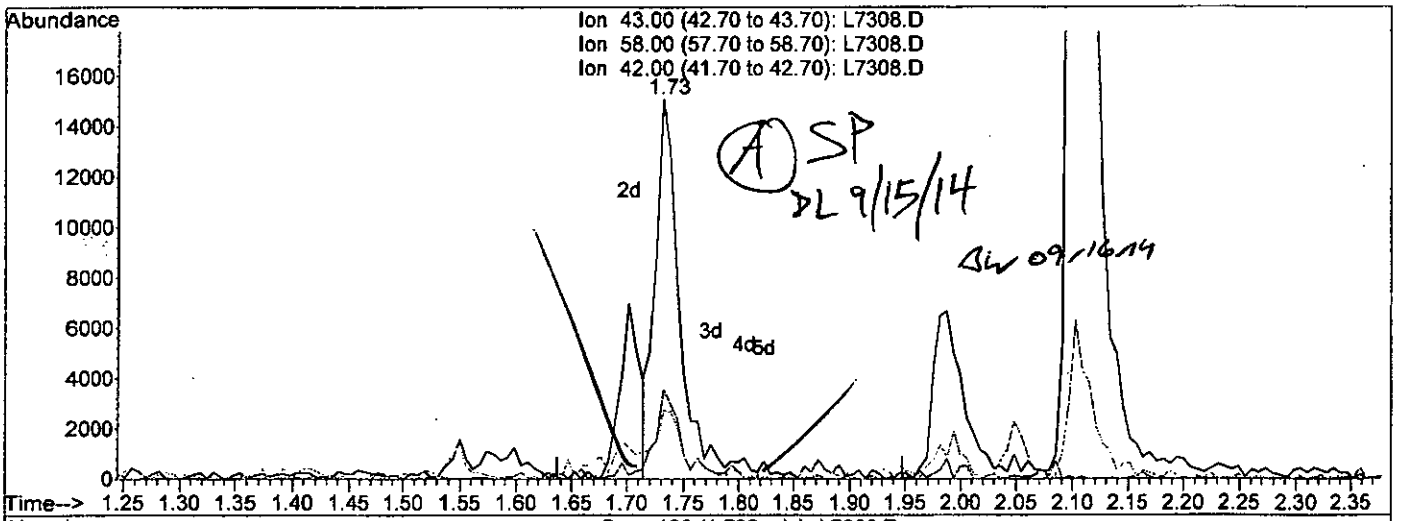
1.73min 9.44ug/L

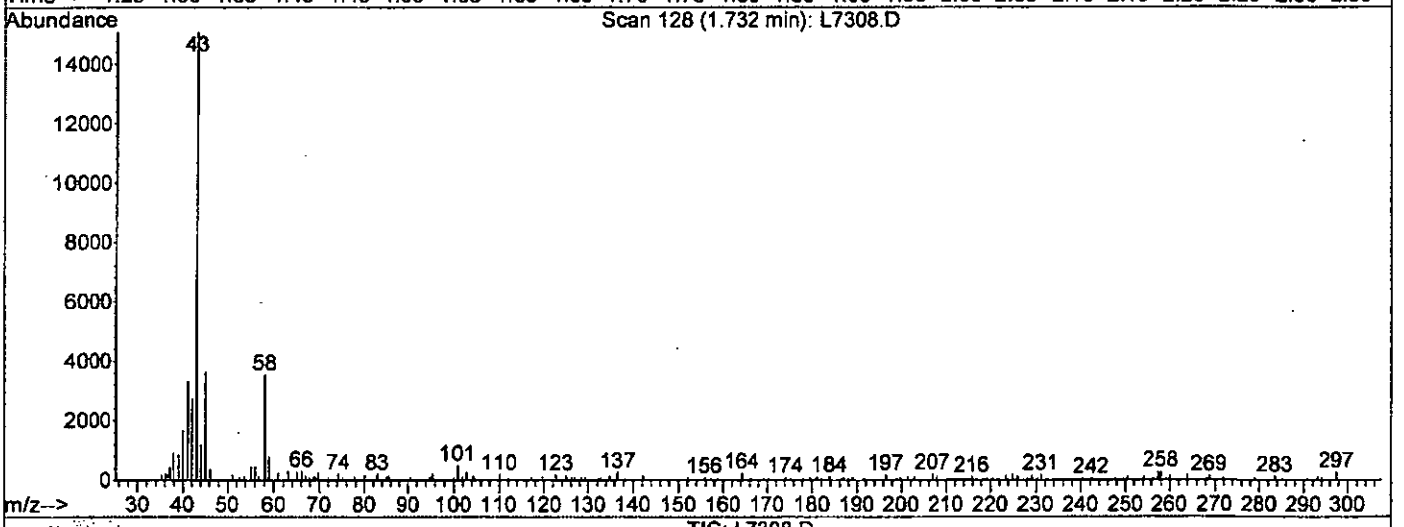
response 21546

Ion	Exp%	Act%
43.00	100	100
58.00	27.40	23.44
42.00	20.40	18.02
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7308.D Vial: 11
Acq On : 11 Sep 2014 2:20 pm Operator: D.Lipani
Sample : STD #5 - 10 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:51 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:49:42 2014
Response via : Multiple Level Calibration





TIC: L7308.D

(14) Acetone

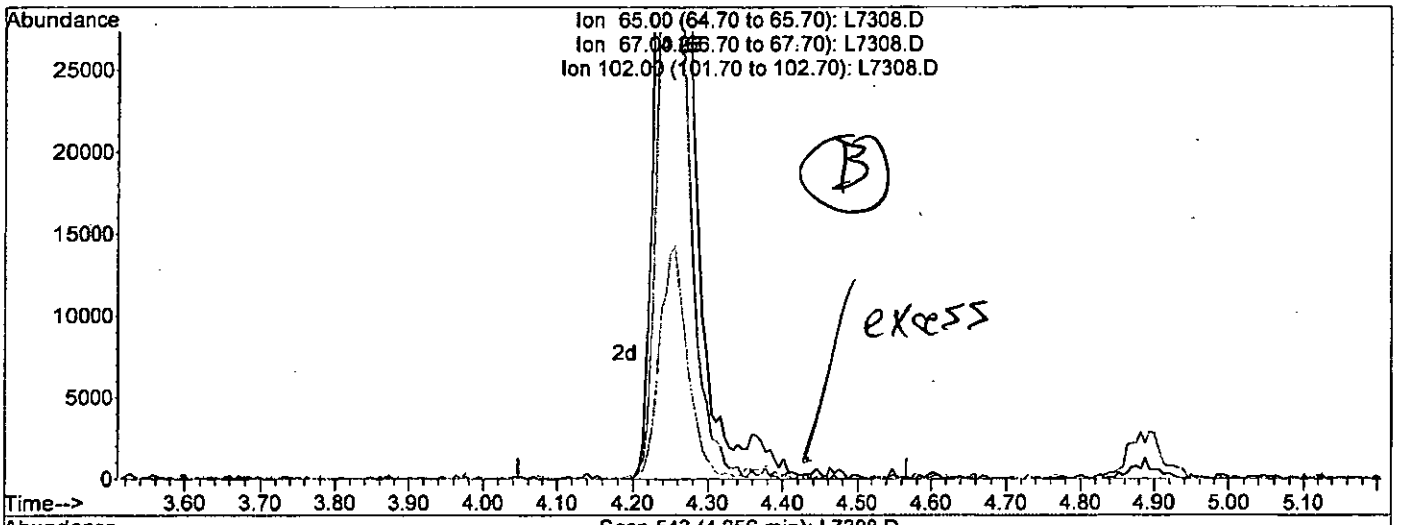
1.73min 10.40ug/L m

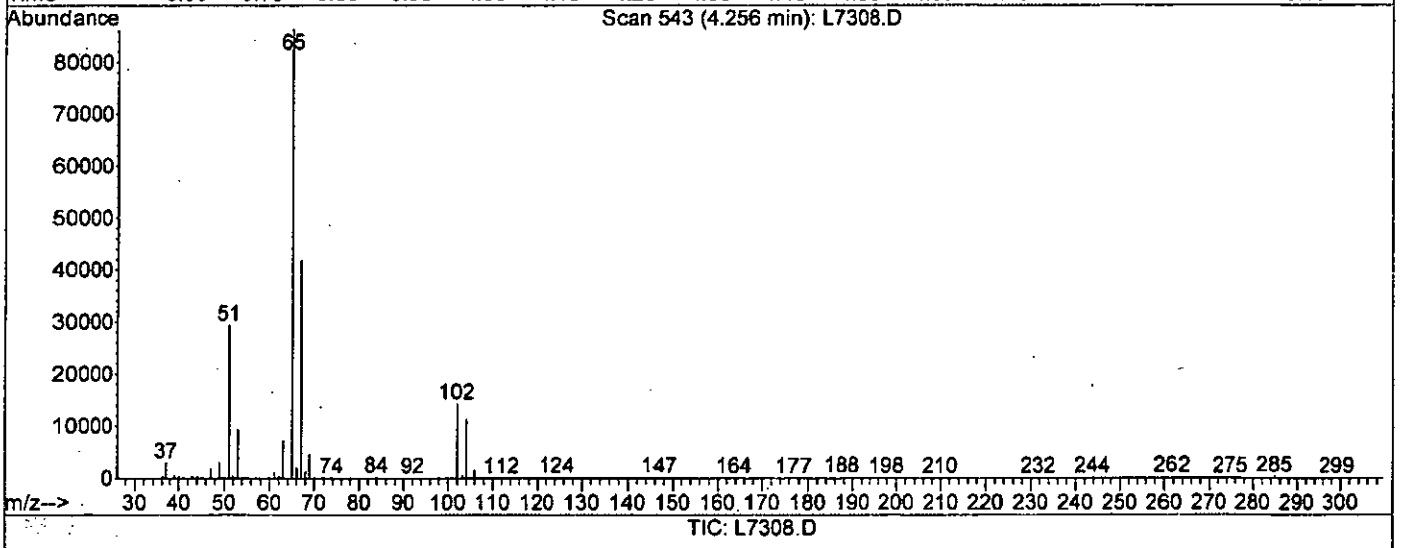
response 23725

Ion	Exp%	Act%
43.00	100	100
58.00	27.40	23.44
42.00	20.40	18.02
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7308.D Vial: 11
Acq On : 11 Sep 2014 2:20 pm Operator: D.Lipani
Sample : STD #5 - 10 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:51 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:49:42 2014
Response via : Multiple Level Calibration





TIC: L7308.D

(30) SURR1,1,2-Diclethane-d4 (S)

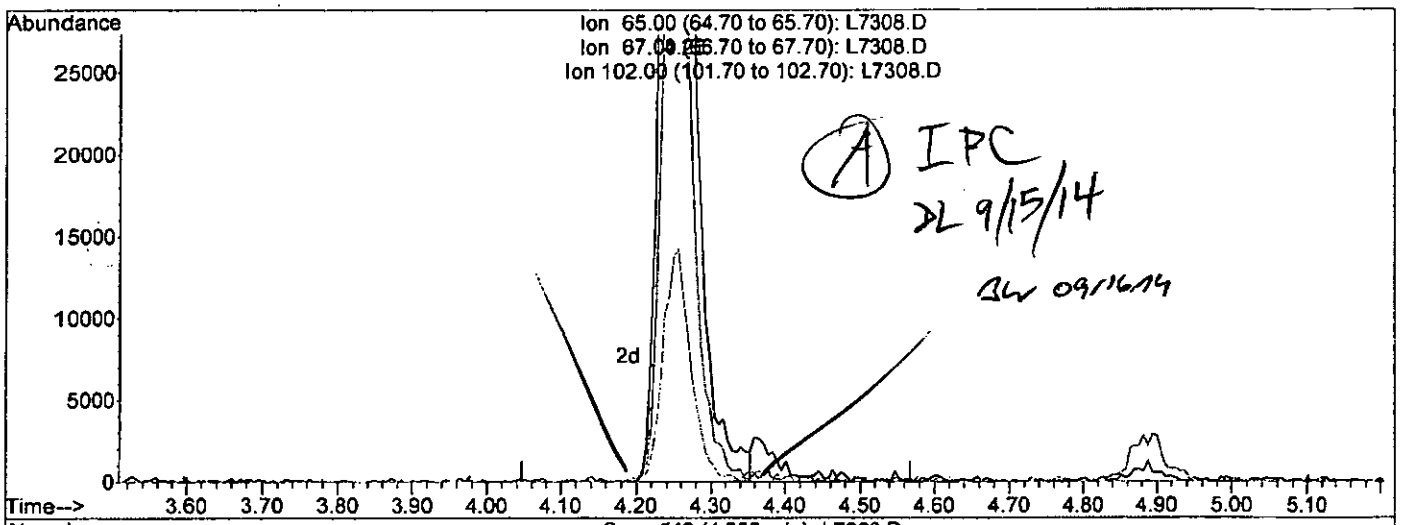
4.26min 31.90ug/L

response 228727

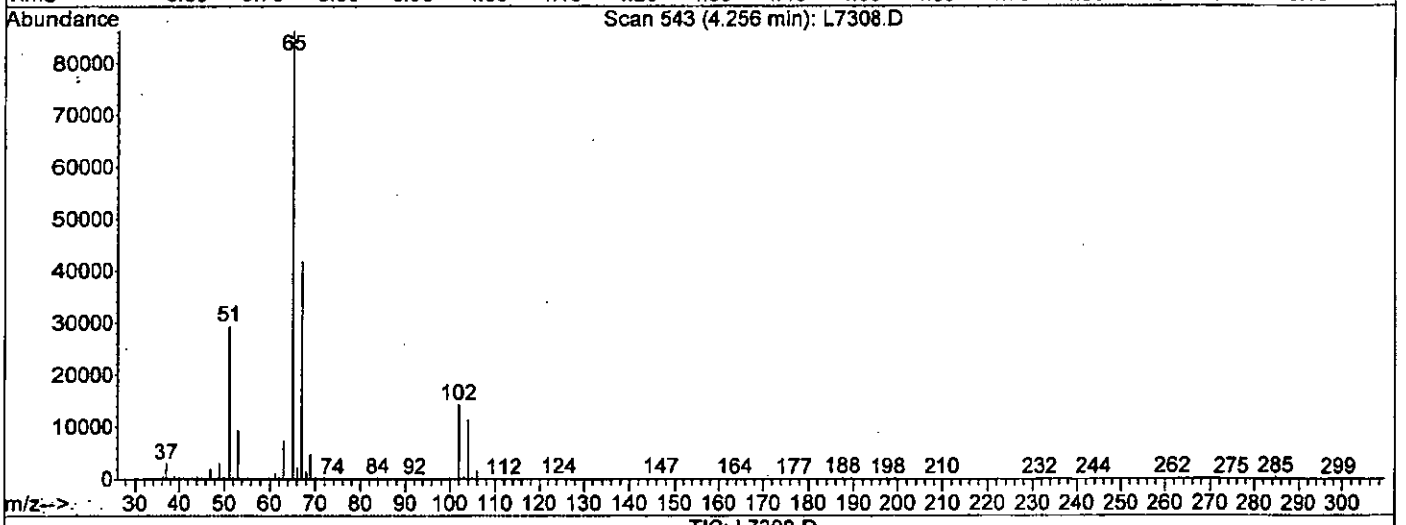
Ion	Exp%	Act%
65.00	100	100
67.00	52.00	48.33
102.00	19.40	16.50
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7308.D Vial: 11
Acq On : 11 Sep 2014 2:20 pm Operator: D.Lipani
Sample : STD #5 - 10 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:52 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:49:42 2014
Response via : Multiple Level Calibration



A IPC
DL 9/15/14
GW 09/16/14



TIC: L7308.D

(30) SURR1,1,2-Diclethane-d4 (S)

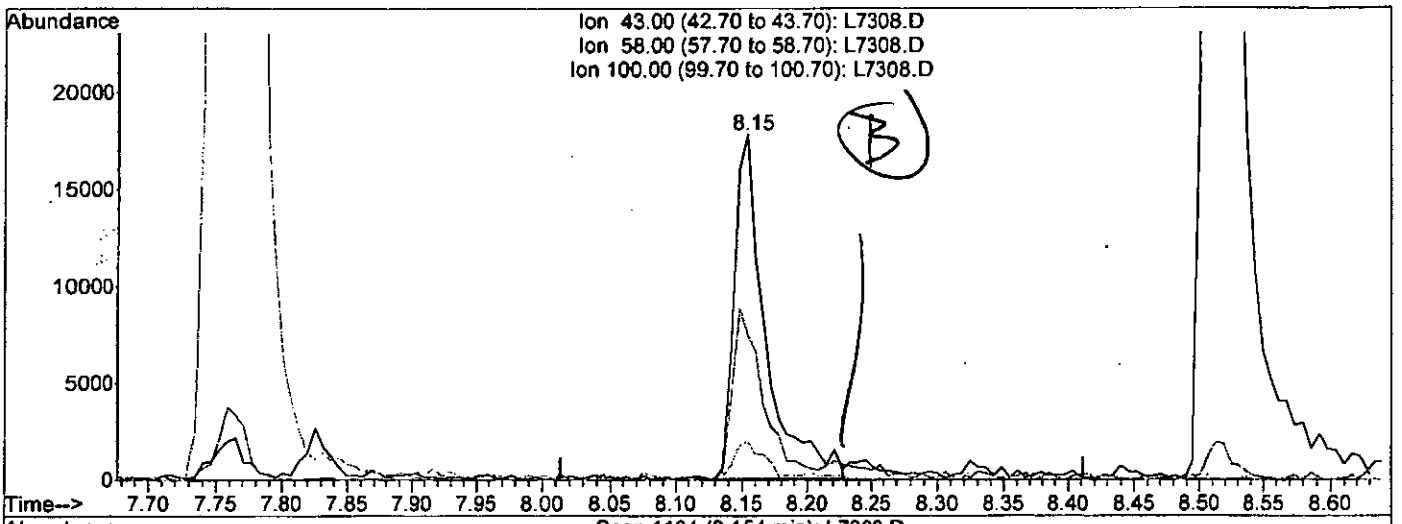
4.26min 31.10ug/L m

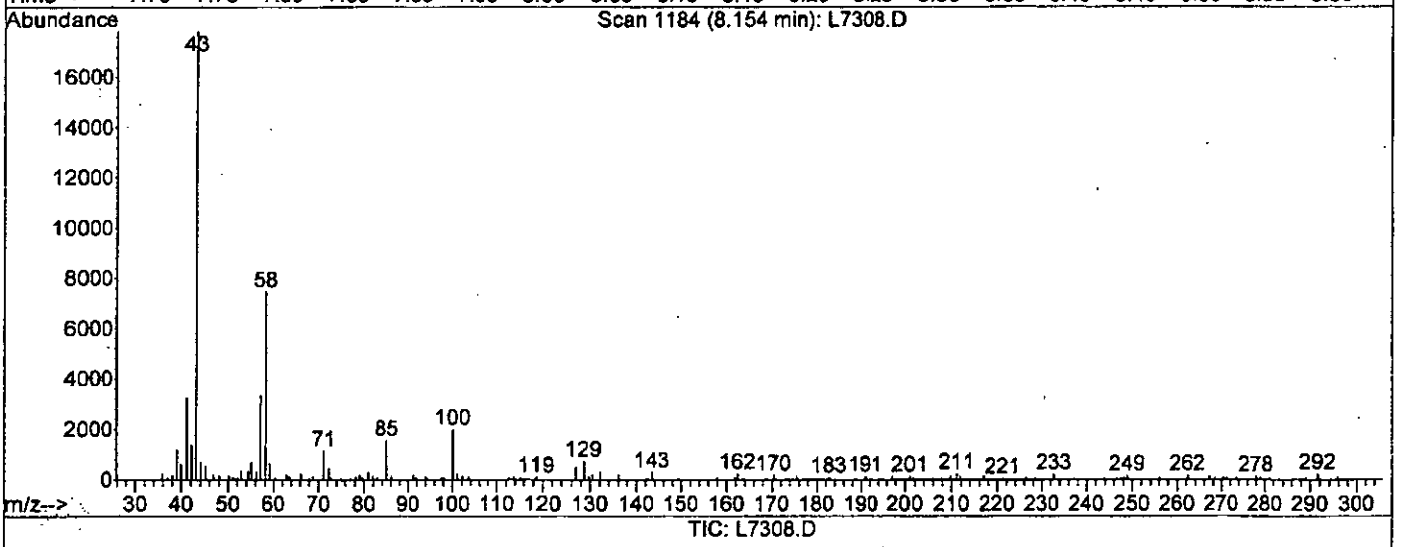
response 222945

Ion	Exp%	Act%
65.00	100	100
67.00	52.00	48.33
102.00	19.40	16.50
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7308.D Vial: 11
Acq On : 11 Sep 2014 2:20 pm Operator: D.Lipani
Sample : STD #5 - 10 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:52 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:49:42 2014
Response via : Multiple Level Calibration





TIC: L7308.D

(55) 2-Hexanone

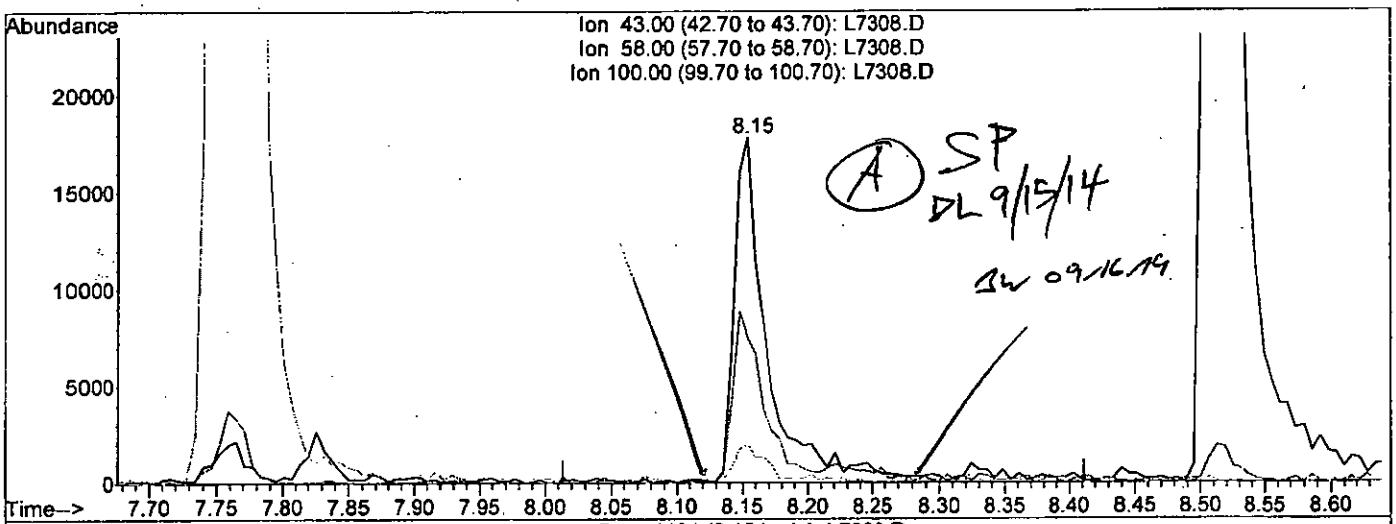
8.15min 8.24ug/L

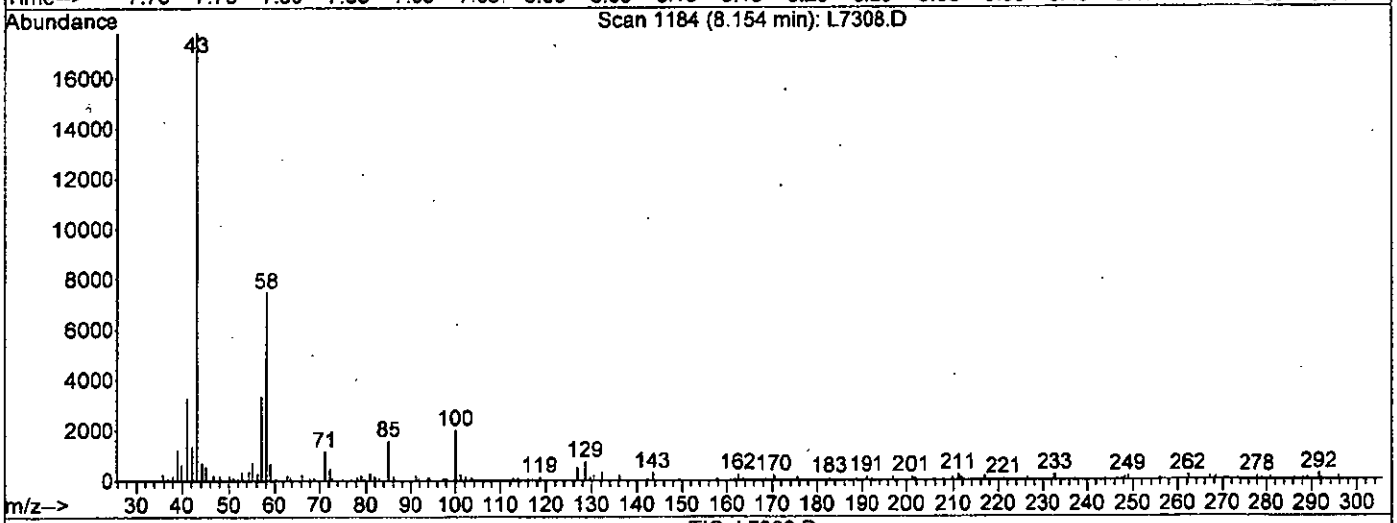
response 29390

Ion	Exp%	Act%
43.00	100	100
58.00	51.80	49.85
100.00	8.40	10.11#
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7308.D Vial: 11
Acq On : 11 Sep 2014 2:20 pm Operator: D.Lipani
Sample : STD #5 - 10 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:54 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:49:42 2014
Response via : Multiple Level Calibration





TIC: L7308.D

(55) 2-Hexanone

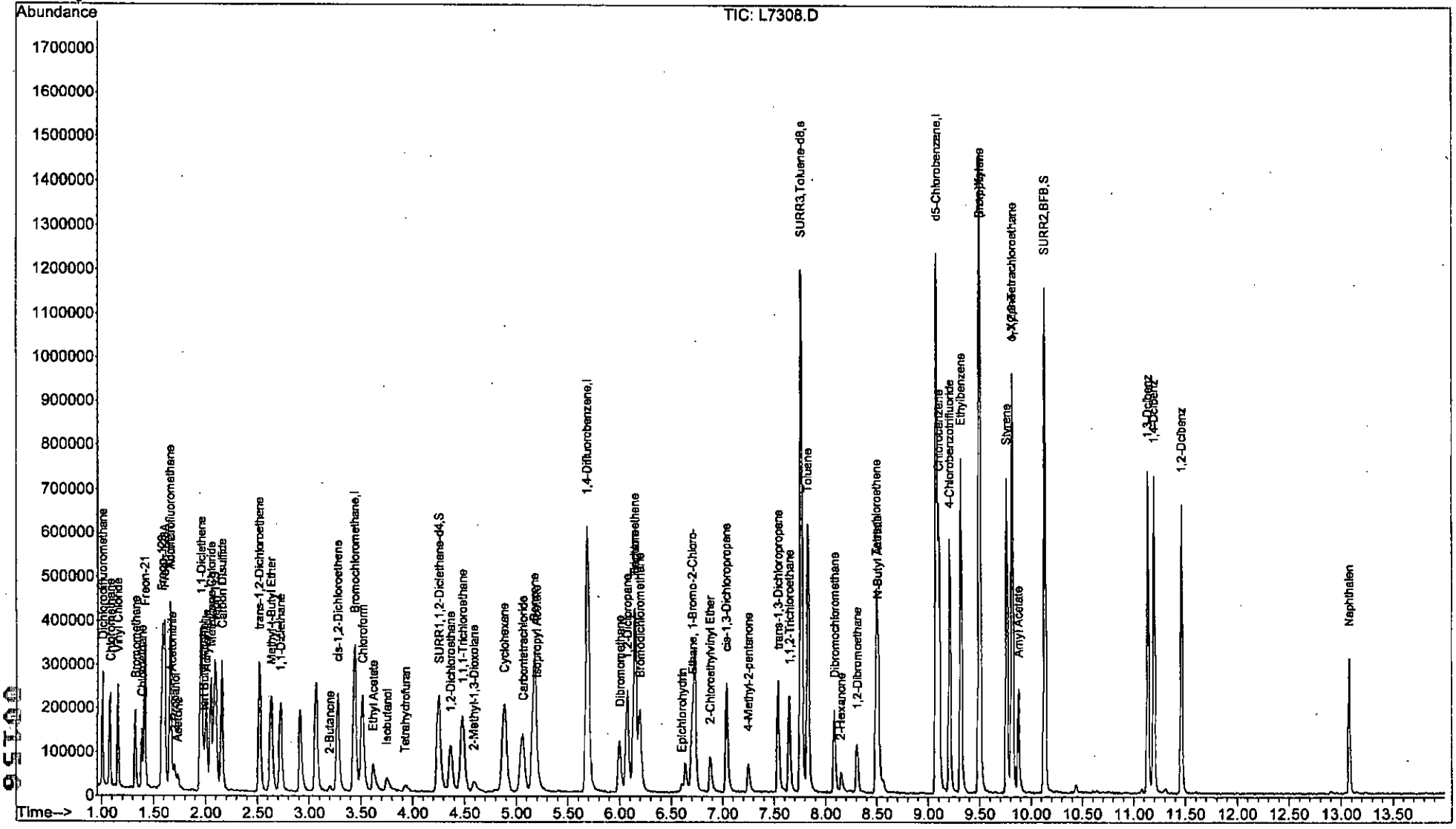
8.15min 8.85ug/L m

response 31537

Ion	Exp%	Act%
43.00	100	100
58.00	51.80	46.46
100.00	8.40	9.42
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7308.D Vial: 11
Acq On : 11 Sep 2014 2:20 pm Operator: D.Lipani
Sample : STD #5 - 10 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:54 2014 Quant Results File: 6240911.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:49:42 2014
Response via : Initial Calibration



L7308.D 6240911.M Mon Sep 15 10:55:15 2014 Page 3

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7309.D Vial: 12
Acq On : 11 Sep 2014 2:54 pm Operator: D.Lipani
Sample : STD #6 - 20 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:56 2014 Quant Results File: 6240911.RES

Quant Method : I:\ACQUDATA\M...\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:55:29 2014
Response via : Initial Calibration
DataAcq Meth : 6240911

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	3.44	128	107295	30.00	ug/L	0.00
35) 1,4-Difluorobenzene	5.69	114	623287	30.00	ug/L	0.00
53) d5-Chlorobenzene	9.08	117	589744	30.00	ug/L	0.00
System Monitoring Compounds						
30) SURR1,1,2-Diclethane-d4	4.25	65	220752	29.79	ug/L	0.00
Spiked Amount 30.000	Range 81 - 127		Recovery = 99.30%			
51) SURR3,Toluene-d8	7.76	98	722536	30.09	ug/L	0.00
Spiked Amount 30.000	Range 83 - 120		Recovery = 100.30%			
68) SURR2,BFB	10.13	95	276982	28.21	ug/L	0.00
Spiked Amount 30.000	Range 79 - 123		Recovery = 94.03%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.01	85	237084	20.18	ug/L	100
3) Chloromethane	1.08	50	218687	19.41	ug/L	100
4) Vinyl Chloride	1.16	62	216094	19.21	ug/L	100
5) Bromomethane	1.32	94	135427	17.09	ug/L	100
6) Chloroethane	1.39	64	131353	18.89	ug/L	100
7) Freon-21	1.41	67	401477	20.05	ug/L	100
8) Freon-123	1.58	83	317214	20.75	ug/L	100
9) Freon-123A	1.60	67	266694	20.02	ug/L	100
10) Acrolein	1.66	56	116818	106.62	ug/L	100
11) Trichlorofluoromethane	1.66	101	381961	19.54	ug/L	100
12) Acetonitrile	1.67	41	94824	107.73	ug/L	100
13) 2-Propanol	1.70	45	133214	463.84	ug/L	100
14) Acetone	1.74	43	53292	22.24	ug/L	100
15) 1,1-Diclethene	1.95	96	184840	19.85	ug/L	100
16) tert Butyl Alcohol	1.99	59	206330m	461.68	ug/L	
17) Acrylonitrile	2.01	53	216423	110.78	ug/L	100
18) Methylene Chloride	2.05	84	173074	20.24	ug/L	100
19) Freon 113	2.09	101	206001	20.01	ug/L	100
20) Carbon Disulfide	2.16	76	665892	21.32	ug/L	100
21) trans-1,2-Dichloroethene	2.52	96	205303	20.71	ug/L	100
22) Methyl-t-Butyl Ether	2.64	73	486997	22.34	ug/L	100
23) 1,1-Diclethane	2.73	63	368891	20.37	ug/L	100
24) 2-Butanone	3.18	43	45657	21.27	ug/L	100
25) cis-1,2-Dichloroethene	3.28	96	206107	19.63	ug/L	100
26) Chloroform	3.52	83	363154	19.64	ug/L	100
27) Ethyl Acetate	3.61	43	218901	46.59	ug/L	100
28) Isobutanol	3.75	43	70038	393.01	ug/L	100
29) Tetrahydrofuran	3.93	42	31414	19.31	ug/L	100
31) 1,2-Dichloroethane	4.37	62	241209	20.21	ug/L	100
32) 1,1,1-Trichloroethane	4.48	97	330681	19.46	ug/L	100
33) 2-Methyl-1,3-Dioxolane	4.59	73	72393	111.37	ug/L	100
34) Cyclohexane	4.89	56	306221	20.60	ug/L	100
36) Carbontetrachloride	5.06	117	269579	20.00	ug/L	100
37) Isopropyl Acetate	5.19	43	236276	21.49	ug/L	100
38) Benzene	5.17	78	705368	20.30	ug/L	100
39) Dibromomethane	6.00	93	114474	20.65	ug/L	100
40) 1,2-Diclpropane	6.08	63	195171	20.55	ug/L	98
41) Trichloroethene	6.14	130	214050	19.95	ug/L	100

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

DL 9/15/14

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7309.D Vial: 12
Acq On : 11 Sep 2014 2:54 pm Operator: D.Lipani
Sample : STD #6 - 20 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:56 2014 Quant Results File: 6240911.RES

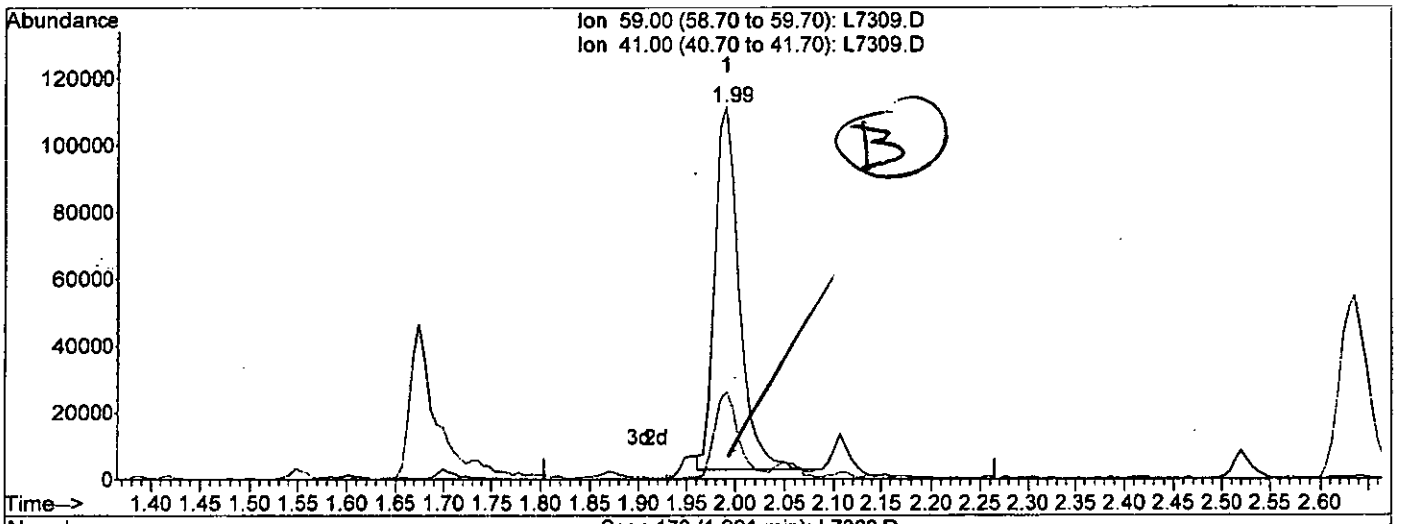
Quant Method : I:\ACQUDATA\M...\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:55:29 2014
Response via : Initial Calibration
DataAcq Meth : 6240911

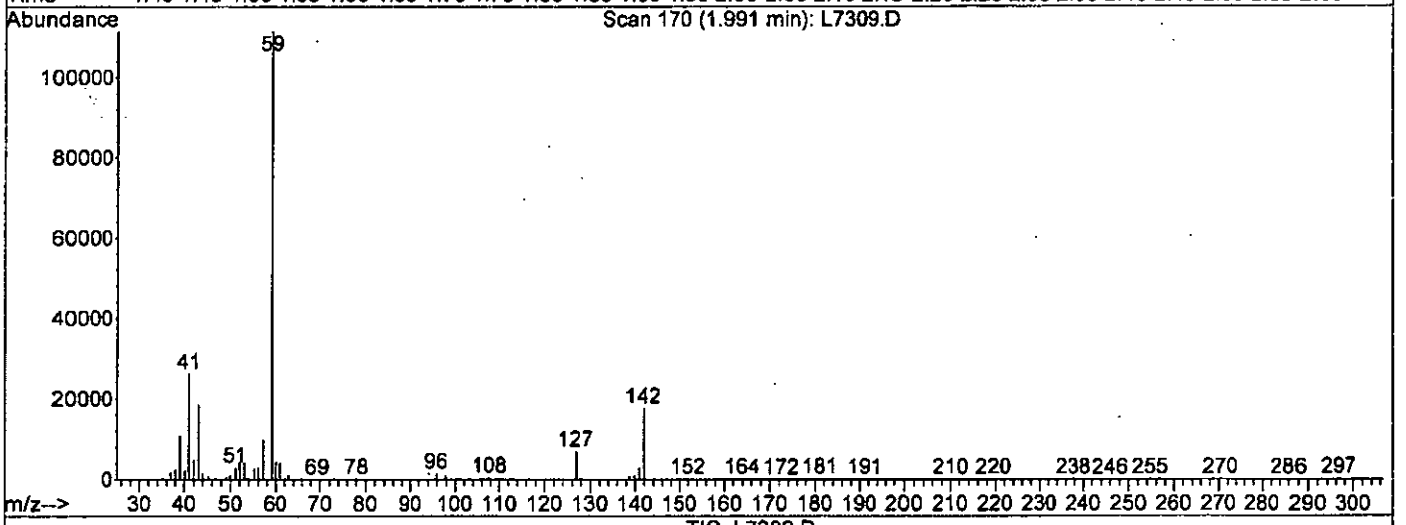
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
42)	Heptane	6.15	43	181237	20.55	ug/L	100
43)	Bromodichloromethane	6.20	83	277519	20.62	ug/L	100
44)	Epichlorohydrin	6.60	57	48794	108.60	ug/L	100
45)	Ethane, 1-Bromo-2-Chloro-	6.70	63	222812	20.49	ug/L	100
46)	2-Chloroethylvinyl Ether	6.88	63	90959	21.72	ug/L	100
47)	cis-1,3-Dichloropropene	7.04	75	287838	20.57	ug/L	100
48)	4-Methyl-2-pentanone	7.25	43	109929	21.12	ug/L	100
49)	trans-1,3-Dichloropropene	7.54	75	248457	20.40	ug/L	100
50)	1,1,2-Trichloroethane	7.65	97	135954	20.74	ug/L	100
52)	Toluene	7.83	91	769316	20.35	ug/L	100
54)	Dibromochloromethane	8.08	129	194813	20.08	ug/L	100
55)	2-Hexanone	8.15	43	79226	21.15	ug/L	100
56)	1,2-Dibromoethane	8.30	107	153727	20.64	ug/L	100
57)	Tetrachloroethene	8.50	164	183426	19.19	ug/L	100
58)	N-Butyl Acetate	8.52	43	396547	44.50	ug/L	100
59)	Chlorobenzene	9.10	112	534208	19.81	ug/L	100
60)	4-Chlorobenzotrifluoride	9.21	180	319394	20.66	ug/L	100
61)	Ethylbenzene	9.32	106	273919	19.54	ug/L	100
62)	(m+p)Xylene	9.50	106	674400	38.45	ug/L	100
63)	Bromoform	9.50	173	126887	20.14	ug/L	100
64)	Styrene	9.76	104	581928	20.16	ug/L	100
65)	1,1,2,2-Tetrachloroethane	9.81	83	161228	19.51	ug/L	100
66)	o-Xylene	9.82	106	342548	20.19	ug/L	100
67)	Amyl Acetate	9.88	43	246754	20.98	ug/L	100
69)	1,3-Dclbenz	11.14	146	474348	19.24	ug/L	100
70)	1,4-Dclbenz	11.19	146	476031	19.39	ug/L	100
71)	1,2-Dclbenz	11.46	146	431114	19.22	ug/L	100
72)	Naphthalen	13.08	128	433524	21.32	ug/L	100

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

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7309.D Vial: 12
Acq On : 11 Sep 2014 2:54 pm Operator: D.Lipani
Sample : STD #6 - 20 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:56 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:55:29 2014
Response via : Multiple Level Calibration





TIC: L7309.D

(16) tert Butyl Alcohol

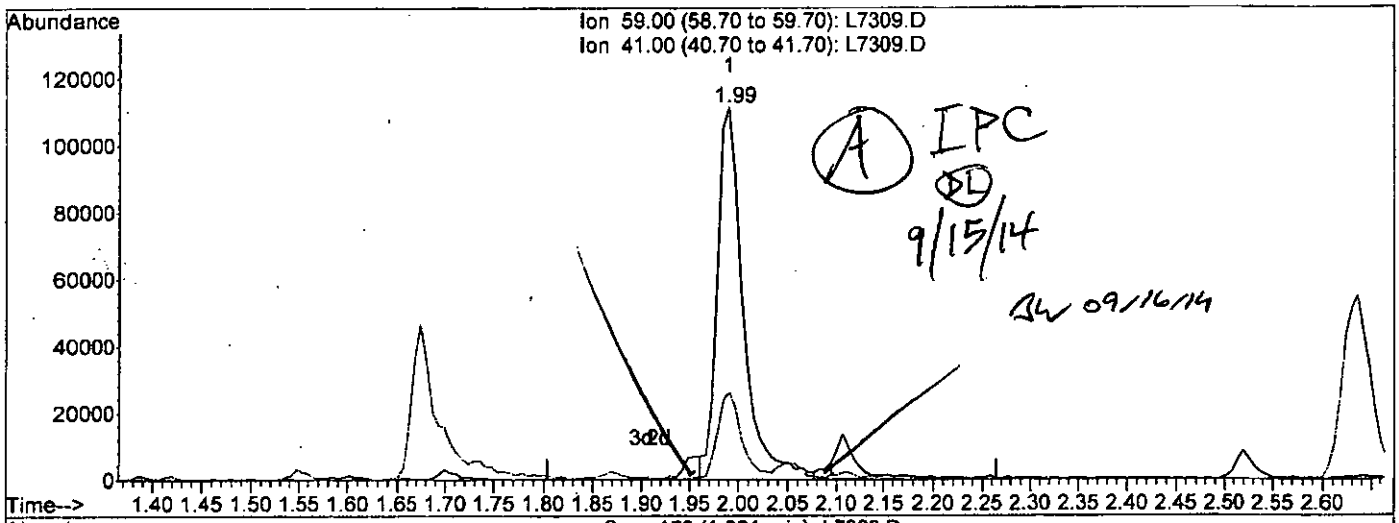
1.99min 415.13ug/L

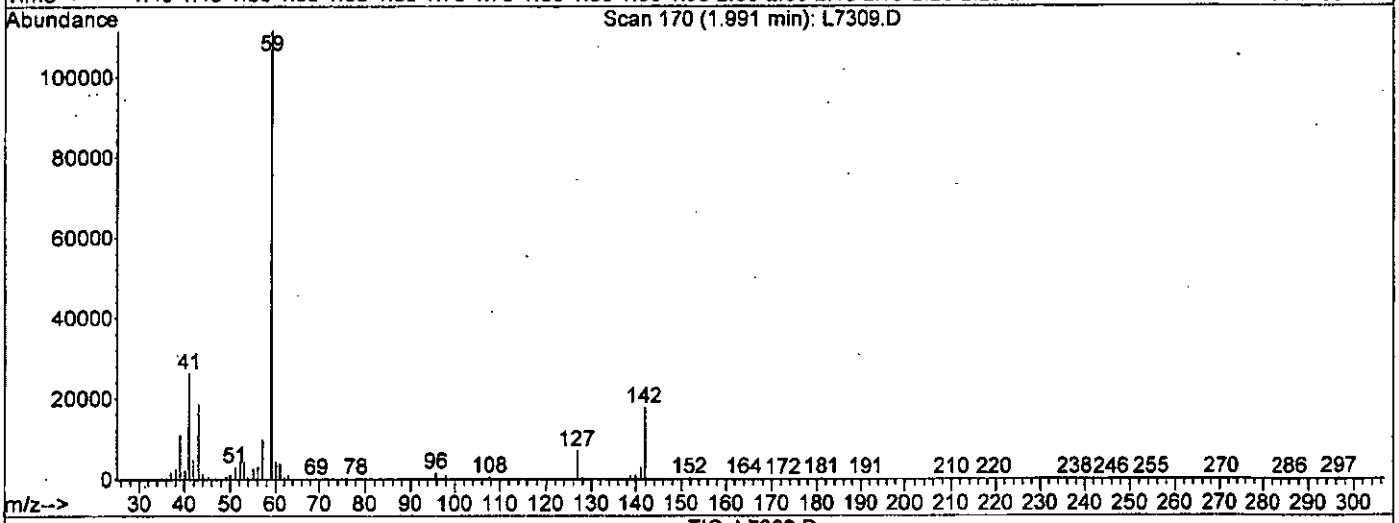
response 185525

Ion	Exp%	Act%
59.00	100	100
41.00	23.50	23.48
0.00	0.00	0.00
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7309.D Vial: 12
Acq On : 11 Sep 2014 2:54 pm Operator: D.Lipani
Sample : STD #6 - 20 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:56 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:55:29 2014
Response via : Multiple Level Calibration





TIC: L7309.D

(16) tert Butyl Alcohol

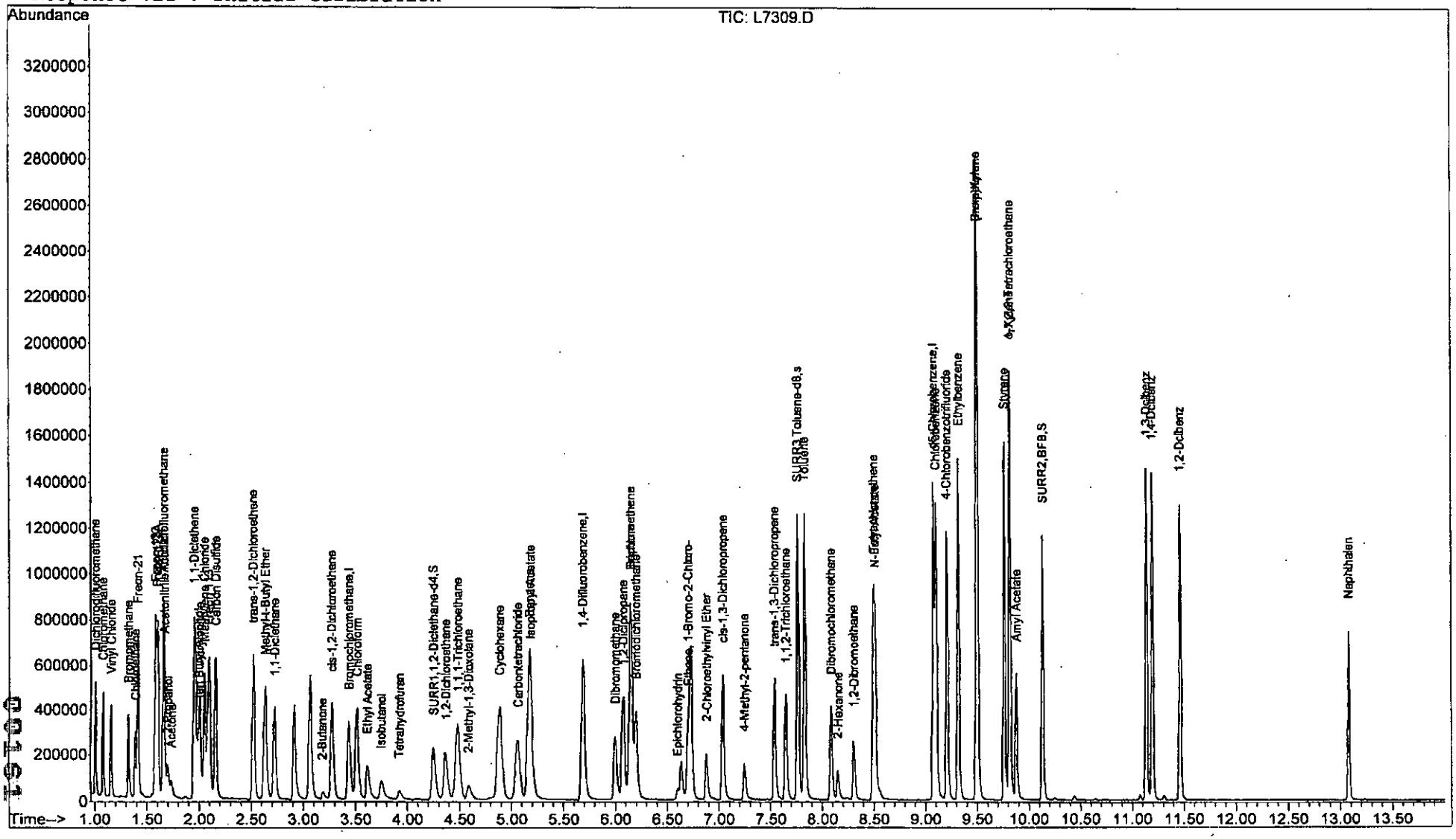
1.99min 461.68ug/L m

response 206330

Ion	Exp%	Act%
59.00	100	100
41.00	23.50	23.48
0.00	0.00	0.00
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7309.D Vial: 12
Acq On : 11 Sep 2014 2:54 pm Operator: D.Lipani
Sample : STD #6 - 20 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:56 2014 Quant Results File: 6240911.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:55:29 2014
Response via : Initial Calibration



Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7310.D Vial: 13
Acq On : 11 Sep 2014 3:33 pm Operator: D.Lipani
Sample : STD #7 - 50 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 11:00 2014 Quant Results File: 6240911.RES

Quant Method : I:\ACQUDATA\M...\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:58:06 2014
Response via : Initial Calibration
DataAcq Meth : 6240911

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	3.44	128	106022	30.00	ug/L		0.00
35) 1,4-Difluorobenzene	5.69	114	645535	30.00	ug/L		0.00
53) d5-Chlorobenzene	9.08	117	599085	30.00	ug/L		0.00
System Monitoring Compounds							
30) SURR1,1,2-Diclethane-d4	4.26	65	246675	33.68	ug/L		0.00
Spiked Amount 30.000	Range 81 - 127		Recovery = 112.27%				
51) SURR3,Toluene-d8	7.76	98	772097	31.04	ug/L		0.00
Spiked Amount 30.000	Range 83 - 120		Recovery = 103.47%				
68) SURR2,BFB	10.13	95	293831	29.46	ug/L		0.00
Spiked Amount 30.000	Range 79 - 123		Recovery = 98.20%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.01	85	553930	47.71	ug/L		96
3) Chloromethane	1.08	50	503409	45.22	ug/L		98
4) Vinyl Chloride	1.16	62	517136	46.53	ug/L		99
5) Bromomethane	1.33	94	330497	42.22	ug/L		96
6) Chloroethane	1.39	64	320404	46.63	ug/L		99
7) Freon-21	1.42	67	921717	46.60	ug/L		99
8) Freon-123	1.58	83	709859	47.00	ug/L		99
9) Freon-123A	1.61	67	622795	47.31	ug/L		95
10) Acrolein	1.66	56	261136	241.19	ug/L		98
11) Trichlorofluoromethane	1.66	101	905199	46.87	ug/L		95
12) Acetonitrile	1.67	41	204167	234.74	ug/L		95
13) 2-Propanol	1.70	45	295940	1042.81	ug/L		99
14) Acetone	1.73	43	114572	48.39	ug/L		88
15) 1,1-Diclethene	1.95	96	439985	47.81	ug/L		92
16) tert Butyl Alcohol	1.99	59	448204	1014.94	ug/L		96
17) Acrylonitrile	2.01	53	458267	237.39	ug/L		98
18) Methylene Chloride	2.06	84	393684	46.58	ug/L		91
19) Freon 113	2.09	101	476804	46.86	ug/L		93
20) Carbon Disulfide	2.16	76	1370370	44.41	ug/L		99
21) trans-1,2-Dichloroethene	2.52	96	465144	47.48	ug/L		95
22) Methyl-t-Butyl Ether	2.63	73	1034553	48.03	ug/L		97
23) 1,1-Diclethane	2.72	63	820205	45.84	ug/L		99
24) 2-Butanone	3.17	43	117233m	55.28	ug/L		
25) cis-1,2-Dichloroethene	3.28	96	496143	47.81	ug/L		95
26) Chloroform	3.52	83	895075	48.98	ug/L		93
27) Ethyl Acetate	3.61	43	529732	114.10	ug/L		97
28) Isobutanol	3.75	43	171653	974.77	ug/L	#	92
29) Tetrahydrofuran	3.92	42	77733	48.35	ug/L	#	82
31) 1,2-Dichloroethane	4.37	62	573237	48.61	ug/L	#	96
32) 1,1,1-Trichloroethane	4.49	97	809906	48.24	ug/L		97
33) 2-Methyl-1,3-Dioxolane	4.58	73	182797	284.59	ug/L		95
34) Cyclohexane	4.88	56	681742	46.40	ug/L		97
36) Carbontetrachloride	5.06	117	664587	47.60	ug/L		99
37) Isopropyl Acetate	5.19	43	555927	48.82	ug/L		98
38) Benzene	5.17	78	1679171	46.66	ug/L		98
39) Dibromomethane	6.00	93	262856	45.78	ug/L		99
40) 1,2-Diclpropane	6.08	63	469682	47.74	ug/L		96
41) Trichloroethene	6.14	130	518788	46.68	ug/L		98

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

DL 9/15/14

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7310.D Vial: 13
Acq On : 11 Sep 2014 3:33 pm Operator: D.Lipani
Sample : STD #7 - 50 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 11:00 2014 Quant Results File: 6240911.RES

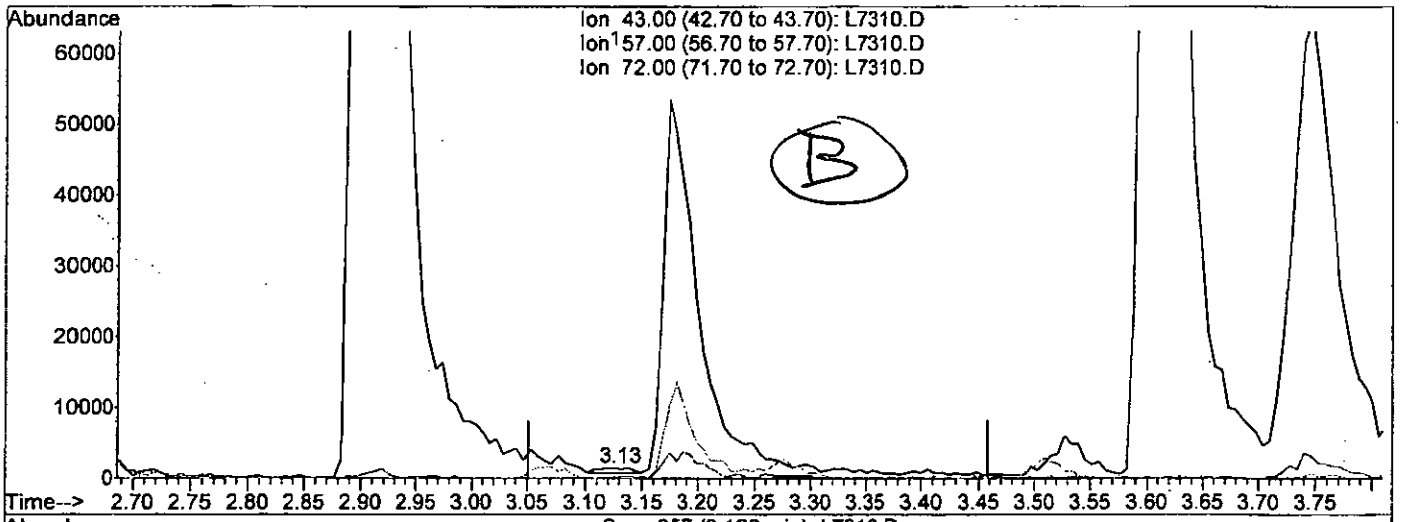
Quant Method : I:\ACQUDATA\M...\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:58:06 2014
Response via : Initial Calibration
DataAcq Meth : 6240911

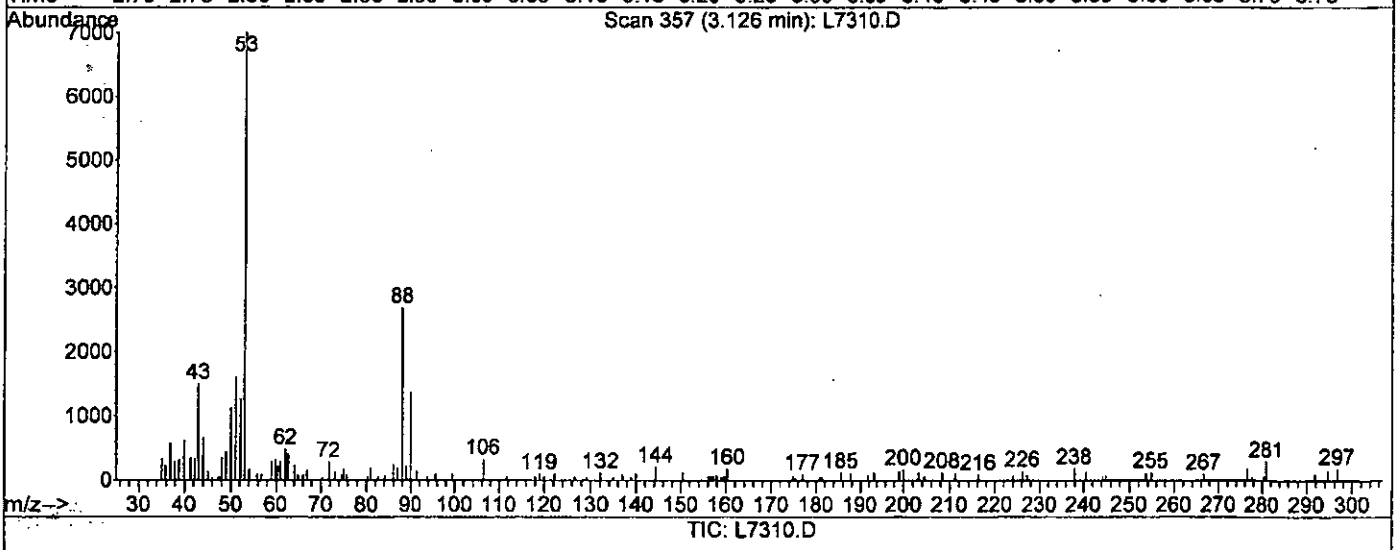
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
42)	Heptane	6.15	43	415841	45.52	ug/L	99
43)	Bromodichloromethane	6.20	83	663089	47.56	ug/L	98
44)	Epichlorohydrin	6.60	57	124642	267.85	ug/L	97
45)	Ethane, 1-Bromo-2-Chloro-	6.70	63	544994	48.38	ug/L	99
46)	2-Chloroethylvinyl Ether	6.88	63	216259	49.87	ug/L	93
47)	cis-1,3-Dichloropropene	7.04	75	730636	50.41	ug/L	98
48)	4-Methyl-2-pentanone	7.24	43	283096	52.92	ug/L	98
49)	trans-1,3-Dichloropropene	7.54	75	644239	51.06	ug/L	99
50)	1,1,2-Trichloroethane	7.64	97	337374	49.68	ug/L	99
52)	Toluene	7.83	91	1846140	47.16	ug/L	99
54)	Dibromochloromethane	8.09	129	486175	49.34	ug/L	98
55)	2-Hexanone	8.14	43	211700	55.64	ug/L	96
56)	1,2-Dibromoethane	8.31	107	355121	46.93	ug/L	95
57)	Tetrachloroethene	8.50	164	439809	45.30	ug/L	98
58)	N-Butyl Acetate	8.51	43	921573	101.81	ug/L	99
59)	Chlorobenzene	9.10	112	1282455	46.81	ug/L	99
60)	4-Chlorobenzotrifluoride	9.21	180	723914	46.10	ug/L	99
61)	Ethylbenzene	9.32	106	692482	48.63	ug/L	91
62)	(m+p)Xylene	9.50	106	1634619	91.74	ug/L	94
63)	Bromoform	9.50	173	319642	49.95	ug/L	97
64)	Styrene	9.76	104	1386404	47.28	ug/L	100
65)	1,1,2,2-Tetrachloroethane	9.81	83	386325	46.02	ug/L	97
66)	o-Xylene	9.82	106	802341	46.56	ug/L	100
67)	Amyl Acetate	9.88	43	593933	49.71	ug/L	99
69)	1,3-Dclbenz	11.14	146	1141801	45.58	ug/L	99
70)	1,4-Dclbenz	11.20	146	1116271	44.75	ug/L	98
71)	1,2-Dclbenz	11.46	146	1032179	45.30	ug/L	98
72)	Naphthalen	13.08	128	984358	47.64	ug/L	99

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

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7310.D Vial: 13
Acq On : 11 Sep 2014 3:33 pm Operator: D.Lipani
Sample : STD #7 - 50 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 10:59 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:58:06 2014
Response via : Multiple Level Calibration





TIC: L7310.D

(24) 2-Butanone

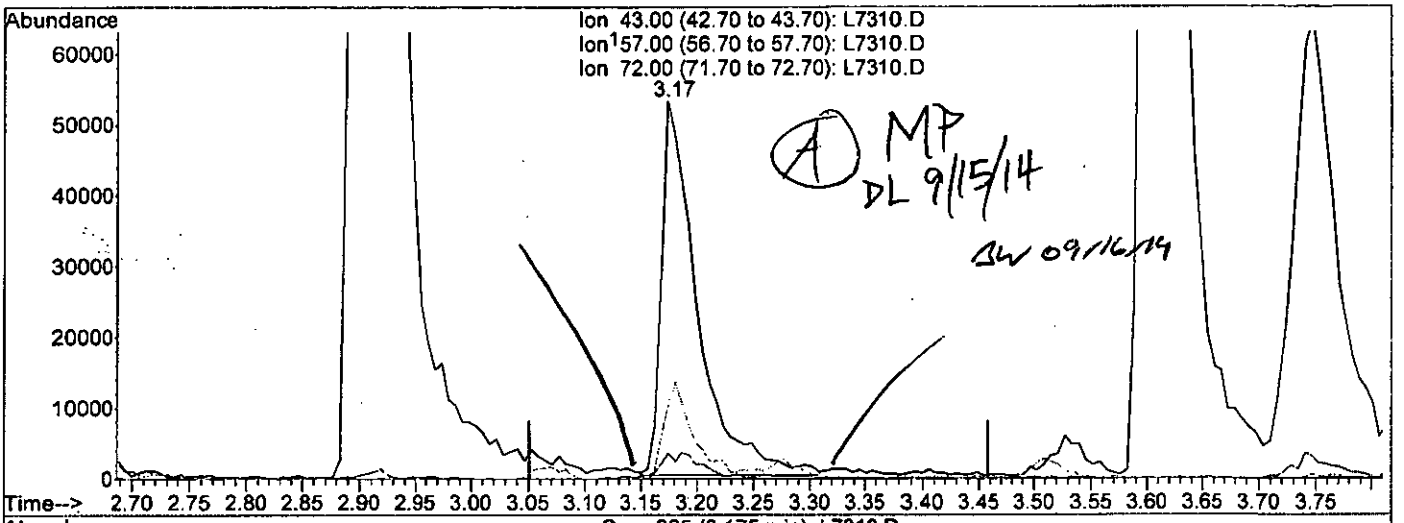
3.13min 0.73ug/L

response 1558

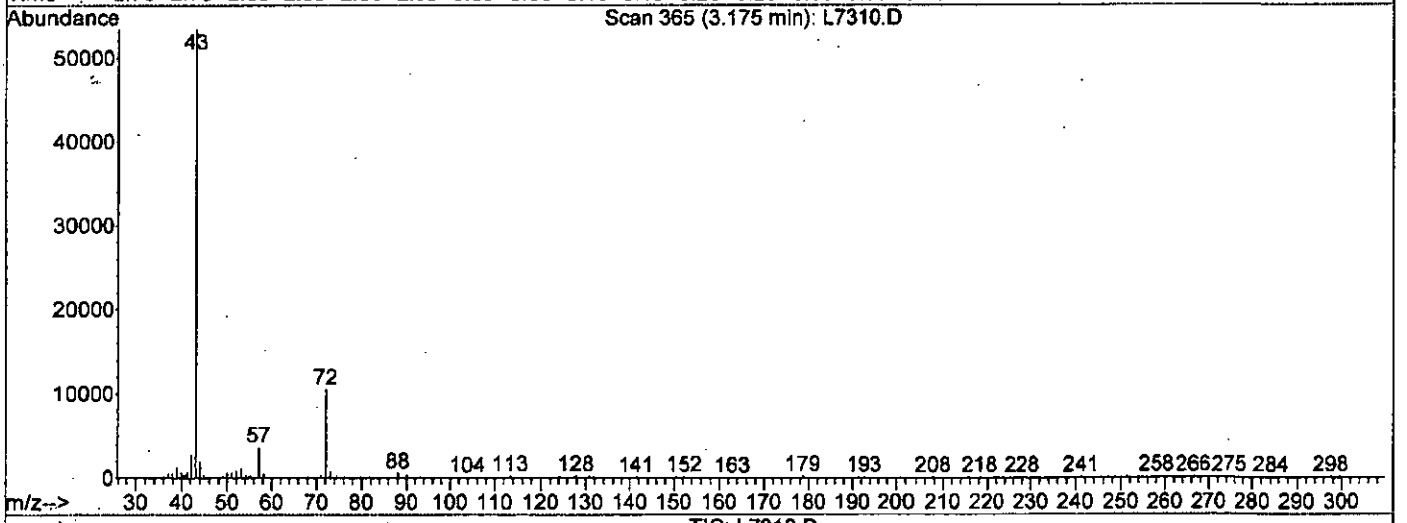
Ion	Exp%	Act%
43.00	100	100
57.00	5.40	5.67
72.00	18.40	18.80
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7310.D Vial: 13
Acq On : 11 Sep 2014 3:33 pm Operator: D.Lipani
Sample : STD #7 - 50 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 11:00 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:58:06 2014
Response via : Multiple Level Calibration



MP DL 9/15/14 SW 09/16/14



TIC: L7310.D

(24) 2-Butanone

3.17min 55.28ug/L m

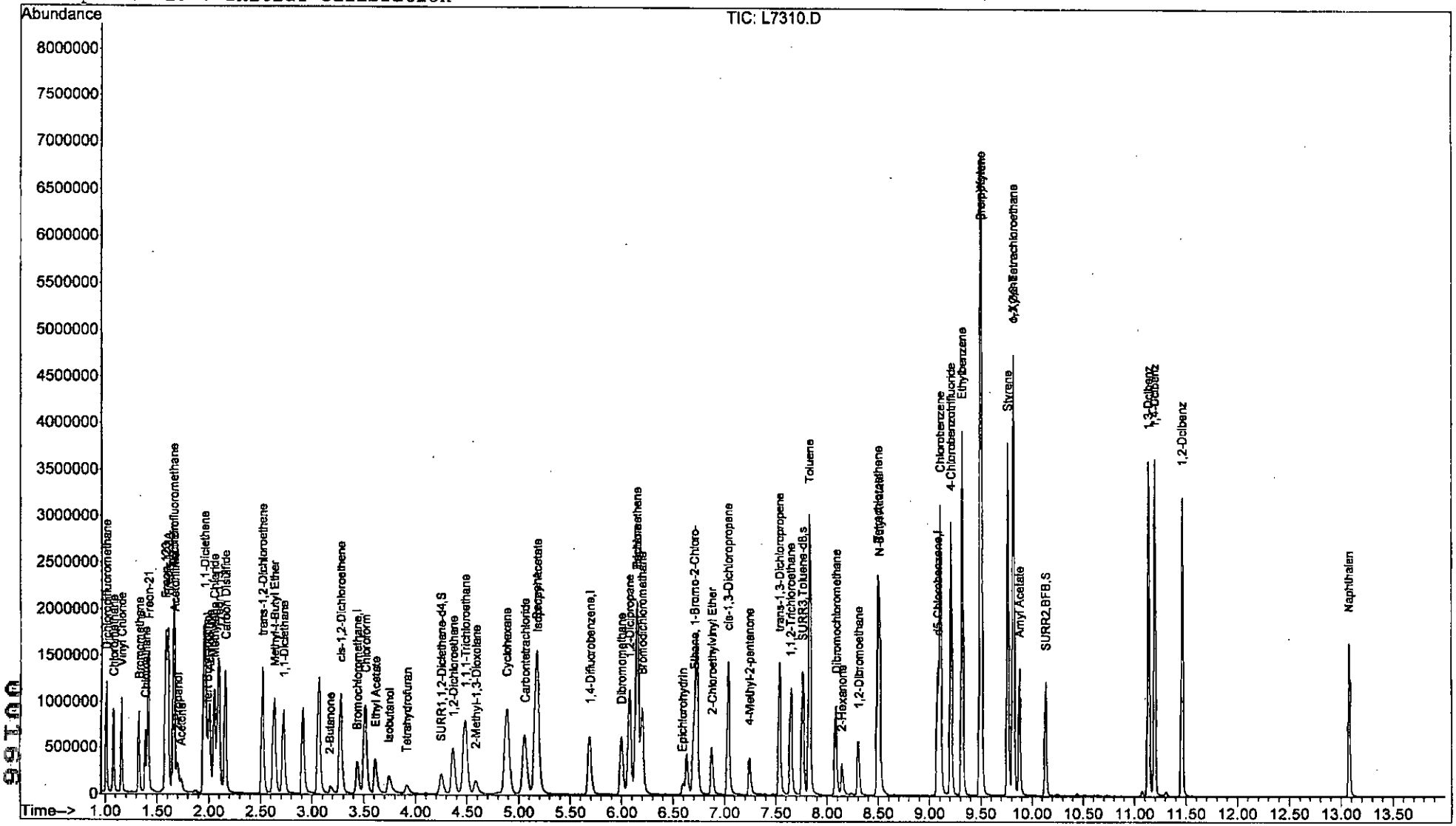
response 117233

Ion	Exp%	Act%
43.00	100	100
57.00	5.40	6.83#
72.00	18.40	19.75
0.00	0.00	0.00

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7310.D Vial: 13
Acq On : 11 Sep 2014 3:33 pm Operator: D.Lipani
Sample : STD #7 - 50 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 11:00 2014 Quant Results File: 6240911.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 10:58:06 2014
Response via : Initial Calibration



L7310.D 6240911.M Mon Sep 15 11:01:27 2014 Page 3

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7311.D Vial: 14
Acq On : 11 Sep 2014 4:24 pm Operator: D.Lipani
Sample : STD #8 - 100 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 11:02 2014 Quant Results File: 6240911.RES

Quant Method : I:\ACQUDATA\M...\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 11:01:42 2014
Response via : Initial Calibration
DataAcq Meth : 6240911

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	3.44	128	99376	30.00	ug/L		0.00
35) 1,4-Difluorobenzene	5.69	114	603081	30.00	ug/L		0.00
53) d5-Chlorobenzene	9.08	117	551881	30.00	ug/L		0.00
System Monitoring Compounds							
30) SURR1,1,2-Diclethane-d4	4.25	65	197604	28.39	ug/L		0.00
Spiked Amount 30.000	Range 81 - 127		Recovery = 94.63%				
51) SURR3,Toluene-d8	7.76	98	706878	30.43	ug/L		0.00
Spiked Amount 30.000	Range 83 - 120		Recovery = 101.43%				
68) SURR2,BFB	10.13	95	270588	29.45	ug/L		0.00
Spiked Amount 30.000	Range 79 - 123		Recovery = 98.17%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.01	85	1117129	102.65	ug/L		93
3) Chloromethane	1.08	50	1065117	102.08	ug/L		91
4) Vinyl Chloride	1.15	62	1054875	101.25	ug/L		98
5) Bromomethane	1.32	94	681311	92.85	ug/L		98
6) Chloroethane	1.39	64	617845	95.94	ug/L		99
7) Freon-21	1.42	67	1761719	95.02	ug/L		94
8) Freon-123	1.58	83	1414685	99.93	ug/L		98
9) Freon-123A	1.60	67	1250838	101.38	ug/L		95
10) Acrolein	1.66	56	516850	509.30	ug/L		99
11) Trichlorofluoromethane	1.66	101	1753360	96.86	ug/L		94
12) Acetonitrile	1.67	41	393094	482.18	ug/L		94
13) 2-Propanol	1.70	45	521353	1959.97	ug/L		99
14) Acetone	1.73	43	211385	95.25	ug/L		87
15) 1,1-Diclethene	1.95	96	869040	100.75	ug/L		94
16) tert Butyl Alcohol	1.99	59	819250	1979.23	ug/L		99
17) Acrylonitrile	2.01	53	932700	515.47	ug/L		99
18) Methylene Chloride	2.05	84	789218	99.63	ug/L		96
19) Freon 113	2.09	101	1004348	105.31	ug/L		90
20) Carbon Disulfide	2.16	76	2765277	95.60	ug/L	#	96
21) trans-1,2-Dichloroethene	2.52	96	944858	102.84	ug/L		95
22) Methyl-t-Butyl Ether	2.63	73	1994564	98.80	ug/L		100
23) 1,1-Diclethane	2.72	63	1636144	97.55	ug/L		96
24) 2-Butanone	3.18	43	224431	112.32	ug/L	#	90
25) cis-1,2-Dichloroethene	3.27	96	1002765	103.10	ug/L		99
26) Chloroform	3.51	83	1731609	101.10	ug/L		98
27) Ethyl Acetate	3.61	43	970391	222.99	ug/L		99
28) Isobutanol	3.75	43	339617m	2075.81	ug/L		
29) Tetrahydrofuran	3.91	42	162345	107.73	ug/L	#	86
31) 1,2-Dichloroethane	4.37	62	1095886	99.14	ug/L		99
32) 1,1,1-Trichloroethane	4.48	97	1609339	102.27	ug/L		94
33) 2-Methyl-1,3-Dioxolane	4.58	73	324921	539.69	ug/L		95
34) Cyclohexane	4.89	56	1405733	102.08	ug/L		96
36) Carbontetrachloride	5.05	117	1341361	102.86	ug/L		99
37) Isopropyl Acetate	5.19	43	1064382	100.08	ug/L		98
38) Benzene	5.17	78	3261210	97.02	ug/L		95
39) Dibromomethane	6.00	93	511303	95.34	ug/L		98
40) 1,2-Diclpropane	6.07	63	993697	108.12	ug/L		97
41) Trichloroethene	6.14	130	1051230	101.28	ug/L		99

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

DL 9/15/14

00167

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7311.D Vial: 14
Acq On : 11 Sep 2014 4:24 pm Operator: D.Lipani
Sample : STD #8 - 100 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 11:02 2014 Quant Results File: 6240911.RES

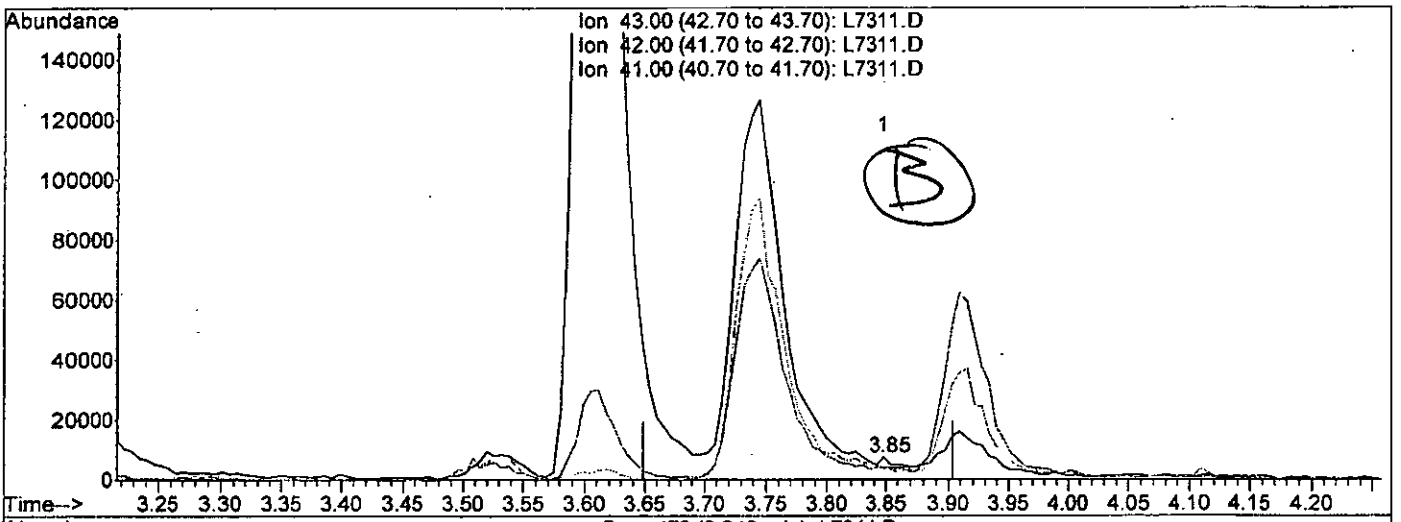
Quant Method : I:\ACQUDATA\M...\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 11:01:42 2014
Response via : Initial Calibration
DataAcq Meth : 6240911

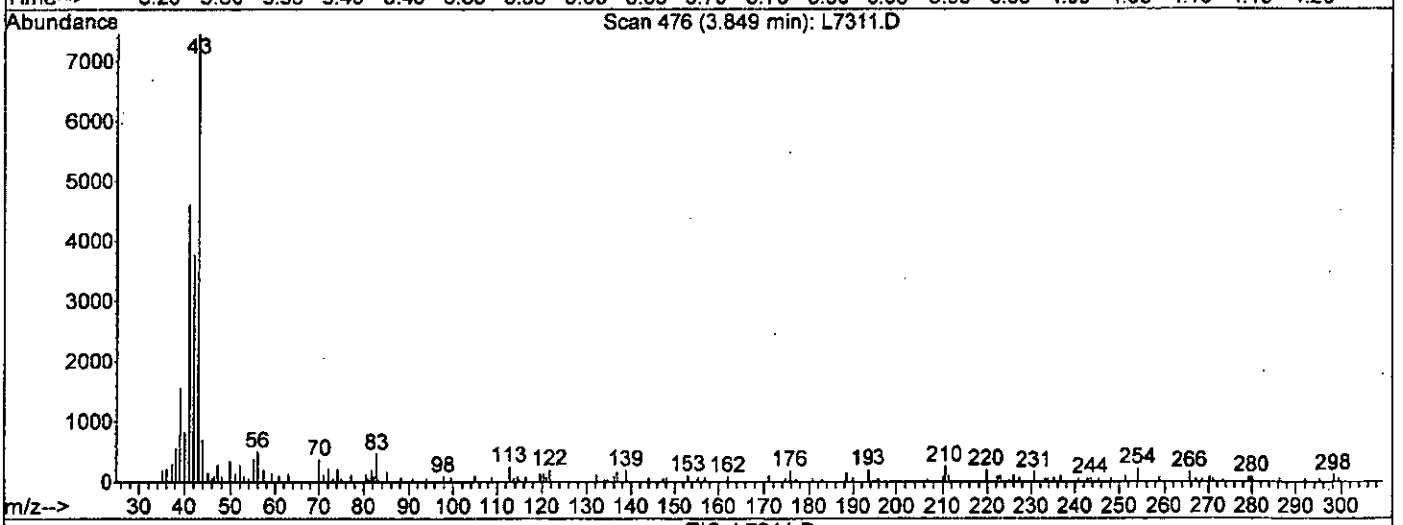
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
42)	Heptane	6.15	43	930019	108.98	ug/L	98
43)	Bromodichloromethane	6.20	83	1335007	102.52	ug/L	98
44)	Epichlorohydrin	6.59	57	224852	517.35	ug/L	93
45)	Ethane, 1-Bromo-2-Chloro-	6.70	63	986951	93.81	ug/L	98
46)	2-Chloroethylvinyl Ether	6.88	63	402298	99.32	ug/L	94
47)	cis-1,3-Dichloropropene	7.04	75	1353657	99.99	ug/L	99
48)	4-Methyl-2-pentanone	7.24	43	494935	99.06	ug/L	99
49)	trans-1,3-Dichloropropene	7.53	75	1212778	102.92	ug/L	99
50)	1,1,2-Trichloroethane	7.64	97	613796	96.78	ug/L	98
52)	Toluene	7.83	91	3290672	90.00	ug/L	96
54)	Dibromochloromethane	8.09	129	942017	103.79	ug/L	100
55)	2-Hexanone	8.14	43	360651	102.91	ug/L	97
56)	1,2-Dibromoethane	8.31	107	695612	99.81	ug/L	98
57)	Tetrachloroethene	8.49	164	889393	99.45	ug/L	98
58)	N-Butyl Acetate	8.51	43	1648533	197.73	ug/L	97
59)	Chlorobenzene	9.10	112	2375811	94.14	ug/L	99
60)	4-Chlorobenzotrifluoride	9.21	180	1463651	101.18	ug/L	99
61)	Ethylbenzene	9.32	106	1393279	106.23	ug/L	77
62)	(m+p)Xylene	9.50	106	3130935	190.75	ug/L	79
63)	Bromoform	9.50	173	617543	104.77	ug/L	98
64)	Styrene	9.76	104	2672347	98.94	ug/L	96
65)	1,1,2,2-Tetrachloroethane	9.81	83	736223	95.21	ug/L	99
66)	o-Xylene	9.81	106	1613233	101.63	ug/L	92
67)	Amyl Acetate	9.88	43	1120386	101.81	ug/L	99
69)	1,3-Dclbenz	11.13	146	2190358	94.93	ug/L	98
70)	1,4-Dclbenz	11.19	146	2130503	92.72	ug/L	95
71)	1,2-Dclbenz	11.46	146	1964943	93.62	ug/L	94
72)	Naphthalen	13.08	128	1813881	95.32	ug/L	98

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

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7311.D Vial: 14
Acq On : 11 Sep 2014 4:24 pm Operator: D.Lipani
Sample : STD #8 - 100 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 11:02 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 11:01:42 2014
Response via : Multiple Level Calibration





TIC: L7311.D

(28) Isobutanol

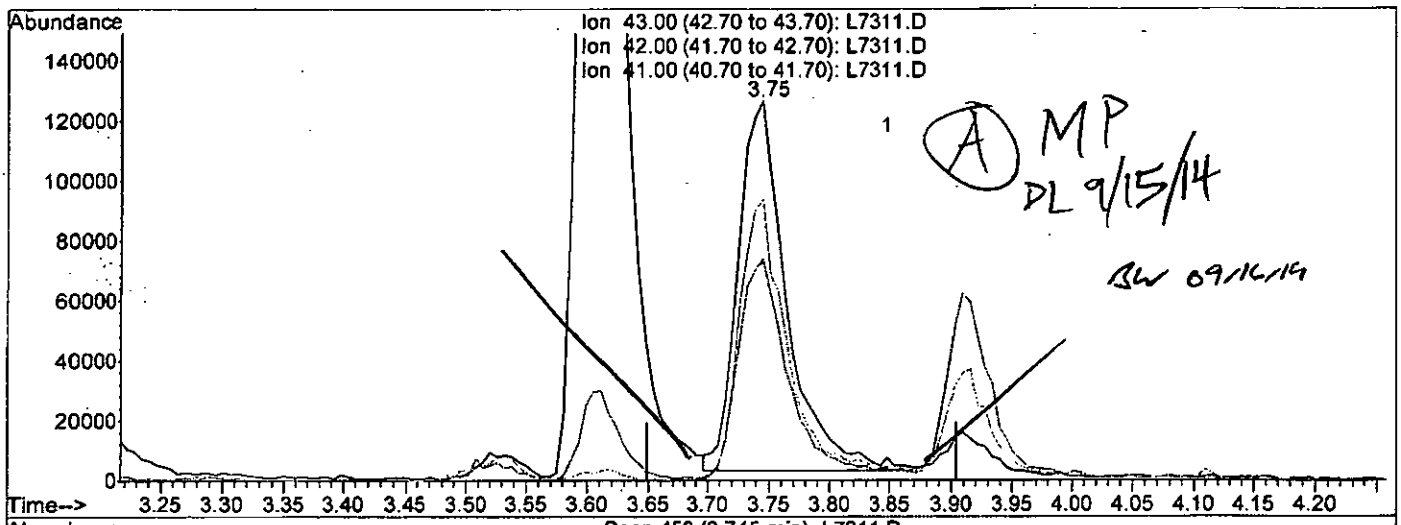
3.85min 12.76ug/L

response 2087

Ion	Exp%	Act%
43.00	100	100
42.00	44.80	50.52
41.00	70.90	61.74
0.00	0.00	0.00

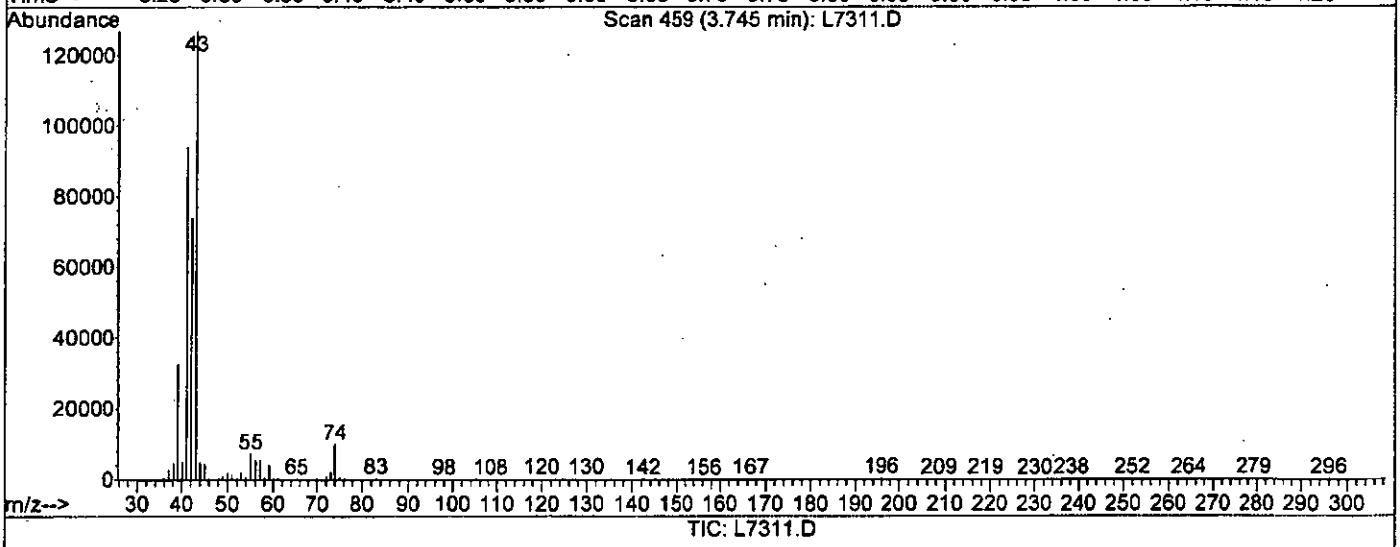
Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7311.D Vial: 14
Acq On : 11 Sep 2014 4:24 pm Operator: D.Lipani
Sample : STD #8 - 100 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 11:02 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 11:01:42 2014
Response via : Multiple Level Calibration



A MP DL 9/15/14

BW 09/16/14



TIC: L7311.D

(28) Isobutanol

3.75min 2075.81ug/L m

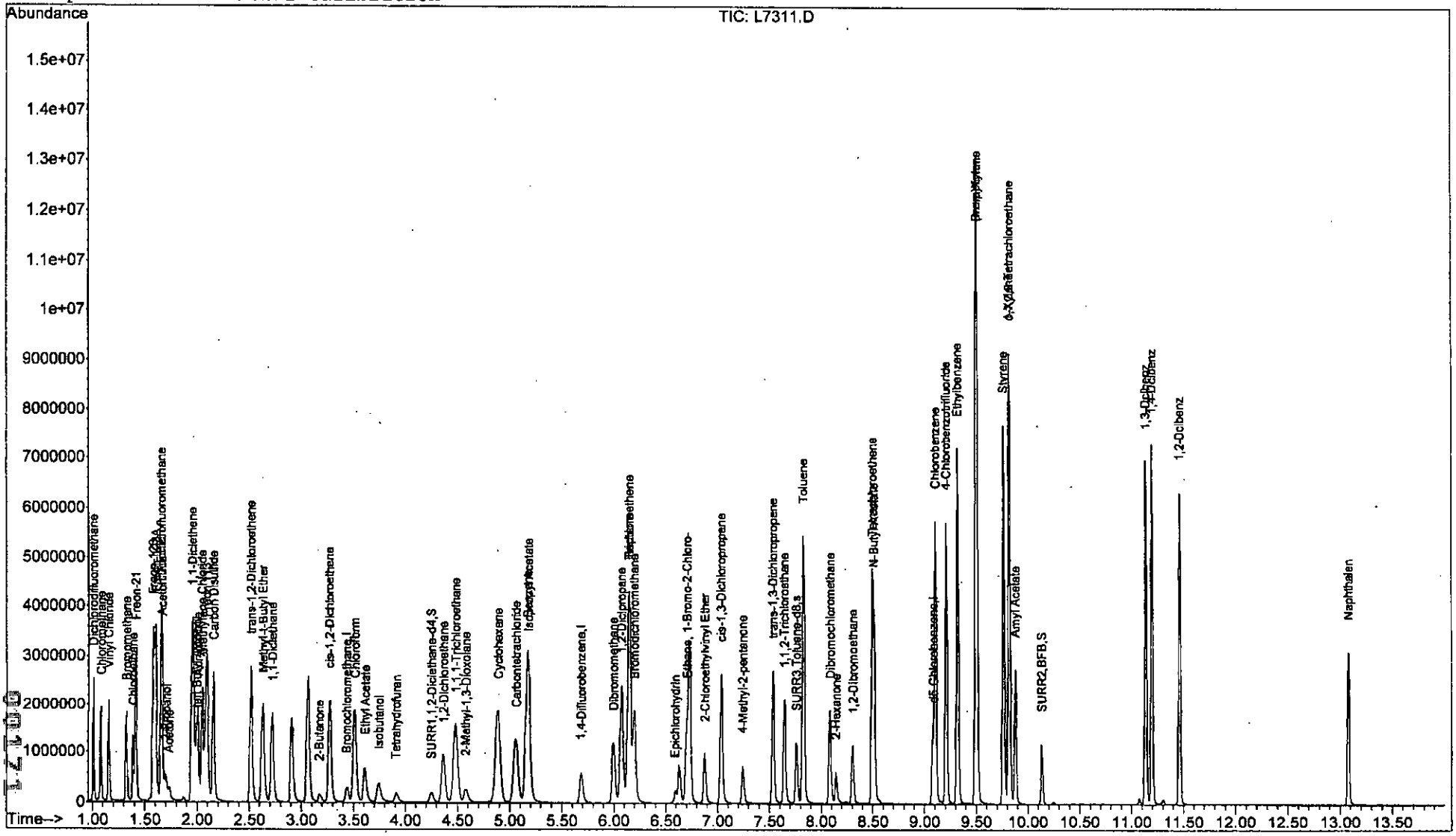
response 339617

Ion	Exp%	Act%
43.00	100	100
42.00	44.80	58.23#
41.00	70.90	74.01
0.00	0.00	0.00

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7311.D Vial: 14
Acq On : 11 Sep 2014 4:24 pm Operator: D.Lipani
Sample : STD #8 - 100 PPB Inst : MS#6
Misc : GCMS#6 ICAL 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 11:02 2014 Quant Results File: 6240911.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 11:01:42 2014
Response via : Initial Calibration



Quantitation Report (QA Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7316.D Vial: 19
Acq On : 11 Sep 2014 7:20 pm Operator: D.Lipani
Sample : STD #10 - 200 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 11:07 2014 Quant Results File: 6240911.RES

Quant Method : I:\ACQUDATA\M...\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 11:03:48 2014
Response via : Initial Calibration
DataAcq Meth : 6240911

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	3.44	128	110487	30.00	ug/L		0.00
35) 1,4-Difluorobenzene	5.69	114	679127	30.00	ug/L		0.00
53) d5-Chlorobenzene	9.08	117	604050	30.00	ug/L		0.00
System Monitoring Compounds							
30) SURR1,1,2-Diclethane-d4	4.25	65	231802	29.95	ug/L		0.00
Spiked Amount 30.000	Range 81 - 127		Recovery = 99.83%				
51) SURR3,Toluene-d8	7.76	98	759288	29.02	ug/L		0.00
Spiked Amount 30.000	Range 83 - 120		Recovery = 96.73%				
68) SURR2,BFB	10.13	95	321121	31.93	ug/L		0.00
Spiked Amount 30.000	Range 79 - 123		Recovery = 106.43%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.01	85	1910609	157.90	ug/L		88
3) Chloromethane	1.08	50	1768486	152.44	ug/L		83
4) Vinyl Chloride	1.15	62	1748784	150.98	ug/L		94
5) Bromomethane	1.32	94	1274390	156.20	ug/L		95
6) Chloroethane	1.39	64	1180965	164.94	ug/L		98
7) Freon-21	1.41	67	3089300m	149.86	ug/L		
8) Freon-123	1.58	83	2713814	172.42	ug/L	#	90
9) Freon-123A	1.61	67	2395778	174.65	ug/L		90
10) Acrolein	1.66	56	1091466	967.37	ug/L		97
11) Trichlorofluoromethane	1.66	101	3180898	158.05	ug/L		87
12) Acetonitrile	1.67	41	872046	962.11	ug/L		90
13) 2-Propanol	1.70	45	1215333	4109.44	ug/L		100
14) Acetone	1.73	43	450333	182.51	ug/L		89
15) 1,1-Diclethene	1.95	96	1621380	169.06	ug/L		87
16) tert Butyl Alcohol	1.99	59	1728744	3756.47	ug/L		98
17) Acrylonitrile	2.01	53	1808987	899.22	ug/L		99
18) Methylene Chloride	2.05	84	1486013	168.73	ug/L		91
19) Freon 113	2.09	101	1839948	173.53	ug/L		93
20) Carbon Disulfide	2.16	76	4518997	140.52	ug/L	#	89
21) trans-1,2-Dichloroethene	2.52	96	1835054	179.64	ug/L		89
22) Methyl-t-Butyl Ether	2.63	73	4019455	179.08	ug/L		96
23) 1,1-Diclethane	2.72	63	3116351	167.12	ug/L	#	92
24) 2-Butanone	3.17	43	470928	211.98	ug/L	#	89
25) cis-1,2-Dichloroethene	3.27	96	1942436	179.63	ug/L		100
26) Chloroform	3.52	83	3456795	181.54	ug/L		98
27) Ethyl Acetate	3.61	43	2175770	449.69	ug/L	#	95
28) Isobutanol	3.75	43	733302	4011.88	ug/L	#	87
29) Tetrahydrofuran	3.91	42	341192	203.65	ug/L	#	91
31) 1,2-Dichloroethane	4.37	62	2283858	185.83	ug/L	#	97
32) 1,1,1-Trichloroethane	4.48	97	3264345	186.58	ug/L		96
33) 2-Methyl-1,3-Dioxolane	4.58	73	792192	1183.50	ug/L		89
34) Cyclohexane	4.89	56	3185354	208.04	ug/L		95
36) Carbontetrachloride	5.06	117	2791264	190.08	ug/L		96
37) Isopropyl Acetate	5.19	43	2647325	221.05	ug/L		98
38) Benzene	5.18	78	6583888	173.94	ug/L	#	89
39) Dibromomethane	6.00	93	1130103	187.12	ug/L		96
40) 1,2-Diclpropane	6.08	63	1980132	191.32	ug/L	#	94
41) Trichloroethene	6.14	130	2106341	180.20	ug/L		98

DL 9/15/14

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

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7316.D Vial: 19
Acq On : 11 Sep 2014 7:20 pm Operator: D.Lipani
Sample : STD #10 - 200 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 11:07 2014 Quant Results File: 6240911.RES

Quant Method : I:\ACQUDATA\M...\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 11:03:48 2014
Response via : Initial Calibration
DataAcq Meth : 6240911

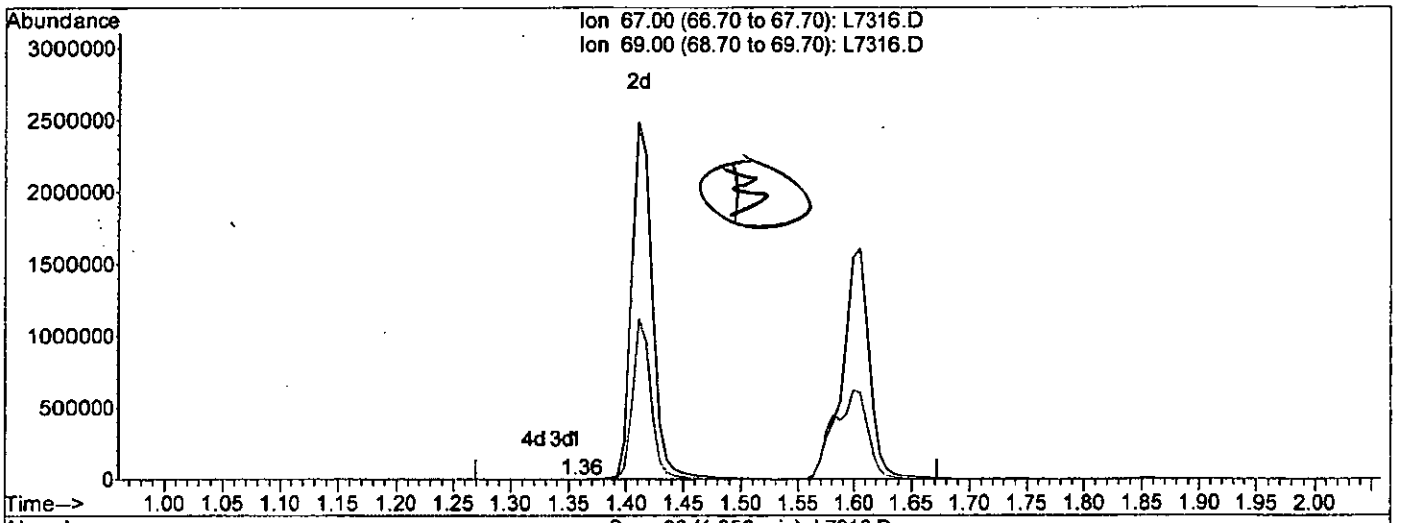
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
42)	Heptane	6.15	43	1944758	202.37	ug/L		99
43)	Bromodichloromethane	6.20	83	2712878	185.01	ug/L		97
44)	Epichlorohydrin	6.59	57	517716	1057.80	ug/L		94
45)	Ethane, 1-Bromo-2-Chloro-	6.70	63	2076345	175.25	ug/L		97
46)	2-Chloroethylvinyl Ether	6.88	63	849515	186.25	ug/L		94
47)	cis-1,3-Dichloropropene	7.04	75	2669879	175.13	ug/L		97
48)	4-Methyl-2-pentanone	7.24	43	1089681	193.67	ug/L		99
49)	trans-1,3-Dichloropropene	7.54	75	2380010	179.35	ug/L		97
50)	1,1,2-Trichloroethane	7.65	97	1294098	181.19	ug/L		99
52)	Toluene	7.83	91	5436454	132.04	ug/L	#	86
54)	Dibromochloromethane	8.09	129	1920982	193.36	ug/L		100
55)	2-Hexanone	8.14	43	790374	206.06	ug/L		97
56)	1,2-Dibromoethane	8.31	107	1465159	192.06	ug/L		98
57)	Tetrachloroethene	8.50	164	1748974	178.68	ug/L		99
58)	N-Butyl Acetate	8.51	43	3315216	363.29	ug/L	#	92
59)	Chlorobenzene	9.10	112	4111262	148.83	ug/L	#	90
60)	4-Chlorobenzotrifluoride	9.21	180	2871429	181.36	ug/L		95
61)	Ethylbenzene	9.32	106	2569757	179.01	ug/L	#	52
62)	(m+p)Xylene	9.51	106	5261916	292.89	ug/L	#	61
63)	Bromoform	9.50	173	1386802	214.96	ug/L		98
64)	Styrene	9.77	104	4565080	154.42	ug/L	#	87
65)	1,1,2,2-Tetrachloroethane	9.82	83	1579155	186.59	ug/L		99
66)	o-Xylene	9.82	106	3040537	175.01	ug/L	#	74
67)	Amyl Acetate	9.88	43	2452351	203.60	ug/L		97
69)	1,3-Dclbenz	11.14	146	3846886m	152.33	ug/L		
70)	1,4-Dclbenz	11.20	146	3800065	151.10	ug/L	#	87
71)	1,2-Dclbenz	11.46	146	3572967	155.53	ug/L	#	82
72)	Naphthalen	13.08	128	3532271	169.58	ug/L	#	94

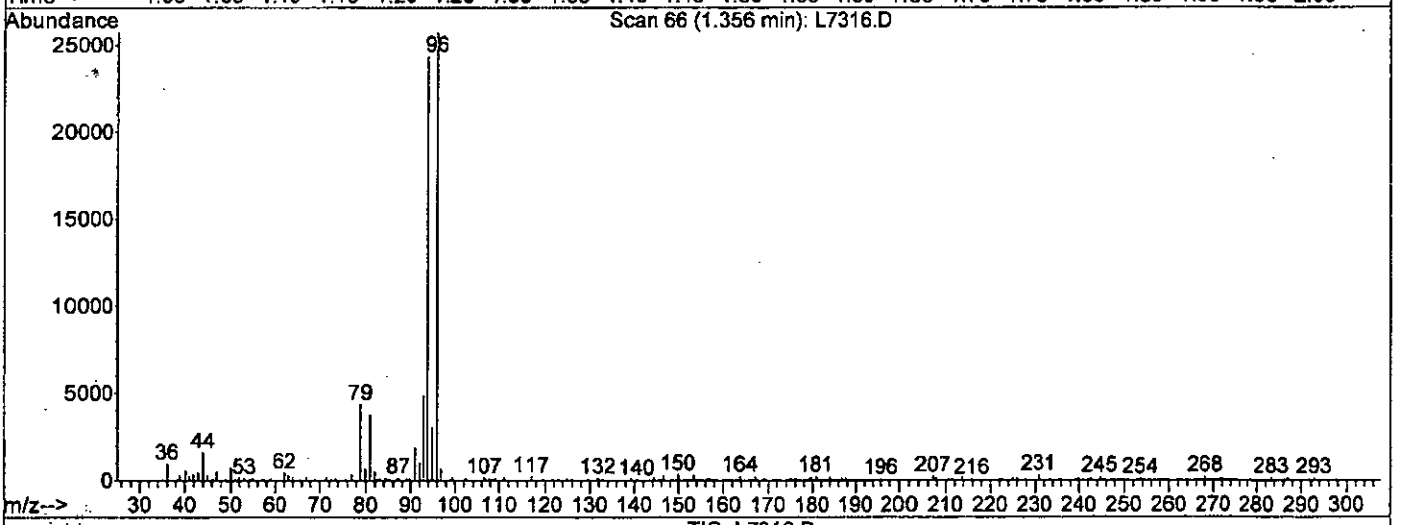
DL 9/15/14

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

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7316.D Vial: 19
Acq On : 11 Sep 2014 7:20 pm Operator: D.Lipani
Sample : STD #10 - 200 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 11:04 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 11:03:48 2014
Response via : Single Level Calibration





TIC: L7316.D

(7) Freon-21

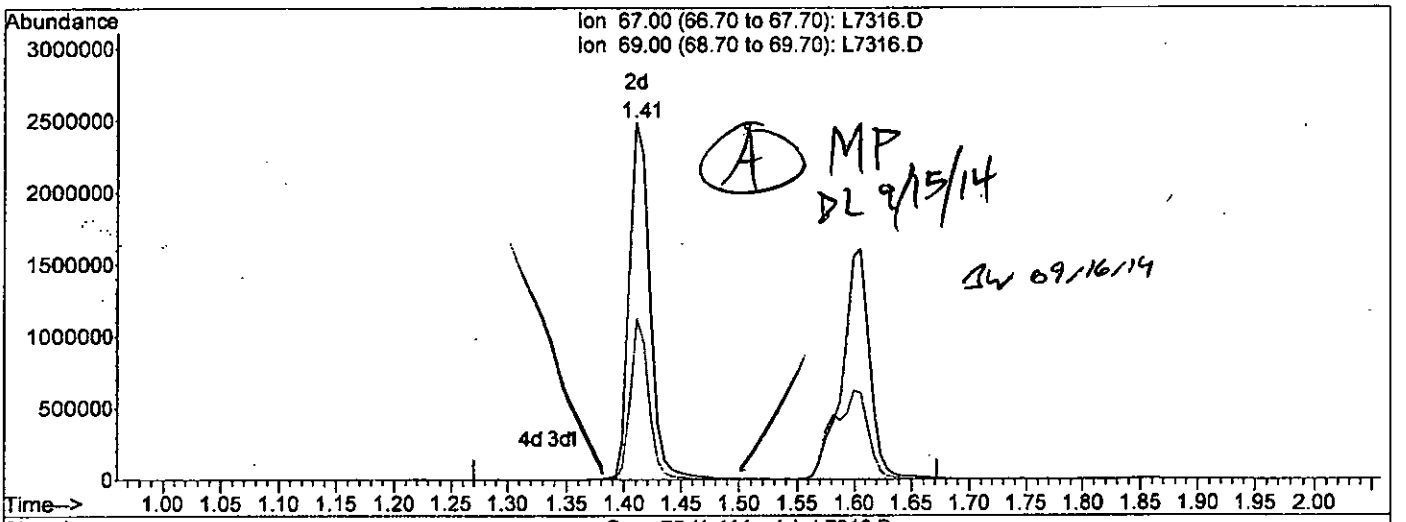
1.36min 0.00ug/L

response 85

Ion	Exp%	Act%
67.00	100	100
69.00	34.50	38.71
0.00	0.00	0.00
0.00	0.00	0.00

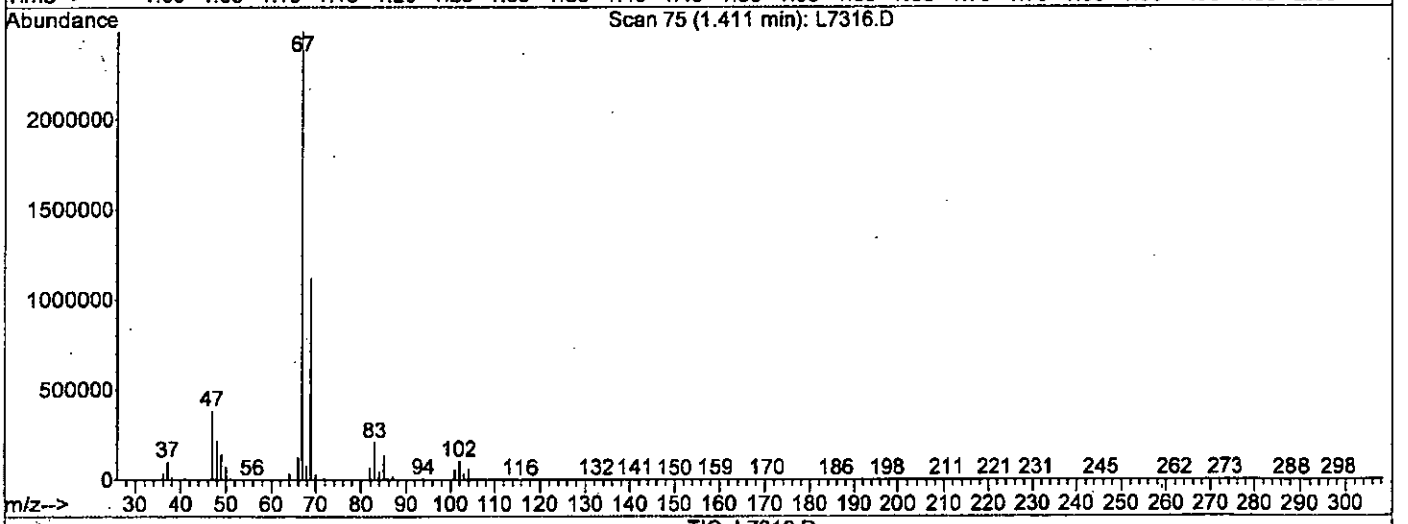
Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7316.D Vial: 19
Acq On : 11 Sep 2014 7:20 pm Operator: D.Lipani
Sample : STD #10 - 200 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 11:04 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 11:03:48 2014
Response via : Single Level Calibration



A MP DL 9/15/14

JW 09/16/14



TIC: L7316.D

(7) Freon-21

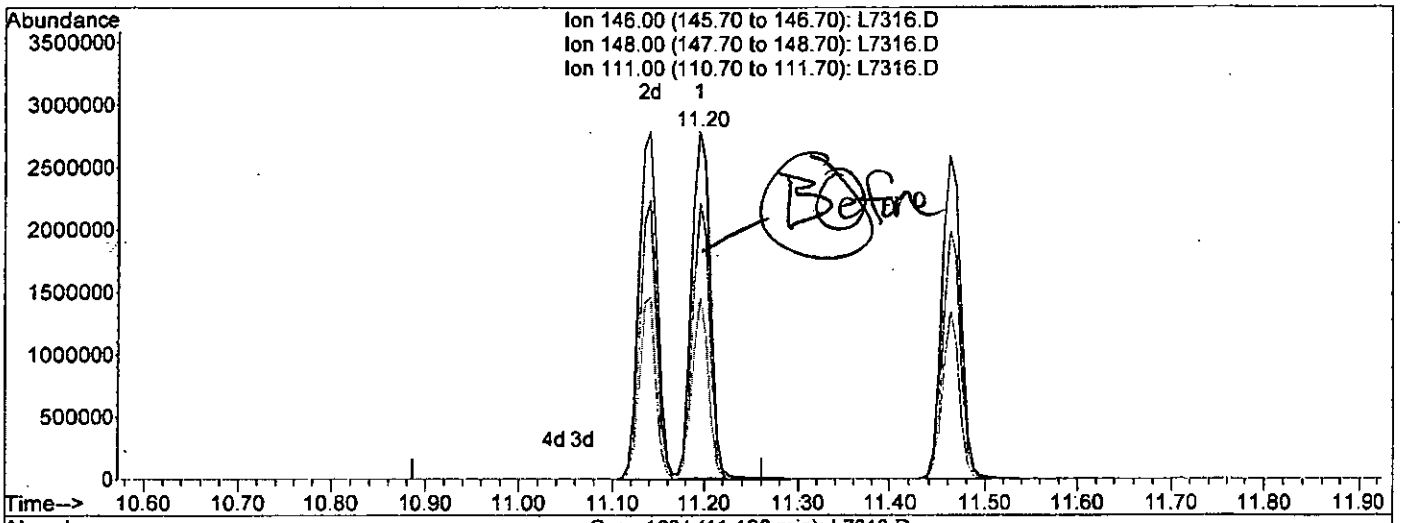
1.41min 149.86ug/L m

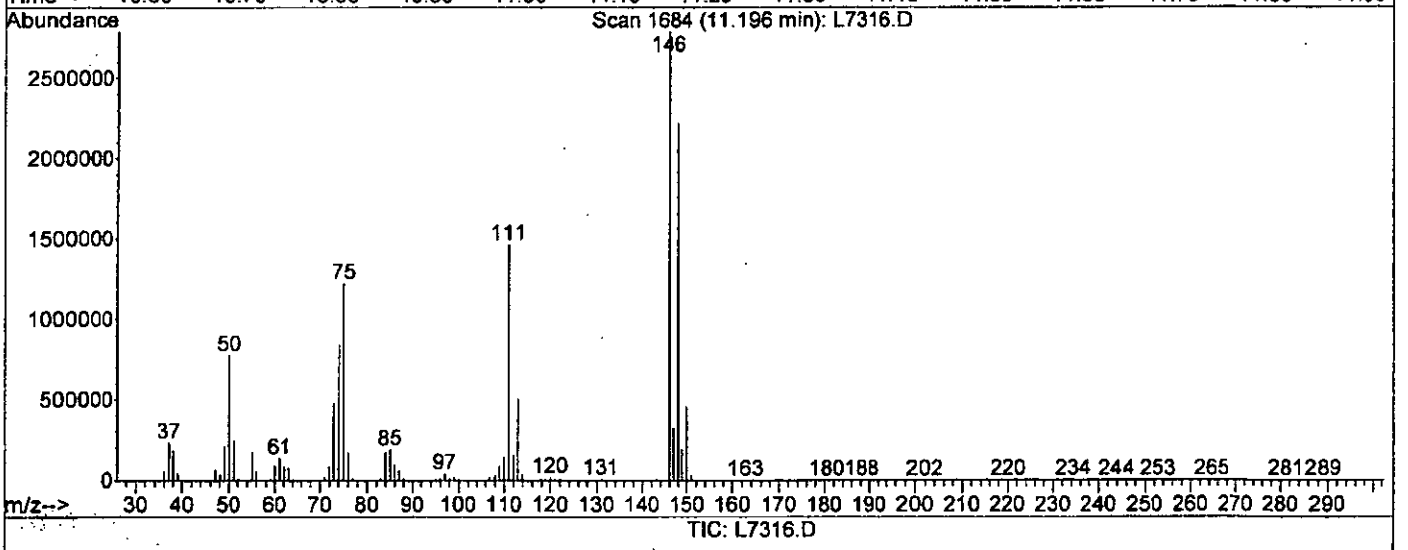
response 3089300

Ion	Exp%	Act%
67.00	100	100
69.00	34.50	44.94#
0.00	0.00	0.00
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7316.D Vial: 19
Acq On : 11 Sep 2014 7:20 pm Operator: D.Lipani
Sample : STD #10 - 200 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 11:04 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 11:03:48 2014
Response via : Single Level Calibration





TIC: L7316.D

(69) 1,3-Dclbenz

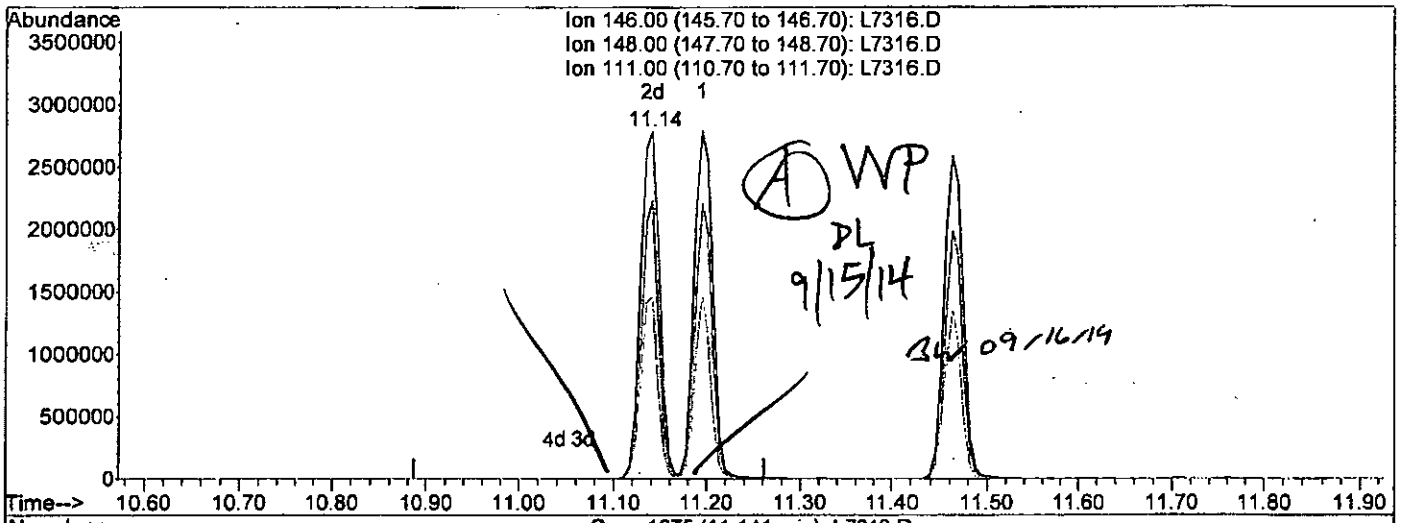
11.20min 148.75ug/L

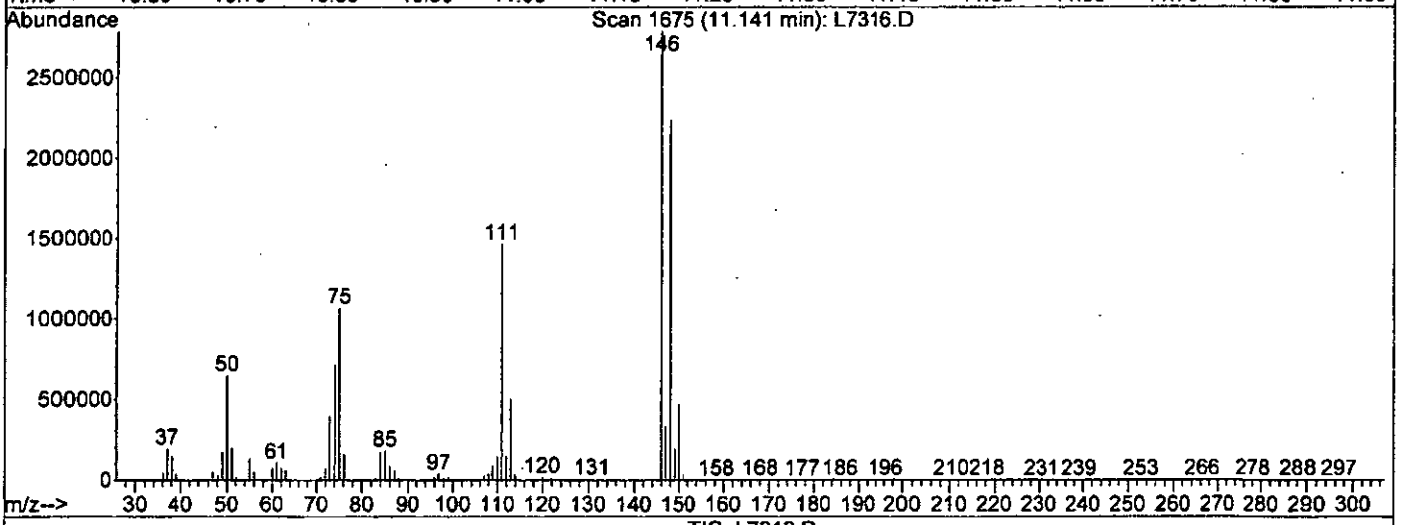
response 3756437

Ion	Exp%	Act%
146.00	100	100
148.00	65.80	73.34
111.00	38.20	45.71
0.00	0.00	0.00

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7316.D Vial: 19
Acq On : 11 Sep 2014 7:20 pm Operator: D.Lipani
Sample : STD #10 - 200 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 11:07 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 11:03:48 2014
Response via : Single Level Calibration





TIC: L7316.D

(69) 1,3-Dclbenz

11.14min 152.33ug/L m

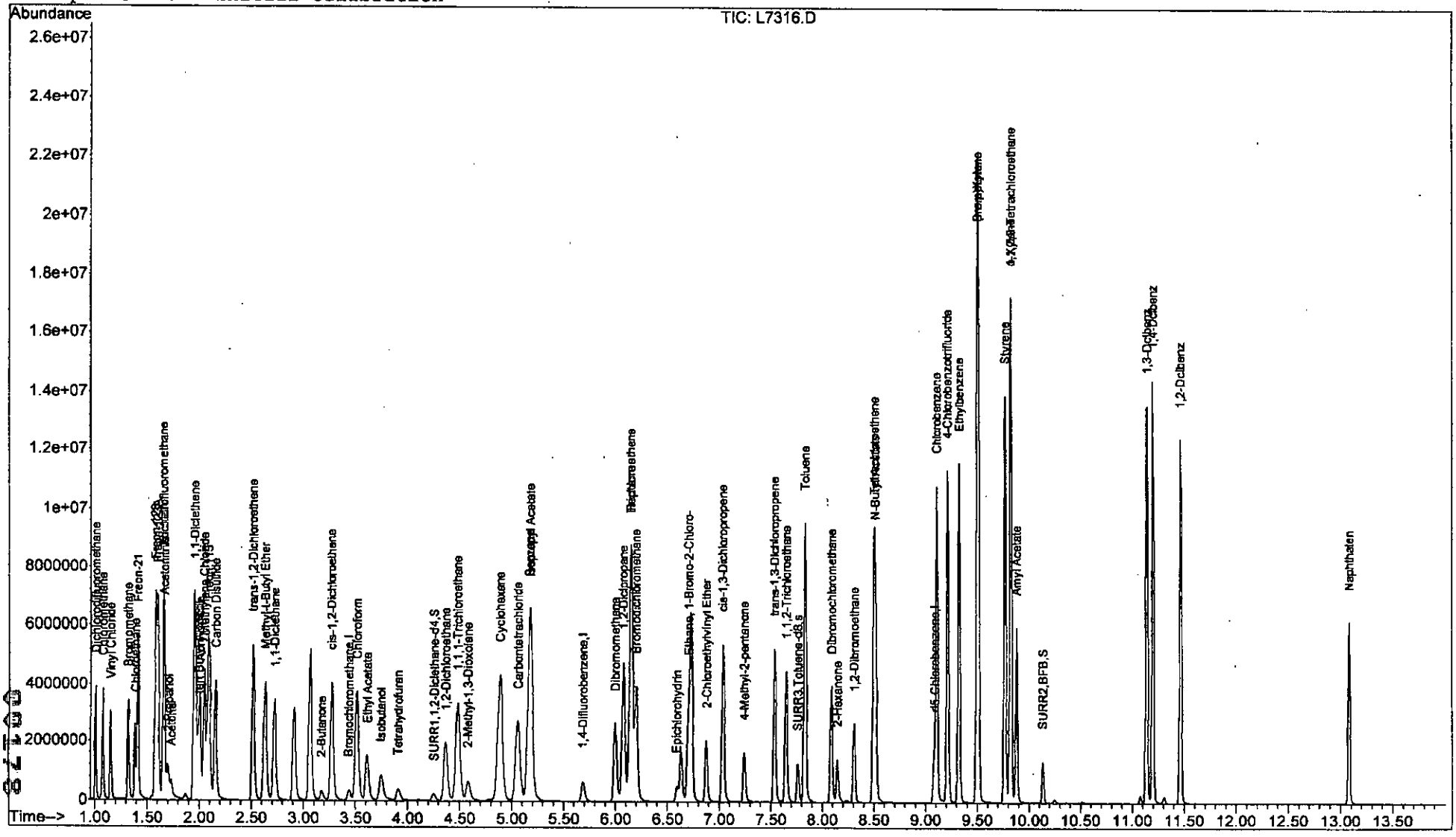
response 3846886

Ion	Exp%	Act%
146.00	100	100
148.00	65.80	71.62
111.00	38.20	44.63
0.00	0.00	0.00

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7316.D Vial: 19
Acq On : 11 Sep 2014 7:20 pm Operator: D.Lipani
Sample : STD #10 - 200 PPB Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 11:07 2014 Quant Results File: 6240911.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 11:07:33 2014
Response via : Initial Calibration



L7316.D 6240911.M Mon Sep 15 11:34:38 2014

Initial Calibration Verification Summary Report

Calibration ID:	RC1400082	**Instrument ID:**	R-MS-06
		Column Name:	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
1,1,1-Trichloroethane (TCA)	RC1400082-10	T	Average RF	50	46.35	ug/L	-7.3	<=30
1,1,2,2-Tetrachloroethane	RC1400082-10	T	Average RF	50	46.01	ug/L	-8.0	<=30
1,1,2-Trichloroethane	RC1400082-10	T	Average RF	50	51.45	ug/L	2.9	<=30
1,1,2-Trichlorotrifluoroethane	RC1400082-10	T	Average RF	50	45.80	ug/L	-8.4	<=30
1,1-Dichloroethane (1,1-DCA)	RC1400082-10	T	Average RF	50	42.24	ug/L	-15.5	<=30
1,1-Dichloroethene (1,1-DCE)	RC1400082-10	T	Average RF	50	45.26	ug/L	-9.5	<=30
1,2-Dibromoethane	RC1400082-10	T	Average RF	50	46.03	ug/L	-7.9	<=30
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123:	RC1400082-10	T	Average RF	50	48.16	ug/L	-3.7	<=30
1,2-Dichlorobenzene	RC1400082-10	T	Average RF	50	46.17	ug/L	-7.7	<=30
1,2-Dichloroethane	RC1400082-10	T	Average RF	50	45.07	ug/L	-9.9	<=30
1,2-Dichloropropane	RC1400082-10	T	Average RF	50	48.43	ug/L	-3.1	<=30
1,3-Dichlorobenzene	RC1400082-10	T	Average RF	50	45.77	ug/L	-8.5	<=30
1,4-Dichlorobenzene	RC1400082-10	T	Average RF	50	46.49	ug/L	-7.0	<=30
1-Bromo-2-chloroethane	RC1400082-10	T	Average RF	50	47.94	ug/L	-4.1	<=30
1-Chloro-4-(trifluoromethyl)benzene	RC1400082-10	T	Average RF	50	49.34	ug/L	-1.3	<=30
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123	RC1400082-10	T	Average RF	50	47.56	ug/L	-4.9	<=30
2-Butanone (MEK)	RC1400082-10	T	Average RF	50	43.81	ug/L	-12.4	<=30
2-Chloroethyl Vinyl Ether	RC1400082-10	T	Average RF	50	50.29	ug/L	0.6	<=30
2-Hexanone	RC1400082-10	T	Average RF	50	53.33	ug/L	6.7	<=30
2-Methyl-1,3-dioxolane	RC1400082-10	T	Average RF	250	258.4	ug/L	3.3	<=30
2-Methyl-1-propanol	RC1400082-10	T	Average RF	1000	940.8	ug/L	-5.9	<=30
2-Methyl-2-propanol	RC1400082-10	T	Average RF	1000	887.9	ug/L	-11.2	<=30
2-Propanol	RC1400082-10	T	Average RF	1000	919.8	ug/L	-8.0	<=30
4-Methyl-2-pentanone	RC1400082-10	T	Average RF	50	49.25	ug/L	-1.5	<=30
Acetone	RC1400082-11	T	Average RF	50	41.77	ug/L	-16.5	<=30
Acetonitrile	RC1400082-10	T	Average RF	250	219.5	ug/L	-12.2	<=30
Acrolein	RC1400082-11	T	Average RF	250	254.8	ug/L	1.9	<=30
Acrylonitrile	RC1400082-10	T	Average RF	250	227.2	ug/L	-9.1	<=30
Amyl Acetate	RC1400082-10	T	Average RF	50	51.42	ug/L	2.8	<=30
Benzene	RC1400082-10	T	Average RF	50	49.84	ug/L	-0.3	<=30
Bromodichloromethane	RC1400082-10	T	Average RF	50	49.39	ug/L	-1.2	<=30
Bromoform	RC1400082-10	T	Average RF	50	50.21	ug/L	0.4	<=30
Bromomethane	RC1400082-10	T	Average RF	50	39.79	ug/L	-20.4	<=30
Carbon Disulfide	RC1400082-10	T	Average RF	50	42.40	ug/L	-15.2	<=30
Carbon Tetrachloride	RC1400082-10	T	Average RF	50	56.57	ug/L	13.1	<=30
Chlorobenzene	RC1400082-10	T	Average RF	50	49.79	ug/L	-0.4	<=30
Chloroethane	RC1400082-10	T	Average RF	50	42.87	ug/L	-14.3	<=30
Chloroform	RC1400082-10	T	Average RF	50	46.46	ug/L	-7.1	<=30
Chloromethane	RC1400082-10	T	Average RF	50	41.75	ug/L	-16.5	<=30
Cyclohexane	RC1400082-10	T	Average RF	50	48.62	ug/L	-2.8	<=30
Dibromochlormethane	RC1400082-10	T	Average RF	50	52.91	ug/L	5.8	<=30
Dibromomethane	RC1400082-10	T	Average RF	50	44.06	ug/L	-11.9	<=30
Dichlorodifluoromethane (CFC 12)	RC1400082-10	T	Average RF	50	48.18	ug/L	-3.6	<=30
Dichloromethane	RC1400082-10	T	Average RF	50	52.30	ug/L	4.6	<=30
Epichlorohydrin	RC1400082-10	T	Average RF	250	241.2	ug/L	-3.5	<=30
Ethyl Acetate	RC1400082-10	T	Average RF	50	52.35	ug/L	4.7	<=30
Ethylbenzene	RC1400082-10	T	Average RF	50	50.30	ug/L	0.6	<=30
Isopropyl Acetate	RC1400082-10	T	Average RF	50	49.67	ug/L	-0.7	<=30
Methyl tert-Butyl Ether	RC1400082-10	T	Average RF	50	43.64	ug/L	-12.7	<=30
Naphthalene	RC1400082-10	T	Average RF	50	45.46	ug/L	-9.1	<=30
Styrene	RC1400082-10	T	Average RF	50	48.55	ug/L	-2.9	<=30

00179

Initial Calibration Verification Summary Report

Calibration ID:	RC1400082	**Instrument ID:**	R-MS-06
		Column Name:	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Tetrachloroethene (PCE)	RC1400082-10	T	Average RF	50	47.21	ug/L	-5.6	<=30
Tetrahydrofuran (THF)	RC1400082-10	T	Average RF	50	41.98	ug/L	-16.0	<=30
Toluene	RC1400082-10	T	Average RF	50	49.16	ug/L	-1.7	<=30
Trichloroethene (TCE)	RC1400082-10	T	Average RF	50	48.43	ug/L	-3.1	<=30
Trichlorofluoromethane (CFC 11)	RC1400082-10	T	Average RF	50	44.00	ug/L	-12.0	<=30
Vinyl Chloride	RC1400082-10	T	Average RF	50	42.53	ug/L	-14.9	<=30
cis-1,2-Dichloroethene	RC1400082-10	T	Average RF	50	47.95	ug/L	-4.1	<=30
cis-1,3-Dichloropropene	RC1400082-10	T	Average RF	50	50.52	ug/L	1.0	<=30
m,p-Xylenes	RC1400082-10	T	Average RF	100	96.64	ug/L	-3.4	<=30
n-Butyl Acetate	RC1400082-10	T	Average RF	50	58.80	ug/L	17.6	<=30
n-Heptane	RC1400082-10	T	Average RF	50	48.44	ug/L	-3.1	<=30
o-Xylene	RC1400082-10	T	Average RF	50	48.35	ug/L	-3.3	<=30
trans-1,2-Dichloroethene	RC1400082-10	T	Average RF	50	45.97	ug/L	-8.1	<=30
trans-1,3-Dichloropropene	RC1400082-10	T	Average RF	50	52.28	ug/L	4.6	<=30
1,2-Dichloroethane-d4	RC1400082-10	S	Average RF	30	27.83	ug/L	-7.2	<=30
4-Bromofluorobenzene	RC1400082-10	S	Average RF	30	29.57	ug/L	-1.4	<=30
Toluene-d8	RC1400082-10	S	Average RF	30	30.27	ug/L	0.9	<=30

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7319.D Vial: 22
Acq On : 11 Sep 2014 9:24 pm Operator: D.Lipani
Sample : ICV Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 11:42 2014 Quant Results File: 6240911.RES

Quant Method : I:\ACQUDATA\M...\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 11:07:33 2014
Response via : Initial Calibration
DataAcq Meth : 6240911

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	3.44	128	117379	30.00	ug/L		0.00
35) 1,4-Difluorobenzene	5.69	114	671116	30.00	ug/L		0.00
53) d5-Chlorobenzene	9.08	117	610582	30.00	ug/L		0.00
System Monitoring Compounds							
30) SURR1,1,2-Diclethane-d4	4.25	65	228828	27.83	ug/L		0.00
Spiked Amount 30.000	Range 81 - 127		Recovery = 92.77%				
51) SURR3,Toluene-d8	7.76	98	782283	30.27	ug/L		0.00
Spiked Amount 30.000	Range 83 - 120		Recovery = 100.90%				
68) SURR2,BFB	10.13	95	300461	29.57	ug/L		0.00
Spiked Amount 30.000	Range 79 - 123		Recovery = 98.57%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.01	85	619307	48.18	ug/L		95
3) Chloromethane	1.08	50	514577	41.75	ug/L		94
4) Vinyl Chloride	1.15	62	523319	42.53	ug/L		98
5) Bromomethane	1.32	94	344835	39.79	ug/L		97
6) Chloroethane	1.39	64	326121	42.87	ug/L		100
7) Freon-21	1.41	67	1053455	48.10	ug/L		98
8) Freon-123	1.58	83	795278	47.56	ug/L		96
9) Freon-123A	1.60	67	701793	48.16	ug/L		98
10) Acrolein	1.66	56	181463	151.39	ug/L		100
11) Trichlorofluoromethane	1.66	101	940777	44.00	ug/L		98
12) Acetonitrile	1.67	41	211405	219.54	ug/L		98
13) 2-Propanol	1.70	45	288990	919.80	ug/L		99
14) Acetone	1.74	43	82686	31.54	ug/L		88
15) 1,1-Diclethene	1.95	96	461095	45.26	ug/L		92
16) tert Butyl Alcohol	1.99	59	434087	887.87	ug/L		96
17) Acrylonitrile	2.01	53	485924	227.20	ug/L		99
18) Methylene Chloride	2.05	84	489332	52.30	ug/L		92
19) Freon 113	2.09	101	515916	45.80	ug/L		93
20) Carbon Disulfide	2.16	76	1448741	42.40	ug/L	#	99
21) trans-1,2-Dichloroethene	2.52	96	498844	45.97	ug/L		95
22) Methyl-t-Butyl Ether	2.64	73	1040595	43.64	ug/L		98
23) 1,1-Diclethane	2.72	63	836758	42.24	ug/L		98
24) 2-Butanone	3.18	43	103410	43.81	ug/L		97
25) cis-1,2-Dichloroethene	3.27	96	550845	47.95	ug/L		97
26) Chloroform	3.51	83	939964	46.46	ug/L		96
27) Ethyl Acetate	3.61	43	269071	52.35	ug/L	#	99
28) Isobutanol	3.75	43	182679m	940.75	ug/L		
29) Tetrahydrofuran	3.92	42	74728	41.98	ug/L	#	84
31) 1,2-Dichloroethane	4.36	62	588469	45.07	ug/L		94
32) 1,1,1-Trichloroethane	4.48	97	861424	46.35	ug/L		95
33) 2-Methyl-1,3-Dioxolane	4.58	73	183733	258.37	ug/L	#	93
34) Cyclohexane	4.89	56	790788	48.62	ug/L		97
36) Carbontetrachloride	5.06	117	820713	56.57	ug/L		99
37) Isopropyl Acetate	5.18	43	587633	49.67	ug/L		98
38) Benzene	5.17	78	1863837	49.84	ug/L		98
39) Dibromomethane	6.00	93	262902	44.06	ug/L		98
40) 1,2-Diclpropane	6.07	63	495253	48.43	ug/L	#	94
41) Trichloroethene	6.14	130	559297	48.43	ug/L		99

DL 9/15/14

DL

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

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7319.D Vial: 22
Acq On : 11 Sep 2014 9:24 pm Operator: D.Lipani
Sample : ICV Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 11:42 2014 Quant Results File: 6240911.RES

Quant Method : I:\ACQUDATA\M...\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 11:07:33 2014
Response via : Initial Calibration
DataAcq Meth : 6240911

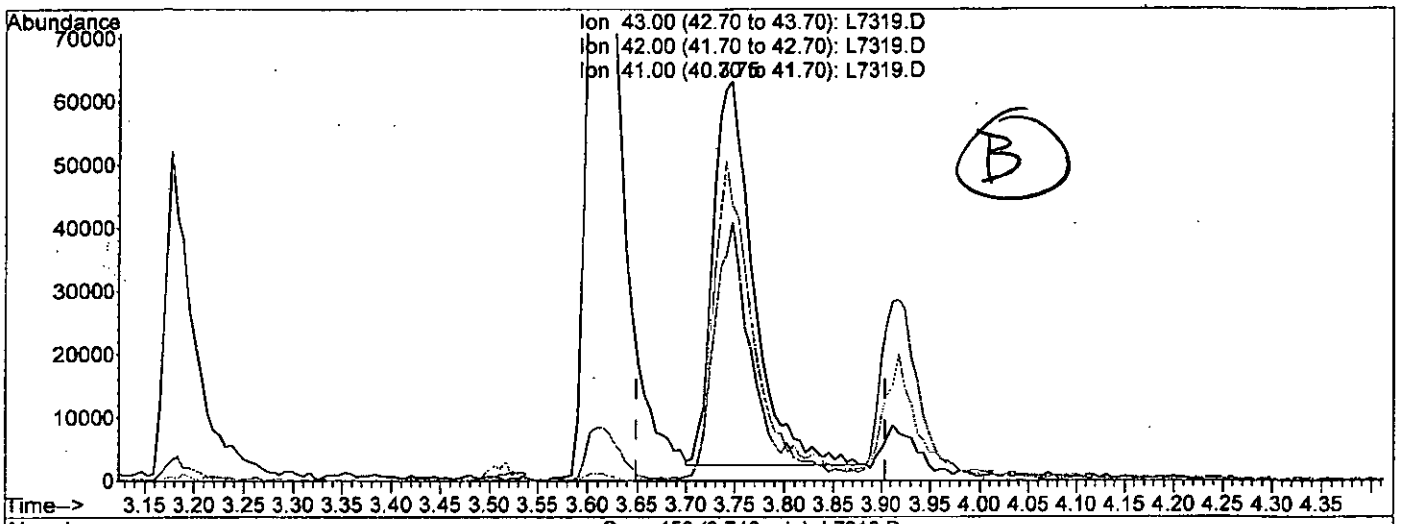
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
42)	Heptane	6.15	43	459918	48.44	ug/L	98
43)	Bromodichloromethane	6.20	83	715461	49.39	ug/L	98
44)	Epichlorohydrin	6.60	57	116632	241.21	ug/L	92
45)	Ethane, 1-Bromo-2-Chloro-	6.70	63	561177	47.94	ug/L	99
46)	2-Chloroethylvinyl Ether	6.87	63	226648	50.29	ug/L	93
47)	cis-1,3-Dichloropropene	7.04	75	761079	50.52	ug/L	98
48)	4-Methyl-2-pentanone	7.25	43	273734	49.25	ug/L	99
49)	trans-1,3-Dichloropropene	7.54	75	685415	52.28	ug/L	100
50)	1,1,2-Trichloroethane	7.65	97	363069	51.45	ug/L	98
52)	Toluene	7.83	91	2000125	49.16	ug/L	99
54)	Dibromochloromethane	8.08	129	531252	52.91	ug/L	98
55)	2-Hexanone	8.15	43	206711	53.33	ug/L	96
56)	1,2-Dibromoethane	8.30	107	354894	46.03	ug/L	97
57)	Tetrachloroethene	8.50	164	467048	47.21	ug/L	98
58)	N-Butyl Acetate	8.51	43	542340	58.80	ug/L	99
59)	Chlorobenzene	9.10	112	1390163	49.79	ug/L	99
60)	4-Chlorobenzotrifluoride	9.21	180	789560	49.34	ug/L	99
61)	Ethylbenzene	9.32	106	729695	50.30	ug/L	92
62)	(m+p)Xylene	9.50	106	1754862	96.64	ug/L	93
63)	Bromoform	9.50	173	327346	50.21	ug/L	97
64)	Styrene	9.76	104	1450908	48.55	ug/L	99
65)	1,1,2,2-Tetrachloroethane	9.81	83	393502	46.01	ug/L	99
66)	o-Xylene	9.82	106	848908	48.35	ug/L	99
67)	Amyl Acetate	9.88	43	625859	51.42	ug/L	100
69)	1,3-Dclbenz	11.14	146	1168441	45.77	ug/L	99
70)	1,4-Dclbenz	11.19	146	1181788	46.49	ug/L	99
71)	1,2-Dclbenz	11.47	146	1072180	46.17	ug/L	98
72)	Naphthalen	13.08	128	957043	45.46	ug/L	99

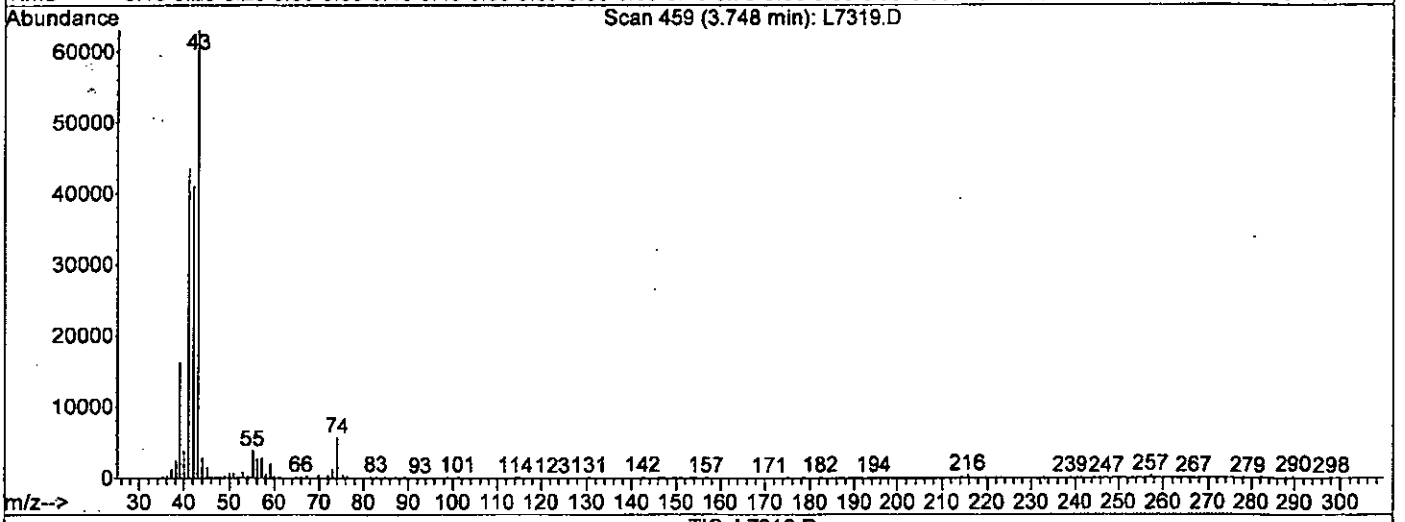
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7319.D Vial: 22
Acq On : 11 Sep 2014 9:24 pm Operator: D.Lipani
Sample : ICV Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 11:42 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 11:07:33 2014
Response via : Multiple Level Calibration





TIC: L7319.D

(28) Isobutanol

3.75min 902.59ug/L

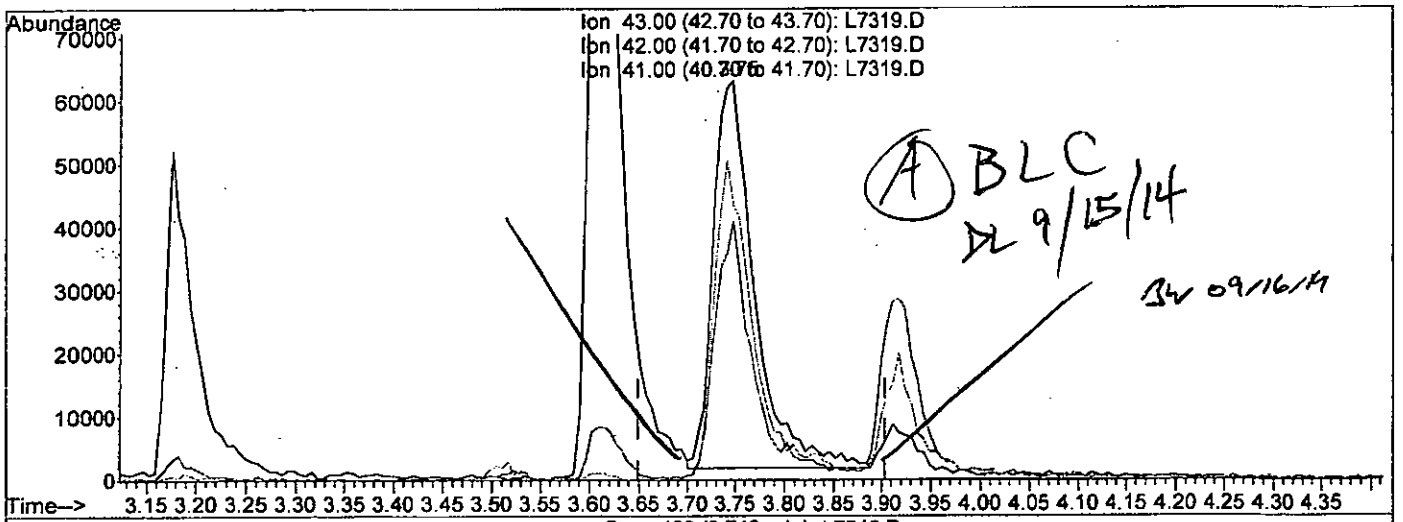
response 175268

Ion	Exp%	Act%
43.00	100	100
42.00	44.80	64.87#
41.00	70.90	69.01
0.00	0.00	0.00

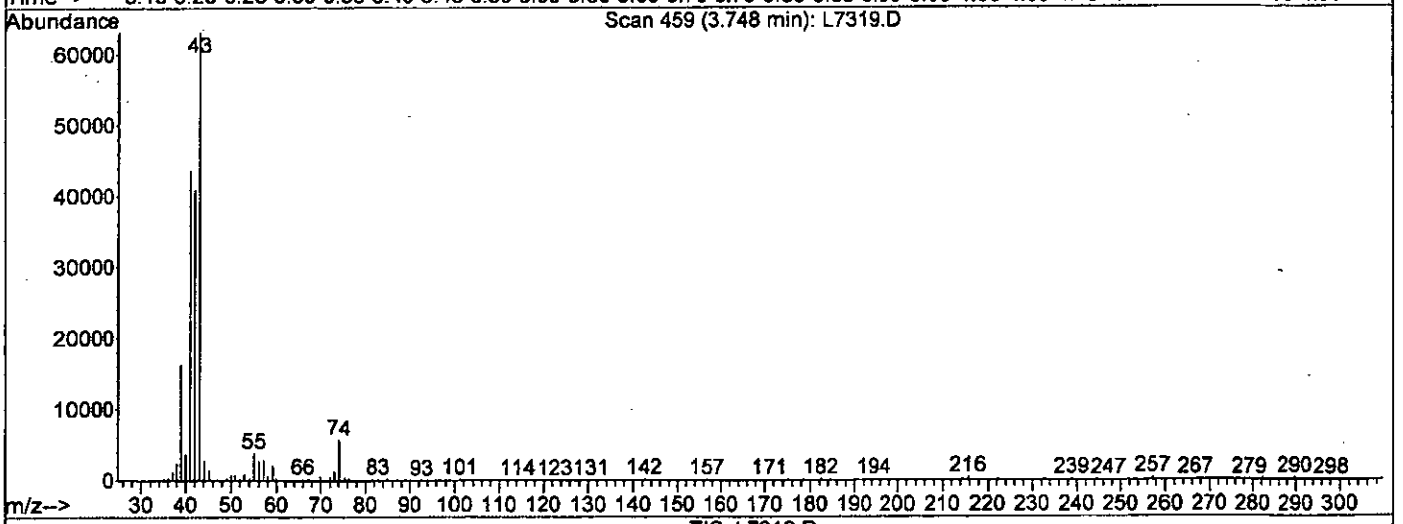
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7319.D Vial: 22
Acq On : 11 Sep 2014 9:24 pm Operator: D.Lipani
Sample : ICV Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 11:42 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 11:07:33 2014
Response via : Multiple Level Calibration



A BLC 9/15/14
BV 09/16/14



TIC: L7319.D

(28) Isobutanol

3.75min 940.75ug/L m

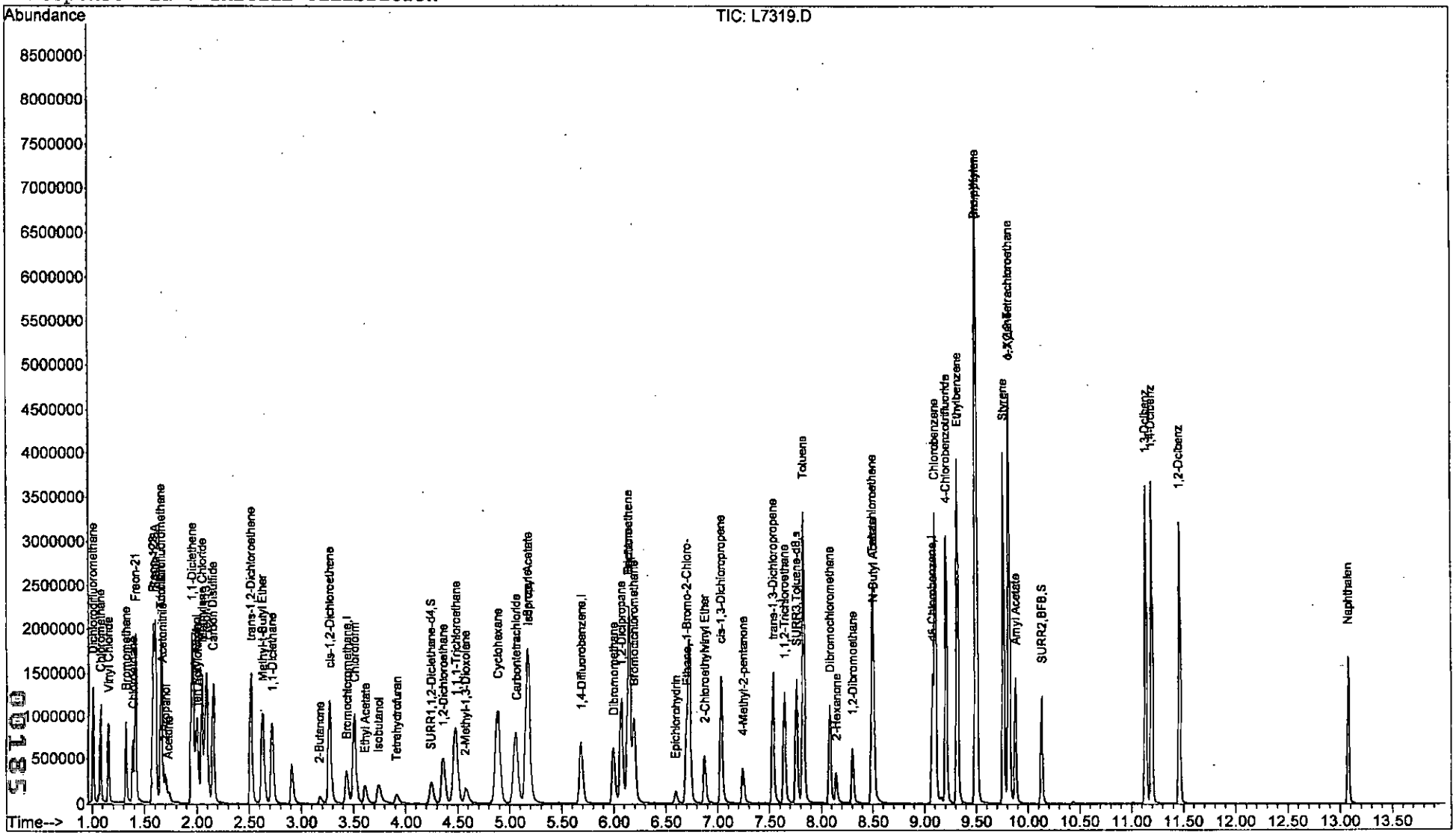
response 182679

Ion	Exp%	Act%
43.00	100	100
42.00	44.80	64.87#
41.00	70.90	69.01
0.00	0.00	0.00

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7319.D Vial: 22
Acq On : 11 Sep 2014 9:24 pm Operator: D.Lipani
Sample : ICV Inst : MS#6
Misc : 624 ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 11:42 2014 Quant Results File: 6240911.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 11:07:33 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7332.D Vial: 4
Acq On : 12 Sep 2014 9:09 am Operator: D.Lipani
Sample : ICV#2 ACETONE/ACROLEIN Inst : MS#6
Misc : 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 11:44 2014 Quant Results File: 6240911.RES

Quant Method : I:\ACQUDATA\M...\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 11:07:33 2014
Response via : Initial Calibration
DataAcq Meth : 6240911

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	3.44	128	108861	30.00	ug/L		0.00
35) 1,4-Difluorobenzene	5.69	114	626835	30.00	ug/L		0.00
53) d5-Chlorobenzene	9.07	117	571670	30.00	ug/L		0.00
System Monitoring Compounds							
30) SURR1,1,2-Diclethane-d4	4.24	65	225580	29.58	ug/L		0.00
Spiked Amount 30.000	Range 81 - 127		Recovery = 98.60%				
51) SURR3,Toluene-d8	7.76	98	768816	31.85	ug/L		0.00
Spiked Amount 30.000	Range 83 - 120		Recovery = 106.17%				
68) SURR2,BFB	10.13	95	294371	30.94	ug/L		0.00
Spiked Amount 30.000	Range 79 - 123		Recovery = 103.13%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.01	85	639056	53.60	ug/L		95
3) Chloromethane	1.08	50	529453	46.32	ug/L		99
4) Vinyl Chloride	1.16	62	524041	45.92	ug/L		98
5) Bromomethane	1.33	94	321970	40.05	ug/L		99
6) Chloroethane	1.39	64	322664	45.74	ug/L		97
7) Freon-21	1.41	67	1058958	52.14	ug/L		99
8) Freon-123	1.58	83	814549	52.53	ug/L		99
9) Freon-123A	1.61	67	728860	53.93	ug/L		95
10) Acrolein	1.66	56	283283	254.82	ug/L		99
11) Trichlorofluoromethane	1.66	101	943881	47.60	ug/L		96
12) Acetonitrile	1.67	41	223917	250.73	ug/L		93
13) 2-Propanol	1.70	45	313279	1075.12	ug/L		95
14) Acetone	1.73	43	101555	41.77	ug/L		81
15) 1,1-Diclethene	1.95	96	499087	52.82	ug/L		97
16) tert Butyl Alcohol	1.99	59	529763	1168.34	ug/L		97
17) Acrylonitrile	2.01	53	578621	291.71	ug/L		100
18) Methylene Chloride	2.05	84	527226	60.76	ug/L		95
19) Freon 113	2.09	101	549540	52.60	ug/L		97
20) Carbon Disulfide	2.16	76	1546272	48.80	ug/L		99
21) trans-1,2-Dichloroethene	2.52	96	512058	50.88	ug/L		99
22) Methyl-t-Butyl Ether	2.63	73	1103276	49.89	ug/L		97
23) 1,1-Diclethane	2.72	63	847045	46.10	ug/L		99
24) 2-Butanone	3.18	43	122168	55.81	ug/L	#	91
25) cis-1,2-Dichloroethene	3.27	96	555560	52.14	ug/L		99
26) Chloroform	3.51	83	922393	49.16	ug/L		99
27) Ethyl Acetate	3.61	43	284361	59.65	ug/L	#	97
28) Isobutanol	3.74	43	187367	1040.39	ug/L	#	90
29) Tetrahydrofuran	3.92	42	80987	49.06	ug/L	#	88
31) 1,2-Dichloroethane	4.36	62	597635	49.35	ug/L		97
32) 1,1,1-Trichloroethane	4.48	97	872029	50.59	ug/L		94
33) 2-Methyl-1,3-Dioxolane	4.58	73	202806	307.51	ug/L		89
34) Cyclohexane	4.88	56	819060	54.29	ug/L		96
36) Carbontetrachloride	5.06	117	842622	62.18	ug/L		96
37) Isopropyl Acetate	5.19	43	625256	56.58	ug/L		99
38) Benzene	5.17	78	1871764	53.59	ug/L		98
39) Dibromomethane	6.00	93	279206	50.10	ug/L		96
40) 1,2-Diclpropane	6.07	63	530635	55.56	ug/L		97
41) Trichloroethene	6.14	130	569012	52.75	ug/L		99

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

DL 9/15/14

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7332.D Vial: 4
Acq On : 12 Sep 2014 9:09 am Operator: D.Lipani
Sample : ICV#2 ACETONE/ACROLEIN Inst : MS#6
Misc : 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 11:44 2014 Quant Results File: 6240911.RES

Quant Method : I:\ACQUDATA\M...\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 11:07:33 2014
Response via : Initial Calibration
DataAcq Meth : 6240911

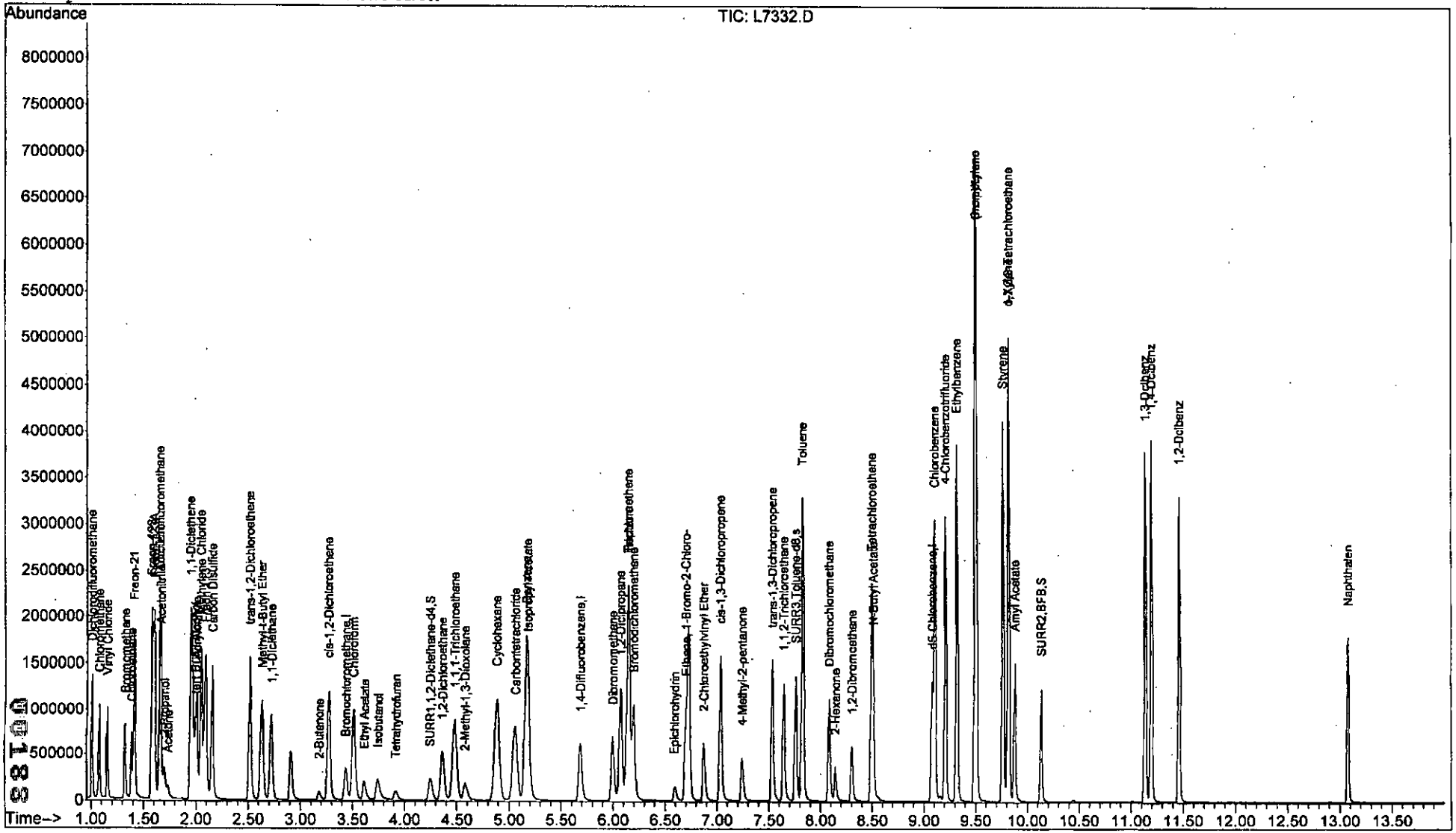
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
42)	Heptane	6.15	43	478527	53.96	ug/L	97
43)	Bromodichloromethane	6.20	83	735591	54.36	ug/L	98
44)	Epichlorohydrin	6.60	57	137306	304.03	ug/L	94
45)	Ethane, 1-Bromo-2-Chloro-	6.70	63	602836	55.14	ug/L	97
46)	2-Chloroethylvinyl Ether	6.87	63	264673	62.88	ug/L	93
47)	cis-1,3-Dichloropropene	7.04	75	811714	57.69	ug/L	99
48)	4-Methyl-2-pentanone	7.24	43	337769	65.06	ug/L	97
49)	trans-1,3-Dichloropropene	7.53	75	717017	58.55	ug/L	99
50)	1,1,2-Trichloroethane	7.64	97	365133	55.40	ug/L	97
52)	Toluene	7.83	91	1987523	52.30	ug/L	98
54)	Dibromochloromethane	8.08	129	538373	57.27	ug/L	99
55)	2-Hexanone	8.14	43	220365	60.72	ug/L	96
56)	1,2-Dibromoethane	8.30	107	357763	49.56	ug/L	97
57)	Tetrachloroethene	8.50	164	470202	50.77	ug/L	99
58)	N-Butyl Acetate	8.51	43	504903	58.46	ug/L	97
59)	Chlorobenzene	9.10	112	1319456	50.47	ug/L	99
60)	4-Chlorobenzotrifluoride	9.21	180	802525	53.57	ug/L	99
61)	Ethylbenzene	9.32	106	700821	51.59	ug/L	91
62)	(m+p)Xylene	9.50	106	1672461	98.37	ug/L	93
63)	Bromoform	9.49	173	336879	55.19	ug/L	100
64)	Styrene	9.76	104	1452504	51.92	ug/L	98
65)	1,1,2,2-Tetrachloroethane	9.81	83	406477	50.76	ug/L	100
66)	o-Xylene	9.82	106	851401	51.79	ug/L	99
67)	Amyl Acetate	9.88	43	649062	56.95	ug/L	99
69)	1,3-Dclbenz	11.14	146	1206146	50.47	ug/L	99
70)	1,4-Dclbenz	11.20	146	1219924	51.25	ug/L	98
71)	1,2-Dclbenz	11.46	146	1100673	50.63	ug/L	97
72)	Naphthalen	13.08	128	1047415	53.13	ug/L	98

(#) = qualifier out of range (m) = manual integration
L7332.D 6240911.M Mon Sep 15 11:44:41 2014

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7332.D Vial: 4
Acq On : 12 Sep 2014 9:09 am Operator: D.Lipani
Sample : ICV#2 ACETONE/ACROLEIN Inst : MS#6
Misc : 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Sep 15 11:44 2014 Quant Results File: 6240911.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Mon Sep 15 11:07:33 2014
Response via : Initial Calibration



L7332.D 6240911.M Mon Sep 15 11:44:45 2014 Page 3

ALS Environmental

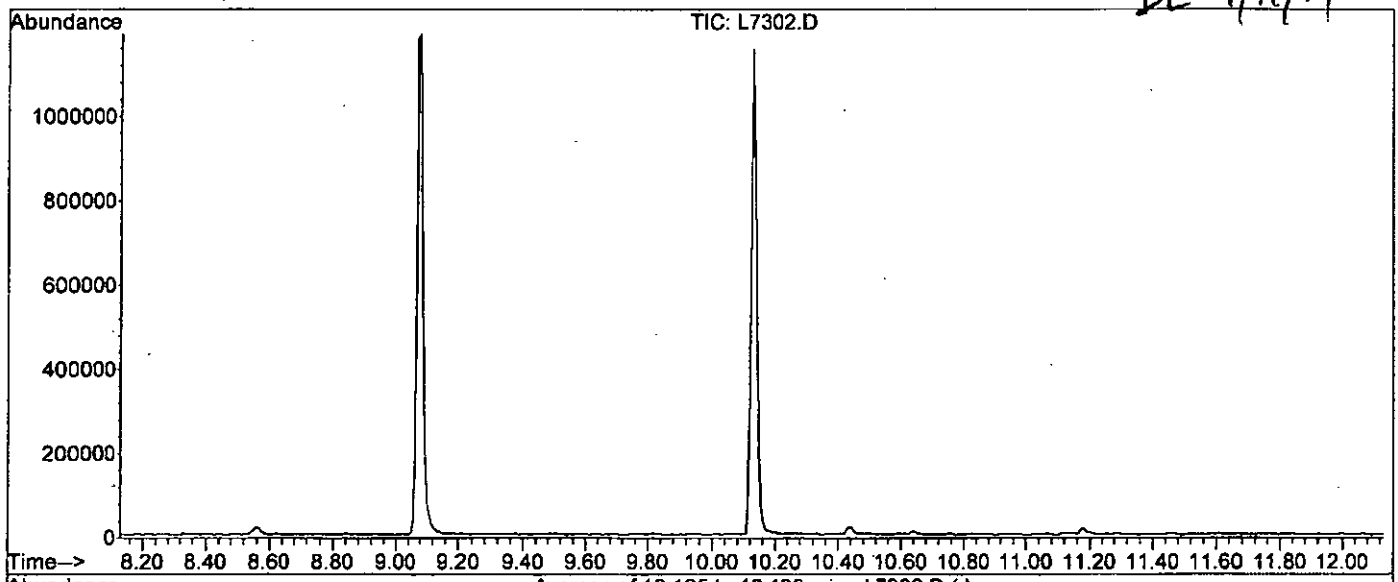
VOLATILE ORGANICS
RAW QC DATA

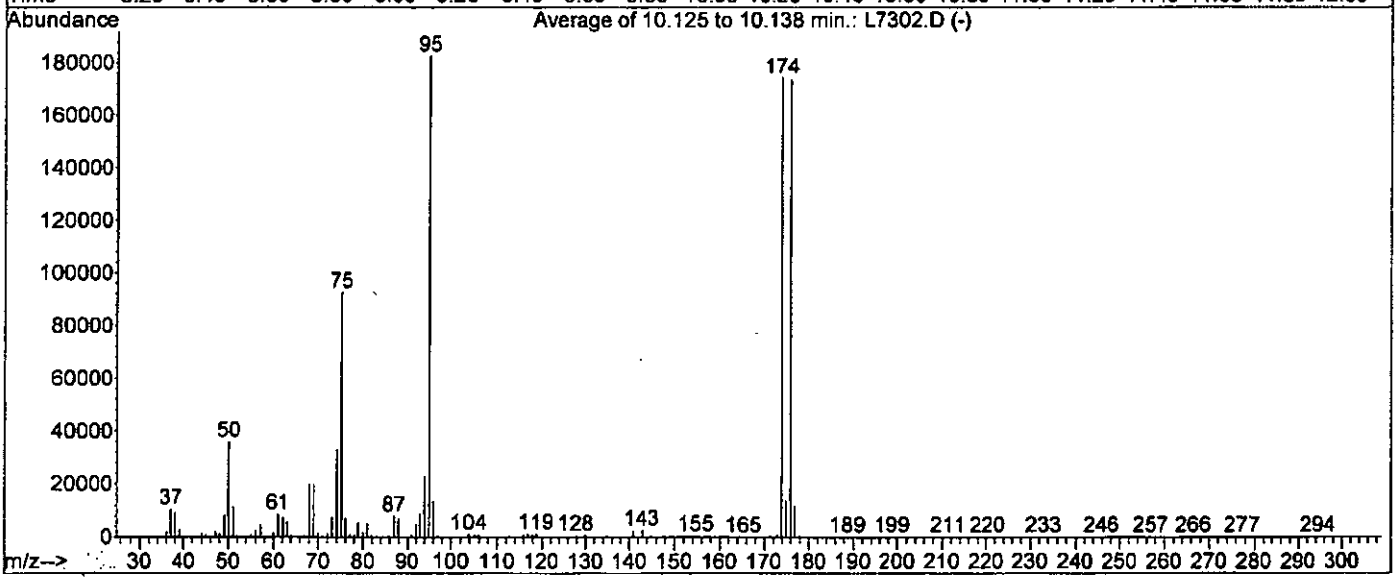
ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

BFB

Data File : I:\ACQUDATA\MSVOA6\DATA\091114\L7302.D Vial: 5
Acq On : 11 Sep 2014 10:16 am Operator: D.Lipani
Sample : TUNE CHECK Inst : MS#6
Misc : 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6

DL 9/11/14





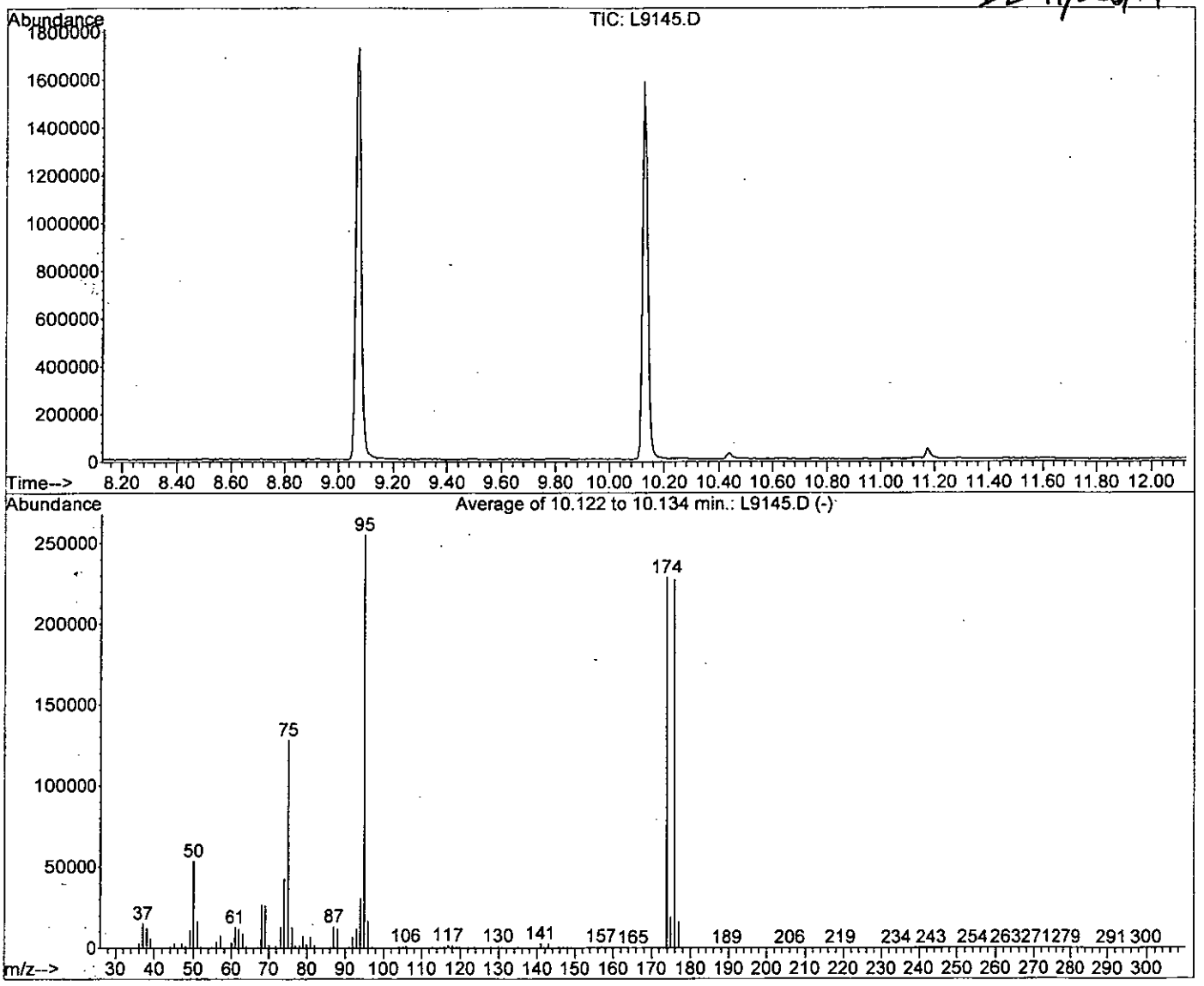
AutoFind: Scans 1508, 1509, 1510; Background Corrected with Scan 1503

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.7	35944	PASS
75	95	30	60	50.7	92597	PASS
95	95	100	100	100.0	182656	PASS
96	95	5	9	7.4	13465	PASS
173	174	0.00	2	0.6	1057	PASS
174	95	50	120	95.4	174183	PASS
175	174	5	9	8.0	13867	PASS
176	174	95	101	99.6	173483	PASS
177	176	5	9	6.7	11541	PASS

BFB

Data File : I:\ACQUDATA\MSVOA6\DATA\112614\L9145.D Vial: 4
Acq On : 26 Nov 2014 9:02 am Operator: D.Lipani
Sample : TUNE CHECK RQ1414901-01 Inst : MS#6
Misc : 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6

DL 11/26/14



AutoFind: Scans 1507, 1508, 1509; Background Corrected with Scan 1502

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.9	53444	PASS
75	95	30	60	50.1	127973	PASS
95	95	100	100	100.0	255240	PASS
96	95	5	9	6.4	16320	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	89.6	228751	PASS
175	174	5	9	8.3	18883	PASS
176	174	95	101	99.4	227435	PASS
177	176	5	9	7.0	15936	PASS

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrastructure (Formerly MACTEC)	**Service Request:**	R1409445
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	11/26/14 11:24
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1414901-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method:	624	**Analysis Lot:**	423263
Data File Name:	I:\ACQUDATA\MSVOA6\DATA\112614\L9149.D\	**Instrument Name:**	R-MS-06
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	1.0	U	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	
75-35-4	1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	
110-75-8	2-Chloroethyl Vinyl Ether	10	U	10	
107-02-8	Acrolein	10	U	10	
107-13-1	Acrylonitrile	10	U	10	
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
56-23-5	Carbon Tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
75-09-2	Methylene Chloride	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
127-18-4	Tetrachloroethene (PCE)	1.0	U	1.0	
108-88-3	Toluene	1.0	U	1.0	
79-01-6	Trichloroethene (TCE)	1.0	U	1.0	
75-69-4	Trichlorofluoromethane (CFC 11)	1.0	U	1.0	
75-01-4	Vinyl Chloride	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
179601-23-1	m,p-Xylenes	2.0	U	2.0	
95-47-6	o-Xylene	1.0	U	1.0	
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrastructure (Formerly MACTEC)	**Service Request:**	R1409445
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	11/26/14 11:24
		Units:	µg/L
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	RQ1414901-04		

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method:	624	**Analysis Lot:**	423263
Data File Name:	I:\ACQUDATA\MSVOA6\DATA\112614\L9149.D\	**Instrument Name:**	R-MS-06
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	92	81-127	11/26/14 11:24	
4-Bromofluorobenzene	100	79-123	11/26/14 11:24	
Toluene-d8	106	83-120	11/26/14 11:24	

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\112614\L9149.D Vial: 8
Acq On : 26 Nov 2014 11:24 am Operator: D.Lipani
Sample : MET BLK RQ1414901-04 Inst : MS#6
Misc : 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 1 11:27 2014 Quant Results File: 6240911.RES

Quant Method : I:\ACQUDATA\M...\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Tue Oct 14 13:19:09 2014
Response via : Initial Calibration
DataAcq Meth : 6240911

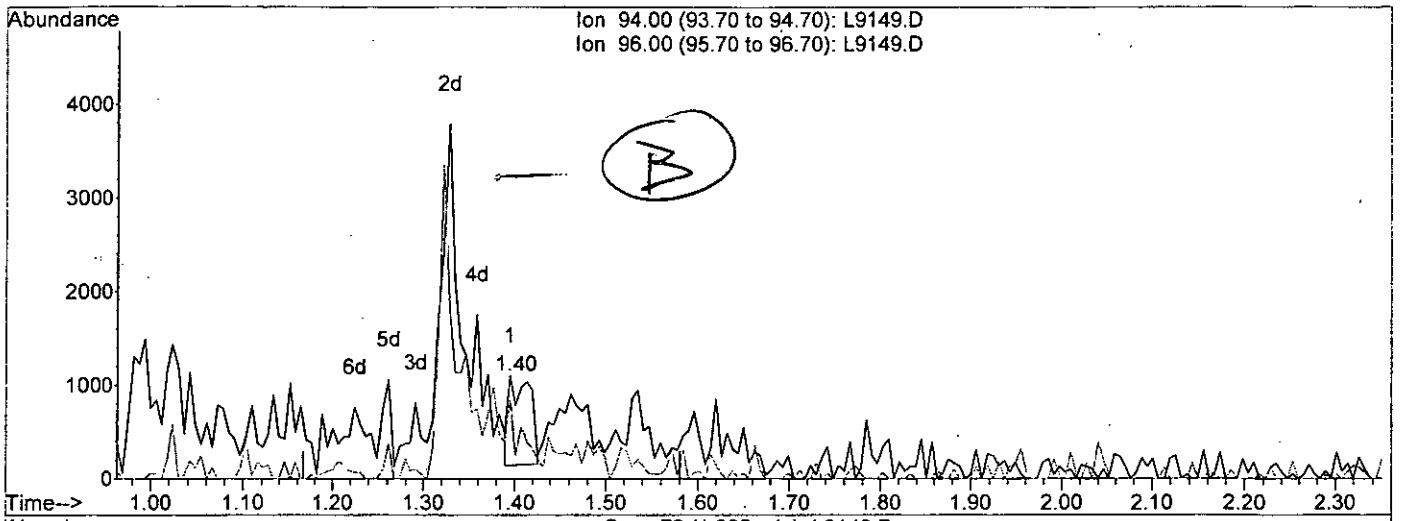
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	3.43	128	137057	30.00	ug/L	0.00
35) 1,4-Difluorobenzene	5.68	114	779660	30.00	ug/L	0.00
53) d5-Chlorobenzene	9.08	117	728084	30.00	ug/L	0.00
System Monitoring Compounds						
30) SURR1,1,2-Diclethane-d4	4.24	65	264652	27.57	ug/L	-0.01
Spiked Amount 30.000	Range 81 - 127		Recovery = 91.90%			
51) SURR3,Toluene-d8	7.76	98	957011	31.87	ug/L	0.00
Spiked Amount 30.000	Range 83 - 120		Recovery = 106.23%			
68) SURR2,BFB	10.13	95	364002	30.04	ug/L	0.00
Spiked Amount 30.000	Range 79 - 123		Recovery = 100.13%			
Target Compounds						Qvalue
5) Bromomethane	1.33	94	5023m	0.50	ug/L	
14) Acetone	1.74	43	4076	1.33	ug/L	85
39) Dibromomethane	6.00	93	1960	0.28	ug/L #	77
72) Naphthalen	13.09	128	3377m	0.13	ug/L	

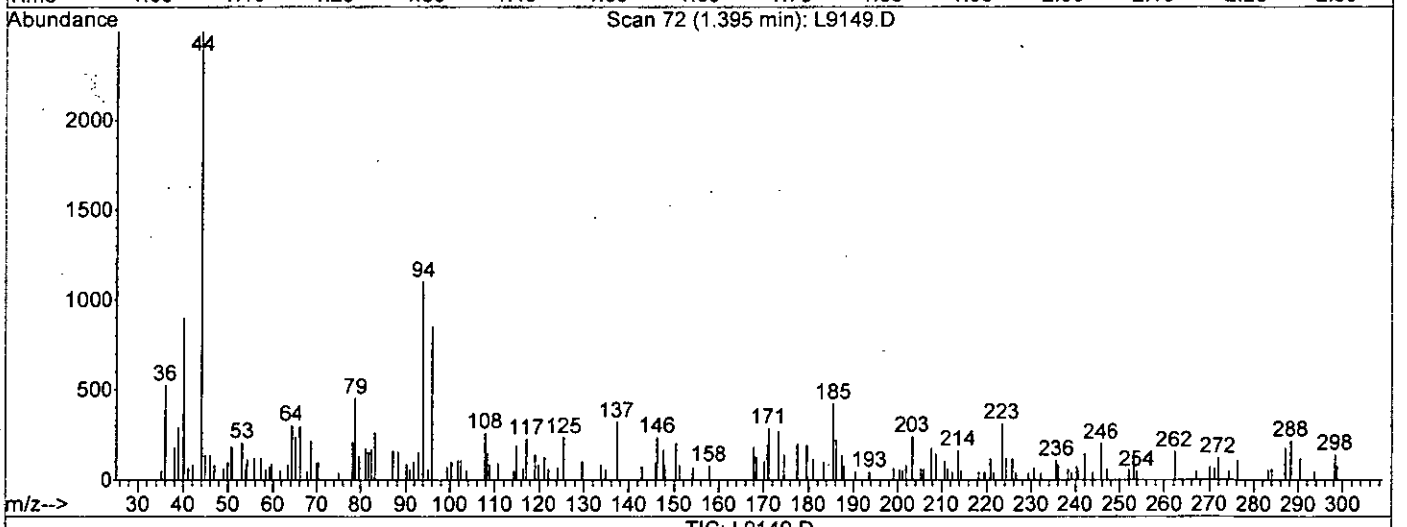
DL 12/1/14

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

Data File : I:\ACQUDATA\MSVOA6\DATA\112614\L9149.D Vial: 8
Acq On : 26 Nov 2014 11:24 am Operator: D.Lipani
Sample : MET BLK Inst : MS#6
Misc : 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 26 11:44 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Tue Oct 14 13:19:09 2014
Response via : Single Level Calibration





TIC: L9149.D

(5) Bromomethane

1.40min 0.15ug/L

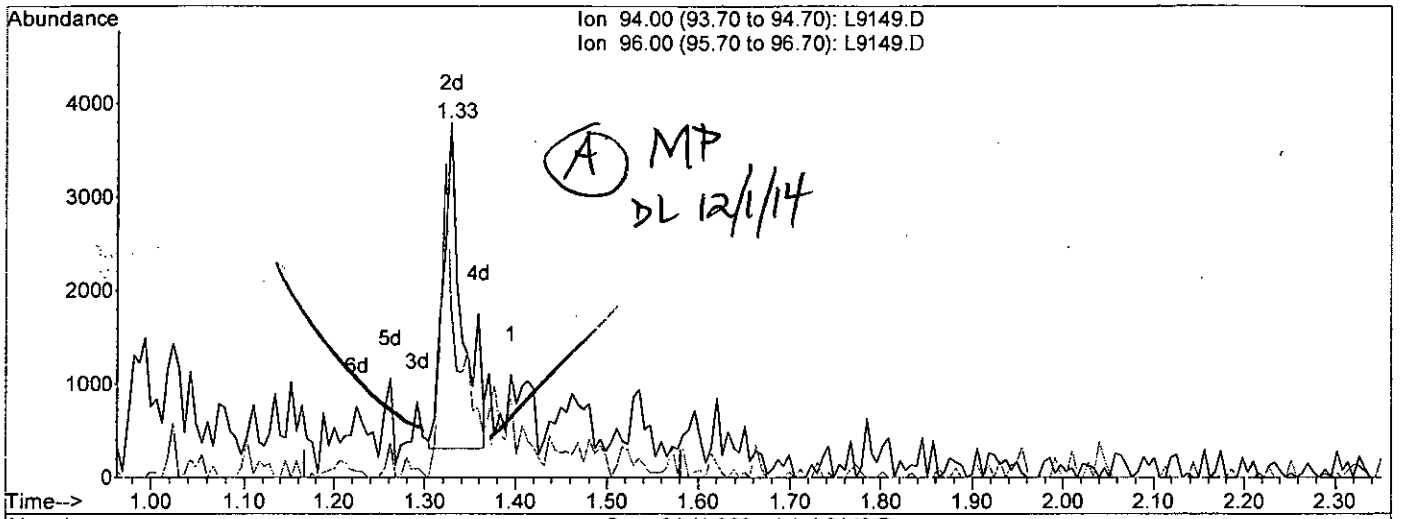
response 1528

Ion	Exp%	Act%
94.00	100	100
96.00	90.90	77.34
0.00	0.00	0.00
0.00	0.00	0.00

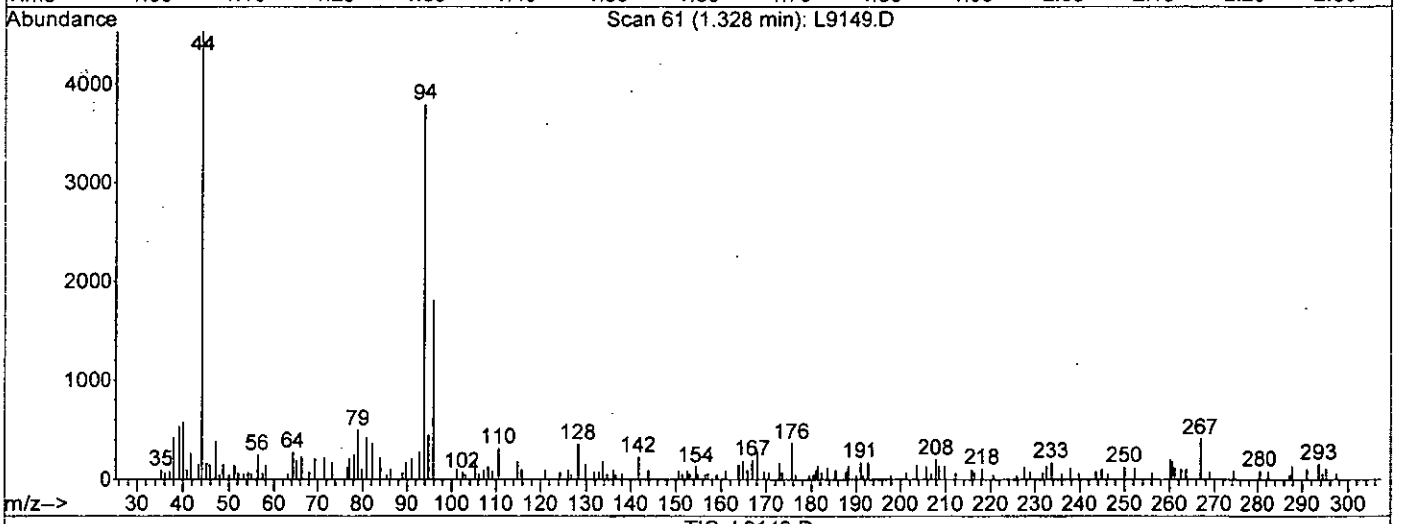
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\112614\L9149.D Vial: 8
Acq On : 26 Nov 2014 11:24 am Operator: D.Lipani
Sample : MET BLK Inst : MS#6
Misc : 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 1 11:25 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Tue Oct 14 13:19:09 2014
Response via : Single Level Calibration



A MP
DL 12/1/14



TIC: L9149.D

(5) Bromomethane

1.33min 0.50ug/L m

response 5023

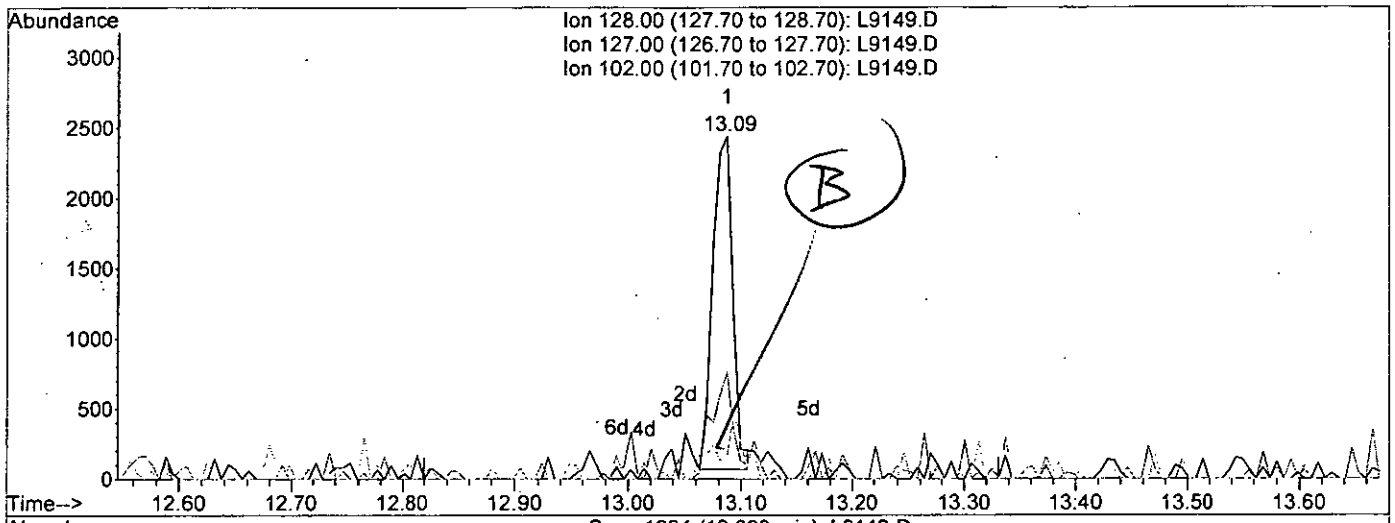
Ion	Exp%	Act%
94.00	100	100
96.00	90.90	47.69#
0.00	0.00	0.00
0.00	0.00	0.00

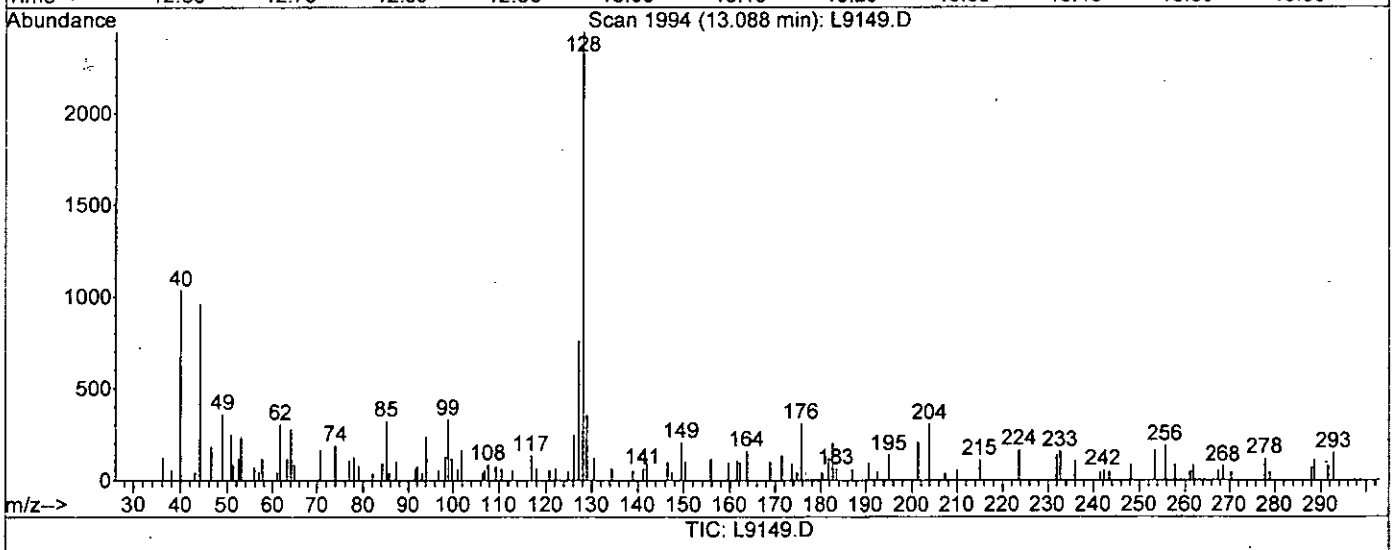
M. 12/1

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\112614\L9149.D Vial: 8
Acq On : 26 Nov 2014 11:24 am Operator: D.Lipani
Sample : MET BLK Inst : MS#6
Misc : 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 1 11:26 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Tue Oct 14 13:19:09 2014
Response via : Single Level Calibration





(72) Naphthalen

13.09min 0.12ug/L

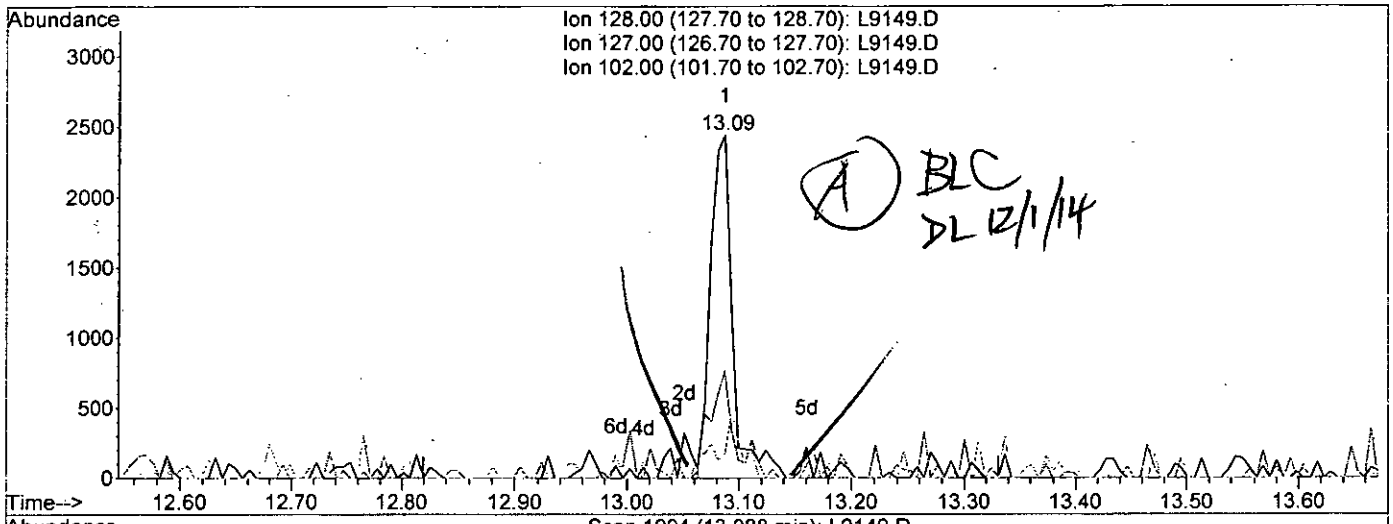
response 2940

Ion	Exp%	Act%
128.00	100	100
127.00	13.50	35.10#
102.00	8.80	14.86#
0.00	0.00	0.00

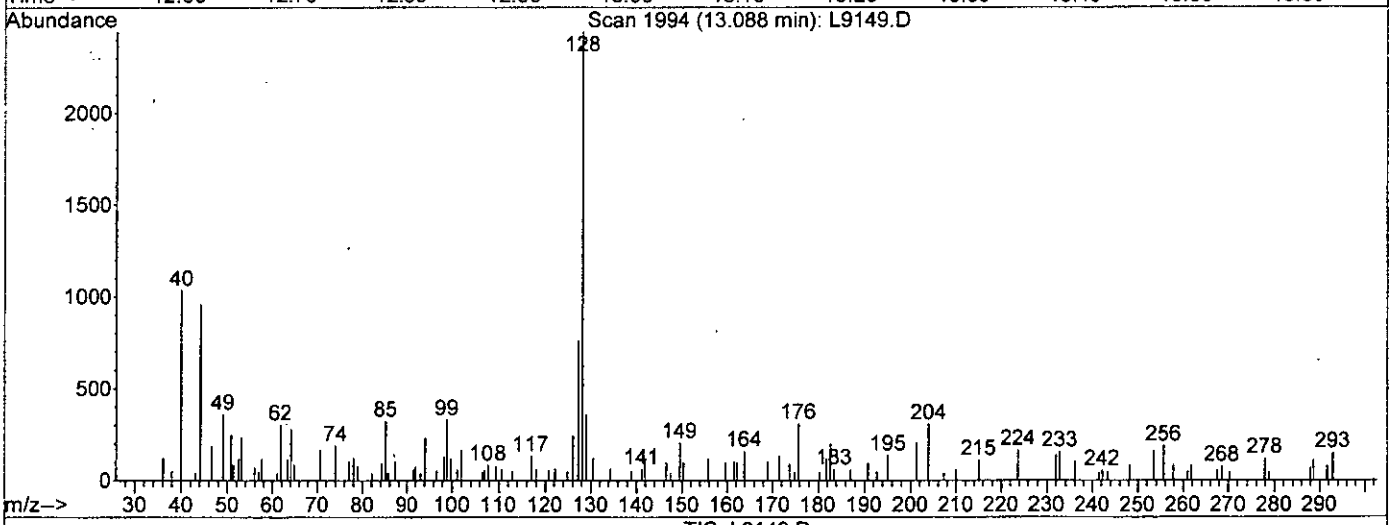
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\112614\L9149.D Vial: 8
Acq On : 26 Nov 2014 11:24 am Operator: D.Lipani
Sample : MET BLK Inst : MS#6
Misc : 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 1 11:27 2014 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Tue Oct 14 13:19:09 2014
Response via : Single Level Calibration



A BLC DL 12/1/14



TIC: L9149.D

(72) Naphthalen

13.09min 0.13ug/L m

response 3377

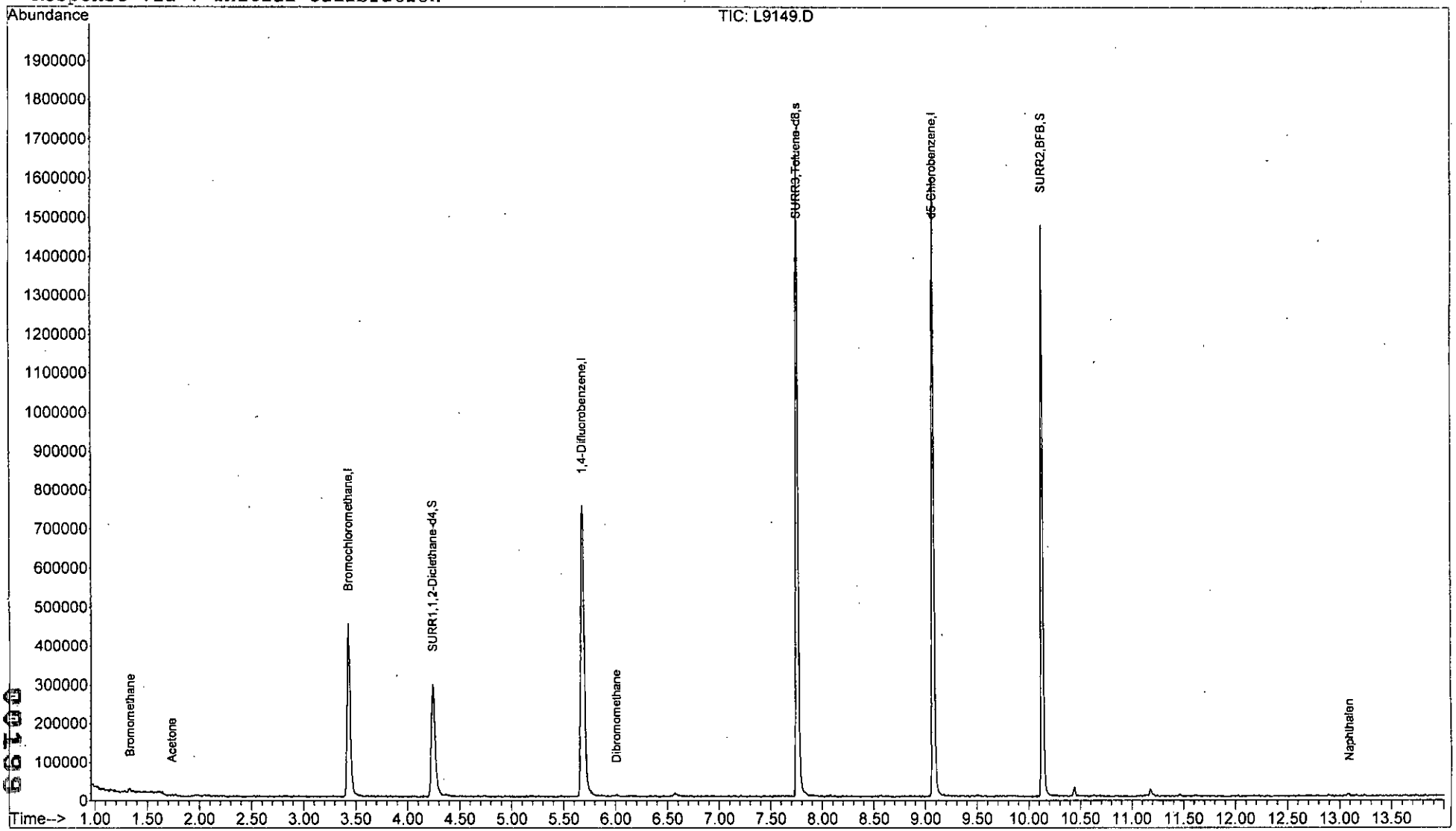
Ion	Exp%	Act%
128.00	100	100
127.00	13.50	30.56#
102.00	8.80	12.94#
0.00	0.00	0.00

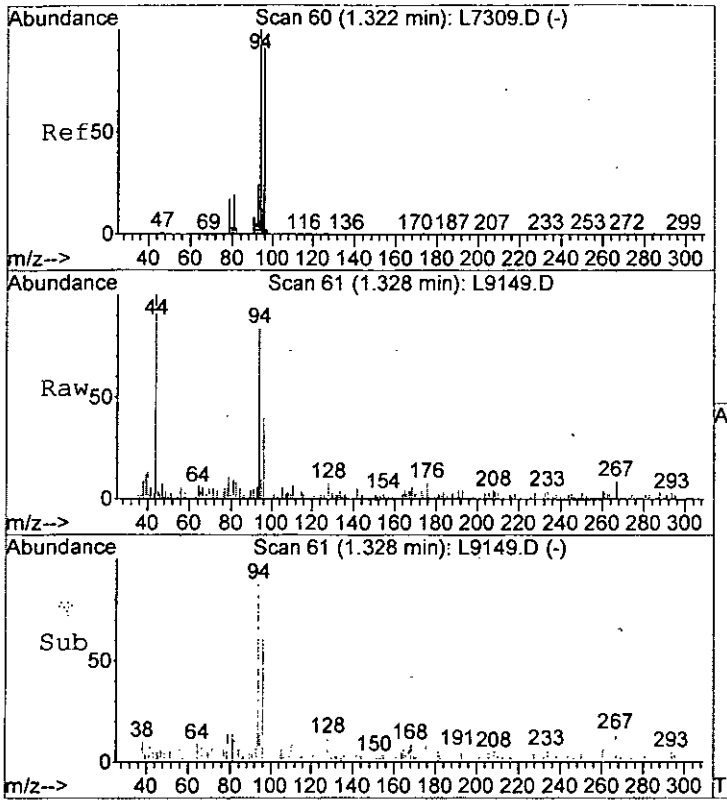
MW 12/2

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\112614\L9149.D Vial: 8
Acq On : 26 Nov 2014 11:24 am Operator: D.Lipani
Sample : MET BLK Inst : MS#6
Misc : 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 1 11:27 2014 Quant Results File: 6240911.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Tue Oct 14 13:19:09 2014
Response via : Initial Calibration

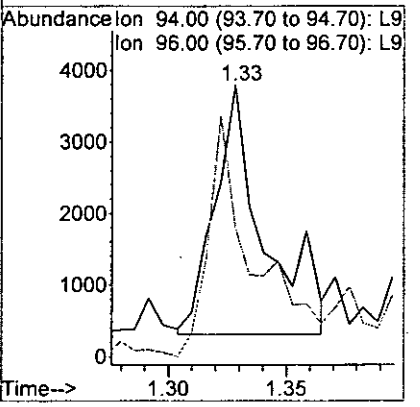


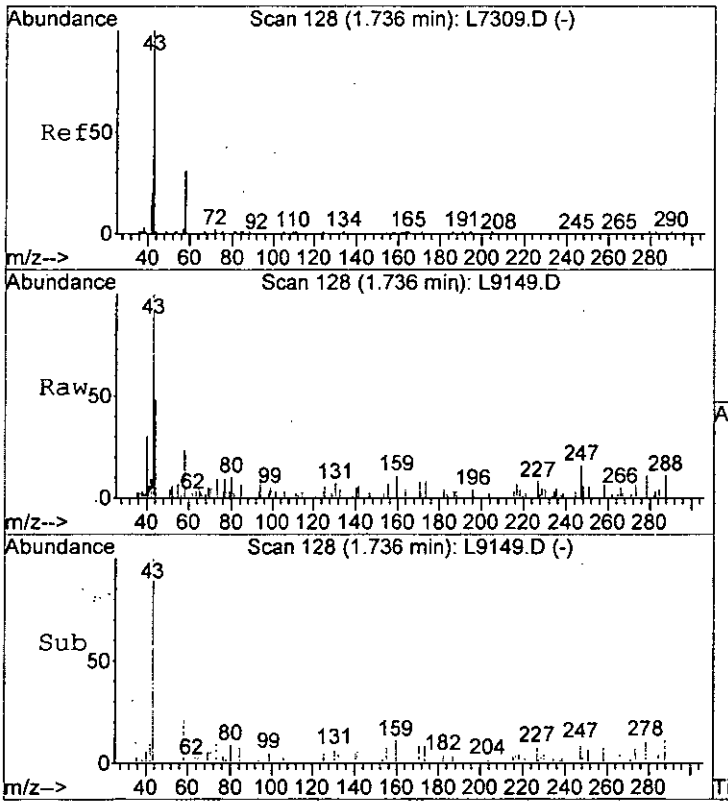


#5
Bromomethane
Concen: 0.50 ug/L m
RT: 1.33 min Scan# 61
Delta R.T. 0.01 min
Lab File: L9149.D
Acq: 26 Nov 2014 11:24 am

Tgt Ion: 94 Resp: 5023

Ion	Ratio	Lower	Upper
94	100		
96	47.7	70.9	110.9#

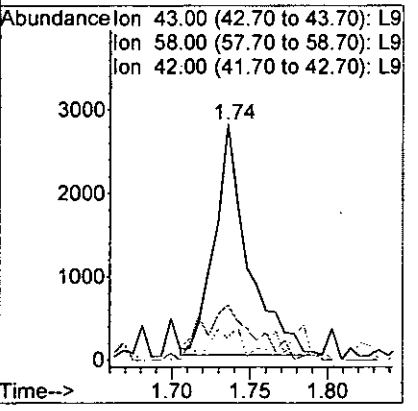


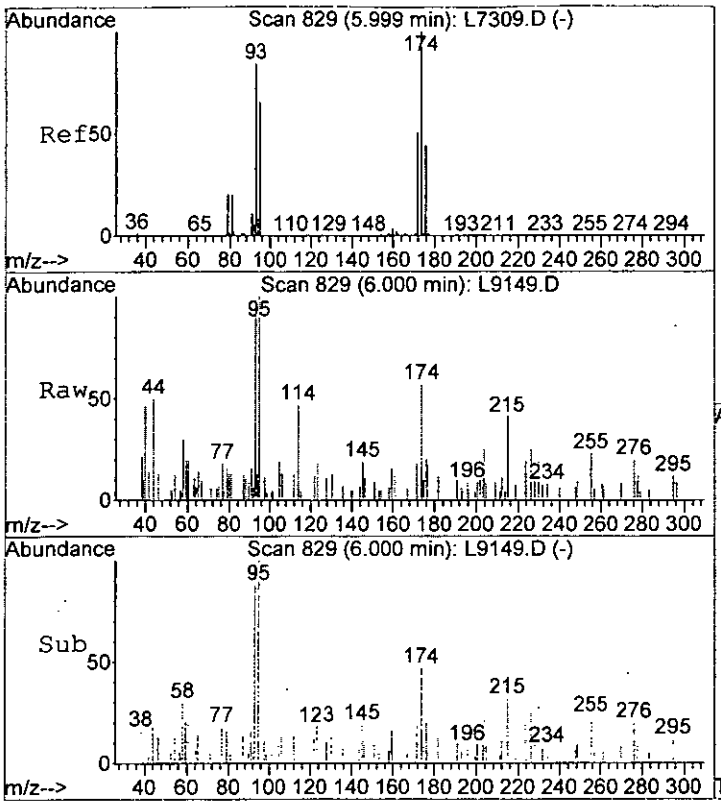


#14
Acetone
Concen: 1.33 ug/L
RT: 1.74 min Scan# 128
Delta R.T. 0.00 min
Lab File: L9149.D
Acq: 26 Nov 2014 11:24 am

Tgt Ion: 43 Resp: 4076

Ion	Ratio	Lower	Upper
43	100		
58	23.1	7.4	47.4
42	9.2	0.4	40.4

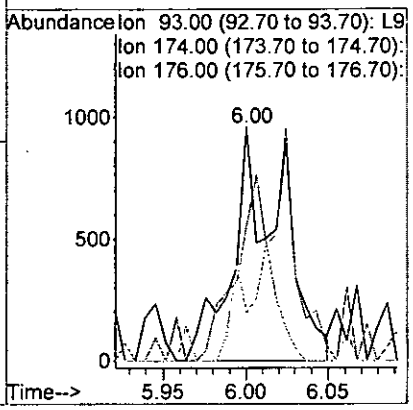


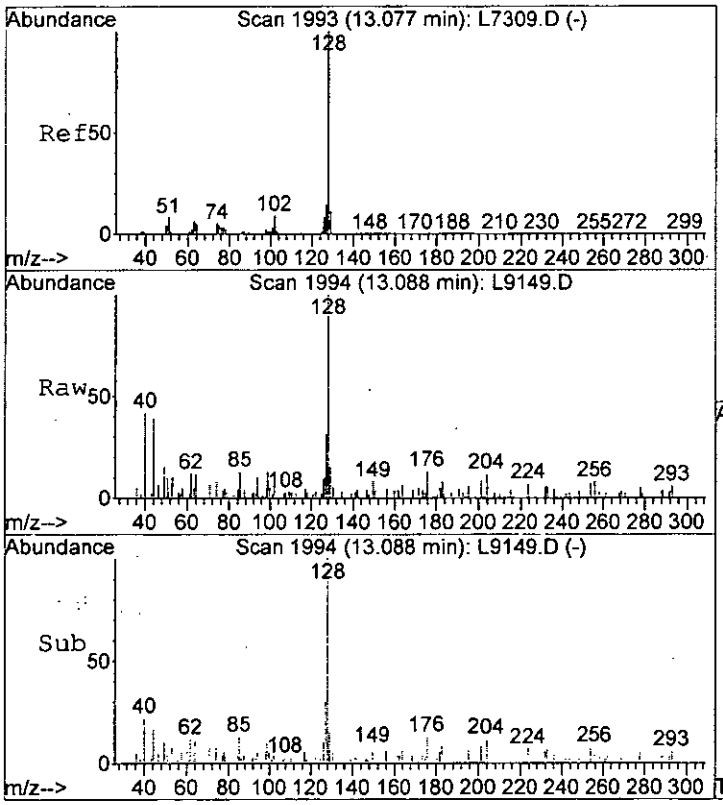


#39
Dibromomethane
Concen: 0.28 ug/L
RT: 6.00 min Scan# 829
Delta R.T. 0.00 min
Lab File: L9149.D
Acq: 26 Nov 2014 11:24 am

Tgt Ion: 93 Resp: 1960

Ion	Ratio	Lower	Upper
93	100		
174	91.5	89.4	134.0
176	34.5	45.7	68.5#

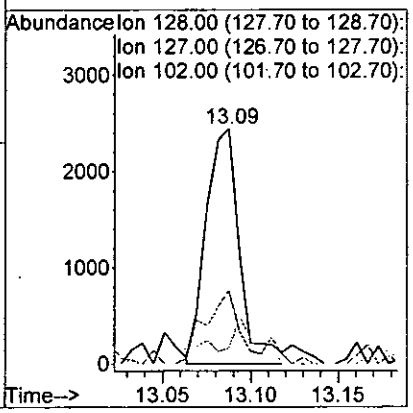




#72
Naphthalen
Concen: 0.13 ug/L m
RT: 13.09 min Scan# 1994
Delta R.T. 0.01 min
Lab File: L9149.D
Acq: 26 Nov 2014 11:24 am

Tgt Ion:128 Resp: 3377

Ion	Ratio	Lower	Upper
128	100		
127	30.6	10.8	16.2#
102	12.9	7.0	10.6#



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrastructure (Formerly MACTEC)	**Service Request:**	R1409445
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	11/26/14 09:52
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1414901-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method:	624	**Analysis Lot:**	423263
Data File Name:	I:\ACQUDATA\MSVOA6\DATA\112614\L9146.D\	**Instrument Name:**	R-MS-06
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	**18.2**		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	**22.9**		1.0	
79-00-5	1,1,2-Trichloroethane	**22.3**		1.0	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**19.6**		1.0	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**19.5**		1.0	
95-50-1	1,2-Dichlorobenzene	**19.5**		1.0	
107-06-2	1,2-Dichloroethane	**18.8**		1.0	
78-87-5	1,2-Dichloropropane	**21.7**		1.0	
541-73-1	1,3-Dichlorobenzene	**19.4**		1.0	
106-46-7	1,4-Dichlorobenzene	**19.2**		1.0	
110-75-8	2-Chloroethyl Vinyl Ether	**23.6**		10	
107-02-8	Acrolein	**68.3**		10	
107-13-1	Acrylonitrile	**126**		10	
71-43-2	Benzene	**21.8**		1.0	
75-27-4	Bromodichloromethane	**19.7**		1.0	
75-25-2	Bromoform	**20.7**		1.0	
74-83-9	Bromomethane	**14.2**		1.0	
56-23-5	Carbon Tetrachloride	**20.3**		1.0	
108-90-7	Chlorobenzene	**20.4**		1.0	
75-00-3	Chloroethane	**20.9**		1.0	
67-66-3	Chloroform	**19.1**		1.0	
74-87-3	Chloromethane	**21.1**		1.0	
124-48-1	Dibromochloromethane	**20.9**		1.0	
75-09-2	Methylene Chloride	**25.5**		1.0	
100-41-4	Ethylbenzene	**20.5**		1.0	
127-18-4	Tetrachloroethene (PCE)	**18.7**		1.0	
108-88-3	Toluene	**21.2**		1.0	
79-01-6	Trichloroethene (TCE)	**19.7**		1.0	
75-69-4	Trichlorofluoromethane (CFC 11)	**16.0**		1.0	
75-01-4	Vinyl Chloride	**24.7**		1.0	
10061-01-5	cis-1,3-Dichloropropene	**21.9**		1.0	
179601-23-1	m,p-Xylenes	**40.3**		2.0	
95-47-6	o-Xylene	**21.2**		1.0	
156-60-5	trans-1,2-Dichloroethene	**20.3**		1.0	
10061-02-6	trans-1,3-Dichloropropene	**21.4**		1.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrastructure (Formerly MACTEC)	**Service Request:**	R1409445
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	11/26/14 09:52
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1414901-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method:	624	**Analysis Lot:**	423263
Data File Name:	I:\ACQUDATA\MSVOA6\DATA\112614\L9146.D\	**Instrument Name:**	R-MS-06
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	93	81-127	11/26/14 09:52	
4-Bromofluorobenzene	99	79-123	11/26/14 09:52	
Toluene-d8	106	83-120	11/26/14 09:52	

Quantitation Report (Not Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\112614\L9146.D Vial: 5
Acq On : 26 Nov 2014 9:52 am Operator: D.Lipani
Sample : LCS RQ1414901-02, -03 Inst : MS#6
Misc : 624 Multiplr: 1.00
MS Integration Params: LSCINT.P (CCV)
Quant Time: Nov 26 10:11 2014 Quant Results File: 6240911.RES

Quant Method : I:\ACQUDATA\M...\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Tue Oct 14 13:19:09 2014
Response via : Initial Calibration
DataAcq Meth : 6240911

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	3.43	128	128864	30.00	ug/L	0.00
35) 1,4-Difluorobenzene	5.68	114	795785	30.00	ug/L	0.00
53) d5-Chlorobenzene	9.08	117	747282	30.00	ug/L	0.00
System Monitoring Compounds						
30) SURR1,1,2-Diclethane-d4	4.25	65	252985	28.03	ug/L	0.00
Spiked Amount 30.000	Range 81 - 127		Recovery = 93.43%			
51) SURR3,Toluene-d8	7.76	98	971342	31.69	ug/L	0.00
Spiked Amount 30.000	Range 83 - 120		Recovery = 105.63%			
68) SURR2,BFB	10.13	95	368882	29.66	ug/L	0.00
Spiked Amount 30.000	Range 79 - 123		Recovery = 98.87%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.00	85	300196	21.27	ug/L	99
3) Chloromethane	1.08	50	285989	21.14	ug/L	95
4) Vinyl Chloride	1.15	62	333676	24.70	ug/L	98
5) Bromomethane	1.32	94	135514	14.24	ug/L	95
6) Chloroethane	1.38	64	174729	20.92	ug/L	100
7) Freon-21	1.41	67	500504	20.82	ug/L	100
8) Freon-123	1.57	83	358927	19.55	ug/L	98
9) Freon-123A	1.60	67	307252	19.20	ug/L	98
10) Acrolein	1.66	56	89861	68.29	ug/L	93
11) Trichlorofluoromethane	1.65	101	375153	15.98	ug/L	98
12) Acetonitrile	1.67	41	105872	100.15	ug/L	96
13) 2-Propanol	1.70	45	172649	500.53	ug/L	94
14) Acetone	1.73	43	52709	18.32	ug/L	82
15) 1,1-Diclethene	1.95	96	218169	19.50	ug/L	93
16) tert Butyl Alcohol	1.98	59	266368	496.26	ug/L	99
17) Acrylonitrile	2.00	53	295202	125.72	ug/L	97
18) Methylene Chloride	2.04	84	261574	25.46	ug/L	97
19) Freon 113	2.09	101	247001	19.97	ug/L	97
20) Carbon Disulfide	2.15	76	789901	21.06	ug/L	100
21) trans-1,2-Dichloroethene	2.51	96	242344	20.34	ug/L	96
22) Methyl-t-Butyl Ether	2.63	73	508136	19.41	ug/L	97
23) 1,1-Diclethane	2.72	63	427215	19.64	ug/L	99
24) 2-Butanone	3.18	43	60955	23.52	ug/L #	90
25) cis-1,2-Dichloroethene	3.27	96	271477	21.53	ug/L	94
26) Chloroform	3.50	83	423183	19.05	ug/L #	94
27) Ethyl Acetate	3.61	43	141410	25.06	ug/L #	95
28) Isobutanol	3.74	43	113940	534.47	ug/L #	89
29) Tetrahydrofuran	3.92	42	47863	24.49	ug/L #	77
31) 1,2-Dichloroethane	4.36	62	268826	18.75	ug/L	98
32) 1,1,1-Trichloroethane	4.48	97	370570	18.16	ug/L	97
33) 2-Methyl-1,3-Dioxolane	4.58	73	94258	120.74	ug/L #	90
34) Cyclohexane	4.88	56	385451	21.58	ug/L	99
36) Carbontetrachloride	5.05	117	349861	20.34	ug/L	98
37) Isopropyl Acetate	5.18	43	322034	22.96	ug/L	99
38) Benzene	5.16	78	967008	21.81	ug/L	98
39) Dibromomethane	5.99	93	139393	19.70	ug/L	92
40) 1,2-Diclpropane	6.06	63	263617	21.74	ug/L	92
41) Trichloroethene	6.14	130	269581	19.69	ug/L	99

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

DL 11/26/14

Quantitation Report (Not Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\112614\L9146.D Vial: 5
Acq On : 26 Nov 2014 9:52 am Operator: D.Lipani
Sample : LCS Inst : MS#6
Misc : 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 26 10:11 2014 Quant Results File: 6240911.RES

Quant Method : I:\ACQUDATA\M...\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Tue Oct 14 13:19:09 2014
Response via : Initial Calibration
DataAcq Meth : 6240911

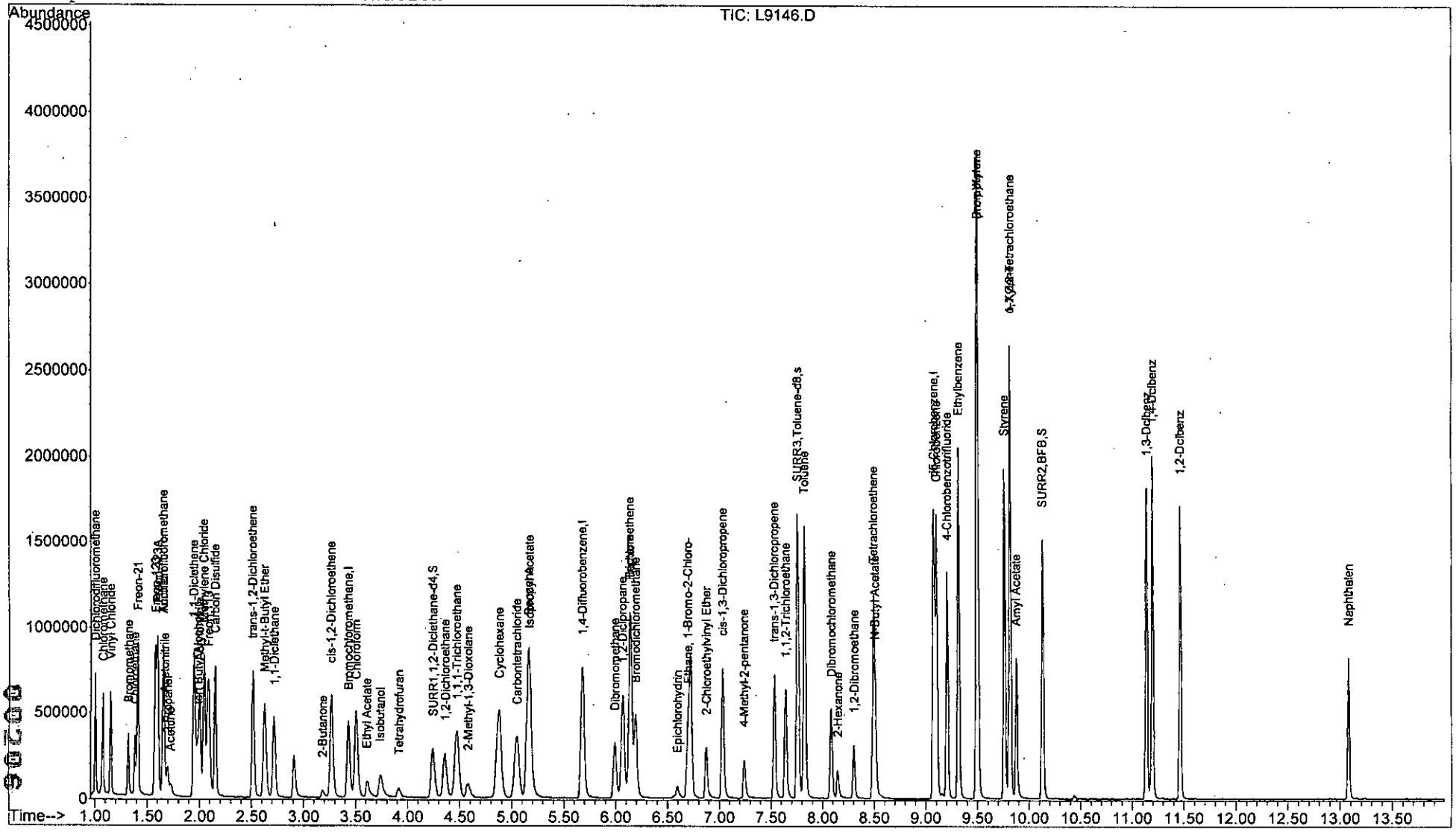
	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
42)	Heptane	6.14	43	227134	20.17 ug/L		97
43)	Bromodichloromethane	6.19	83	339065	19.74 ug/L		98
44)	Epichlorohydrin	6.59	57	61118	106.60 ug/L		94
45)	Ethane, 1-Bromo-2-Chloro-	6.69	63	307657	22.17 ug/L	#	93
46)	2-Chloroethylvinyl Ether	6.87	63	126170	23.61 ug/L		96
47)	cis-1,3-Dichloropropene	7.03	75	391156	21.90 ug/L		98
48)	4-Methyl-2-pentanone	7.24	43	159278	24.17 ug/L		99
49)	trans-1,3-Dichloropropene	7.53	75	332723	21.40 ug/L		98
50)	1,1,2-Trichloroethane	7.64	97	186458	22.28 ug/L		96
52)	Toluene	7.82	91	1022584	21.20 ug/L		98
54)	Dibromochloromethane	8.08	129	256794	20.90 ug/L		99
55)	2-Hexanone	8.14	43	112859	23.79 ug/L		97
56)	1,2-Dibromoethane	8.30	107	177938	18.86 ug/L		99
57)	Tetrachloroethene	8.49	164	226647	18.72 ug/L		99
58)	N-Butyl Acetate	8.51	43	290823	25.76 ug/L		97
59)	Chlorobenzene	9.10	112	696434	20.38 ug/L		98
60)	4-Chlorobenzotrifluoride	9.20	180	347674	17.75 ug/L		97
61)	Ethylbenzene	9.31	106	363462	20.47 ug/L		96
62)	(m+p)Xylene	9.50	106	895118	40.27 ug/L		97
63)	Bromoform	9.50	173	165404	20.73 ug/L		96
64)	Styrene	9.76	104	716214	19.58 ug/L		98
65)	1,1,2,2-Tetrachloroethane	9.81	83	239662	22.89 ug/L		96
66)	o-Xylene	9.81	106	455755	21.21 ug/L		99
67)	Amyl Acetate	9.87	43	390518	26.21 ug/L		97
69)	1,3-Dclbenz	11.14	146	604816	19.36 ug/L		100
70)	1,4-Dclbenz	11.19	146	597743	19.21 ug/L		99
71)	1,2-Dclbenz	11.46	146	554668	19.52 ug/L		95
72)	Naphthalen	13.08	128	484869	18.82 ug/L		98

(#) = qualifier out of range (m) = manual integration
L9146.D 6240911.M Wed Nov 26 10:10:51 2014

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\112614\L9146.D Vial: 5
Acq On : 26 Nov 2014 9:52 am Operator: D.Lipani
Sample : LCS Inst : MS#6
Misc : 624 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 26 10:11 2014 Quant Results File: 6240911.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Tue Oct 14 13:19:09 2014
Response via : Initial Calibration



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrastructure (Formerly MACTEC)	**Service Request:**	R1409445
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	11/21/14 1300
Sample Matrix:	Water	**Date Received:**	11/22/14
		Date Analyzed:	11/26/14 22:04
Sample Name:	633027 EFFLUENT	**Units:**	µg/L
Lab Code:	RQ1414901-05	**Basis:**	NA
Run Type:	Matrix Spike		

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method:	624	**Analysis Lot:**	423263
Data File Name:	I:\ACQUDATA\MSVOA6\DATA\112614\L9170.D\	**Instrument Name:**	R-MS-06
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	**24.9**		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	**25.6**		1.0	
79-00-5	1,1,2-Trichloroethane	**24.6**		1.0	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**21.7**		1.0	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**21.2**		1.0	
95-50-1	1,2-Dichlorobenzene	**21.2**		1.0	
107-06-2	1,2-Dichloroethane	**20.2**		1.0	
78-87-5	1,2-Dichloropropane	**24.8**		1.0	
541-73-1	1,3-Dichlorobenzene	**21.2**		1.0	
106-46-7	1,4-Dichlorobenzene	**21.3**		1.0	
110-75-8	2-Chloroethyl Vinyl Ether	**25.8**		10	
107-02-8	Acrolein	**61.9**		10	
107-13-1	Acrylonitrile	**120**		10	
71-43-2	Benzene	**24.6**		1.0	
75-27-4	Bromodichloromethane	**22.4**		1.0	
75-25-2	Bromoform	**22.6**		1.0	
74-83-9	Bromomethane	**13.5**		1.0	
56-23-5	Carbon Tetrachloride	**22.9**		1.0	
108-90-7	Chlorobenzene	**22.6**		1.0	
75-00-3	Chloroethane	**21.5**		1.0	
67-66-3	Chloroform	**21.3**		1.0	
74-87-3	Chloromethane	**21.8**		1.0	
124-48-1	Dibromochloromethane	**22.5**		1.0	
75-09-2	Methylene Chloride	**27.2**		1.0	
100-41-4	Ethylbenzene	**22.9**		1.0	
127-18-4	Tetrachloroethene (PCE)	**20.4**		1.0	
108-88-3	Toluene	**24.2**		1.0	
79-01-6	Trichloroethene (TCE)	**32.6**		1.0	
75-69-4	Trichlorofluoromethane (CFC 11)	**17.8**		1.0	
75-01-4	Vinyl Chloride	**26.5**		1.0	
10061-01-5	cis-1,3-Dichloropropene	**23.9**		1.0	
179601-23-1	m,p-Xylenes	**45.2**		2.0	
95-47-6	o-Xylene	**23.4**		1.0	
156-60-5	trans-1,2-Dichloroethene	**21.9**		1.0	
10061-02-6	trans-1,3-Dichloropropene	**24.0**		1.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrastructure (Formerly MACTEC)	**Service Request:**	R1409445
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	11/21/14 1300
Sample Matrix:	Water	**Date Received:**	11/22/14
		Date Analyzed:	11/26/14 22:04
Sample Name:	633027 EFFLUENT	**Units:**	µg/L
Lab Code:	RQ1414901-05	**Basis:**	NA
Run Type:	Matrix Spike		

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method:	624	**Analysis Lot:**	423263
Data File Name:	I:\ACQUDATA\MSVOA6\DATA\112614\L9170.D\	**Instrument Name:**	R-MS-06
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	92	81-127	11/26/14 22:04	
4-Bromofluorobenzene	101	79-123	11/26/14 22:04	
Toluene-d8	110	83-120	11/26/14 22:04	

Quantitation Report (Not Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\112614\L9170.D Vial: 29
Acq On : 26 Nov 2014 10:04 pm Operator: D.Lipani
Sample : R1409445-001MS|1.0 RQ1414901-05 Inst : MS#6
Misc : AMEC 624 12456 T4 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 26 22:23 2014 Quant Results File: 6240911.RES

Quant Method : I:\ACQUDATA\M...\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Tue Oct 14 13:19:09 2014
Response via : Initial Calibration
DataAcq Meth : 6240911

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	3.44	128	116105	30.00	ug/L	0.00
35) 1,4-Difluorobenzene	5.68	114	678739	30.00	ug/L	0.00
53) d5-Chlorobenzene	9.07	117	658275	30.00	ug/L	0.00
System Monitoring Compounds						
30) SURR1,1,2-Diclethane-d4	4.25	65	223371	27.47	ug/L	0.00
Spiked Amount 30.000	Range 81 - 127		Recovery = 91.57%			
51) SURR3,Toluene-d8	7.76	98	861255	32.95	ug/L	0.00
Spiked Amount 30.000	Range 83 - 120		Recovery = 109.83%			
68) SURR2,BFB	10.13	95	331284	30.24	ug/L	0.00
Spiked Amount 30.000	Range 79 - 123		Recovery = 100.80%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.01	85	282741	22.24	ug/L	95
3) Chloromethane	1.08	50	266163	21.83	ug/L	94
4) Vinyl Chloride	1.15	62	322412	26.49	ug/L	100
5) Bromomethane	1.32	94	115567	13.48	ug/L	94
6) Chloroethane	1.38	64	161506	21.47	ug/L	93
7) Freon-21	1.41	67	510537	23.57	ug/L	99
8) Freon-123	1.58	83	363137	21.96	ug/L	100
9) Freon-123A	1.60	67	298493	20.71	ug/L	94
10) Acrolein	1.66	56	73352	61.87	ug/L	91
11) Trichlorofluoromethane	1.66	101	375979	17.78	ug/L	96
12) Acetonitrile	1.67	41	97959	102.85	ug/L	92
13) 2-Propanol	1.69	45	143167	460.67	ug/L	99
14) Acetone	1.73	43	41298	15.93	ug/L	81
15) 1,1-Diclethene	1.95	96	213762	21.21	ug/L	92
16) tert Butyl Alcohol	1.98	59	228920	473.36	ug/L	96
17) Acrylonitrile	2.00	53	253569	119.86	ug/L	100
18) Methylene Chloride	2.05	84	251954	27.22	ug/L	97
19) Freon 113	2.09	101	236272	21.20	ug/L	97
20) Carbon Disulfide	2.16	76	781630	23.13	ug/L	100
21) trans-1,2-Dichloroethene	2.51	96	234528	21.85	ug/L	96
22) Methyl-t-Butyl Ether	2.62	73	485397	20.58	ug/L	96
23) 1,1-Diclethane	2.71	63	424741	21.67	ug/L	98
24) 2-Butanone	3.18	43	54349	23.28	ug/L #	92
25) cis-1,2-Dichloroethene	3.27	96	274971	24.20	ug/L	91
26) Chloroform	3.51	83	426214	21.30	ug/L	92
27) Ethyl Acetate	3.62	43	119593	23.52	ug/L #	96
28) Isobutanol	3.74	43	99983	520.54	ug/L #	83
29) Tetrahydrofuran	3.92	42	40407	22.95	ug/L	88
31) 1,2-Dichloroethane	4.36	62	261148	20.22	ug/L #	98
32) 1,1,1-Trichloroethane	4.48	97	457049	24.86	ug/L	95
33) 2-Methyl-1,3-Dioxolane	4.58	73	86911	123.56	ug/L #	89
34) Cyclohexane	4.88	56	396499	24.64	ug/L	100
36) Carbontetrachloride	5.06	117	335328	22.85	ug/L	96
37) Isopropyl Acetate	5.18	43	285141	23.83	ug/L	97
38) Benzene	5.17	78	928746	24.56	ug/L	99
39) Dibromomethane	5.99	93	132144	21.90	ug/L	92
40) 1,2-Diclpropane	6.07	63	256214	24.77	ug/L	93
41) Trichloroethene	6.14	130	380327	32.56	ug/L	97

(#) = qualifier out of range (m) = manual integration
L9170.D 6240911.M Wed Nov 26 22:22:51 2014

Quantitation Report (Not Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\112614\L9170.D Vial: 29
Acq On : 26 Nov 2014 10:04 pm Operator: D.Lipani
Sample : R1409445-001MS|1.0 Inst : MS#6
Misc : AMEC 624 12456 T4 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 26 22:23 2014 Quant Results File: 6240911.RES

Quant Method : I:\ACQUDATA\M...\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Tue Oct 14 13:19:09 2014
Response via : Initial Calibration
DataAcq Meth : 6240911

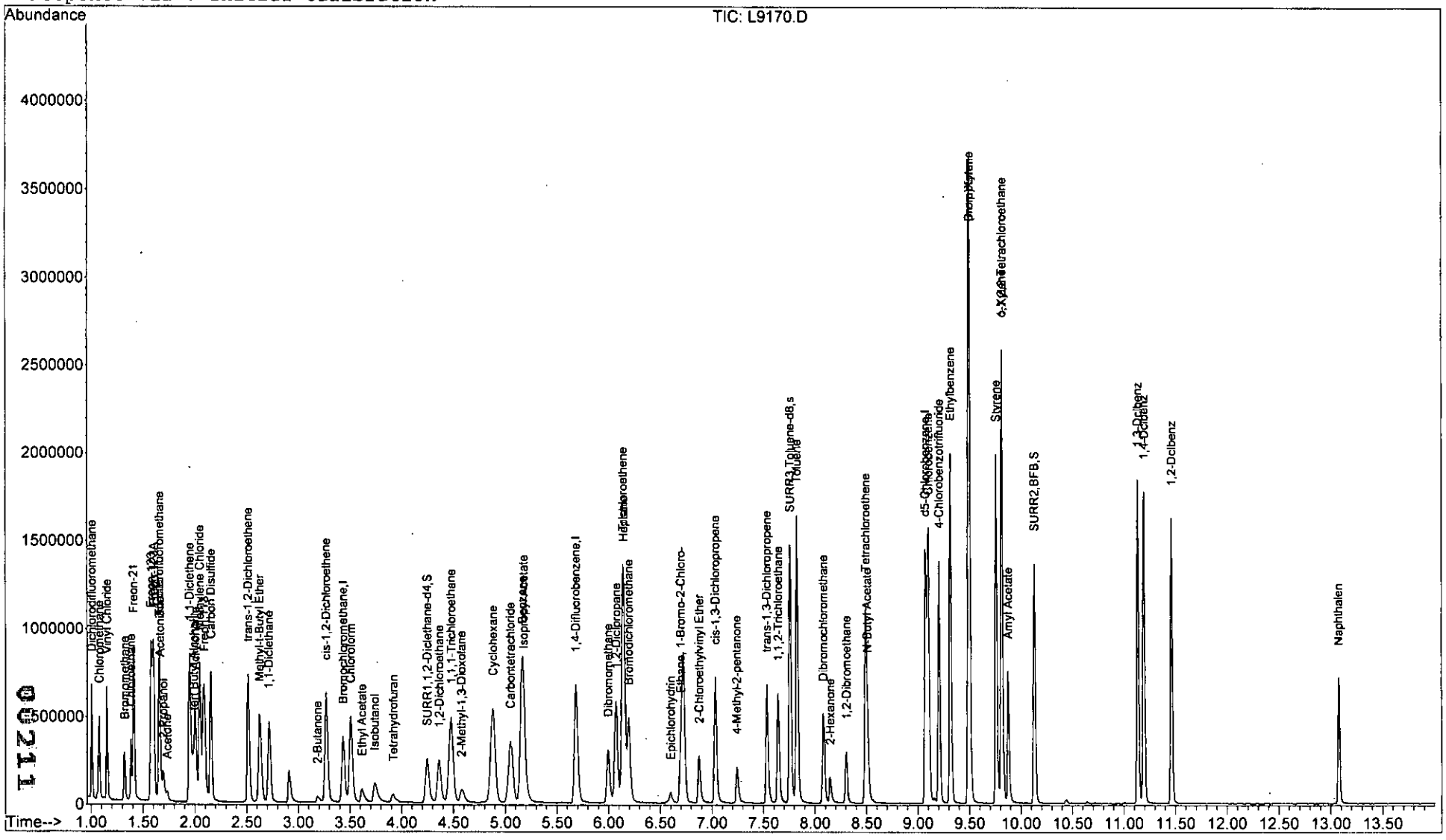
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
42)	Heptane	6.15	43	206589	21.51	ug/L	#	96
43)	Bromodichloromethane	6.19	83	327427	22.35	ug/L		99
44)	Epichlorohydrin	6.60	57	54559	111.57	ug/L	#	92
45)	Ethane, 1-Bromo-2-Chloro-	6.69	63	279022	23.57	ug/L		92
46)	2-Chloroethylvinyl Ether	6.88	63	117670	25.82	ug/L		94
47)	cis-1,3-Dichloropropene	7.03	75	364261	23.91	ug/L		98
48)	4-Methyl-2-pentanone	7.24	43	154093	27.41	ug/L		98
49)	trans-1,3-Dichloropropene	7.53	75	318339	24.01	ug/L		98
50)	1,1,2-Trichloroethane	7.64	97	175699	24.62	ug/L		97
52)	Toluene	7.82	91	996807	24.22	ug/L		99
54)	Dibromochloromethane	8.08	129	243554	22.50	ug/L		99
55)	2-Hexanone	8.14	43	102683	24.57	ug/L		93
56)	1,2-Dibromoethane	8.31	107	170694	20.54	ug/L		94
57)	Tetrachloroethene	8.49	164	217773	20.42	ug/L		98
58)	N-Butyl Acetate	8.51	43	247121	24.85	ug/L		96
59)	Chlorobenzene	9.10	112	680048	22.59	ug/L		97
60)	4-Chlorobenzotrifluoride	9.21	180	350413	20.31	ug/L		97
61)	Ethylbenzene	9.32	106	358675	22.93	ug/L		96
62)	(m+p)Xylene	9.50	106	884287	45.17	ug/L		96
63)	Bromoform	9.50	173	159077	22.63	ug/L		96
64)	Styrene	9.76	104	737151	22.88	ug/L		99
65)	1,1,2,2-Tetrachloroethane	9.81	83	235756	25.57	ug/L		96
66)	o-Xylene	9.81	106	442071	23.35	ug/L		100
67)	Amyl Acetate	9.88	43	335222	25.55	ug/L		99
69)	1,3-Dclbenz	11.13	146	583184	21.19	ug/L		99
70)	1,4-Dclbenz	11.20	146	584997	21.34	ug/L		100
71)	1,2-Dclbenz	11.46	146	530031	21.17	ug/L		99
72)	Naphthalen	13.07	128	448895	19.78	ug/L		99

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

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\112614\L9170.D Vial: 29
Acq On : 26 Nov 2014 10:04 pm Operator: D.Lipani
Sample : R1409445-001MS|1.0 Inst : MS#6
Misc : AMEC 624 12456 T4 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 26 22:23 2014 Quant Results File: 6240911.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Tue Oct 14 13:19:09 2014
Response via : Initial Calibration



ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrastructure (Formerly MACTEC)	**Service Request:**	R1409445
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	11/21/14 1300
Sample Matrix:	Water	**Date Received:**	11/22/14
		Date Analyzed:	11/26/14 22:34
Sample Name:	633027 EFFLUENT	**Units:**	µg/L
Lab Code:	RQ1414901-06	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method:	624	**Analysis Lot:**	423263
Data File Name:	I:\ACQUDATA\MSVOA6\DATA\112614\L9171.D\	**Instrument Name:**	R-MS-06
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	**23.3**		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	**23.9**		1.0	
79-00-5	1,1,2-Trichloroethane	**23.2**		1.0	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**20.4**		1.0	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**20.3**		1.0	
95-50-1	1,2-Dichlorobenzene	**20.3**		1.0	
107-06-2	1,2-Dichloroethane	**18.9**		1.0	
78-87-5	1,2-Dichloropropane	**22.8**		1.0	
541-73-1	1,3-Dichlorobenzene	**20.3**		1.0	
106-46-7	1,4-Dichlorobenzene	**20.4**		1.0	
110-75-8	2-Chloroethyl Vinyl Ether	**24.3**		10	
107-02-8	Acrolein	**60.5**		10	
107-13-1	Acrylonitrile	**114**		10	
71-43-2	Benzene	**23.0**		1.0	
75-27-4	Bromodichloromethane	**20.3**		1.0	
75-25-2	Bromoform	**21.6**		1.0	
74-83-9	Bromomethane	**15.4**		1.0	
56-23-5	Carbon Tetrachloride	**21.3**		1.0	
108-90-7	Chlorobenzene	**21.4**		1.0	
75-00-3	Chloroethane	**19.5**		1.0	
67-66-3	Chloroform	**20.3**		1.0	
74-87-3	Chloromethane	**21.0**		1.0	
124-48-1	Dibromochloromethane	**21.9**		1.0	
75-09-2	Methylene Chloride	**26.4**		1.0	
100-41-4	Ethylbenzene	**21.6**		1.0	
127-18-4	Tetrachloroethene (PCE)	**19.1**		1.0	
108-88-3	Toluene	**22.8**		1.0	
79-01-6	Trichloroethene (TCE)	**30.9**		1.0	
75-69-4	Trichlorofluoromethane (CFC 11)	**16.8**		1.0	
75-01-4	Vinyl Chloride	**25.0**		1.0	
10061-01-5	cis-1,3-Dichloropropene	**22.1**		1.0	
179601-23-1	m,p-Xylenes	**43.0**		2.0	
95-47-6	o-Xylene	**22.7**		1.0	
156-60-5	trans-1,2-Dichloroethene	**21.1**		1.0	
10061-02-6	trans-1,3-Dichloropropene	**22.1**		1.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrastructure (Formerly MACTEC)	**Service Request:**	R1409445
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	11/21/14 1300
Sample Matrix:	Water	**Date Received:**	11/22/14
		Date Analyzed:	11/26/14 22:34
Sample Name:	633027 EFFLUENT	**Units:**	µg/L
Lab Code:	RQ1414901-06	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method:	624	**Analysis Lot:**	423263
Data File Name:	I:\ACQUDATA\MSVOA6\DATA\112614\L9171.D\	**Instrument Name:**	R-MS-06
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	92	81-127	11/26/14 22:34	
4-Bromofluorobenzene	102	79-123	11/26/14 22:34	
Toluene-d8	105	83-120	11/26/14 22:34	

Quantitation Report (Not Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\112614\L9171.D Vial: 30
Acq On : 26 Nov 2014 10:34 pm Operator: D.Lipani
Sample : R1409445-001MSD|1.0 Inst : MS#6
Misc : AMEC 624 12456 T4 RQ1414901-06 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 26 22:53 2014 Quant Results File: 6240911.RES

Quant Method : I:\ACQUDATA\M...\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Tue Oct 14 13:19:09 2014
Response via : Initial Calibration
DataAcq Meth : 6240911

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	3.44	128	122235	30.00	ug/L		0.00
35) 1,4-Difluorobenzene	5.69	114	727997	30.00	ug/L		0.00
53) d5-Chlorobenzene	9.08	117	693897	30.00	ug/L		0.00
System Monitoring Compounds							
30) SURR1,1,2-Diclethane-d4	4.24	65	237510	27.74	ug/L		0.00
Spiked Amount 30.000	Range 81 - 127		Recovery = 92.47%				
51) SURR3,Toluene-d8	7.76	98	886323	31.61	ug/L		0.00
Spiked Amount 30.000	Range 83 - 120		Recovery = 105.37%				
68) SURR2,BFB	10.13	95	353870	30.64	ug/L		0.00
Spiked Amount 30.000	Range 79 - 123		Recovery = 102.13%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.00	85	291940	21.81	ug/L		99
3) Chloromethane	1.08	50	268924	20.95	ug/L		94
4) Vinyl Chloride	1.15	62	320544	25.01	ug/L		100
5) Bromomethane	1.32	94	139196	15.42	ug/L		90
6) Chloroethane	1.39	64	154468	19.50	ug/L		97
7) Freon-21	1.41	67	504255	22.11	ug/L		100
8) Freon-123	1.58	83	361474	20.76	ug/L		98
9) Freon-123A	1.60	67	315093	20.76	ug/L		97
10) Acrolein	1.66	56	75531	60.51	ug/L		99
11) Trichlorofluoromethane	1.65	101	374943	16.84	ug/L		96
12) Acetonitrile	1.67	41	95574	95.31	ug/L		95
13) 2-Propanol	1.70	45	149636	457.34	ug/L		98
14) Acetone	1.73	43	41055	15.04	ug/L		89
15) 1,1-Diclethene	1.95	96	214999	20.26	ug/L		94
16) tert Butyl Alcohol	1.98	59	232927	457.49	ug/L		97
17) Acrylonitrile	2.01	53	252809	113.51	ug/L		97
18) Methylene Chloride	2.05	84	256722	26.35	ug/L		97
19) Freon 113	2.09	101	238352	20.32	ug/L		93
20) Carbon Disulfide	2.15	76	797183	22.41	ug/L		99
21) trans-1,2-Dichloroethene	2.52	96	238421	21.10	ug/L		90
22) Methyl-t-Butyl Ether	2.63	73	468116	18.85	ug/L		95
23) 1,1-Diclethane	2.72	63	420684	20.39	ug/L		98
24) 2-Butanone	3.18	43	51095	20.79	ug/L	#	92
25) cis-1,2-Dichloroethene	3.27	96	278679	23.29	ug/L		95
26) Chloroform	3.51	83	427151	20.28	ug/L		97
27) Ethyl Acetate	3.62	43	96144	17.96	ug/L		97
28) Isobutanol	3.73	43	92394	456.90	ug/L		89
29) Tetrahydrofuran	3.92	42	37431	20.19	ug/L	#	76
31) 1,2-Dichloroethane	4.36	62	257494	18.94	ug/L	#	99
32) 1,1,1-Trichloroethane	4.47	97	451665	23.33	ug/L		99
33) 2-Methyl-1,3-Dioxolane	4.57	73	90125	121.70	ug/L	#	88
34) Cyclohexane	4.88	56	388225	22.92	ug/L		96
36) Carbontetrachloride	5.05	117	335718	21.33	ug/L		97
37) Isopropyl Acetate	5.19	43	281730	21.95	ug/L		98
38) Benzene	5.17	78	931040	22.95	ug/L		100
39) Dibromomethane	5.99	93	128514	19.86	ug/L		95
40) 1,2-Diclpropane	6.07	63	252709	22.78	ug/L		92
41) Trichloroethene	6.14	130	386971	30.89	ug/L		100

DL 12/2/14

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

Quantitation Report (Not Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\112614\L9171.D Vial: 30
Acq On : 26 Nov 2014 10:34 pm Operator: D.Lipani
Sample : R1409445-001MSD|1.0 Inst : MS#6
Misc : AMEC 624 12456 T4 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 26 22:53 2014 Quant Results File: 6240911.RES

Quant Method : I:\ACQUDATA\M...\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Tue Oct 14 13:19:09 2014
Response via : Initial Calibration
DataAcq Meth : 6240911

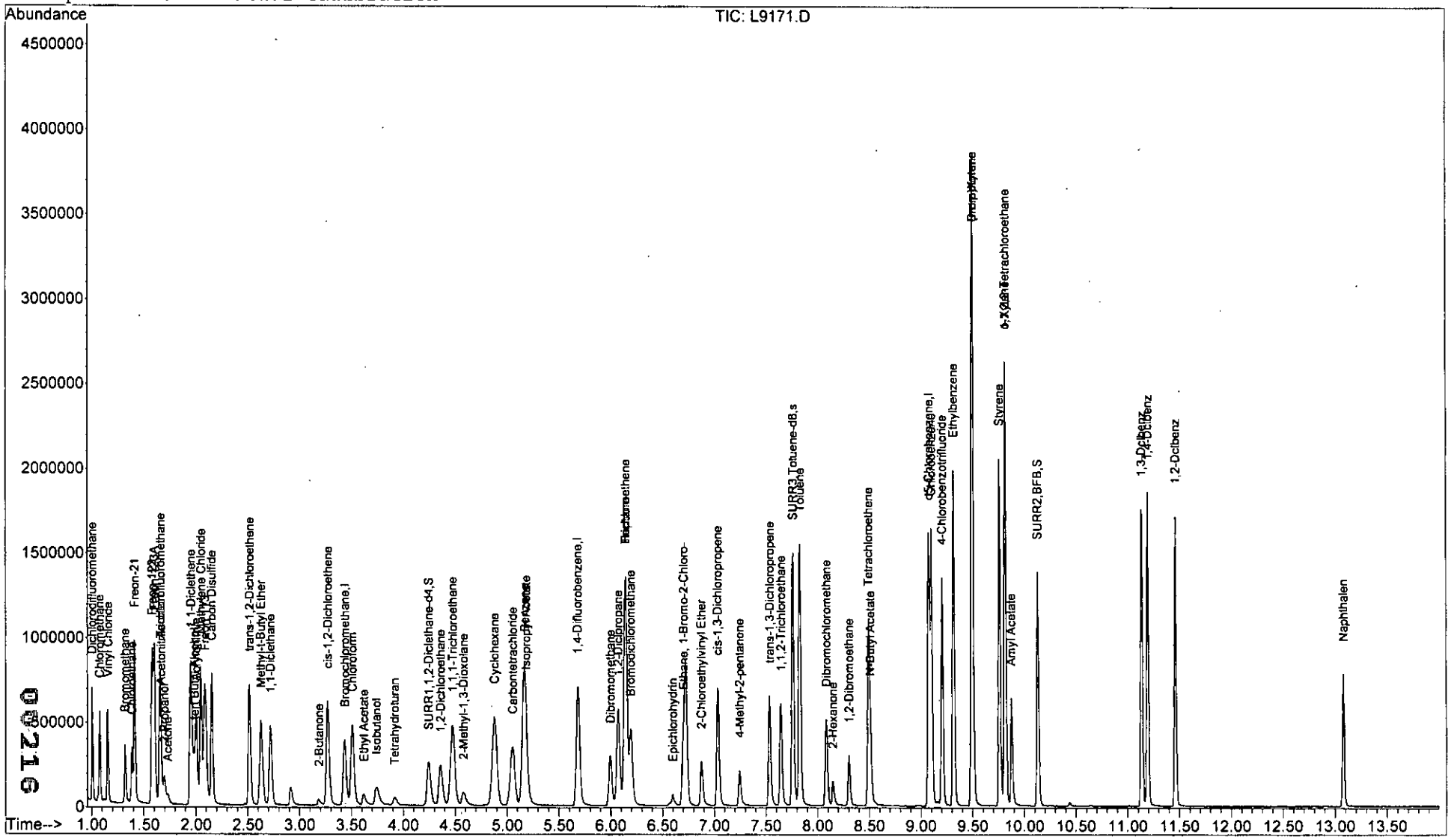
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
42)	Heptane	6.15	43	209160	20.31	ug/L	98
43)	Bromodichloromethane	6.20	83	319577	20.34	ug/L	98
44)	Epichlorohydrin	6.60	57	53427	101.86	ug/L	94
45)	Ethane, 1-Bromo-2-Chloro-	6.70	63	276793	21.80	ug/L	99
46)	2-Chloroethylvinyl Ether	6.87	63	118614	24.26	ug/L	97
47)	cis-1,3-Dichloropropene	7.03	75	360397	22.06	ug/L	99
48)	4-Methyl-2-pentanone	7.24	43	145711	24.17	ug/L	97
49)	trans-1,3-Dichloropropene	7.54	75	314529	22.12	ug/L	95
50)	1,1,2-Trichloroethane	7.65	97	177819	23.23	ug/L	96
52)	Toluene	7.83	91	1008133	22.84	ug/L	99
54)	Dibromochloromethane	8.08	129	250203	21.93	ug/L	98
55)	2-Hexanone	8.14	43	100236	22.76	ug/L	99
56)	1,2-Dibromoethane	8.30	107	173668	19.82	ug/L	99
57)	Tetrachloroethene	8.49	164	214725	19.10	ug/L	98
58)	N-Butyl Acetate	8.52	43	225568	21.52	ug/L	97
59)	Chlorobenzene	9.10	112	679254	21.41	ug/L	98
60)	4-Chlorobenzotrifluoride	9.20	180	351236	19.31	ug/L	98
61)	Ethylbenzene	9.31	106	356347	21.61	ug/L	97
62)	(m+p)Xylene	9.49	106	887978	43.03	ug/L	97
63)	Bromoform	9.49	173	159921	21.58	ug/L	97
64)	Styrene	9.76	104	740645	21.81	ug/L	100
65)	1,1,2,2-Tetrachloroethane	9.81	83	232386	23.91	ug/L	100
66)	o-Xylene	9.81	106	451970	22.65	ug/L	100
67)	Amyl Acetate	9.87	43	317993	22.99	ug/L	97
69)	1,3-Dclbenz	11.14	146	589907	20.33	ug/L	99
70)	1,4-Dclbenz	11.19	146	589028	20.39	ug/L	99
71)	1,2-Dclbenz	11.46	146	536624	20.34	ug/L	97
72)	Naphthalen	13.08	128	476224	19.90	ug/L	99

(#) = qualifier out of range (m) = manual integration
L9171.D 6240911.M Wed Nov 26 22:53:03 2014

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\112614\L9171.D Vial: 30
Acq On : 26 Nov 2014 10:34 pm Operator: D.Lipani
Sample : R1409445-001MSD|1.0 Inst : MS#6
Misc : AMEC 624 12456 T4 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 26 22:53 2014 Quant Results File: 6240911.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\6240911.M (RTE Integrator)
Title : 624 VOAS on MS#6
Last Update : Tue Oct 14 13:19:09 2014
Response via : Initial Calibration



Analysis: 624 | Analyst: D. Lippmann | Tune Method: 6240911.M

Date: GCMS#6 | Data Path: j:\acqudata\msvoa6\DATA\091114\... | Run Method: ↓ ↓ ↓

Instr. 09/11/14 | LIMS Run#: (ICAL)

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	Blk								L7300	N	
2	Blk								01	Y	
3	Tune Check		(Run as a Blk)						↓ 02	Y	
4	Inst. Blk								03	Y	
			1°Targ 1°Targ	PPL EXT	HSL	Fr+	Final				
			5.0 10	500 500	500	500	Volume				
5	STD#1-0.5PPB		5.0µl —	— —	—	—	50mL		L7304	Y	
6	#2-1.0PPB		— 5.0µl	— —	—	—	↓		05	Y	
7	#3-2.0PPB		— 10µl	— —	—	—	↓		06	Y	
8	#4-5.0PPB		— —	2.0µl →		→	200mL		07	N	MEK peak poor - repeat
9	#5-10PPB		— —	2.0µl →		→	100mL		↓ 08	Y	
10	#6-20PPB		— —	2.0µl →		→	50mL		09	Y	
11	#7-50PPB		— —	5.0µl →		→	↓		L7310	Y	
12	#8-100PPB		— —	10µl →		→	↓		11	Y	
13	— no data			—	—	—			12	—	file already downloaded as 200ppb
14	Blk			—	—	—			13	N	
15	Blk			—	—	—			14	Y	
16	STD#4-5.0ppb			2.0µl →		→	200mL		15	Y	
17	↓ #10-200ppb			20µl →		→	50mL		16	Y	
18	Blk								17	N	
19	Blk								↓ 18	Y	
20	ICV					DL	9-12-14		19	Y	- except acetone/acrolein ↓
21-32	Blks						EE		20-YL	L7331	
33	ICV#2 (acetone/Acrolein)						L7332		L7327	Y	(used newly-prepped SS Extras!)
—	EOD DL 9-12-14										

All samples = 10 mL + 1.0 uL combined IS/Surr. 10 mL purged

DL 9-11-14

(500) Primary PPL: 74474695 — 10µl / 1.0mL MeOH = 1°Targ 5.0

(500) Primary Ext: 74693

(500) Primary HSL: 74694

Primary Fr+: 74200 — 20µl / 1.0mL MeOH = 1°Targ 10

Primary :

Secondary PPL: 74449 12.5µl / 50mL DI = ICV.

Secondary Ext: 73771

Secondary Fr+: 74518

Secondary :

Secondary (new Ext 9/12/14): 74735 (used ICV#2)

Combined IS/Surr 300 : 74691

Surrogate : —

Internal Std : —

Analysis: 624 Analyst: D. Lippini Tune Method: 6240911.M

Date: 11/26/14 Data Path: j:\acqudata\msvoa6\DATA\112614... Run Method: ↓ ↓ ↓

Instr. GCMS#6 LIMS Run#: 42362263

R DL 11-26-14

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	Blk								L9144	Y	
2	Tune Check		(Run as a Blk)						45	Y	
3	LCS								46	Y	
4	Met Blk								47	N	
5	Met Blk		Residual						48	N	
6	Met Blk		Chlorine						49	Y	
7	R1409453-001	1.0	neg	[redacted]	11889	2	-1	~7	L9150	Y	
8	↓ -002	1.0	neg	↓	↓	↓	-1	~7	51	Y	
9	R1409519-001	1.0	neg	[redacted]	11852	1	-1	~5	52	Y	
10	↓ -002	1.0	neg	↓	↓	↓	-1	~5	53	Y	
11	R1409445-001	1.0	neg	[redacted]	12456	4	-1	~5	54	Y	
12	↓ -002	1.0	↓DL 11-26-14 neg	↓	↓	↓	-1	~5	55	Y	
13	R1409442-001	~~10~~	(5.0mL/50mL) neg	[redacted]	12194	2	-1	~9!	56	Y	→ dilution is 1.0!
14	R1409518-001	1.0	neg	[redacted]	11852	2	-1	~5	57	Y	high NT
15	R1409494-001	1.0	neg	[redacted]	"	2	-1	~5	58	Y	
16	R1409429-001	10	(5.0mL/50mL) neg	[redacted]	9766	II	-2	<2	59	Y	= DL
17	R1409561-002	1.0	(9562-002) neg	[redacted]	11852	I	-1	~5	L9160	Y	pH~5 DL 12-2-14
18	R1409430-001	1.0	neg	[redacted]	9766	II	-1	<2	61	Y	
19	R1409561-001	1.0	(9562-001) neg	[redacted]	11852	I	-1	~5	62	Y	
20	Blk		—	—	—	—	—	—	63	Y	
21	R1409417-001	50	(1.0mL/50mL) neg	[redacted]	9766	II	-1	~3	64	(N)	weak rpt 1/25
22	R1409564-006	1.0	neg	[redacted]	11868	II	-1	~5	65	Y	
23	↓ -003	2.5	(20mL/50mL) neg	↓			C-1	~5	66	Y	
24	R1409566-006	1.0	neg	[redacted]			-1	~5	67	Y	
25	↓ -003	2.5	(20mL/50mL) neg	↓			C-1	~5	68	Y	
26	Blk		—	—	—	—	—	—	69	Y	MS/MSD spikes!
27	R1409445-001MS	1.0	neg	[redacted]	12456	-2	(tier)	~5	L9170	Y	(4.25mL each of secondaries
28	↓ -001MSD	1.0	neg	↓	↓	-3	IV	~5	71	Y	into full vials sample)
29	Blk		—	—	—	—	—		72	Y	
	EOD DL 11-26-14										

All samples = 10 mL + 1.0 uL combined IS/Surr. 10 mL purged

Primary :

Primary :

Primary :

Primary :

Primary :

Secondary PPL : 76736 5.0mL/50mL DI

Secondary Ext : 76245 ↓

Secondary Frt : 76763 = LCS.

Secondary :

Secondary :

Combined IS/Surr 300 : 76847

Surrogate :

Internal Std :

Runlog-MSVOAr2 9/20/13

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0021818

wrections DL 12/1/14

ALS Environmental

METALS 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

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METALS

COVER PAGE - INORGANIC ANALYSIS DATA PACKAGE

Contract: R1409445 SDG No.: 633027 EFFL

Lab Code: _____ Case No.: _____ SAS No.: _____

SOW No.: EPA200SERIES

Sample ID.	Lab Sample No.
633027 EFFLUENT	R1409445-001

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments: See Attatched Case Narrative

Signature: Janice Berger Name: Janice Berger

Date: 12/16/14 Title: Project Manager

00220

ALS Environmental

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

633027 EFFLUENT

Contract: R1409445

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027 EFFLU

Matrix (soil/water): WATER Lab Sample ID: R1409445-001

Level (low/med): LOW Date Received: 11/22/2014

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	5.0	U		P
7440-47-3	Chromium	10.0	U		P
7440-50-8	Copper	20.0	U		P
7440-02-0	Nickel	57.4			P
7439-92-1	Lead	50.0	U		P
7440-66-6	Zinc	20.0	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

METALS
-2A-
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: R1409445

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027 EFFLU

Initial Calibration Source: PERKIN ELMER

Continuing Calibration Source: PERKIN ELMER

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Cadmium	500	501	100	500	517	103	501	100	P
Chromium	500	505	101	500	518	104	504	101	P
Copper	1250	1220	98	1250	1240	99	1220	98	P
Nickel	2000	2000	100	2000	2060	103	2010	100	P
Lead	500	504	101	500	521	104	507	101	P
Zinc	1000	981	98	1000	1030	103	990	99	P

Comments:

METALS
-2A-
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: R1409445

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027 EFFLU

Initial Calibration Source: PERKIN ELMER

Continuing Calibration Source: PERKIN ELMER

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Cadmium				500	519	104	511	102	P
Chromium				500	520	104	511	102	P
Copper				1250	1230	98	1210	97	P
Nickel				2000	2080	104	2040	102	P
Lead				500	525	105	514	103	P
Zinc				1000	1040	104	1020	102	P

Comments:

METALS
-2A-
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: R1409445

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027 EFFLU

Initial Calibration Source: PERKIN ELMER

Continuing Calibration Source: PERKIN ELMER

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Cadmium				500	498	100	513	103	P
Chromium				500	502	100	515	103	P
Copper				1250	1200	96	1220	98	P
Nickel				2000	2000	100	2050	102	P
Lead				500	512	102	524	105	P
Zinc				1000	1000	100	1030	103	P

Comments:

METALS
-2B-
CRDL STANDARD FOR AA AND ICP

Contract: R1409445

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 633027 EFFLU

AA CRDL Standard Source: ACCUSTANDARD

ICP CRDL Standard Source:

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Cadmium				10.0	10.70	107	10.65	106
Chromium				10.0	10.49	105	10.32	103
Copper				25.0	27.96	112	25.71	103
Nickel				40.0	42.49	106	41.90	105
Lead				10.0	10.55	106	10.09	101
Zinc				20.0	19.08	95	19.01	95

Comments:

METALS

-3-

BLANKS

Contract: R1409445

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027 EFFLU

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L, ppt, or mg/kg): UG/L

Analyte	Initial Calib. Blank ug/L	C	Continuing Calibration Blank ug/L 1	C	2	C	3	C	Preparation Blank	C	M
Cadmium	5.00	U	5.00	U	5.00	U	5.00	U	5.000	U	P
Chromium	10.00	U	10.00	U	10.00	U	10.00	U	10.000	U	P
Copper	20.00	U	20.00	U	20.00	U	20.00	U	20.000	U	P
Nickel	40.00	U	40.00	U	40.00	U	40.00	U	40.000	U	P
Lead	50.00	U	50.00	U	50.00	U	50.00	U	50.000	U	P
Zinc	20.00	U	20.00	U	20.00	U	20.00	U	20.000	U	P

Comments:

METALS

-3-

BLANKS

Contract: R1409445

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027 EFFLU

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L, ppt, or mg/kg): UG/L

Analyte	Initial Calib. Blank ug/L	C	Continuing Calibration Blank ug/L 1	C	2	C	3	C	Preparation Blank	C	M
Cadmium			5.00	U	5.00	U	5.00	U			P
Chromium			10.00	U	10.00	U	10.00	U			P
Copper			20.00	U	20.00	U	20.00	U			P
Nickel			40.00	U	40.00	U	40.00	U			P
Lead			50.00	U	50.00	U	50.00	U			P
Zinc			20.00	U	20.00	U	20.00	U			P

Comments:

METALS

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ICP INTERFERENCE CHECK SAMPLE

Contract: R1409445

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027 EFFLU

ICP ID Number: Optima ICP 3 ICS Source: PERKIN ELMER

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Cadmium		1000	-0.9	937	94	-0.6	937	94
Chromium		500	2.4	484	97	2.5	484	97
Copper		500	3.9	497	99	2.5	491	98
Nickel		1000	-2.9	907	91	-3.1	909	91
Lead		50	-0.3	47	94	-1.3	47	94
Zinc		1000	6.9	929	93	6.8	926	93

METALS

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LABORATORY CONTROL SAMPLE

Contract: R1409445

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027 EFFLU

Solid LCS Source: _____

Aqueous LCS Source: CPI

Analyte	Aqueous (ug/L			Solid (mg/K				
	True	Found	%R	True	Found	C	Limits	%R
Cadmium	50	48	96					
Chromium	200	200	100					
Copper	250	265	106					
Nickel	500	500	100					
Lead	500	497	99					
Zinc	500	500	100					

Comments: _____

METALS

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ICP SERIAL DILUTIONS

SAMPLE NO.

633027 EFFLUENTL

Contract: R1409445

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027 EFFLU

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Cadmium	5.00	U	25.00	U			P
Chromium	10.00	U	50.00	U			P
Copper	20.00	U	100.00	U			P
Nickel	57.40		200.00	U	100.0		P
Lead	50.00	U	250.00	U			P
Zinc	20.00	U	100.00	U			P

Comments: _____

METALS

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DETECTION LIMITS

Contract: R1409445

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027 EFFLU

ICP ID Number: Optima ICP 3 Date: 2/4/2014

Flame AA ID Number: _____

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	PQL ug/L	MDL ug/L	M
Cadmium	226.502		5.0	5.0	P
Chromium	267.716		10.0	10.0	P
Copper	324.752		20.0	20.0	P
Nickel	231.604		40.0	40.0	P
Lead	220.353		50.0	50.0	P
Zinc	206.200		20.0	20.0	P

Comments: _____

METALS

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ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Contract: R1409445

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027 EFFLU

ICP ID Number: Optima ICP 3 Date: 11/20/2014

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg
Aluminum	237.313	0.0000000	0.4834130	-1.4216100	0.2884860
Antimony	206.836	0.0923342	0.0000000	0.0000000	0.0000000
Arsenic	188.979	0.0415463	0.0000000	0.0000000	0.0000000
Barium	233.527	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.107	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.772	0.0981385	0.0000000	4.1292200	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.1755480	0.0000000
Calcium	227.546	-1.9405200	0.0000000	-44.6141014	0.0000000
Chromium	267.716	0.0000000	0.0000000	-0.0514372	-0.0927577
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.752	0.0000000	0.0000000	-0.0911222	0.0000000
Iron	259.939	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	-0.1097400	-0.0087930	0.0483957	0.0000000
Magnesium	279.077	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	-0.1340730	0.0000000
Molybdenum	202.031	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.490	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.026	-0.0157320	0.0000000	-0.3166110	0.0000000
Silver	328.068	0.0000000	0.0000000	-0.2535860	0.0000000
Sodium	589.592	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.552	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.801	0.0746510	0.0000000	-0.0459710	0.0000000
Tin	189.927	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	337.279	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	206.200	0.0000000	0.0000000	0.0000000	0.0000000

Comments: _____

METALS
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ICP LINEAR RANGES (QUARTERLY)

Contract: R1409445

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027 EFFLU

ICP ID Number: Optima ICP 3 Date: 8/14/2014

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Cadmium	0.200	2000	P
Chromium	0.200	10000	P
Copper	0.200	5000	P
Nickel	0.200	8000	P
Lead	0.200	10000	P
Zinc	0.200	4000	P

Comments: _____

METALS

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PREPARATION LOG

Contract: R1409445

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027 EFFLUENT

Method: P

Sample ID	Preparation Date	Initial Volume	Final Volume(mL)
LCSW	11/25/2014	50.0	50.0
PBW	11/25/2014	50.0	50.0
633027 EFFLUENT	11/25/2014	50.0	50.0

Comments:

METALS
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ANALYSIS RUN LOG

Contract: R1409445

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 633027 EFFLU

Instrument ID Number: Optima ICP 3 Method: P

Start Date: 12/4/2014 End Date: 12/4/2014

Sample ID.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
Calib Blank 1	1.00	14:10							X		X		X		X				X						X	
Calib Std 1	1.00	14:17							X		X		X		X				X						X	
Calib Std 2	1.00	14:22							X				X													
Calib Std 3	1.00	14:28									X								X						X	
Calib Std 4	1.00	14:34							X		X		X		X				X						X	
Calib Std 5	1.00	14:40							X		X		X		X				X						X	
ICV1	1.00	14:47							X		X		X		X				X						X	
ICB1	1.00	14:53							X		X		X		X				X						X	
CRDL1	1.00	14:59							X		X		X		X				X						X	
ICS-A1	1.00	15:05							X		X		X		X				X						X	
ICS-AB1	1.00	15:11							X		X		X		X				X						X	
CCV1	1.00	15:17							X		X		X		X				X						X	
CCB1	1.00	15:23							X		X		X		X				X						X	
ZZZZZZ	1.00	15:29																								
ZZZZZZ	1.00	15:35																								
ZZZZZZ	1.00	15:41																								
ZZZZZZ	5.00	15:47																								
ZZZZZZ	1.00	15:53																								
ZZZZZZ	1.00	15:59																								
ZZZZZZ	1.00	16:06																								
ZZZZZZ	5.00	16:12																								
ZZZZZZ	1.00	16:18																								
ZZZZZZ	1.00	16:24																								
ZZZZZZ	1.00	16:30																								
CCV2	1.00	16:41							X		X		X		X				X						X	
CCB2	1.00	16:47							X		X		X		X				X						X	
PBW	1.00	16:53							X		X		X		X				X						X	
LCSW	1.00	16:59							X		X		X		X				X						X	
633027 EFFLUENT	1.00	17:06							X		X		X		X				X						X	
633027 EFFLUENTL	5.00	17:12							X		X		X		X				X						X	
ZZZZZZ	1.00	17:18																								
ZZZZZZ	1.00	17:24																								
ZZZZZZ	1.00	17:30																								

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

METALS
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ANALYSIS RUN LOG

Contract: R1409445

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 633027 EFFLU

Instrument ID Number: Optima ICP 3 Method: P

Start Date: 12/4/2014 End Date: 12/4/2014

Sample ID.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	5.00	17:36																												
ZZZZZZ	1.00	17:42																												
ZZZZZZ	1.00	17:48																												
CCV3	1.00	17:54							X		X		X		X				X						X					
CCB3	1.00	18:00							X		X		X		X				X						X					
ZZZZZZ	1.00	18:06																												
ZZZZZZ	1.00	18:12																												
ZZZZZZ	1.00	18:18																												
ZZZZZZ	1.00	18:24																												
ZZZZZZ	1.00	18:29																												
ZZZZZZ	1.00	18:35																												
ZZZZZZ	1.00	18:42																												
ZZZZZZ	1.00	18:48																												
ZZZZZZ	5.00	18:54																												
ZZZZZZ	1.00	19:00																												
CCV4	1.00	19:06							X		X		X		X				X						X					
CCB4	1.00	19:12							X		X		X		X				X						X					
ZZZZZZ	1.00	19:18																												
ZZZZZZ	1.00	19:24																												
ZZZZZZ	1.00	19:31																												
ZZZZZZ	1.00	19:37																												
ZZZZZZ	5.00	19:43																												
ZZZZZZ	1.00	19:49																												
ZZZZZZ	5.00	19:55																												
ZZZZZZ	100.00	20:01																												
ZZZZZZ	100.00	20:07																												
ZZZZZZ	1.00	20:13																												
CCV5	1.00	20:19							X		X		X		X				X						X					
CCB5	1.00	20:25							X		X		X		X				X						X					
CRDL2	1.00	20:31							X		X		X		X				X						X					
ICS-A2	1.00	20:37							X		X		X		X				X						X					
ICS-AB2	1.00	20:43							X		X		X		X				X						X					
ZZZZZZ	1.00	20:49																												

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

METALS
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ANALYSIS RUN LOG

Contract: R1409445

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 633027 EFFLU

Instrument ID Number: Optima ICP 3 Method: P

Start Date: 12/4/2014 End Date: 12/4/2014

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	20:54																										
CCV6	1.00	21:01							X		X		X		X				X						X	
CCB6	1.00	21:07							X		X		X		X				X						X	

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

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Metals Cover Page

Analyst: DCB **Date:** 12/4/14 **Instrument:** Opt 3

Data File: 3Dec04a **Reviewed By:** DCB **Entered By:** DCB

Approval: TC 12/5/14

Starlims Run #	Analytes Used	Batch ID	Method	Failed Analytes	Repeats
424283	TAL B	224313	6010		R9373-002 Fe Mn Zn R9373-001, 6 (Ag Se Tl)
					R9373-004 Fe Mn R9404-002 Na -003 Fe
					R9435 - all metals R9444-001 Ca
424284	Cd Cr Cu Ni Pb Zn	224310	200.7		
424285	Ag Al As Ba Cd Co Cr Cu Fe Ni	224760	200.7		
	Pb Sb Se Tl Zn				
424286	Ag As Ba Cd Cr Cu Ni Pb Se Zn	224667	6010 TCLP		

Package Data:

Client Sub#	TIER	Analytes Used	Batch ID	Raw Data Copied?
R9445	III / (IV) / ILM	Cd Cr Cu Ni Pb Zn	224310	Yes / No
R9320	III / (IV) / ILM	As Al Co Fe	224313	Yes / No
R9432	III / (IV) / ILM	Al As Co Fe	224313	Yes / No
R9434	III / (IV) / ILM	Al As Co Fe	224313	Yes / No
	III / IV / ILM			Yes / No
	III / IV / ILM			Yes / No
	III / IV / ILM			Yes / No
	III / IV / ILM			Yes / No

Analysis Begun

Start Time: 12/4/2014 2:10:58 PM
Logged In Analyst: alrce.metals03
Spectrometer Model: Optima 5300 DV, S/N 077N6051602
Plasma On Time: 12/4/2014 7:17:07 AM
Technique: ICP Continuous
Autosampler Model: AS-93plus

12/5/14
DCN

Sample Information File: C:\pe\Optima5300\Sample Information\ROUTINE1.sif
Batch ID: r
Results Data Set: 3Dec04a
Results Library: C:\pe\Optima5300\Results\Dec14.mdb

Method Loaded
Method Name: DV200-6010C Opt3
IEC File: DV112014.iec
Method Last Saved: 11/20/2014 9:21:50 AM
MSF File:
Method Description: 5300DV TAL Metals Method 200.7/6010C-Optima 3

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
B 249.772	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Cd 226.502	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Fe 259.939	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
K 766.490	Lin Thru 0	Peak Area	Radial	Y 371.029	Yes
Mg 279.077	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Ni 231.604	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Na 589.592	Lin Thru 0	Peak Area	Radial	Y 371.029	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Se 196.026	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Ti 337.279	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 206.200	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Ca 227.546	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Y 371.029	Yes
Al 237.313	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes

Sequence No.: 1
Sample ID: Calib Blank 1
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 1
Date Collected: 12/4/2014 2:10:59 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib Blank 1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	7108803.4	79401.59	1.12%	1.000	mg/L
Ag 328.068†	-68.5	17.94	26.20%	[0.00]	mg/L
As 188.979†	9.1	1.06	11.60%	[0.00]	mg/L
B 249.772†	451.7	12.54	2.78%	[0.00]	mg/L
Ba 233.527†	-497.5	2.68	0.54%	[0.00]	mg/L
Be 313.107†	-5565.2	76.34	1.37%	[0.00]	mg/L
Cd 226.502†	-175.9	10.36	5.89%	[0.00]	mg/L
Co 228.616†	-39.1	1.69	4.32%	[0.00]	mg/L
Cr 267.716†	-457.5	5.37	1.17%	[0.00]	mg/L
Cu 324.752†	3300.3	46.95	1.42%	[0.00]	mg/L
Fe 259.939†	-1754.0	9.56	0.54%	[0.00]	mg/L
K 766.490†	1172.0	14.77	1.26%	[0.00]	mg/L

Mg 279.077†	-3361.0	2.26	0.07%	[0.00] mg/L
Mn 257.610†	-790.3	6.11	0.77%	[0.00] mg/L
Mo 202.031†	6.0	2.16	35.99%	[0.00] mg/L
Ni 231.604†	-264.8	0.29	0.11%	[0.00] mg/L
Na 589.592†	1043.3	2.06	0.20%	[0.00] mg/L
Pb 220.353†	-38.9	1.03	2.65%	[0.00] mg/L
Sb 206.836†	45.0	1.82	4.05%	[0.00] mg/L
Se 196.026†	-0.2	2.15	891.28%	[0.00] mg/L
Sn 189.927†	53.0	1.76	3.32%	[0.00] mg/L
Ti 337.279†	26.0	5.33	20.52%	[0.00] mg/L
Tl 190.801†	16.6	0.16	0.93%	[0.00] mg/L
V 292.402†	17.2	13.56	78.99%	[0.00] mg/L
Zn 206.200†	116.7	0.58	0.50%	[0.00] mg/L
Ca 227.546†	-68.2	6.59	9.66%	[0.00] mg/L
Sr 421.552†	184.0	37.24	20.24%	[0.00] mg/L
Al 237.313†	150.0	10.63	7.09%	[0.00] mg/L

Sequence No.: 2 **Autosampler Location: 9**
Sample ID: Calib Std 1 **Date Collected: 12/4/2014 2:17:01 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: Calib Std 1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	7100655.7	94050.11	1.32%	0.9989	mg/L
As 188.979†	11.2	0.41	3.63%	[0.0050]	mg/L
Ba 233.527†	2580.2	30.17	1.17%	[0.0200]	mg/L
Cd 226.502†	122.6	0.96	0.78%	[0.0010]	mg/L
Co 228.616†	106.1	3.99	3.76%	[0.0030]	mg/L
Cr 267.716†	154.3	6.45	4.18%	[0.0010]	mg/L
Cu 324.752†	3118.7	87.22	2.80%	[0.0100]	mg/L
Mn 257.610†	4398.1	40.02	0.91%	[0.0100]	mg/L
Mo 202.031†	800.0	8.44	1.05%	[0.0250]	mg/L
Ni 231.604†	291.5	2.96	1.01%	[0.0050]	mg/L
Pb 220.353†	46.0	2.17	4.72%	[0.0050]	mg/L
Sb 206.836†	38.6	2.08	5.38%	[0.0100]	mg/L
Se 196.026†	4.3	1.59	36.52%	[0.0050]	mg/L
Tl 190.801†	39.2	0.29	0.73%	[0.0100]	mg/L
V 292.402†	333.2	4.55	1.37%	[0.0030]	mg/L
Zn 206.200†	389.7	2.36	0.60%	[0.0100]	mg/L

Sequence No.: 3 **Autosampler Location: 10**
Sample ID: Calib Std 2 **Date Collected: 12/4/2014 2:22:46 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: Calib Std 2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	7165389.5	58110.65	0.81%	1.008	mg/L
As 188.979†	21.5	0.75	3.51%	[0.0100]	mg/L
B 249.772†	25318.0	384.00	1.52%	[0.200]	mg/L
Be 313.107†	7790.5	22.47	0.29%	[0.0030]	mg/L
Cd 226.502†	595.9	7.67	1.29%	[0.005]	mg/L
Cu 324.752†	5939.0	81.65	1.37%	[0.0200]	mg/L
K 766.490†	7000.4	219.19	3.13%	[2.000]	mg/L
Mg 279.077†	11042.4	122.77	1.11%	[1.000]	mg/L
Na 589.592†	15575.0	437.70	2.81%	[1.000]	mg/L
Sb 206.836†	218.1	1.38	0.63%	[0.060]	mg/L
Se 196.026†	11.8	1.09	9.27%	[0.0100]	mg/L
Sn 189.927†	1824.8	28.59	1.57%	[0.500]	mg/L
Ca 227.546†	415.0	3.55	0.86%	[1.000]	mg/L
Al 237.313†	893.6	12.71	1.42%	[0.1000]	mg/L

Sequence No.: 4
Sample ID: Calib Std 3
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 12/4/2014 2:28:44 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib Std 3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	7133454.0	15715.25	0.22%	1.003	mg/L
Ag 328.068†	3020.4	3.18	0.11%	[0.0100]	mg/L
B 249.772†	6834.9	2.90	0.04%	[0.0500]	mg/L
Be 313.107†	13566.3	15.29	0.11%	[0.0050]	mg/L
Co 228.616†	1816.1	1.71	0.09%	[0.050]	mg/L
Cr 267.716†	1482.3	6.79	0.46%	[0.010]	mg/L
Fe 259.939†	6781.2	18.28	0.27%	[0.1000]	mg/L
K 766.490†	1683.5	59.91	3.56%	[0.5000]	mg/L
Mg 279.077†	5632.9	24.15	0.43%	[0.5000]	mg/L
Ni 231.604†	2678.9	6.47	0.24%	[0.0400]	mg/L
Na 589.592†	7944.3	31.47	0.40%	[0.5000]	mg/L
Sn 189.927†	746.1	2.38	0.32%	[0.1000]	mg/L
Ti 337.279†	29859.3	59.10	0.20%	[0.0500]	mg/L
V 292.402†	5377.2	6.20	0.12%	[0.050]	mg/L
Zn 206.200†	949.3	1.24	0.13%	[0.020]	mg/L
Ca 227.546†	209.8	0.42	0.20%	[0.5000]	mg/L
Sr 421.552†	33016.6	218.43	0.66%	[0.0500]	mg/L

Sequence No.: 5
Sample ID: Calib Std 4
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 12
Date Collected: 12/4/2014 2:34:46 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib Std 4

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	7009656.8	1257.44	0.02%	0.9861	mg/L
Ag 328.068†	61496.2	581.42	0.95%	[0.2000]	mg/L
As 188.979†	884.2	1.26	0.14%	[0.4000]	mg/L
B 249.772†	136211.3	667.22	0.49%	[1.0000]	mg/L
Ba 233.527†	516891.6	281.26	0.05%	[4.0000]	mg/L
Be 313.107†	278027.1	907.49	0.33%	[0.1000]	mg/L
Cd 226.502†	25643.4	283.70	1.11%	[0.2000]	mg/L
Co 228.616†	36357.7	521.44	1.43%	[1.0000]	mg/L
Cr 267.716†	29961.5	319.54	1.07%	[0.2000]	mg/L
Cu 324.752†	157486.2	1441.64	0.92%	[0.5000]	mg/L
Fe 259.939†	138141.8	1559.74	1.13%	[2.0000]	mg/L
K 766.490†	38317.9	463.85	1.21%	[10.000]	mg/L
Mg 279.077†	113897.3	1416.68	1.24%	[10.000]	mg/L
Mn 257.610†	142907.1	1674.02	1.17%	[0.3000]	mg/L
Mo 202.031†	33045.3	340.82	1.03%	[1.0000]	mg/L
Ni 231.604†	53819.0	636.56	1.18%	[0.8000]	mg/L
Na 589.592†	163462.4	1860.23	1.14%	[10.000]	mg/L
Pb 220.353†	2037.2	6.80	0.33%	[0.2000]	mg/L
Sb 206.836†	7539.3	3.44	0.05%	[2.0000]	mg/L
Se 196.026†	204.3	2.09	1.02%	[0.2000]	mg/L
Sn 189.927†	15037.8	200.48	1.33%	[2.0000]	mg/L
Ti 337.279†	603976.7	2312.07	0.38%	[1.0000]	mg/L
Tl 190.801†	1622.9	5.76	0.35%	[0.4000]	mg/L
V 292.402†	110400.8	1111.16	1.01%	[1.0000]	mg/L
Zn 206.200†	19554.7	242.72	1.24%	[0.4000]	mg/L
Ca 227.546†	4428.7	1.90	0.04%	[10.000]	mg/L
Sr 421.552†	678717.7	7708.99	1.14%	[1.0000]	mg/L
Al 237.313†	36779.3	415.14	1.13%	[4.0000]	mg/L

Sequence No.: 6
Sample ID: Calib Std 5
Analyst:

Autosampler Location: 2
Date Collected: 12/4/2014 2:40:50 PM
Data Type: Original

Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: Calib Std 5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	6790742.8	42439.81	0.62%	0.9553	mg/L
Ag 328.068†	295827.0	4796.90	1.62%	[1.0000]	mg/L
As 188.979†	4305.4	58.07	1.35%	[2.0000]	mg/L
B 249.772†	667947.4	17900.93	2.68%	[5.0000]	mg/L
Ba 233.527†	2361504.9	9293.26	0.39%	[20.000]	mg/L
Be 313.107†	1339256.7	6948.48	0.52%	[0.5000]	mg/L
Cd 226.502†	121508.8	2219.30	1.83%	[1.0000]	mg/L
Co 228.616†	170730.3	3209.64	1.88%	[5.0000]	mg/L
Cr 267.716†	143778.4	2800.14	1.95%	[1.0000]	mg/L
Cu 324.752†	749281.5	2763.62	0.37%	[2.5000]	mg/L
Fe 259.939†	644667.4	11766.17	1.83%	[10.000]	mg/L
K 766.490†	192586.5	3935.57	2.04%	[50.000]	mg/L
Mg 279.077†	538813.3	10699.07	1.99%	[50.000]	mg/L
Mn 257.610†	673214.1	12452.84	1.85%	[1.5000]	mg/L
Mo 202.031†	158133.7	3027.81	1.91%	[5.0000]	mg/L
Ni 231.604†	252007.5	4834.00	1.92%	[4.0000]	mg/L
Na 589.592†	801354.0	16612.96	2.07%	[50.000]	mg/L
Pb 220.353†	9577.9	126.82	1.32%	[1.0000]	mg/L
Sb 206.836†	36856.7	626.20	1.70%	[10.000]	mg/L
Se 196.026†	983.8	11.92	1.21%	[1.0000]	mg/L
Sn 189.927†	72035.3	1871.52	2.60%	[10.000]	mg/L
Ti 337.279†	2875420.5	9605.29	0.33%	[5.0000]	mg/L
Tl 190.801†	7475.2	110.58	1.48%	[2.0000]	mg/L
V 292.402†	527662.5	267.63	0.05%	[5.0000]	mg/L
Zn 206.200†	93777.8	2003.55	2.14%	[2.0000]	mg/L
Ca 227.546†	22073.2	185.06	0.84%	[50.000]	mg/L
Sr 421.552†	3289524.4	26246.39	0.80%	[5.0000]	mg/L
Al 237.313†	180354.7	3268.91	1.81%	[20.000]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	296300	0.00000	0.999971	
As 188.979	4	Lin Thru 0	0.0	2155	0.00000	0.999987	
B 249.772	4	Lin Thru 0	0.0	133700	0.00000	0.999991	
Ba 233.527	3	Lin Thru 0	0.0	118500	0.00000	0.999836	
Be 313.107	4	Lin Thru 0	0.0	2682000	0.00000	0.999973	
Cd 226.502	4	Lin Thru 0	0.0	121800	0.00000	0.999944	
Co 228.616	4	Lin Thru 0	0.0	34230	0.00000	0.999923	
Cr 267.716	4	Lin Thru 0	0.0	144000	0.00000	0.999968	
Cu 324.752	4	Lin Thru 0	0.0	300300	0.00000	0.999952	
Fe 259.939	3	Lin Thru 0	0.0	64640	0.00000	0.999906	
K 766.490	4	Lin Thru 0	0.0	3850	0.00000	0.999992	
Mg 279.077	4	Lin Thru 0	0.0	10800	0.00000	0.999940	
Mn 257.610	3	Lin Thru 0	0.0	449900	0.00000	0.999931	
Mo 202.031	3	Lin Thru 0	0.0	31680	0.00000	0.999963	
Ni 231.604	4	Lin Thru 0	0.0	63170	0.00000	0.999915	
Na 589.592	4	Lin Thru 0	0.0	16040	0.00000	0.999993	
Pb 220.353	3	Lin Thru 0	0.0	9601	0.00000	0.999926	
Sb 206.836	4	Lin Thru 0	0.0	3689	0.00000	0.999990	
Se 196.026	4	Lin Thru 0	0.0	985.2	0.00000	0.999971	
Sn 189.927	4	Lin Thru 0	0.0	7207	0.00000	0.999672	
Ti 337.279	3	Lin Thru 0	0.0	576200	0.00000	0.999953	
Tl 190.801	3	Lin Thru 0	0.0	3750	0.00000	0.999866	
V 292.402	4	Lin Thru 0	0.0	105700	0.00000	0.999961	
Zn 206.200	4	Lin Thru 0	0.0	46970	0.00000	0.999966	
Ca 227.546	4	Lin Thru 0	0.0	441.5	0.00000	0.999999	
Sr 421.552	3	Lin Thru 0	0.0	658700	0.00000	0.999982	
Al 237.313	3	Lin Thru 0	0.0	9025	0.00000	0.999993	

Sequence No.: 7 Autosampler Location: 3
Sample ID: ICV Date Collected: 12/4/2014 2:47:11 PM
Analyst: Data Type: Original

Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6988825.7	0.9831	mg/L	0.00134				0.14%
Ag 328.068†	146151.3	0.4946	mg/L	0.00173	0.4946	mg/L	0.00173	0.35%
QC value within limits for Ag 328.068 Recovery = 98.91%								
As 188.979†	2127.9	0.9870	mg/L	0.00233	0.9870	mg/L	0.00233	0.24%
QC value within limits for As 188.979 Recovery = 98.70%								
B 249.772†	331613.2	2.459	mg/L	0.0143	2.459	mg/L	0.0143	0.58%
QC value within limits for B 249.772 Recovery = 98.37%								
Ba 233.527†	1214601.1	10.25	mg/L	0.016	10.25	mg/L	0.016	0.16%
QC value within limits for Ba 233.527 Recovery = 102.49%								
Be 313.107†	667142.7	0.2487	mg/L	0.00058	0.2487	mg/L	0.00058	0.23%
QC value within limits for Be 313.107 Recovery = 99.48%								
Cd 226.502†	61067.1	0.5006	mg/L	0.00116	0.5006	mg/L	0.00116	0.23%
QC value within limits for Cd 226.502 Recovery = 100.13%								
Co 228.616†	84365.5	2.465	mg/L	0.0004	2.465	mg/L	0.0004	0.02%
QC value within limits for Co 228.616 Recovery = 98.58%								
Cr 267.716†	72390.8	0.5052	mg/L	0.00004	0.5052	mg/L	0.00004	0.01%
QC value within limits for Cr 267.716 Recovery = 101.05%								
Cu 324.752†	366688.1	1.222	mg/L	0.0068	1.222	mg/L	0.0068	0.55%
QC value within limits for Cu 324.752 Recovery = 97.72%								
Fe 259.939†	321690.7	4.976	mg/L	0.0020	4.976	mg/L	0.0020	0.04%
QC value within limits for Fe 259.939 Recovery = 99.53%								
K 766.490†	92482.3	24.02	mg/L	0.283	24.02	mg/L	0.283	1.18%
QC value within limits for K 766.490 Recovery = 96.08%								
Mg 279.077†	269372.5	24.94	mg/L	0.013	24.94	mg/L	0.013	0.05%
QC value within limits for Mg 279.077 Recovery = 99.77%								
Mn 257.610†	337456.9	0.7508	mg/L	0.00029	0.7508	mg/L	0.00029	0.04%
QC value within limits for Mn 257.610 Recovery = 100.11%								
Mo 202.031†	76668.6	2.420	mg/L	0.0026	2.420	mg/L	0.0026	0.11%
QC value within limits for Mo 202.031 Recovery = 96.80%								
Ni 231.604†	126647.2	2.005	mg/L	0.0035	2.005	mg/L	0.0035	0.17%
QC value within limits for Ni 231.604 Recovery = 100.25%								
Na 589.592†	388793.8	24.24	mg/L	0.287	24.24	mg/L	0.287	1.18%
QC value within limits for Na 589.592 Recovery = 96.96%								
Pb 220.353†	4828.0	0.5039	mg/L	0.00169	0.5039	mg/L	0.00169	0.33%
QC value within limits for Pb 220.353 Recovery = 100.78%								
Sb 206.836†	17962.0	4.868	mg/L	0.0073	4.868	mg/L	0.0073	0.15%
QC value within limits for Sb 206.836 Recovery = 97.37%								
Se 196.026†	486.9	0.4960	mg/L	0.00324	0.4960	mg/L	0.00324	0.65%
QC value within limits for Se 196.026 Recovery = 99.19%								
Sn 189.927†	36265.6	5.032	mg/L	0.0040	5.032	mg/L	0.0040	0.08%
QC value within limits for Sn 189.927 Recovery = 100.64%								
Ti 337.279†	1430218.8	2.482	mg/L	0.0003	2.482	mg/L	0.0003	0.01%
QC value within limits for Ti 337.279 Recovery = 99.29%								
Tl 190.801†	3838.6	1.023	mg/L	0.0014	1.023	mg/L	0.0014	0.13%
QC value within limits for Tl 190.801 Recovery = 102.32%								
V 292.402†	258677.0	2.447	mg/L	0.0038	2.447	mg/L	0.0038	0.16%
QC value within limits for V 292.402 Recovery = 97.87%								
Zn 206.200†	46059.7	0.9807	mg/L	0.00643	0.9807	mg/L	0.00643	0.66%
QC value within limits for Zn 206.200 Recovery = 98.07%								
Ca 227.546†	10701.9	24.48	mg/L	0.025	24.48	mg/L	0.025	0.10%
QC value within limits for Ca 227.546 Recovery = 97.92%								
Sr 421.552†	1562071.1	2.371	mg/L	0.0246	2.371	mg/L	0.0246	1.04%
QC value less than the lower limit for Sr 421.552 Recovery = 94.86%								
Al 237.313†	86681.0	9.593	mg/L	0.0184	9.593	mg/L	0.0184	0.19%
QC value within limits for Al 237.313 Recovery = 95.93%								

QC Failed. Continue with analysis.

Sequence No.: 8 Autosampler Location: 1
Sample ID: ICB Date Collected: 12/4/2014 2:53:19 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7280795.6	1.024	mg/L	0.0052				0.51%
Ag 328.068†	149.7	0.0005	mg/L	0.00014	0.0005	mg/L	0.00014	27.88%
QC value within limits for Ag 328.068 Recovery = Not calculated								
As 188.979†	0.4	0.0002	mg/L	0.00047	0.0002	mg/L	0.00047	229.37%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	5546.2	0.0415	mg/L	0.00505	0.0415	mg/L	0.00505	12.18%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	545.1	0.0046	mg/L	0.00146	0.0046	mg/L	0.00146	31.75%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	526.5	0.0002	mg/L	0.00004	0.0002	mg/L	0.00004	22.57%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	25.5	0.0002	mg/L	0.00012	0.0002	mg/L	0.00012	58.81%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	50.2	0.0015	mg/L	0.00017	0.0015	mg/L	0.00017	11.49%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	25.9	0.0002	mg/L	0.00009	0.0002	mg/L	0.00009	51.29%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	1219.8	0.0041	mg/L	0.00034	0.0041	mg/L	0.00034	8.42%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	287.4	0.0044	mg/L	0.00083	0.0044	mg/L	0.00083	18.74%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	86.4	0.0224	mg/L	0.00085	0.0224	mg/L	0.00085	3.77%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	82.4	0.0076	mg/L	0.00091	0.0076	mg/L	0.00091	11.90%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	242.4	0.0005	mg/L	0.00013	0.0005	mg/L	0.00013	24.08%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	52.0	0.0016	mg/L	0.00038	0.0016	mg/L	0.00038	23.34%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	78.1	0.0012	mg/L	0.00043	0.0012	mg/L	0.00043	35.05%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	314.6	0.0196	mg/L	0.00086	0.0196	mg/L	0.00086	4.40%
QC value within limits for Na 589.592 Recovery = Not calculated								
Pb 220.353†	2.6	0.0003	mg/L	0.00022	0.0003	mg/L	0.00022	84.50%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	18.8	0.0051	mg/L	0.00130	0.0051	mg/L	0.00130	25.57%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	2.0	0.0020	mg/L	0.00123	0.0020	mg/L	0.00123	62.07%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	101.6	0.0141	mg/L	0.00141	0.0141	mg/L	0.00141	10.01%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 337.279†	724.0	0.0013	mg/L	0.00035	0.0013	mg/L	0.00035	27.52%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	3.9	0.0010	mg/L	0.00004	0.0010	mg/L	0.00004	3.60%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	126.9	0.0012	mg/L	0.00018	0.0012	mg/L	0.00018	15.08%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	31.8	0.0007	mg/L	0.00014	0.0007	mg/L	0.00014	20.77%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	1.9	0.0045	mg/L	0.00302	0.0045	mg/L	0.00302	66.59%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Sr 421.552†	1067.2	0.0016	mg/L	0.00019	0.0016	mg/L	0.00019	11.95%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Al 237.313†	44.1	0.0049	mg/L	0.00186	0.0049	mg/L	0.00186	37.99%
QC value within limits for Al 237.313 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 9
Sample ID: MRL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/4/2014 2:59:22 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MRL

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7176422.7	1.010	mg/L	0.0018				0.18%

Ag 328.068†	3063.9	0.0104 mg/L	0.00007	0.0104 mg/L	0.00007	0.66%
QC value within limits for Ag 328.068 Recovery = 103.69%						
As 188.979†	46.0	0.0213 mg/L	0.00057	0.0213 mg/L	0.00057	2.67%
QC value within limits for As 188.979 Recovery = 106.63%						
B 249.772†	28862.6	0.2154 mg/L	0.00184	0.2154 mg/L	0.00184	0.85%
QC value within limits for B 249.772 Recovery = 107.72%						
Ba 233.527†	26456.4	0.2233 mg/L	0.00165	0.2233 mg/L	0.00165	0.74%
QC value within limits for Ba 233.527 Recovery = 111.63%						
Be 313.107†	13794.7	0.0051 mg/L	0.00003	0.0051 mg/L	0.00003	0.59%
QC value within limits for Be 313.107 Recovery = 102.85%						
Cd 226.502†	1305.5	0.0107 mg/L	0.00005	0.0107 mg/L	0.00005	0.47%
QC value within limits for Cd 226.502 Recovery = 107.02%						
Co 228.616†	1866.0	0.0545 mg/L	0.00003	0.0545 mg/L	0.00003	0.06%
QC value within limits for Co 228.616 Recovery = 109.02%						
Cr 267.716†	1496.3	0.0105 mg/L	0.00004	0.0105 mg/L	0.00004	0.36%
QC value within limits for Cr 267.716 Recovery = 104.93%						
Cu 324.752†	8392.5	0.0280 mg/L	0.00001	0.0280 mg/L	0.00001	0.02%
QC value within limits for Cu 324.752 Recovery = 111.83%						
Fe 259.939†	7008.9	0.1084 mg/L	0.00074	0.1084 mg/L	0.00074	0.68%
QC value within limits for Fe 259.939 Recovery = 108.42%						
K 766.490†	3624.2	0.9413 mg/L	0.00137	0.9413 mg/L	0.00137	0.15%
QC value within limits for K 766.490 Recovery = 94.13%						
Mg 279.077†	11301.9	1.046 mg/L	0.0076	1.046 mg/L	0.0076	0.73%
QC value within limits for Mg 279.077 Recovery = 104.65%						
Mn 257.610†	7040.3	0.0157 mg/L	0.00025	0.0157 mg/L	0.00025	1.60%
QC value within limits for Mn 257.610 Recovery = 104.43%						
Mo 202.031†	825.6	0.0261 mg/L	0.00013	0.0261 mg/L	0.00013	0.49%
QC value within limits for Mo 202.031 Recovery = 104.24%						
Ni 231.604†	2683.7	0.0425 mg/L	0.00005	0.0425 mg/L	0.00005	0.12%
QC value within limits for Ni 231.604 Recovery = 106.21%						
Na 589.592†	16148.2	1.007 mg/L	0.0009	1.007 mg/L	0.0009	0.09%
QC value within limits for Na 589.592 Recovery = 100.68%						
Pb 220.353†	101.0	0.0105 mg/L	0.00036	0.0105 mg/L	0.00036	3.37%
QC value within limits for Pb 220.353 Recovery = 105.50%						
Sb 206.836†	232.9	0.0631 mg/L	0.00048	0.0631 mg/L	0.00048	0.76%
QC value within limits for Sb 206.836 Recovery = 105.21%						
Se 196.026†	12.6	0.0129 mg/L	0.00046	0.0129 mg/L	0.00046	3.55%
QC value greater than the upper limit for Se 196.026 Recovery = 128.72%						
Sn 189.927†	3801.1	0.5274 mg/L	0.00061	0.5274 mg/L	0.00061	0.12%
QC value within limits for Sn 189.927 Recovery = 105.48%						
Ti 337.279†	29334.6	0.0509 mg/L	0.00046	0.0509 mg/L	0.00046	0.91%
QC value within limits for Ti 337.279 Recovery = 101.82%						
Tl 190.801†	83.7	0.0223 mg/L	0.00020	0.0223 mg/L	0.00020	0.89%
QC value within limits for Tl 190.801 Recovery = 111.54%						
V 292.402†	5564.7	0.0526 mg/L	0.00025	0.0526 mg/L	0.00025	0.48%
QC value within limits for V 292.402 Recovery = 105.27%						
Zn 206.200†	896.2	0.0191 mg/L	0.00013	0.0191 mg/L	0.00013	0.67%
QC value within limits for Zn 206.200 Recovery = 95.41%						
Ca 227.546†	421.3	0.9596 mg/L	0.00257	0.9596 mg/L	0.00257	0.27%
QC value within limits for Ca 227.546 Recovery = 95.96%						
Sr 421.552†	68089.9	0.1034 mg/L	0.00009	0.1034 mg/L	0.00009	0.09%
QC value within limits for Sr 421.552 Recovery = 103.37%						
Al 237.313†	1800.8	0.1989 mg/L	0.00026	0.1989 mg/L	0.00026	0.13%
QC value within limits for Al 237.313 Recovery = 99.47%						

QC Failed. Continue with analysis.

Sequence No.: 10
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2014 3:05:22 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6576108.2	0.9251	mg/L	0.00684				0.74%
Ag 328.068†	-5221.3	0.0044	mg/L	0.00020	0.0044	mg/L	0.00020	4.48%
QC value within limits for Ag 328.068 Recovery = Not calculated								
As 188.979†	37.4	0.0069	mg/L	0.00021	0.0069	mg/L	0.00021	3.06%
QC value within limits for As 188.979 Recovery = Not calculated								

B 249.772†	49375.8	-0.0138 mg/L	0.00108	-0.0138 mg/L	0.00108	7.86%
Ba 233.527†	1179.8	0.0100 mg/L	0.00025	0.0100 mg/L	0.00025	2.53%
Be 313.107†	-725.9	-0.0003 mg/L	0.00003	-0.0003 mg/L	0.00003	10.98%
QC value within limits for Be 313.107 Recovery = Not calculated						
Cd 226.502†	1747.6	-0.0009 mg/L	0.00001	-0.0009 mg/L	0.00001	1.20%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	36.5	0.0011 mg/L	0.00036	0.0011 mg/L	0.00036	33.76%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-3625.1	0.0024 mg/L	0.00020	0.0024 mg/L	0.00020	8.30%
QC value greater than the upper limit for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-1199.9	0.0039 mg/L	0.00007	0.0039 mg/L	0.00007	1.84%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 259.939†	5611631.6	86.81 mg/L	0.271	86.81 mg/L	0.271	0.31%
QC value within limits for Fe 259.939 Recovery = 86.81%						
K 766.490†	-101.8	-0.0264 mg/L	0.00964	-0.0264 mg/L	0.00964	36.46%
Mg 279.077†	2692924.5	249.3 mg/L	0.71	249.3 mg/L	0.71	0.28%
QC value within limits for Mg 279.077 Recovery = 99.74%						
Mn 257.610†	-5171.4	0.0001 mg/L	0.00018	0.0001 mg/L	0.00018	126.54%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-73.0	-0.0023 mg/L	0.00011	-0.0023 mg/L	0.00011	4.81%
Ni 231.604†	-186.2	-0.0029 mg/L	0.00027	-0.0029 mg/L	0.00027	9.10%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Na 589.592†	-44.9	-0.0028 mg/L	0.00049	-0.0028 mg/L	0.00049	17.46%
Pb 220.353†	-249.3	-0.0003 mg/L	0.00037	-0.0003 mg/L	0.00037	108.45%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	89.7	0.0011 mg/L	0.00082	0.0011 mg/L	0.00082	75.01%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-32.4	-0.0015 mg/L	0.00349	-0.0015 mg/L	0.00349	236.39%
QC value within limits for Se 196.026 Recovery = Not calculated						
Sn 189.927†	-77.9	-0.0108 mg/L	0.00012	-0.0108 mg/L	0.00012	1.12%
Ti 337.279†	179.9	0.0003 mg/L	0.00003	0.0003 mg/L	0.00003	9.00%
Tl 190.801†	46.5	-0.0024 mg/L	0.00143	-0.0024 mg/L	0.00143	59.40%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	-515.1	-0.0049 mg/L	0.00006	-0.0049 mg/L	0.00006	1.33%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	323.5	0.0069 mg/L	0.00004	0.0069 mg/L	0.00004	0.60%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	111141.8	256.1 mg/L	1.59	256.1 mg/L	1.59	0.62%
QC value within limits for Ca 227.546 Recovery = 102.44%						
Sr 421.552†	2794.9	0.0042 mg/L	0.00005	0.0042 mg/L	0.00005	1.16%
Al 237.313†	2270714.5	251.5 mg/L	0.58	251.5 mg/L	0.58	0.23%
QC value within limits for Al 237.313 Recovery = 100.62%						
QC Failed. Continue with analysis.						

Sequence No.: 11 **Autosampler Location: 8**
Sample ID: ICSAB **Date Collected: 12/4/2014 3:11:26 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6627105.4	0.9322	mg/L	0.00068				0.07%
Ag 328.068†	55052.1	0.2078	mg/L	0.00026	0.2078	mg/L	0.00026	0.13%
QC value within limits for Ag 328.068 Recovery = 103.91%								
As 188.979†	244.4	0.1030	mg/L	0.00066	0.1030	mg/L	0.00066	0.64%
QC value within limits for As 188.979 Recovery = 102.98%								
B 249.772†	49415.4	-0.0133	mg/L	0.00045	-0.0133	mg/L	0.00045	3.37%
Ba 233.527†	60402.9	0.5097	mg/L	0.00116	0.5097	mg/L	0.00116	0.23%
QC value within limits for Ba 233.527 Recovery = 101.94%								
Be 313.107†	1325234.9	0.4940	mg/L	0.00049	0.4940	mg/L	0.00049	0.10%
QC value within limits for Be 313.107 Recovery = 98.81%								
Cd 226.502†	115960.4	0.9371	mg/L	0.00225	0.9371	mg/L	0.00225	0.24%
QC value within limits for Cd 226.502 Recovery = 93.71%								
Co 228.616†	15425.9	0.4506	mg/L	0.00205	0.4506	mg/L	0.00205	0.45%
QC value within limits for Co 228.616 Recovery = 90.13%								
Cr 267.716†	65723.3	0.4840	mg/L	0.00077	0.4840	mg/L	0.00077	0.16%
QC value within limits for Cr 267.716 Recovery = 96.79%								
Cu 324.752†	146755.8	0.4966	mg/L	0.00267	0.4966	mg/L	0.00267	0.54%

QC value within limits for Cu 324.752 Recovery = 99.32%						
Fe 259.939†	5610278.4	86.79 mg/L	0.145	86.79 mg/L	0.145	0.17%
QC value within limits for Fe 259.939 Recovery = 86.79%						
K 766.490†	-167.6	-0.0435 mg/L	0.00630	-0.0435 mg/L	0.00630	14.47%
Mg 279.077†	2691584.2	249.2 mg/L	0.26	249.2 mg/L	0.26	0.11%
QC value within limits for Mg 279.077 Recovery = 99.69%						
Mn 257.610†	210976.4	0.4806 mg/L	0.00164	0.4806 mg/L	0.00164	0.34%
QC value within limits for Mn 257.610 Recovery = 96.12%						
Mo 202.031†	-71.8	-0.0023 mg/L	0.00004	-0.0023 mg/L	0.00004	1.67%
Ni 231.604†	57272.1	0.9067 mg/L	0.00312	0.9067 mg/L	0.00312	0.34%
QC value within limits for Ni 231.604 Recovery = 90.67%						
Na 589.592†	-55.9	-0.0035 mg/L	0.00325	-0.0035 mg/L	0.00325	93.21%
Pb 220.353†	208.4	0.0473 mg/L	0.00145	0.0473 mg/L	0.00145	3.07%
QC value within limits for Pb 220.353 Recovery = 94.56%						
Sb 206.836†	2310.5	0.6032 mg/L	0.00389	0.6032 mg/L	0.00389	0.64%
QC value within limits for Sb 206.836 Recovery = 100.53%						
Se 196.026†	12.4	0.0440 mg/L	0.00101	0.0440 mg/L	0.00101	2.29%
QC value within limits for Se 196.026 Recovery = 88.06%						
Sn 189.927†	-126.7	-0.0176 mg/L	0.00097	-0.0176 mg/L	0.00097	5.51%
Ti 337.279†	101.1	0.0002 mg/L	0.00001	0.0002 mg/L	0.00001	3.52%
Tl 190.801†	399.0	0.0917 mg/L	0.00010	0.0917 mg/L	0.00010	0.10%
QC value within limits for Tl 190.801 Recovery = 91.66%						
V 292.402†	50443.2	0.4771 mg/L	0.00167	0.4771 mg/L	0.00167	0.35%
QC value within limits for V 292.402 Recovery = 95.43%						
Zn 206.200†	43618.4	0.9287 mg/L	0.00428	0.9287 mg/L	0.00428	0.46%
QC value within limits for Zn 206.200 Recovery = 92.87%						
Ca 227.546†	111717.9	257.4 mg/L	0.74	257.4 mg/L	0.74	0.29%
QC value within limits for Ca 227.546 Recovery = 102.96%						
Sr 421.552†	2647.1	0.0040 mg/L	0.00008	0.0040 mg/L	0.00008	1.89%
Al 237.313†	2265684.1	251.0 mg/L	0.21	251.0 mg/L	0.21	0.08%
QC value within limits for Al 237.313 Recovery = 100.39%						

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/4/2014 3:17:32 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	6975978.2	0.9813 mg/L	0.00066			0.07%
Ag 328.068†	148741.4	0.5033 mg/L	0.00181	0.5033 mg/L	0.00181	0.36%
QC value within limits for Ag 328.068 Recovery = 100.67%						
As 188.979†	2201.9	1.021 mg/L	0.0001	1.021 mg/L	0.0001	0.01%
QC value within limits for As 188.979 Recovery = 102.14%						
B 249.772†	332477.7	2.465 mg/L	0.0114	2.465 mg/L	0.0114	0.46%
QC value within limits for B 249.772 Recovery = 98.59%						
Ba 233.527†	1230592.6	10.38 mg/L	0.014	10.38 mg/L	0.014	0.13%
QC value within limits for Ba 233.527 Recovery = 103.84%						
Be 313.107†	678929.1	0.2531 mg/L	0.00022	0.2531 mg/L	0.00022	0.09%
QC value within limits for Be 313.107 Recovery = 101.24%						
Cd 226.502†	63005.6	0.5165 mg/L	0.00221	0.5165 mg/L	0.00221	0.43%
QC value within limits for Cd 226.502 Recovery = 103.30%						
Co 228.616†	86703.3	2.533 mg/L	0.0085	2.533 mg/L	0.0085	0.34%
QC value within limits for Co 228.616 Recovery = 101.31%						
Cr 267.716†	74232.9	0.5181 mg/L	0.00172	0.5181 mg/L	0.00172	0.33%
QC value within limits for Cr 267.716 Recovery = 103.62%						
Cu 324.752†	372214.5	1.240 mg/L	0.0033	1.240 mg/L	0.0033	0.27%
QC value within limits for Cu 324.752 Recovery = 99.20%						
Fe 259.939†	334156.1	5.169 mg/L	0.0585	5.169 mg/L	0.0585	1.13%
QC value within limits for Fe 259.939 Recovery = 103.38%						
K 766.490†	93191.6	24.20 mg/L	0.161	24.20 mg/L	0.161	0.67%
QC value within limits for K 766.490 Recovery = 96.81%						
Mg 279.077†	278067.4	25.75 mg/L	0.210	25.75 mg/L	0.210	0.82%
QC value within limits for Mg 279.077 Recovery = 102.99%						
Mn 257.610†	345964.3	0.7697 mg/L	0.00279	0.7697 mg/L	0.00279	0.36%
QC value within limits for Mn 257.610 Recovery = 102.63%						
Mo 202.031†	78514.9	2.478 mg/L	0.0077	2.478 mg/L	0.0077	0.31%

QC value within limits for Mo 202.031 Recovery = 99.13%

Ni 231.604†	130176.9	2.061 mg/L	0.0063	2.061 mg/L	0.0063	0.30%

QC value within limits for Ni 231.604 Recovery = 103.04%

Na 589.592†	388305.0	24.21 mg/L	0.127	24.21 mg/L	0.127	0.53%

QC value within limits for Na 589.592 Recovery = 96.84%

Pb 220.353†	4995.9	0.5214 mg/L	0.00099	0.5214 mg/L	0.00099	0.19%

QC value within limits for Pb 220.353 Recovery = 104.28%

Sb 206.836†	18437.4	4.997 mg/L	0.0062	4.997 mg/L	0.0062	0.12%

QC value within limits for Sb 206.836 Recovery = 99.94%

Se 196.026†	503.3	0.5126 mg/L	0.00037	0.5126 mg/L	0.00037	0.07%

QC value within limits for Se 196.026 Recovery = 102.52%

Sn 189.927†	37210.0	5.163 mg/L	0.0156	5.163 mg/L	0.0156	0.30%

QC value within limits for Sn 189.927 Recovery = 103.26%

Ti 337.279†	1440358.0	2.500 mg/L	0.0042	2.500 mg/L	0.0042	0.17%

QC value within limits for Ti 337.279 Recovery = 99.99%

Tl 190.801†	3950.0	1.053 mg/L	0.0009	1.053 mg/L	0.0009	0.08%

QC value within limits for Tl 190.801 Recovery = 105.28%

V 292.402†	264569.1	2.503 mg/L	0.0032	2.503 mg/L	0.0032	0.13%

QC value within limits for V 292.402 Recovery = 100.10%

Zn 206.200†	48358.9	1.030 mg/L	0.0000	1.030 mg/L	0.0000	0.00%

QC value within limits for Zn 206.200 Recovery = 102.97%

Ca 227.546†	10899.5	24.94 mg/L	0.044	24.94 mg/L	0.044	0.18%

QC value within limits for Ca 227.546 Recovery = 99.75%

Sr 421.552†	1565045.4	2.376 mg/L	0.0150	2.376 mg/L	0.0150	0.63%

QC value within limits for Sr 421.552 Recovery = 95.04%

Al 237.313†	89955.6	9.956 mg/L	0.1176	9.956 mg/L	0.1176	1.18%

QC value within limits for Al 237.313 Recovery = 99.56%

All analyte(s) passed QC.

Sequence No.: 13
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/4/2014 3:23:41 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7276233.0	1.024	mg/L	0.0092				0.90%
Ag 328.068†	175.7	0.0006	mg/L	0.00009	0.0006	mg/L	0.00009	15.63%
QC value within limits for Ag 328.068 Recovery = Not calculated								
As 188.979†	1.1	0.0005	mg/L	0.00017	0.0005	mg/L	0.00017	32.07%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	3738.2	0.0279	mg/L	0.00312	0.0279	mg/L	0.00312	11.19%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	504.1	0.0043	mg/L	0.00137	0.0043	mg/L	0.00137	32.18%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	458.4	0.0002	mg/L	0.00006	0.0002	mg/L	0.00006	33.17%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	25.0	0.0002	mg/L	0.00000	0.0002	mg/L	0.00000	2.45%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	42.5	0.0012	mg/L	0.00030	0.0012	mg/L	0.00030	24.08%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	31.5	0.0002	mg/L	0.00015	0.0002	mg/L	0.00015	67.85%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	1061.6	0.0035	mg/L	0.00021	0.0035	mg/L	0.00021	5.88%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	1067.4	0.0165	mg/L	0.00258	0.0165	mg/L	0.00258	15.60%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	-53.5	-0.0139	mg/L	0.00651	-0.0139	mg/L	0.00651	46.84%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	164.5	0.0152	mg/L	0.00569	0.0152	mg/L	0.00569	37.33%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	182.6	0.0004	mg/L	0.00011	0.0004	mg/L	0.00011	27.76%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	39.1	0.0012	mg/L	0.00050	0.0012	mg/L	0.00050	40.47%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	76.9	0.0012	mg/L	0.00047	0.0012	mg/L	0.00047	38.56%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	196.1	0.0122	mg/L	0.00575	0.0122	mg/L	0.00575	47.04%

QC value within limits for Na 589.592 Recovery = Not calculated

Pb 220.353†	-0.7	-0.0001	mg/L	0.00022	-0.0001	mg/L	0.00022 303.18%

QC value within limits for Pb 220.353 Recovery = Not calculated

Sb 206.836†	15.8	0.0043	mg/L	0.00111	0.0043	mg/L	0.00111 25.85%

QC value within limits for Sb 206.836 Recovery = Not calculated

Se 196.026†	0.7	0.0007	mg/L	0.00018	0.0007	mg/L	0.00018 26.44%

QC value within limits for Se 196.026 Recovery = Not calculated

Sn 189.927†	68.8	0.0096	mg/L	0.00121	0.0096	mg/L	0.00121 12.63%

QC value within limits for Sn 189.927 Recovery = Not calculated

Ti 337.279†	706.7	0.0012	mg/L	0.00032	0.0012	mg/L	0.00032 26.36%

QC value within limits for Ti 337.279 Recovery = Not calculated

Tl 190.801†	3.5	0.0009	mg/L	0.00063	0.0009	mg/L	0.00063 66.69%

QC value within limits for Tl 190.801 Recovery = Not calculated

V 292.402†	128.0	0.0012	mg/L	0.00045	0.0012	mg/L	0.00045 37.10%

QC value within limits for V 292.402 Recovery = Not calculated

Zn 206.200†	42.6	0.0009	mg/L	0.00017	0.0009	mg/L	0.00017 18.52%

QC value within limits for Zn 206.200 Recovery = Not calculated

Ca 227.546†	5.2	0.0126	mg/L	0.01652	0.0126	mg/L	0.01652 131.53%

QC value within limits for Ca 227.546 Recovery = Not calculated

Sr 421.552†	1131.9	0.0017	mg/L	0.00016	0.0017	mg/L	0.00016 9.55%

QC value within limits for Sr 421.552 Recovery = Not calculated

Al 237.313†	146.7	0.0163	mg/L	0.00417	0.0163	mg/L	0.00417 25.65%

QC value within limits for Al 237.313 Recovery = Not calculated

All analyte(s) passed QC.

pump tubing disconnected - samples reanalyzed

Sequence No.: 14 12/5/14 DCN **Autosampler Location:** 38
Sample ID: PBW-224310 **Date Collected:** 12/4/2014 3:29:41 PM
Analyst: **Data Type:** Original
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:** 50 mL

Mean Data: PBW-224310

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7440560.5	1.047	mg/L	0.0047				0.45%
Ag 328.068†	112.2	0.0004	mg/L	0.00003				6.82%
As 188.979†	-1.0	-0.0005	mg/L	0.00072				150.23%
B 249.772†	1981.6	0.0148	mg/L	0.00104				7.03%
Ba 233.527†	213.2	0.0018	mg/L	0.00002				1.39%
Be 313.107†	201.7	0.0001	mg/L	0.00001				10.47%
Cd 226.502†	-5.6	0.0000	mg/L	0.00001				29.29%
Co 228.616†	19.1	0.0006	mg/L	0.00018				32.11%
Cr 267.716†	57.8	0.0004	mg/L	0.00003				8.30%
Cu 324.752†	535.7	0.0018	mg/L	0.00033				18.33%
Fe 259.939†	486.6	0.0075	mg/L	0.00042				5.60%
K 766.490†	-106.2	-0.0276	mg/L	0.00048				1.73%
Mg 279.077†	61.8	0.0057	mg/L	0.00015				2.60%
Mn 257.610†	-3.9	0.0000	mg/L	0.00002				204.27%
Mo 202.031†	8.7	0.0003	mg/L	0.00015				53.31%
Ni 231.604†	14.8	0.0002	mg/L	0.00010				43.11%
Na 589.592†	-20.8	-0.0013	mg/L	0.00079				60.72%
Pb 220.353†	-1.0	-0.0001	mg/L	0.00033				326.23%
Sb 206.836†	6.4	0.0017	mg/L	0.00045				26.13%
Se 196.026†	3.0	0.0031	mg/L	0.00055				17.92%
Sn 189.927†	55.1	0.0076	mg/L	0.00042				5.48%
Ti 337.279†	291.4	0.0005	mg/L	0.00002				4.83%
Tl 190.801†	0.5	0.0001	mg/L	0.00096				723.16%
V 292.402†	47.8	0.0005	mg/L	0.00013				27.71%
Zn 206.200†	161.1	0.0034	mg/L	0.00006				1.75%
Ca 227.546†	5.4	0.0125	mg/L	0.00590				47.02%
Sr 421.552†	18.2	0.0000	mg/L	0.00003				101.34%
Al 237.313†	72.4	0.0080	mg/L	0.00001				0.07%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 15 **Autosampler Location:** 39
Sample ID: LCSW-224310 **Date Collected:** 12/4/2014 3:35:40 PM
Analyst: **Data Type:** Original
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:** 50 mL

Mean Data: LCSW-224310

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7294325.0	1.026	mg/L	0.0053				0.52%
Ag 328.068†	14397.5	0.0489	mg/L	0.00047				0.95%
As 188.979†	83.4	0.0386	mg/L	0.00038				0.99%
B 249.772†	124092.8	0.9239	mg/L	0.00743				0.80%
Ba 233.527†	242403.1	2.046	mg/L	0.0196				0.96%
Be 313.107†	127803.7	0.0476	mg/L	0.00055				1.15%
Cd 226.502†	5949.0	0.0487	mg/L	0.00022				0.45%
Co 228.616†	17277.7	0.5047	mg/L	0.00472				0.93%
Cr 267.716†	28986.2	0.2015	mg/L	0.00197				0.98%
Cu 324.752†	80992.9	0.2698	mg/L	0.00405				1.50%
Fe 259.939†	66116.6	1.023	mg/L	0.0113				1.11%
K 766.490†	72773.8	18.90	mg/L	0.168				0.89%
Mg 279.077†	20992.6	1.944	mg/L	0.0185				0.95%
Mn 257.610†	224297.9	0.4987	mg/L	0.00522				1.05%
Mo 202.031†	15502.0	0.4893	mg/L	0.00527				1.08%
Ni 231.604†	32018.5	0.5069	mg/L	0.00336				0.66%
Na 589.592†	307566.5	19.18	mg/L	0.076				0.39%
Pb 220.353†	4810.5	0.5012	mg/L	0.00304				0.61%
Sb 206.836†	1732.9	0.4696	mg/L	0.00287				0.61%
Se 196.026†	967.6	0.9825	mg/L	0.00590				0.60%
Sn 189.927†	37602.3	5.217	mg/L	0.0412				0.79%
Ti 337.279†	284029.3	0.4929	mg/L	0.00632				1.28%
Tl 190.801†	7344.1	1.958	mg/L	0.0070				0.36%
V 292.402†	52318.6	0.4949	mg/L	0.00437				0.88%
Zn 206.200†	23826.7	0.5073	mg/L	0.00253				0.50%
Ca 227.546†	851.1	1.977	mg/L	0.0007				0.04%
Sr 421.552†	-7.7	0.0000	mg/L	0.00001				44.32%
Al 237.313†	16880.1	1.870	mg/L	0.0272				1.45%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 16
Sample ID: R1409445-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 40
Date Collected: 12/4/2014 3:41:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409445-001

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7041092.4	0.9905	mg/L	0.00203				0.21%
Ag 328.068†	-191.5	-0.0004	mg/L	0.00003				7.96%
As 188.979†	8.4	0.0035	mg/L	0.00027				7.58%
B 249.772†	18707.4	0.1355	mg/L	0.00059				0.44%
Ba 233.527†	10466.6	0.0883	mg/L	0.00044				0.50%
Be 313.107†	-269.3	-0.0001	mg/L	0.00003				28.78%
Cd 226.502†	19.9	0.0000	mg/L	0.00002				232.99%
Co 228.616†	18.8	0.0005	mg/L	0.00005				9.10%
Cr 267.716†	63.4	0.0029	mg/L	0.00001				0.52%
Cu 324.752†	4827.6	0.0162	mg/L	0.00009				0.57%
Fe 259.939†	56945.6	0.8809	mg/L	0.00062				0.07%
K 766.490†	10785.2	2.801	mg/L	0.0040				0.14%
Mg 279.077†	276450.4	25.60	mg/L	0.017				0.07%
Mn 257.610†	103817.6	0.2309	mg/L	0.00038				0.16%
Mo 202.031†	38.9	0.0012	mg/L	0.00002				1.44%
Ni 231.604†	3671.4	0.0581	mg/L	0.00044				0.76%
Na 589.592†	323069.9	20.14	mg/L	0.024				0.12%
Pb 220.353†	64.2	0.0085	mg/L	0.00013				1.52%
Sb 206.836†	6.2	0.0010	mg/L	0.00055				57.10%
Se 196.026†	4.0	0.0045	mg/L	0.00061				13.50%
Sn 189.927†	-128.5	-0.0178	mg/L	0.00015				0.84%
Ti 337.279†	11419.3	0.0198	mg/L	0.00109				5.48%
Tl 190.801†	-2.7	-0.0013	mg/L	0.00117				91.30%
V 292.402†	160.6	0.0015	mg/L	0.00002				1.04%
Zn 206.200†	678.8	0.0145	mg/L	0.00008				0.59%
Ca 227.546†	48424.4	109.7	mg/L	0.50				0.45%

Sr 421.552†	281468.0	0.4273 mg/L	0.00056	0.13%
Al 237.313†	71654.6	7.881 mg/L	0.0175	0.22%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 17
Sample ID: R1409445-001L
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 41
Date Collected: 12/4/2014 3:47:57 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409445-001L

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7172223.2	1.009	mg/L	0.0025				0.24%
Ag 328.068†	19.5	0.0001	mg/L	0.00032				285.55%
As 188.979†	-0.3	-0.0002	mg/L	0.00027				123.93%
B 249.772†	4410.1	0.0321	mg/L	0.00084				2.60%
Ba 233.527†	2165.7	0.0183	mg/L	0.00006				0.31%
Be 313.107†	-177.1	-0.0001	mg/L	0.00000				6.79%
Cd 226.502†	5.8	0.0000	mg/L	0.00005				298.39%
Co 228.616†	3.1	0.0001	mg/L	0.00016				176.77%
Cr 267.716†	12.9	0.0006	mg/L	0.00003				4.24%
Cu 324.752†	1068.4	0.0036	mg/L	0.00010				2.75%
Fe 259.939†	11817.3	0.1828	mg/L	0.00055				0.30%
K 766.490†	1889.7	0.4908	mg/L	0.00945				1.93%
Mg 279.077†	57306.9	5.306	mg/L	0.0329				0.62%
Mn 257.610†	21022.2	0.0468	mg/L	0.00025				0.53%
Mo 202.031†	10.3	0.0003	mg/L	0.00014				44.16%
Ni 231.604†	742.1	0.0117	mg/L	0.00008				0.68%
Na 589.592†	63188.4	3.940	mg/L	0.0052				0.13%
Pb 220.353†	8.5	0.0012	mg/L	0.00054				43.57%
Sb 206.836†	0.9	0.0001	mg/L	0.00034				345.16%
Se 196.026†	2.4	0.0025	mg/L	0.00060				24.04%
Sn 189.927†	-79.0	-0.0110	mg/L	0.00016				1.45%
Ti 337.279†	2909.2	0.0050	mg/L	0.00069				13.57%
Tl 190.801†	-3.9	-0.0012	mg/L	0.00031				27.23%
V 292.402†	28.6	0.0003	mg/L	0.00009				34.19%
Zn 206.200†	139.4	0.0030	mg/L	0.00001				0.29%
Ca 227.546†	9400.9	21.30	mg/L	0.032				0.15%
Sr 421.552†	55513.0	0.0843	mg/L	0.00013				0.15%
Al 237.313†	14115.2	1.553	mg/L	0.0015				0.10%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 18
Sample ID: PBW-224313
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 42
Date Collected: 12/4/2014 3:53:55 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: PBW-224313

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7432042.0	1.045	mg/L	0.0008				0.07%
Ag 328.068†	51.0	0.0002	mg/L	0.00001				6.29%
As 188.979†	0.6	0.0003	mg/L	0.00027				97.97%
B 249.772†	670.5	0.0049	mg/L	0.00020				4.06%
Ba 233.527†	28.7	0.0002	mg/L	0.00003				11.08%
Be 313.107†	-61.6	0.0000	mg/L	0.00004				188.88%
Cd 226.502†	-5.4	0.0000	mg/L	0.00001				26.56%
Co 228.616†	-4.6	-0.0001	mg/L	0.00003				25.06%
Cr 267.716†	68.0	0.0005	mg/L	0.00002				3.44%
Cu 324.752†	194.3	0.0006	mg/L	0.00011				16.84%
Fe 259.939†	1122.8	0.0174	mg/L	0.00055				3.18%
K 766.490†	-95.3	-0.0247	mg/L	0.01410				56.99%
Mg 279.077†	104.0	0.0096	mg/L	0.00010				1.07%
Mn 257.610†	-79.7	-0.0002	mg/L	0.00002				9.16%
Mo 202.031†	-3.3	-0.0001	mg/L	0.00001				11.82%
Ni 231.604†	-12.6	-0.0002	mg/L	0.00014				69.92%

Na 589.592†	-87.9	-0.0055	mg/L	0.00097	17.71%
Pb 220.353†	1.2	0.0001	mg/L	0.00047	391.59%
Sb 206.836†	0.7	0.0002	mg/L	0.00009	43.73%
Se 196.026†	2.3	0.0023	mg/L	0.00071	30.66%
Sn 189.927†	7.8	0.0011	mg/L	0.00009	8.41%
Ti 337.279†	100.2	0.0002	mg/L	0.00003	15.04%
Tl 190.801†	-3.4	-0.0009	mg/L	0.00033	37.27%
V 292.402†	11.8	0.0001	mg/L	0.00015	135.12%
Zn 206.200†	100.9	0.0021	mg/L	0.00004	2.08%
Ca 227.546†	1.3	0.0037	mg/L	0.01342	365.75%
Sr 421.552†	5.7	0.0000	mg/L	0.00002	215.36%
Al 237.313†	12.3	0.0014	mg/L	0.00061	43.99%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 19
Sample ID: LCSW-224313
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 43
Date Collected: 12/4/2014 3:59:55 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: LCSW-224313

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7289724.3	1.025	mg/L	0.0053				0.52%
Ag 328.068†	14624.8	0.0496	mg/L	0.00027				0.55%
As 188.979†	81.1	0.0376	mg/L	0.00074				1.97%
B 249.772†	124910.3	0.9300	mg/L	0.00328				0.35%
Ba 233.527†	245244.5	2.070	mg/L	0.0179				0.87%
Be 313.107†	129064.7	0.0481	mg/L	0.00035				0.73%
Cd 226.502†	5945.1	0.0486	mg/L	0.00016				0.32%
Co 228.616†	17480.7	0.5107	mg/L	0.00475				0.93%
Cr 267.716†	29374.9	0.2042	mg/L	0.00184				0.90%
Cu 324.752†	80917.1	0.2695	mg/L	0.00230				0.85%
Fe 259.939†	66518.3	1.029	mg/L	0.0086				0.83%
K 766.490†	73235.7	19.02	mg/L	0.088				0.46%
Mg 279.077†	21186.7	1.962	mg/L	0.0197				1.00%
Mn 257.610†	226890.9	0.5045	mg/L	0.00444				0.88%
Mo 202.031†	15603.5	0.4925	mg/L	0.00470				0.95%
Ni 231.604†	32351.4	0.5122	mg/L	0.00422				0.82%
Na 589.592†	309986.4	19.33	mg/L	0.126				0.65%
Pb 220.353†	4808.2	0.5010	mg/L	0.00155				0.31%
Sb 206.836†	1727.5	0.4681	mg/L	0.00047				0.10%
Se 196.026†	954.1	0.9688	mg/L	0.00028				0.03%
Sn 189.927†	37958.1	5.267	mg/L	0.0336				0.64%
Ti 337.279†	287204.6	0.4984	mg/L	0.00388				0.78%
Tl 190.801†	7352.5	1.961	mg/L	0.0067				0.34%
V 292.402†	52892.5	0.5003	mg/L	0.00535				1.07%
Zn 206.200†	23997.5	0.5110	mg/L	0.00343				0.67%
Ca 227.546†	854.4	1.985	mg/L	0.0112				0.56%
Sr 421.552†	-34.3	-0.0001	mg/L	0.00003				52.90%
Al 237.313†	17082.3	1.893	mg/L	0.0149				0.79%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 20
Sample ID: R1409320-014
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 44
Date Collected: 12/4/2014 4:06:06 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409320-014

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7553909.6	1.063	mg/L	0.0198				1.87%
Ag 328.068†	-15.5	0.0002	mg/L	0.00023				109.71%
As 188.979†	-1.4	-0.0007	mg/L	0.00051				78.26%
B 249.772†	1814.4	0.0092	mg/L	0.00157				16.96%
Ba 233.527†	113.4	0.0010	mg/L	0.00002				2.23%
Be 313.107†	168.5	0.0001	mg/L	0.00003				48.77%

Cd 226.502†	9.7	-0.0001	mg/L	0.00001	12.44%
Co 228.616†	11.1	0.0003	mg/L	0.00007	21.28%
Cr 267.716†	91.5	0.0007	mg/L	0.00004	6.39%
Cu 324.752†	-12.3	0.0001	mg/L	0.00018	337.30%
Fe 259.939†	67696.0	1.047	mg/L	0.0132	1.26%
K 766.490†	54.6	0.0142	mg/L	0.00135	9.50%
Mg 279.077†	658.9	0.0610	mg/L	0.00297	4.86%
Mn 257.610†	8937.6	0.0200	mg/L	0.00016	0.80%
Mo 202.031†	5.6	0.0002	mg/L	0.00004	24.15%
Ni 231.604†	183.3	0.0029	mg/L	0.00006	2.00%
Na 589.592†	482.4	0.0301	mg/L	0.00703	23.38%
Pb 220.353†	-2.9	-0.0003	mg/L	0.00001	1.89%
Sb 206.836†	0.1	0.0000	mg/L	0.00028	878.83%
Se 196.026†	3.0	0.0033	mg/L	0.00150	44.90%
Sn 189.927†	16.5	0.0023	mg/L	0.00067	29.25%
Ti 337.279†	156.2	0.0003	mg/L	0.00001	3.14%
Tl 190.801†	-2.6	-0.0006	mg/L	0.00050	76.82%
V 292.402†	12.3	0.0001	mg/L	0.00000	0.38%
Zn 206.200†	25.4	0.0005	mg/L	0.00001	2.63%
Ca 227.546†	114.7	0.3066	mg/L	0.00892	2.91%
Sr 421.552†	737.5	0.0011	mg/L	0.00002	1.89%
Al 237.313†	5.7	0.0020	mg/L	0.00078	39.72%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 21
Sample ID: R1409320-014L
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 45
Date Collected: 12/4/2014 4:12:11 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409320-014L

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7335069.8	1.032	mg/L	0.0034				0.33%
Ag 328.068†	45.6	0.0002	mg/L	0.00009				43.76%
As 188.979†	-1.5	-0.0007	mg/L	0.00011				15.96%
B 249.772†	754.6	0.0048	mg/L	0.00081				17.10%
Ba 233.527†	31.2	0.0003	mg/L	0.00006				22.73%
Be 313.107†	10.1	0.0000	mg/L	0.00002				491.99%
Cd 226.502†	-1.5	0.0000	mg/L	0.00003				58.81%
Co 228.616†	0.3	0.0000	mg/L	0.00002				156.87%
Cr 267.716†	26.7	0.0002	mg/L	0.00012				60.99%
Cu 324.752†	-68.5	-0.0002	mg/L	0.00003				14.02%
Fe 259.939†	13979.2	0.2162	mg/L	0.00131				0.61%
K 766.490†	-69.5	-0.0180	mg/L	0.00574				31.83%
Mg 279.077†	127.1	0.0118	mg/L	0.00510				43.32%
Mn 257.610†	1466.3	0.0033	mg/L	0.00063				19.18%
Mo 202.031†	-2.7	-0.0001	mg/L	0.00001				9.96%
Ni 231.604†	17.8	0.0003	mg/L	0.00009				31.64%
Na 589.592†	0.5	0.0000	mg/L	0.00338				>999.9%
Pb 220.353†	-0.8	-0.0001	mg/L	0.00051				557.82%
Sb 206.836†	1.2	0.0003	mg/L	0.00022				67.38%
Se 196.026†	1.6	0.0017	mg/L	0.00114				69.02%
Sn 189.927†	7.5	0.0010	mg/L	0.00022				20.92%
Ti 337.279†	32.1	0.0001	mg/L	0.00007				117.08%
Tl 190.801†	1.5	0.0004	mg/L	0.00063				151.65%
V 292.402†	26.3	0.0002	mg/L	0.00016				63.21%
Zn 206.200†	-7.0	-0.0001	mg/L	0.00026				172.57%
Ca 227.546†	16.4	0.0467	mg/L	0.00987				21.14%
Sr 421.552†	99.5	0.0002	mg/L	0.00005				36.26%
Al 237.313†	32.7	0.0039	mg/L	0.00654				167.11%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 22
Sample ID: R1409373-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 46
Date Collected: 12/4/2014 4:18:10 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409373-001

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	21028695.2	2.958	mg/L	0.0069				0.23%
Ag 328.068†	194.3	0.0007	mg/L	0.00001				0.79%
As 188.979†	-6.4	-0.0030	mg/L	0.00016				5.42%
B 249.772†	-219.8	-0.0017	mg/L	0.00008				4.61%
Ba 233.527†	317.4	0.0027	mg/L	0.00001				0.24%
Be 313.107†	4298.7	0.0016	mg/L	0.00001				0.32%
Cd 226.502†	113.0	0.0009	mg/L	0.00000				0.02%
Co 228.616†	22.6	0.0007	mg/L	0.00007				11.15%
Cr 267.716†	293.9	0.0021	mg/L	0.00001				0.35%
Cu 324.752†	-2648.8	-0.0088	mg/L	0.00006				0.71%
Fe 259.939†	1121.6	0.0174	mg/L	0.00014				0.80%
K 766.490†	-783.4	-0.2035	mg/L	0.00010				0.05%
Mg 279.077†	2165.1	0.2005	mg/L	0.00072				0.36%
Mn 257.610†	439.3	0.0010	mg/L	0.00000				0.34%
Mo 202.031†	-6.3	-0.0002	mg/L	0.00003				15.01%
Ni 231.604†	171.8	0.0027	mg/L	0.00003				1.15%
Na 589.592†	-805.4	-0.0502	mg/L	0.00078				1.56%
Pb 220.353†	29.5	0.0031	mg/L	0.00029				9.28%
Sb 206.836†	-28.8	-0.0078	mg/L	0.00009				1.19%
Se 196.026†	0.9	0.0009	mg/L	0.00042				45.38%
Sn 189.927†	-35.8	-0.0050	mg/L	0.00002				0.43%
Ti 337.279†	13.9	0.0000	mg/L	0.00002				91.47%
Tl 190.801†	-13.8	-0.0037	mg/L	0.00009				2.56%
V 292.402†	-13.1	-0.0001	mg/L	0.00002				15.16%
Zn 206.200†	-111.9	-0.0024	mg/L	0.00007				2.81%
Ca 227.546†	47.1	0.1075	mg/L	0.00199				1.85%
Sr 421.552†	-166.7	-0.0003	mg/L	0.00004				15.66%
Al 237.313†	-109.6	-0.0122	mg/L	0.00025				2.08%

tubing disconnected 12/5/14 DCB

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 23
Sample ID: R1409373-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 47
Date Collected: 12/4/2014 4:24:20 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409373-002

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	21000407.6	2.954	mg/L	0.0041				0.14%
Ag 328.068†	218.2	0.0007	mg/L	0.00005				6.79%
As 188.979†	-7.0	-0.0032	mg/L	0.00002				0.63%
B 249.772†	-275.7	-0.0021	mg/L	0.00001				0.58%
Ba 233.527†	319.6	0.0027	mg/L	0.00000				0.10%
Be 313.107†	4299.2	0.0016	mg/L	0.00000				0.17%
Cd 226.502†	112.9	0.0009	mg/L	0.00002				2.23%
Co 228.616†	22.5	0.0007	mg/L	0.00001				1.03%
Cr 267.716†	294.0	0.0021	mg/L	0.00000				0.11%
Cu 324.752†	-2678.0	-0.0089	mg/L	0.00000				0.02%
Fe 259.939†	1117.8	0.0173	mg/L	0.00001				0.04%
K 766.490†	-785.0	-0.2039	mg/L	0.00326				1.60%
Mg 279.077†	2170.8	0.2010	mg/L	0.00013				0.07%
Mn 257.610†	438.6	0.0010	mg/L	0.00000				0.13%
Mo 202.031†	-6.6	-0.0002	mg/L	0.00004				17.37%
Ni 231.604†	173.9	0.0028	mg/L	0.00002				0.84%
Na 589.592†	-806.3	-0.0503	mg/L	0.00075				1.49%
Pb 220.353†	28.6	0.0030	mg/L	0.00005				1.56%
Sb 206.836†	-28.9	-0.0078	mg/L	0.00008				0.99%
Se 196.026†	1.0	0.0011	mg/L	0.00053				49.48%
Sn 189.927†	-37.0	-0.0051	mg/L	0.00010				1.87%
Ti 337.279†	20.8	0.0000	mg/L	0.00001				27.93%
Tl 190.801†	-14.0	-0.0037	mg/L	0.00004				1.15%
V 292.402†	-13.3	-0.0001	mg/L	0.00000				2.53%
Zn 206.200†	-113.8	-0.0024	mg/L	0.00000				0.18%
Ca 227.546†	46.7	0.1065	mg/L	0.00108				1.01%
Sr 421.552†	-161.2	-0.0002	mg/L	0.00000				1.85%

Al 237.313† -109.2 -0.0122 mg/L 0.00020 1.63%
Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 24
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/4/2014 4:30:28 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	17852423.7	2.511	mg/L	0.5479				21.82%
Saturated within auto integration window (code 4)								
Ag 328.068†	195.2	0.0007	mg/L	0.00011	0.0007	mg/L	0.00011	16.40%
QC value less than the lower limit for Ag 328.068				Recovery = 0.13%				
As 188.979†	-5.9	-0.0027	mg/L	0.00018	-0.0027	mg/L	0.00018	6.76%
QC value less than the lower limit for As 188.979				Recovery = -0.27%				
B 249.772†	-273.3	-0.0021	mg/L	0.00028	-0.0021	mg/L	0.00028	13.32%
QC value less than the lower limit for B 249.772				Recovery = -0.08%				
Ba 233.527†	282.9	0.0024	mg/L	0.00037	0.0024	mg/L	0.00037	15.54%
QC value less than the lower limit for Ba 233.527				Recovery = 0.02%				
Be 313.107†	4101.6	0.0015	mg/L	0.00010	0.0015	mg/L	0.00010	6.42%
QC value less than the lower limit for Be 313.107				Recovery = 0.61%				
Cd 226.502†	100.7	0.0008	mg/L	0.00010	0.0008	mg/L	0.00010	12.36%
QC value less than the lower limit for Cd 226.502				Recovery = 0.16%				
Co 228.616†	20.2	0.0006	mg/L	0.00015	0.0006	mg/L	0.00015	25.76%
QC value less than the lower limit for Co 228.616				Recovery = 0.02%				
Cr 267.716†	263.5	0.0018	mg/L	0.00030	0.0018	mg/L	0.00030	16.19%
QC value less than the lower limit for Cr 267.716				Recovery = 0.37%				
Cu 324.752†	-2557.7	-0.0085	mg/L	0.00049	-0.0085	mg/L	0.00049	5.76%
QC value less than the lower limit for Cu 324.752				Recovery = -0.68%				
Fe 259.939†	990.5	0.0153	mg/L	0.00245	0.0153	mg/L	0.00245	16.00%
QC value less than the lower limit for Fe 259.939				Recovery = 0.31%				
K 766.490†	-709.0	-0.1841	mg/L	0.02717	-0.1841	mg/L	0.02717	14.75%
QC value less than the lower limit for K 766.490				Recovery = -0.74%				
Mg 279.077†	1942.8	0.1799	mg/L	0.02741	0.1799	mg/L	0.02741	15.24%
QC value less than the lower limit for Mg 279.077				Recovery = 0.72%				
Mn 257.610†	369.3	0.0008	mg/L	0.00020	0.0008	mg/L	0.00020	24.43%
QC value less than the lower limit for Mn 257.610				Recovery = 0.11%				
Mo 202.031†	-6.8	-0.0002	mg/L	0.00001	-0.0002	mg/L	0.00001	5.66%
QC value less than the lower limit for Mo 202.031				Recovery = -0.01%				
Ni 231.604†	156.0	0.0025	mg/L	0.00040	0.0025	mg/L	0.00040	16.01%
QC value less than the lower limit for Ni 231.604				Recovery = 0.12%				
Na 589.592†	-748.9	-0.0467	mg/L	0.00303	-0.0467	mg/L	0.00303	6.50%
QC value less than the lower limit for Na 589.592				Recovery = -0.19%				
Pb 220.353†	28.4	0.0030	mg/L	0.00017	0.0030	mg/L	0.00017	5.59%
QC value less than the lower limit for Pb 220.353				Recovery = 0.59%				
Sb 206.836†	-25.4	-0.0069	mg/L	0.00126	-0.0069	mg/L	0.00126	18.27%
QC value less than the lower limit for Sb 206.836				Recovery = -0.14%				
Se 196.026†	0.9	0.0009	mg/L	0.00076	0.0009	mg/L	0.00076	82.55%
QC value less than the lower limit for Se 196.026				Recovery = 0.18%				
Sn 189.927†	-34.5	-0.0048	mg/L	0.00056	-0.0048	mg/L	0.00056	11.71%
QC value less than the lower limit for Sn 189.927				Recovery = -0.10%				
Ti 337.279†	34.0	0.0001	mg/L	0.00006	0.0001	mg/L	0.00006	93.85%
QC value less than the lower limit for Ti 337.279				Recovery = 0.00%				
Tl 190.801†	-13.3	-0.0035	mg/L	0.00031	-0.0035	mg/L	0.00031	8.81%
QC value less than the lower limit for Tl 190.801				Recovery = -0.35%				
V 292.402†	-11.6	-0.0001	mg/L	0.00009	-0.0001	mg/L	0.00009	80.54%
QC value less than the lower limit for V 292.402				Recovery = -0.00%				
Zn 206.200†	-111.4	-0.0024	mg/L	0.00001	-0.0024	mg/L	0.00001	0.41%
QC value less than the lower limit for Zn 206.200				Recovery = -0.24%				
Ca 227.546†	44.5	0.1014	mg/L	0.01302	0.1014	mg/L	0.01302	12.84%
QC value less than the lower limit for Ca 227.546				Recovery = 0.41%				
Sr 421.552†	-162.3	-0.0002	mg/L	0.00002	-0.0002	mg/L	0.00002	9.08%
QC value less than the lower limit for Sr 421.552				Recovery = -0.01%				
Al 237.313†	-99.3	-0.0111	mg/L	0.00086	-0.0111	mg/L	0.00086	7.73%
QC value less than the lower limit for Al 237.313				Recovery = -0.11%				

QC Failed. Continue with analysis.

Sequence No.: 25
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:
User canceled analysis.

Autosampler Location: 1
Date Collected: 12/4/2014 4:36:31 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Analysis Begun

Start Time: 12/4/2014 4:41:21 PM
Logged In Analyst: alrce.metals03
Spectrometer Model: Optima 5300 DV, S/N 077N6051602
Plasma On Time: 12/4/2014 7:17:07 AM
Technique: ICP Continuous
Autosampler Model: AS-93plus

Sample Information File: C:\pe\Optima5300\Sample Information\ROUTINE1.sif
Batch ID: r
Results Data Set: 3Dec04a
Results Library: C:\pe\Optima5300\Results\Dec14.mdb

Sequence No.: 1
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:
User canceled analysis.

Autosampler Location: 3
Date Collected: 12/4/2014 4:41:21 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Analysis Begun

Start Time: 12/4/2014 4:41:50 PM
Logged In Analyst: alrce.metals03
Spectrometer Model: Optima 5300 DV, S/N 077N6051602
Plasma On Time: 12/4/2014 7:17:07 AM
Technique: ICP Continuous
Autosampler Model: AS-93plus

Sample Information File: C:\pe\Optima5300\Sample Information\ROUTINE1.sif
Batch ID: r
Results Data Set: 3Dec04a
Results Library: C:\pe\Optima5300\Results\Dec14.mdb

run restarted at previous ccv/ccb
12/5/14 DCB

Sequence No.: 6
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/4/2014 4:41:50 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7067619.0	0.9942	mg/L	0.00237				0.24%
Ag 328.068†	146136.4	0.4945	mg/L	0.00061	0.4945	mg/L	0.00061	0.12%
QC value within limits for Ag 328.068 Recovery = 98.90%								
As 188.979†	2138.0	0.9917	mg/L	0.00961	0.9917	mg/L	0.00961	0.97%
QC value within limits for As 188.979 Recovery = 99.17%								
B 249.772†	324528.6	2.406	mg/L	0.0213	2.406	mg/L	0.0213	0.89%
QC value within limits for B 249.772 Recovery = 96.25%								
Ba 233.527†	1218329.7	10.28	mg/L	0.026	10.28	mg/L	0.026	0.25%
QC value within limits for Ba 233.527 Recovery = 102.81%								
Be 313.107†	668963.0	0.2494	mg/L	0.00015	0.2494	mg/L	0.00015	0.06%
QC value within limits for Be 313.107 Recovery = 99.75%								
Cd 226.502†	61102.9	0.5009	mg/L	0.00108	0.5009	mg/L	0.00108	0.22%
QC value within limits for Cd 226.502 Recovery = 100.19%								
Co 228.616†	84400.8	2.466	mg/L	0.0059	2.466	mg/L	0.0059	0.24%
QC value within limits for Co 228.616 Recovery = 98.62%								
Cr 267.716†	72185.0	0.5038	mg/L	0.00139	0.5038	mg/L	0.00139	0.28%
QC value within limits for Cr 267.716 Recovery = 100.76%								
Cu 324.752†	365740.9	1.218	mg/L	0.0018	1.218	mg/L	0.0018	0.15%
QC value within limits for Cu 324.752 Recovery = 97.47%								
Fe 259.939†	320972.2	4.965	mg/L	0.0138	4.965	mg/L	0.0138	0.28%
QC value within limits for Fe 259.939 Recovery = 99.30%								
K 766.490†	93294.5	24.23	mg/L	0.531	24.23	mg/L	0.531	2.19%
QC value within limits for K 766.490 Recovery = 96.92%								
Mg 279.077†	268750.7	24.88	mg/L	0.041	24.88	mg/L	0.041	0.16%
QC value within limits for Mg 279.077 Recovery = 99.54%								
Mn 257.610†	336944.9	0.7497	mg/L	0.00200	0.7497	mg/L	0.00200	0.27%
QC value within limits for Mn 257.610 Recovery = 99.95%								
Mo 202.031†	76593.0	2.418	mg/L	0.0087	2.418	mg/L	0.0087	0.36%

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QC value within limits for Mo 202.031 Recovery = 96.70%						
Ni 231.604†	126758.4	2.007 mg/L	0.0065	2.007 mg/L	0.0065	0.32%
QC value within limits for Ni 231.604 Recovery = 100.34%						
Na 589.592†	389156.7	24.26 mg/L	0.568	24.26 mg/L	0.568	2.34%
QC value within limits for Na 589.592 Recovery = 97.05%						
Pb 220.353†	4858.0	0.5070 mg/L	0.00307	0.5070 mg/L	0.00307	0.60%
QC value within limits for Pb 220.353 Recovery = 101.40%						
Sb 206.836†	18001.8	4.879 mg/L	0.0255	4.879 mg/L	0.0255	0.52%
QC value within limits for Sb 206.836 Recovery = 97.58%						
Se 196.026†	489.6	0.4987 mg/L	0.00514	0.4987 mg/L	0.00514	1.03%
QC value within limits for Se 196.026 Recovery = 99.74%						
Sn 189.927†	35983.4	4.993 mg/L	0.0260	4.993 mg/L	0.0260	0.52%
QC value within limits for Sn 189.927 Recovery = 99.85%						
Ti 337.279†	1434283.1	2.489 mg/L	0.0053	2.489 mg/L	0.0053	0.21%
QC value within limits for Ti 337.279 Recovery = 99.57%						
Tl 190.801†	3839.3	1.023 mg/L	0.0051	1.023 mg/L	0.0051	0.50%
QC value within limits for Tl 190.801 Recovery = 102.34%						
V 292.402†	260086.5	2.460 mg/L	0.0005	2.460 mg/L	0.0005	0.02%
QC value within limits for V 292.402 Recovery = 98.41%						
Zn 206.200†	46494.7	0.9900 mg/L	0.00736	0.9900 mg/L	0.00736	0.74%
QC value within limits for Zn 206.200 Recovery = 99.00%						
Ca 227.546†	10693.6	24.46 mg/L	0.103	24.46 mg/L	0.103	0.42%
QC value within limits for Ca 227.546 Recovery = 97.84%						
Sr 421.552†	1566863.8	2.379 mg/L	0.0535	2.379 mg/L	0.0535	2.25%
QC value within limits for Sr 421.552 Recovery = 95.15%						
Al 237.313†	86624.0	9.587 mg/L	0.0273	9.587 mg/L	0.0273	0.28%
QC value within limits for Al 237.313 Recovery = 95.87%						

All analyte(s) passed QC.

Sequence No.: 7
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/4/2014 4:47:56 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7256093.6	1.021	mg/L	0.0019				0.19%
Ag 328.068†	91.2	0.0003	mg/L	0.00025	0.0003	mg/L	0.00025	81.87%
QC value within limits for Ag 328.068 Recovery = Not calculated								
As 188.979†	-0.2	-0.0001	mg/L	0.00063	-0.0001	mg/L	0.00063	571.49%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	2997.6	0.0224	mg/L	0.00291	0.0224	mg/L	0.00291	13.02%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	371.1	0.0031	mg/L	0.00085	0.0031	mg/L	0.00085	27.09%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	341.6	0.0001	mg/L	0.00003	0.0001	mg/L	0.00003	24.53%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	21.3	0.0002	mg/L	0.00004	0.0002	mg/L	0.00004	23.45%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	33.6	0.0010	mg/L	0.00027	0.0010	mg/L	0.00027	27.90%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	23.7	0.0002	mg/L	0.00004	0.0002	mg/L	0.00004	25.68%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	676.2	0.0023	mg/L	0.00038	0.0023	mg/L	0.00038	16.83%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	434.9	0.0067	mg/L	0.00023	0.0067	mg/L	0.00023	3.39%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	121.5	0.0316	mg/L	0.01176	0.0316	mg/L	0.01176	37.27%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	30.2	0.0028	mg/L	0.00059	0.0028	mg/L	0.00059	21.19%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	259.1	0.0006	mg/L	0.00003	0.0006	mg/L	0.00003	5.34%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	35.7	0.0011	mg/L	0.00031	0.0011	mg/L	0.00031	27.82%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	86.6	0.0014	mg/L	0.00017	0.0014	mg/L	0.00017	12.38%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	325.8	0.0203	mg/L	0.00175	0.0203	mg/L	0.00175	8.63%

QC value within limits for Na 589.592 Recovery = Not calculated

Pb 220.353†	2.1	0.0002 mg/L	0.00003	0.0002 mg/L	0.00003	13.16%

QC value within limits for Pb 220.353 Recovery = Not calculated

Sb 206.836†	11.8	0.0032 mg/L	0.00139	0.0032 mg/L	0.00139	43.70%

QC value within limits for Sb 206.836 Recovery = Not calculated

Se 196.026†	2.0	0.0021 mg/L	0.00040	0.0021 mg/L	0.00040	19.68%

QC value within limits for Se 196.026 Recovery = Not calculated

Sn 189.927†	61.3	0.0085 mg/L	0.00119	0.0085 mg/L	0.00119	13.92%

QC value within limits for Sn 189.927 Recovery = Not calculated

Ti 337.279†	517.1	0.0009 mg/L	0.00033	0.0009 mg/L	0.00033	36.86%

QC value within limits for Ti 337.279 Recovery = Not calculated

Tl 190.801†	5.5	0.0015 mg/L	0.00196	0.0015 mg/L	0.00196	133.29%

QC value within limits for Tl 190.801 Recovery = Not calculated

V 292.402†	94.2	0.0009 mg/L	0.00018	0.0009 mg/L	0.00018	20.25%

QC value within limits for V 292.402 Recovery = Not calculated

Zn 206.200†	37.8	0.0008 mg/L	0.00008	0.0008 mg/L	0.00008	10.17%

QC value within limits for Zn 206.200 Recovery = Not calculated

Ca 227.546†	0.7	0.0019 mg/L	0.02265	0.0019 mg/L	0.02265	>999.9%

QC value within limits for Ca 227.546 Recovery = Not calculated

Sr 421.552†	915.8	0.0014 mg/L	0.00022	0.0014 mg/L	0.00022	15.51%

QC value within limits for Sr 421.552 Recovery = Not calculated

Al 237.313†	35.6	0.0040 mg/L	0.00145	0.0040 mg/L	0.00145	36.70%

QC value within limits for Al 237.313 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 8
Sample ID: PBW-224310
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 38
Date Collected: 12/4/2014 4:53:55 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: PBW-224310

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7410171.5	1.042	mg/L	0.0135				1.29%
Ag 328.068†	104.0	0.0004	mg/L	0.00005				12.92%
As 188.979†	0.9	0.0004	mg/L	0.00028				69.78%
B 249.772†	1651.9	0.0123	mg/L	0.00073				5.89%
Ba 233.527†	243.1	0.0021	mg/L	0.00005				2.46%
Be 313.107†	137.3	0.0001	mg/L	0.00002				47.50%
Cd 226.502†	-4.1	0.0000	mg/L	0.00001				37.10%
Co 228.616†	19.3	0.0006	mg/L	0.00004				6.99%
Cr 267.716†	67.1	0.0005	mg/L	0.00001				2.58%
Cu 324.752†	267.0	0.0009	mg/L	0.00010				10.76%
Fe 259.939†	184.1	0.0028	mg/L	0.00008				2.69%
K 766.490†	-101.1	-0.0263	mg/L	0.00354				13.49%
Mg 279.077†	97.2	0.0090	mg/L	0.00048				5.34%
Mn 257.610†	4.5	0.0000	mg/L	0.00000				14.76%
Mo 202.031†	12.4	0.0004	mg/L	0.00000				0.73%
Ni 231.604†	16.4	0.0003	mg/L	0.00002				6.65%
Na 589.592†	17.7	0.0011	mg/L	0.00337				305.69%
Pb 220.353†	2.3	0.0002	mg/L	0.00051				214.15%
Sb 206.836†	5.1	0.0014	mg/L	0.00039				28.19%
Se 196.026†	1.9	0.0019	mg/L	0.00059				31.33%
Sn 189.927†	47.0	0.0065	mg/L	0.00038				5.83%
Ti 337.279†	392.3	0.0007	mg/L	0.00001				0.74%
Tl 190.801†	2.2	0.0006	mg/L	0.00052				86.78%
V 292.402†	53.0	0.0005	mg/L	0.00006				11.03%
Zn 206.200†	132.6	0.0028	mg/L	0.00003				0.94%
Ca 227.546†	2.5	0.0059	mg/L	0.00231				39.03%
Sr 421.552†	89.8	0.0001	mg/L	0.00007				48.32%
Al 237.313†	91.6	0.0101	mg/L	0.00001				0.10%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 9
Sample ID: LCSW-224310
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 39
Date Collected: 12/4/2014 4:59:52 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: LCSW-224310

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7296775.4	1.026	mg/L	0.0034				0.33%
Ag 328.068†	14308.0	0.0485	mg/L	0.00002				0.03%
As 188.979†	82.1	0.0380	mg/L	0.00085				2.24%
B 249.772†	122372.2	0.9111	mg/L	0.00663				0.73%
Ba 233.527†	238758.6	2.015	mg/L	0.0039				0.19%
Be 313.107†	126357.9	0.0471	mg/L	0.00006				0.13%
Cd 226.502†	5894.6	0.0482	mg/L	0.00003				0.07%
Co 228.616†	17038.2	0.4977	mg/L	0.00066				0.13%
Cr 267.716†	28732.7	0.1997	mg/L	0.00058				0.29%
Cu 324.752†	79632.8	0.2653	mg/L	0.00064				0.24%
Fe 259.939†	64869.4	1.003	mg/L	0.0010				0.10%
K 766.490†	71656.7	18.61	mg/L	0.085				0.46%
Mg 279.077†	20703.6	1.917	mg/L	0.0071				0.37%
Mn 257.610†	221583.5	0.4927	mg/L	0.00034				0.07%
Mo 202.031†	15281.4	0.4823	mg/L	0.00050				0.10%
Ni 231.604†	31612.2	0.5005	mg/L	0.00046				0.09%
Na 589.592†	305587.5	19.05	mg/L	0.083				0.43%
Pb 220.353†	4765.6	0.4965	mg/L	0.00112				0.23%
Sb 206.836†	1716.2	0.4651	mg/L	0.00094				0.20%
Se 196.026†	952.1	0.9667	mg/L	0.00208				0.21%
Sn 189.927†	36899.6	5.120	mg/L	0.0071				0.14%
Ti 337.279†	281254.9	0.4881	mg/L	0.00016				0.03%
Tl 190.801†	7265.7	1.937	mg/L	0.0020				0.10%
V 292.402†	51889.3	0.4908	mg/L	0.00071				0.15%
Zn 206.200†	23481.1	0.5000	mg/L	0.00208				0.42%
Ca 227.546†	849.0	1.971	mg/L	0.0231				1.17%
Sr 421.552†	-2.0	0.0000	mg/L	0.00005				>999.9%
Al 237.313†	16662.2	1.846	mg/L	0.0055				0.30%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 10
Sample ID: R1409445-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 40
Date Collected: 12/4/2014 5:06:03 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409445-001

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7043946.0	0.9909	mg/L	0.00326				0.33%
Ag 328.068†	-39.0	0.0001	mg/L	0.00006				68.89%
As 188.979†	6.7	0.0028	mg/L	0.00006				2.32%
B 249.772†	18054.2	0.1308	mg/L	0.00130				0.99%
Ba 233.527†	10294.5	0.0869	mg/L	0.00024				0.27%
Be 313.107†	-161.1	-0.0001	mg/L	0.00001				23.75%
Cd 226.502†	26.5	0.0001	mg/L	0.00002				32.68%
Co 228.616†	23.6	0.0007	mg/L	0.00009				13.41%
Cr 267.716†	84.1	0.0029	mg/L	0.00011				3.85%
Cu 324.752†	4499.6	0.0151	mg/L	0.00019				1.28%
Fe 259.939†	55136.2	0.8529	mg/L	0.00359				0.42%
K 766.490†	10725.6	2.786	mg/L	0.0078				0.28%
Mg 279.077†	268483.5	24.86	mg/L	0.167				0.67%
Mn 257.610†	100987.1	0.2246	mg/L	0.00140				0.62%
Mo 202.031†	40.3	0.0013	mg/L	0.00013				10.07%
Ni 231.604†	3623.2	0.0574	mg/L	0.00022				0.39%
Na 589.592†	321341.6	20.03	mg/L	0.098				0.49%
Pb 220.353†	67.0	0.0087	mg/L	0.00113				12.89%
Sb 206.836†	7.5	0.0013	mg/L	0.00022				16.62%
Se 196.026†	4.0	0.0044	mg/L	0.00079				17.90%
Sn 189.927†	-127.1	-0.0176	mg/L	0.00057				3.22%
Ti 337.279†	10909.0	0.0189	mg/L	0.00023				1.23%
Tl 190.801†	1.1	-0.0002	mg/L	0.00082				329.97%
V 292.402†	164.4	0.0016	mg/L	0.00005				3.46%
Zn 206.200†	650.2	0.0138	mg/L	0.00004				0.30%
Ca 227.546†	47491.4	107.6	mg/L	0.24				0.22%

Sr 421.552†	279747.2	0.4247	mg/L	0.00202	0.47%
Al 237.313†	69560.5	7.650	mg/L	0.0235	0.31%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 11
Sample ID: R1409445-001L
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 41
Date Collected: 12/4/2014 5:12:05 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409445-001L

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7141399.5	1.005	mg/L	0.0040				0.40%
Ag 328.068†	18.7	0.0001	mg/L	0.00024				225.60%
As 188.979†	0.3	0.0001	mg/L	0.00147				>999.9%
B 249.772†	4284.5	0.0312	mg/L	0.00020				0.64%
Ba 233.527†	2141.4	0.0181	mg/L	0.00009				0.48%
Be 313.107†	-124.4	0.0000	mg/L	0.00001				27.85%
Cd 226.502†	3.2	0.0000	mg/L	0.00004				715.83%
Co 228.616†	1.5	0.0000	mg/L	0.00001				27.84%
Cr 267.716†	11.5	0.0006	mg/L	0.00004				7.23%
Cu 324.752†	1032.0	0.0035	mg/L	0.00019				5.39%
Fe 259.939†	11617.0	0.1797	mg/L	0.00192				1.07%
K 766.490†	2064.5	0.5362	mg/L	0.01144				2.13%
Mg 279.077†	57129.4	5.290	mg/L	0.0749				1.42%
Mn 257.610†	21102.0	0.0469	mg/L	0.00073				1.56%
Mo 202.031†	7.2	0.0002	mg/L	0.00000				0.94%
Ni 231.604†	784.6	0.0124	mg/L	0.00010				0.79%
Na 589.592†	64467.0	4.019	mg/L	0.0499				1.24%
Pb 220.353†	12.5	0.0017	mg/L	0.00059				35.71%
Sb 206.836†	0.6	0.0000	mg/L	0.00008				>999.9%
Se 196.026†	0.8	0.0009	mg/L	0.00111				127.65%
Sn 189.927†	-80.9	-0.0112	mg/L	0.00005				0.47%
Ti 337.279†	2343.9	0.0041	mg/L	0.00001				0.13%
Tl 190.801†	-0.5	-0.0002	mg/L	0.00010				42.30%
V 292.402†	27.8	0.0003	mg/L	0.00018				70.18%
Zn 206.200†	214.5	0.0046	mg/L	0.00000				0.04%
Ca 227.546†	9522.5	21.58	mg/L	0.269				1.25%
Sr 421.552†	56651.4	0.0860	mg/L	0.00100				1.16%
Al 237.313†	14159.8	1.557	mg/L	0.0260				1.67%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 12
Sample ID: PBW-224313
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 42
Date Collected: 12/4/2014 5:18:03 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: PBW-224313

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7317736.2	1.029	mg/L	0.0027				0.26%
Ag 328.068†	49.4	0.0002	mg/L	0.00005				32.61%
As 188.979†	-1.4	-0.0007	mg/L	0.00079				120.87%
B 249.772†	583.9	0.0043	mg/L	0.00026				6.04%
Ba 233.527†	19.8	0.0002	mg/L	0.00002				14.19%
Be 313.107†	54.5	0.0000	mg/L	0.00001				43.02%
Cd 226.502†	0.8	0.0000	mg/L	0.00004				729.00%
Co 228.616†	-4.0	-0.0001	mg/L	0.00002				18.62%
Cr 267.716†	48.9	0.0003	mg/L	0.00002				6.42%
Cu 324.752†	107.7	0.0004	mg/L	0.00001				3.54%
Fe 259.939†	313.9	0.0049	mg/L	0.00003				0.64%
K 766.490†	-51.5	-0.0134	mg/L	0.00196				14.64%
Mg 279.077†	63.0	0.0058	mg/L	0.00064				11.05%
Mn 257.610†	-126.0	-0.0003	mg/L	0.00001				5.32%
Mo 202.031†	-3.5	-0.0001	mg/L	0.00003				28.58%
Ni 231.604†	-15.8	-0.0003	mg/L	0.00012				47.21%

Na 589.592†	157.1	0.0098	mg/L	0.00516	52.72%
Pb 220.353†	1.0	0.0001	mg/L	0.00100	963.80%
Sb 206.836†	1.6	0.0004	mg/L	0.00029	65.91%
Se 196.026†	0.8	0.0008	mg/L	0.00145	173.41%
Sn 189.927†	9.7	0.0013	mg/L	0.00022	16.18%
Ti 337.279†	128.1	0.0002	mg/L	0.00004	16.16%
Tl 190.801†	-1.1	-0.0003	mg/L	0.00045	151.80%
V 292.402†	-7.1	-0.0001	mg/L	0.00005	69.47%
Zn 206.200†	106.8	0.0023	mg/L	0.00005	2.25%
Ca 227.546†	4.0	0.0094	mg/L	0.00932	99.51%
Sr 421.552†	-44.7	-0.0001	mg/L	0.00003	37.15%
Al 237.313†	101.2	0.0112	mg/L	0.00011	0.97%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 13
Sample ID: LCSW-224313
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 43
Date Collected: 12/4/2014 5:24:10 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: LCSW-224313

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7317264.3	1.029	mg/L	0.0252				2.45%
Ag 328.068†	14321.2	0.0486	mg/L	0.00147				3.03%
As 188.979†	80.7	0.0374	mg/L	0.00037				1.00%
B 249.772†	121812.6	0.9069	mg/L	0.02092				2.31%
Ba 233.527†	239110.3	2.018	mg/L	0.0594				2.95%
Be 313.107†	126211.5	0.0471	mg/L	0.00126				2.68%
Cd 226.502†	5860.2	0.0480	mg/L	0.00081				1.70%
Co 228.616†	17085.7	0.4991	mg/L	0.01388				2.78%
Cr 267.716†	28753.7	0.1999	mg/L	0.00606				3.03%
Cu 324.752†	78908.6	0.2629	mg/L	0.00794				3.02%
Fe 259.939†	64909.3	1.004	mg/L	0.0291				2.90%
K 766.490†	72746.8	18.89	mg/L	0.170				0.90%
Mg 279.077†	20756.3	1.922	mg/L	0.0473				2.46%
Mn 257.610†	222014.2	0.4936	mg/L	0.01492				3.02%
Mo 202.031†	15261.7	0.4817	mg/L	0.01496				3.11%
Ni 231.604†	31695.3	0.5018	mg/L	0.01489				2.97%
Na 589.592†	302889.8	18.88	mg/L	0.484				2.56%
Pb 220.353†	4743.1	0.4942	mg/L	0.00871				1.76%
Sb 206.836†	1701.3	0.4610	mg/L	0.00752				1.63%
Se 196.026†	935.8	0.9502	mg/L	0.01883				1.98%
Sn 189.927†	36929.7	5.124	mg/L	0.1542				3.01%
Ti 337.279†	280952.9	0.4876	mg/L	0.01419				2.91%
Tl 190.801†	7241.5	1.931	mg/L	0.0342				1.77%
V 292.402†	52063.9	0.4925	mg/L	0.01522				3.09%
Zn 206.200†	23560.4	0.5017	mg/L	0.01583				3.15%
Ca 227.546†	839.0	1.949	mg/L	0.0235				1.20%
Sr 421.552†	-14.6	0.0000	mg/L	0.00003				155.94%
Al 237.313†	16677.9	1.848	mg/L	0.0509				2.76%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 14
Sample ID: R1409320-014
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 44
Date Collected: 12/4/2014 5:30:19 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409320-014

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7429791.2	1.045	mg/L	0.0048				0.46%
Ag 328.068†	36.2	0.0004	mg/L	0.00016				40.36%
As 188.979†	-2.0	-0.0009	mg/L	0.00087				93.65%
B 249.772†	1754.9	0.0088	mg/L	0.00136				15.55%
Ba 233.527†	123.4	0.0010	mg/L	0.00006				6.05%
Be 313.107†	133.2	0.0000	mg/L	0.00002				48.25%

Cd 226.502†	10.3	-0.0001	mg/L	0.00012	115.43%
Co 228.616†	9.2	0.0003	mg/L	0.00006	21.14%
Cr 267.716†	85.5	0.0007	mg/L	0.00000	0.21%
Cu 324.752†	-45.6	-0.0001	mg/L	0.00000	4.27%
Fe 259.939†	68414.7	1.058	mg/L	0.0039	0.37%
K 766.490†	71.7	0.0186	mg/L	0.00626	33.65%
Mg 279.077†	610.9	0.0566	mg/L	0.00085	1.50%
Mn 257.610†	9052.9	0.0203	mg/L	0.00006	0.29%
Mo 202.031†	6.4	0.0002	mg/L	0.00003	12.92%
Ni 231.604†	194.2	0.0031	mg/L	0.00006	1.96%
Na 589.592†	520.2	0.0324	mg/L	0.00249	7.67%
Pb 220.353†	-5.5	-0.0006	mg/L	0.00014	22.35%
Sb 206.836†	3.0	0.0008	mg/L	0.00013	16.12%
Se 196.026†	2.8	0.0032	mg/L	0.00013	4.22%
Sn 189.927†	17.6	0.0024	mg/L	0.00018	7.43%
Ti 337.279†	161.4	0.0003	mg/L	0.00005	16.26%
Tl 190.801†	0.4	0.0002	mg/L	0.00038	256.19%
V 292.402†	20.2	0.0002	mg/L	0.00018	94.25%
Zn 206.200†	23.6	0.0005	mg/L	0.00006	12.73%
Ca 227.546†	107.6	0.2909	mg/L	0.00645	2.22%
Sr 421.552†	775.0	0.0012	mg/L	0.00008	6.56%
Al 237.313†	2.2	0.0016	mg/L	0.00107	66.05%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 15
Sample ID: R1409320-014L
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 45
Date Collected: 12/4/2014 5:36:21 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409320-014L

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7238727.4	1.018	mg/L	0.0039				0.39%
Ag 328.068†	-5.8	0.0000	mg/L	0.00015				426.66%
As 188.979†	0.2	0.0001	mg/L	0.00013				115.39%
B 249.772†	748.8	0.0047	mg/L	0.00025				5.39%
Ba 233.527†	26.0	0.0002	mg/L	0.00006				26.34%
Be 313.107†	44.2	0.0000	mg/L	0.00000				8.45%
Cd 226.502†	3.2	0.0000	mg/L	0.00001				105.35%
Co 228.616†	4.1	0.0001	mg/L	0.00006				53.37%
Cr 267.716†	8.8	0.0001	mg/L	0.00009				123.58%
Cu 324.752†	-143.3	-0.0005	mg/L	0.00009				20.35%
Fe 259.939†	13979.4	0.2163	mg/L	0.00148				0.68%
K 766.490†	-53.4	-0.0139	mg/L	0.00809				58.28%
Mg 279.077†	120.8	0.0112	mg/L	0.00258				23.03%
Mn 257.610†	1681.6	0.0038	mg/L	0.00003				0.74%
Mo 202.031†	-3.5	-0.0001	mg/L	0.00015				139.35%
Ni 231.604†	20.6	0.0003	mg/L	0.00003				9.12%
Na 589.592†	-56.8	-0.0035	mg/L	0.00561				158.34%
Pb 220.353†	-5.1	-0.0005	mg/L	0.00007				13.46%
Sb 206.836†	-1.1	-0.0003	mg/L	0.00014				49.53%
Se 196.026†	1.5	0.0016	mg/L	0.00156				100.24%
Sn 189.927†	13.6	0.0019	mg/L	0.00003				1.82%
Ti 337.279†	27.7	0.0000	mg/L	0.00002				42.37%
Tl 190.801†	2.9	0.0008	mg/L	0.00085				109.27%
V 292.402†	9.9	0.0001	mg/L	0.00006				59.64%
Zn 206.200†	-1.5	0.0000	mg/L	0.00005				152.71%
Ca 227.546†	19.7	0.0542	mg/L	0.01598				29.50%
Sr 421.552†	105.5	0.0002	mg/L	0.00006				36.43%
Al 237.313†	-9.5	-0.0008	mg/L	0.00040				51.97%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 16
Sample ID: R1409373-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 46
Date Collected: 12/4/2014 5:42:55 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409373-001

Analyte	Mean Corrected Intensity	Calib Conc.	Units		Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	8390853.4	1.180	mg/L		0.0050				0.42%
Ag 328.068†	-31133.4	-0.0272	mg/L	neg	0.00063				2.31%
As 188.979†	879.1	0.3946	mg/L		0.00466				1.18%
B 249.772†	332850.9	1.190	mg/L		0.0032				0.27%
Ba 233.527†	723092.1	6.102	mg/L		0.0049				0.08%
Be 313.107†	60294.8	0.0225	mg/L		0.00004				0.19%
Cd 226.502†	13477.5	0.0568	mg/L		0.00054				0.96%
Co 228.616†	20043.2	0.5855	mg/L		0.00208				0.36%
Cr 267.716†	55807.1	0.4159	mg/L		0.00013				0.03%
Cu 324.752†	734555.9	2.474	mg/L		0.0127				0.51%
Fe 259.939†	19851201.9	307.1	mg/L	LR	0.99				0.32%
K 766.490†	231368.0	60.09	mg/L		0.352				0.59%
Mg 279.077†	1464368.5	135.6	mg/L		0.31				0.23%
Mn 257.610†	23345555.2	51.94	mg/L	LR	0.049				0.10%
Mo 202.031†	323.7	0.0102	mg/L		0.00124				12.12%
Ni 231.604†	40873.0	0.6471	mg/L		0.00399				0.62%
Na 589.592†	73004.4	4.552	mg/L		0.0341				0.75%
Pb 220.353†	9109.5	0.9699	mg/L		0.00509				0.52%
Sb 206.836†	149.5	0.0107	mg/L		0.00354				32.96%
Se 196.026†	-190.3	-0.0909	mg/L	neg	0.01184				13.03%
Sn 189.927†	-96.5	-0.0134	mg/L		0.00286				21.39%
Ti 337.279†	626694.4	1.088	mg/L		0.0012				0.11%
Tl 190.801†	-72.8	-0.0294	mg/L	neg	0.00471				16.04%
V 292.402†	40846.2	0.3864	mg/L		0.00113				0.29%
Zn 206.200†	111983.8	2.384	mg/L	LR	0.0095				0.40%
Ca 227.546†	28959.0	79.92	mg/L		0.255				0.32%
Sr 421.552†	497453.5	0.7552	mg/L		0.00527				0.70%
Al 237.313†	2910713.7	322.9	mg/L		0.82				0.25%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 17
Sample ID: R1409373-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 47
Date Collected: 12/4/2014 5:48:11 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409373-002

Analyte	Mean Corrected Intensity	Calib Conc.	Units		Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7382026.8	1.038	mg/L		0.0004				0.04%
Ag 328.068†	-2083.8	0.0036	mg/L		0.00013				3.66%
As 188.979†	62.9	0.0281	mg/L		0.00039				1.38%
B 249.772†	25252.2	0.0135	mg/L		0.00134				9.90%
Ba 233.527†	49068.4	0.4141	mg/L		0.00157				0.38%
Be 313.107†	3831.4	0.0014	mg/L		0.00002				1.45%
Cd 226.502†	827.3	-0.0006	mg/L		0.00002				3.31%
Co 228.616†	1140.8	0.0333	mg/L		0.00016				0.48%
Cr 267.716†	3720.7	0.0294	mg/L		0.00012				0.41%
Cu 324.752†	29466.4	0.1019	mg/L		0.00001				0.01%
Fe 259.939†	2704557.4	41.84	mg/L		0.164				0.39%
K 766.490†	31155.7	8.092	mg/L		0.0151				0.19%
Mg 279.077†	164630.9	15.24	mg/L		0.084				0.55%
Mn 257.610†	1881528.1	4.188	mg/L	LR	0.0166				0.40%
Mo 202.031†	29.3	0.0009	mg/L		0.00004				4.12%
Ni 231.604†	2456.1	0.0389	mg/L		0.00000				0.01%
Na 589.592†	86664.8	5.403	mg/L		0.0111				0.21%
Pb 220.353†	494.6	0.0528	mg/L		0.00031				0.59%
Sb 206.836†	13.3	0.0011	mg/L		0.00129				112.31%
Se 196.026†	-9.1	0.0044	mg/L		0.00043				9.83%
Sn 189.927†	-128.2	-0.0178	mg/L		0.00029				1.65%
Ti 337.279†	99161.7	0.1721	mg/L		0.00116				0.68%
Tl 190.801†	-7.0	-0.0019	mg/L		0.00036				18.38%
V 292.402†	3123.5	0.0295	mg/L		0.00012				0.42%
Zn 206.200†	6856.5	0.1460	mg/L		0.00042				0.29%
Ca 227.546†	18582.9	44.01	mg/L		0.436				0.99%
Sr 421.552†	187981.9	0.2854	mg/L		0.00072				0.25%

Al 237.313† 241184.4 26.76 mg/L 0.073 0.27%
Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 18
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/4/2014 5:54:16 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7053840.8	0.9923	mg/L	0.00262				0.26%
Ag 328.068†	149840.7	0.5071	mg/L	0.00438	0.5071	mg/L	0.00438	0.86%
QC value within limits for Ag 328.068 Recovery = 101.41%								
As 188.979†	2202.5	1.022	mg/L	0.0004	1.022	mg/L	0.0004	0.04%
QC value within limits for As 188.979 Recovery = 102.17%								
B 249.772†	331318.7	2.456	mg/L	0.0126	2.456	mg/L	0.0126	0.51%
QC value within limits for B 249.772 Recovery = 98.25%								
Ba 233.527†	1228250.8	10.36	mg/L	0.035	10.36	mg/L	0.035	0.34%
QC value within limits for Ba 233.527 Recovery = 103.65%								
Be 313.107†	672816.6	0.2508	mg/L	0.00021	0.2508	mg/L	0.00021	0.08%
QC value within limits for Be 313.107 Recovery = 100.33%								
Cd 226.502†	63303.7	0.5190	mg/L	0.00662	0.5190	mg/L	0.00662	1.28%
QC value within limits for Cd 226.502 Recovery = 103.79%								
Co 228.616†	86996.7	2.541	mg/L	0.0285	2.541	mg/L	0.0285	1.12%
QC value within limits for Co 228.616 Recovery = 101.66%								
Cr 267.716†	74454.5	0.5196	mg/L	0.00494	0.5196	mg/L	0.00494	0.95%
QC value within limits for Cr 267.716 Recovery = 103.93%								
Cu 324.752†	369555.8	1.231	mg/L	0.0104	1.231	mg/L	0.0104	0.85%
QC value within limits for Cu 324.752 Recovery = 98.49%								
Fe 259.939†	334291.1	5.171	mg/L	0.0673	5.171	mg/L	0.0673	1.30%
QC value within limits for Fe 259.939 Recovery = 103.43%								
K 766.490†	93511.2	24.29	mg/L	0.036	24.29	mg/L	0.036	0.15%
QC value within limits for K 766.490 Recovery = 97.14%								
Mg 279.077†	276503.3	25.60	mg/L	0.288	25.60	mg/L	0.288	1.13%
QC value within limits for Mg 279.077 Recovery = 102.41%								
Mn 257.610†	350606.1	0.7800	mg/L	0.00947	0.7800	mg/L	0.00947	1.21%
QC value within limits for Mn 257.610 Recovery = 104.01%								
Mo 202.031†	78597.3	2.481	mg/L	0.0250	2.481	mg/L	0.0250	1.01%
QC value within limits for Mo 202.031 Recovery = 99.23%								
Ni 231.604†	131285.9	2.078	mg/L	0.0209	2.078	mg/L	0.0209	1.00%
QC value within limits for Ni 231.604 Recovery = 103.92%								
Na 589.592†	392031.6	24.44	mg/L	0.026	24.44	mg/L	0.026	0.11%
QC value within limits for Na 589.592 Recovery = 97.77%								
Pb 220.353†	5026.6	0.5246	mg/L	0.00069	0.5246	mg/L	0.00069	0.13%
QC value within limits for Pb 220.353 Recovery = 104.91%								
Sb 206.836†	18519.0	5.019	mg/L	0.0008	5.019	mg/L	0.0008	0.02%
QC value within limits for Sb 206.836 Recovery = 100.39%								
Se 196.026†	497.3	0.5066	mg/L	0.00218	0.5066	mg/L	0.00218	0.43%
QC value within limits for Se 196.026 Recovery = 101.31%								
Sn 189.927†	37120.8	5.151	mg/L	0.0569	5.151	mg/L	0.0569	1.10%
QC value within limits for Sn 189.927 Recovery = 103.01%								
Ti 337.279†	1435614.2	2.492	mg/L	0.0056	2.492	mg/L	0.0056	0.22%
QC value within limits for Ti 337.279 Recovery = 99.66%								
Tl 190.801†	3964.2	1.057	mg/L	0.0001	1.057	mg/L	0.0001	0.01%
QC value within limits for Tl 190.801 Recovery = 105.67%								
V 292.402†	269357.5	2.548	mg/L	0.0148	2.548	mg/L	0.0148	0.58%
QC value within limits for V 292.402 Recovery = 101.91%								
Zn 206.200†	49075.8	1.045	mg/L	0.0124	1.045	mg/L	0.0124	1.19%
QC value within limits for Zn 206.200 Recovery = 104.49%								
Ca 227.546†	10910.6	24.96	mg/L	0.086	24.96	mg/L	0.086	0.34%
QC value within limits for Ca 227.546 Recovery = 99.85%								
Sr 421.552†	1570682.0	2.384	mg/L	0.0038	2.384	mg/L	0.0038	0.16%
QC value within limits for Sr 421.552 Recovery = 95.38%								
Al 237.313†	88157.0	9.757	mg/L	0.1181	9.757	mg/L	0.1181	1.21%
QC value within limits for Al 237.313 Recovery = 97.57%								

All analyte(s) passed QC.

Sequence No.: 19
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/4/2014 6:00:23 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7282995.2	1.025	mg/L	0.0023				0.23%
Ag 328.068†	223.7	0.0008	mg/L	0.00048	0.0008	mg/L	0.00048	62.59%
QC value within limits for Ag 328.068 Recovery = Not calculated								
As 188.979†	2.0	0.0009	mg/L	0.00072	0.0009	mg/L	0.00072	77.71%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	3541.7	0.0263	mg/L	0.00358	0.0263	mg/L	0.00358	13.60%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	733.6	0.0062	mg/L	0.00298	0.0062	mg/L	0.00298	48.07%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	569.5	0.0002	mg/L	0.00006	0.0002	mg/L	0.00006	30.10%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	42.1	0.0003	mg/L	0.00010	0.0003	mg/L	0.00010	30.73%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	69.2	0.0020	mg/L	0.00074	0.0020	mg/L	0.00074	36.71%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	29.7	0.0002	mg/L	0.00009	0.0002	mg/L	0.00009	43.38%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	983.1	0.0033	mg/L	0.00050	0.0033	mg/L	0.00050	15.40%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	2972.4	0.0460	mg/L	0.00462	0.0460	mg/L	0.00462	10.05%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	134.9	0.0350	mg/L	0.01579	0.0350	mg/L	0.01579	45.05%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	-2.9	-0.0003	mg/L	0.00555	-0.0003	mg/L	0.00555	>999.9%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	2723.0	0.0061	mg/L	0.00053	0.0061	mg/L	0.00053	8.73%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	56.1	0.0018	mg/L	0.00078	0.0018	mg/L	0.00078	43.91%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	133.1	0.0021	mg/L	0.00053	0.0021	mg/L	0.00053	24.95%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	297.2	0.0185	mg/L	0.00280	0.0185	mg/L	0.00280	15.10%
QC value within limits for Na 589.592 Recovery = Not calculated								
Pb 220.353†	-0.9	-0.0001	mg/L	0.00028	-0.0001	mg/L	0.00028	298.26%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	19.4	0.0052	mg/L	0.00093	0.0052	mg/L	0.00093	17.80%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	1.3	0.0013	mg/L	0.00106	0.0013	mg/L	0.00106	80.16%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	57.2	0.0079	mg/L	0.00226	0.0079	mg/L	0.00226	28.49%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 337.279†	1014.3	0.0018	mg/L	0.00075	0.0018	mg/L	0.00075	42.73%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	3.4	0.0009	mg/L	0.00086	0.0009	mg/L	0.00086	93.80%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	190.3	0.0018	mg/L	0.00056	0.0018	mg/L	0.00056	31.24%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	64.2	0.0014	mg/L	0.00034	0.0014	mg/L	0.00034	24.91%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	-1.3	-0.0009	mg/L	0.02151	-0.0009	mg/L	0.02151	>999.9%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Sr 421.552†	691.7	0.0011	mg/L	0.00008	0.0011	mg/L	0.00008	7.75%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Al 237.313†	90.6	0.0101	mg/L	0.00323	0.0101	mg/L	0.00323	31.97%
QC value within limits for Al 237.313 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 20
Sample ID: R1409373-003
Analyst:
Initial Sample Wt:

Autosampler Location: 48
Date Collected: 12/4/2014 6:06:25 PM
Data Type: Original
Initial Sample Vol:

Dilution: Sample Prep Vol: 50 mL

Mean Data: R1409373-003

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7368647.6	1.037	mg/L	0.0043				0.41%
Ag 328.068†	7.3	0.0004	mg/L	0.00013				33.12%
As 188.979†	2.1	0.0009	mg/L	0.00125				133.36%
B 249.772†	3096.9	0.0173	mg/L	0.00113				6.55%
Ba 233.527†	7639.1	0.0645	mg/L	0.00114				1.77%
Be 313.107†	174.9	0.0001	mg/L	0.00000				4.33%
Cd 226.502†	27.1	0.0000	mg/L	0.00000				0.32%
Co 228.616†	38.6	0.0011	mg/L	0.00015				12.89%
Cr 267.716†	55.7	0.0011	mg/L	0.00005				4.98%
Cu 324.752†	1447.1	0.0049	mg/L	0.00008				1.52%
Fe 259.939†	90380.5	1.398	mg/L	0.0169				1.21%
K 766.490†	3764.9	0.9778	mg/L	0.00115				0.12%
Mg 279.077†	72378.2	6.702	mg/L	0.0765				1.14%
Mn 257.610†	73748.7	0.1641	mg/L	0.00200				1.22%
Mo 202.031†	15.2	0.0005	mg/L	0.00006				13.20%
Ni 231.604†	105.6	0.0017	mg/L	0.00006				3.60%
Na 589.592†	69929.5	4.360	mg/L	0.0472				1.08%
Pb 220.353†	14.0	0.0019	mg/L	0.00020				10.54%
Sb 206.836†	2.1	0.0005	mg/L	0.00028				59.05%
Se 196.026†	1.8	0.0023	mg/L	0.00156				68.49%
Sn 189.927†	-98.7	-0.0137	mg/L	0.00063				4.60%
Ti 337.279†	4856.8	0.0084	mg/L	0.00009				1.06%
Tl 190.801†	-4.1	-0.0011	mg/L	0.00014				12.77%
V 292.402†	133.4	0.0013	mg/L	0.00007				5.27%
Zn 206.200†	349.0	0.0074	mg/L	0.00014				1.85%
Ca 227.546†	17360.4	39.39	mg/L	0.110				0.28%
Sr 421.552†	164542.3	0.2498	mg/L	0.00231				0.92%
Al 237.313†	9893.6	1.077	mg/L	0.0112				1.04%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 21 Autosampler Location: 49
Sample ID: R1409373-004 Date Collected: 12/4/2014 6:12:31 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol: 50 mL

Mean Data: R1409373-004

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7324775.3	1.030	mg/L	0.0112				1.09%
Ag 328.068†	-4048.1	0.0061	mg/L	0.00005				0.77%
As 188.979†	106.4	0.0472	mg/L	0.00017				0.36%
B 249.772†	48392.2	0.0352	mg/L	0.00640				18.20%
Ba 233.527†	57972.2	0.4892	mg/L	0.01205				2.46%
Be 313.107†	8089.0	0.0030	mg/L	0.00003				1.11%
Cd 226.502†	1579.9	-0.0007	mg/L	0.00006				8.38%
Co 228.616†	2281.3	0.0666	mg/L	0.00056				0.84%
Cr 267.716†	8552.5	0.0656	mg/L	0.00155				2.36%
Cu 324.752†	57678.9	0.1992	mg/L	0.00441				2.21%
Fe 259.939†	5034371.1	77.88	mg/L LR	0.557				0.71%
K 766.490†	59065.8	15.34	mg/L	0.306				2.00%
Mg 279.077†	257677.1	23.86	mg/L	0.538				2.25%
Mn 257.610†	2528413.1	5.631	mg/L LR	0.0368				0.65%
Mo 202.031†	24.5	0.0008	mg/L	0.00007				9.21%
Ni 231.604†	4263.0	0.0675	mg/L	0.00068				1.01%
Na 589.592†	67533.1	4.211	mg/L	0.0848				2.01%
Pb 220.353†	974.0	0.1038	mg/L	0.00178				1.71%
Sb 206.836†	27.6	0.0025	mg/L	0.00011				4.46%
Se 196.026†	-22.8	0.0023	mg/L	0.00212				90.50%
Sn 189.927†	-105.3	-0.0146	mg/L	0.00004				0.28%
Ti 337.279†	168450.1	0.2923	mg/L	0.00719				2.46%
Tl 190.801†	-1.4	-0.0008	mg/L	0.00014				17.22%
V 292.402†	6657.0	0.0630	mg/L	0.00153				2.44%
Zn 206.200†	13284.5	0.2829	mg/L	0.00301				1.06%

Ca 227.546†	15422.4	38.51 mg/L	0.681		1.77%
Sr 421.552†	161651.5	0.2454 mg/L	0.00476		1.94%
Al 237.313†	482301.4	53.53 mg/L	0.278		0.52%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 22
Sample ID: R1409373-005
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 50
Date Collected: 12/4/2014 6:18:39 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409373-005

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7431948.5	1.045	mg/L	0.0039				0.37%
Ag 328.068†	-99.7	-0.0002	mg/L	0.00005				32.09%
As 188.979†	1.1	0.0005	mg/L	0.00073				148.25%
B 249.772†	1831.4	0.0108	mg/L	0.00033				3.00%
Ba 233.527†	2105.0	0.0178	mg/L	0.00003				0.15%
Be 313.107†	115.7	0.0000	mg/L	0.00002				41.09%
Cd 226.502†	16.4	0.0000	mg/L	0.00002				112.26%
Co 228.616†	18.9	0.0006	mg/L	0.00005				9.81%
Cr 267.716†	44.5	0.0008	mg/L	0.00004				5.61%
Cu 324.752†	585.4	0.0020	mg/L	0.00013				6.71%
Fe 259.939†	43671.2	0.6756	mg/L	0.00119				0.18%
K 766.490†	3425.0	0.8895	mg/L	0.00333				0.37%
Mg 279.077†	48487.4	4.490	mg/L	0.0248				0.55%
Mn 257.610†	21769.5	0.0485	mg/L	0.00007				0.15%
Mo 202.031†	12.8	0.0004	mg/L	0.00006				14.67%
Ni 231.604†	12.8	0.0002	mg/L	0.00003				12.52%
Na 589.592†	48343.7	3.014	mg/L	0.0277				0.92%
Pb 220.353†	-3.6	-0.0001	mg/L	0.00026				470.54%
Sb 206.836†	1.5	0.0004	mg/L	0.00006				16.62%
Se 196.026†	2.8	0.0031	mg/L	0.00021				6.74%
Sn 189.927†	-108.3	-0.0150	mg/L	0.00010				0.65%
Ti 337.279†	3136.6	0.0054	mg/L	0.00005				0.86%
Tl 190.801†	-5.4	-0.0015	mg/L	0.00073				49.61%
V 292.402†	104.8	0.0010	mg/L	0.00001				1.04%
Zn 206.200†	166.1	0.0035	mg/L	0.00001				0.41%
Ca 227.546†	14165.2	32.12	mg/L	0.335				1.04%
Sr 421.552†	119481.4	0.1814	mg/L	0.00172				0.95%
Al 237.313†	5605.5	0.6053	mg/L	0.00220				0.36%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 23
Sample ID: R1409373-006
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 51
Date Collected: 12/4/2014 6:24:41 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409373-006

Analyte	Mean Corrected Intensity	Calib Conc.	Units		Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	8415701.1	1.184	mg/L		0.0017				0.14%
Ag 328.068†	-33101.1	-0.0315	mg/L		0.00128				4.05%
As 188.979†	931.0	0.4181	mg/L		0.00672				1.61%
B 249.772†	357186.0	1.333	mg/L		0.0264				1.98%
Ba 233.527†	658211.3	5.554	mg/L		0.0360				0.65%
Be 313.107†	58145.8	0.0217	mg/L		0.00021				0.95%
Cd 226.502†	14411.9	0.0628	mg/L		0.00003				0.05%
Co 228.616†	20965.2	0.6125	mg/L		0.00784				1.28%
Cr 267.716†	59633.5	0.4436	mg/L		0.00237				0.54%
Cu 324.752†	742334.2	2.501	mg/L		0.0007				0.03%
Fe 259.939†	20449022.0	316.3	mg/L	LL	1.21				0.38%
K 766.490†	253546.5	65.85	mg/L		0.237				0.36%
Mg 279.077†	1540849.9	142.7	mg/L		1.07				0.75%
Mn 257.610†	24532230.3	54.57	mg/L	L	0.144				0.26%
Mo 202.031†	365.4	0.0115	mg/L		0.00041				3.57%

Ni 231.604†	40944.8	0.6482	mg/L	0.00854		1.32%
Na 589.592†	73882.2	4.606	mg/L	0.0142		0.31%
Pb 220.353†	9636.9	1.026	mg/L	0.0115		1.12%
Sb 206.836†	172.0	0.0156	mg/L	0.00049		3.13%
Se 196.026†	-186.0	-0.0833	mg/L neg	0.00546		6.56%
Sn 189.927†	-92.6	-0.0128	mg/L	0.00092		7.19%
Ti 337.279†	680607.1	1.181	mg/L	0.0057		0.48%
Tl 190.801†	-98.4	-0.0368	mg/L neg	0.00270		7.35%
V 292.402†	44316.2	0.4192	mg/L	0.00078		0.19%
Zn 206.200†	113662.8	2.420	mg/L LR	0.0275		1.14%
Ca 227.546†	22774.9	66.35	mg/L	0.019		0.03%
Sr 421.552†	443142.7	0.6727	mg/L	0.00210		0.31%
Al 237.313†	3031102.2	336.3	mg/L	0.81		0.24%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 24
Sample ID: R1409404-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 52
Date Collected: 12/4/2014 6:29:47 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409404-001

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7302289.2	1.027	mg/L	0.0088				0.86%
Ag 328.068†	-1602.9	0.0023	mg/L	0.00001				0.22%
As 188.979†	24.1	0.0102	mg/L	0.00111				10.93%
B 249.772†	20172.4	0.0235	mg/L	0.00131				5.56%
Ba 233.527†	22989.6	0.1940	mg/L	0.00084				0.43%
Be 313.107†	2466.7	0.0009	mg/L	0.00002				2.44%
Cd 226.502†	603.3	-0.0004	mg/L	0.00000				0.65%
Co 228.616†	436.0	0.0127	mg/L	0.00018				1.38%
Cr 267.716†	4015.0	0.0314	mg/L	0.00010				0.33%
Cu 324.752†	7848.8	0.0289	mg/L	0.00006				0.22%
Fe 259.939†	1957015.2	30.27	mg/L	0.037				0.12%
K 766.490†	25220.6	6.550	mg/L	0.0014				0.02%
Mg 279.077†	227229.2	21.04	mg/L	0.104				0.49%
Mn 257.610†	262772.2	0.5882	mg/L	0.00309				0.53%
Mo 202.031†	26.5	0.0008	mg/L	0.00002				2.12%
Ni 231.604†	1632.4	0.0258	mg/L	0.00025				0.97%
Na 589.592†	194163.9	12.11	mg/L	0.034				0.28%
Pb 220.353†	112.5	0.0137	mg/L	0.00021				1.50%
Sb 206.836†	10.4	0.0006	mg/L	0.00019				33.25%
Se 196.026†	-6.6	0.0033	mg/L	0.00018				5.65%
Sn 189.927†	-147.3	-0.0204	mg/L	0.00023				1.13%
Ti 337.279†	77213.4	0.1340	mg/L	0.00071				0.53%
Tl 190.801†	-2.8	-0.0012	mg/L	0.00083				70.68%
V 292.402†	3298.3	0.0312	mg/L	0.00010				0.32%
Zn 206.200†	3702.6	0.0788	mg/L	0.00108				1.37%
Ca 227.546†	42190.9	96.96	mg/L	0.264				0.27%
Sr 421.552†	141615.7	0.2150	mg/L	0.00073				0.34%
Al 237.313†	218073.0	24.16	mg/L	0.045				0.19%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 25
Sample ID: R1409404-001D
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 53
Date Collected: 12/4/2014 6:35:55 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409404-001D

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7371095.1	1.037	mg/L	0.0073				0.70%
Ag 328.068†	-1857.8	0.0025	mg/L	0.00038				15.08%
As 188.979†	29.7	0.0126	mg/L	0.00149				11.77%
B 249.772†	22892.3	0.0253	mg/L	0.00119				4.70%
Ba 233.527†	24801.0	0.2093	mg/L	0.00238				1.14%

Be 313.107†	2665.9	0.0010 mg/L	0.00001	1.20%
Cd 226.502†	698.3	-0.0004 mg/L	0.00006	18.01%
Co 228.616†	481.5	0.0141 mg/L	0.00013	0.94%
Cr 267.716†	4565.7	0.0356 mg/L	0.00028	0.80%
Cu 324.752†	10040.9	0.0366 mg/L	0.00057	1.57%
Fe 259.939†	2242709.2	34.69 mg/L	0.705	2.03%
K 766.490†	27255.2	7.079 mg/L	0.0961	1.36%
Mg 279.077†	246286.4	22.80 mg/L	0.259	1.14%
Mn 257.610†	286391.5	0.6413 mg/L	0.00825	1.29%
Mo 202.031†	35.0	0.0011 mg/L	0.00014	12.59%
Ni 231.604†	1863.7	0.0295 mg/L	0.00013	0.46%
Na 589.592†	206659.5	12.88 mg/L	0.169	1.32%
Pb 220.353†	130.9	0.0158 mg/L	0.00008	0.48%
Sb 206.836†	13.5	0.0012 mg/L	0.00029	24.61%
Se 196.026†	-10.1	0.0011 mg/L	0.00164	147.54%
Sn 189.927†	-147.5	-0.0205 mg/L	0.00031	1.49%
Ti 337.279†	80965.1	0.1405 mg/L	0.00087	0.62%
Tl 190.801†	-1.6	-0.0009 mg/L	0.00078	90.22%
V 292.402†	3641.6	0.0344 mg/L	0.00065	1.89%
Zn 206.200†	4301.5	0.0916 mg/L	0.00074	0.81%
Ca 227.546†	45258.7	104.1 mg/L	1.41	1.36%
Sr 421.552†	151519.6	0.2300 mg/L	0.00295	1.28%
Al 237.313†	244589.6	27.10 mg/L	0.339	1.25%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 26
Sample ID: R1409404-001S
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 54
Date Collected: 12/4/2014 6:42:10 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409404-001S

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7233656.9	1.018	mg/L	0.0035				0.35%
Ag 328.068†	12592.3	0.0514	mg/L	0.00009				0.17%
As 188.979†	115.4	0.0525	mg/L	0.00073				1.39%
B 249.772†	147641.0	0.9568	mg/L	0.00826				0.86%
Ba 233.527†	256661.3	2.166	mg/L	0.0065				0.30%
Be 313.107†	130744.2	0.0487	mg/L	0.00021				0.44%
Cd 226.502†	6449.2	0.0468	mg/L	0.00033				0.71%
Co 228.616†	16937.2	0.4948	mg/L	0.00345				0.70%
Cr 267.716†	32748.0	0.2314	mg/L	0.00109				0.47%
Cu 324.752†	82545.0	0.2781	mg/L	0.00085				0.30%
Fe 259.939†	2269207.0	35.10	mg/L	0.155				0.44%
K 766.490†	95381.2	24.77	mg/L	0.205				0.83%
Mg 279.077†	254706.7	23.58	mg/L	0.116				0.49%
Mn 257.610†	495615.7	1.106	mg/L	0.0044				0.40%
Mo 202.031†	15102.8	0.4767	mg/L	0.00104				0.22%
Ni 231.604†	32508.5	0.5146	mg/L	0.00189				0.37%
Na 589.592†	512526.6	31.95	mg/L	0.195				0.61%
Pb 220.353†	4780.2	0.5000	mg/L	0.00381				0.76%
Sb 206.836†	1593.2	0.4294	mg/L	0.00408				0.95%
Se 196.026†	970.4	0.9965	mg/L	0.00817				0.82%
Sn 189.927†	34950.1	4.849	mg/L	0.0139				0.29%
Ti 337.279†	332021.8	0.5762	mg/L	0.00082				0.14%
Tl 190.801†	6984.4	1.862	mg/L	0.0117				0.63%
V 292.402†	55283.8	0.5229	mg/L	0.00183				0.35%
Zn 206.200†	26801.3	0.5707	mg/L	0.00564				0.99%
Ca 227.546†	44444.0	102.3	mg/L	0.41				0.40%
Sr 421.552†	150868.4	0.2290	mg/L	0.00136				0.59%
Al 237.313†	243701.2	27.00	mg/L	0.008				0.03%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 27
Sample ID: R1409404-001A
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 55
Date Collected: 12/4/2014 6:48:13 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409404-001A

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7223057.1	1.016	mg/L	0.0011				0.10%
Ag 328.068†	13219.4	0.0523	mg/L	0.00012				0.24%
As 188.979†	106.8	0.0485	mg/L	0.00131				2.70%
B 249.772†	147893.4	0.9780	mg/L	0.00363				0.37%
Ba 233.527†	256834.2	2.167	mg/L	0.0119				0.55%
Be 313.107†	130124.3	0.0485	mg/L	0.00025				0.52%
Cd 226.502†	6292.4	0.0463	mg/L	0.00032				0.69%
Co 228.616†	16853.3	0.4923	mg/L	0.00261				0.53%
Cr 267.716†	32250.2	0.2276	mg/L	0.00132				0.58%
Cu 324.752†	81588.4	0.2745	mg/L	0.00095				0.34%
Fe 259.939†	1968877.7	30.46	mg/L	0.035				0.11%
K 766.490†	98739.4	25.64	mg/L	0.345				1.35%
Mg 279.077†	241475.1	22.36	mg/L	0.134				0.60%
Mn 257.610†	470567.5	1.050	mg/L	0.0019				0.18%
Mo 202.031†	15712.6	0.4960	mg/L	0.00161				0.32%
Ni 231.604†	32251.5	0.5106	mg/L	0.00281				0.55%
Na 589.592†	500120.5	31.18	mg/L	0.384				1.23%
Pb 220.353†	4737.9	0.4957	mg/L	0.00367				0.74%
Sb 206.836†	1876.8	0.5064	mg/L	0.00039				0.08%
Se 196.026†	1001.4	1.026	mg/L	0.0063				0.61%
Sn 189.927†	-138.8	-0.0193	mg/L	0.00068				3.51%
Ti 337.279†	355214.4	0.6165	mg/L	0.00079				0.13%
Tl 190.801†	7009.2	1.869	mg/L	0.0099				0.53%
V 292.402†	55234.7	0.5225	mg/L	0.00321				0.61%
Zn 206.200†	26283.5	0.5596	mg/L	0.00307				0.55%
Ca 227.546†	42598.2	97.89	mg/L	0.747				0.76%
Sr 421.552†	140410.6	0.2132	mg/L	0.00251				1.18%
Al 237.313†	231468.6	25.64	mg/L	0.119				0.46%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 28
Sample ID: R1409404-001L
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 56
Date Collected: 12/4/2014 6:54:24 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409404-001L

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7331692.0	1.031	mg/L	0.0091				0.89%
Ag 328.068†	-374.7	0.0004	mg/L	0.00001				2.48%
As 188.979†	4.2	0.0017	mg/L	0.00005				3.01%
B 249.772†	5728.9	0.0158	mg/L	0.00117				7.41%
Ba 233.527†	4678.1	0.0395	mg/L	0.00032				0.80%
Be 313.107†	595.0	0.0002	mg/L	0.00001				6.08%
Cd 226.502†	127.0	-0.0001	mg/L	0.00008				95.29%
Co 228.616†	98.9	0.0029	mg/L	0.00006				2.08%
Cr 267.716†	847.2	0.0066	mg/L	0.00003				0.45%
Cu 324.752†	1601.0	0.0059	mg/L	0.00031				5.25%
Fe 259.939†	415693.7	6.430	mg/L	0.0226				0.35%
K 766.490†	4796.5	1.246	mg/L	0.0005				0.04%
Mg 279.077†	46848.5	4.338	mg/L	0.0068				0.16%
Mn 257.610†	54332.7	0.1216	mg/L	0.00014				0.11%
Mo 202.031†	9.7	0.0003	mg/L	0.00006				18.38%
Ni 231.604†	331.9	0.0053	mg/L	0.00001				0.10%
Na 589.592†	38357.0	2.391	mg/L	0.0097				0.40%
Pb 220.353†	26.0	0.0031	mg/L	0.00060				19.45%
Sb 206.836†	3.7	0.0005	mg/L	0.00050				91.35%
Se 196.026†	-0.3	0.0018	mg/L	0.00002				1.18%
Sn 189.927†	-84.9	-0.0118	mg/L	0.00014				1.16%
Ti 337.279†	15493.7	0.0269	mg/L	0.00023				0.85%
Tl 190.801†	4.1	0.0010	mg/L	0.00081				78.17%
V 292.402†	682.2	0.0065	mg/L	0.00005				0.79%
Zn 206.200†	778.3	0.0166	mg/L	0.00029				1.76%
Ca 227.546†	8246.4	18.97	mg/L	0.176				0.93%

Sr 421.552†	28213.2	0.0428 mg/L	0.00023	0.53%
Al 237.313†	43418.8	4.810 mg/L	0.0352	0.73%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 29
Sample ID: R1409404-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 57
Date Collected: 12/4/2014 7:00:28 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409404-002

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7028925.3	0.9888	mg/L	0.00676				0.68%
Ag 328.068†	-214.9	0.0001	mg/L	0.00009				139.36%
As 188.979†	6.3	0.0028	mg/L	0.00060				21.54%
B 249.772†	6302.3	0.0339	mg/L	0.00001				0.03%
Ba 233.527†	7990.1	0.0674	mg/L	0.00045				0.66%
Be 313.107†	-131.1	0.0000	mg/L	0.00000				3.79%
Cd 226.502†	66.5	0.0000	mg/L	0.00002				996.44%
Co 228.616†	21.8	0.0006	mg/L	0.00005				7.82%
Cr 267.716†	585.6	0.0059	mg/L	0.00009				1.59%
Cu 324.752†	1163.1	0.0042	mg/L	0.00013				3.13%
Fe 259.939†	202145.6	3.127	mg/L	0.0113				0.36%
K 766.490†	13935.4	3.619	mg/L	0.0453				1.25%
Mg 279.077†	195165.2	18.07	mg/L	0.087				0.48%
Mn 257.610†	179123.0	0.3986	mg/L	0.00144				0.36%
Mo 202.031†	22.4	0.0007	mg/L	0.00007				9.99%
Ni 231.604†	184.9	0.0029	mg/L	0.00003				1.02%
Na 589.592†	2954933.7	184.2	mg/L L4	1.24				0.67%
Pb 220.353†	17.2	0.0026	mg/L	0.00079				30.23%
Sb 206.836†	3.6	0.0007	mg/L	0.00015				22.23%
Se 196.026†	1.4	0.0025	mg/L	0.00073				29.48%
Sn 189.927†	-155.7	-0.0216	mg/L	0.00023				1.07%
Ti 337.279†	27325.4	0.0474	mg/L	0.00001				0.02%
Tl 190.801†	-2.0	-0.0006	mg/L	0.00050				78.80%
V 292.402†	533.1	0.0050	mg/L	0.00005				1.02%
Zn 206.200†	507.5	0.0108	mg/L	0.00002				0.20%
Ca 227.546†	31653.6	71.84	mg/L	0.015				0.02%
Sr 421.552†	110446.7	0.1677	mg/L	0.00137				0.82%
Al 237.313†	29406.3	3.223	mg/L	0.0061				0.19%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 30
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/4/2014 7:06:38 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7130603.9	1.003	mg/L	0.0042				0.41%
Ag 328.068†	147371.9	0.4987	mg/L	0.00183	0.4987	mg/L	0.00183	0.37%
QC value within limits for Ag 328.068 Recovery = 99.74%								
As 188.979†	2162.4	1.003	mg/L	0.0103	1.003	mg/L	0.0103	1.03%
QC value within limits for As 188.979 Recovery = 100.31%								
B 249.772†	325599.2	2.414	mg/L	0.0227	2.414	mg/L	0.0227	0.94%
QC value within limits for B 249.772 Recovery = 96.56%								
Ba 233.527†	1210431.8	10.21	mg/L	0.037	10.21	mg/L	0.037	0.36%
QC value within limits for Ba 233.527 Recovery = 102.14%								
Be 313.107†	662851.8	0.2471	mg/L	0.00165	0.2471	mg/L	0.00165	0.67%
QC value within limits for Be 313.107 Recovery = 98.84%								
Cd 226.502†	62272.4	0.5105	mg/L	0.00250	0.5105	mg/L	0.00250	0.49%
QC value within limits for Cd 226.502 Recovery = 102.11%								
Co 228.616†	85406.9	2.495	mg/L	0.0099	2.495	mg/L	0.0099	0.40%
QC value within limits for Co 228.616 Recovery = 99.80%								
Cr 267.716†	73185.4	0.5108	mg/L	0.00220	0.5108	mg/L	0.00220	0.43%

	QC value within limits for Cr 267.716 Recovery = 102.16%					
Cu 324.752†	363429.6	1.211 mg/L	0.0038	1.211 mg/L	0.0038	0.32%
	QC value within limits for Cu 324.752 Recovery = 96.85%					
Fe 259.939†	324502.9	5.020 mg/L	0.0138	5.020 mg/L	0.0138	0.28%
	QC value within limits for Fe 259.939 Recovery = 100.40%					
K 766.490†	92667.9	24.07 mg/L	0.122	24.07 mg/L	0.122	0.51%
	QC value within limits for K 766.490 Recovery = 96.27%					
Mg 279.077†	271235.7	25.11 mg/L	0.088	25.11 mg/L	0.088	0.35%
	QC value within limits for Mg 279.077 Recovery = 100.46%					
Mn 257.610†	341559.0	0.7599 mg/L	0.00262	0.7599 mg/L	0.00262	0.35%
	QC value within limits for Mn 257.610 Recovery = 101.32%					
Mo 202.031†	77323.5	2.441 mg/L	0.0081	2.441 mg/L	0.0081	0.33%
	QC value within limits for Mo 202.031 Recovery = 97.63%					
Ni 231.604†	128770.2	2.039 mg/L	0.0086	2.039 mg/L	0.0086	0.42%
	QC value within limits for Ni 231.604 Recovery = 101.93%					
Na 589.592†	391734.9	24.42 mg/L	0.120	24.42 mg/L	0.120	0.49%
	QC value within limits for Na 589.592 Recovery = 97.69%					
Pb 220.353†	4926.8	0.5142 mg/L	0.00558	0.5142 mg/L	0.00558	1.09%
	QC value within limits for Pb 220.353 Recovery = 102.83%					
Sb 206.836†	18210.8	4.936 mg/L	0.0433	4.936 mg/L	0.0433	0.88%
	QC value within limits for Sb 206.836 Recovery = 98.72%					
Se 196.026†	487.1	0.4961 mg/L	0.00462	0.4961 mg/L	0.00462	0.93%
	QC value within limits for Se 196.026 Recovery = 99.23%					
Sn 189.927†	36428.6	5.055 mg/L	0.0413	5.055 mg/L	0.0413	0.82%
	QC value within limits for Sn 189.927 Recovery = 101.09%					
Ti 337.279†	1416336.1	2.458 mg/L	0.0109	2.458 mg/L	0.0109	0.44%
	QC value within limits for Ti 337.279 Recovery = 98.32%					
Tl 190.801†	3883.7	1.035 mg/L	0.0113	1.035 mg/L	0.0113	1.09%
	QC value within limits for Tl 190.801 Recovery = 103.52%					
V 292.402†	264479.9	2.502 mg/L	0.0011	2.502 mg/L	0.0011	0.05%
	QC value within limits for V 292.402 Recovery = 100.07%					
Zn 206.200†	48064.9	1.023 mg/L	0.0083	1.023 mg/L	0.0083	0.81%
	QC value within limits for Zn 206.200 Recovery = 102.34%					
Ca 227.546†	10799.0	24.70 mg/L	0.111	24.70 mg/L	0.111	0.45%
	QC value within limits for Ca 227.546 Recovery = 98.81%					
Sr 421.552†	1556355.2	2.363 mg/L	0.0122	2.363 mg/L	0.0122	0.52%
	QC value within limits for Sr 421.552 Recovery = 94.51%					
Al 237.313†	86510.8	9.574 mg/L	0.0354	9.574 mg/L	0.0354	0.37%
	QC value within limits for Al 237.313 Recovery = 95.74%					

All analyte(s) passed QC.

Sequence No.: 31 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 12/4/2014 7:12:45 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7399862.0	1.041	mg/L	0.0045				0.43%
Ag 328.068†	120.0	0.0004	mg/L	0.00005	0.0004	mg/L	0.00005	11.62%
QC value within limits for Ag 328.068 Recovery = Not calculated								
As 188.979†	0.5	0.0002	mg/L	0.00024	0.0002	mg/L	0.00024	99.02%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	3190.2	0.0238	mg/L	0.00297	0.0238	mg/L	0.00297	12.52%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	643.0	0.0054	mg/L	0.00277	0.0054	mg/L	0.00277	51.03%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	690.2	0.0003	mg/L	0.00015	0.0003	mg/L	0.00015	58.13%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	37.0	0.0003	mg/L	0.00011	0.0003	mg/L	0.00011	37.18%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	55.4	0.0016	mg/L	0.00062	0.0016	mg/L	0.00062	38.11%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	38.6	0.0003	mg/L	0.00009	0.0003	mg/L	0.00009	31.77%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	939.1	0.0031	mg/L	0.00072	0.0031	mg/L	0.00072	23.12%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	1688.4	0.0261	mg/L	0.00197	0.0261	mg/L	0.00197	7.54%

QC value within limits for Fe 259.939 Recovery = Not calculated

K 766.490†	77.6	0.0201 mg/L	0.00290	0.0201 mg/L	0.00290	14.37%

QC value within limits for K 766.490 Recovery = Not calculated

Mg 279.077†	50.9	0.0047 mg/L	0.00787	0.0047 mg/L	0.00787	166.99%

QC value within limits for Mg 279.077 Recovery = Not calculated

Mn 257.610†	1556.4	0.0035 mg/L	0.00022	0.0035 mg/L	0.00022	6.44%

QC value within limits for Mn 257.610 Recovery = Not calculated

Mo 202.031†	54.2	0.0017 mg/L	0.00071	0.0017 mg/L	0.00071	41.34%

QC value within limits for Mo 202.031 Recovery = Not calculated

Ni 231.604†	118.3	0.0019 mg/L	0.00055	0.0019 mg/L	0.00055	29.37%

QC value within limits for Ni 231.604 Recovery = Not calculated

Na 589.592†	692.2	0.0432 mg/L	0.00130	0.0432 mg/L	0.00130	3.02%

QC value within limits for Na 589.592 Recovery = Not calculated

Pb 220.353†	3.7	0.0004 mg/L	0.00088	0.0004 mg/L	0.00088	226.96%

QC value within limits for Pb 220.353 Recovery = Not calculated

Sb 206.836†	20.2	0.0055 mg/L	0.00178	0.0055 mg/L	0.00178	32.38%

QC value within limits for Sb 206.836 Recovery = Not calculated

Se 196.026†	3.2	0.0033 mg/L	0.00024	0.0033 mg/L	0.00024	7.21%

QC value within limits for Se 196.026 Recovery = Not calculated

Sn 189.927†	56.6	0.0078 mg/L	0.00181	0.0078 mg/L	0.00181	23.01%

QC value within limits for Sn 189.927 Recovery = Not calculated

Ti 337.279†	1087.4	0.0019 mg/L	0.00114	0.0019 mg/L	0.00114	60.27%

QC value within limits for Ti 337.279 Recovery = Not calculated

Tl 190.801†	4.2	0.0011 mg/L	0.00010	0.0011 mg/L	0.00010	8.63%

QC value within limits for Tl 190.801 Recovery = Not calculated

V 292.402†	193.5	0.0018 mg/L	0.00113	0.0018 mg/L	0.00113	61.48%

QC value within limits for V 292.402 Recovery = Not calculated

Zn 206.200†	59.0	0.0013 mg/L	0.00017	0.0013 mg/L	0.00017	13.79%

QC value within limits for Zn 206.200 Recovery = Not calculated

Ca 227.546†	5.6	0.0139 mg/L	0.00008	0.0139 mg/L	0.00008	0.60%

QC value within limits for Ca 227.546 Recovery = Not calculated

Sr 421.552†	1997.2	0.0030 mg/L	0.00015	0.0030 mg/L	0.00015	4.92%

QC value within limits for Sr 421.552 Recovery = Not calculated

Al 237.313†	55.2	0.0061 mg/L	0.00151	0.0061 mg/L	0.00151	24.54%

QC value within limits for Al 237.313 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 32
Sample ID: R1409404-003
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 58
Date Collected: 12/4/2014 7:18:46 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409404-003

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6988612.7	0.9831	mg/L	0.00225				0.23%
Ag 328.068†	-3876.9	0.0040	mg/L	0.00002				0.49%
As 188.979†	62.0	0.0273	mg/L	0.00148				5.41%
B 249.772†	43970.6	0.0467	mg/L	0.00292				6.25%
Ba 233.527†	29273.0	0.2470	mg/L	0.00102				0.41%
Be 313.107†	3443.8	0.0013	mg/L	0.00001				0.48%
Cd 226.502†	1593.5	0.0012	mg/L	0.00006				5.21%
Co 228.616†	950.4	0.0278	mg/L	0.00043				1.56%
Cr 267.716†	14120.0	0.1060	mg/L	0.00011				0.10%
Cu 324.752†	14967.2	0.0560	mg/L	0.00048				0.86%
Fe 259.939†	4363978.9	67.51	mg/L LR	0.262				0.39%
K 766.490†	34327.2	8.915	mg/L	0.0505				0.57%
Mg 279.077†	526469.3	48.75	mg/L	0.161				0.33%
Mn 257.610†	481615.3	1.080	mg/L	0.0045				0.42%
Mo 202.031†	2.3	0.0001	mg/L	0.00009				126.74%
Ni 231.604†	3645.4	0.0577	mg/L	0.00029				0.51%
Na 589.592†	811465.3	50.59	mg/L	0.471				0.93%
Pb 220.353†	362.7	0.0405	mg/L	0.00031				0.76%
Sb 206.836†	23.9	0.0032	mg/L	0.00034				10.60%
Se 196.026†	-21.5	0.0001	mg/L	0.00127				885.11%
Sn 189.927†	-165.2	-0.0229	mg/L	0.00044				1.94%
Ti 337.279†	79334.4	0.1377	mg/L	0.00086				0.62%
Tl 190.801†	0.8	0.0006	mg/L	0.00038				58.32%
V 292.402†	5077.8	0.0480	mg/L	0.00001				0.03%

Zn 206.200†	8388.4	0.1786 mg/L	0.00182		1.02%
Ca 227.546†	103328.7	237.1 mg/L	2.11		0.89%
Sr 421.552†	268611.1	0.4078 mg/L	0.00366		0.90%
Al 237.313†	323135.0	35.78 mg/L	0.269		0.75%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 33
Sample ID: R1409404-004
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 59
Date Collected: 12/4/2014 7:24:57 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409404-004

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7593054.2	1.068	mg/L	0.0021				0.20%
Ag 328.068†	78.4	0.0003	mg/L	0.00018				59.86%
As 188.979†	-1.7	-0.0008	mg/L	0.00078				97.46%
B 249.772†	804.4	0.0055	mg/L	0.00045				8.20%
Ba 233.527†	5.2	0.0000	mg/L	0.00002				50.74%
Be 313.107†	323.7	0.0001	mg/L	0.00001				11.17%
Cd 226.502†	-0.6	0.0000	mg/L	0.00002				60.22%
Co 228.616†	4.7	0.0001	mg/L	0.00006				40.55%
Cr 267.716†	203.9	0.0014	mg/L	0.00000				0.11%
Cu 324.752†	66.0	0.0002	mg/L	0.00024				104.81%
Fe 259.939†	8080.7	0.1250	mg/L	0.00392				3.14%
K 766.490†	-102.1	-0.0265	mg/L	0.00345				13.02%
Mg 279.077†	68.2	0.0063	mg/L	0.00264				41.79%
Mn 257.610†	1050.1	0.0024	mg/L	0.00004				1.72%
Mo 202.031†	-4.8	-0.0002	mg/L	0.00001				5.46%
Ni 231.604†	-3.4	-0.0001	mg/L	0.00015				278.35%
Na 589.592†	7.6	0.0005	mg/L	0.00063				134.33%
Pb 220.353†	-0.1	0.0000	mg/L	0.00085				>999.9%
Sb 206.836†	2.6	0.0007	mg/L	0.00004				5.72%
Se 196.026†	-0.0	0.0000	mg/L	0.00145				>999.9%
Sn 189.927†	-1.9	-0.0003	mg/L	0.00003				12.13%
Ti 337.279†	97.9	0.0002	mg/L	0.00012				68.52%
Tl 190.801†	-0.8	-0.0002	mg/L	0.00041				185.56%
V 292.402†	7.3	0.0001	mg/L	0.00011				154.89%
Zn 206.200†	116.2	0.0025	mg/L	0.00006				2.30%
Ca 227.546†	-2.5	-0.0001	mg/L	0.00167				>999.9%
Sr 421.552†	-37.4	-0.0001	mg/L	0.00003				53.97%
Al 237.313†	15.4	0.0019	mg/L	0.00027				14.44%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 34
Sample ID: R1409432-015
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 60
Date Collected: 12/4/2014 7:31:03 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409432-015

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7602133.2	1.069	mg/L	0.0059				0.55%
Ag 328.068†	21.4	0.0001	mg/L	0.00020				200.73%
As 188.979†	-1.8	-0.0008	mg/L	0.00010				11.71%
B 249.772†	456.6	0.0030	mg/L	0.00018				6.00%
Ba 233.527†	28.4	0.0002	mg/L	0.00008				32.38%
Be 313.107†	235.4	0.0001	mg/L	0.00000				2.31%
Cd 226.502†	-1.1	0.0000	mg/L	0.00001				49.88%
Co 228.616†	1.7	0.0000	mg/L	0.00001				24.83%
Cr 267.716†	206.6	0.0014	mg/L	0.00002				1.62%
Cu 324.752†	-30.6	-0.0001	mg/L	0.00005				54.20%
Fe 259.939†	6467.7	0.1001	mg/L	0.00008				0.08%
K 766.490†	-79.5	-0.0207	mg/L	0.00320				15.50%
Mg 279.077†	489.2	0.0453	mg/L	0.00183				4.04%
Mn 257.610†	2464.0	0.0055	mg/L	0.00003				0.59%

Mo 202.031†	-6.9	-0.0002	mg/L	0.00008	38.53%
Ni 231.604†	108.9	0.0017	mg/L	0.00004	2.05%
Na 589.592†	11.6	0.0007	mg/L	0.00133	184.08%
Pb 220.353†	2.8	0.0003	mg/L	0.00068	240.62%
Sb 206.836†	0.5	0.0001	mg/L	0.00059	466.14%
Se 196.026†	0.8	0.0008	mg/L	0.00106	130.94%
Sn 189.927†	-6.3	-0.0009	mg/L	0.00009	10.00%
Ti 337.279†	374.7	0.0007	mg/L	0.00003	4.20%
Tl 190.801†	-4.6	-0.0012	mg/L	0.00012	9.73%
V 292.402†	12.7	0.0001	mg/L	0.00003	24.93%
Zn 206.200†	64.5	0.0014	mg/L	0.00000	0.13%
Ca 227.546†	49.4	0.1164	mg/L	0.01238	10.64%
Sr 421.552†	110.5	0.0002	mg/L	0.00006	38.55%
Al 237.313†	143.9	0.0160	mg/L	0.00034	2.15%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 35 4
Sample ID: R1409432-01F
Analyst:
Initial Sample Wt: 12/5/14 DCS
Dilution:

Autosampler Location: 61
Date Collected: 12/4/2014 7:37:07 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409432-01F 4

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7548378.3	1.062	mg/L	0.0070				0.66%
Ag 328.068†	10.1	0.0002	mg/L	0.00016				64.86%
As 188.979†	-1.3	-0.0006	mg/L	0.00100				167.63%
B 249.772†	698.6	0.0018	mg/L	0.00020				11.22%
Ba 233.527†	36.6	0.0003	mg/L	0.00005				14.97%
Be 313.107†	160.2	0.0001	mg/L	0.00002				36.54%
Cd 226.502†	15.8	0.0000	mg/L	0.00000				31.01%
Co 228.616†	7.7	0.0002	mg/L	0.00011				50.02%
Cr 267.716†	307.3	0.0022	mg/L	0.00009				4.21%
Cu 324.752†	379.5	0.0013	mg/L	0.00025				18.37%
Fe 259.939†	53557.7	0.8285	mg/L	0.00572				0.69%
K 766.490†	53.0	0.0138	mg/L	0.00911				66.24%
Mg 279.077†	598.1	0.0554	mg/L	0.00034				0.61%
Mn 257.610†	7504.7	0.0168	mg/L	0.00018				1.10%
Mo 202.031†	7.0	0.0002	mg/L	0.00004				16.16%
Ni 231.604†	159.7	0.0025	mg/L	0.00005				1.93%
Na 589.592†	425.6	0.0265	mg/L	0.00182				6.86%
Pb 220.353†	2.9	0.0003	mg/L	0.00042				161.32%
Sb 206.836†	-0.3	-0.0001	mg/L	0.00022				308.83%
Se 196.026†	1.8	0.0021	mg/L	0.00207				97.42%
Sn 189.927†	-9.3	-0.0013	mg/L	0.00046				35.57%
Ti 337.279†	573.0	0.0010	mg/L	0.00003				3.34%
Tl 190.801†	-0.8	-0.0002	mg/L	0.00133				786.53%
V 292.402†	2.1	0.0000	mg/L	0.00002				78.33%
Zn 206.200†	260.9	0.0056	mg/L	0.00015				2.68%
Ca 227.546†	73.1	0.2026	mg/L	0.00754				3.72%
Sr 421.552†	566.4	0.0009	mg/L	0.00003				2.94%
Al 237.313†	92.9	0.0114	mg/L	0.00112				9.81%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 36 4
Sample ID: R1409432-01FL
Analyst:
Initial Sample Wt: 12/5/14 DCS
Dilution:

Autosampler Location: 62
Date Collected: 12/4/2014 7:43:07 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409432-01FL 4

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7396591.4	1.040	mg/L	0.0023				0.22%
Ag 328.068†	40.0	0.0002	mg/L	0.00001				4.87%
As 188.979†	-1.0	-0.0005	mg/L	0.00100				213.08%
B 249.772†	285.5	0.0014	mg/L	0.00002				1.57%

Ba 233.527†	-3.5	0.0000 mg/L	0.00000	6.74%
Be 313.107†	190.0	0.0001 mg/L	0.00003	38.04%
Cd 226.502†	6.5	0.0000 mg/L	0.00002	90.09%
Co 228.616†	4.4	0.0001 mg/L	0.00006	46.95%
Cr 267.716†	68.0	0.0005 mg/L	0.00005	9.35%
Cu 324.752†	4.0	0.0000 mg/L	0.00006	197.15%
Fe 259.939†	11627.5	0.1799 mg/L	0.00084	0.47%
K 766.490†	-54.2	-0.0141 mg/L	0.01454	103.35%
Mg 279.077†	108.8	0.0101 mg/L	0.00144	14.31%
Mn 257.610†	1965.2	0.0044 mg/L	0.00004	0.89%
Mo 202.031†	-4.6	-0.0001 mg/L	0.00002	11.17%
Ni 231.604†	25.1	0.0004 mg/L	0.00010	26.11%
Na 589.592†	-65.3	-0.0041 mg/L	0.00415	101.92%
Pb 220.353†	-1.2	-0.0001 mg/L	0.00073	562.73%
Sb 206.836†	-0.7	-0.0002 mg/L	0.00033	183.89%
Se 196.026†	1.6	0.0017 mg/L	0.00103	59.53%
Sn 189.927†	-8.3	-0.0012 mg/L	0.00022	19.01%
Ti 337.279†	96.1	0.0002 mg/L	0.00001	7.40%
Tl 190.801†	-2.2	-0.0006 mg/L	0.00056	95.99%
V 292.402†	22.1	0.0002 mg/L	0.00014	67.88%
Zn 206.200†	53.0	0.0011 mg/L	0.00025	22.56%
Ca 227.546†	5.1	0.0196 mg/L	0.00803	40.99%
Sr 421.552†	73.9	0.0001 mg/L	0.00000	2.99%
Al 237.313†	14.9	0.0019 mg/L	0.00092	48.35%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 37
Sample ID: R1409434-0017
Analyst:
Initial Sample Wt: 12/5/14 DCB
Dilution:

Autosampler Location: 63
Date Collected: 12/4/2014 7:49:08 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409434-0017

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7488181.8	1.053	mg/L	0.0083				0.78%
Ag 328.068†	50.7	0.0002	mg/L	0.00000				0.40%
As 188.979†	0.2	0.0001	mg/L	0.00042				569.93%
B 249.772†	120.4	0.0003	mg/L	0.00001				2.19%
Ba 233.527†	-1.3	0.0000	mg/L	0.00001				109.13%
Be 313.107†	95.5	0.0000	mg/L	0.00002				60.52%
Cd 226.502†	-3.2	-0.0001	mg/L	0.00003				61.07%
Co 228.616†	3.7	0.0001	mg/L	0.00004				34.19%
Cr 267.716†	86.7	0.0006	mg/L	0.00006				9.63%
Cu 324.752†	374.0	0.0013	mg/L	0.00005				4.22%
Fe 259.939†	8835.1	0.1367	mg/L	0.00168				1.23%
K 766.490†	-0.6	-0.0002	mg/L	0.00802				>999.9%
Mg 279.077†	350.1	0.0324	mg/L	0.00150				4.63%
Mn 257.610†	2038.9	0.0046	mg/L	0.00001				0.17%
Mo 202.031†	-1.0	0.0000	mg/L	0.00000				4.53%
Ni 231.604†	18.9	0.0003	mg/L	0.00000				1.56%
Na 589.592†	528.0	0.0329	mg/L	0.00032				0.97%
Pb 220.353†	-0.8	-0.0001	mg/L	0.00005				51.73%
Sb 206.836†	-1.0	-0.0003	mg/L	0.00031				115.92%
Se 196.026†	0.8	0.0009	mg/L	0.00287				318.91%
Sn 189.927†	-11.3	-0.0016	mg/L	0.00033				21.09%
Ti 337.279†	305.7	0.0005	mg/L	0.00003				5.83%
Tl 190.801†	-1.7	-0.0005	mg/L	0.00004				8.53%
V 292.402†	7.2	0.0001	mg/L	0.00002				27.22%
Zn 206.200†	46.4	0.0010	mg/L	0.00004				4.01%
Ca 227.546†	42.4	0.1021	mg/L	0.01243				12.18%
Sr 421.552†	71.3	0.0001	mg/L	0.00000				2.60%
Al 237.313†	121.5	0.0136	mg/L	0.00015				1.12%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 38
Sample ID: R1409434-017L
Analyst:
Initial Sample Wt:

Autosampler Location: 64
Date Collected: 12/4/2014 7:55:08 PM
Data Type: Original
Initial Sample Vol:

Dilution: Sample Prep Vol: 50 mL

Mean Data: R1409434-017L

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7365538.0	1.036	mg/L	0.0056				0.54%
Ag 328.068†	-10.1	0.0000	mg/L	0.00007				459.03%
As 188.979†	-1.1	-0.0005	mg/L	0.00050				97.80%
B 249.772†	77.3	0.0003	mg/L	0.00006				21.47%
Ba 233.527†	-18.6	-0.0002	mg/L	0.00005				33.31%
Be 313.107†	98.1	0.0000	mg/L	0.00002				64.04%
Cd 226.502†	8.2	0.0001	mg/L	0.00004				66.16%
Co 228.616†	2.3	0.0001	mg/L	0.00015				228.93%
Cr 267.716†	74.7	0.0005	mg/L	0.00003				5.20%
Cu 324.752†	-102.1	-0.0003	mg/L	0.00003				8.98%
Fe 259.939†	4746.3	0.0734	mg/L	0.00001				0.02%
K 766.490†	-71.9	-0.0187	mg/L	0.00891				47.70%
Mg 279.077†	46.0	0.0043	mg/L	0.00026				6.21%
Mn 257.610†	873.1	0.0020	mg/L	0.00001				0.33%
Mo 202.031†	-6.3	-0.0002	mg/L	0.00002				8.68%
Ni 231.604†	-3.6	-0.0001	mg/L	0.00002				27.66%
Na 589.592†	-117.1	-0.0073	mg/L	0.00023				3.10%
Pb 220.353†	-4.0	-0.0004	mg/L	0.00021				50.44%
Sb 206.836†	-0.8	-0.0002	mg/L	0.00071				336.44%
Se 196.026†	-0.4	-0.0004	mg/L	0.00100				278.40%
Sn 189.927†	-10.0	-0.0014	mg/L	0.00020				14.69%
Ti 337.279†	42.8	0.0001	mg/L	0.00002				28.66%
Tl 190.801†	-1.4	-0.0004	mg/L	0.00115				317.41%
V 292.402†	15.8	0.0001	mg/L	0.00026				173.84%
Zn 206.200†	0.7	0.0000	mg/L	0.00000				7.82%
Ca 227.546†	1.2	0.0059	mg/L	0.00100				16.87%
Sr 421.552†	-58.9	-0.0001	mg/L	0.00004				48.41%
Al 237.313†	6.7	0.0008	mg/L	0.00057				67.55%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 39
Sample ID: R1409435-001 100X
Analyst:
Initial Sample Wt:
Dilution: 100X

Autosampler Location: 65
Date Collected: 12/4/2014 8:01:14 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409435-001 100X

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7420478.8	1.044	mg/L	0.0038				0.36%
Ag 328.068†	17.4	0.0001	mg/L	0.00023				369.97%
As 188.979†	-1.2	-0.0006	mg/L	0.00006				10.19%
B 249.772†	44.1	0.0003	mg/L	0.00005				18.72%
Ba 233.527†	-18.7	-0.0002	mg/L	0.00001				4.78%
Be 313.107†	139.5	0.0001	mg/L	0.00000				7.59%
Cd 226.502†	3.2	0.0000	mg/L	0.00003				140.84%
Co 228.616†	1.7	0.0000	mg/L	0.00008				157.50%
Cr 267.716†	4.1	0.0000	mg/L	0.00002				54.63%
Cu 324.752†	-108.9	-0.0004	mg/L	0.00002				4.78%
Fe 259.939†	866.6	0.0134	mg/L	0.00003				0.22%
K 766.490†	6322.7	1.642	mg/L	0.0127				0.77%
Mg 279.077†	1194.9	0.1106	mg/L	0.00379				3.42%
Mn 257.610†	715.3	0.0016	mg/L	0.00001				0.86%
Mo 202.031†	-7.3	-0.0002	mg/L	0.00004				16.89%
Ni 231.604†	-12.6	-0.0002	mg/L	0.00016				82.32%
Na 589.592†	97.4	0.0061	mg/L	0.00254				41.82%
Pb 220.353†	-0.3	0.0000	mg/L	0.00030				>999.9%
Sb 206.836†	0.6	0.0002	mg/L	0.00023				153.00%
Se 196.026†	3.0	0.0030	mg/L	0.00178				58.80%
Sn 189.927†	-6.8	-0.0009	mg/L	0.00034				36.02%
Ti 337.279†	-4.4	0.0000	mg/L	0.00005				606.72%
Tl 190.801†	-1.6	-0.0004	mg/L	0.00037				85.42%
V 292.402†	26.1	0.0002	mg/L	0.00008				33.22%
Zn 206.200†	496.2	0.0106	mg/L	0.00010				0.90%

over diluted
12/5/14
DCS

Ca 227.546†	17.7	0.0408	mg/L	0.00331	8.12%
Sr 421.552†	17.9	0.0000	mg/L	0.00003	102.41%
Al 237.313†	10.4	0.0011	mg/L	0.00148	132.37%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 40
Sample ID: R1409435-002 100X
Analyst:
Initial Sample Wt:
Dilution: 100X

Autosampler Location: 66
Date Collected: 12/4/2014 8:07:16 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409435-002 100X

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7396117.2	1.040	mg/L	0.0008				0.07%
Ag 328.068†	-10.4	0.0000	mg/L	0.00015				484.89%
As 188.979†	-2.3	-0.0011	mg/L	0.00020				19.44%
B 249.772†	19.9	0.0001	mg/L	0.00000				2.70%
Ba 233.527†	-15.5	-0.0001	mg/L	0.00005				41.41%
Be 313.107†	138.9	0.0001	mg/L	0.00000				2.23%
Cd 226.502†	1.3	0.0000	mg/L	0.00001				150.39%
Co 228.616†	3.6	0.0001	mg/L	0.00005				50.20%
Cr 267.716†	-3.1	0.0000	mg/L	0.00003				296.28%
Cu 324.752†	92.7	0.0003	mg/L	0.00001				1.63%
Fe 259.939†	1016.9	0.0157	mg/L	0.00020				1.29%
K 766.490†	7553.7	1.962	mg/L	0.0372				1.90%
Mg 279.077†	1182.4	0.1095	mg/L	0.00204				1.86%
Mn 257.610†	681.9	0.0015	mg/L	0.00003				1.98%
Mo 202.031†	-4.5	-0.0001	mg/L	0.00007				51.12%
Ni 231.604†	-11.6	-0.0002	mg/L	0.00028				153.72%
Na 589.592†	34.2	0.0021	mg/L	0.00272				127.43%
Pb 220.353†	-7.4	-0.0008	mg/L	0.00023				29.90%
Sb 206.836†	-1.4	-0.0004	mg/L	0.00019				51.93%
Se 196.026†	1.3	0.0013	mg/L	0.00021				15.28%
Sn 189.927†	-6.9	-0.0010	mg/L	0.00032				33.04%
Ti 337.279†	-42.6	-0.0001	mg/L	0.00006				86.73%
Tl 190.801†	1.1	0.0003	mg/L	0.00011				35.54%
V 292.402†	22.0	0.0002	mg/L	0.00001				3.34%
Zn 206.200†	461.5	0.0098	mg/L	0.00000				0.02%
Ca 227.546†	6.4	0.0153	mg/L	0.00517				33.82%
Sr 421.552†	29.8	0.0000	mg/L	0.00001				22.97%
Al 237.313†	-7.8	-0.0009	mg/L	0.00085				96.53%

over diluted 12/5/14 DCB

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 41
Sample ID: R1409444-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 67
Date Collected: 12/4/2014 8:13:17 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409444-001

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6843760.5	0.9627	mg/L	0.00247				0.26%
Ag 328.068†	-247.4	-0.0008	mg/L	0.00018				21.92%
As 188.979†	9.4	0.0044	mg/L	0.00145				33.11%
B 249.772†	17995.9	0.1342	mg/L	0.00026				0.20%
Ba 233.527†	1335.9	0.0113	mg/L	0.00014				1.24%
Be 313.107†	-491.7	-0.0002	mg/L	0.00000				2.32%
Cd 226.502†	-3.7	0.0000	mg/L	0.00001				29.40%
Co 228.616†	-15.7	-0.0005	mg/L	0.00002				4.83%
Cr 267.716†	-1646.0	-0.0027	mg/L	0.00013				4.76%
Cu 324.752†	760.9	0.0025	mg/L	0.00011				4.40%
Fe 259.939†	6267.8	0.0970	mg/L	0.00022				0.22%
K 766.490†	56973.7	14.80	mg/L	0.069				0.46%
Mg 279.077†	1021031.8	94.54	mg/L	0.952				1.01%
Mn 257.610†	2093.3	0.0047	mg/L	0.00005				1.05%
Mo 202.031†	90.4	0.0029	mg/L	0.00008				2.95%

Ni 231.604†	-55.2	-0.0009 mg/L	0.00012		13.58%
Na 589.592†	780926.6	48.69 mg/L	0.201		0.41%
Pb 220.353†	-35.1	-0.0011 mg/L	0.00009		8.28%
Sb 206.836†	3.6	0.0010 mg/L	0.00019		19.72%
Se 196.026†	2.6	0.0027 mg/L	0.00063		23.25%
Sn 189.927†	-216.8	-0.0301 mg/L	0.00029		0.97%
Ti 337.279†	332.5	0.0006 mg/L	0.00006		10.19%
Tl 190.801†	-11.3	-0.0030 mg/L	0.00016		5.23%
V 292.402†	-26.9	-0.0003 mg/L	0.00008		31.25%
Zn 206.200†	99.1	0.0021 mg/L	0.00003		1.35%
Ca 227.546†	130140.3	294.8 mg/L LR	2.01		0.68%
Sr 421.552†	215072.5	0.3265 mg/L	0.00134		0.41%
Al 237.313†	807.8	-0.0801 mg/L	0.00143		1.78%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 42
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/4/2014 8:19:21 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7104123.0	0.9993	mg/L	0.00393				0.39%
Ag 328.068†	146095.0	0.4944	mg/L	0.00354	0.4944	mg/L	0.00354	0.72%
QC value within limits for Ag 328.068 Recovery = 98.87%								
As 188.979†	2147.0	0.9959	mg/L	0.00278	0.9959	mg/L	0.00278	0.28%
QC value within limits for As 188.979 Recovery = 99.59%								
B 249.772†	320537.9	2.377	mg/L	0.0389	2.377	mg/L	0.0389	1.64%
QC value within limits for B 249.772 Recovery = 95.06%								
Ba 233.527†	1203208.7	10.15	mg/L	0.154	10.15	mg/L	0.154	1.51%
QC value within limits for Ba 233.527 Recovery = 101.53%								
Be 313.107†	659580.2	0.2459	mg/L	0.00379	0.2459	mg/L	0.00379	1.54%
QC value within limits for Be 313.107 Recovery = 98.36%								
Cd 226.502†	60753.6	0.4981	mg/L	0.01035	0.4981	mg/L	0.01035	2.08%
QC value within limits for Cd 226.502 Recovery = 99.61%								
Co 228.616†	83647.6	2.444	mg/L	0.0384	2.444	mg/L	0.0384	1.57%
QC value within limits for Co 228.616 Recovery = 97.74%								
Cr 267.716†	71895.5	0.5018	mg/L	0.00774	0.5018	mg/L	0.00774	1.54%
QC value within limits for Cr 267.716 Recovery = 100.36%								
Cu 324.752†	360649.6	1.201	mg/L	0.0019	1.201	mg/L	0.0019	0.16%
QC value within limits for Cu 324.752 Recovery = 96.11%								
Fe 259.939†	317580.2	4.913	mg/L	0.0590	4.913	mg/L	0.0590	1.20%
QC value within limits for Fe 259.939 Recovery = 98.25%								
K 766.490†	93829.8	24.37	mg/L	0.000	24.37	mg/L	0.000	0.00%
QC value within limits for K 766.490 Recovery = 97.48%								
Mg 279.077†	266151.3	24.64	mg/L	0.324	24.64	mg/L	0.324	1.31%
QC value within limits for Mg 279.077 Recovery = 98.57%								
Mn 257.610†	334546.0	0.7443	mg/L	0.01016	0.7443	mg/L	0.01016	1.37%
QC value within limits for Mn 257.610 Recovery = 99.24%								
Mo 202.031†	76031.0	2.400	mg/L	0.0335	2.400	mg/L	0.0335	1.40%
QC value within limits for Mo 202.031 Recovery = 95.99%								
Ni 231.604†	126417.8	2.001	mg/L	0.0332	2.001	mg/L	0.0332	1.66%
QC value within limits for Ni 231.604 Recovery = 100.07%								
Na 589.592†	395839.1	24.68	mg/L	0.013	24.68	mg/L	0.013	0.05%
QC value within limits for Na 589.592 Recovery = 98.72%								
Pb 220.353†	4905.7	0.5120	mg/L	0.00025	0.5120	mg/L	0.00025	0.05%
QC value within limits for Pb 220.353 Recovery = 102.39%								
Sb 206.836†	18155.1	4.921	mg/L	0.0058	4.921	mg/L	0.0058	0.12%
QC value within limits for Sb 206.836 Recovery = 98.41%								
Se 196.026†	484.3	0.4933	mg/L	0.00027	0.4933	mg/L	0.00027	0.06%
QC value within limits for Se 196.026 Recovery = 98.66%								
Sn 189.927†	35508.8	4.927	mg/L	0.0981	4.927	mg/L	0.0981	1.99%
QC value within limits for Sn 189.927 Recovery = 98.54%								
Ti 337.279†	1418419.2	2.462	mg/L	0.0316	2.462	mg/L	0.0316	1.28%
QC value within limits for Ti 337.279 Recovery = 98.47%								
Tl 190.801†	3871.0	1.032	mg/L	0.0031	1.032	mg/L	0.0031	0.30%
QC value within limits for Tl 190.801 Recovery = 103.18%								
V 292.402†	261938.6	2.478	mg/L	0.0289	2.478	mg/L	0.0289	1.16%

QC value within limits for V 292.402 Recovery = 99.11%

Zn 206.200†	47052.4	1.002 mg/L	0.0029	1.002 mg/L	0.0029	0.29%

QC value within limits for Zn 206.200 Recovery = 100.18%

Ca 227.546†	10798.3	24.70 mg/L	0.056	24.70 mg/L	0.056	0.23%

QC value within limits for Ca 227.546 Recovery = 98.78%

Sr 421.552†	1572960.5	2.388 mg/L	0.0011	2.388 mg/L	0.0011	0.05%

QC value within limits for Sr 421.552 Recovery = 95.52%

Al 237.313†	85318.8	9.442 mg/L	0.0459	9.442 mg/L	0.0459	0.49%

QC value within limits for Al 237.313 Recovery = 94.42%

All analyte(s) passed QC.

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Sequence No.: 43 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 12/4/2014 8:25:29 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7396796.4	1.041	mg/L	0.0025				0.24%
Ag 328.068†	173.6	0.0006	mg/L	0.00017	0.0006	mg/L	0.00017	28.81%
QC value within limits for Ag 328.068 Recovery = Not calculated								
As 188.979†	1.2	0.0005	mg/L	0.00024	0.0005	mg/L	0.00024	44.05%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	2838.7	0.0212	mg/L	0.00282	0.0212	mg/L	0.00282	13.30%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	396.9	0.0033	mg/L	0.00121	0.0033	mg/L	0.00121	36.04%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	502.5	0.0002	mg/L	0.00004	0.0002	mg/L	0.00004	24.00%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	28.1	0.0002	mg/L	0.00003	0.0002	mg/L	0.00003	11.71%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	36.7	0.0011	mg/L	0.00028	0.0011	mg/L	0.00028	26.57%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	29.0	0.0002	mg/L	0.00004	0.0002	mg/L	0.00004	21.58%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	756.8	0.0025	mg/L	0.00055	0.0025	mg/L	0.00055	21.68%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	808.5	0.0125	mg/L	0.00061	0.0125	mg/L	0.00061	4.88%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	127.9	0.0332	mg/L	0.00372	0.0332	mg/L	0.00372	11.21%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	92.1	0.0085	mg/L	0.00008	0.0085	mg/L	0.00008	0.95%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	642.3	0.0014	mg/L	0.00008	0.0014	mg/L	0.00008	5.44%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	34.8	0.0011	mg/L	0.00025	0.0011	mg/L	0.00025	23.09%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	83.0	0.0013	mg/L	0.00026	0.0013	mg/L	0.00026	19.41%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	317.6	0.0198	mg/L	0.00123	0.0198	mg/L	0.00123	6.19%
QC value within limits for Na 589.592 Recovery = Not calculated								
Pb 220.353†	-0.3	0.0000	mg/L	0.00044	0.0000	mg/L	0.00044	>999.9%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	13.6	0.0037	mg/L	0.00110	0.0037	mg/L	0.00110	29.77%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	1.1	0.0011	mg/L	0.00277	0.0011	mg/L	0.00277	255.06%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	56.5	0.0078	mg/L	0.00130	0.0078	mg/L	0.00130	16.52%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 337.279†	552.0	0.0010	mg/L	0.00028	0.0010	mg/L	0.00028	29.23%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	2.6	0.0007	mg/L	0.00006	0.0007	mg/L	0.00006	8.19%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	130.4	0.0012	mg/L	0.00004	0.0012	mg/L	0.00004	3.41%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	43.7	0.0009	mg/L	0.00017	0.0009	mg/L	0.00017	18.43%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	6.8	0.0160	mg/L	0.00534	0.0160	mg/L	0.00534	33.42%

QC value within limits for Ca 227.546 Recovery = Not calculated

Sr 421.552†	709.5	0.0011 mg/L	0.00008	0.0011 mg/L	0.00008	7.02%

QC value within limits for Sr 421.552 Recovery = Not calculated

Al 237.313†	36.6	0.0041 mg/L	0.00103	0.0041 mg/L	0.00103	25.44%

QC value within limits for Al 237.313 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 44
Sample ID: MRL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/4/2014 8:31:29 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MRL

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7416102.0	1.043	mg/L	0.0045				0.43%
Ag 328.068†	3020.8	0.0102	mg/L	0.00016	0.0102	mg/L	0.00016	1.56%
QC value within limits for Ag 328.068 Recovery = 102.25%								
As 188.979†	45.1	0.0209	mg/L	0.00069	0.0209	mg/L	0.00069	3.28%
QC value within limits for As 188.979 Recovery = 104.63%								
B 249.772†	27092.2	0.2022	mg/L	0.00278	0.2022	mg/L	0.00278	1.37%
QC value within limits for B 249.772 Recovery = 101.09%								
Ba 233.527†	25902.2	0.2186	mg/L	0.00179	0.2186	mg/L	0.00179	0.82%
QC value within limits for Ba 233.527 Recovery = 109.29%								
Be 313.107†	13677.7	0.0051	mg/L	0.00002	0.0051	mg/L	0.00002	0.30%
QC value within limits for Be 313.107 Recovery = 101.98%								
Cd 226.502†	1299.5	0.0107	mg/L	0.00009	0.0107	mg/L	0.00009	0.86%
QC value within limits for Cd 226.502 Recovery = 106.52%								
Co 228.616†	1839.5	0.0537	mg/L	0.00039	0.0537	mg/L	0.00039	0.72%
QC value within limits for Co 228.616 Recovery = 107.48%								
Cr 267.716†	1471.6	0.0103	mg/L	0.00007	0.0103	mg/L	0.00007	0.67%
QC value within limits for Cr 267.716 Recovery = 103.21%								
Cu 324.752†	7719.0	0.0257	mg/L	0.00036	0.0257	mg/L	0.00036	1.40%
QC value within limits for Cu 324.752 Recovery = 102.86%								
Fe 259.939†	7386.0	0.1143	mg/L	0.00159	0.1143	mg/L	0.00159	1.39%
QC value within limits for Fe 259.939 Recovery = 114.26%								
K 766.490†	3449.4	0.8959	mg/L	0.00001	0.8959	mg/L	0.00001	0.00%
QC value within limits for K 766.490 Recovery = 89.59%								
Mg 279.077†	11232.2	1.040	mg/L	0.0112	1.040	mg/L	0.0112	1.08%
QC value within limits for Mg 279.077 Recovery = 104.00%								
Mn 257.610†	7398.8	0.0165	mg/L	0.00013	0.0165	mg/L	0.00013	0.81%
QC value within limits for Mn 257.610 Recovery = 109.75%								
Mo 202.031†	807.7	0.0255	mg/L	0.00023	0.0255	mg/L	0.00023	0.91%
QC value within limits for Mo 202.031 Recovery = 101.98%								
Ni 231.604†	2646.6	0.0419	mg/L	0.00040	0.0419	mg/L	0.00040	0.96%
QC value within limits for Ni 231.604 Recovery = 104.75%								
Na 589.592†	15669.6	0.9770	mg/L	0.00794	0.9770	mg/L	0.00794	0.81%
QC value within limits for Na 589.592 Recovery = 97.70%								
Pb 220.353†	96.6	0.0101	mg/L	0.00061	0.0101	mg/L	0.00061	6.00%
QC value within limits for Pb 220.353 Recovery = 100.86%								
Sb 206.836†	226.7	0.0614	mg/L	0.00002	0.0614	mg/L	0.00002	0.04%
QC value within limits for Sb 206.836 Recovery = 102.38%								
Se 196.026†	9.9	0.0101	mg/L	0.00165	0.0101	mg/L	0.00165	16.41%
QC value within limits for Se 196.026 Recovery = 100.58%								
Sn 189.927†	3747.2	0.5199	mg/L	0.00415	0.5199	mg/L	0.00415	0.80%
QC value within limits for Sn 189.927 Recovery = 103.99%								
Ti 337.279†	28669.3	0.0498	mg/L	0.00035	0.0498	mg/L	0.00035	0.71%
QC value within limits for Ti 337.279 Recovery = 99.51%								
Tl 190.801†	78.7	0.0210	mg/L	0.00004	0.0210	mg/L	0.00004	0.19%
QC value within limits for Tl 190.801 Recovery = 104.86%								
V 292.402†	5596.8	0.0529	mg/L	0.00037	0.0529	mg/L	0.00037	0.69%
QC value within limits for V 292.402 Recovery = 105.88%								
Zn 206.200†	892.9	0.0190	mg/L	0.00021	0.0190	mg/L	0.00021	1.11%
QC value within limits for Zn 206.200 Recovery = 95.06%								
Ca 227.546†	420.7	0.9583	mg/L	0.01157	0.9583	mg/L	0.01157	1.21%
QC value within limits for Ca 227.546 Recovery = 95.83%								
Sr 421.552†	65572.5	0.0995	mg/L	0.00095	0.0995	mg/L	0.00095	0.95%
QC value within limits for Sr 421.552 Recovery = 99.55%								
Al 237.313†	1737.8	0.1920	mg/L	0.00120	0.1920	mg/L	0.00120	0.63%

QC value within limits for Al 237.313 Recovery = 95.98%
All analyte(s) passed QC.

Sequence No.: 45
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/4/2014 8:37:31 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6743470.2	0.9486	mg/L	0.00222				0.23%
Ag 328.068†	-5012.3	0.0048	mg/L	0.00010	0.0048	mg/L	0.00010	2.05%
QC value within limits for Ag 328.068 Recovery = Not calculated								
As 188.979†	37.4	0.0071	mg/L	0.00060	0.0071	mg/L	0.00060	8.46%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	48363.7	-0.0169	mg/L	0.00211	-0.0169	mg/L	0.00211	12.49%
Ba 233.527†	1101.7	0.0093	mg/L	0.00004	0.0093	mg/L	0.00004	0.48%
Be 313.107†	-590.1	-0.0002	mg/L	0.00001	-0.0002	mg/L	0.00001	3.39%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	1757.6	-0.0006	mg/L	0.00006	-0.0006	mg/L	0.00006	9.39%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	36.7	0.0011	mg/L	0.00002	0.0011	mg/L	0.00002	2.31%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-3580.8	0.0025	mg/L	0.00004	0.0025	mg/L	0.00004	1.79%
QC value greater than the upper limit for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	-1593.9	0.0025	mg/L	0.00004	0.0025	mg/L	0.00004	1.64%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	5547823.2	85.82	mg/L	0.318	85.82	mg/L	0.318	0.37%
QC value within limits for Fe 259.939 Recovery = 85.82%								
K 766.490†	-163.6	-0.0425	mg/L	0.00418	-0.0425	mg/L	0.00418	9.84%
Mg 279.077†	2666887.9	246.9	mg/L	1.02	246.9	mg/L	1.02	0.41%
QC value within limits for Mg 279.077 Recovery = 98.77%								
Mn 257.610†	-4526.2	0.0014	mg/L	0.00016	0.0014	mg/L	0.00016	11.07%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-66.6	-0.0021	mg/L	0.00004	-0.0021	mg/L	0.00004	1.83%
Ni 231.604†	-193.7	-0.0031	mg/L	0.00003	-0.0031	mg/L	0.00003	0.85%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	-68.3	-0.0043	mg/L	0.00448	-0.0043	mg/L	0.00448	105.16%
Pb 220.353†	-254.8	-0.0013	mg/L	0.00005	-0.0013	mg/L	0.00005	3.54%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	87.8	0.0009	mg/L	0.00017	0.0009	mg/L	0.00017	17.78%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-34.2	-0.0036	mg/L	0.00135	-0.0036	mg/L	0.00135	37.18%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-118.3	-0.0164	mg/L	0.00111	-0.0164	mg/L	0.00111	6.73%
Ti 337.279†	167.4	0.0003	mg/L	0.00002	0.0003	mg/L	0.00002	6.54%
Tl 190.801†	47.1	-0.0020	mg/L	0.00083	-0.0020	mg/L	0.00083	41.86%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	-593.6	-0.0056	mg/L	0.00012	-0.0056	mg/L	0.00012	2.14%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	319.7	0.0068	mg/L	0.00018	0.0068	mg/L	0.00018	2.64%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	111390.2	256.6	mg/L	0.39	256.6	mg/L	0.39	0.15%
QC value within limits for Ca 227.546 Recovery = 102.64%								
Sr 421.552†	2746.4	0.0042	mg/L	0.00000	0.0042	mg/L	0.00000	0.12%
Al 237.313†	2232905.6	247.4	mg/L	0.20	247.4	mg/L	0.20	0.08%
QC value within limits for Al 237.313 Recovery = 98.94%								

QC Failed. Continue with analysis.

Sequence No.: 46
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/4/2014 8:43:31 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6712828.4	0.9443	mg/L	0.00282				0.30%
Ag 328.068†	55293.6	0.2086	mg/L	0.00159	0.2086	mg/L	0.00159	0.76%
QC value within limits for Ag 328.068 Recovery = 104.28%								
As 188.979†	244.4	0.1031	mg/L	0.00049	0.1031	mg/L	0.00049	0.47%
QC value within limits for As 188.979 Recovery = 103.06%								
B 249.772†	48918.7	-0.0156	mg/L	0.00165	-0.0156	mg/L	0.00165	10.59%
Ba 233.527†	59781.1	0.5045	mg/L	0.00264	0.5045	mg/L	0.00264	0.52%
QC value within limits for Ba 233.527 Recovery = 100.89%								
Be 313.107†	1315668.3	0.4905	mg/L	0.00062	0.4905	mg/L	0.00062	0.13%
QC value within limits for Be 313.107 Recovery = 98.10%								
Cd 226.502†	115941.1	0.9370	mg/L	0.00661	0.9370	mg/L	0.00661	0.71%
QC value within limits for Cd 226.502 Recovery = 93.70%								
Co 228.616†	15340.4	0.4481	mg/L	0.00030	0.4481	mg/L	0.00030	0.07%
QC value within limits for Co 228.616 Recovery = 89.63%								
Cr 267.716†	65725.9	0.4840	mg/L	0.00362	0.4840	mg/L	0.00362	0.75%
QC value within limits for Cr 267.716 Recovery = 96.79%								
Cu 324.752†	145098.2	0.4911	mg/L	0.00424	0.4911	mg/L	0.00424	0.86%
QC value within limits for Cu 324.752 Recovery = 98.21%								
Fe 259.939†	5590072.1	86.47	mg/L	0.132	86.47	mg/L	0.132	0.15%
QC value within limits for Fe 259.939 Recovery = 86.47%								
K 766.490†	-140.2	-0.0364	mg/L	0.00178	-0.0364	mg/L	0.00178	4.88%
Mg 279.077†	2692638.2	249.3	mg/L	0.38	249.3	mg/L	0.38	0.15%
QC value within limits for Mg 279.077 Recovery = 99.73%								
Mn 257.610†	210613.0	0.4798	mg/L	0.00350	0.4798	mg/L	0.00350	0.73%
QC value within limits for Mn 257.610 Recovery = 95.95%								
Mo 202.031†	-79.7	-0.0025	mg/L	0.00008	-0.0025	mg/L	0.00008	3.36%
Ni 231.604†	57416.8	0.9090	mg/L	0.00660	0.9090	mg/L	0.00660	0.73%
QC value within limits for Ni 231.604 Recovery = 90.90%								
Na 589.592†	-62.4	-0.0039	mg/L	0.00409	-0.0039	mg/L	0.00409	105.02%
Pb 220.353†	210.6	0.0473	mg/L	0.00132	0.0473	mg/L	0.00132	2.78%
QC value within limits for Pb 220.353 Recovery = 94.64%								
Sb 206.836†	2330.6	0.6088	mg/L	0.00022	0.6088	mg/L	0.00022	0.04%
QC value within limits for Sb 206.836 Recovery = 101.46%								
Se 196.026†	12.4	0.0439	mg/L	0.00281	0.0439	mg/L	0.00281	6.40%
QC value within limits for Se 196.026 Recovery = 87.78%								
Sn 189.927†	-142.1	-0.0197	mg/L	0.00045	-0.0197	mg/L	0.00045	2.27%
Ti 337.279†	84.5	0.0001	mg/L	0.00002	0.0001	mg/L	0.00002	17.01%
Tl 190.801†	397.6	0.0914	mg/L	0.00090	0.0914	mg/L	0.00090	0.98%
QC value within limits for Tl 190.801 Recovery = 91.40%								
V 292.402†	51033.2	0.4827	mg/L	0.00362	0.4827	mg/L	0.00362	0.75%
QC value within limits for V 292.402 Recovery = 96.54%								
Zn 206.200†	43484.2	0.9259	mg/L	0.00272	0.9259	mg/L	0.00272	0.29%
QC value within limits for Zn 206.200 Recovery = 92.59%								
Ca 227.546†	112090.6	258.2	mg/L	3.28	258.2	mg/L	3.28	1.27%
QC value within limits for Ca 227.546 Recovery = 103.29%								
Sr 421.552†	2629.5	0.0040	mg/L	0.00006	0.0040	mg/L	0.00006	1.41%
Al 237.313†	2248452.2	249.1	mg/L	0.05	249.1	mg/L	0.05	0.02%
QC value within limits for Al 237.313 Recovery = 99.63%								

All analyte(s) passed QC.

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Sequence No.: 47
Sample ID: HLCCV2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 12/4/2014 8:49:39 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: HLCCV2

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6504610.3	0.9150	mg/L	0.00652				0.71%
Ag 328.068†	594995.4	2.020	mg/L	0.0011	2.020	mg/L	0.0011	0.05%
QC value within limits for Ag 328.068 Recovery = 100.98%								
As 188.979†	8539.2	3.943	mg/L	0.0492	3.943	mg/L	0.0492	1.25%
QC value within limits for As 188.979 Recovery = 98.57%								
B 249.772†	1315611.3	9.608	mg/L	0.0429	9.608	mg/L	0.0429	0.45%
QC value within limits for B 249.772 Recovery = 96.08%								
Ba 233.527†	4261482.4	35.96	mg/L	0.001	35.96	mg/L	0.001	0.00%
QC value less than the lower limit for Ba 233.527 Recovery = 89.90%								

Be 313.107†	2535129.9	0.9451 mg/L	0.00328	0.9451 mg/L	0.00328	0.35%
QC value within limits for Be 313.107 Recovery = 94.51%						
Cd 226.502†	222765.9	1.822 mg/L	0.0018	1.822 mg/L	0.0018	0.10%
QC value within limits for Cd 226.502 Recovery = 91.08%						
Co 228.616†	302626.0	8.841 mg/L	0.0038	8.841 mg/L	0.0038	0.04%
QC value less than the lower limit for Co 228.616 Recovery = 88.41%						
Cr 267.716†	1337184.6	9.331 mg/L	0.0048	9.331 mg/L	0.0048	0.05%
QC value within limits for Cr 267.716 Recovery = 93.31%						
Cu 324.752†	1476352.9	4.920 mg/L	0.0097	4.920 mg/L	0.0097	0.20%
QC value within limits for Cu 324.752 Recovery = 98.41%						
Fe 259.939†	2915912.7	45.11 mg/L	0.040	45.11 mg/L	0.040	0.09%
QC value within limits for Fe 259.939 Recovery = 90.21%						
K 766.490†	594068.3	154.3 mg/L	1.83	154.3 mg/L	1.83	1.19%
QC value within limits for K 766.490 Recovery = 102.86%						
Mg 279.077†	5083303.7	470.7 mg/L	0.80	470.7 mg/L	0.80	0.17%
QC value within limits for Mg 279.077 Recovery = 94.14%						
Mn 257.610†	4041947.0	8.991 mg/L	0.0043	8.991 mg/L	0.0043	0.05%
QC value less than the lower limit for Mn 257.610 Recovery = 89.91%						
Mo 202.031†	292326.4	9.227 mg/L	0.0048	9.227 mg/L	0.0048	0.05%
QC value within limits for Mo 202.031 Recovery = 92.27%						
Ni 231.604†	439303.8	6.955 mg/L	0.0034	6.955 mg/L	0.0034	0.05%
QC value less than the lower limit for Ni 231.604 Recovery = 86.93%						
Na 589.592†	2403220.7	149.8 mg/L	1.72	149.8 mg/L	1.72	1.15%
QC value within limits for Na 589.592 Recovery = 99.89%						
Pb 220.353†	86315.9	9.043 mg/L	0.0077	9.043 mg/L	0.0077	0.08%
QC value within limits for Pb 220.353 Recovery = 90.43%						
Sb 206.836†	156.0	-0.0021 mg/L	0.00612	-0.0021 mg/L	0.00612	295.58%
Se 196.026†	1874.3	1.924 mg/L	0.0274	1.924 mg/L	0.0274	1.43%
QC value within limits for Se 196.026 Recovery = 96.21%						
Sn 189.927†	-196.9	-0.0273 mg/L	0.00799	-0.0273 mg/L	0.00799	29.23%
Ti 337.279†	5488378.3	9.525 mg/L	0.0212	9.525 mg/L	0.0212	0.22%
QC value within limits for Ti 337.279 Recovery = 95.25%						
Tl 190.801†	13064.0	3.450 mg/L	0.0513	3.450 mg/L	0.0513	1.49%
QC value less than the lower limit for Tl 190.801 Recovery = 86.25%						
V 292.402†	1021753.3	9.665 mg/L	0.0339	9.665 mg/L	0.0339	0.35%
QC value within limits for V 292.402 Recovery = 96.65%						
Zn 206.200†	166750.9	3.550 mg/L	0.0074	3.550 mg/L	0.0074	0.21%
QC value less than the lower limit for Zn 206.200 Recovery = 88.76%						
Ca 227.546†	115489.1	264.5 mg/L	0.01	264.5 mg/L	0.01	0.00%
QC value within limits for Ca 227.546 Recovery = 105.81%						
Sr 421.552†	6469907.3	9.822 mg/L	0.1076	9.822 mg/L	0.1076	1.10%
QC value within limits for Sr 421.552 Recovery = 98.22%						
Al 237.313†	4336628.6	480.3 mg/L	0.60	480.3 mg/L	0.60	0.13%
QC value within limits for Al 237.313 Recovery = 96.07%						

QC Failed. Continue with analysis.

Sequence No.: 48
Sample ID: HLCCV1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 12/4/2014 8:54:29 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: HLCCV1

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7105827.5	0.9996	mg/L	0.00948				0.95%
Ag 328.068†	296342.8	1.003	mg/L	0.0090	1.003	mg/L	0.0090	0.90%
QC value within limits for Ag 328.068 Recovery = 100.28%								
As 188.979†	4358.5	2.022	mg/L	0.0016	2.022	mg/L	0.0016	0.08%
QC value within limits for As 188.979 Recovery = 101.09%								
B 249.772†	670538.3	4.973	mg/L	0.0251	4.973	mg/L	0.0251	0.50%
QC value within limits for B 249.772 Recovery = 99.45%								
Ba 233.527†	2379494.3	20.08	mg/L	0.014	20.08	mg/L	0.014	0.07%
QC value within limits for Ba 233.527 Recovery = 100.40%								
Be 313.107†	1343899.5	0.5010	mg/L	0.00051	0.5010	mg/L	0.00051	0.10%
QC value within limits for Be 313.107 Recovery = 100.20%								
Cd 226.502†	123991.6	1.017	mg/L	0.0088	1.017	mg/L	0.0088	0.87%
QC value within limits for Cd 226.502 Recovery = 101.65%								
Co 228.616†	172030.3	5.026	mg/L	0.0451	5.026	mg/L	0.0451	0.90%
QC value within limits for Co 228.616 Recovery = 100.51%								

Cr 267.716†	145786.4	1.018 mg/L	0.0090	1.018 mg/L	0.0090	0.88%
QC value within limits for Cr 267.716 Recovery = 101.75%						
Cu 324.752†	741737.1	2.471 mg/L	0.0011	2.471 mg/L	0.0011	0.04%
QC value within limits for Cu 324.752 Recovery = 98.84%						
Fe 259.939†	646971.2	10.01 mg/L	0.098	10.01 mg/L	0.098	0.98%
QC value within limits for Fe 259.939 Recovery = 100.08%						
K 766.490†	188417.7	48.93 mg/L	0.161	48.93 mg/L	0.161	0.33%
QC value within limits for K 766.490 Recovery = 97.87%						
Mg 279.077†	542014.7	50.19 mg/L	0.455	50.19 mg/L	0.455	0.91%
QC value within limits for Mg 279.077 Recovery = 100.37%						
Mn 257.610†	676702.4	1.506 mg/L	0.0125	1.506 mg/L	0.0125	0.83%
QC value within limits for Mn 257.610 Recovery = 100.37%						
Mo 202.031†	158993.4	5.019 mg/L	0.0422	5.019 mg/L	0.0422	0.84%
QC value within limits for Mo 202.031 Recovery = 100.37%						
Ni 231.604†	256141.6	4.055 mg/L	0.0334	4.055 mg/L	0.0334	0.82%
QC value within limits for Ni 231.604 Recovery = 101.38%						
Na 589.592†	787153.6	49.08 mg/L	0.247	49.08 mg/L	0.247	0.50%
QC value within limits for Na 589.592 Recovery = 98.15%						
Pb 220.353†	9788.3	1.022 mg/L	0.0017	1.022 mg/L	0.0017	0.16%
QC value within limits for Pb 220.353 Recovery = 102.16%						
Sb 206.836†	37205.2	10.08 mg/L	0.065	10.08 mg/L	0.065	0.64%
QC value within limits for Sb 206.836 Recovery = 100.84%						
Se 196.026†	980.1	0.9982 mg/L	0.00268	0.9982 mg/L	0.00268	0.27%
QC value within limits for Se 196.026 Recovery = 99.82%						
Sn 189.927†	72112.7	10.01 mg/L	0.076	10.01 mg/L	0.076	0.76%
QC value within limits for Sn 189.927 Recovery = 100.06%						
Ti 337.279†	2861694.3	4.967 mg/L	0.0017	4.967 mg/L	0.0017	0.03%
QC value within limits for Ti 337.279 Recovery = 99.33%						
Tl 190.801†	7538.8	2.009 mg/L	0.0009	2.009 mg/L	0.0009	0.04%
QC value within limits for Tl 190.801 Recovery = 100.47%						
V 292.402†	542072.2	5.127 mg/L	0.0066	5.127 mg/L	0.0066	0.13%
QC value within limits for V 292.402 Recovery = 102.55%						
Zn 206.200†	96815.6	2.061 mg/L	0.0142	2.061 mg/L	0.0142	0.69%
QC value within limits for Zn 206.200 Recovery = 103.07%						
Ca 227.546†	22041.1	50.41 mg/L	0.121	50.41 mg/L	0.121	0.24%
QC value within limits for Ca 227.546 Recovery = 100.81%						
Sr 421.552†	3207332.6	4.869 mg/L	0.0871	4.869 mg/L	0.0871	1.79%
QC value within limits for Sr 421.552 Recovery = 97.38%						
Al 237.313†	178475.3	19.75 mg/L	0.207	19.75 mg/L	0.207	1.05%
QC value within limits for Al 237.313 Recovery = 98.76%						

All analyte(s) passed QC.

Sequence No.: 49
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/4/2014 9:01:09 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	7169641.5	1.009	mg/L	0.0042				0.41%
Ag 328.068†	147984.3	0.5008	mg/L	0.00312	0.5008	mg/L	0.00312	0.62%
QC value within limits for Ag 328.068 Recovery = 100.15%								
As 188.979†	2195.9	1.019	mg/L	0.0054	1.019	mg/L	0.0054	0.53%
QC value within limits for As 188.979 Recovery = 101.86%								
B 249.772†	336335.6	2.494	mg/L	0.0046	2.494	mg/L	0.0046	0.18%
QC value within limits for B 249.772 Recovery = 99.77%								
Ba 233.527†	1221124.3	10.30	mg/L	0.048	10.30	mg/L	0.048	0.46%
QC value within limits for Ba 233.527 Recovery = 103.04%								
Be 313.107†	669153.1	0.2495	mg/L	0.00131	0.2495	mg/L	0.00131	0.53%
QC value within limits for Be 313.107 Recovery = 99.78%								
Cd 226.502†	62601.1	0.5132	mg/L	0.00475	0.5132	mg/L	0.00475	0.93%
QC value within limits for Cd 226.502 Recovery = 102.64%								
Co 228.616†	85760.8	2.505	mg/L	0.0171	2.505	mg/L	0.0171	0.68%
QC value within limits for Co 228.616 Recovery = 100.21%								
Cr 267.716†	73725.3	0.5145	mg/L	0.00409	0.5145	mg/L	0.00409	0.80%
QC value within limits for Cr 267.716 Recovery = 102.91%								
Cu 324.752†	366256.0	1.220	mg/L	0.0052	1.220	mg/L	0.0052	0.42%
QC value within limits for Cu 324.752 Recovery = 97.61%								

Fe 259.939†	325672.7	5.038 mg/L	0.0406	5.038 mg/L	0.0406	0.81%
QC value within limits for Fe 259.939 Recovery = 100.76%						
K 766.490†	92627.1	24.06 mg/L	0.143	24.06 mg/L	0.143	0.59%
QC value within limits for K 766.490 Recovery = 96.23%						
Mg 279.077†	272620.6	25.24 mg/L	0.194	25.24 mg/L	0.194	0.77%
QC value within limits for Mg 279.077 Recovery = 100.97%						
Mn 257.610†	342250.7	0.7615 mg/L	0.00561	0.7615 mg/L	0.00561	0.74%
QC value within limits for Mn 257.610 Recovery = 101.53%						
Mo 202.031†	77663.4	2.451 mg/L	0.0182	2.451 mg/L	0.0182	0.74%
QC value within limits for Mo 202.031 Recovery = 98.06%						
Ni 231.604†	129656.9	2.053 mg/L	0.0177	2.053 mg/L	0.0177	0.86%
QC value within limits for Ni 231.604 Recovery = 102.63%						
Na 589.592†	391024.0	24.38 mg/L	0.116	24.38 mg/L	0.116	0.48%
QC value within limits for Na 589.592 Recovery = 97.52%						
Pb 220.353†	5020.9	0.5240 mg/L	0.00383	0.5240 mg/L	0.00383	0.73%
QC value within limits for Pb 220.353 Recovery = 104.79%						
Sb 206.836†	18417.1	4.992 mg/L	0.0158	4.992 mg/L	0.0158	0.32%
QC value within limits for Sb 206.836 Recovery = 99.83%						
Se 196.026†	490.3	0.4994 mg/L	0.00219	0.4994 mg/L	0.00219	0.44%
QC value within limits for Se 196.026 Recovery = 99.88%						
Sn 189.927†	36528.7	5.068 mg/L	0.0323	5.068 mg/L	0.0323	0.64%
QC value within limits for Sn 189.927 Recovery = 101.37%						
Ti 337.279†	1426304.3	2.475 mg/L	0.0071	2.475 mg/L	0.0071	0.29%
QC value within limits for Ti 337.279 Recovery = 99.01%						
Tl 190.801†	3932.7	1.048 mg/L	0.0047	1.048 mg/L	0.0047	0.45%
QC value within limits for Tl 190.801 Recovery = 104.83%						
V 292.402†	266406.2	2.520 mg/L	0.0229	2.520 mg/L	0.0229	0.91%
QC value within limits for V 292.402 Recovery = 100.80%						
Zn 206.200†	48498.5	1.033 mg/L	0.0116	1.033 mg/L	0.0116	1.12%
QC value within limits for Zn 206.200 Recovery = 103.26%						
Ca 227.546†	10836.4	24.79 mg/L	0.042	24.79 mg/L	0.042	0.17%
QC value within limits for Ca 227.546 Recovery = 99.15%						
Sr 421.552†	1551361.7	2.355 mg/L	0.0113	2.355 mg/L	0.0113	0.48%
QC value within limits for Sr 421.552 Recovery = 94.21%						
Al 237.313†	86608.0	9.585 mg/L	0.0461	9.585 mg/L	0.0461	0.48%
QC value within limits for Al 237.313 Recovery = 95.85%						

All analyte(s) passed QC.

Sequence No.: 50
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/4/2014 9:07:16 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	7445505.8	1.047 mg/L	0.0059			0.57%
Ag 328.068†	162.8	0.0006 mg/L	0.00019	0.0006 mg/L	0.00019	33.80%
QC value within limits for Ag 328.068 Recovery = Not calculated						
As 188.979†	2.1	0.0010 mg/L	0.00033	0.0010 mg/L	0.00033	34.47%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.772†	8656.8	0.0647 mg/L	0.00639	0.0647 mg/L	0.00639	9.89%
QC value within limits for B 249.772 Recovery = Not calculated						
Ba 233.527†	778.3	0.0066 mg/L	0.00229	0.0066 mg/L	0.00229	34.81%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	810.4	0.0003 mg/L	0.00004	0.0003 mg/L	0.00004	12.48%
QC value within limits for Be 313.107 Recovery = Not calculated						
Cd 226.502†	40.9	0.0003 mg/L	0.00008	0.0003 mg/L	0.00008	24.64%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	89.9	0.0026 mg/L	0.00056	0.0026 mg/L	0.00056	21.21%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	101.8	0.0007 mg/L	0.00022	0.0007 mg/L	0.00022	30.57%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	2292.5	0.0076 mg/L	0.00091	0.0076 mg/L	0.00091	11.86%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 259.939†	1620.7	0.0251 mg/L	0.00187	0.0251 mg/L	0.00187	7.44%
QC value within limits for Fe 259.939 Recovery = Not calculated						
K 766.490†	66.1	0.0172 mg/L	0.00172	0.0172 mg/L	0.00172	10.04%
QC value within limits for K 766.490 Recovery = Not calculated						

Mg 279.077†	84.8	0.0079 mg/L	0.00479	0.0079 mg/L	0.00479	60.95%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	882.3	0.0020 mg/L	0.00021	0.0020 mg/L	0.00021	10.58%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	63.0	0.0020 mg/L	0.00061	0.0020 mg/L	0.00061	30.62%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	170.7	0.0027 mg/L	0.00055	0.0027 mg/L	0.00055	20.50%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Na 589.592†	486.1	0.0303 mg/L	0.00479	0.0303 mg/L	0.00479	15.81%
QC value within limits for Na 589.592 Recovery = Not calculated						
Pb 220.353†	12.1	0.0013 mg/L	0.00035	0.0013 mg/L	0.00035	27.58%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	25.9	0.0070 mg/L	0.00132	0.0070 mg/L	0.00132	18.90%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	3.1	0.0032 mg/L	0.00180	0.0032 mg/L	0.00180	56.72%
QC value within limits for Se 196.026 Recovery = Not calculated						
Sn 189.927†	96.6	0.0134 mg/L	0.00182	0.0134 mg/L	0.00182	13.59%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 337.279†	984.1	0.0017 mg/L	0.00062	0.0017 mg/L	0.00062	36.58%
QC value within limits for Ti 337.279 Recovery = Not calculated						
Tl 190.801†	5.4	0.0014 mg/L	0.00088	0.0014 mg/L	0.00088	61.35%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	186.2	0.0018 mg/L	0.00070	0.0018 mg/L	0.00070	39.62%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	79.7	0.0017 mg/L	0.00031	0.0017 mg/L	0.00031	18.39%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	2.2	0.0061 mg/L	0.00400	0.0061 mg/L	0.00400	65.38%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Sr 421.552†	1491.8	0.0023 mg/L	0.00012	0.0023 mg/L	0.00012	5.43%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Al 237.313†	142.2	0.0158 mg/L	0.00346	0.0158 mg/L	0.00346	21.89%
QC value within limits for Al 237.313 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 51
Sample ID: PBW-224760
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 68
Date Collected: 12/4/2014 9:13:16 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: PBW-224760

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7589441.6	1.068	mg/L	0.0115				1.08%
Ag 328.068†	74.1	0.0003	mg/L	0.00005				20.83%
As 188.979†	1.0	0.0005	mg/L	0.00035				77.35%
B 249.772†	4871.3	0.0364	mg/L	0.00219				6.03%
Ba 233.527†	108.0	0.0009	mg/L	0.00010				11.47%
Be 313.107†	296.3	0.0001	mg/L	0.00000				2.93%
Cd 226.502†	-0.5	0.0000	mg/L	0.00006				912.34%
Co 228.616†	23.8	0.0007	mg/L	0.00007				9.71%
Cr 267.716†	96.0	0.0007	mg/L	0.00004				6.62%
Cu 324.752†	1250.5	0.0042	mg/L	0.00035				8.30%
Fe 259.939†	956.2	0.0148	mg/L	0.00075				5.06%
K 766.490†	-31.6	-0.0082	mg/L	0.01067				129.90%
Mg 279.077†	-55.5	-0.0051	mg/L	0.00203				39.49%
Mn 257.610†	290.0	0.0006	mg/L	0.00002				3.80%
Mo 202.031†	5.9	0.0002	mg/L	0.00003				17.48%
Ni 231.604†	40.7	0.0006	mg/L	0.00006				9.81%
Na 589.592†	-150.4	-0.0094	mg/L	0.00110				11.72%
Pb 220.353†	1.5	0.0002	mg/L	0.00050				319.97%
Sb 206.836†	8.3	0.0022	mg/L	0.00068				30.17%
Se 196.026†	0.8	0.0009	mg/L	0.00216				253.11%
Sn 189.927†	53.1	0.0074	mg/L	0.00002				0.29%
Ti 337.279†	138.8	0.0002	mg/L	0.00005				19.39%
Tl 190.801†	-1.7	-0.0005	mg/L	0.00038				82.90%
V 292.402†	14.9	0.0001	mg/L	0.00004				31.73%
Zn 206.200†	61.6	0.0013	mg/L	0.00010				7.47%
Ca 227.546†	-7.4	-0.0161	mg/L	0.00259				16.04%
Sr 421.552†	-11.5	0.0000	mg/L	0.00000				0.80%

Al 237.313†	7.2	0.0008 mg/L	0.00009		11.50%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 52
Sample ID: LCSW-224760
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 69
Date Collected: 12/4/2014 9:19:18 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: LCSW-224760

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7463953.3	1.050	mg/L	0.0020				0.19%
Ag 328.068†	14081.9	0.0478	mg/L	0.00052				1.10%
As 188.979†	82.2	0.0381	mg/L	0.00008				0.20%
B 249.772†	122156.4	0.9095	mg/L	0.02151				2.37%
Ba 233.527†	233793.5	1.973	mg/L	0.0323				1.64%
Be 313.107†	123274.0	0.0460	mg/L	0.00078				1.69%
Cd 226.502†	5931.9	0.0485	mg/L	0.00093				1.92%
Co 228.616†	16809.8	0.4911	mg/L	0.00857				1.75%
Cr 267.716†	28343.3	0.1970	mg/L	0.00283				1.43%
Cu 324.752†	76344.5	0.2543	mg/L	0.00418				1.64%
Fe 259.939†	65051.1	1.006	mg/L	0.0172				1.71%
K 766.490†	69780.6	18.12	mg/L	0.190				1.05%
Mg 279.077†	20331.5	1.883	mg/L	0.0294				1.56%
Mn 257.610†	217767.5	0.4842	mg/L	0.00774				1.60%
Mo 202.031†	14947.9	0.4718	mg/L	0.00844				1.79%
Ni 231.604†	31378.1	0.4968	mg/L	0.00899				1.81%
Na 589.592†	295021.4	18.39	mg/L	0.169				0.92%
Pb 220.353†	4734.8	0.4933	mg/L	0.00367				0.74%
Sb 206.836†	1692.6	0.4587	mg/L	0.00075				0.16%
Se 196.026†	912.8	0.9268	mg/L	0.00118				0.13%
Sn 189.927†	36206.9	5.024	mg/L	0.0892				1.77%
Ti 337.279†	272810.3	0.4735	mg/L	0.00831				1.75%
Tl 190.801†	7199.6	1.920	mg/L	0.0109				0.57%
V 292.402†	51661.7	0.4887	mg/L	0.00735				1.50%
Zn 206.200†	23290.5	0.4959	mg/L	0.00878				1.77%
Ca 227.546†	843.6	1.959	mg/L	0.0057				0.29%
Sr 421.552†	83.3	0.0001	mg/L	0.00001				4.44%
Al 237.313†	16249.5	1.801	mg/L	0.0307				1.70%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 53
Sample ID: FBLK 14963-09
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 70
Date Collected: 12/4/2014 9:25:28 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: FBLK 14963-09

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7617965.1	1.072	mg/L	0.0073				0.68%
Ag 328.068†	6.0	0.0000	mg/L	0.00016				569.55%
As 188.979†	-1.4	-0.0006	mg/L	0.00094				149.32%
B 249.772†	2951.7	0.0219	mg/L	0.00165				7.54%
Ba 233.527†	1975.1	0.0167	mg/L	0.00004				0.24%
Be 313.107†	286.3	0.0001	mg/L	0.00001				8.16%
Cd 226.502†	2.3	0.0000	mg/L	0.00003				267.80%
Co 228.616†	18.4	0.0005	mg/L	0.00008				15.04%
Cr 267.716†	100.2	0.0007	mg/L	0.00002				3.53%
Cu 324.752†	656.9	0.0022	mg/L	0.00000				0.00%
Fe 259.939†	2121.9	0.0328	mg/L	0.00035				1.07%
K 766.490†	-75.0	-0.0195	mg/L	0.00360				18.46%
Mg 279.077†	-27.2	-0.0025	mg/L	0.00010				3.99%
Mn 257.610†	287.9	0.0006	mg/L	0.00003				5.27%
Mo 202.031†	3.5	0.0001	mg/L	0.00009				85.47%
Ni 231.604†	26.5	0.0004	mg/L	0.00008				19.64%
Na 589.592†	135.2	0.0084	mg/L	0.00087				10.28%

Pb 220.353†	-3.3	-0.0003	mg/L	0.00055	157.34%
Sb 206.836†	3.4	0.0009	mg/L	0.00042	45.31%
Se 196.026†	0.6	0.0006	mg/L	0.00010	18.20%
Sn 189.927†	27.0	0.0037	mg/L	0.00071	18.86%
Ti 337.279†	121.8	0.0002	mg/L	0.00005	25.44%
Tl 190.801†	1.0	0.0003	mg/L	0.00051	196.01%
V 292.402†	18.3	0.0002	mg/L	0.00000	1.57%
Zn 206.200†	53.1	0.0011	mg/L	0.00009	8.00%
Ca 227.546†	-1.8	-0.0025	mg/L	0.00240	94.25%
Sr 421.552†	29.4	0.0000	mg/L	0.00004	100.18%
Al 237.313†	-1.1	-0.0001	mg/L	0.00017	219.29%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 54
Sample ID: R1409624-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 71
Date Collected: 12/4/2014 9:31:34 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409624-002

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7482922.0	1.053	mg/L	0.0022				0.21%
Ag 328.068†	-50.8	0.0001	mg/L	0.00003				34.76%
As 188.979†	3.1	0.0014	mg/L	0.00045				31.70%
B 249.772†	8536.6	0.0595	mg/L	0.00105				1.77%
Ba 233.527†	3897.2	0.0329	mg/L	0.00026				0.79%
Be 313.107†	230.8	0.0001	mg/L	0.00001				9.42%
Cd 226.502†	23.1	0.0000	mg/L	0.00003				295.31%
Co 228.616†	26.2	0.0008	mg/L	0.00017				22.53%
Cr 267.716†	36.4	0.0011	mg/L	0.00000				0.07%
Cu 324.752†	1260.2	0.0043	mg/L	0.00007				1.62%
Fe 259.939†	66803.3	1.033	mg/L	0.0045				0.43%
K 766.490†	7333.5	1.905	mg/L	0.0080				0.42%
Mg 279.077†	92216.1	8.539	mg/L	0.0306				0.36%
Mn 257.610†	12287.4	0.0275	mg/L	0.00015				0.56%
Mo 202.031†	104.0	0.0033	mg/L	0.00008				2.41%
Ni 231.604†	113.0	0.0018	mg/L	0.00015				8.66%
Na 589.592†	209383.1	13.05	mg/L	0.006				0.05%
Pb 220.353†	8.5	0.0012	mg/L	0.00008				6.47%
Sb 206.836†	3.1	0.0007	mg/L	0.00013				17.33%
Se 196.026†	1.6	0.0019	mg/L	0.00033				17.31%
Sn 189.927†	-96.9	-0.0135	mg/L	0.00016				1.16%
Ti 337.279†	9700.1	0.0168	mg/L	0.00094				5.61%
Tl 190.801†	-2.3	-0.0006	mg/L	0.00014				21.98%
V 292.402†	535.7	0.0051	mg/L	0.00003				0.56%
Zn 206.200†	251.5	0.0054	mg/L	0.00021				3.99%
Ca 227.546†	14128.3	32.05	mg/L	0.110				0.34%
Sr 421.552†	103091.1	0.1565	mg/L	0.00014				0.09%
Al 237.313†	9022.3	0.9833	mg/L	0.00595				0.61%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 55
Sample ID: R1409624-007
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 72
Date Collected: 12/4/2014 9:37:33 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409624-007

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7397476.1	1.041	mg/L	0.0046				0.44%
Ag 328.068†	5.2	0.0001	mg/L	0.00016				154.64%
As 188.979†	3.6	0.0017	mg/L	0.00004				2.42%
B 249.772†	13200.4	0.0972	mg/L	0.00159				1.63%
Ba 233.527†	9982.1	0.0842	mg/L	0.00156				1.85%
Be 313.107†	-56.3	0.0000	mg/L	0.00001				34.36%
Cd 226.502†	8.3	0.0000	mg/L	0.00005				799.21%

Co 228.616†	12.3	0.0004 mg/L	0.00006	17.66%
Cr 267.716†	-19.7	0.0006 mg/L	0.00000	0.28%
Cu 324.752†	1862.6	0.0062 mg/L	0.00007	1.13%
Fe 259.939†	22698.4	0.3511 mg/L	0.00503	1.43%
K 766.490†	8525.6	2.214 mg/L	0.0015	0.07%
Mg 279.077†	86098.3	7.972 mg/L	0.1380	1.73%
Mn 257.610†	13037.1	0.0290 mg/L	0.00056	1.94%
Mo 202.031†	166.1	0.0052 mg/L	0.00005	0.88%
Ni 231.604†	50.8	0.0008 mg/L	0.00001	1.20%
Na 589.592†	365785.5	22.81 mg/L	0.059	0.26%
Pb 220.353†	-1.9	0.0002 mg/L	0.00005	27.67%
Sb 206.836†	0.6	0.0001 mg/L	0.00004	52.61%
Se 196.026†	-0.0	0.0001 mg/L	0.00393	>999.9%
Sn 189.927†	-112.1	-0.0156 mg/L	0.00031	2.02%
Ti 337.279†	9660.0	0.0168 mg/L	0.00048	2.85%
Tl 190.801†	-4.4	-0.0012 mg/L	0.00014	11.73%
V 292.402†	234.5	0.0022 mg/L	0.00014	6.39%
Zn 206.200†	198.3	0.0042 mg/L	0.00011	2.65%
Ca 227.546†	15254.0	34.57 mg/L	0.264	0.76%
Sr 421.552†	157831.3	0.2396 mg/L	0.00079	0.33%
Al 237.313†	7303.3	0.7908 mg/L	0.00813	1.03%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 56
Sample ID: R1409629-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 73
Date Collected: 12/4/2014 9:43:37 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409629-001

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7160369.7	1.007	mg/L	0.0065				0.65%
Ag 328.068†	2.0	0.0000	mg/L	0.00013				455.80%
As 188.979†	1.1	0.0005	mg/L	0.00118				230.41%
B 249.772†	7045.2	0.0523	mg/L	0.00006				0.12%
Ba 233.527†	2370.9	0.0200	mg/L	0.00002				0.10%
Be 313.107†	-414.1	-0.0002	mg/L	0.00002				14.14%
Cd 226.502†	1.4	0.0000	mg/L	0.00005				>999.9%
Co 228.616†	9.5	0.0003	mg/L	0.00001				3.81%
Cr 267.716†	-8.7	0.0003	mg/L	0.00004				13.75%
Cu 324.752†	11434.2	0.0381	mg/L	0.00035				0.93%
Fe 259.939†	5636.9	0.0872	mg/L	0.00012				0.14%
K 766.490†	38537.0	10.01	mg/L	0.040				0.40%
Mg 279.077†	40098.6	3.713	mg/L	0.0118				0.32%
Mn 257.610†	10188.8	0.0227	mg/L	0.00009				0.42%
Mo 202.031†	35.4	0.0011	mg/L	0.00000				0.18%
Ni 231.604†	26.4	0.0004	mg/L	0.00018				42.00%
Na 589.592†	3512541.8	219.0	mg/L	1.22				0.56%
Pb 220.353†	-5.3	-0.0004	mg/L	0.00017				46.52%
Sb 206.836†	4.0	0.0011	mg/L	0.00005				4.91%
Se 196.026†	3.3	0.0034	mg/L	0.00169				50.12%
Sn 189.927†	-78.0	-0.0108	mg/L	0.00019				1.76%
Ti 337.279†	604.1	0.0010	mg/L	0.00014				13.16%
Tl 190.801†	-4.2	-0.0011	mg/L	0.00152				134.26%
V 292.402†	30.3	0.0003	mg/L	0.00014				47.75%
Zn 206.200†	2061.6	0.0439	mg/L	0.00018				0.40%
Ca 227.546†	9157.0	20.74	mg/L	0.044				0.21%
Sr 421.552†	49767.7	0.0756	mg/L	0.00014				0.19%
Al 237.313†	785.3	0.0760	mg/L	0.00075				0.99%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 57
Sample ID: R1409661-006
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 74
Date Collected: 12/4/2014 9:49:54 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409661-006

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7259866.8	1.021	mg/L	0.0025				0.24%
Ag 328.068†	-62.7	-0.0002	mg/L	0.00011				58.29%
As 188.979†	1.8	0.0008	mg/L	0.00073				86.58%
B 249.772†	9619.4	0.0717	mg/L	0.00000				0.00%
Ba 233.527†	6360.1	0.0537	mg/L	0.00001				0.02%
Be 313.107†	-195.0	-0.0001	mg/L	0.00002				28.91%
Cd 226.502†	22.8	0.0002	mg/L	0.00003				14.51%
Co 228.616†	0.6	0.0000	mg/L	0.00004				242.73%
Cr 267.716†	-142.5	0.0000	mg/L	0.00007				>999.9%
Cu 324.752†	1812.5	0.0060	mg/L	0.00001				0.18%
Fe 259.939†	4182.1	0.0647	mg/L	0.00009				0.14%
K 766.490†	9041.0	2.348	mg/L	0.0541				2.31%
Mg 279.077†	115682.2	10.71	mg/L	0.206				1.93%
Mn 257.610†	14125.1	0.0314	mg/L	0.00055				1.75%
Mo 202.031†	41.4	0.0013	mg/L	0.00014				10.43%
Ni 231.604†	-11.6	-0.0002	mg/L	0.00005				25.09%
Na 589.592†	96886.2	6.041	mg/L	0.0904				1.50%
Pb 220.353†	5.5	0.0012	mg/L	0.00038				31.30%
Sb 206.836†	1.7	0.0004	mg/L	0.00004				8.23%
Se 196.026†	3.7	0.0038	mg/L	0.00112				29.39%
Sn 189.927†	-146.2	-0.0203	mg/L	0.00034				1.67%
Ti 337.279†	471.0	0.0008	mg/L	0.00005				5.78%
Tl 190.801†	-3.5	-0.0009	mg/L	0.00098				104.47%
V 292.402†	98.0	0.0009	mg/L	0.00001				0.96%
Zn 206.200†	1058.4	0.0225	mg/L	0.00001				0.05%
Ca 227.546†	32176.0	72.88	mg/L	0.302				0.41%
Sr 421.552†	166628.5	0.2530	mg/L	0.00348				1.38%
Al 237.313†	384.7	0.0044	mg/L	0.00028				6.47%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 58
Sample ID: R1409661-007
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 75
Date Collected: 12/4/2014 9:55:57 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409661-007

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7407958.8	1.042	mg/L	0.0011				0.10%
Ag 328.068†	-15.1	0.0000	mg/L	0.00005				101.59%
As 188.979†	0.5	0.0002	mg/L	0.00065				288.24%
B 249.772†	8695.6	0.0649	mg/L	0.00061				0.95%
Ba 233.527†	3918.8	0.0331	mg/L	0.00008				0.25%
Be 313.107†	3.7	0.0000	mg/L	0.00003				>999.9%
Cd 226.502†	14.2	0.0001	mg/L	0.00003				29.15%
Co 228.616†	-1.8	-0.0001	mg/L	0.00024				439.54%
Cr 267.716†	-92.7	0.0002	mg/L	0.00001				4.66%
Cu 324.752†	893.2	0.0030	mg/L	0.00007				2.35%
Fe 259.939†	1714.7	0.0265	mg/L	0.00020				0.75%
K 766.490†	9598.4	2.493	mg/L	0.0004				0.02%
Mg 279.077†	97130.3	8.994	mg/L	0.0352				0.39%
Mn 257.610†	4093.9	0.0091	mg/L	0.00005				0.56%
Mo 202.031†	47.3	0.0015	mg/L	0.00016				10.63%
Ni 231.604†	-11.9	-0.0002	mg/L	0.00010				53.19%
Na 589.592†	171191.3	10.67	mg/L	0.095				0.89%
Pb 220.353†	-3.2	0.0001	mg/L	0.00069				482.82%
Sb 206.836†	2.9	0.0008	mg/L	0.00079				100.18%
Se 196.026†	3.9	0.0040	mg/L	0.00024				6.04%
Sn 189.927†	-137.0	-0.0190	mg/L	0.00024				1.26%
Ti 337.279†	208.8	0.0004	mg/L	0.00003				8.92%
Tl 190.801†	-4.4	-0.0012	mg/L	0.00055				47.36%
V 292.402†	95.4	0.0009	mg/L	0.00007				7.33%
Zn 206.200†	1336.9	0.0285	mg/L	0.00019				0.66%
Ca 227.546†	23930.7	54.20	mg/L	0.064				0.12%
Sr 421.552†	152574.3	0.2316	mg/L	0.00181				0.78%
Al 237.313†	247.3	-0.0014	mg/L	0.00136				100.00%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 59
Sample ID: R1409661-008
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 76
Date Collected: 12/4/2014 10:02:01 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409661-008

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7199921.1	1.013	mg/L	0.0085				0.84%
Ag 328.068†	-50.9	-0.0002	mg/L	0.00004				21.20%
As 188.979†	0.1	0.0001	mg/L	0.00036				574.12%
B 249.772†	9065.7	0.0677	mg/L	0.00076				1.12%
Ba 233.527†	5378.2	0.0454	mg/L	0.00040				0.89%
Be 313.107†	-193.5	-0.0001	mg/L	0.00003				35.24%
Cd 226.502†	17.6	0.0001	mg/L	0.00004				25.39%
Co 228.616†	-9.0	-0.0003	mg/L	0.00005				18.14%
Cr 267.716†	-107.8	0.0004	mg/L	0.00001				1.72%
Cu 324.752†	1623.1	0.0054	mg/L	0.00014				2.63%
Fe 259.939†	1580.4	0.0244	mg/L	0.00012				0.48%
K 766.490†	15395.4	3.998	mg/L	0.0522				1.31%
Mg 279.077†	134700.5	12.47	mg/L	0.136				1.09%
Mn 257.610†	44411.9	0.0987	mg/L	0.00085				0.86%
Mo 202.031†	73.8	0.0023	mg/L	0.00021				9.08%
Ni 231.604†	8.6	0.0001	mg/L	0.00012				91.95%
Na 589.592†	848267.5	52.89	mg/L	0.403				0.76%
Pb 220.353†	-6.9	-0.0001	mg/L	0.00016				149.08%
Sb 206.836†	2.5	0.0007	mg/L	0.00107				159.92%
Se 196.026†	2.7	0.0027	mg/L	0.00209				76.83%
Sn 189.927†	-150.1	-0.0208	mg/L	0.00004				0.19%
Ti 337.279†	302.5	0.0005	mg/L	0.00005				9.17%
Tl 190.801†	-4.2	-0.0011	mg/L	0.00031				27.30%
V 292.402†	106.2	0.0010	mg/L	0.00001				0.90%
Zn 206.200†	3730.3	0.0794	mg/L	0.00099				1.24%
Ca 227.546†	30488.5	69.06	mg/L	0.418				0.61%
Sr 421.552†	223083.2	0.3387	mg/L	0.00477				1.41%
Al 237.313†	290.4	-0.0048	mg/L	0.00010				2.01%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 60
Sample ID: R1409661-009
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 77
Date Collected: 12/4/2014 10:08:12 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409661-009

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7191747.0	1.012	mg/L	0.0079				0.78%
Ag 328.068†	52.8	0.0002	mg/L	0.00006				29.64%
As 188.979†	3.1	0.0014	mg/L	0.00024				17.46%
B 249.772†	9631.8	0.0717	mg/L	0.00009				0.12%
Ba 233.527†	20373.4	0.1719	mg/L	0.00085				0.49%
Be 313.107†	-232.8	-0.0001	mg/L	0.00000				3.56%
Cd 226.502†	5.5	0.0000	mg/L	0.00000				7.40%
Co 228.616†	-1.4	0.0000	mg/L	0.00029				694.13%
Cr 267.716†	-49.8	0.0003	mg/L	0.00013				50.40%
Cu 324.752†	1092.6	0.0036	mg/L	0.00003				0.70%
Fe 259.939†	4105.2	0.0635	mg/L	0.00028				0.44%
K 766.490†	12416.1	3.225	mg/L	0.0255				0.79%
Mg 279.077†	69677.8	6.452	mg/L	0.0242				0.37%
Mn 257.610†	6860.5	0.0153	mg/L	0.00007				0.43%
Mo 202.031†	144.1	0.0045	mg/L	0.00010				2.20%
Ni 231.604†	6.3	0.0001	mg/L	0.00008				80.88%
Na 589.592†	1585222.4	98.83	mg/L	0.292				0.30%
Pb 220.353†	2.7	0.0007	mg/L	0.00014				20.25%

Sb 206.836†	1.5	0.0003 mg/L	0.00015	43.84%
Se 196.026†	3.1	0.0031 mg/L	0.00043	13.80%
Sn 189.927†	-128.0	-0.0178 mg/L	0.00036	2.02%
Ti 337.279†	608.8	0.0011 mg/L	0.00002	1.58%
Tl 190.801†	-1.9	-0.0005 mg/L	0.00024	44.57%
V 292.402†	326.3	0.0031 mg/L	0.00003	1.10%
Zn 206.200†	2021.2	0.0430 mg/L	0.00064	1.49%
Ca 227.546†	18112.7	41.03 mg/L	0.302	0.74%
Sr 421.552†	160977.2	0.2444 mg/L	0.00281	1.15%
Al 237.313†	5450.6	0.5824 mg/L	0.00660	1.13%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 61
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/4/2014 10:14:28 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7186852.7	1.011	mg/L	0.0089				0.88%
Ag 328.068†	147740.0	0.4999	mg/L	0.00440	0.4999	mg/L	0.00440	0.88%
QC value within limits for Ag 328.068 Recovery = 99.98%								
As 188.979†	2165.4	1.004	mg/L	0.0170	1.004	mg/L	0.0170	1.69%
QC value within limits for As 188.979 Recovery = 100.45%								
B 249.772†	324935.2	2.409	mg/L	0.0357	2.409	mg/L	0.0357	1.48%
QC value within limits for B 249.772 Recovery = 96.36%								
Ba 233.527†	1218801.2	10.28	mg/L	0.028	10.28	mg/L	0.028	0.27%
QC value within limits for Ba 233.527 Recovery = 102.85%								
Be 313.107†	667626.2	0.2489	mg/L	0.00064	0.2489	mg/L	0.00064	0.26%
QC value within limits for Be 313.107 Recovery = 99.56%								
Cd 226.502†	62283.9	0.5106	mg/L	0.00582	0.5106	mg/L	0.00582	1.14%
QC value within limits for Cd 226.502 Recovery = 102.12%								
Co 228.616†	85350.9	2.493	mg/L	0.0282	2.493	mg/L	0.0282	1.13%
QC value within limits for Co 228.616 Recovery = 99.73%								
Cr 267.716†	73462.7	0.5127	mg/L	0.00516	0.5127	mg/L	0.00516	1.01%
QC value within limits for Cr 267.716 Recovery = 102.54%								
Cu 324.752†	363393.6	1.211	mg/L	0.0099	1.211	mg/L	0.0099	0.82%
QC value within limits for Cu 324.752 Recovery = 96.84%								
Fe 259.939†	323183.7	4.999	mg/L	0.0511	4.999	mg/L	0.0511	1.02%
QC value within limits for Fe 259.939 Recovery = 99.99%								
K 766.490†	92351.0	23.98	mg/L	0.091	23.98	mg/L	0.091	0.38%
QC value within limits for K 766.490 Recovery = 95.94%								
Mg 279.077†	271272.5	25.12	mg/L	0.261	25.12	mg/L	0.261	1.04%
QC value within limits for Mg 279.077 Recovery = 100.47%								
Mn 257.610†	340359.5	0.7572	mg/L	0.00785	0.7572	mg/L	0.00785	1.04%
QC value within limits for Mn 257.610 Recovery = 100.97%								
Mo 202.031†	77411.2	2.443	mg/L	0.0272	2.443	mg/L	0.0272	1.11%
QC value within limits for Mo 202.031 Recovery = 97.74%								
Ni 231.604†	129186.5	2.045	mg/L	0.0225	2.045	mg/L	0.0225	1.10%
QC value within limits for Ni 231.604 Recovery = 102.26%								
Na 589.592†	391814.5	24.43	mg/L	0.091	24.43	mg/L	0.091	0.37%
QC value within limits for Na 589.592 Recovery = 97.71%								
Pb 220.353†	4947.1	0.5163	mg/L	0.00648	0.5163	mg/L	0.00648	1.26%
QC value within limits for Pb 220.353 Recovery = 103.26%								
Sb 206.836†	18307.6	4.962	mg/L	0.0670	4.962	mg/L	0.0670	1.35%
QC value within limits for Sb 206.836 Recovery = 99.24%								
Se 196.026†	483.6	0.4925	mg/L	0.00519	0.4925	mg/L	0.00519	1.05%
QC value within limits for Se 196.026 Recovery = 98.51%								
Sn 189.927†	36519.6	5.067	mg/L	0.0595	5.067	mg/L	0.0595	1.17%
QC value within limits for Sn 189.927 Recovery = 101.34%								
Ti 337.279†	1430652.5	2.483	mg/L	0.0042	2.483	mg/L	0.0042	0.17%
QC value within limits for Ti 337.279 Recovery = 99.32%								
Tl 190.801†	3889.9	1.037	mg/L	0.0153	1.037	mg/L	0.0153	1.48%
QC value within limits for Tl 190.801 Recovery = 103.68%								
V 292.402†	266683.9	2.523	mg/L	0.0300	2.523	mg/L	0.0300	1.19%
QC value within limits for V 292.402 Recovery = 100.90%								
Zn 206.200†	47513.0	1.012	mg/L	0.0188	1.012	mg/L	0.0188	1.86%
QC value within limits for Zn 206.200 Recovery = 101.17%								

Ca 227.546†	10880.4	24.89 mg/L	0.243	24.89 mg/L	0.243	0.98%
QC value within limits for Ca 227.546 Recovery = 99.54%						
Sr 421.552†	1552411.2	2.357 mg/L	0.0081	2.357 mg/L	0.0081	0.34%
QC value within limits for Sr 421.552 Recovery = 94.27%						
Al 237.313†	86374.6	9.559 mg/L	0.0620	9.559 mg/L	0.0620	0.65%
QC value within limits for Al 237.313 Recovery = 95.59%						

All analyte(s) passed QC.

Sequence No.: 62
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 12/4/2014 10:20:37 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7412387.3	1.043	mg/L	0.0093				0.89%
Ag 328.068†	81.2	0.0003	mg/L	0.00016	0.0003	mg/L	0.00016	58.56%
QC value within limits for Ag 328.068 Recovery = Not calculated								
As 188.979†	0.6	0.0003	mg/L	0.00011	0.0003	mg/L	0.00011	39.59%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	3379.3	0.0252	mg/L	0.00258	0.0252	mg/L	0.00258	10.23%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	520.0	0.0044	mg/L	0.00143	0.0044	mg/L	0.00143	32.63%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	644.5	0.0002	mg/L	0.00003	0.0002	mg/L	0.00003	13.63%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	35.7	0.0003	mg/L	0.00007	0.0003	mg/L	0.00007	25.16%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	47.5	0.0014	mg/L	0.00055	0.0014	mg/L	0.00055	39.44%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	27.8	0.0002	mg/L	0.00015	0.0002	mg/L	0.00015	75.26%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	980.6	0.0033	mg/L	0.00031	0.0033	mg/L	0.00031	9.47%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	536.2	0.0083	mg/L	0.00128	0.0083	mg/L	0.00128	15.39%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	138.9	0.0361	mg/L	0.00999	0.0361	mg/L	0.00999	27.69%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	42.2	0.0039	mg/L	0.00737	0.0039	mg/L	0.00737	188.42%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	412.4	0.0009	mg/L	0.00014	0.0009	mg/L	0.00014	14.89%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	43.0	0.0014	mg/L	0.00042	0.0014	mg/L	0.00042	30.87%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	94.7	0.0015	mg/L	0.00034	0.0015	mg/L	0.00034	22.81%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	613.4	0.0382	mg/L	0.00248	0.0382	mg/L	0.00248	6.48%
QC value within limits for Na 589.592 Recovery = Not calculated								
Pb 220.353†	-0.6	-0.0001	mg/L	0.00013	-0.0001	mg/L	0.00013	-191.96%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	14.6	0.0040	mg/L	0.00166	0.0040	mg/L	0.00166	41.93%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	0.8	0.0008	mg/L	0.00056	0.0008	mg/L	0.00056	68.46%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	62.6	0.0087	mg/L	0.00158	0.0087	mg/L	0.00158	18.18%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 337.279†	670.1	0.0012	mg/L	0.00029	0.0012	mg/L	0.00029	25.28%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	5.7	0.0015	mg/L	0.00095	0.0015	mg/L	0.00095	62.64%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	131.5	0.0012	mg/L	0.00036	0.0012	mg/L	0.00036	28.96%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	44.7	0.0010	mg/L	0.00017	0.0010	mg/L	0.00017	17.37%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	0.9	0.0025	mg/L	0.01475	0.0025	mg/L	0.01475	583.72%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Sr 421.552†	928.4	0.0014	mg/L	0.00008	0.0014	mg/L	0.00008	5.48%
QC value within limits for Sr 421.552 Recovery = Not calculated								

Al 237.313†	34.5	0.0038	mg/L	0.00088	0.0038	mg/L	0.00088 22.89%

QC value within limits for Al 237.313 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 63
Sample ID: R1409661-010
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 78
Date Collected: 12/4/2014 10:26:38 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409661-010

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7156138.3	1.007	mg/L	0.0040				0.40%
Ag 328.068†	-40.3	-0.0001	mg/L	0.00021				159.42%
As 188.979†	2.9	0.0014	mg/L	0.00072				52.90%
B 249.772†	7404.1	0.0553	mg/L	0.00062				1.13%
Ba 233.527†	3817.5	0.0322	mg/L	0.00000				0.01%
Be 313.107†	-90.4	0.0000	mg/L	0.00004				112.05%
Cd 226.502†	1.1	0.0000	mg/L	0.00003				586.42%
Co 228.616†	-3.5	-0.0001	mg/L	0.00011				110.75%
Cr 267.716†	-154.5	-0.0001	mg/L	0.00003				26.23%
Cu 324.752†	8917.8	0.0297	mg/L	0.00040				1.33%
Fe 259.939†	1424.3	0.0220	mg/L	0.00043				1.93%
K 766.490†	8450.2	2.195	mg/L	0.0140				0.64%
Mg 279.077†	109265.0	10.12	mg/L	0.093				0.92%
Mn 257.610†	961.1	0.0021	mg/L	0.00004				1.72%
Mo 202.031†	71.9	0.0023	mg/L	0.00003				1.31%
Ni 231.604†	16.9	0.0003	mg/L	0.00013				49.14%
Na 589.592†	1053706.9	65.70	mg/L	0.527				0.80%
Pb 220.353†	48.7	0.0055	mg/L	0.00022				3.91%
Sb 206.836†	5.5	0.0015	mg/L	0.00029				19.77%
Se 196.026†	2.1	0.0021	mg/L	0.00060				27.98%
Sn 189.927†	-116.5	-0.0162	mg/L	0.00070				4.33%
Ti 337.279†	327.6	0.0006	mg/L	0.00003				5.68%
Tl 190.801†	-2.7	-0.0007	mg/L	0.00029				40.90%
V 292.402†	66.6	0.0006	mg/L	0.00010				15.67%
Zn 206.200†	826.5	0.0176	mg/L	0.00017				0.98%
Ca 227.546†	21771.0	49.31	mg/L	0.535				1.09%
Sr 421.552†	159568.1	0.2422	mg/L	0.00108				0.45%
Al 237.313†	474.9	0.0259	mg/L	0.00027				1.02%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 64
Sample ID: R1409667-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 79
Date Collected: 12/4/2014 10:32:48 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409667-001

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6612871.4	0.9302	mg/L	0.00419				0.45%
Ag 328.068†	-190.7	-0.0004	mg/L	0.00007				16.12%
As 188.979†	8.1	0.0037	mg/L	0.00052				13.76%
B 249.772†	15920.9	0.1157	mg/L	0.00013				0.11%
Ba 233.527†	11284.1	0.0952	mg/L	0.00121				1.27%
Be 313.107†	-687.9	-0.0003	mg/L	0.00002				9.07%
Cd 226.502†	36.1	0.0002	mg/L	0.00003				18.55%
Co 228.616†	-5.4	-0.0002	mg/L	0.00000				2.56%
Cr 267.716†	-668.2	-0.0008	mg/L	0.00004				4.39%
Cu 324.752†	1022.2	0.0035	mg/L	0.00010				2.91%
Fe 259.939†	53512.1	0.8278	mg/L	0.00021				0.03%
K 766.490†	20222.3	5.252	mg/L	0.1298				2.47%
Mg 279.077†	442306.9	40.95	mg/L	0.012				0.03%
Mn 257.610†	58258.3	0.1296	mg/L	0.00034				0.27%
Mo 202.031†	530.5	0.0167	mg/L	0.00014				0.85%
Ni 231.604†	163.2	0.0026	mg/L	0.00006				2.26%

Na 589.592†	11154041.4	695.4	mg/L	0.98		0.14%
Pb 220.353†	-21.1	-0.0009	mg/L	0.00037		42.10%
Sb 206.836†	5.8	0.0016	mg/L	0.00060		38.39%
Se 196.026†	5.5	0.0058	mg/L	0.00181		31.16%
Sn 189.927†	-176.2	-0.0245	mg/L	0.00020		0.83%
Ti 337.279†	115.4	0.0002	mg/L	0.00005		25.27%
Tl 190.801†	-1.8	-0.0005	mg/L	0.00080		174.31%
V 292.402†	14.9	0.0001	mg/L	0.00006		45.23%
Zn 206.200†	1910.6	0.0407	mg/L	0.00071		1.76%
Ca 227.546†	67242.6	152.3	mg/L	0.09		0.06%
Sr 421.552†	587773.9	0.8923	mg/L	0.01448		1.62%
Al 237.313†	1171.2	0.0455	mg/L	0.00124		2.72%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 65
Sample ID: R1409675-007
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 80
Date Collected: 12/4/2014 10:39:21 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409675-007

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7083978.6	0.9965	mg/L	0.00823				0.83%
Ag 328.068†	-38.5	-0.0001	mg/L	0.00026				271.94%
As 188.979†	3.6	0.0017	mg/L	0.00112				67.32%
B 249.772†	26139.2	0.1949	mg/L	0.00236				1.21%
Ba 233.527†	5479.5	0.0462	mg/L	0.00051				1.09%
Be 313.107†	-229.5	-0.0001	mg/L	0.00003				31.49%
Cd 226.502†	2.8	0.0000	mg/L	0.00003				>999.9%
Co 228.616†	-4.4	-0.0001	mg/L	0.00000				2.72%
Cr 267.716†	-314.1	-0.0004	mg/L	0.00003				7.62%
Cu 324.752†	6039.6	0.0201	mg/L	0.00034				1.71%
Fe 259.939†	9151.7	0.1416	mg/L	0.00116				0.82%
K 766.490†	46322.0	12.03	mg/L	0.066				0.55%
Mg 279.077†	200704.2	18.58	mg/L	0.238				1.28%
Mn 257.610†	5844.4	0.0130	mg/L	0.00012				0.94%
Mo 202.031†	43.7	0.0014	mg/L	0.00009				6.54%
Ni 231.604†	44.6	0.0007	mg/L	0.00004				5.16%
Na 589.592†	2484183.1	154.9	mg/L	1.75				1.13%
Pb 220.353†	-9.6	-0.0004	mg/L	0.00028				75.97%
Sb 206.836†	3.9	0.0011	mg/L	0.00014				13.60%
Se 196.026†	3.0	0.0031	mg/L	0.00011				3.65%
Sn 189.927†	-147.3	-0.0204	mg/L	0.00025				1.23%
Ti 337.279†	473.9	0.0008	mg/L	0.00030				36.19%
Tl 190.801†	-4.6	-0.0012	mg/L	0.00021				17.47%
V 292.402†	10.9	0.0001	mg/L	0.00004				34.27%
Zn 206.200†	2490.9	0.0530	mg/L	0.00092				1.73%
Ca 227.546†	31841.6	72.13	mg/L	0.963				1.33%
Sr 421.552†	567642.8	0.8618	mg/L	0.00446				0.52%
Al 237.313†	289.4	-0.0080	mg/L	0.00005				0.59%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 66
Sample ID: R1409682-003
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 81
Date Collected: 12/4/2014 10:45:34 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409682-003

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7044418.8	0.9909	mg/L	0.00398				0.40%
Ag 328.068†	-26.4	-0.0001	mg/L	0.00015				163.28%
As 188.979†	4.5	0.0021	mg/L	0.00006				3.08%
B 249.772†	5331.7	0.0399	mg/L	0.00051				1.27%
Ba 233.527†	4346.9	0.0367	mg/L	0.00024				0.67%
Be 313.107†	-250.9	-0.0001	mg/L	0.00000				4.25%

Cd 226.502†	23.5	0.0002 mg/L	0.00002	10.39%
Co 228.616†	31.2	0.0009 mg/L	0.00024	25.88%
Cr 267.716†	-432.6	-0.0011 mg/L	0.00013	12.35%
Cu 324.752†	7481.2	0.0249 mg/L	0.00013	0.53%
Fe 259.939†	-185.9	-0.0029 mg/L	0.00053	18.55%
K 766.490†	15685.2	4.074 mg/L	0.0533	1.31%
Mg 279.077†	225264.9	20.86 mg/L	0.019	0.09%
Mn 257.610†	21463.4	0.0477 mg/L	0.00001	0.02%
Mo 202.031†	286.8	0.0091 mg/L	0.00014	1.55%
Ni 231.604†	1769.6	0.0280 mg/L	0.00034	1.21%
Na 589.592†	3277041.0	204.3 mg/L	0.94	0.46%
Pb 220.353†	-8.0	-0.0004 mg/L	0.00033	77.17%
Sb 206.836†	2.3	0.0006 mg/L	0.00084	134.90%
Se 196.026†	2.7	0.0027 mg/L	0.00178	66.24%
Sn 189.927†	-133.5	-0.0185 mg/L	0.00027	1.47%
Ti 337.279†	111.1	0.0002 mg/L	0.00001	3.41%
Tl 190.801†	-6.0	-0.0016 mg/L	0.00078	49.02%
V 292.402†	448.6	0.0042 mg/L	0.00003	0.67%
Zn 206.200†	301.0	0.0064 mg/L	0.00007	1.13%
Ca 227.546†	19585.7	44.36 mg/L	0.080	0.18%
Sr 421.552†	2727578.3	4.141 mg/L	0.0231	0.56%
Al 237.313†	962.7	0.0792 mg/L	0.00059	0.74%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 67
Sample ID: R1409682-003S
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 82
Date Collected: 12/4/2014 10:51:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409682-003S

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7032407.0	0.9893	mg/L	0.00394				0.40%
Ag 328.068†	14482.0	0.0491	mg/L	0.00003				0.06%
As 188.979†	93.6	0.0433	mg/L	0.00026				0.59%
B 249.772†	131340.0	0.9783	mg/L	0.00618				0.63%
Ba 233.527†	238061.8	2.009	mg/L	0.0150				0.75%
Be 313.107†	128168.3	0.0478	mg/L	0.00010				0.21%
Cd 226.502†	5838.9	0.0478	mg/L	0.00025				0.53%
Co 228.616†	16643.3	0.4862	mg/L	0.00455				0.94%
Cr 267.716†	27965.3	0.1964	mg/L	0.00193				0.98%
Cu 324.752†	84261.4	0.2807	mg/L	0.00055				0.20%
Fe 259.939†	63360.0	0.9801	mg/L	0.00394				0.40%
K 766.490†	93718.8	24.34	mg/L	0.203				0.84%
Mg 279.077†	255418.7	23.65	mg/L	0.110				0.47%
Mn 257.610†	241611.1	0.5372	mg/L	0.00290				0.54%
Mo 202.031†	15549.3	0.4908	mg/L	0.00178				0.36%
Ni 231.604†	32967.6	0.5219	mg/L	0.00456				0.87%
Na 589.592†	3757908.6	234.3	mg/L	1.83				0.78%
Pb 220.353†	4631.4	0.4830	mg/L	0.00218				0.45%
Sb 206.836†	1787.9	0.4845	mg/L	0.00086				0.18%
Se 196.026†	991.3	1.006	mg/L	0.0124				1.23%
Sn 189.927†	35245.8	4.890	mg/L	0.0459				0.94%
Ti 337.279†	278979.1	0.4842	mg/L	0.00033				0.07%
Tl 190.801†	6822.5	1.819	mg/L	0.0077				0.43%
V 292.402†	53588.4	0.5069	mg/L	0.00383				0.75%
Zn 206.200†	23323.0	0.4966	mg/L	0.00878				1.77%
Ca 227.546†	21613.2	49.00	mg/L	0.081				0.16%
Sr 421.552†	2870541.3	4.358	mg/L	0.0334				0.77%
Al 237.313†	18120.7	1.979	mg/L	0.0022				0.11%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 68
Sample ID: R1409682-003SD
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 83
Date Collected: 12/4/2014 10:58:06 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409682-003SD

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7081630.8	0.9962	mg/L	0.00369				0.37%
Ag 328.068†	14334.5	0.0486	mg/L	0.00034				0.71%
As 188.979†	92.5	0.0429	mg/L	0.00010				0.22%
B 249.772†	131239.7	0.9775	mg/L	0.00057				0.06%
Ba 233.527†	237232.4	2.002	mg/L	0.0045				0.22%
Be 313.107†	127055.4	0.0474	mg/L	0.00003				0.05%
Cd 226.502†	5814.2	0.0476	mg/L	0.00002				0.04%
Co 228.616†	16592.5	0.4847	mg/L	0.00008				0.02%
Cr 267.716†	27868.0	0.1957	mg/L	0.00004				0.02%
Cu 324.752†	88470.0	0.2947	mg/L	0.00198				0.67%
Fe 259.939†	63005.2	0.9746	mg/L	0.00077				0.08%
K 766.490†	94685.5	24.59	mg/L	0.377				1.53%
Mg 279.077†	251101.8	23.25	mg/L	0.076				0.33%
Mn 257.610†	239992.2	0.5336	mg/L	0.00102				0.19%
Mo 202.031†	15467.6	0.4882	mg/L	0.00027				0.06%
Ni 231.604†	32748.4	0.5184	mg/L	0.00164				0.32%
Na 589.592†	3733740.6	232.8	mg/L	2.84				1.22%
Pb 220.353†	4619.1	0.4817	mg/L	0.00035				0.07%
Sb 206.836†	1778.6	0.4820	mg/L	0.00053				0.11%
Se 196.026†	989.7	1.005	mg/L	0.0040				0.39%
Sn 189.927†	35141.5	4.876	mg/L	0.0070				0.14%
Ti 337.279†	275130.7	0.4775	mg/L	0.00195				0.41%
Tl 190.801†	6792.1	1.811	mg/L	0.0011				0.06%
V 292.402†	53197.1	0.5032	mg/L	0.00069				0.14%
Zn 206.200†	23807.6	0.5069	mg/L	0.00038				0.07%
Ca 227.546†	21091.9	47.82	mg/L	0.433				0.91%
Sr 421.552†	2851174.2	4.328	mg/L	0.0521				1.20%
Al 237.313†	17958.0	1.961	mg/L	0.0105				0.54%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 69
Sample ID: R1409682-003A
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 84
Date Collected: 12/4/2014 11:04:26 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409682-003A

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7097183.4	0.9984	mg/L	0.00369				0.37%
Ag 328.068†	13642.5	0.0463	mg/L	0.00078				1.68%
As 188.979†	85.0	0.0394	mg/L	0.00144				3.65%
B 249.772†	122828.7	0.9149	mg/L	0.01339				1.46%
Ba 233.527†	219294.9	1.851	mg/L	0.0240				1.30%
Be 313.107†	117041.1	0.0436	mg/L	0.00043				0.97%
Cd 226.502†	5352.9	0.0438	mg/L	0.00014				0.32%
Co 228.616†	15063.8	0.4401	mg/L	0.00081				0.18%
Cr 267.716†	25694.2	0.1805	mg/L	0.00238				1.32%
Cu 324.752†	76864.7	0.2560	mg/L	0.00276				1.08%
Fe 259.939†	58863.4	0.9106	mg/L	0.00953				1.05%
K 766.490†	86027.4	22.34	mg/L	0.089				0.40%
Mg 279.077†	238363.6	22.07	mg/L	0.261				1.18%
Mn 257.610†	222327.9	0.4943	mg/L	0.00583				1.18%
Mo 202.031†	15590.6	0.4921	mg/L	0.00636				1.29%
Ni 231.604†	30327.2	0.4801	mg/L	0.00611				1.27%
Na 589.592†	3518927.4	219.4	mg/L	0.19				0.09%
Pb 220.353†	4244.0	0.4426	mg/L	0.00097				0.22%
Sb 206.836†	1836.3	0.4976	mg/L	0.00090				0.18%
Se 196.026†	777.0	0.7889	mg/L	0.00006				0.01%
Sn 189.927†	-90.7	-0.0126	mg/L	0.00046				3.69%
Ti 337.279†	268971.1	0.4668	mg/L	0.00483				1.03%
Tl 190.801†	6276.8	1.674	mg/L	0.0031				0.19%
V 292.402†	48991.3	0.4634	mg/L	0.00731				1.58%
Zn 206.200†	21772.7	0.4636	mg/L	0.00564				1.22%
Ca 227.546†	19921.4	45.17	mg/L	0.522				1.16%
Sr 421.552†	2700373.9	4.100	mg/L	0.0068				0.17%

Al 237.313†	16565.1	1.809 mg/L	0.0225		1.24%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 70
Sample ID: R1409682-003L
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 85
Date Collected: 12/4/2014 11:10:45 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409682-003L

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7306713.1	1.028	mg/L	0.0005				0.05%
Ag 328.068†	38.6	0.0001	mg/L	0.00007				56.75%
As 188.979†	-0.6	-0.0003	mg/L	0.00051				197.98%
B 249.772†	2853.3	0.0213	mg/L	0.00101				4.72%
Ba 233.527†	918.8	0.0078	mg/L	0.00004				0.53%
Be 313.107†	-107.0	0.0000	mg/L	0.00003				86.06%
Cd 226.502†	8.5	0.0001	mg/L	0.00003				43.65%
Co 228.616†	14.8	0.0004	mg/L	0.00009				20.23%
Cr 267.716†	-107.9	-0.0003	mg/L	0.00008				22.99%
Cu 324.752†	1605.9	0.0053	mg/L	0.00007				1.30%
Fe 259.939†	-57.4	-0.0009	mg/L	0.00006				6.88%
K 766.490†	2843.5	0.7385	mg/L	0.01359				1.84%
Mg 279.077†	46793.8	4.333	mg/L	0.0106				0.25%
Mn 257.610†	4311.5	0.0096	mg/L	0.00002				0.18%
Mo 202.031†	60.0	0.0019	mg/L	0.00001				0.54%
Ni 231.604†	351.5	0.0056	mg/L	0.00005				0.94%
Na 589.592†	651573.7	40.62	mg/L	0.349				0.86%
Pb 220.353†	-0.7	0.0000	mg/L	0.00019				>999.9%
Sb 206.836†	1.0	0.0003	mg/L	0.00110				389.44%
Se 196.026†	2.6	0.0026	mg/L	0.00135				51.07%
Sn 189.927†	-29.3	-0.0041	mg/L	0.00074				18.24%
Ti 337.279†	58.0	0.0001	mg/L	0.00009				94.32%
Tl 190.801†	9.6	0.0026	mg/L	0.00046				17.88%
V 292.402†	106.9	0.0010	mg/L	0.00013				12.77%
Zn 206.200†	51.3	0.0011	mg/L	0.00008				7.11%
Ca 227.546†	3727.1	8.442	mg/L	0.0006				0.01%
Sr 421.552†	541857.4	0.8226	mg/L	0.00622				0.76%
Al 237.313†	179.5	0.0146	mg/L	0.00015				1.06%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 71
Sample ID: R1409682-004
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 86
Date Collected: 12/4/2014 11:17:01 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409682-004

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7000021.6	0.9847	mg/L	0.00190				0.19%
Ag 328.068†	-66.3	-0.0002	mg/L	0.00013				57.48%
As 188.979†	12.0	0.0056	mg/L	0.00133				23.88%
B 249.772†	2889.2	0.0216	mg/L	0.00044				2.03%
Ba 233.527†	4554.3	0.0384	mg/L	0.00018				0.48%
Be 313.107†	-437.3	-0.0002	mg/L	0.00001				4.07%
Cd 226.502†	-6.1	-0.0001	mg/L	0.00004				84.60%
Co 228.616†	9.6	0.0003	mg/L	0.00009				33.34%
Cr 267.716†	-314.9	-0.0007	mg/L	0.00003				4.20%
Cu 324.752†	429.5	0.0014	mg/L	0.00000				0.27%
Fe 259.939†	343.4	0.0053	mg/L	0.00021				3.98%
K 766.490†	24549.3	6.376	mg/L	0.0281				0.44%
Mg 279.077†	168756.9	15.63	mg/L	0.151				0.97%
Mn 257.610†	796.3	0.0018	mg/L	0.00001				0.45%
Mo 202.031†	176.0	0.0056	mg/L	0.00007				1.21%
Ni 231.604†	40.4	0.0006	mg/L	0.00004				5.71%
Na 589.592†	3351747.5	209.0	mg/L	2.53				1.21%

Pb 220.353†	-3.4	0.0001 mg/L	0.00052		660.59%
Sb 206.836†	3.2	0.0009 mg/L	0.00020		22.97%
Se 196.026†	4.8	0.0049 mg/L	0.00282		57.64%
Sn 189.927†	-121.2	-0.0168 mg/L	0.00014		0.84%
Ti 337.279†	122.4	0.0002 mg/L	0.00005		22.54%
Tl 190.801†	0.8	0.0002 mg/L	0.00067		324.87%
V 292.402†	517.5	0.0049 mg/L	0.00002		0.49%
Zn 206.200†	136.1	0.0029 mg/L	0.00013		4.58%
Ca 227.546†	21466.4	48.62 mg/L	0.429		0.88%
Sr 421.552†	1576907.3	2.394 mg/L	0.0291		1.21%
Al 237.313†	603.9	0.0389 mg/L	0.00091		2.34%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 72
Sample ID: R1409682-004S
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 87
Date Collected: 12/4/2014 11:23:20 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409682-004S

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7001636.1	0.9849	mg/L	0.00998				1.01%
Ag 328.068†	14472.3	0.0491	mg/L	0.00015				0.31%
As 188.979†	101.0	0.0468	mg/L	0.00110				2.34%
B 249.772†	127743.9	0.9507	mg/L	0.01357				1.43%
Ba 233.527†	238760.5	2.015	mg/L	0.0217				1.08%
Be 313.107†	128540.0	0.0479	mg/L	0.00051				1.06%
Cd 226.502†	5819.6	0.0476	mg/L	0.00054				1.14%
Co 228.616†	16594.2	0.4848	mg/L	0.00587				1.21%
Cr 267.716†	28400.9	0.1989	mg/L	0.00170				0.85%
Cu 324.752†	77963.7	0.2597	mg/L	0.00232				0.89%
Fe 259.939†	73008.6	1.129	mg/L	0.0116				1.03%
K 766.490†	101855.4	26.45	mg/L	0.493				1.87%
Mg 279.077†	191407.7	17.72	mg/L	0.174				0.98%
Mn 257.610†	220435.5	0.4902	mg/L	0.00488				1.00%
Mo 202.031†	15370.1	0.4851	mg/L	0.00454				0.94%
Ni 231.604†	30946.5	0.4899	mg/L	0.00484				0.99%
Na 589.592†	3741793.8	233.3	mg/L	1.71				0.73%
Pb 220.353†	4639.6	0.4838	mg/L	0.00574				1.19%
Sb 206.836†	1780.4	0.4825	mg/L	0.00568				1.18%
Se 196.026†	1000.5	1.016	mg/L	0.0139				1.36%
Sn 189.927†	35380.3	4.909	mg/L	0.0602				1.23%
Ti 337.279†	277152.0	0.4810	mg/L	0.00462				0.96%
Tl 190.801†	6828.9	1.821	mg/L	0.0218				1.20%
V 292.402†	53413.7	0.5052	mg/L	0.00479				0.95%
Zn 206.200†	23181.9	0.4936	mg/L	0.00618				1.25%
Ca 227.546†	22938.3	52.01	mg/L	0.256				0.49%
Sr 421.552†	1600450.3	2.430	mg/L	0.0410				1.69%
Al 237.313†	17732.5	1.936	mg/L	0.0139				0.72%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 73
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/4/2014 11:29:32 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7177259.5	1.010	mg/L	0.0018				0.18%
Ag 328.068†	147340.5	0.4986	mg/L	0.00175	0.4986	mg/L	0.00175	0.35%
QC value within limits for Ag 328.068 Recovery = 99.71%								
As 188.979†	2159.3	1.002	mg/L	0.0009	1.002	mg/L	0.0009	0.09%
QC value within limits for As 188.979 Recovery = 100.16%								
B 249.772†	324793.4	2.408	mg/L	0.0248	2.408	mg/L	0.0248	1.03%
QC value within limits for B 249.772 Recovery = 96.33%								

Ba 233.527†	1207700.9	10.19 mg/L	0.058	10.19 mg/L	0.058	0.57%
QC value within limits for Ba 233.527 Recovery = 101.91%						
Be 313.107†	664920.5	0.2479 mg/L	0.00115	0.2479 mg/L	0.00115	0.46%
QC value within limits for Be 313.107 Recovery = 99.15%						
Cd 226.502†	61441.9	0.5037 mg/L	0.00447	0.5037 mg/L	0.00447	0.89%
QC value within limits for Cd 226.502 Recovery = 100.74%						
Co 228.616†	84535.7	2.470 mg/L	0.0147	2.470 mg/L	0.0147	0.60%
QC value within limits for Co 228.616 Recovery = 98.78%						
Cr 267.716†	72626.4	0.5069 mg/L	0.00329	0.5069 mg/L	0.00329	0.65%
QC value within limits for Cr 267.716 Recovery = 101.38%						
Cu 324.752†	364583.2	1.215 mg/L	0.0037	1.215 mg/L	0.0037	0.30%
QC value within limits for Cu 324.752 Recovery = 97.16%						
Fe 259.939†	320375.5	4.956 mg/L	0.0337	4.956 mg/L	0.0337	0.68%
QC value within limits for Fe 259.939 Recovery = 99.12%						
K 766.490†	93513.7	24.29 mg/L	0.020	24.29 mg/L	0.020	0.08%
QC value within limits for K 766.490 Recovery = 97.15%						
Mg 279.077†	269517.2	24.96 mg/L	0.158	24.96 mg/L	0.158	0.63%
QC value within limits for Mg 279.077 Recovery = 99.82%						
Mn 257.610†	337763.5	0.7515 mg/L	0.00439	0.7515 mg/L	0.00439	0.58%
QC value within limits for Mn 257.610 Recovery = 100.20%						
Mo 202.031†	76817.3	2.425 mg/L	0.0141	2.425 mg/L	0.0141	0.58%
QC value within limits for Mo 202.031 Recovery = 96.99%						
Ni 231.604†	127608.0	2.020 mg/L	0.0115	2.020 mg/L	0.0115	0.57%
QC value within limits for Ni 231.604 Recovery = 101.01%						
Na 589.592†	396847.0	24.74 mg/L	0.023	24.74 mg/L	0.023	0.09%
QC value within limits for Na 589.592 Recovery = 98.97%						
Pb 220.353†	4927.0	0.5142 mg/L	0.00010	0.5142 mg/L	0.00010	0.02%
QC value within limits for Pb 220.353 Recovery = 102.84%						
Sb 206.836†	18251.0	4.947 mg/L	0.0007	4.947 mg/L	0.0007	0.01%
QC value within limits for Sb 206.836 Recovery = 98.93%						
Se 196.026†	488.2	0.4972 mg/L	0.00075	0.4972 mg/L	0.00075	0.15%
QC value within limits for Se 196.026 Recovery = 99.45%						
Sn 189.927†	36402.8	5.051 mg/L	0.0420	5.051 mg/L	0.0420	0.83%
QC value within limits for Sn 189.927 Recovery = 101.02%						
Ti 337.279†	1424671.6	2.473 mg/L	0.0055	2.473 mg/L	0.0055	0.22%
QC value within limits for Ti 337.279 Recovery = 98.90%						
Tl 190.801†	3906.1	1.041 mg/L	0.0008	1.041 mg/L	0.0008	0.08%
QC value within limits for Tl 190.801 Recovery = 104.11%						
V 292.402†	263263.6	2.490 mg/L	0.0125	2.490 mg/L	0.0125	0.50%
QC value within limits for V 292.402 Recovery = 99.61%						
Zn 206.200†	47349.7	1.008 mg/L	0.0023	1.008 mg/L	0.0023	0.23%
QC value within limits for Zn 206.200 Recovery = 100.82%						
Ca 227.546†	10827.3	24.76 mg/L	0.031	24.76 mg/L	0.031	0.12%
QC value within limits for Ca 227.546 Recovery = 99.05%						
Sr 421.552†	1558055.3	2.365 mg/L	0.0027	2.365 mg/L	0.0027	0.11%
QC value within limits for Sr 421.552 Recovery = 94.61%						
Al 237.313†	86136.6	9.533 mg/L	0.0142	9.533 mg/L	0.0142	0.15%
QC value within limits for Al 237.313 Recovery = 95.33%						

All analyte(s) passed QC.

Sequence No.: 74
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/4/2014 11:35:43 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7495468.0	1.054	mg/L	0.0190				1.80%
Ag 328.068†	69.0	0.0002	mg/L	0.00021	0.0002	mg/L	0.00021	90.90%
QC value within limits for Ag 328.068 Recovery = Not calculated								
As 188.979†	1.3	0.0006	mg/L	0.00123	0.0006	mg/L	0.00123	204.43%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	3934.2	0.0294	mg/L	0.00390	0.0294	mg/L	0.00390	13.27%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	504.4	0.0043	mg/L	0.00206	0.0043	mg/L	0.00206	48.44%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	642.9	0.0002	mg/L	0.00004	0.0002	mg/L	0.00004	14.73%
QC value within limits for Be 313.107 Recovery = Not calculated								

Cd 226.502†	28.8	0.0002 mg/L	0.00011	0.0002 mg/L	0.00011	47.12%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	43.1	0.0013 mg/L	0.00033	0.0013 mg/L	0.00033	26.09%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	17.6	0.0001 mg/L	0.00005	0.0001 mg/L	0.00005	38.63%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	904.3	0.0030 mg/L	0.00083	0.0030 mg/L	0.00083	27.65%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 259.939†	378.0	0.0058 mg/L	0.00099	0.0058 mg/L	0.00099	16.94%
QC value within limits for Fe 259.939 Recovery = Not calculated						
K 766.490†	-12.0	-0.0031 mg/L	0.00433	-0.0031 mg/L	0.00433	139.00%
QC value within limits for K 766.490 Recovery = Not calculated						
Mg 279.077†	89.1	0.0083 mg/L	0.00183	0.0083 mg/L	0.00183	22.16%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	348.5	0.0008 mg/L	0.00018	0.0008 mg/L	0.00018	22.90%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	33.5	0.0011 mg/L	0.00069	0.0011 mg/L	0.00069	64.90%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	58.3	0.0009 mg/L	0.00022	0.0009 mg/L	0.00022	24.26%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Na 589.592†	1184.5	0.0738 mg/L	0.00194	0.0738 mg/L	0.00194	2.62%
QC value within limits for Na 589.592 Recovery = Not calculated						
Pb 220.353†	-0.3	0.0000 mg/L	0.00068	0.0000 mg/L	0.00068	>999.9%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	14.1	0.0038 mg/L	0.00189	0.0038 mg/L	0.00189	49.53%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	3.0	0.0031 mg/L	0.00180	0.0031 mg/L	0.00180	58.62%
QC value within limits for Se 196.026 Recovery = Not calculated						
Sn 189.927†	87.6	0.0122 mg/L	0.00236	0.0122 mg/L	0.00236	19.42%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 337.279†	669.6	0.0012 mg/L	0.00054	0.0012 mg/L	0.00054	46.49%
QC value within limits for Ti 337.279 Recovery = Not calculated						
Tl 190.801†	7.9	0.0021 mg/L	0.00034	0.0021 mg/L	0.00034	16.22%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	133.1	0.0013 mg/L	0.00069	0.0013 mg/L	0.00069	55.14%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	13.3	0.0003 mg/L	0.00025	0.0003 mg/L	0.00025	89.48%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	-4.8	-0.0106 mg/L	0.01325	-0.0106 mg/L	0.01325	124.68%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Sr 421.552†	1185.9	0.0018 mg/L	0.00015	0.0018 mg/L	0.00015	8.42%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Al 237.313†	22.8	0.0025 mg/L	0.00262	0.0025 mg/L	0.00262	103.20%
QC value within limits for Al 237.313 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 75
Sample ID: R1409682-004SD
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 88
Date Collected: 12/4/2014 11:41:47 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409682-004SD

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7016427.9	0.9870	mg/L	0.00065				0.07%
Ag 328.068†	14322.2	0.0486	mg/L	0.00034				0.70%
As 188.979†	98.4	0.0456	mg/L	0.00013				0.29%
B 249.772†	126785.7	0.9442	mg/L	0.01248				1.32%
Ba 233.527†	235081.5	1.984	mg/L	0.0260				1.31%
Be 313.107†	126884.1	0.0473	mg/L	0.00062				1.31%
Cd 226.502†	5734.3	0.0469	mg/L	0.00023				0.49%
Co 228.616†	16332.7	0.4771	mg/L	0.00605				1.27%
Cr 267.716†	27818.8	0.1949	mg/L	0.00215				1.10%
Cu 324.752†	76528.7	0.2549	mg/L	0.00132				0.52%
Fe 259.939†	62951.9	0.9738	mg/L	0.01187				1.22%
K 766.490†	101466.9	26.35	mg/L	0.103				0.39%
Mg 279.077†	190102.0	17.60	mg/L	0.197				1.12%
Mn 257.610†	216335.1	0.4810	mg/L	0.00545				1.13%
Mo 202.031†	15459.4	0.4880	mg/L	0.00649				1.33%

Ni 231.604†	30461.9	0.4822	mg/L	0.00559	1.16%
Na 589.592†	3703754.2	230.9	mg/L	0.31	0.13%
Pb 220.353†	4584.5	0.4781	mg/L	0.00205	0.43%
Sb 206.836†	1802.0	0.4883	mg/L	0.00017	0.04%
Se 196.026†	999.5	1.015	mg/L	0.0036	0.35%
Sn 189.927†	33043.5	4.585	mg/L	0.0820	1.79%
Ti 337.279†	278225.2	0.4829	mg/L	0.00414	0.86%
Tl 190.801†	6749.7	1.800	mg/L	0.0017	0.09%
V 292.402†	52329.4	0.4950	mg/L	0.00451	0.91%
Zn 206.200†	22823.7	0.4860	mg/L	0.00920	1.89%
Ca 227.546†	22806.0	51.70	mg/L	0.218	0.42%
Sr 421.552†	1606700.9	2.439	mg/L	0.0120	0.49%
Al 237.313†	17411.6	1.901	mg/L	0.0217	1.14%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 76
Sample ID: R1409682-004A
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 89
Date Collected: 12/4/2014 11:48:04 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409682-004A

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7024709.9	0.9882	mg/L	0.00110				0.11%
Ag 328.068†	14540.7	0.0493	mg/L	0.00004				0.09%
As 188.979†	95.3	0.0442	mg/L	0.00141				3.18%
B 249.772†	127730.2	0.9510	mg/L	0.00089				0.09%
Ba 233.527†	234412.1	1.978	mg/L	0.0037				0.19%
Be 313.107†	126036.2	0.0470	mg/L	0.00004				0.08%
Cd 226.502†	5679.2	0.0465	mg/L	0.00001				0.03%
Co 228.616†	16303.8	0.4763	mg/L	0.00008				0.02%
Cr 267.716†	27922.9	0.1955	mg/L	0.00002				0.01%
Cu 324.752†	75799.2	0.2525	mg/L	0.00035				0.14%
Fe 259.939†	67296.6	1.041	mg/L	0.0024				0.23%
K 766.490†	99306.7	25.79	mg/L	0.366				1.42%
Mg 279.077†	183761.3	17.01	mg/L	0.023				0.14%
Mn 257.610†	216170.7	0.4807	mg/L	0.00078				0.16%
Mo 202.031†	15891.1	0.5016	mg/L	0.00251				0.50%
Ni 231.604†	30462.0	0.4822	mg/L	0.00010				0.02%
Na 589.592†	3550104.6	221.3	mg/L	1.18				0.54%
Pb 220.353†	4542.0	0.4737	mg/L	0.00004				0.01%
Sb 206.836†	1897.2	0.5141	mg/L	0.00025				0.05%
Se 196.026†	948.8	0.9634	mg/L	0.00115				0.12%
Sn 189.927†	-81.1	-0.0112	mg/L	0.00065				5.79%
Ti 337.279†	275408.9	0.4780	mg/L	0.00042				0.09%
Tl 190.801†	6751.7	1.800	mg/L	0.0011				0.06%
V 292.402†	52478.1	0.4964	mg/L	0.00292				0.59%
Zn 206.200†	23113.2	0.4921	mg/L	0.00143				0.29%
Ca 227.546†	21855.3	49.55	mg/L	0.064				0.13%
Sr 421.552†	1534933.3	2.330	mg/L	0.0335				1.44%
Al 237.313†	17302.6	1.890	mg/L	0.0074				0.39%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 77
Sample ID: R1409682-004L
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 90
Date Collected: 12/4/2014 11:54:24 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409682-004L

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7252025.1	1.020	mg/L	0.0057				0.56%
Ag 328.068†	15.4	0.0001	mg/L	0.00023				429.74%
As 188.979†	1.1	0.0005	mg/L	0.00043				84.62%
B 249.772†	2661.5	0.0199	mg/L	0.00146				7.31%
Ba 233.527†	967.9	0.0082	mg/L	0.00007				0.85%

Be 313.107†	30.5	0.0000 mg/L	0.00000	20.86%
Cd 226.502†	-2.6	0.0000 mg/L	0.00009	400.83%
Co 228.616†	4.6	0.0001 mg/L	0.00006	42.20%
Cr 267.716†	-67.7	-0.0002 mg/L	0.00007	39.21%
Cu 324.752†	186.8	0.0006 mg/L	0.00009	14.33%
Fe 259.939†	169.5	0.0026 mg/L	0.00031	11.78%
K 766.490†	4350.0	1.130 mg/L	0.0123	1.09%
Mg 279.077†	34687.3	3.212 mg/L	0.0223	0.69%
Mn 257.610†	149.5	0.0003 mg/L	0.00000	0.51%
Mo 202.031†	39.7	0.0013 mg/L	0.00010	7.92%
Ni 231.604†	0.1	0.0000 mg/L	0.00008	>999.9%
Na 589.592†	653182.6	40.72 mg/L	0.036	0.09%
Pb 220.353†	2.7	0.0004 mg/L	0.00025	69.00%
Sb 206.836†	0.9	0.0002 mg/L	0.00051	215.13%
Se 196.026†	3.0	0.0031 mg/L	0.00050	16.33%
Sn 189.927†	-28.7	-0.0040 mg/L	0.00050	12.64%
Ti 337.279†	31.8	0.0001 mg/L	0.00010	174.06%
Tl 190.801†	5.8	0.0015 mg/L	0.00138	89.38%
V 292.402†	132.2	0.0013 mg/L	0.00005	3.89%
Zn 206.200†	34.2	0.0007 mg/L	0.00005	6.24%
Ca 227.546†	4077.9	9.236 mg/L	0.0191	0.21%
Sr 421.552†	303910.9	0.4614 mg/L	0.00090	0.20%
Al 237.313†	120.0	0.0079 mg/L	0.00071	9.01%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 78
Sample ID: R1409682-005
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 91
Date Collected: 12/5/2014 12:00:40 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409682-005

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6899247.9	0.9705	mg/L	0.00406				0.42%
Ag 328.068†	-61.7	-0.0002	mg/L	0.00003				17.40%
As 188.979†	11.9	0.0055	mg/L	0.00011				1.93%
B 249.772†	8211.3	0.0611	mg/L	0.00090				1.47%
Ba 233.527†	5373.4	0.0453	mg/L	0.00020				0.44%
Be 313.107†	-70.3	0.0000	mg/L	0.00002				90.96%
Cd 226.502†	-4.9	-0.0001	mg/L	0.00015				273.20%
Co 228.616†	126.8	0.0037	mg/L	0.00001				0.31%
Cr 267.716†	-541.3	-0.0014	mg/L	0.00003				1.80%
Cu 324.752†	490.1	0.0016	mg/L	0.00007				4.53%
Fe 259.939†	5165.0	0.0799	mg/L	0.00024				0.30%
K 766.490†	29156.8	7.572	mg/L	0.0524				0.69%
Mg 279.077†	270393.4	25.04	mg/L	0.279				1.12%
Mn 257.610†	31488.1	0.0700	mg/L	0.00045				0.64%
Mo 202.031†	420.8	0.0133	mg/L	0.00002				0.13%
Ni 231.604†	355.4	0.0056	mg/L	0.00001				0.23%
Na 589.592†	6327526.1	394.5	mg/L	1.58				0.40%
Pb 220.353†	-12.3	-0.0008	mg/L	0.00053				66.16%
Sb 206.836†	7.2	0.0019	mg/L	0.00027				14.17%
Se 196.026†	6.0	0.0061	mg/L	0.00143				23.35%
Sn 189.927†	-123.5	-0.0171	mg/L	0.00038				2.22%
Ti 337.279†	124.1	0.0002	mg/L	0.00007				32.63%
Tl 190.801†	-3.4	-0.0009	mg/L	0.00138				150.00%
V 292.402†	414.5	0.0039	mg/L	0.00003				0.71%
Zn 206.200†	45.3	0.0010	mg/L	0.00008				8.03%
Ca 227.546†	23088.9	52.30	mg/L	0.284				0.54%
Sr 421.552†	1879941.1	2.854	mg/L	0.0504				1.77%
Al 237.313†	2416.5	0.2354	mg/L	0.00085				0.36%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 79
Sample ID: R1409683-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 92
Date Collected: 12/5/2014 12:07:09 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409683-001

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6986777.7	0.9828	mg/L	0.00052				0.05%
Ag 328.068†	-19.8	0.0001	mg/L	0.00031				214.16%
As 188.979†	3.0	0.0013	mg/L	0.00030				23.23%
B 249.772†	7598.4	0.0532	mg/L	0.00065				1.22%
Ba 233.527†	59.4	0.0005	mg/L	0.00003				5.97%
Be 313.107†	-472.5	-0.0002	mg/L	0.00003				17.86%
Cd 226.502†	24.8	0.0001	mg/L	0.00002				31.93%
Co 228.616†	155.9	0.0046	mg/L	0.00008				1.83%
Cr 267.716†	537.7	0.0038	mg/L	0.00008				2.03%
Cu 324.752†	2563.8	0.0086	mg/L	0.00015				1.71%
Fe 259.939†	54345.6	0.8407	mg/L	0.00692				0.82%
K 766.490†	146938.5	38.16	mg/L	0.382				1.00%
Mg 279.077†	373.4	0.0346	mg/L	0.00201				5.83%
Mn 257.610†	3299.2	0.0074	mg/L	0.00003				0.34%
Mo 202.031†	134.7	0.0043	mg/L	0.00002				0.53%
Ni 231.604†	906.6	0.0144	mg/L	0.00040				2.79%
Na 589.592†	6647913.3	414.5	mg/L	1.81				0.44%
Pb 220.353†	-8.4	-0.0007	mg/L	0.00070				103.46%
Sb 206.836†	52.5	0.0140	mg/L	0.00053				3.80%
Se 196.026†	1.0	0.0013	mg/L	0.00016				12.06%
Sn 189.927†	11.7	0.0016	mg/L	0.00023				14.36%
Ti 337.279†	442.7	0.0008	mg/L	0.00015				18.87%
Tl 190.801†	3.1	0.0007	mg/L	0.00042				60.26%
V 292.402†	287.7	0.0027	mg/L	0.00006				2.22%
Zn 206.200†	138.9	0.0030	mg/L	0.00003				0.91%
Ca 227.546†	-22.0	-0.0081	mg/L	0.01091				134.49%
Sr 421.552†	183.7	0.0003	mg/L	0.00007				24.64%
Al 237.313†	19252.8	2.135	mg/L	0.0287				1.35%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 80
Sample ID: R1409683-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 93
Date Collected: 12/5/2014 12:13:35 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409683-002

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7049214.3	0.9916	mg/L	0.00652				0.66%
Ag 328.068†	31.8	0.0001	mg/L	0.00033				242.28%
As 188.979†	4.4	0.0020	mg/L	0.00035				17.84%
B 249.772†	49060.6	0.3663	mg/L	0.00233				0.63%
Ba 233.527†	5950.6	0.0502	mg/L	0.00003				0.06%
Be 313.107†	-476.9	-0.0002	mg/L	0.00001				3.53%
Cd 226.502†	12.7	0.0001	mg/L	0.00007				78.72%
Co 228.616†	119.0	0.0035	mg/L	0.00008				2.16%
Cr 267.716†	961.6	0.0067	mg/L	0.00002				0.30%
Cu 324.752†	3506.8	0.0117	mg/L	0.00001				0.11%
Fe 259.939†	7768.8	0.1202	mg/L	0.00015				0.12%
K 766.490†	112247.2	29.15	mg/L	0.004				0.01%
Mg 279.077†	3848.6	0.3564	mg/L	0.00438				1.23%
Mn 257.610†	2517.5	0.0056	mg/L	0.00002				0.38%
Mo 202.031†	118.4	0.0037	mg/L	0.00003				0.84%
Ni 231.604†	782.1	0.0124	mg/L	0.00004				0.30%
Na 589.592†	6602362.5	411.6	mg/L	0.19				0.05%
Pb 220.353†	-4.4	-0.0002	mg/L	0.00051				221.99%
Sb 206.836†	42.5	0.0113	mg/L	0.00034				3.01%
Se 196.026†	2.6	0.0027	mg/L	0.00091				34.35%
Sn 189.927†	-14.9	-0.0021	mg/L	0.00002				1.19%
Ti 337.279†	264.8	0.0005	mg/L	0.00003				5.62%
Tl 190.801†	3.1	0.0007	mg/L	0.00032				45.52%
V 292.402†	284.8	0.0027	mg/L	0.00011				3.93%
Zn 206.200†	2192.5	0.0467	mg/L	0.00030				0.65%
Ca 227.546†	1209.7	2.749	mg/L	0.0293				1.07%

Sr 421.552†	2712.6	0.0041 mg/L	0.00002	0.42%
Al 237.313†	17563.4	1.945 mg/L	0.0046	0.24%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 81
Sample ID: R1409684-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 94
Date Collected: 12/5/2014 12:19:55 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409684-001

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7402770.1	1.041	mg/L	0.0023				0.22%
Ag 328.068†	-59.5	0.0001	mg/L	0.00002				17.61%
As 188.979†	3.0	0.0014	mg/L	0.00099				71.33%
B 249.772†	4441.4	0.0278	mg/L	0.00027				0.96%
Ba 233.527†	2981.4	0.0252	mg/L	0.00003				0.10%
Be 313.107†	20.4	0.0000	mg/L	0.00003				408.20%
Cd 226.502†	16.6	-0.0001	mg/L	0.00001				14.44%
Co 228.616†	-0.1	0.0000	mg/L	0.00003				793.73%
Cr 267.716†	28.6	0.0011	mg/L	0.00008				6.88%
Cu 324.752†	868.9	0.0030	mg/L	0.00001				0.45%
Fe 259.939†	83916.0	1.298	mg/L	0.0021				0.16%
K 766.490†	6321.5	1.642	mg/L	0.0189				1.15%
Mg 279.077†	96302.8	8.917	mg/L	0.0169				0.19%
Mn 257.610†	9289.8	0.0208	mg/L	0.00001				0.05%
Mo 202.031†	47.7	0.0015	mg/L	0.00004				2.64%
Ni 231.604†	42.3	0.0007	mg/L	0.00014				20.95%
Na 589.592†	231789.1	14.45	mg/L	0.155				1.07%
Pb 220.353†	6.2	0.0009	mg/L	0.00019				21.19%
Sb 206.836†	-1.9	-0.0005	mg/L	0.00012				21.99%
Se 196.026†	2.1	0.0026	mg/L	0.00374				144.25%
Sn 189.927†	-36.9	-0.0051	mg/L	0.00023				4.48%
Ti 337.279†	747.4	0.0013	mg/L	0.00018				13.87%
Tl 190.801†	-6.9	-0.0018	mg/L	0.00012				6.53%
V 292.402†	30.9	0.0003	mg/L	0.00012				41.18%
Zn 206.200†	253.5	0.0054	mg/L	0.00014				2.67%
Ca 227.546†	14874.1	33.75	mg/L	0.083				0.25%
Sr 421.552†	122403.0	0.1858	mg/L	0.00188				1.01%
Al 237.313†	1832.0	0.1860	mg/L	0.00058				0.31%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 82
Sample ID: R1409684-001S
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 95
Date Collected: 12/5/2014 12:25:55 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409684-001S

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7293944.7	1.026	mg/L	0.0048				0.47%
Ag 328.068†	14357.6	0.0490	mg/L	0.00035				0.70%
As 188.979†	87.4	0.0405	mg/L	0.00052				1.28%
B 249.772†	127344.0	0.9428	mg/L	0.01418				1.50%
Ba 233.527†	240020.7	2.025	mg/L	0.0114				0.56%
Be 313.107†	128278.3	0.0478	mg/L	0.00009				0.19%
Cd 226.502†	5842.9	0.0476	mg/L	0.00060				1.26%
Co 228.616†	16949.9	0.4952	mg/L	0.00228				0.46%
Cr 267.716†	28958.0	0.2022	mg/L	0.00111				0.55%
Cu 324.752†	76688.4	0.2556	mg/L	0.00392				1.53%
Fe 259.939†	149671.3	2.315	mg/L	0.0174				0.75%
K 766.490†	81417.1	21.15	mg/L	0.015				0.07%
Mg 279.077†	118003.7	10.93	mg/L	0.069				0.63%
Mn 257.610†	231513.4	0.5149	mg/L	0.00287				0.56%
Mo 202.031†	15416.7	0.4866	mg/L	0.00451				0.93%
Ni 231.604†	31657.8	0.5012	mg/L	0.00183				0.37%

Na 589.592†	549690.1	34.27	mg/L	0.015		0.04%
Pb 220.353†	4743.9	0.4945	mg/L	0.00567		1.15%
Sb 206.836†	1745.4	0.4730	mg/L	0.00501		1.06%
Se 196.026†	982.6	0.9981	mg/L	0.00488		0.49%
Sn 189.927†	36863.8	5.115	mg/L	0.0244		0.48%
Ti 337.279†	280295.0	0.4865	mg/L	0.00407		0.84%
Tl 190.801†	7145.2	1.905	mg/L	0.0207		1.09%
V 292.402†	53273.0	0.5039	mg/L	0.00463		0.92%
Zn 206.200†	23316.9	0.4965	mg/L	0.00196		0.40%
Ca 227.546†	16209.7	36.82	mg/L	0.379		1.03%
Sr 421.552†	123539.4	0.1875	mg/L	0.00017		0.09%
Al 237.313†	18721.7	2.057	mg/L	0.0183		0.89%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 83
Sample ID: R1409684-001SD
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 96
Date Collected: 12/5/2014 12:32:04 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409684-001SD

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7235122.8	1.018	mg/L	0.0001				0.01%
Ag 328.068†	14313.7	0.0489	mg/L	0.00029				0.60%
As 188.979†	84.5	0.0391	mg/L	0.00035				0.90%
B 249.772†	127022.2	0.9408	mg/L	0.01094				1.16%
Ba 233.527†	236763.1	1.998	mg/L	0.0069				0.35%
Be 313.107†	126944.4	0.0473	mg/L	0.00014				0.30%
Cd 226.502†	5818.6	0.0474	mg/L	0.00034				0.71%
Co 228.616†	16694.2	0.4877	mg/L	0.00183				0.37%
Cr 267.716†	28638.3	0.2000	mg/L	0.00077				0.39%
Cu 324.752†	76995.9	0.2566	mg/L	0.00270				1.05%
Fe 259.939†	143889.6	2.226	mg/L	0.0089				0.40%
K 766.490†	80557.6	20.92	mg/L	0.248				1.19%
Mg 279.077†	114233.8	10.58	mg/L	0.056				0.53%
Mn 257.610†	228768.7	0.5088	mg/L	0.00182				0.36%
Mo 202.031†	15374.3	0.4853	mg/L	0.00035				0.07%
Ni 231.604†	31224.1	0.4943	mg/L	0.00109				0.22%
Na 589.592†	540120.8	33.68	mg/L	0.394				1.17%
Pb 220.353†	4737.6	0.4939	mg/L	0.00437				0.89%
Sb 206.836†	1758.2	0.4764	mg/L	0.00223				0.47%
Se 196.026†	984.5	1.0000	mg/L	0.00743				0.74%
Sn 189.927†	36428.9	5.055	mg/L	0.0187				0.37%
Ti 337.279†	280829.8	0.4874	mg/L	0.00328				0.67%
Tl 190.801†	7137.5	1.903	mg/L	0.0129				0.68%
V 292.402†	52833.9	0.4998	mg/L	0.00149				0.30%
Zn 206.200†	22746.0	0.4843	mg/L	0.00115				0.24%
Ca 227.546†	15732.6	35.74	mg/L	0.317				0.89%
Sr 421.552†	119398.9	0.1813	mg/L	0.00160				0.88%
Al 237.313†	18453.6	2.028	mg/L	0.0142				0.70%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 84
Sample ID: R1409684-001A
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 97
Date Collected: 12/5/2014 12:38:07 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409684-001A

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7287125.8	1.025	mg/L	0.0061				0.59%
Ag 328.068†	14317.3	0.0489	mg/L	0.00038				0.77%
As 188.979†	85.2	0.0394	mg/L	0.00085				2.15%
B 249.772†	126267.7	0.9350	mg/L	0.01068				1.14%
Ba 233.527†	233669.0	1.972	mg/L	0.0171				0.87%
Be 313.107†	124847.1	0.0465	mg/L	0.00017				0.36%

Cd 226.502†	5728.1	0.0466 mg/L	0.00011	0.24%
Co 228.616†	16466.4	0.4810 mg/L	0.00331	0.69%
Cr 267.716†	28190.1	0.1969 mg/L	0.00112	0.57%
Cu 324.752†	74500.6	0.2483 mg/L	0.00258	1.04%
Fe 259.939†	145751.5	2.255 mg/L	0.0167	0.74%
K 766.490†	77937.1	20.24 mg/L	0.166	0.82%
Mg 279.077†	115106.2	10.66 mg/L	0.082	0.77%
Mn 257.610†	226195.7	0.5031 mg/L	0.00387	0.77%
Mo 202.031†	15897.0	0.5018 mg/L	0.00458	0.91%
Ni 231.604†	30788.3	0.4874 mg/L	0.00256	0.53%
Na 589.592†	523550.5	32.64 mg/L	0.182	0.56%
Pb 220.353†	4658.2	0.4856 mg/L	0.00112	0.23%
Sb 206.836†	1860.6	0.5042 mg/L	0.00198	0.39%
Se 196.026†	958.8	0.9739 mg/L	0.00254	0.26%
Sn 189.927†	0.2	0.0000 mg/L	0.00085	>999.9%
Ti 337.279†	279718.7	0.4855 mg/L	0.00291	0.60%
Tl 190.801†	7091.1	1.891 mg/L	0.0071	0.38%
V 292.402†	51867.9	0.4906 mg/L	0.00529	1.08%
Zn 206.200†	22757.6	0.4846 mg/L	0.00302	0.62%
Ca 227.546†	15795.1	35.88 mg/L	0.380	1.06%
Sr 421.552†	117787.2	0.1788 mg/L	0.00113	0.63%
Al 237.313†	18202.0	2.000 mg/L	0.0163	0.82%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 85
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/5/2014 12:44:22 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	7265908.9	1.022 mg/L	0.0050			0.49%
Ag 328.068†	147016.4	0.4975 mg/L	0.00427	0.4975 mg/L	0.00427	0.86%
QC value within limits for Ag 328.068 Recovery = 99.49%						
As 188.979†	2151.4	0.9979 mg/L	0.00123	0.9979 mg/L	0.00123	0.12%
QC value within limits for As 188.979 Recovery = 99.79%						
B 249.772†	324994.0	2.410 mg/L	0.0107	2.410 mg/L	0.0107	0.44%
QC value within limits for B 249.772 Recovery = 96.39%						
Ba 233.527†	1196282.5	10.09 mg/L	0.004	10.09 mg/L	0.004	0.04%
QC value within limits for Ba 233.527 Recovery = 100.95%						
Be 313.107†	656080.6	0.2446 mg/L	0.00030	0.2446 mg/L	0.00030	0.12%
QC value within limits for Be 313.107 Recovery = 97.83%						
Cd 226.502†	61462.1	0.5039 mg/L	0.00436	0.5039 mg/L	0.00436	0.86%
QC value within limits for Cd 226.502 Recovery = 100.78%						
Co 228.616†	84271.5	2.462 mg/L	0.0191	2.462 mg/L	0.0191	0.78%
QC value within limits for Co 228.616 Recovery = 98.47%						
Cr 267.716†	72516.9	0.5061 mg/L	0.00344	0.5061 mg/L	0.00344	0.68%
QC value within limits for Cr 267.716 Recovery = 101.22%						
Cu 324.752†	362139.0	1.206 mg/L	0.0117	1.206 mg/L	0.0117	0.97%
QC value within limits for Cu 324.752 Recovery = 96.51%						
Fe 259.939†	318912.5	4.933 mg/L	0.0471	4.933 mg/L	0.0471	0.95%
QC value within limits for Fe 259.939 Recovery = 98.67%						
K 766.490†	92725.9	24.08 mg/L	0.005	24.08 mg/L	0.005	0.02%
QC value within limits for K 766.490 Recovery = 96.33%						
Mg 279.077†	268339.6	24.85 mg/L	0.218	24.85 mg/L	0.218	0.88%
QC value within limits for Mg 279.077 Recovery = 99.39%						
Mn 257.610†	336631.4	0.7489 mg/L	0.00660	0.7489 mg/L	0.00660	0.88%
QC value within limits for Mn 257.610 Recovery = 99.86%						
Mo 202.031†	76672.8	2.420 mg/L	0.0195	2.420 mg/L	0.0195	0.81%
QC value within limits for Mo 202.031 Recovery = 96.81%						
Ni 231.604†	127537.0	2.019 mg/L	0.0155	2.019 mg/L	0.0155	0.77%
QC value within limits for Ni 231.604 Recovery = 100.95%						
Na 589.592†	393326.9	24.52 mg/L	0.014	24.52 mg/L	0.014	0.06%
QC value within limits for Na 589.592 Recovery = 98.09%						
Pb 220.353†	4909.6	0.5124 mg/L	0.00034	0.5124 mg/L	0.00034	0.07%
QC value within limits for Pb 220.353 Recovery = 102.47%						
Sb 206.836†	18191.8	4.931 mg/L	0.0092	4.931 mg/L	0.0092	0.19%
QC value within limits for Sb 206.836 Recovery = 98.61%						

Se 196.026†	478.7	0.4876 mg/L	0.00094	0.4876 mg/L	0.00094	0.19%
QC value within limits for Se 196.026 Recovery = 97.52%						
Sn 189.927†	36222.6	5.026 mg/L	0.0323	5.026 mg/L	0.0323	0.64%
QC value within limits for Sn 189.927 Recovery = 100.52%						
Ti 337.279†	1409035.7	2.445 mg/L	0.0032	2.445 mg/L	0.0032	0.13%
QC value within limits for Ti 337.279 Recovery = 97.82%						
Tl 190.801†	3875.3	1.033 mg/L	0.0014	1.033 mg/L	0.0014	0.13%
QC value within limits for Tl 190.801 Recovery = 103.30%						
V 292.402†	264592.2	2.503 mg/L	0.0154	2.503 mg/L	0.0154	0.62%
QC value within limits for V 292.402 Recovery = 100.11%						
Zn 206.200†	47149.3	1.004 mg/L	0.0053	1.004 mg/L	0.0053	0.53%
QC value within limits for Zn 206.200 Recovery = 100.39%						
Ca 227.546†	10810.8	24.72 mg/L	0.110	24.72 mg/L	0.110	0.45%
QC value within limits for Ca 227.546 Recovery = 98.90%						
Sr 421.552†	1541565.2	2.340 mg/L	0.0011	2.340 mg/L	0.0011	0.05%
QC value within limits for Sr 421.552 Recovery = 93.61%						
Al 237.313†	85592.2	9.472 mg/L	0.1036	9.472 mg/L	0.1036	1.09%
QC value within limits for Al 237.313 Recovery = 94.72%						

All analyte(s) passed QC.

Sequence No.: 86
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/5/2014 12:50:34 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7417435.5	1.043	mg/L	0.0135				1.29%
Ag 328.068†	118.2	0.0004	mg/L	0.00001	0.0004	mg/L	0.00001	3.44%
QC value within limits for Ag 328.068 Recovery = Not calculated								
As 188.979†	0.2	0.0001	mg/L	0.00076	0.0001	mg/L	0.00076	688.50%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	4274.5	0.0320	mg/L	0.00335	0.0320	mg/L	0.00335	10.49%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	636.1	0.0054	mg/L	0.00200	0.0054	mg/L	0.00200	37.19%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	678.0	0.0003	mg/L	0.00010	0.0003	mg/L	0.00010	38.86%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	39.4	0.0003	mg/L	0.00011	0.0003	mg/L	0.00011	33.42%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	55.0	0.0016	mg/L	0.00032	0.0016	mg/L	0.00032	19.79%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	19.7	0.0001	mg/L	0.00019	0.0001	mg/L	0.00019	135.87%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	974.0	0.0032	mg/L	0.00047	0.0032	mg/L	0.00047	14.34%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	337.8	0.0052	mg/L	0.00136	0.0052	mg/L	0.00136	25.96%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	-12.2	-0.0032	mg/L	0.01416	-0.0032	mg/L	0.01416	448.62%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	64.0	0.0059	mg/L	0.00740	0.0059	mg/L	0.00740	124.82%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	341.2	0.0008	mg/L	0.00017	0.0008	mg/L	0.00017	22.79%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	46.5	0.0015	mg/L	0.00044	0.0015	mg/L	0.00044	30.31%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	73.8	0.0012	mg/L	0.00036	0.0012	mg/L	0.00036	30.47%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	845.3	0.0527	mg/L	0.00101	0.0527	mg/L	0.00101	1.92%
QC value within limits for Na 589.592 Recovery = Not calculated								
Pb 220.353†	1.3	0.0001	mg/L	0.00049	0.0001	mg/L	0.00049	369.25%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	18.3	0.0050	mg/L	0.00183	0.0050	mg/L	0.00183	36.92%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.1	-0.0001	mg/L	0.00134	-0.0001	mg/L	0.00134	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	89.9	0.0125	mg/L	0.00172	0.0125	mg/L	0.00172	13.77%
QC value within limits for Sn 189.927 Recovery = Not calculated								

Ti 337.279†	839.6	0.0015 mg/L	0.00046	0.0015 mg/L	0.00046	31.24%
QC value within limits for Ti 337.279 Recovery = Not calculated						
Tl 190.801†	6.8	0.0018 mg/L	0.00086	0.0018 mg/L	0.00086	47.05%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	177.0	0.0017 mg/L	0.00050	0.0017 mg/L	0.00050	29.61%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	22.1	0.0005 mg/L	0.00013	0.0005 mg/L	0.00013	28.58%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	6.7	0.0155 mg/L	0.02247	0.0155 mg/L	0.02247	145.36%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Sr 421.552†	1319.4	0.0020 mg/L	0.00002	0.0020 mg/L	0.00002	0.85%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Al 237.313†	40.1	0.0044 mg/L	0.00119	0.0044 mg/L	0.00119	26.70%
QC value within limits for Al 237.313 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 87
Sample ID: R1409684-001L
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 98
Date Collected: 12/5/2014 12:56:37 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409684-001L

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7433876.6	1.046	mg/L	0.0013				0.13%
Ag 328.068†	8.6	0.0001	mg/L	0.00019				195.19%
As 188.979†	0.3	0.0001	mg/L	0.00065				439.24%
B 249.772†	2881.9	0.0204	mg/L	0.00101				4.93%
Ba 233.527†	674.9	0.0057	mg/L	0.00001				0.18%
Be 313.107†	266.3	0.0001	mg/L	0.00002				24.51%
Cd 226.502†	12.4	0.0001	mg/L	0.00004				74.86%
Co 228.616†	8.8	0.0003	mg/L	0.00009				35.09%
Cr 267.716†	11.2	0.0003	mg/L	0.00002				9.27%
Cu 324.752†	381.3	0.0013	mg/L	0.00004				2.77%
Fe 259.939†	17427.2	0.2696	mg/L	0.00421				1.56%
K 766.490†	1072.8	0.2786	mg/L	0.00682				2.45%
Mg 279.077†	19601.2	1.815	mg/L	0.0256				1.41%
Mn 257.610†	1840.9	0.0041	mg/L	0.00000				0.09%
Mo 202.031†	14.0	0.0004	mg/L	0.00009				19.36%
Ni 231.604†	2.8	0.0000	mg/L	0.00007				158.75%
Na 589.592†	43961.6	2.741	mg/L	0.0059				0.22%
Pb 220.353†	1.7	0.0002	mg/L	0.00075				330.26%
Sb 206.836†	2.6	0.0007	mg/L	0.00033				46.56%
Se 196.026†	1.9	0.0021	mg/L	0.00065				31.30%
Sn 189.927†	3.1	0.0004	mg/L	0.00009				19.63%
Ti 337.279†	225.9	0.0004	mg/L	0.00001				3.15%
Tl 190.801†	-0.2	-0.0001	mg/L	0.00054				966.50%
V 292.402†	7.0	0.0001	mg/L	0.00004				56.26%
Zn 206.200†	71.2	0.0015	mg/L	0.00003				1.94%
Ca 227.546†	2886.8	6.551	mg/L	0.0166				0.25%
Sr 421.552†	23346.8	0.0354	mg/L	0.00004				0.12%
Al 237.313†	350.6	0.0355	mg/L	0.00028				0.80%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 88
Sample ID: R1409688-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 99
Date Collected: 12/5/2014 1:02:40 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409688-001

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6683810.0	0.9402	mg/L	0.00136				0.14%
Ag 328.068†	-434.1	-0.0015	mg/L	0.00004				2.81%
As 188.979†	3.9	0.0018	mg/L	0.00080				44.34%
B 249.772†	11856.3	0.0886	mg/L	0.00079				0.89%

Ba 233.527†	4920.9	0.0415	mg/L	0.00036	0.86%
Be 313.107†	-747.7	-0.0003	mg/L	0.00004	13.44%
Cd 226.502†	-16.6	-0.0001	mg/L	0.00001	9.24%
Co 228.616†	-1.2	0.0000	mg/L	0.00022	622.68%
Cr 267.716†	-156.2	-0.0005	mg/L	0.00010	17.93%
Cu 324.752†	7543.3	0.0251	mg/L	0.00054	2.16%
Fe 259.939†	1848.3	0.0286	mg/L	0.00018	0.64%
K 766.490†	4249.3	1.104	mg/L	0.0002	0.02%
Mg 279.077†	62690.5	5.805	mg/L	0.0481	0.83%
Mn 257.610†	4789.2	0.0106	mg/L	0.00003	0.27%
Mo 202.031†	145.5	0.0046	mg/L	0.00001	0.23%
Ni 231.604†	-39.5	-0.0006	mg/L	0.00005	7.37%
Na 589.592†	2545274.5	158.7	mg/L	0.46	0.29%
Pb 220.353†	-47.8	0.0005	mg/L	0.00014	26.86%
Sb 206.836†	7.6	0.0020	mg/L	0.00035	17.23%
Se 196.026†	3.8	0.0038	mg/L	0.00057	14.88%
Sn 189.927†	-212.2	-0.0294	mg/L	0.00093	3.16%
Ti 337.279†	10.9	0.0000	mg/L	0.00001	36.97%
Tl 190.801†	13.6	0.0036	mg/L	0.00111	30.53%
V 292.402†	60.6	0.0006	mg/L	0.00002	3.36%
Zn 206.200†	1577.2	0.0336	mg/L	0.00023	0.70%
Ca 227.546†	276638.6	626.6	mg/L	6.67	1.06%
Sr 421.552†	315968.6	0.4797	mg/L	0.00082	0.17%
Al 237.313†	133.4	-0.2898	mg/L	0.00360	1.24%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 89
Sample ID: R1409688-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 100
Date Collected: 12/5/2014 1:08:57 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409688-002

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6815146.0	0.9587	mg/L	0.00208				0.22%
Ag 328.068†	-270.5	-0.0009	mg/L	0.00017				18.22%
As 188.979†	8.7	0.0040	mg/L	0.00024				5.95%
B 249.772†	11605.0	0.0868	mg/L	0.00049				0.56%
Ba 233.527†	5866.9	0.0495	mg/L	0.00011				0.22%
Be 313.107†	-736.1	-0.0003	mg/L	0.00000				0.47%
Cd 226.502†	-20.5	-0.0002	mg/L	0.00004				25.95%
Co 228.616†	-2.2	-0.0001	mg/L	0.00011				163.48%
Cr 267.716†	-156.3	-0.0006	mg/L	0.00005				7.86%
Cu 324.752†	5472.0	0.0182	mg/L	0.00001				0.07%
Fe 259.939†	173.8	0.0027	mg/L	0.00028				10.55%
K 766.490†	4156.7	1.080	mg/L	0.0266				2.47%
Mg 279.077†	58864.9	5.450	mg/L	0.0137				0.25%
Mn 257.610†	4281.9	0.0095	mg/L	0.00002				0.18%
Mo 202.031†	137.4	0.0043	mg/L	0.00000				0.04%
Ni 231.604†	-37.8	-0.0006	mg/L	0.00012				19.74%
Na 589.592†	2388115.5	148.9	mg/L	0.35				0.23%
Pb 220.353†	-39.1	0.0011	mg/L	0.00019				17.53%
Sb 206.836†	5.2	0.0014	mg/L	0.00021				14.97%
Se 196.026†	4.3	0.0043	mg/L	0.00132				30.70%
Sn 189.927†	-221.5	-0.0307	mg/L	0.00037				1.22%
Ti 337.279†	-50.9	-0.0001	mg/L	0.00005				51.67%
Tl 190.801†	13.0	0.0035	mg/L	0.00008				2.29%
V 292.402†	55.3	0.0005	mg/L	0.00006				11.23%
Zn 206.200†	1571.4	0.0335	mg/L	0.00012				0.37%
Ca 227.546†	259868.9	588.6	mg/L	1.08				0.18%
Sr 421.552†	299466.6	0.4546	mg/L	0.00129				0.28%
Al 237.313†	66.8	-0.2787	mg/L	0.00019				0.07%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 90
Sample ID: R1409688-005
Analyst:
Initial Sample Wt:

Autosampler Location: 101
Date Collected: 12/5/2014 1:15:08 AM
Data Type: Original
Initial Sample Vol:

Dilution: Sample Prep Vol: 50 mL

Mean Data: R1409688-005

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7476262.1	1.052	mg/L	0.0018				0.17%
Ag 328.068†	16.2	0.0001	mg/L	0.00030				222.06%
As 188.979†	-2.2	-0.0010	mg/L	0.00051				49.29%
B 249.772†	1648.9	0.0110	mg/L	0.00028				2.52%
Ba 233.527†	1568.9	0.0132	mg/L	0.00008				0.61%
Be 313.107†	155.7	0.0001	mg/L	0.00004				66.32%
Cd 226.502†	14.9	0.0001	mg/L	0.00001				11.37%
Co 228.616†	2.6	0.0001	mg/L	0.00014				179.39%
Cr 267.716†	9.4	0.0003	mg/L	0.00007				18.90%
Cu 324.752†	367.6	0.0013	mg/L	0.00016				12.90%
Fe 259.939†	20454.3	0.3164	mg/L	0.00100				0.31%
K 766.490†	2680.4	0.6961	mg/L	0.00700				1.01%
Mg 279.077†	31038.9	2.874	mg/L	0.0106				0.37%
Mn 257.610†	13452.7	0.0299	mg/L	0.00003				0.10%
Mo 202.031†	12.5	0.0004	mg/L	0.00005				12.15%
Ni 231.604†	-4.5	-0.0001	mg/L	0.00003				48.48%
Na 589.592†	174941.3	10.91	mg/L	0.053				0.49%
Pb 220.353†	2.1	0.0003	mg/L	0.00015				46.97%
Sb 206.836†	0.8	0.0002	mg/L	0.00055				279.71%
Se 196.026†	0.6	0.0007	mg/L	0.00003				4.78%
Sn 189.927†	-67.7	-0.0094	mg/L	0.00002				0.20%
Ti 337.279†	2155.5	0.0037	mg/L	0.00105				28.08%
Tl 190.801†	-4.6	-0.0012	mg/L	0.00049				39.30%
V 292.402†	36.6	0.0003	mg/L	0.00005				13.79%
Zn 206.200†	117.1	0.0025	mg/L	0.00009				3.53%
Ca 227.546†	5405.4	12.26	mg/L	0.032				0.26%
Sr 421.552†	31636.8	0.0480	mg/L	0.00032				0.66%
Al 237.313†	1446.6	0.1540	mg/L	0.00059				0.38%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 91
Sample ID: R1409692-001 10X
Analyst:
Initial Sample Wt:
Dilution: 10X

Autosampler Location: 102
Date Collected: 12/5/2014 1:21:13 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409692-001 10X

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6734048.2	0.9473	mg/L	0.01254				1.32%
Ag 328.068†	-13.0	0.0000	mg/L	0.00011				237.16%
As 188.979†	5.6	0.0026	mg/L	0.00030				11.66%
B 249.772†	3119.8	0.0233	mg/L	0.00029				1.24%
Ba 233.527†	354.4	0.0030	mg/L	0.00010				3.28%
Be 313.107†	-593.3	-0.0002	mg/L	0.00001				3.21%
Cd 226.502†	-9.8	-0.0001	mg/L	0.00000				3.19%
Co 228.616†	-4.1	-0.0001	mg/L	0.00004				34.01%
Cr 267.716†	-155.5	-0.0007	mg/L	0.00004				5.35%
Cu 324.752†	332.0	0.0011	mg/L	0.00012				10.86%
Fe 259.939†	-137.7	-0.0021	mg/L	0.00056				26.44%
K 766.490†	2816.8	0.7316	mg/L	0.01132				1.55%
Mg 279.077†	45640.3	4.226	mg/L	0.0236				0.56%
Mn 257.610†	349.7	0.0008	mg/L	0.00004				4.57%
Mo 202.031†	21.2	0.0007	mg/L	0.00001				1.30%
Ni 231.604†	27.0	0.0004	mg/L	0.00007				15.59%
Na 589.592†	Saturated2							
Pb 220.353†	-8.0	-0.0007	mg/L	0.00027				39.39%
Sb 206.836†	1.1	0.0003	mg/L	0.00037				122.81%
Se 196.026†	3.6	0.0037	mg/L	0.00077				21.06%
Sn 189.927†	-103.2	-0.0143	mg/L	0.00059				4.13%
Ti 337.279†	-21.5	0.0000	mg/L	0.00003				91.37%
Tl 190.801†	5.0	0.0013	mg/L	0.00063				46.48%
V 292.402†	9.7	0.0001	mg/L	0.00027				289.70%
Zn 206.200†	141.6	0.0030	mg/L	0.00008				2.55%

Ca 227.546†	7556.4	17.11 mg/L	0.129	0.75%
Sr 421.552†	388308.9	0.5895 mg/L	0.00390	0.66%
Al 237.313†	12.6	-0.0081 mg/L	0.00008	0.93%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 92
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/5/2014 1:27:26 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7268236.5	1.022	mg/L	0.0023				0.22%
Ag 328.068†	147575.0	0.4994	mg/L	0.00169	0.4994	mg/L	0.00169	0.34%
QC value within limits for Ag 328.068 Recovery = 99.87%								
As 188.979†	2143.7	0.9944	mg/L	0.00629	0.9944	mg/L	0.00629	0.63%
QC value within limits for As 188.979 Recovery = 99.44%								
B 249.772†	323365.0	2.398	mg/L	0.0058	2.398	mg/L	0.0058	0.24%
QC value within limits for B 249.772 Recovery = 95.90%								
Ba 233.527†	1191425.9	10.05	mg/L	0.039	10.05	mg/L	0.039	0.39%
QC value within limits for Ba 233.527 Recovery = 100.54%								
Be 313.107†	653447.1	0.2436	mg/L	0.00023	0.2436	mg/L	0.00023	0.10%
QC value within limits for Be 313.107 Recovery = 97.44%								
Cd 226.502†	61825.4	0.5069	mg/L	0.00384	0.5069	mg/L	0.00384	0.76%
QC value within limits for Cd 226.502 Recovery = 101.37%								
Co 228.616†	84446.2	2.467	mg/L	0.0124	2.467	mg/L	0.0124	0.50%
QC value within limits for Co 228.616 Recovery = 98.68%								
Cr 267.716†	72984.3	0.5094	mg/L	0.00159	0.5094	mg/L	0.00159	0.31%
QC value within limits for Cr 267.716 Recovery = 101.87%								
Cu 324.752†	361021.5	1.203	mg/L	0.0000	1.203	mg/L	0.0000	0.00%
QC value within limits for Cu 324.752 Recovery = 96.21%								
Fe 259.939†	319657.0	4.945	mg/L	0.0189	4.945	mg/L	0.0189	0.38%
QC value within limits for Fe 259.939 Recovery = 98.90%								
K 766.490†	93041.3	24.16	mg/L	0.295	24.16	mg/L	0.295	1.22%
QC value within limits for K 766.490 Recovery = 96.66%								
Mg 279.077†	268902.9	24.90	mg/L	0.107	24.90	mg/L	0.107	0.43%
QC value within limits for Mg 279.077 Recovery = 99.59%								
Mn 257.610†	337463.0	0.7508	mg/L	0.00325	0.7508	mg/L	0.00325	0.43%
QC value within limits for Mn 257.610 Recovery = 100.11%								
Mo 202.031†	76943.3	2.429	mg/L	0.0096	2.429	mg/L	0.0096	0.40%
QC value within limits for Mo 202.031 Recovery = 97.15%								
Ni 231.604†	128300.0	2.031	mg/L	0.0113	2.031	mg/L	0.0113	0.56%
QC value within limits for Ni 231.604 Recovery = 101.56%								
Na 589.592†	400911.6	25.00	mg/L	0.254	25.00	mg/L	0.254	1.02%
QC value within limits for Na 589.592 Recovery = 99.98%								
Pb 220.353†	4903.6	0.5117	mg/L	0.00387	0.5117	mg/L	0.00387	0.76%
QC value within limits for Pb 220.353 Recovery = 102.35%								
Sb 206.836†	18174.3	4.926	mg/L	0.0240	4.926	mg/L	0.0240	0.49%
QC value within limits for Sb 206.836 Recovery = 98.52%								
Se 196.026†	482.4	0.4914	mg/L	0.00537	0.4914	mg/L	0.00537	1.09%
QC value within limits for Se 196.026 Recovery = 98.28%								
Sn 189.927†	36311.9	5.038	mg/L	0.0179	5.038	mg/L	0.0179	0.35%
QC value within limits for Sn 189.927 Recovery = 100.77%								
Ti 337.279†	1404648.9	2.438	mg/L	0.0096	2.438	mg/L	0.0096	0.39%
QC value within limits for Ti 337.279 Recovery = 97.51%								
Tl 190.801†	3869.5	1.031	mg/L	0.0086	1.031	mg/L	0.0086	0.83%
QC value within limits for Tl 190.801 Recovery = 103.14%								
V 292.402†	267670.5	2.532	mg/L	0.0197	2.532	mg/L	0.0197	0.78%
QC value within limits for V 292.402 Recovery = 101.28%								
Zn 206.200†	47516.3	1.012	mg/L	0.0088	1.012	mg/L	0.0088	0.87%
QC value within limits for Zn 206.200 Recovery = 101.17%								
Ca 227.546†	10795.3	24.69	mg/L	0.040	24.69	mg/L	0.040	0.16%
QC value within limits for Ca 227.546 Recovery = 98.76%								
Sr 421.552†	1545086.6	2.346	mg/L	0.0274	2.346	mg/L	0.0274	1.17%
QC value within limits for Sr 421.552 Recovery = 93.83%								
Al 237.313†	85670.0	9.481	mg/L	0.0154	9.481	mg/L	0.0154	0.16%
QC value within limits for Al 237.313 Recovery = 94.81%								

All analyte(s) passed QC.

Sequence No.: 93
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/5/2014 1:33:35 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7591565.9	1.068	mg/L	0.0032				0.30%
Ag 328.068†	149.9	0.0005	mg/L	0.00002	0.0005	mg/L	0.00002	4.11%
QC value within limits for Ag 328.068 Recovery = Not calculated								
As 188.979†	0.9	0.0004	mg/L	0.00020	0.0004	mg/L	0.00020	47.41%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	2561.9	0.0191	mg/L	0.00248	0.0191	mg/L	0.00248	12.96%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	553.1	0.0047	mg/L	0.00187	0.0047	mg/L	0.00187	40.08%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	674.2	0.0003	mg/L	0.00005	0.0003	mg/L	0.00005	20.12%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	25.3	0.0002	mg/L	0.00005	0.0002	mg/L	0.00005	23.59%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	41.3	0.0012	mg/L	0.00023	0.0012	mg/L	0.00023	19.29%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	8.3	0.0001	mg/L	0.00005	0.0001	mg/L	0.00005	80.93%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	757.4	0.0025	mg/L	0.00068	0.0025	mg/L	0.00068	27.05%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	323.0	0.0050	mg/L	0.00069	0.0050	mg/L	0.00069	13.86%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	29.0	0.0075	mg/L	0.00834	0.0075	mg/L	0.00834	110.63%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	45.4	0.0042	mg/L	0.00284	0.0042	mg/L	0.00284	67.46%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	273.6	0.0006	mg/L	0.00015	0.0006	mg/L	0.00015	24.09%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	41.9	0.0013	mg/L	0.00046	0.0013	mg/L	0.00046	35.09%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	57.6	0.0009	mg/L	0.00036	0.0009	mg/L	0.00036	39.76%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	2466.1	0.1538	mg/L	0.00707	0.1538	mg/L	0.00707	4.60%
QC value within limits for Na 589.592 Recovery = Not calculated								
Pb 220.353†	-2.4	-0.0002	mg/L	0.00059	-0.0002	mg/L	0.00059	238.36%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	15.6	0.0042	mg/L	0.00070	0.0042	mg/L	0.00070	16.45%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	2.5	0.0025	mg/L	0.00284	0.0025	mg/L	0.00284	111.81%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	71.4	0.0099	mg/L	0.00203	0.0099	mg/L	0.00203	20.48%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 337.279†	733.0	0.0013	mg/L	0.00063	0.0013	mg/L	0.00063	49.54%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	2.9	0.0008	mg/L	0.00018	0.0008	mg/L	0.00018	23.15%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	139.5	0.0013	mg/L	0.00049	0.0013	mg/L	0.00049	36.80%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	17.9	0.0004	mg/L	0.00016	0.0004	mg/L	0.00016	41.88%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	9.4	0.0215	mg/L	0.00692	0.0215	mg/L	0.00692	32.19%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Sr 421.552†	1233.1	0.0019	mg/L	0.00019	0.0019	mg/L	0.00019	10.34%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Al 237.313†	25.1	0.0028	mg/L	0.00232	0.0028	mg/L	0.00232	83.74%
QC value within limits for Al 237.313 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 94
Sample ID: MRL

Autosampler Location: 6
Date Collected: 12/5/2014 1:39:37 AM

Analyst:
Initial Sample Wt:
Dilution:

Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MRL

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7507649.6	1.056	mg/L	0.0039				0.37%
Ag 328.068†	3022.0	0.0102	mg/L	0.00007	0.0102	mg/L	0.00007	0.70%
QC value within limits for Ag 328.068 Recovery = 102.27%								
As 188.979†	43.7	0.0203	mg/L	0.00094	0.0203	mg/L	0.00094	4.65%
QC value within limits for As 188.979 Recovery = 101.33%								
B 249.772†	27125.1	0.2024	mg/L	0.00109	0.2024	mg/L	0.00109	0.54%
QC value within limits for B 249.772 Recovery = 101.22%								
Ba 233.527†	25756.8	0.2173	mg/L	0.00278	0.2173	mg/L	0.00278	1.28%
QC value within limits for Ba 233.527 Recovery = 108.67%								
Be 313.107†	13615.1	0.0051	mg/L	0.00008	0.0051	mg/L	0.00008	1.60%
QC value within limits for Be 313.107 Recovery = 101.51%								
Cd 226.502†	1304.0	0.0107	mg/L	0.00003	0.0107	mg/L	0.00003	0.31%
QC value within limits for Cd 226.502 Recovery = 106.90%								
Co 228.616†	1842.3	0.0538	mg/L	0.00029	0.0538	mg/L	0.00029	0.54%
QC value within limits for Co 228.616 Recovery = 107.64%								
Cr 267.716†	1471.1	0.0103	mg/L	0.00008	0.0103	mg/L	0.00008	0.74%
QC value within limits for Cr 267.716 Recovery = 103.17%								
Cu 324.752†	7858.9	0.0262	mg/L	0.00010	0.0262	mg/L	0.00010	0.38%
QC value within limits for Cu 324.752 Recovery = 104.72%								
Fe 259.939†	6990.4	0.1081	mg/L	0.00008	0.1081	mg/L	0.00008	0.08%
QC value within limits for Fe 259.939 Recovery = 108.14%								
K 766.490†	3596.5	0.9341	mg/L	0.00415	0.9341	mg/L	0.00415	0.44%
QC value within limits for K 766.490 Recovery = 93.41%								
Mg 279.077†	11197.3	1.037	mg/L	0.0012	1.037	mg/L	0.0012	0.11%
QC value within limits for Mg 279.077 Recovery = 103.68%								
Mn 257.610†	7050.2	0.0157	mg/L	0.00014	0.0157	mg/L	0.00014	0.89%
QC value within limits for Mn 257.610 Recovery = 104.57%								
Mo 202.031†	812.2	0.0256	mg/L	0.00018	0.0256	mg/L	0.00018	0.69%
QC value within limits for Mo 202.031 Recovery = 102.55%								
Ni 231.604†	2671.5	0.0423	mg/L	0.00032	0.0423	mg/L	0.00032	0.76%
QC value within limits for Ni 231.604 Recovery = 105.73%								
Na 589.592†	16727.6	1.043	mg/L	0.0016	1.043	mg/L	0.0016	0.16%
QC value within limits for Na 589.592 Recovery = 104.29%								
Pb 220.353†	98.7	0.0103	mg/L	0.00051	0.0103	mg/L	0.00051	4.99%
QC value within limits for Pb 220.353 Recovery = 103.06%								
Sb 206.836†	228.0	0.0618	mg/L	0.00035	0.0618	mg/L	0.00035	0.57%
QC value within limits for Sb 206.836 Recovery = 102.99%								
Se 196.026†	10.5	0.0107	mg/L	0.00039	0.0107	mg/L	0.00039	3.62%
QC value within limits for Se 196.026 Recovery = 107.26%								
Sn 189.927†	3793.5	0.5264	mg/L	0.00416	0.5264	mg/L	0.00416	0.79%
QC value within limits for Sn 189.927 Recovery = 105.27%								
Ti 337.279†	28737.7	0.0499	mg/L	0.00035	0.0499	mg/L	0.00035	0.69%
QC value within limits for Ti 337.279 Recovery = 99.75%								
Tl 190.801†	80.4	0.0214	mg/L	0.00072	0.0214	mg/L	0.00072	3.37%
QC value within limits for Tl 190.801 Recovery = 107.10%								
V 292.402†	5570.8	0.0527	mg/L	0.00033	0.0527	mg/L	0.00033	0.63%
QC value within limits for V 292.402 Recovery = 105.39%								
Zn 206.200†	902.8	0.0192	mg/L	0.00026	0.0192	mg/L	0.00026	1.33%
QC value within limits for Zn 206.200 Recovery = 96.11%								
Ca 227.546†	422.7	0.9625	mg/L	0.02161	0.9625	mg/L	0.02161	2.25%
QC value within limits for Ca 227.546 Recovery = 96.25%								
Sr 421.552†	66582.5	0.1011	mg/L	0.00015	0.1011	mg/L	0.00015	0.15%
QC value within limits for Sr 421.552 Recovery = 101.08%								
Al 237.313†	1740.8	0.1923	mg/L	0.00058	0.1923	mg/L	0.00058	0.30%
QC value within limits for Al 237.313 Recovery = 96.14%								

All analyte(s) passed QC.

Sequence No.: 95
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/5/2014 1:45:41 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6854304.9	0.9642	mg/L	0.00070				0.07%
Ag 328.068†	-4959.4	0.0048	mg/L	0.00012	0.0048	mg/L	0.00012	2.51%
QC value within limits for Ag 328.068 Recovery = Not calculated								
As 188.979†	34.9	0.0060	mg/L	0.00011	0.0060	mg/L	0.00011	1.88%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	48911.3	-0.0097	mg/L	0.00278	-0.0097	mg/L	0.00278	28.50%
Ba 233.527†	1239.7	0.0105	mg/L	0.00015	0.0105	mg/L	0.00015	1.43%
Be 313.107†	-572.4	-0.0002	mg/L	0.00003	-0.0002	mg/L	0.00003	13.91%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	1749.2	-0.0006	mg/L	0.00007	-0.0006	mg/L	0.00007	11.56%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	38.5	0.0011	mg/L	0.00004	0.0011	mg/L	0.00004	3.77%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-3559.2	0.0024	mg/L	0.00005	0.0024	mg/L	0.00005	2.09%
QC value greater than the upper limit for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	-1549.6	0.0026	mg/L	0.00005	0.0026	mg/L	0.00005	1.92%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	5503388.1	85.13	mg/L	0.383	85.13	mg/L	0.383	0.45%
QC value within limits for Fe 259.939 Recovery = 85.13%								
K 766.490†	-78.3	-0.0203	mg/L	0.00544	-0.0203	mg/L	0.00544	26.73%
Mg 279.077†	2650935.7	245.5	mg/L	1.37	245.5	mg/L	1.37	0.56%
QC value within limits for Mg 279.077 Recovery = 98.18%								
Mn 257.610†	-4826.6	0.0007	mg/L	0.00010	0.0007	mg/L	0.00010	14.86%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-64.4	-0.0020	mg/L	0.00026	-0.0020	mg/L	0.00026	12.64%
Ni 231.604†	-185.4	-0.0029	mg/L	0.00001	-0.0029	mg/L	0.00001	0.39%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	577.6	0.0360	mg/L	0.00005	0.0360	mg/L	0.00005	0.13%
Pb 220.353†	-258.2	-0.0019	mg/L	0.00043	-0.0019	mg/L	0.00043	23.13%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	82.3	-0.0004	mg/L	0.00137	-0.0004	mg/L	0.00137	386.94%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-33.4	-0.0031	mg/L	0.00102	-0.0031	mg/L	0.00102	33.50%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-89.2	-0.0124	mg/L	0.00039	-0.0124	mg/L	0.00039	3.16%
Ti 337.279†	179.1	0.0003	mg/L	0.00001	0.0003	mg/L	0.00001	3.68%
Tl 190.801†	49.6	-0.0012	mg/L	0.00067	-0.0012	mg/L	0.00067	55.58%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	-591.8	-0.0056	mg/L	0.00010	-0.0056	mg/L	0.00010	1.74%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	330.2	0.0070	mg/L	0.00052	0.0070	mg/L	0.00052	7.36%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	111098.5	255.9	mg/L	1.96	255.9	mg/L	1.96	0.76%
QC value within limits for Ca 227.546 Recovery = 102.36%								
Sr 421.552†	2816.0	0.0043	mg/L	0.00005	0.0043	mg/L	0.00005	1.23%
Al 237.313†	2215396.0	245.4	mg/L	0.15	245.4	mg/L	0.15	0.06%
QC value within limits for Al 237.313 Recovery = 98.17%								
QC Failed. Continue with analysis.								

Sequence No.: 96
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/5/2014 1:52:00 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6862087.8	0.9653	mg/L	0.00225				0.23%
Ag 328.068†	54690.8	0.2061	mg/L	0.00006	0.2061	mg/L	0.00006	0.03%
QC value within limits for Ag 328.068 Recovery = 103.03%								
As 188.979†	245.8	0.1039	mg/L	0.00027	0.1039	mg/L	0.00027	0.26%
QC value within limits for As 188.979 Recovery = 103.93%								
B 249.772†	48695.1	-0.0091	mg/L	0.00194	-0.0091	mg/L	0.00194	21.37%
Ba 233.527†	59010.4	0.4980	mg/L	0.00207	0.4980	mg/L	0.00207	0.42%
QC value within limits for Ba 233.527 Recovery = 99.59%								

Be 313.107†	1290360.8	0.4810 mg/L	0.00197	0.4810 mg/L	0.00197	0.41%
QC value within limits for Be 313.107 Recovery = 96.21%						
Cd 226.502†	114639.4	0.9266 mg/L	0.00623	0.9266 mg/L	0.00623	0.67%
QC value within limits for Cd 226.502 Recovery = 92.66%						
Co 228.616†	15145.0	0.4424 mg/L	0.00338	0.4424 mg/L	0.00338	0.76%
QC value within limits for Co 228.616 Recovery = 88.49%						
Cr 267.716†	64838.4	0.4772 mg/L	0.00249	0.4772 mg/L	0.00249	0.52%
QC value within limits for Cr 267.716 Recovery = 95.44%						
Cu 324.752†	143945.4	0.4871 mg/L	0.00506	0.4871 mg/L	0.00506	1.04%
QC value within limits for Cu 324.752 Recovery = 97.41%						
Fe 259.939†	5470326.4	84.62 mg/L	0.350	84.62 mg/L	0.350	0.41%
QC value within limits for Fe 259.939 Recovery = 84.62%						
K 766.490†	-134.2	-0.0349 mg/L	0.00469	-0.0349 mg/L	0.00469	13.45%
Mg 279.077†	2635810.7	244.1 mg/L	1.02	244.1 mg/L	1.02	0.42%
QC value within limits for Mg 279.077 Recovery = 97.62%						
Mn 257.610†	207325.3	0.4722 mg/L	0.00123	0.4722 mg/L	0.00123	0.26%
QC value within limits for Mn 257.610 Recovery = 94.44%						
Mo 202.031†	-80.5	-0.0025 mg/L	0.00012	-0.0025 mg/L	0.00012	4.70%
Ni 231.604†	56684.2	0.8974 mg/L	0.00544	0.8974 mg/L	0.00544	0.61%
QC value within limits for Ni 231.604 Recovery = 89.74%						
Na 589.592†	495.0	0.0309 mg/L	0.00263	0.0309 mg/L	0.00263	8.52%
Pb 220.353†	206.4	0.0463 mg/L	0.00066	0.0463 mg/L	0.00066	1.41%
QC value within limits for Pb 220.353 Recovery = 92.66%						
Sb 206.836†	2291.5	0.5987 mg/L	0.00347	0.5987 mg/L	0.00347	0.58%
QC value within limits for Sb 206.836 Recovery = 99.78%						
Se 196.026†	12.1	0.0429 mg/L	0.00355	0.0429 mg/L	0.00355	8.28%
QC value within limits for Se 196.026 Recovery = 85.82%						
Sn 189.927†	-126.4	-0.0175 mg/L	0.00014	-0.0175 mg/L	0.00014	0.83%
Ti 337.279†	101.6	0.0002 mg/L	0.00002	0.0002 mg/L	0.00002	8.63%
Tl 190.801†	390.4	0.0898 mg/L	0.00140	0.0898 mg/L	0.00140	1.56%
QC value within limits for Tl 190.801 Recovery = 89.82%						
V 292.402†	50526.5	0.4779 mg/L	0.00181	0.4779 mg/L	0.00181	0.38%
QC value within limits for V 292.402 Recovery = 95.59%						
Zn 206.200†	43293.2	0.9218 mg/L	0.00722	0.9218 mg/L	0.00722	0.78%
QC value within limits for Zn 206.200 Recovery = 92.18%						
Ca 227.546†	110607.6	254.8 mg/L	0.61	254.8 mg/L	0.61	0.24%
QC value within limits for Ca 227.546 Recovery = 101.91%						
Sr 421.552†	2683.5	0.0041 mg/L	0.00004	0.0041 mg/L	0.00004	0.96%
Al 237.313†	2197694.1	243.5 mg/L	0.62	243.5 mg/L	0.62	0.26%
QC value within limits for Al 237.313 Recovery = 97.38%						

All analyte(s) passed QC.

Sequence No.: 97
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/5/2014 1:58:06 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	7328506.6	1.031 mg/L	0.0036			0.35%
Ag 328.068†	147881.9	0.5004 mg/L	0.00126	0.5004 mg/L	0.00126	0.25%
QC value within limits for Ag 328.068 Recovery = 100.08%						
As 188.979†	2167.8	1.006 mg/L	0.0126	1.006 mg/L	0.0126	1.25%
QC value within limits for As 188.979 Recovery = 100.56%						
B 249.772†	325690.1	2.415 mg/L	0.0275	2.415 mg/L	0.0275	1.14%
QC value within limits for B 249.772 Recovery = 96.58%						
Ba 233.527†	1212271.8	10.23 mg/L	0.007	10.23 mg/L	0.007	0.07%
QC value within limits for Ba 233.527 Recovery = 102.30%						
Be 313.107†	666134.1	0.2483 mg/L	0.00096	0.2483 mg/L	0.00096	0.39%
QC value within limits for Be 313.107 Recovery = 99.33%						
Cd 226.502†	62835.4	0.5151 mg/L	0.00206	0.5151 mg/L	0.00206	0.40%
QC value within limits for Cd 226.502 Recovery = 103.03%						
Co 228.616†	85678.6	2.503 mg/L	0.0101	2.503 mg/L	0.0101	0.40%
QC value within limits for Co 228.616 Recovery = 100.12%						
Cr 267.716†	73647.6	0.5140 mg/L	0.00257	0.5140 mg/L	0.00257	0.50%
QC value within limits for Cr 267.716 Recovery = 102.80%						
Cu 324.752†	363201.5	1.210 mg/L	0.0049	1.210 mg/L	0.0049	0.40%
QC value within limits for Cu 324.752 Recovery = 96.79%						

Fe 259.939†	326307.4	5.048 mg/L	0.0139	5.048 mg/L	0.0139	0.28%
QC value within limits for Fe 259.939 Recovery = 100.96%						
K 766.490†	92813.2	24.10 mg/L	0.099	24.10 mg/L	0.099	0.41%
QC value within limits for K 766.490 Recovery = 96.42%						
Mg 279.077†	273221.1	25.30 mg/L	0.114	25.30 mg/L	0.114	0.45%
QC value within limits for Mg 279.077 Recovery = 101.19%						
Mn 257.610†	341676.9	0.7602 mg/L	0.00353	0.7602 mg/L	0.00353	0.46%
QC value within limits for Mn 257.610 Recovery = 101.36%						
Mo 202.031†	77803.9	2.456 mg/L	0.0133	2.456 mg/L	0.0133	0.54%
QC value within limits for Mo 202.031 Recovery = 98.23%						
Ni 231.604†	129801.2	2.055 mg/L	0.0093	2.055 mg/L	0.0093	0.45%
QC value within limits for Ni 231.604 Recovery = 102.75%						
Na 589.592†	394038.6	24.57 mg/L	0.115	24.57 mg/L	0.115	0.47%
QC value within limits for Na 589.592 Recovery = 98.27%						
Pb 220.353†	4950.5	0.5166 mg/L	0.00513	0.5166 mg/L	0.00513	0.99%
QC value within limits for Pb 220.353 Recovery = 103.33%						
Sb 206.836†	18232.0	4.942 mg/L	0.0595	4.942 mg/L	0.0595	1.20%
QC value within limits for Sb 206.836 Recovery = 98.83%						
Se 196.026†	485.6	0.4946 mg/L	0.00480	0.4946 mg/L	0.00480	0.97%
QC value within limits for Se 196.026 Recovery = 98.92%						
Sn 189.927†	36959.6	5.128 mg/L	0.0432	5.128 mg/L	0.0432	0.84%
QC value within limits for Sn 189.927 Recovery = 102.56%						
Ti 337.279†	1416860.8	2.459 mg/L	0.0085	2.459 mg/L	0.0085	0.35%
QC value within limits for Ti 337.279 Recovery = 98.36%						
Tl 190.801†	3889.1	1.037 mg/L	0.0100	1.037 mg/L	0.0100	0.97%
QC value within limits for Tl 190.801 Recovery = 103.66%						
V 292.402†	266891.0	2.525 mg/L	0.0031	2.525 mg/L	0.0031	0.12%
QC value within limits for V 292.402 Recovery = 100.98%						
Zn 206.200†	48731.8	1.038 mg/L	0.0056	1.038 mg/L	0.0056	0.54%
QC value within limits for Zn 206.200 Recovery = 103.76%						
Ca 227.546†	10752.7	24.60 mg/L	0.222	24.60 mg/L	0.222	0.90%
QC value within limits for Ca 227.546 Recovery = 98.39%						
Sr 421.552†	1535655.9	2.331 mg/L	0.0104	2.331 mg/L	0.0104	0.45%
QC value within limits for Sr 421.552 Recovery = 93.25%						
Al 237.313†	86971.8	9.625 mg/L	0.0305	9.625 mg/L	0.0305	0.32%
QC value within limits for Al 237.313 Recovery = 96.25%						

All analyte(s) passed QC.

Sequence No.: 98
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/5/2014 2:04:17 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	7500882.6	1.055 mg/L	0.0066			0.62%
Ag 328.068†	125.5	0.0004 mg/L	0.00004	0.0004 mg/L	0.00004	8.55%
QC value within limits for Ag 328.068 Recovery = Not calculated						
As 188.979†	1.2	0.0006 mg/L	0.00054	0.0006 mg/L	0.00054	93.16%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.772†	3451.5	0.0257 mg/L	0.00314	0.0257 mg/L	0.00314	12.21%
QC value within limits for B 249.772 Recovery = Not calculated						
Ba 233.527†	425.4	0.0036 mg/L	0.00111	0.0036 mg/L	0.00111	31.01%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	701.8	0.0003 mg/L	0.00006	0.0003 mg/L	0.00006	22.53%
QC value within limits for Be 313.107 Recovery = Not calculated						
Cd 226.502†	35.6	0.0003 mg/L	0.00014	0.0003 mg/L	0.00014	50.21%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	40.6	0.0012 mg/L	0.00040	0.0012 mg/L	0.00040	33.35%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	8.4	0.0001 mg/L	0.00008	0.0001 mg/L	0.00008	130.90%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	915.6	0.0031 mg/L	0.00049	0.0031 mg/L	0.00049	16.18%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 259.939†	1625.1	0.0251 mg/L	0.00472	0.0251 mg/L	0.00472	18.78%
QC value within limits for Fe 259.939 Recovery = Not calculated						
K 766.490†	79.3	0.0206 mg/L	0.00214	0.0206 mg/L	0.00214	10.42%
QC value within limits for K 766.490 Recovery = Not calculated						

Mg 279.077†	276.6	0.0256 mg/L	0.00888	0.0256 mg/L	0.00888	34.66%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	232.4	0.0005 mg/L	0.00008	0.0005 mg/L	0.00008	14.98%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	24.6	0.0008 mg/L	0.00029	0.0008 mg/L	0.00029	37.40%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	58.8	0.0009 mg/L	0.00024	0.0009 mg/L	0.00024	25.25%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Na 589.592†	613.6	0.0383 mg/L	0.00073	0.0383 mg/L	0.00073	1.91%
QC value within limits for Na 589.592 Recovery = Not calculated						
Pb 220.353†	-5.3	-0.0005 mg/L	0.00042	-0.0005 mg/L	0.00042	76.59%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	14.7	0.0040 mg/L	0.00113	0.0040 mg/L	0.00113	28.35%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	2.3	0.0024 mg/L	0.00004	0.0024 mg/L	0.00004	1.49%
QC value within limits for Se 196.026 Recovery = Not calculated						
Sn 189.927†	70.9	0.0098 mg/L	0.00178	0.0098 mg/L	0.00178	18.07%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 337.279†	469.8	0.0008 mg/L	0.00036	0.0008 mg/L	0.00036	44.19%
QC value within limits for Ti 337.279 Recovery = Not calculated						
Tl 190.801†	2.1	0.0006 mg/L	0.00083	0.0006 mg/L	0.00083	145.34%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	92.0	0.0009 mg/L	0.00029	0.0009 mg/L	0.00029	33.69%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	22.0	0.0005 mg/L	0.00023	0.0005 mg/L	0.00023	48.96%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	6.0	0.0147 mg/L	0.02455	0.0147 mg/L	0.02455	167.52%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Sr 421.552†	741.8	0.0011 mg/L	0.00003	0.0011 mg/L	0.00003	2.69%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Al 237.313†	259.9	0.0288 mg/L	0.01039	0.0288 mg/L	0.01039	36.04%
QC value within limits for Al 237.313 Recovery = Not calculated						

All analyte(s) passed QC.

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Sequence No.: 99
Sample ID: PBT-224667
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 103
Date Collected: 12/5/2014 2:10:26 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: PBT-224667

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7496177.2	1.054	mg/L	0.0046				0.43%
Ag 328.068†	18.1	0.0001	mg/L	0.00001				11.83%
As 188.979†	-0.2	-0.0001	mg/L	0.00039				378.19%
B 249.772†	2100.0	0.0155	mg/L	0.00135				8.69%
Ba 233.527†	379.7	0.0032	mg/L	0.00004				1.27%
Be 313.107†	441.1	0.0002	mg/L	0.00000				1.50%
Cd 226.502†	3.0	0.0000	mg/L	0.00005				293.36%
Co 228.616†	39.0	0.0011	mg/L	0.00005				4.16%
Cr 267.716†	23.7	0.0002	mg/L	0.00004				25.48%
Cu 324.752†	1310.8	0.0044	mg/L	0.00099				22.75%
Fe 259.939†	3298.9	0.0510	mg/L	0.00125				2.45%
K 766.490†	-69.1	-0.0179	mg/L	0.00037				2.05%
Mg 279.077†	-87.8	-0.0081	mg/L	0.00034				4.20%
Mn 257.610†	466.6	0.0010	mg/L	0.00006				6.11%
Mo 202.031†	15.3	0.0005	mg/L	0.00006				12.69%
Ni 231.604†	56.4	0.0009	mg/L	0.00004				4.47%
Na 589.592†	354.3	0.0221	mg/L	0.00044				2.01%
Pb 220.353†	-4.3	-0.0004	mg/L	0.00033				73.29%
Sb 206.836†	5.3	0.0014	mg/L	0.00005				3.14%
Se 196.026†	1.8	0.0018	mg/L	0.00100				54.81%
Sn 189.927†	215.3	0.0299	mg/L	0.00458				15.32%
Ti 337.279†	106.4	0.0002	mg/L	0.00001				7.22%
Tl 190.801†	0.3	0.0001	mg/L	0.00007				74.20%
V 292.402†	14.1	0.0001	mg/L	0.00030				224.47%
Zn 206.200†	4.6	0.0001	mg/L	0.00008				81.07%
Ca 227.546†	-2.2	-0.0026	mg/L	0.00573				219.31%
Sr 421.552†	192.5	0.0003	mg/L	0.00002				5.34%

Al 237.313† 71.7 0.0080 mg/L 0.00134 16.69%
Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 100
Sample ID: LCST 6X
Analyst:
Initial Sample Wt:
Dilution: 6X

Autosampler Location: 104
Date Collected: 12/5/2014 2:16:30 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: LCST 6X

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7510598.9	1.057	mg/L	0.0044				0.42%
Ag 328.068†	231762.0	0.7823	mg/L	0.00231				0.30%
As 188.979†	1587.2	0.7365	mg/L	0.00878				1.19%
B 249.772†	1153.5	0.0086	mg/L	0.00050				5.86%
Ba 233.527†	108921.6	0.9191	mg/L	0.00822				0.89%
Be 313.107†	-87.9	0.0000	mg/L	0.00001				19.99%
Cd 226.502†	19632.0	0.1612	mg/L	0.00201				1.25%
Co 228.616†	13.6	0.0004	mg/L	0.00022				55.87%
Cr 267.716†	114719.2	0.7966	mg/L	0.00610				0.77%
Cu 324.752†	93.4	0.0003	mg/L	0.00014				44.20%
Fe 259.939†	842.5	0.0130	mg/L	0.00026				1.99%
K 766.490†	-41.1	-0.0107	mg/L	0.00548				51.43%
Mg 279.077†	-55.7	-0.0052	mg/L	0.00677				131.19%
Mn 257.610†	-60.8	-0.0001	mg/L	0.00006				45.27%
Mo 202.031†	1.9	0.0001	mg/L	0.00006				98.34%
Ni 231.604†	9.9	0.0002	mg/L	0.00003				19.56%
Na 589.592†	208.6	0.0130	mg/L	0.00226				17.40%
Pb 220.353†	7979.9	0.8311	mg/L	0.00984				1.18%
Sb 206.836†	12.2	0.0033	mg/L	0.00064				19.43%
Se 196.026†	146.6	0.1488	mg/L	0.00194				1.31%
Sn 189.927†	13.1	0.0018	mg/L	0.00009				5.11%
Ti 337.279†	3.1	0.0000	mg/L	0.00000				77.25%
Tl 190.801†	-0.9	-0.0002	mg/L	0.00001				2.39%
V 292.402†	-212.2	-0.0020	mg/L	0.00013				6.63%
Zn 206.200†	-17.8	-0.0004	mg/L	0.00032				84.57%
Ca 227.546†	-14.0	-0.0311	mg/L	0.00371				11.94%
Sr 421.552†	7.2	0.0000	mg/L	0.00006				537.84%
Al 237.313†	-3.5	-0.0003	mg/L	0.00040				114.87%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 101
Sample ID: LCST-224667
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 105
Date Collected: 12/5/2014 2:22:32 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: LCST-224667

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7441604.0	1.047	mg/L	0.0055				0.53%
Ag 328.068†	1367412.0	4.615	mg/L	0.0072				0.16%
As 188.979†	9514.1	4.415	mg/L	0.0210				0.47%
B 249.772†	998.8	0.0073	mg/L	0.00031				4.20%
Ba 233.527†	650372.0	5.488	mg/L	0.0039				0.07%
Be 313.107†	-1892.0	-0.0007	mg/L	0.00004				5.51%
Cd 226.502†	115798.7	0.9510	mg/L	0.00268				0.28%
Co 228.616†	55.6	0.0016	mg/L	0.00007				4.14%
Cr 267.716†	689743.2	4.790	mg/L	0.0025				0.05%
Cu 324.752†	441.5	0.0015	mg/L	0.00013				9.12%
Fe 259.939†	2412.1	0.0373	mg/L	0.00069				1.86%
K 766.490†	-30.5	-0.0079	mg/L	0.00301				38.09%
Mg 279.077†	-224.6	-0.0208	mg/L	0.00135				6.49%
Mn 257.610†	77.2	0.0002	mg/L	0.00003				14.71%
Mo 202.031†	49.1	0.0016	mg/L	0.00002				1.07%
Ni 231.604†	53.8	0.0009	mg/L	0.00002				2.64%
Na 589.592†	188.9	0.0118	mg/L	0.00128				10.89%

Pb 220.353†	48134.7	5.013	mg/L	0.0155	0.31%
Sb 206.836†	72.6	0.0197	mg/L	0.00059	2.98%
Se 196.026†	854.7	0.8675	mg/L	0.00992	1.14%
Sn 189.927†	109.6	0.0152	mg/L	0.00115	7.55%
Ti 337.279†	64.4	0.0001	mg/L	0.00001	12.29%
Tl 190.801†	7.4	0.0020	mg/L	0.00010	5.18%
V 292.402†	-1295.0	-0.0122	mg/L	0.00026	2.08%
Zn 206.200†	-282.7	-0.0060	mg/L	0.00046	7.64%
Ca 227.546†	-2.2	-0.0033	mg/L	0.01005	304.00%
Sr 421.552†	150.4	0.0002	mg/L	0.00000	0.83%
Al 237.313†	3.3	0.0004	mg/L	0.00022	52.15%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 102
Sample ID: LCSW-224667
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 106
Date Collected: 12/5/2014 2:28:40 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: LCSW-224667

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7348150.9	1.034	mg/L	0.0011				0.11%
Ag 328.068†	14059.6	0.0477	mg/L	0.00035				0.73%
As 188.979†	86.4	0.0400	mg/L	0.00147				3.67%
B 249.772†	120572.0	0.8974	mg/L	0.00127				0.14%
Ba 233.527†	232976.8	1.966	mg/L	0.0125				0.64%
Be 313.107†	130147.4	0.0485	mg/L	0.00011				0.23%
Cd 226.502†	5913.2	0.0484	mg/L	0.00013				0.27%
Co 228.616†	16684.2	0.4874	mg/L	0.00326				0.67%
Cr 267.716†	28209.6	0.1961	mg/L	0.00134				0.68%
Cu 324.752†	79829.2	0.2659	mg/L	0.00143				0.54%
Fe 259.939†	68747.1	1.063	mg/L	0.0067				0.63%
K 766.490†	69811.4	18.13	mg/L	0.071				0.39%
Mg 279.077†	20234.7	1.874	mg/L	0.0077				0.41%
Mn 257.610†	216958.6	0.4824	mg/L	0.00317				0.66%
Mo 202.031†	14888.7	0.4700	mg/L	0.00228				0.48%
Ni 231.604†	30968.5	0.4903	mg/L	0.00327				0.67%
Na 589.592†	299502.7	18.67	mg/L	0.064				0.34%
Pb 220.353†	4765.7	0.4965	mg/L	0.00007				0.02%
Sb 206.836†	1750.7	0.4744	mg/L	0.00070				0.15%
Se 196.026†	11.5	0.0121	mg/L	0.00258				21.37%
Sn 189.927†	56.5	0.0078	mg/L	0.00068				8.70%
Ti 337.279†	271710.4	0.4716	mg/L	0.00162				0.34%
Tl 190.801†	7260.4	1.936	mg/L	0.0005				0.03%
V 292.402†	51064.6	0.4830	mg/L	0.00493				1.02%
Zn 206.200†	23649.7	0.5036	mg/L	0.00410				0.81%
Ca 227.546†	843.9	1.962	mg/L	0.0138				0.70%
Sr 421.552†	127.9	0.0002	mg/L	0.00004				18.08%
Al 237.313†	16103.3	1.784	mg/L	0.0028				0.16%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 103
Sample ID: MBLK 14877-01
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 107
Date Collected: 12/5/2014 2:34:51 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: MBLK 14877-01

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6456258.1	0.9082	mg/L	0.00378				0.42%
Ag 328.068†	7.3	0.0000	mg/L	0.00018				516.73%
As 188.979†	11.4	0.0053	mg/L	0.00094				17.75%
B 249.772†	38700.7	0.2893	mg/L	0.00341				1.18%
Ba 233.527†	5300.0	0.0447	mg/L	0.00013				0.29%
Be 313.107†	-706.7	-0.0003	mg/L	0.00003				12.44%
Cd 226.502†	-24.9	-0.0002	mg/L	0.00007				34.79%

Co 228.616†	17.0	0.0005 mg/L	0.00009	18.95%
Cr 267.716†	305.1	0.0021 mg/L	0.00005	2.24%
Cu 324.752†	1526.3	0.0051 mg/L	0.00000	0.07%
Fe 259.939†	2338.5	0.0362 mg/L	0.00020	0.56%
K 766.490†	3822.8	0.9928 mg/L	0.00422	0.43%
Mg 279.077†	2860.9	0.2649 mg/L	0.00354	1.34%
Mn 257.610†	268.9	0.0006 mg/L	0.00002	2.53%
Mo 202.031†	42.4	0.0013 mg/L	0.00007	4.99%
Ni 231.604†	11.8	0.0002 mg/L	0.00001	7.52%
Na 589.592†	Saturated2			
Pb 220.353†	3.3	0.0004 mg/L	0.00028	77.91%
Sb 206.836†	8.9	0.0024 mg/L	0.00006	2.64%
Se 196.026†	1.3	0.0013 mg/L J	0.00009	6.65%
Sn 189.927†	91.2	0.0127 mg/L	0.00042	3.31%
Ti 337.279†	248.2	0.0004 mg/L	0.00001	1.83%
Tl 190.801†	19.6	0.0052 mg/L	0.00091	17.45%
V 292.402†	40.9	0.0004 mg/L	0.00006	16.36%
Zn 206.200†	1536.5	0.0327 mg/L	0.00028	0.84%
Ca 227.546†	502.4	1.140 mg/L	0.0099	0.87%
Sr 421.552†	1276.3	0.0019 mg/L	0.00003	1.58%
Al 237.313†	572.3	0.0628 mg/L	0.00126	2.01%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 104
Sample ID: MBLK 14902-01
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 108
Date Collected: 12/5/2014 2:40:54 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: MBLK 14902-01

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7501663.8	1.055	mg/L	0.0080				0.76%
Ag 328.068†	99.4	0.0003	mg/L	0.00007				21.40%
As 188.979†	1.6	0.0007	mg/L	0.00027				36.50%
B 249.772†	1117.5	0.0082	mg/L	0.00069				8.37%
Ba 233.527†	210.8	0.0018	mg/L	0.00003				1.70%
Be 313.107†	303.5	0.0001	mg/L	0.00003				29.62%
Cd 226.502†	2.1	0.0000	mg/L	0.00003				258.63%
Co 228.616†	25.4	0.0007	mg/L	0.00003				3.97%
Cr 267.716†	32.2	0.0002	mg/L	0.00006				28.59%
Cu 324.752†	93.5	0.0003	mg/L	0.00001				3.42%
Fe 259.939†	2464.9	0.0381	mg/L	0.00019				0.50%
K 766.490†	-51.5	-0.0134	mg/L	0.02677				200.30%
Mg 279.077†	-85.5	-0.0079	mg/L	0.00112				14.10%
Mn 257.610†	229.2	0.0005	mg/L	0.00004				7.45%
Mo 202.031†	8.2	0.0003	mg/L	0.00001				2.50%
Ni 231.604†	14.8	0.0002	mg/L	0.00004				17.34%
Na 589.592†	4533.0	0.2826	mg/L	0.01289				4.56%
Pb 220.353†	0.3	0.0000	mg/L	0.00013				506.30%
Sb 206.836†	2.7	0.0007	mg/L	0.00003				4.26%
Se 196.026†	1.4	0.0014	mg/L J	0.00085				59.66%
Sn 189.927†	54.5	0.0076	mg/L	0.00085				11.19%
Ti 337.279†	134.3	0.0002	mg/L	0.00010				43.63%
Tl 190.801†	-0.1	0.0000	mg/L	0.00063				>999.9%
V 292.402†	15.3	0.0001	mg/L	0.00004				26.59%
Zn 206.200†	94.1	0.0020	mg/L	0.00008				4.02%
Ca 227.546†	6.9	0.0174	mg/L	0.00546				31.39%
Sr 421.552†	97.5	0.0001	mg/L	0.00002				13.93%
Al 237.313†	48.4	0.0054	mg/L	0.00074				13.62%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 105
Sample ID: R1409504-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 109
Date Collected: 12/5/2014 2:46:57 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409504-001

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6902195.3	0.9709	mg/L	0.00495				0.51%
Ag 328.068†	-280.3	-0.0001	mg/L	0.00009				63.02%
As 188.979†	8.7	0.0040	mg/L	0.00097				24.37%
B 249.772†	25087.7	0.1745	mg/L	0.00246				1.41%
Ba 233.527†	14980.9	0.1264	mg/L	0.00100				0.79%
Be 313.107†	-279.1	-0.0001	mg/L	0.00000				0.94%
Cd 226.502†	66.8	0.0000	mg/L	0.00002				337.09%
Co 228.616†	68.2	0.0020	mg/L	0.00002				0.81%
Cr 267.716†	-489.7	0.0058	mg/L	0.00002				0.42%
Cu 324.752†	6227.3	0.0210	mg/L	0.00022				1.05%
Fe 259.939†	204642.9	3.166	mg/L	0.0368				1.16%
K 766.490†	31704.9	8.234	mg/L	0.1070				1.30%
Mg 279.077†	1055470.0	97.73	mg/L	0.416				0.43%
Mn 257.610†	138628.6	0.3086	mg/L	0.00352				1.14%
Mo 202.031†	576.5	0.0182	mg/L	0.00025				1.40%
Ni 231.604†	947.7	0.0150	mg/L	0.00012				0.78%
Na 589.592†	3741109.9	233.2	mg/L	2.25				0.96%
Pb 220.353†	-2.3	0.0008	mg/L	0.00043				54.79%
Sb 206.836†	5.9	0.0015	mg/L	0.00087				59.40%
Se 196.026†	2.5	0.0035	mg/L J	0.00030				8.51%
Sn 189.927†	-118.8	-0.0165	mg/L	0.00022				1.35%
Ti 337.279†	10525.3	0.0183	mg/L	0.00016				0.87%
Tl 190.801†	-8.4	-0.0022	mg/L	0.00075				34.45%
V 292.402†	162.3	0.0015	mg/L	0.00007				4.47%
Zn 206.200†	1300.8	0.0277	mg/L	0.00036				1.31%
Ca 227.546†	52355.5	118.7	mg/L	1.80				1.52%
Sr 421.552†	1219441.4	1.851	mg/L	0.0164				0.89%
Al 237.313†	11250.6	1.166	mg/L	0.0227				1.95%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 106
Sample ID: R140-504-001D
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 110
Date Collected: 12/5/2014 2:53:13 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R140-504-001D

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6875232.4	0.9671	mg/L	0.00606				0.63%
Ag 328.068†	-288.5	-0.0002	mg/L	0.00007				41.22%
As 188.979†	8.0	0.0037	mg/L	0.00050				13.61%
B 249.772†	24146.9	0.1674	mg/L	0.00026				0.15%
Ba 233.527†	14473.0	0.1221	mg/L	0.00058				0.47%
Be 313.107†	-332.4	-0.0001	mg/L	0.00001				4.68%
Cd 226.502†	55.2	-0.0001	mg/L	0.00003				31.47%
Co 228.616†	71.2	0.0021	mg/L	0.00032				15.49%
Cr 267.716†	-436.0	0.0057	mg/L	0.00008				1.47%
Cu 324.752†	5082.7	0.0172	mg/L	0.00013				0.77%
Fe 259.939†	205306.0	3.176	mg/L	0.0141				0.44%
K 766.490†	30161.7	7.833	mg/L	0.0654				0.83%
Mg 279.077†	998407.7	92.45	mg/L	0.469				0.51%
Mn 257.610†	132850.7	0.2957	mg/L	0.00158				0.53%
Mo 202.031†	553.4	0.0175	mg/L	0.00001				0.04%
Ni 231.604†	921.7	0.0146	mg/L	0.00015				1.04%
Na 589.592†	3534492.9	220.4	mg/L	1.19				0.54%
Pb 220.353†	-1.5	0.0008	mg/L	0.00057				68.90%
Sb 206.836†	6.1	0.0015	mg/L	0.00039				25.47%
Se 196.026†	5.0	0.0061	mg/L J	0.00060				9.74%
Sn 189.927†	-122.1	-0.0169	mg/L	0.00014				0.85%
Ti 337.279†	11192.2	0.0194	mg/L	0.00057				2.94%
Tl 190.801†	-7.7	-0.0020	mg/L	0.00090				45.04%
V 292.402†	169.1	0.0016	mg/L	0.00005				2.83%
Zn 206.200†	1230.2	0.0262	mg/L	0.00015				0.57%
Ca 227.546†	50004.8	113.4	mg/L	0.38				0.33%
Sr 421.552†	1157923.7	1.758	mg/L	0.0105				0.60%
Al 237.313†	11766.1	1.227	mg/L	0.0061				0.50%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 107
Sample ID: R1409504-001S ~~6X~~
Analyst:
Initial Sample Wt: 12/5/14 DCB
Dilution: ~~5X~~
Autosampler Location: 111
Date Collected: 12/5/2014 2:59:31 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409504-001S ~~6X~~

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6861339.7	0.9652	mg/L	0.00072				0.07%
Ag 328.068†	1391481.4	4.697	mg/L	0.0001				0.00%
As 188.979†	10362.5	4.809	mg/L	0.0240				0.50%
B 249.772†	25044.5	0.1736	mg/L	0.00016				0.09%
Ba 233.527†	614515.4	5.186	mg/L	0.0124				0.24%
Be 313.107†	-2494.1	-0.0009	mg/L	0.00003				3.19%
Cd 226.502†	111874.3	0.9182	mg/L	0.00645				0.70%
Co 228.616†	84.9	0.0025	mg/L	0.00007				2.72%
Cr 267.716†	676454.7	4.706	mg/L	0.0136				0.29%
Cu 324.752†	5434.2	0.0184	mg/L	0.00005				0.28%
Fe 259.939†	213775.0	3.307	mg/L	0.0091				0.27%
K 766.490†	31803.9	8.260	mg/L	0.0952				1.15%
Mg 279.077†	1051051.7	97.32	mg/L	0.142				0.15%
Mn 257.610†	138415.1	0.3081	mg/L	0.00106				0.35%
Mo 202.031†	616.3	0.0195	mg/L	0.00013				0.68%
Ni 231.604†	972.4	0.0154	mg/L	0.00014				0.88%
Na 589.592†	3738342.4	233.1	mg/L	2.93				1.26%
Pb 220.353†	44755.9	4.662	mg/L	0.0239				0.51%
Sb 206.836†	71.6	0.0193	mg/L	0.00014				0.73%
Se 196.026†	927.6	0.9426	mg/L	0.01459				1.55%
Sn 189.927†	-130.0	-0.0180	mg/L	0.00044				2.43%
Ti 337.279†	10604.4	0.0184	mg/L	0.00007				0.40%
Tl 190.801†	0.4	0.0002	mg/L	0.00030				192.65%
V 292.402†	-1098.1	-0.0104	mg/L	0.00013				1.28%
Zn 206.200†	1009.1	0.0215	mg/L	0.00020				0.91%
Ca 227.546†	52554.0	119.2	mg/L	0.06				0.05%
Sr 421.552†	1222512.7	1.856	mg/L	0.0224				1.21%
Al 237.313†	11768.9	1.223	mg/L	0.0008				0.06%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 108
Sample ID: R1409504-001S ~~6X~~
Analyst:
Initial Sample Wt: 12/5/14 DCB
Dilution:
Autosampler Location: 112
Date Collected: 12/5/2014 3:05:59 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409504-001S ~~6X~~

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7314920.7	1.029	mg/L	0.0036				0.35%
Ag 328.068†	234431.6	0.7914	mg/L	0.00075				0.09%
As 188.979†	1711.7	0.7943	mg/L	0.00447				0.56%
B 249.772†	4557.8	0.0316	mg/L	0.00001				0.02%
Ba 233.527†	107326.7	0.9057	mg/L	0.00106				0.12%
Be 313.107†	-347.5	-0.0001	mg/L	0.00003				25.81%
Cd 226.502†	19737.6	0.1620	mg/L	0.00006				0.04%
Co 228.616†	13.2	0.0004	mg/L	0.00010				26.29%
Cr 267.716†	116729.0	0.8122	mg/L	0.00171				0.21%
Cu 324.752†	724.6	0.0025	mg/L	0.00003				1.35%
Fe 259.939†	39319.4	0.6082	mg/L	0.00011				0.02%
K 766.490†	4836.1	1.256	mg/L	0.0048				0.38%
Mg 279.077†	183931.0	17.03	mg/L	0.027				0.16%
Mn 257.610†	23860.5	0.0531	mg/L	0.00000				0.01%
Mo 202.031†	105.0	0.0033	mg/L	0.00008				2.30%
Ni 231.604†	167.2	0.0026	mg/L	0.00006				2.12%
Na 589.592†	614227.5	38.30	mg/L	0.172				0.45%
Pb 220.353†	7974.7	0.8308	mg/L	0.00084				0.10%

Sb 206.836†	9.2	0.0025 mg/L	0.00038	15.46%
Se 196.026†	155.2	0.1577 mg/L	0.00218	1.38%
Sn 189.927†	-95.3	-0.0132 mg/L	0.00006	0.46%
Ti 337.279†	1757.4	0.0031 mg/L	0.00011	3.57%
Tl 190.801†	-3.1	-0.0008 mg/L	0.00002	2.39%
V 292.402†	-202.1	-0.0019 mg/L	0.00045	23.29%
Zn 206.200†	212.6	0.0045 mg/L	0.00053	11.71%
Ca 227.546†	8416.3	19.09 mg/L	0.024	0.13%
Sr 421.552†	198710.1	0.3017 mg/L	0.00109	0.36%
Al 237.313†	1899.4	0.1972 mg/L	0.00045	0.23%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 109 **Autosampler Location: 4**
Sample ID: CCV **Date Collected: 12/5/2014 3:12:14 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7275039.1	1.023	mg/L	0.0025				0.24%
Ag 328.068†	146661.7	0.4963	mg/L	0.00588	0.4963	mg/L	0.00588	1.19%
QC value within limits for Ag 328.068 Recovery = 99.26%								
As 188.979†	2151.5	0.9980	mg/L	0.00174	0.9980	mg/L	0.00174	0.17%
QC value within limits for As 188.979 Recovery = 99.80%								
B 249.772†	321915.7	2.387	mg/L	0.0218	2.387	mg/L	0.0218	0.91%
QC value within limits for B 249.772 Recovery = 95.47%								
Ba 233.527†	1218625.1	10.28	mg/L	0.027	10.28	mg/L	0.027	0.27%
QC value within limits for Ba 233.527 Recovery = 102.83%								
Be 313.107†	669526.6	0.2496	mg/L	0.00082	0.2496	mg/L	0.00082	0.33%
QC value within limits for Be 313.107 Recovery = 99.84%								
Cd 226.502†	61758.7	0.5063	mg/L	0.00566	0.5063	mg/L	0.00566	1.12%
QC value within limits for Cd 226.502 Recovery = 101.26%								
Co 228.616†	84785.4	2.477	mg/L	0.0285	2.477	mg/L	0.0285	1.15%
QC value within limits for Co 228.616 Recovery = 99.07%								
Cr 267.716†	72852.2	0.5085	mg/L	0.00588	0.5085	mg/L	0.00588	1.16%
QC value within limits for Cr 267.716 Recovery = 101.69%								
Cu 324.752†	361923.5	1.206	mg/L	0.0142	1.206	mg/L	0.0142	1.18%
QC value within limits for Cu 324.752 Recovery = 96.45%								
Fe 259.939†	321001.8	4.966	mg/L	0.0613	4.966	mg/L	0.0613	1.23%
QC value within limits for Fe 259.939 Recovery = 99.31%								
K 766.490†	94067.2	24.43	mg/L	0.024	24.43	mg/L	0.024	0.10%
QC value within limits for K 766.490 Recovery = 97.72%								
Mg 279.077†	270079.7	25.01	mg/L	0.309	25.01	mg/L	0.309	1.24%
QC value within limits for Mg 279.077 Recovery = 100.03%								
Mn 257.610†	338059.9	0.7521	mg/L	0.00899	0.7521	mg/L	0.00899	1.20%
QC value within limits for Mn 257.610 Recovery = 100.28%								
Mo 202.031†	76895.4	2.427	mg/L	0.0294	2.427	mg/L	0.0294	1.21%
QC value within limits for Mo 202.031 Recovery = 97.09%								
Ni 231.604†	127918.5	2.025	mg/L	0.0231	2.025	mg/L	0.0231	1.14%
QC value within limits for Ni 231.604 Recovery = 101.25%								
Na 589.592†	398329.7	24.83	mg/L	0.016	24.83	mg/L	0.016	0.07%
QC value within limits for Na 589.592 Recovery = 99.34%								
Pb 220.353†	4912.6	0.5127	mg/L	0.00056	0.5127	mg/L	0.00056	0.11%
QC value within limits for Pb 220.353 Recovery = 102.54%								
Sb 206.836†	18116.4	4.910	mg/L	0.0071	4.910	mg/L	0.0071	0.15%
QC value within limits for Sb 206.836 Recovery = 98.20%								
Se 196.026†	487.9	0.4969	mg/L	0.00154	0.4969	mg/L	0.00154	0.31%
QC value within limits for Se 196.026 Recovery = 99.38%								
Sn 189.927†	36638.3	5.084	mg/L	0.0479	5.084	mg/L	0.0479	0.94%
QC value within limits for Sn 189.927 Recovery = 101.67%								
Ti 337.279†	1426583.0	2.476	mg/L	0.0067	2.476	mg/L	0.0067	0.27%
QC value within limits for Ti 337.279 Recovery = 99.03%								
Tl 190.801†	3872.2	1.032	mg/L	0.0006	1.032	mg/L	0.0006	0.06%
QC value within limits for Tl 190.801 Recovery = 103.21%								
V 292.402†	262735.0	2.485	mg/L	0.0228	2.485	mg/L	0.0228	0.92%
QC value within limits for V 292.402 Recovery = 99.41%								
Zn 206.200†	47765.9	1.017	mg/L	0.0101	1.017	mg/L	0.0101	0.99%
QC value within limits for Zn 206.200 Recovery = 101.70%								

Ca 227.546†	10743.6	24.57 mg/L	0.123	24.57 mg/L	0.123	0.50%
QC value within limits for Ca 227.546 Recovery = 98.30%						
Sr 421.552†	1537036.2	2.333 mg/L	0.0022	2.333 mg/L	0.0022	0.09%
QC value within limits for Sr 421.552 Recovery = 93.34%						
Al 237.313†	85914.9	9.508 mg/L	0.1210	9.508 mg/L	0.1210	1.27%
QC value within limits for Al 237.313 Recovery = 95.08%						

All analyte(s) passed QC.

Sequence No.: 110
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/5/2014 3:18:24 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7433303.6	1.046	mg/L	0.0037				0.35%
Ag 328.068†	139.2	0.0005	mg/L	0.00000	0.0005	mg/L	0.00000	0.83%
QC value within limits for Ag 328.068 Recovery = Not calculated								
As 188.979†	2.4	0.0011	mg/L	0.00131	0.0011	mg/L	0.00131	119.48%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	3175.7	0.0237	mg/L	0.00296	0.0237	mg/L	0.00296	12.48%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	520.5	0.0044	mg/L	0.00185	0.0044	mg/L	0.00185	42.17%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	546.7	0.0002	mg/L	0.00004	0.0002	mg/L	0.00004	19.48%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	25.6	0.0002	mg/L	0.00009	0.0002	mg/L	0.00009	42.77%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	39.6	0.0012	mg/L	0.00049	0.0012	mg/L	0.00049	42.67%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	43.9	0.0003	mg/L	0.00022	0.0003	mg/L	0.00022	70.86%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	694.8	0.0023	mg/L	0.00059	0.0023	mg/L	0.00059	25.33%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	356.7	0.0055	mg/L	0.00137	0.0055	mg/L	0.00137	24.84%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	56.2	0.0146	mg/L	0.01814	0.0146	mg/L	0.01814	124.24%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	64.4	0.0060	mg/L	0.00914	0.0060	mg/L	0.00914	153.28%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	202.7	0.0005	mg/L	0.00015	0.0005	mg/L	0.00015	34.18%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	40.3	0.0013	mg/L	0.00050	0.0013	mg/L	0.00050	39.02%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	50.6	0.0008	mg/L	0.00071	0.0008	mg/L	0.00071	88.43%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	1452.2	0.0905	mg/L	0.00392	0.0905	mg/L	0.00392	4.33%
QC value within limits for Na 589.592 Recovery = Not calculated								
Pb 220.353†	0.4	0.0000	mg/L	0.00087	0.0000	mg/L	0.00087	>999.9%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	14.3	0.0039	mg/L	0.00113	0.0039	mg/L	0.00113	29.15%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	2.5	0.0025	mg/L	0.00013	0.0025	mg/L	0.00013	5.14%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	62.0	0.0086	mg/L	0.00181	0.0086	mg/L	0.00181	20.98%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 337.279†	691.7	0.0012	mg/L	0.00063	0.0012	mg/L	0.00063	52.78%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	4.4	0.0012	mg/L	0.00013	0.0012	mg/L	0.00013	10.74%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	133.4	0.0013	mg/L	0.00046	0.0013	mg/L	0.00046	36.68%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	14.9	0.0003	mg/L	0.00004	0.0003	mg/L	0.00004	11.43%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	-0.3	-0.0004	mg/L	0.01147	-0.0004	mg/L	0.01147	>999.9%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Sr 421.552†	1210.9	0.0018	mg/L	0.00016	0.0018	mg/L	0.00016	8.58%
QC value within limits for Sr 421.552 Recovery = Not calculated								

Al 237.313†	32.1	0.0036 mg/L	0.00106	0.0036 mg/L	0.00106	29.71%

QC value within limits for Al 237.313 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 111
Sample ID: R1409504-001L
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 113
Date Collected: 12/5/2014 3:24:28 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409504-001L

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7254249.0	1.020	mg/L	0.0072				0.71%
Ag 328.068†	24.9	0.0003	mg/L	0.00006				24.21%
As 188.979†	1.1	0.0005	mg/L	0.00075				147.90%
B 249.772†	6512.6	0.0460	mg/L	0.00111				2.41%
Ba 233.527†	3090.9	0.0261	mg/L	0.00006				0.25%
Be 313.107†	-76.4	0.0000	mg/L	0.00000				3.40%
Cd 226.502†	17.9	0.0000	mg/L	0.00002				57.53%
Co 228.616†	13.4	0.0004	mg/L	0.00016				41.64%
Cr 267.716†	-179.3	0.0007	mg/L	0.00002				3.19%
Cu 324.752†	1429.7	0.0048	mg/L	0.00023				4.70%
Fe 259.939†	42596.6	0.6589	mg/L	0.00521				0.79%
K 766.490†	5761.2	1.496	mg/L	0.0383				2.56%
Mg 279.077†	220263.6	20.39	mg/L	0.193				0.95%
Mn 257.610†	28444.9	0.0633	mg/L	0.00065				1.03%
Mo 202.031†	119.6	0.0038	mg/L	0.00013				3.39%
Ni 231.604†	183.0	0.0029	mg/L	0.00010				3.39%
Na 589.592†	727661.6	45.37	mg/L	0.763				1.68%
Pb 220.353†	0.0	0.0002	mg/L	0.00010				47.78%
Sb 206.836†	3.4	0.0009	mg/L	0.00054				59.25%
Se 196.026†	2.4	0.0026	mg/L	0.00058				22.10%
Sn 189.927†	-63.0	-0.0087	mg/L	0.00061				6.97%
Ti 337.279†	2183.4	0.0038	mg/L	0.00004				0.97%
Tl 190.801†	-4.6	-0.0012	mg/L	0.00048				40.01%
V 292.402†	35.1	0.0003	mg/L	0.00002				7.45%
Zn 206.200†	289.5	0.0062	mg/L	0.00001				0.21%
Ca 227.546†	10183.7	23.10	mg/L	0.310				1.34%
Sr 421.552†	238047.7	0.3614	mg/L	0.00748				2.07%
Al 237.313†	2198.2	0.2275	mg/L	0.00156				0.69%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 112
Sample ID: R1409592-001
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 114
Date Collected: 12/5/2014 3:30:42 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409592-001

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6376685.7	0.8970	mg/L	0.00767				0.85%
Ag 328.068†	18.1	0.0002	mg/L	0.00022				120.20%
As 188.979†	22.9	0.0106	mg/L	0.00094				8.83%
B 249.772†	43009.8	0.3198	mg/L	0.00003				0.01%
Ba 233.527†	16975.8	0.1433	mg/L	0.00009				0.06%
Be 313.107†	248.6	0.0001	mg/L	0.00002				16.22%
Cd 226.502†	20.6	0.0001	mg/L	0.00003				29.33%
Co 228.616†	201.4	0.0059	mg/L	0.00015				2.56%
Cr 267.716†	215.8	0.0016	mg/L	0.00003				1.84%
Cu 324.752†	2590.3	0.0087	mg/L	0.00012				1.44%
Fe 259.939†	30357.4	0.4696	mg/L	0.00061				0.13%
K 766.490†	7973.4	2.071	mg/L	0.0045				0.22%
Mg 279.077†	9470.0	0.8768	mg/L	0.00224				0.26%
Mn 257.610†	151018.9	0.3358	mg/L	0.00050				0.15%
Mo 202.031†	54.8	0.0017	mg/L	0.00002				1.29%
Ni 231.604†	471.6	0.0075	mg/L	0.00003				0.40%

Na 589.592†	Saturated2					
Pb 220.353†	162.5	0.0170	mg/L	0.00023		1.35%
Sb 206.836†	11.0	0.0029	mg/L	0.00060		20.56%
Se 196.026†	1.3	0.0015	mg/L U	0.00009		5.73%
Sn 189.927†	117.2	0.0163	mg/L	0.00172		10.55%
Ti 337.279†	9214.4	0.0160	mg/L	0.00006		0.37%
Tl 190.801†	13.7	0.0036	mg/L	0.00036		9.86%
V 292.402†	256.6	0.0024	mg/L	0.00010		4.00%
Zn 206.200†	4383.0	0.0933	mg/L	0.00101		1.08%
Ca 227.546†	2520.9	5.732	mg/L	0.0144		0.25%
Sr 421.552†	22658.5	0.0344	mg/L	0.00008		0.24%
Al 237.313†	3722.1	0.4101	mg/L	0.00189		0.46%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 113
Sample ID: R1409593-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 115
Date Collected: 12/5/2014 3:36:47 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409593-001

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6326137.4	0.8899	mg/L	0.00769				0.86%
Ag 328.068†	-592.3	0.0008	mg/L	0.00013				17.02%
As 188.979†	16.5	0.0076	mg/L	0.00002				0.20%
B 249.772†	29099.3	0.1721	mg/L	0.00083				0.48%
Ba 233.527†	27395.5	0.2312	mg/L	0.00030				0.13%
Be 313.107†	315.2	0.0001	mg/L	0.00007				57.75%
Cd 226.502†	297.1	0.0005	mg/L	0.00003				6.04%
Co 228.616†	16266.7	0.4752	mg/L	0.00478				1.01%
Cr 267.716†	840.8	0.0079	mg/L	0.00013				1.71%
Cu 324.752†	4006.5	0.0143	mg/L	0.00037				2.58%
Fe 259.939†	710374.4	10.99	mg/L	0.091				0.82%
K 766.490†	20906.7	5.430	mg/L	0.0795				1.46%
Mg 279.077†	174568.1	16.16	mg/L	0.007				0.04%
Mn 257.610†	811847.2	1.806	mg/L	0.0167				0.92%
Mo 202.031†	66.9	0.0021	mg/L	0.00011				5.13%
Ni 231.604†	2445.2	0.0387	mg/L	0.00052				1.35%
Na 589.592†	Saturated2							
Pb 220.353†	5.3	0.0007	mg/L	0.00044				62.14%
Sb 206.836†	13.0	0.0033	mg/L	0.00049				14.70%
Se 196.026†	-0.4	0.0031	mg/L U	0.00206				66.88%
Sn 189.927†	-51.4	-0.0071	mg/L	0.00111				15.52%
Ti 337.279†	49082.0	0.0852	mg/L	0.00021				0.24%
Tl 190.801†	16.7	0.0048	mg/L	0.00038				7.85%
V 292.402†	209.1	0.0020	mg/L	0.00001				0.71%
Zn 206.200†	5765.4	0.1228	mg/L	0.00115				0.93%
Ca 227.546†	23222.9	53.09	mg/L	0.475				0.90%
Sr 421.552†	138113.9	0.2097	mg/L	0.00279				1.33%
Al 237.313†	17902.9	1.969	mg/L	0.0129				0.65%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 114
Sample ID: R1409593-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 116
Date Collected: 12/5/2014 3:42:51 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1409593-002

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6334027.2	0.8910	mg/L	0.00316				0.35%
Ag 328.068†	-938.4	0.0005	mg/L	0.00019				42.08%
As 188.979†	16.4	0.0075	mg/L	0.00020				2.64%
B 249.772†	36042.9	0.2104	mg/L	0.00295				1.40%
Ba 233.527†	77724.1	0.6559	mg/L	0.00555				0.85%
Be 313.107†	1570.0	0.0006	mg/L	0.00001				1.93%

Cd 226.502†	397.0	0.0007 mg/L	0.00007	8.73%
Co 228.616†	6120.6	0.1788 mg/L	0.00074	0.41%
Cr 267.716†	450.3	0.0050 mg/L	0.00003	0.60%
Cu 324.752†	3495.0	0.0129 mg/L	0.00002	0.16%
Fe 259.939†	924540.1	14.30 mg/L	0.035	0.24%
K 766.490†	77540.7	20.14 mg/L	0.113	0.56%
Mg 279.077†	128381.2	11.89 mg/L	0.098	0.82%
Mn 257.610†	674774.0	1.502 mg/L	0.0056	0.37%
Mo 202.031†	67.8	0.0021 mg/L	0.00004	1.90%
Ni 231.604†	5691.0	0.0901 mg/L	0.00021	0.23%
Na 589.592†	Saturated2			
Pb 220.353†	50.4	0.0061 mg/L	0.00133	21.63%
Sb 206.836†	14.5	0.0038 mg/L	0.00039	10.25%
Se 196.026†	-2.0	0.0026 mg/L U	0.00069	26.97%
Sn 189.927†	-103.6	-0.0144 mg/L	0.00051	3.54%
Ti 337.279†	16773.3	0.0291 mg/L	0.00055	1.87%
Tl 190.801†	13.8	0.0042 mg/L	0.00120	28.61%
V 292.402†	141.4	0.0013 mg/L	0.00001	0.68%
Zn 206.200†	25719.0	0.5476 mg/L	0.00130	0.24%
Ca 227.546†	69398.1	157.8 mg/L	1.37	0.87%
Sr 421.552†	165178.3	0.2508 mg/L	0.00139	0.55%
Al 237.313†	16441.0	1.763 mg/L	0.0115	0.65%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 115
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/5/2014 3:48:59 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7105472.6	0.9995	mg/L	0.00045				0.04%
Ag 328.068†	149789.4	0.5069	mg/L	0.00245	0.5069	mg/L	0.00245	0.48%
QC value within limits for Ag 328.068 Recovery = 101.37%								
As 188.979†	2184.9	1.013	mg/L	0.0026	1.013	mg/L	0.0026	0.25%
QC value within limits for As 188.979 Recovery = 101.35%								
B 249.772†	329096.7	2.440	mg/L	0.0054	2.440	mg/L	0.0054	0.22%
QC value within limits for B 249.772 Recovery = 97.60%								
Ba 233.527†	1233201.7	10.41	mg/L	0.012	10.41	mg/L	0.012	0.12%
QC value within limits for Ba 233.527 Recovery = 104.06%								
Be 313.107†	681608.2	0.2541	mg/L	0.00009	0.2541	mg/L	0.00009	0.04%
QC value within limits for Be 313.107 Recovery = 101.64%								
Cd 226.502†	63113.8	0.5174	mg/L	0.00245	0.5174	mg/L	0.00245	0.47%
QC value within limits for Cd 226.502 Recovery = 103.49%								
Co 228.616†	86675.0	2.532	mg/L	0.0079	2.532	mg/L	0.0079	0.31%
QC value within limits for Co 228.616 Recovery = 101.28%								
Cr 267.716†	74431.6	0.5195	mg/L	0.00219	0.5195	mg/L	0.00219	0.42%
QC value within limits for Cr 267.716 Recovery = 103.90%								
Cu 324.752†	369616.4	1.231	mg/L	0.0035	1.231	mg/L	0.0035	0.28%
QC value within limits for Cu 324.752 Recovery = 98.50%								
Fe 259.939†	327916.9	5.073	mg/L	0.0164	5.073	mg/L	0.0164	0.32%
QC value within limits for Fe 259.939 Recovery = 101.45%								
K 766.490†	95498.1	24.80	mg/L	0.022	24.80	mg/L	0.022	0.09%
QC value within limits for K 766.490 Recovery = 99.21%								
Mg 279.077†	275790.7	25.54	mg/L	0.068	25.54	mg/L	0.068	0.27%
QC value within limits for Mg 279.077 Recovery = 102.14%								
Mn 257.610†	345763.5	0.7693	mg/L	0.00287	0.7693	mg/L	0.00287	0.37%
QC value within limits for Mn 257.610 Recovery = 102.57%								
Mo 202.031†	78567.9	2.480	mg/L	0.0079	2.480	mg/L	0.0079	0.32%
QC value within limits for Mo 202.031 Recovery = 99.20%								
Ni 231.604†	130836.0	2.071	mg/L	0.0057	2.071	mg/L	0.0057	0.27%
QC value within limits for Ni 231.604 Recovery = 103.56%								
Na 589.592†	414766.0	25.86	mg/L	0.015	25.86	mg/L	0.015	0.06%
QC value within limits for Na 589.592 Recovery = 103.44%								
Pb 220.353†	4991.1	0.5209	mg/L	0.00162	0.5209	mg/L	0.00162	0.31%
QC value within limits for Pb 220.353 Recovery = 104.18%								
Sb 206.836†	18346.8	4.973	mg/L	0.0144	4.973	mg/L	0.0144	0.29%
QC value within limits for Sb 206.836 Recovery = 99.45%								

Se 196.026†	494.5	0.5037 mg/L	0.00075	0.5037 mg/L	0.00075	0.15%
QC value within limits for Se 196.026 Recovery = 100.73%						
Sn 189.927†	37714.3	5.233 mg/L	0.0001	5.233 mg/L	0.0001	0.00%
QC value within limits for Sn 189.927 Recovery = 104.66%						
Ti 337.279†	1447669.4	2.512 mg/L	0.0015	2.512 mg/L	0.0015	0.06%
QC value within limits for Ti 337.279 Recovery = 100.50%						
Tl 190.801†	3927.3	1.047 mg/L	0.0029	1.047 mg/L	0.0029	0.27%
QC value within limits for Tl 190.801 Recovery = 104.68%						
V 292.402†	267066.4	2.526 mg/L	0.0209	2.526 mg/L	0.0209	0.83%
QC value within limits for V 292.402 Recovery = 101.05%						
Zn 206.200†	48904.2	1.041 mg/L	0.0020	1.041 mg/L	0.0020	0.19%
QC value within limits for Zn 206.200 Recovery = 104.13%						
Ca 227.546†	10874.6	24.88 mg/L	0.039	24.88 mg/L	0.039	0.16%
QC value within limits for Ca 227.546 Recovery = 99.50%						
Sr 421.552†	1539407.7	2.337 mg/L	0.0001	2.337 mg/L	0.0001	0.01%
QC value within limits for Sr 421.552 Recovery = 93.48%						
Al 237.313†	87868.7	9.725 mg/L	0.0431	9.725 mg/L	0.0431	0.44%
QC value within limits for Al 237.313 Recovery = 97.25%						

All analyte(s) passed QC.

Sequence No.: 116
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/5/2014 3:55:08 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7401596.6	1.041	mg/L	0.0112				1.07%
Ag 328.068†	124.5	0.0004	mg/L	0.00009	0.0004	mg/L	0.00009	21.58%
QC value within limits for Ag 328.068 Recovery = Not calculated								
As 188.979†	1.2	0.0006	mg/L	0.00101	0.0006	mg/L	0.00101	177.12%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	2715.3	0.0203	mg/L	0.00259	0.0203	mg/L	0.00259	12.78%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	421.6	0.0036	mg/L	0.00132	0.0036	mg/L	0.00132	37.10%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	489.0	0.0002	mg/L	0.00003	0.0002	mg/L	0.00003	17.50%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	22.3	0.0002	mg/L	0.00001	0.0002	mg/L	0.00001	6.19%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	30.2	0.0009	mg/L	0.00033	0.0009	mg/L	0.00033	37.34%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-13.1	-0.0001	mg/L	0.00001	-0.0001	mg/L	0.00001	5.60%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	743.1	0.0025	mg/L	0.00063	0.0025	mg/L	0.00063	25.27%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	303.0	0.0047	mg/L	0.00059	0.0047	mg/L	0.00059	12.56%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	169.3	0.0440	mg/L	0.01288	0.0440	mg/L	0.01288	29.30%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	-24.7	-0.0023	mg/L	0.00127	-0.0023	mg/L	0.00127	55.41%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	287.7	0.0006	mg/L	0.00009	0.0006	mg/L	0.00009	14.79%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	35.3	0.0011	mg/L	0.00029	0.0011	mg/L	0.00029	25.76%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	38.4	0.0006	mg/L	0.00031	0.0006	mg/L	0.00031	51.09%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	5836.5	0.3639	mg/L	0.01392	0.3639	mg/L	0.01392	3.83%
QC value within limits for Na 589.592 Recovery = Not calculated								
Pb 220.353†	0.6	0.0001	mg/L	0.00051	0.0001	mg/L	0.00051	856.30%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	14.9	0.0040	mg/L	0.00121	0.0040	mg/L	0.00121	29.95%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	0.6	0.0006	mg/L	0.00098	0.0006	mg/L	0.00098	170.63%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	60.1	0.0083	mg/L	0.00177	0.0083	mg/L	0.00177	21.20%
QC value within limits for Sn 189.927 Recovery = Not calculated								

Ti 337.279†	586.8	0.0010 mg/L	0.00030	0.0010 mg/L	0.00030	29.36%
QC value within limits for Ti 337.279 Recovery = Not calculated						
Tl 190.801†	2.3	0.0006 mg/L	0.00035	0.0006 mg/L	0.00035	56.76%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	118.1	0.0011 mg/L	0.00065	0.0011 mg/L	0.00065	58.13%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	10.6	0.0002 mg/L	0.00025	0.0002 mg/L	0.00025	108.50%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	-2.5	-0.0054 mg/L	0.00426	-0.0054 mg/L	0.00426	78.71%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Sr 421.552†	866.1	0.0013 mg/L	0.00013	0.0013 mg/L	0.00013	9.96%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Al 237.313†	28.5	0.0032 mg/L	0.00162	0.0032 mg/L	0.00162	50.93%
QC value within limits for Al 237.313 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 117
Sample ID: MRL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 12/5/2014 4:01:13 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MRL

Analyte	Mean Corrected Intensity	Calib Conc. Units	Calib Std.Dev.	Sample Conc. Units	Sample Std.Dev.	RSD
Y 371.029	7378546.9	1.038 mg/L	0.0014			0.13%
Ag 328.068†	3114.3	0.0105 mg/L	0.00025	0.0105 mg/L	0.00025	2.39%
QC value within limits for Ag 328.068 Recovery = 105.39%						
As 188.979†	44.9	0.0208 mg/L	0.00031	0.0208 mg/L	0.00031	1.47%
QC value within limits for As 188.979 Recovery = 104.08%						
B 249.772†	27625.6	0.2062 mg/L	0.00341	0.2062 mg/L	0.00341	1.65%
QC value within limits for B 249.772 Recovery = 103.09%						
Ba 233.527†	26489.3	0.2235 mg/L	0.00223	0.2235 mg/L	0.00223	1.00%
QC value within limits for Ba 233.527 Recovery = 111.77%						
Be 313.107†	13953.0	0.0052 mg/L	0.00006	0.0052 mg/L	0.00006	1.14%
QC value within limits for Be 313.107 Recovery = 104.03%						
Cd 226.502†	1318.7	0.0108 mg/L	0.00005	0.0108 mg/L	0.00005	0.51%
QC value within limits for Cd 226.502 Recovery = 108.11%						
Co 228.616†	1860.7	0.0544 mg/L	0.00060	0.0544 mg/L	0.00060	1.11%
QC value within limits for Co 228.616 Recovery = 108.71%						
Cr 267.716†	1460.8	0.0102 mg/L	0.00010	0.0102 mg/L	0.00010	1.00%
QC value within limits for Cr 267.716 Recovery = 102.47%						
Cu 324.752†	7826.2	0.0261 mg/L	0.00034	0.0261 mg/L	0.00034	1.29%
QC value within limits for Cu 324.752 Recovery = 104.28%						
Fe 259.939†	7046.7	0.1090 mg/L	0.00109	0.1090 mg/L	0.00109	1.00%
QC value within limits for Fe 259.939 Recovery = 109.01%						
K 766.490†	3620.3	0.9403 mg/L	0.00286	0.9403 mg/L	0.00286	0.30%
QC value within limits for K 766.490 Recovery = 94.03%						
Mg 279.077†	11340.7	1.050 mg/L	0.0104	1.050 mg/L	0.0104	0.99%
QC value within limits for Mg 279.077 Recovery = 105.01%						
Mn 257.610†	7178.8	0.0160 mg/L	0.00017	0.0160 mg/L	0.00017	1.03%
QC value within limits for Mn 257.610 Recovery = 106.48%						
Mo 202.031†	818.8	0.0258 mg/L	0.00013	0.0258 mg/L	0.00013	0.51%
QC value within limits for Mo 202.031 Recovery = 103.39%						
Ni 231.604†	2671.6	0.0423 mg/L	0.00038	0.0423 mg/L	0.00038	0.90%
QC value within limits for Ni 231.604 Recovery = 105.74%						
Na 589.592†	19237.4	1.199 mg/L	0.0092	1.199 mg/L	0.0092	0.77%
QC value within limits for Na 589.592 Recovery = 119.94%						
Pb 220.353†	101.9	0.0106 mg/L	0.00047	0.0106 mg/L	0.00047	4.45%
QC value within limits for Pb 220.353 Recovery = 106.42%						
Sb 206.836†	229.0	0.0621 mg/L	0.00001	0.0621 mg/L	0.00001	0.02%
QC value within limits for Sb 206.836 Recovery = 103.43%						
Se 196.026†	13.7	0.0139 mg/L	0.00066	0.0139 mg/L	0.00066	4.73%
QC value greater than the upper limit for Se 196.026 Recovery = 139.20%						
Sn 189.927†	3847.0	0.5338 mg/L	0.00515	0.5338 mg/L	0.00515	0.97%
QC value within limits for Sn 189.927 Recovery = 106.76%						
Ti 337.279†	29207.8	0.0507 mg/L	0.00052	0.0507 mg/L	0.00052	1.03%
QC value within limits for Ti 337.279 Recovery = 101.38%						
Tl 190.801†	83.2	0.0222 mg/L	0.00004	0.0222 mg/L	0.00004	0.19%
QC value within limits for Tl 190.801 Recovery = 110.89%						

V 292.402†	5640.9	0.0534 mg/L	0.00047	0.0534 mg/L	0.00047	0.88%
QC value within limits for V 292.402 Recovery = 106.71%						
Zn 206.200†	906.8	0.0193 mg/L	0.00031	0.0193 mg/L	0.00031	1.59%
QC value within limits for Zn 206.200 Recovery = 96.54%						
Ca 227.546†	416.9	0.9496 mg/L	0.00460	0.9496 mg/L	0.00460	0.48%
QC value within limits for Ca 227.546 Recovery = 94.96%						
Sr 421.552†	65158.3	0.0989 mg/L	0.00046	0.0989 mg/L	0.00046	0.46%
QC value within limits for Sr 421.552 Recovery = 98.92%						
Al 237.313†	1775.3	0.1961 mg/L	0.00125	0.1961 mg/L	0.00125	0.64%
QC value within limits for Al 237.313 Recovery = 98.06%						
QC Failed. Continue with analysis.						

Sequence No.: 118
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 12/5/2014 4:07:13 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6798064.5	0.9563	mg/L	0.00556				0.58%
Ag 328.068†	-5039.1	0.0047	mg/L	0.00013	0.0047	mg/L	0.00013	2.77%
QC value within limits for Ag 328.068 Recovery = Not calculated								
As 188.979†	32.6	0.0049	mg/L	0.00121	0.0049	mg/L	0.00121	24.65%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	49190.4	-0.0095	mg/L	0.00036	-0.0095	mg/L	0.00036	3.76%
Ba 233.527†	1177.4	0.0099	mg/L	0.00014	0.0099	mg/L	0.00014	1.45%
Be 313.107†	-611.5	-0.0002	mg/L	0.00003	-0.0002	mg/L	0.00003	12.09%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	1736.5	-0.0008	mg/L	0.00004	-0.0008	mg/L	0.00004	5.07%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	36.6	0.0011	mg/L	0.00002	0.0011	mg/L	0.00002	1.92%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-3586.7	0.0024	mg/L	0.00023	0.0024	mg/L	0.00023	9.59%
QC value greater than the upper limit for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	-1654.3	0.0023	mg/L	0.00003	0.0023	mg/L	0.00003	1.46%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	5531765.1	85.57	mg/L	0.192	85.57	mg/L	0.192	0.22%
QC value within limits for Fe 259.939 Recovery = 85.57%								
K 766.490†	-91.7	-0.0238	mg/L	0.00699	-0.0238	mg/L	0.00699	29.35%
Mg 279.077†	2667158.2	247.0	mg/L	0.32	247.0	mg/L	0.32	0.13%
QC value within limits for Mg 279.077 Recovery = 98.78%								
Mn 257.610†	-4918.3	0.0005	mg/L	0.00011	0.0005	mg/L	0.00011	20.01%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-73.2	-0.0023	mg/L	0.00019	-0.0023	mg/L	0.00019	8.32%
Ni 231.604†	-189.7	-0.0030	mg/L	0.00013	-0.0030	mg/L	0.00013	4.23%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	2511.4	0.1566	mg/L	0.00451	0.1566	mg/L	0.00451	2.88%
Pb 220.353†	-247.0	-0.0007	mg/L	0.00036	-0.0007	mg/L	0.00036	54.62%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	88.2	0.0012	mg/L	0.00038	0.0012	mg/L	0.00038	31.94%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-31.4	-0.0009	mg/L	0.00020	-0.0009	mg/L	0.00020	21.07%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-93.6	-0.0130	mg/L	0.00051	-0.0130	mg/L	0.00051	3.90%
Ti 337.279†	178.6	0.0003	mg/L	0.00000	0.0003	mg/L	0.00000	1.40%
Tl 190.801†	50.4	-0.0010	mg/L	0.00302	-0.0010	mg/L	0.00302	300.35%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	-547.8	-0.0052	mg/L	0.00005	-0.0052	mg/L	0.00005	1.05%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	335.3	0.0071	mg/L	0.00015	0.0071	mg/L	0.00015	2.13%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	110049.5	253.6	mg/L	1.04	253.6	mg/L	1.04	0.41%
QC value within limits for Ca 227.546 Recovery = 101.42%								
Sr 421.552†	2764.4	0.0042	mg/L	0.00000	0.0042	mg/L	0.00000	0.11%
Al 237.313†	2221629.6	246.1	mg/L	0.56	246.1	mg/L	0.56	0.23%
QC value within limits for Al 237.313 Recovery = 98.44%								
QC Failed. Continue with analysis.								

Sequence No.: 119
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 12/5/2014 4:13:12 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6734236.5	0.9473	mg/L	0.00014				0.01%
Ag 328.068†	55760.1	0.2104	mg/L	0.00070	0.2104	mg/L	0.00070	0.33%
QC value within limits for Ag 328.068 Recovery = 105.22%								
As 188.979†	250.8	0.1059	mg/L	0.00173	0.1059	mg/L	0.00173	1.63%
QC value within limits for As 188.979 Recovery = 105.91%								
B 249.772†	50371.4	-0.0100	mg/L	0.00315	-0.0100	mg/L	0.00315	31.46%
Ba 233.527†	61176.7	0.5162	mg/L	0.00005	0.5162	mg/L	0.00005	0.01%
QC value within limits for Ba 233.527 Recovery = 103.25%								
Be 313.107†	1346984.4	0.5022	mg/L	0.00529	0.5022	mg/L	0.00529	1.05%
QC value within limits for Be 313.107 Recovery = 100.43%								
Cd 226.502†	118479.2	0.9576	mg/L	0.00153	0.9576	mg/L	0.00153	0.16%
QC value within limits for Cd 226.502 Recovery = 95.76%								
Co 228.616†	15562.0	0.4546	mg/L	0.00043	0.4546	mg/L	0.00043	0.09%
QC value within limits for Co 228.616 Recovery = 90.92%								
Cr 267.716†	66886.4	0.4924	mg/L	0.00092	0.4924	mg/L	0.00092	0.19%
QC value within limits for Cr 267.716 Recovery = 98.49%								
Cu 324.752†	147292.5	0.4985	mg/L	0.00036	0.4985	mg/L	0.00036	0.07%
QC value within limits for Cu 324.752 Recovery = 99.70%								
Fe 259.939†	5668649.6	87.69	mg/L	0.711	87.69	mg/L	0.711	0.81%
QC value within limits for Fe 259.939 Recovery = 87.69%								
K 766.490†	-74.5	-0.0193	mg/L	0.01084	-0.0193	mg/L	0.01084	56.03%
Mg 279.077†	2734436.0	253.2	mg/L	2.31	253.2	mg/L	2.31	0.91%
QC value within limits for Mg 279.077 Recovery = 101.28%								
Mn 257.610†	213718.9	0.4868	mg/L	0.00036	0.4868	mg/L	0.00036	0.07%
QC value within limits for Mn 257.610 Recovery = 97.37%								
Mo 202.031†	-77.3	-0.0024	mg/L	0.00000	-0.0024	mg/L	0.00000	0.01%
Ni 231.604†	58375.9	0.9242	mg/L	0.00125	0.9242	mg/L	0.00125	0.13%
QC value within limits for Ni 231.604 Recovery = 92.42%								
Na 589.592†	1926.5	0.1201	mg/L	0.00631	0.1201	mg/L	0.00631	5.25%
Pb 220.353†	215.7	0.0481	mg/L	0.00069	0.0481	mg/L	0.00069	1.44%
QC value within limits for Pb 220.353 Recovery = 96.19%								
Sb 206.836†	2341.3	0.6114	mg/L	0.00018	0.6114	mg/L	0.00018	0.03%
QC value within limits for Sb 206.836 Recovery = 101.90%								
Se 196.026†	15.8	0.0478	mg/L	0.00108	0.0478	mg/L	0.00108	2.26%
QC value within limits for Se 196.026 Recovery = 95.60%								
Sn 189.927†	-141.7	-0.0197	mg/L	0.00010	-0.0197	mg/L	0.00010	0.49%
Ti 337.279†	87.8	0.0002	mg/L	0.00000	0.0002	mg/L	0.00000	2.21%
Tl 190.801†	406.0	0.0935	mg/L	0.00120	0.0935	mg/L	0.00120	1.28%
QC value within limits for Tl 190.801 Recovery = 93.51%								
V 292.402†	51292.1	0.4852	mg/L	0.00170	0.4852	mg/L	0.00170	0.35%
QC value within limits for V 292.402 Recovery = 97.03%								
Zn 206.200†	44599.8	0.9496	mg/L	0.00382	0.9496	mg/L	0.00382	0.40%
QC value within limits for Zn 206.200 Recovery = 94.96%								
Ca 227.546†	112632.7	259.5	mg/L	1.20	259.5	mg/L	1.20	0.46%
QC value within limits for Ca 227.546 Recovery = 103.80%								
Sr 421.552†	2690.0	0.0041	mg/L	0.00003	0.0041	mg/L	0.00003	0.62%
Al 237.313†	2272340.4	251.7	mg/L	2.20	251.7	mg/L	2.20	0.87%
QC value within limits for Al 237.313 Recovery = 100.69%								

All analyte(s) passed QC.

Sequence No.: 120
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 12/5/2014 4:19:19 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD

Y 371.029	7380388.8	1.038 mg/L	0.0012			0.12%
Ag 328.068†	143555.3	0.4858 mg/L	0.00265	0.4858 mg/L	0.00265	0.55%
QC value within limits for Ag 328.068 Recovery = 97.16%						
As 188.979†	2141.8	0.9935 mg/L	0.01074	0.9935 mg/L	0.01074	1.08%
QC value within limits for As 188.979 Recovery = 99.35%						
B 249.772†	316917.1	2.349 mg/L	0.0306	2.349 mg/L	0.0306	1.30%
QC value within limits for B 249.772 Recovery = 93.98%						
Ba 233.527†	1208106.1	10.19 mg/L	0.031	10.19 mg/L	0.031	0.30%
QC value within limits for Ba 233.527 Recovery = 101.95%						
Be 313.107†	666253.7	0.2484 mg/L	0.00056	0.2484 mg/L	0.00056	0.22%
QC value within limits for Be 313.107 Recovery = 99.35%						
Cd 226.502†	61367.6	0.5031 mg/L	0.00257	0.5031 mg/L	0.00257	0.51%
QC value within limits for Cd 226.502 Recovery = 100.62%						
Co 228.616†	84004.4	2.454 mg/L	0.0127	2.454 mg/L	0.0127	0.52%
QC value within limits for Co 228.616 Recovery = 98.16%						
Cr 267.716†	71979.5	0.5024 mg/L	0.00169	0.5024 mg/L	0.00169	0.34%
QC value within limits for Cr 267.716 Recovery = 100.48%						
Cu 324.752†	354247.5	1.180 mg/L	0.0067	1.180 mg/L	0.0067	0.57%
QC value within limits for Cu 324.752 Recovery = 94.41%						
Fe 259.939†	319109.4	4.936 mg/L	0.0130	4.936 mg/L	0.0130	0.26%
QC value within limits for Fe 259.939 Recovery = 98.73%						
K 766.490†	93263.7	24.22 mg/L	0.025	24.22 mg/L	0.025	0.10%
QC value within limits for K 766.490 Recovery = 96.89%						
Mg 279.077†	267907.3	24.81 mg/L	0.118	24.81 mg/L	0.118	0.48%
QC value within limits for Mg 279.077 Recovery = 99.22%						
Mn 257.610†	334060.7	0.7432 mg/L	0.00353	0.7432 mg/L	0.00353	0.48%
QC value within limits for Mn 257.610 Recovery = 99.10%						
Mo 202.031†	75845.6	2.394 mg/L	0.0104	2.394 mg/L	0.0104	0.44%
QC value within limits for Mo 202.031 Recovery = 95.76%						
Ni 231.604†	126765.8	2.007 mg/L	0.0095	2.007 mg/L	0.0095	0.47%
QC value within limits for Ni 231.604 Recovery = 100.34%						
Na 589.592†	394810.6	24.62 mg/L	0.038	24.62 mg/L	0.038	0.15%
QC value within limits for Na 589.592 Recovery = 98.46%						
Pb 220.353†	4880.1	0.5093 mg/L	0.00599	0.5093 mg/L	0.00599	1.18%
QC value within limits for Pb 220.353 Recovery = 101.86%						
Sb 206.836†	17892.0	4.849 mg/L	0.0473	4.849 mg/L	0.0473	0.97%
QC value within limits for Sb 206.836 Recovery = 96.99%						
Se 196.026†	486.0	0.4950 mg/L	0.00547	0.4950 mg/L	0.00547	1.11%
QC value within limits for Se 196.026 Recovery = 99.01%						
Sn 189.927†	36363.1	5.045 mg/L	0.0323	5.045 mg/L	0.0323	0.64%
QC value within limits for Sn 189.927 Recovery = 100.91%						
Ti 337.279†	1406483.9	2.441 mg/L	0.0073	2.441 mg/L	0.0073	0.30%
QC value within limits for Ti 337.279 Recovery = 97.64%						
Tl 190.801†	3834.2	1.022 mg/L	0.0124	1.022 mg/L	0.0124	1.21%
QC value within limits for Tl 190.801 Recovery = 102.20%						
V 292.402†	256962.7	2.431 mg/L	0.0109	2.431 mg/L	0.0109	0.45%
QC value within limits for V 292.402 Recovery = 97.22%						
Zn 206.200†	47871.7	1.019 mg/L	0.0052	1.019 mg/L	0.0052	0.51%
QC value within limits for Zn 206.200 Recovery = 101.93%						
Ca 227.546†	10500.7	24.02 mg/L	0.151	24.02 mg/L	0.151	0.63%
QC value within limits for Ca 227.546 Recovery = 96.09%						
Sr 421.552†	1499344.8	2.276 mg/L	0.0012	2.276 mg/L	0.0012	0.05%
QC value within limits for Sr 421.552 Recovery = 91.05%						
Al 237.313†	84962.0	9.403 mg/L	0.0233	9.403 mg/L	0.0233	0.25%
QC value within limits for Al 237.313 Recovery = 94.03%						

All analyte(s) passed QC.

Sequence No.: 121
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 12/5/2014 4:25:28 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7431786.6	1.045	mg/L	0.0057				0.55%
Ag 328.068†	66.8	0.0002	mg/L	0.00020	0.0002	mg/L	0.00020	84.94%
QC value within limits for Ag 328.068 Recovery = Not calculated								
As 188.979†	1.6	0.0007	mg/L	0.00048	0.0007	mg/L	0.00048	64.04%

QC value within limits for As 188.979 Recovery = Not calculated						
B 249.772†	3375.2	0.0252 mg/L	0.00283	0.0252 mg/L	0.00283	11.27%
QC value within limits for B 249.772 Recovery = Not calculated						
Ba 233.527†	454.8	0.0038 mg/L	0.00135	0.0038 mg/L	0.00135	35.22%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	547.6	0.0002 mg/L	0.00004	0.0002 mg/L	0.00004	20.41%
QC value within limits for Be 313.107 Recovery = Not calculated						
Cd 226.502†	32.1	0.0003 mg/L	0.00011	0.0003 mg/L	0.00011	42.02%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	39.7	0.0012 mg/L	0.00039	0.0012 mg/L	0.00039	33.52%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	1.0	0.0000 mg/L	0.00011	0.0000 mg/L	0.00011	>999.9%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	959.2	0.0032 mg/L	0.00069	0.0032 mg/L	0.00069	21.57%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 259.939†	1424.4	0.0220 mg/L	0.00436	0.0220 mg/L	0.00436	19.79%
QC value within limits for Fe 259.939 Recovery = Not calculated						
K 766.490†	-47.1	-0.0122 mg/L	0.00012	-0.0122 mg/L	0.00012	0.95%
QC value within limits for K 766.490 Recovery = Not calculated						
Mg 279.077†	175.0	0.0162 mg/L	0.01032	0.0162 mg/L	0.01032	63.68%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	208.7	0.0005 mg/L	0.00012	0.0005 mg/L	0.00012	25.89%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	39.2	0.0012 mg/L	0.00030	0.0012 mg/L	0.00030	24.02%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	56.8	0.0009 mg/L	0.00030	0.0009 mg/L	0.00030	33.16%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Na 589.592†	1319.6	0.0823 mg/L	0.00126	0.0823 mg/L	0.00126	1.53%
QC value within limits for Na 589.592 Recovery = Not calculated						
Pb 220.353†	-2.4	-0.0002 mg/L	0.00041	-0.0002 mg/L	0.00041	165.95%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	17.3	0.0047 mg/L	0.00119	0.0047 mg/L	0.00119	25.53%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-0.3	-0.0003 mg/L	0.00157	-0.0003 mg/L	0.00157	490.75%
QC value within limits for Se 196.026 Recovery = Not calculated						
Sn 189.927†	66.9	0.0093 mg/L	0.00179	0.0093 mg/L	0.00179	19.26%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 337.279†	607.1	0.0011 mg/L	0.00041	0.0011 mg/L	0.00041	38.72%
QC value within limits for Ti 337.279 Recovery = Not calculated						
Tl 190.801†	3.1	0.0008 mg/L	0.00077	0.0008 mg/L	0.00077	93.44%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	114.3	0.0011 mg/L	0.00043	0.0011 mg/L	0.00043	39.94%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	29.1	0.0006 mg/L	0.00031	0.0006 mg/L	0.00031	50.71%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	0.5	0.0021 mg/L	0.01886	0.0021 mg/L	0.01886	879.09%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Sr 421.552†	854.5	0.0013 mg/L	0.00002	0.0013 mg/L	0.00002	1.31%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Al 237.313†	238.9	0.0265 mg/L	0.00824	0.0265 mg/L	0.00824	31.07%
QC value within limits for Al 237.313 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 122
Sample ID: Sample117
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 117
Date Collected: 12/5/2014 4:31:35 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: Sample117

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7357710.9	1.035	mg/L	0.0001				0.01%
Ag 328.068†	124.6	0.0004	mg/L	0.00011				26.22%
As 188.979†	0.3	0.0001	mg/L	0.00001				4.62%
B 249.772†	1841.4	0.0137	mg/L	0.00056				4.04%
Ba 233.527†	56.7	0.0005	mg/L	0.00004				8.93%
Be 313.107†	268.6	0.0001	mg/L	0.00001				6.95%
Cd 226.502†	-2.5	0.0000	mg/L	0.00001				61.40%
Co 228.616†	6.5	0.0002	mg/L	0.00006				29.41%

Cr 267.716†	-33.3	-0.0002 mg/L	0.00003	11.82%
Cu 324.752†	238.2	0.0008 mg/L	0.00007	8.25%
Fe 259.939†	435.8	0.0067 mg/L	0.00036	5.31%
K 766.490†	-11.7	-0.0030 mg/L	0.00354	116.28%
Mg 279.077†	-169.2	-0.0157 mg/L	0.00104	6.62%
Mn 257.610†	-96.1	-0.0002 mg/L	0.00000	0.11%
Mo 202.031†	-2.7	-0.0001 mg/L	0.00006	70.73%
Ni 231.604†	-10.3	-0.0002 mg/L	0.00006	34.25%
Na 589.592†	890.4	0.0555 mg/L	0.00062	1.11%
Pb 220.353†	-3.8	-0.0004 mg/L	0.00014	35.22%
Sb 206.836†	4.8	0.0013 mg/L	0.00010	7.46%
Se 196.026†	2.4	0.0024 mg/L	0.00053	22.13%
Sn 189.927†	21.5	0.0030 mg/L	0.00003	1.04%
Ti 337.279†	26.4	0.0000 mg/L	0.00003	59.36%
Tl 190.801†	-1.6	-0.0004 mg/L	0.00042	100.41%
V 292.402†	9.8	0.0001 mg/L	0.00005	52.76%
Zn 206.200†	-54.9	-0.0012 mg/L	0.00000	0.08%
Ca 227.546†	-1.9	-0.0039 mg/L	0.01038	264.22%
Sr 421.552†	-6.2	0.0000 mg/L	0.00004	398.92%
Al 237.313†	13.0	0.0015 mg/L	0.00031	21.26%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Preparation Information Benchsheet

Prep Run#: 224310
Team: Metals/CWINKSTERN

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3010A

Status: Prepped
Prep Date/Time: 11/25/14 05:26 PM

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ1414661-01	MB		50mL	200.7/Ag T, Al T, As T, Ba T, Cd T, Co T, Cr T, Cu T, Fe T, Mn T, Ni T, Pb T, Pd T, Sb T, Sn T, V T, Zn T	<2			50.00mL	Colorless-Clear		HB #6 well = H2 temp =95C correction factor =0.0C corrected temp =95C
2	RQ1414661-02	LCS		50mL	200.7/Ag T, Al T, As T, Ba T, Cd T, Co T, Cr T, Cu T, Fe T, Mn T, Ni T, Pb T, Sb T, Sn T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/73574; 0.0500 mL/74566; 0.2500 mL/74428; 0.5000 mL/73573	
3	RQ1414661-03	LCS		50mL	200.7/Pd T	<2			50.00mL	Colorless-Clear	0.1000 mL/66017	
4	R1409390-001	STE-11192014-24 HR	.04	50mL	200.7/Ag T, Al T, As T, Ba T, Cd T, Co T, Cr T, Cu T, Fe T, Mn T, Ni T, Pb T, Pd T, Sb T, Sn T, V T, Zn T	<2			50.00mL	Colorless-Clear		
5	R1409390-002	TKP-11192014-24 HR	.03	50mL	200.7/Pd T	<2			50.00mL	Colorless-Clear		
6	R1409445-001	633027 EFFLUENT	.12	50mL	200.7/Cd T, Cr T, Cu T, Ni T, Pb T, Zn T				50.00mL	Colorless-clear		TIER IV
7	R1409451-001	STE-11172014-7 DAY	.01	50mL	200.7/Ag T, Al T, As T, Ba T, Cd T, Cr T, Cu T, Fe T, Mn T, Ni T, Pb T, Pd T, Sb T, Sn T, V T, Zn T	<2			50.00mL	Colorless-Clear		
8	R1409451-002	TKP-11172014-7 DAY	.01	50mL	200.7/Ag T, Al T, As T, Ba T, Cd T, Cr T, Cu T, Fe T, Mn T, Ni T, Pb T, Pd T, Sb T, Sn T, V T, Zn T	<2			50.00mL	Colorless-Clear		
9	R1409494-001	001	.07	50mL	200.7/Fe T, Zn T	<2			50.00mL	Colorless-Clear		
10	R1409494-002	002	.01	50mL	200.7/Fe T, Zn T	<2			50.00mL	Colorless-Clear		
11	R1409494-003	006	.01	50mL	200.7/Fe T, Zn T	<2			50.00mL	Colorless-Clear		
12	R1409494-004	007	.01	50mL	200.7/Fe T, Zn T	<2			50.00mL	Colorless-Clear		
13	R1409494-005	008	.01	50mL	200.7/Fe T, Zn T	<2			50.00mL	Colorless-Clear		
14	R1409494-006	009	.01	50mL	200.7/Fe T, Zn T	<2			50.00mL	Colorless-Clear		
15	R1409496-003	14-11-3 WW	.02	50mL	200.7/Fe T	<2			50.00mL	Colorless-Clear		
16	R1409523-001	2014003363 E005-GRAB-WA-112414	.05	50mL	200.7/Al T	<2			50.00mL	Colorless-Clear		
17	RQ1414661-04	R1409523-001 MS	.05	50mL	200.7/Al T	<2			50.00mL	Colorless-Clear	0.2500 mL/74428; 0.5000 mL/73573; 0.0500 mL/74566; 0.5000 mL/73574	
18	RQ1414661-05	R1409523-001 DMS	.05	50mL	200.7/Al T	<2			50.00mL	Colorless-Clear	0.0500 mL/74566; 0.5000 mL/73573; 0.5000 mL/73574; 0.2500 mL/74428	
19	R1409523-002	2014003365 E008-GRAB-WA-112414	.08	50mL	200.7/Al T	<2			50.00mL	Colorless-Clear		
20	RQ1414661-06	R1409523-002 MS	.08	50mL	200.7/Al T	<2			50.00mL	Colorless-Clear	0.0500 mL/74566; 0.5000 mL/73574; 0.2500 mL/74428; 0.5000 mL/73573	

Preparation Information Benchsheet

Prep Run#: 224310 **Prep WorkFlow:** MetDigAqICP **Status:** Prepped
Team: Metals/CWINKSTERN **Prep Method:** EPA 3010A **Prep Date/Time:** 11/25/14 05:26 PM

21	RQ1414661-07	R1409523-002 DMS	.08	50mL	200.7/Al T	<2			50.00mL	Colorless-Clear	0.5000 mL/73573; 0.2500 mL/74428; 0.0500 mL/74566; 0.5000 mL/73574	

Spiking Solutions

Name:	Palladium 1000 ug/mL Pd	Inventory ID	66017	Logbook Ref:	M5280036E	Expires On:	07/07/2015	Lot #:	1227036
Name:	Custom LCS STD A Metals	Inventory ID	73573	Logbook Ref:	M5280039BB	Expires On:	08/04/2015	Lot #:	14D125
Name:	Custom LCS STD B Metals	Inventory ID	73574	Logbook Ref:	M5280039CC	Expires On:	08/04/2015	Lot #:	14D123
Name:	Tin 1000 ug/mL Sn	Inventory ID	74428	Logbook Ref:	M5280040H	Expires On:	02/22/2016	Lot #:	13H086
Name:	Selenium 1000 ug/mL Se	Inventory ID	74566	Logbook Ref:	M5280040P	Expires On:	03/03/2016	Lot #:	1408440

Preparation Materials

1:1 HCl Metals Grade	M5280041K (76514)	Hot Block Cups	50 mL Lot 1408268 (76705)	Nitric Acid Metals Grade HNO3	M5280041U (75747)
Thermometer	325 (75016)				

Preparation Steps

Step: Digestion
Started: 11/25/14 17:26
Finished: 11/26/14 12:39
By: TCHRIST
Comments

Comments: _____

Reviewed By: Tracy Christ Date: 11/26/14 Spike Witness: AMOSES Date: _____

Chain of Custody

Relinquished By: Tracy Christ Date: 11/26/14

Received By: RA01 Date: 11/26

Extracts Examined
Yes No

OPTIMA 3,4,5 CALIBRATION STANDARD #1 (Standard is prepared weekly or as necessary)

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot#	Hydrochloric Acid Lot #	Expiration Date	Pipet ID
Cal Std.1	AL	m6880002C	20.0	1.00	1000	0.020	2%HNO3	DCB 11/13/14	A	m52800411	m52800411K	11/26/14	m29 m25
Int.	AS		5.00			0.0050	5%HCl	DCB 11/21/14	B	m52800410	m52800411K	11/28/14	m29 m25
	CD		1.00			0.0010		DCB 11/29/14	C	m52800410	m52800411K	12/6/14	m29 m25
	CO		3.00			0.0030			D				
	CR		1.00			0.0010			E				
	NI		5.00			0.0050			F				
	PB		5.00			0.0050			G				
	SE		5.00			0.0050			H				
	V		3.00			0.0030			I				
Cal Std. 1	CA	m52800388	5000	0.100		0.500			J				
	K		5000			BELOW			K				
	MG		5000			0.500			L				
	NA		5000			0.500			M				
Single Element	BA	m52800 36V	1000	0.020		0.020			N				
	CU	m52800400	1000	0.010		0.010			O				
	K	m52800411m	10000	0.150		2.00			P				
	MN	m52800 37F	1000	0.010		0.010			Q				
	MO	m52800 28X	1000	0.025		0.025			R				
	SB	m52800 376	1000	0.010		0.010			S				
	TL	m52800~~300~~ 410 11/13/14 DCB	1000	0.010		0.010			T				
	ZN	m52800 347	1000	0.010		0.010			U				
	P	—	1000	0.100		0.100			V				
									W				
									X				
									Y				
									Z				

OPTIMA 3,4,5 CALIBRATION STANDARD #2
(Standard is prepared weekly or as necessary)

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot#	Hydrochloric Acid Lot #	Expiration Date	Pipet ID
Single Element	AL	m52800306	1000	0.100	1000	0.100	2%HNO3 5%HCl	DCB 10/27/14	A	m52800411	m52800407	11/3/14	m23 m25
	AS	m52800377F	1000	0.010		0.010		DCB 11/4/14	B	m52800411	m52800407	11/11/14	m23 m25
	B	m52800 35A	1000	0.200		0.200		DCB 11/12/14	C	m52800411	m52800411K	11/19/14	m23 m25
	BE (1/10)	m52800 376 6	100	0.030		0.003		DCB 11/20/14	D	m52800411K U 11/20/14 DCB	m52800411K	11/27/14	m23 m15
	CA	m52800411L	10000	0.100		1.00		DCB 11/26/14	E	m52800410	m52800411K	12/3/14	m23 m15
	CD (1/10)	m52800 40N	100	0.050		0.005		DCB 12/4/14	F	m52800410	m52800411K	12/11/14	m23 m11
	CU	m52800 400	1000	0.020		0.020			G				
	K	m52800411m	10000	0.200		2.00			H				
	MG	m52800 36T	10000	0.100		1.00			I				
	NA	m52800 40m	10000	0.100		1.00			J				
	SB	m52800 376	1000	0.060		0.060			K				
	SE	m52800 40P	1000	0.010		0.010			L				
	SN	m52800 34F	1000	0.500		0.500			M				
									N				
									O				
									P				
									Q				
									R				
									S				
									T				
									U				
									V				
									W				
									X				
									Y				
									Z				

OPTIMA 3/4/5 CALIBRATION STANDARD #5 / HLCCV1 (Standard is prepared weekly or as necessary)

(CALIBRATION STANDARD #3 IS A 1/100 DILUTION OF THIS STANDARD)
(CALIBRATION STANDARD #4 IS A 1/5 DILUTION OF THIS STANDARD)

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot#	Hydrochloric Acid Lot #	Expiration Date	Pipet ID
Cal Std 1	CA	m52800356	5000	5.00	500	50.0	2%HNO3 5%HCl	DCB 11/9/14	A	m52800411	m52800411K	11/16/14	m26 m23
	MG		5000			50.0		DCB 11/14/14	B	m52800411	m52800411K	11/21/14	m26 m23
	K		5000			50.0		DCB 11/20/14	C	m52800411	m52800411K	11/26/14	m26 m23
	NA		5000			50.0		DCB 11/26/14	D	m52800411	m52800411K	12/2/14	m26 m23
Cal Std 2	AG	m52800394	100	5.00		1.00			E				
	CR		100			1.00			F				
	MN		150			1.50			G				
	NI		400			4.00			H				
	ZN		200			2.00			I				
Cal Std 3	AL	m52800393	2000	5.00		20.0			J				
	BA		2000			20.0			K				
	BE		50			0.500			L				
	CO		500			5.00			M				
	CU		250			2.50			N				
	FE		1000			10.0			O				
	V		500			5.00			P				
Cal Std 4	AS	m52800405	100	10.00		2.00			Q				
	CD		50			1.00			R				
	PB		50			1.00			S				
	SE		50			1.00			T				
	TL		100			2.00			U				
Single Metals	SB	m52800376	1000	5.00		10.0			V				
	SN	m52800344	1000	5.00		10.0			W				
	B	m52800354	1000	2.50		5.00			X				
	MO	m52800384	1000	2.50		5.00			Y				
	TI	m52800344B	1000	2.50		5.00			Z				
	SR	m52800372	1000	2.50		5.00			AA				
	P	———	1000	5.00		10.0			BB				

0342

OPTIMA 3/4/5 ICV/CCV (Standard is prepared daily)
(ICV FOR ILM5.3 IS A ½ DILUTION OF THIS STANDARD)

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot#	Hydrochloric Acid Lot #	Pipet ID
Cal Std 1	CA	m52800410D	5000	1.00	200	25.0	2%HNO3	DCB 12/2/14	A	m52800410	m52800410K	m26 m23
	MG		5000			25.0	5%HCl	DCB 12/3/14	B	m52800410	m52800410K	m26 m23
	K		5000			25.0		DCB 12/4/14	C	m52800410	m52800410K	m26 m23
	NA		5000			25.0			D			
Cal Std 2	AG	m52800338R	100	1.00		0.500			E			
	CR		100			0.500			F			
	MN		150			0.750			G			
	NI		400			2.00			H			
	ZN		200			1.00			I			
Cal Std 3	AL	m52800410E	2000	1.00		10.0			J			
	BA		2000			10.0			K			
	BE		50			0.250			L			
	CO		500			2.50			M			
	CU		250			1.25			N			
	FE		1000			5.00			O			
	V		500			2.50			P			
Cal Std 4	AS	m52800418	100	2.00		1.00			Q			
	CD		50			0.500			R			
	PB		50			0.500			S			
	SE		50			0.500			T			
	TL		100			1.00			U			
Single Metals	SB	m52800337N	1000	1.00		5.00			V			
	SN	m52800426E	1000	1.00		5.00			W			
	B	m52800316	1000	0.500		2.50			X			
	MO	m52800317	1000	0.500		2.50			Y			
	TI	m52800318K	1000	0.500		2.50			Z			
	SR	m52800338L	1000	0.500		2.50			AA			
	P		1000	1.00		5.00			BB			

0034

OPTIMA 3/4 HLCCV2 (Standard is prepared every 2 weeks or as necessary)

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot#	Hydrochloric Acid Lot #	Expiration Date	Pipet ID
Cal Std 2	AG	m52800 3A	100	2.00	100	2.00	2%HNO3 5%HCl	DCD 10/23/14	A	m52800 41I	m52800 46Y	11/6/14	m29
	CR		100			Below		DCD 11/4/14	B	m52800 41I	m52800 46Y	11/18/14	m26
	MN		150			Below		TC 11/11/14	C	m52800 41I	m52800 41K	11/25/14	m29
	NI		400			8.00		DCD 11/18/14	D	m52800 41I	m52800 41K	12/2/14	m29
	ZN		200			4.00		DCD 11/25/14	E	m52800 41U	m52800 41K	12/9/14	m26
Cal Std 3	AL	m52800 34B	2000	2.00		Below			F				
	BA		2000			40.0			G				
	BE		50			1.00			H				
	CO, V		500			10.0			I				
	CU		250			5.00			J				
	FE		1000			Below			K				
Cal Std 4	AS, TL	m52800 40K	100	4.00		4.00			L				
	CD, SE		50			2.00			M				
	PB		50			Below			N				
Single Metals	B	m52800 35A	1000	1.00		10.0			O				
	MO	m52800 38X	1000	1.00		10.0			P				
	TI	m52800 34BB	1000	1.00		10.0			Q				
	SR	m52800 37D	1000	1.00		10.0			R				
	CA	m52800 41L	10000	2.50		250			S				
	MG	m52800 41N	10000	5.00		500			T				
	NA	m52800 40m	10000	1.50		150			U				
	CR	m52800 37E	1000	0.800		10.0			V				
	FE	m52800 40Q	10000	0.300		50			W				
	AL	m52800 37H	10000	4.60		500			X				
	MN	m52800 37F	1000	0.700		10.00			Y				
	PB	m52800 34AA	1000	0.800		10.0			Z				
	K	m52800 41m	10000	1.50		150			AA				

00444

OPTIMA 3/4/5 MRL (Standard is prepared every 6 months or as needed)

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot#	Hydrochloric Acid Lot #	Expiration Date	Pipet ID
Cal Std 1	CA	m52800 35C	5000	0.200	1000	1.00	2%HNO3 5%HCl	DCB 9/22/14	A	m52800 39Y	m52800 39X	9/22/15	m25
	MG		5000			1.00		DCB 10/9/14	B	m52800 40W	m52800 40Y	4/9/15	m25
	K		5000			1.00		DCB 10/24/14	C	m52800 41E	m52800 40Y	4/24/15	m25
	NA		5000			1.00		DCB 11/7/14	D	m52800 41I	m52800 41K	5/7/15	m25
Cal Std 2	AG	m52800 39A	100	0.100		0.0100		DCB 11/24/14	E	m52800 41U	m52800 41R	5/24/15	m25
	CR		100			0.0100			F				
	MN		150			0.0150			G				
	NI		400			0.0400			H				
	ZN		200			0.0200			I				
Cal Std 3	AL	m52800 37B	2000	0.100		0.200			J				
	BA		2000			0.200			K				
	BE		50			0.0050			L				
	CO		500			0.0500			M				
	CU		250			0.0250			N				
	FE		1000			0.100			O				
	V		500			0.0500			P				
Cal Std 4	AS	m52800 39C	100	0.200		0.0200			Q				
	CD		50			0.0100			R				
	PB		50			0.0100			S				
	SE		50			0.0100			T				
	TL		100			0.0200			U				
Single Metals	B	m52800 35A	1000	0.200		0.200			V				
	MO	m52800 38X	1000	0.025		0.0250			W				
	SN	m52800 34F	1000	0.500		0.500			X				
	TI	m52800 34DD	1000	0.050		0.0500			Y				
	SB	m52800 37G	1000	0.060		0.0600			Z				
	SR	m52800 37D	1000	0.100		0.100			AA				
	P	—	1000	0.100		0.100			BB				

00345

OPTIMA 3 & 5 ICSA STANDARD (Standard is prepared every 6 months or as necessary)

Element	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	ID Letter	Nitric Acid Lot #	Hydrochloric Acid Lot #	Expiration Date	Pipet ID
Int. A Sol'n	m5280412	Multi	50	1000	Multi	5% HCL	DCB 11/25/14	A	m5280410	m5280141K	5/25/15	—
AL		5000			250	2%HNO3		B				
CA		5000			250			C				
FE		2000			100			D				
MG		5000			250			E				
								F				
								G				
								H				
								I				
								J				
								K				
								L				
								M				
								N				
								O				
								P				
								Q				
								R				
								S				
								T				
								U				
								V				

OPTIMA 3 & 5 ICSAB STANDARD (Standard is prepared every 6 months or as necessary)

Element	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	ID Letter	Nitric Acid Lot #	Hydrochloric Acid Lot #	Expiration Date	Pipet ID
Int. A Sol'n	m5280041Z	Multi	25	500	Multi	5 % HCl	DCA 11/25/14	A	m5280041U	m5280041K	5/25/15	—
AL		5000			250	2%HNO3		B				
CA		5000			250			C				
FE		2000			100			D				
MG		5000			250			E				
Int. B Sol'n	m6880171D	Multi	5		Multi			F				
AG		20			0.200			G				
BA		50			0.500			H				
BE		50			0.500			I				
CD		100			1.00			J				
CO		50			0.500			K				
CR		50			0.500			L				
CU		50			0.500			M				
MN		50			0.500			N				
NI		100			1.00			O				
PB		5			0.0500			P				
V		50			0.500			Q				
ZN		100			1.00			R				
AS		10			0.100			S				
SB		60			0.600			T				
SE		5			0.0500			U				
TL		10			0.100			V				

0347

OPTIMA 3/4 INTERNAL STANDARD (ADDED ON-LINE)

Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot #	Hydro-chloric Acid Lot #	Expiration Date	Pipet ID
Y	m52800394F	10000	2.0	2000	10.0	5 % HCl 2%HNO3	DCB 11/18/14	A	m52800411 I	m52800411K	5/18/15	m29
CS	m52800394E	10000	2.0		10.0		DCB 11/23/14	B	m52800411Z	m52800411K	5/23/15	m29
							DCB 11/24/14	C	m52800411U	m52800411K	5/24/15	m29
							DCB 11/29/14	D	m52800411U	m52800411K	5/29/15	m26
							DCB 12/3/14	E	m52800411U	m52800411K	6/3/15	m26
							DCB 12/4/14	F	m52800411U	m52800411K	6/4/15	m26
								G				
								H				
								I				
								J				
								K				
								L				
								M				
								N				
								O				
								P				
								Q				
								R				
								S				
								T				
								V				

00348

ALS Environmental

GENERAL CHEMISTRY DATA

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ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrastructure (Formerly MACTEC)	**Service Request:**	R1409445
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	11/21/14 1300
Sample Matrix:	Water	**Date Received:**	11/22/14
Sample Name:	633027 EFFLUENT		
Lab Code:	R1409445-001	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Cyanide, Total	9012B	0.010	U	mg/L	0.010	1	11/24/14	11/25/14 11:20	
pH	SM 4500-H+ B	7.40		pH Units		1	NA	11/24/14 11:35	H
Temperature of pH Analysis	SM 4500-H+ B	18.2		deg C		1	NA	11/24/14 11:35	H

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	AMEC Environmental & Infrastructure (Formerly MACTEC)	**Service Request:**	R1409445
Project:	NYSDEC Primoshield/3612122251-04	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R1409445-MB	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Cyanide, Total	9012B	0.010	U	mg/L	0.010	1	11/24/14	11/25/14 11:00	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: AMEC Environmental & Infrastructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251-04
Sample Matrix: Water

Service Request: R1409445
Date Analyzed: 11/25/14

Lab Control Sample Summary
General Chemistry Parameters

Units: mg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R1409445-LCS1 Result	Spike Amount	% Rec	% Rec Limits
Cyanide, Total	9012B	0.101	0.100	101	85 - 115

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: AMEC Environmental & Infrastructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251-04
Sample Matrix: Water

Service Request: R1409445
Date Analyzed: 11/25/14

Lab Control Sample Summary
General Chemistry Parameters

Units: mg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R1409445-LCS2 Result	Spike Amount	% Rec	% Rec Limits
Cyanide, Total	9012B	0.399	0.400	100	85 - 115

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: AMEC Environmental & Infrastructure (Formerly MACTEC) **Service Request:** R1409445
Project: NYSDEC Primoshield/3612122251-04

Continuing Calibration Verification (CCV) Summary
Cyanide, Total

Analytical Method: 9012B **Units:** mg/L

	Analysis Lot	Lab Code	Date Analyzed	True Value	Measured Value	Percent Recovery	Acceptance Limits
CCV1	423151	RQ1414676-01	11/25/14 10:55	0.500	0.503	101	85 - 115
CCV2	423151	RQ1414676-03	11/25/14 11:05	0.500	0.508	102	85 - 115
CCV3	423151	RQ1414676-05	11/25/14 11:14	0.500	0.502	100	85 - 115
CCV4	423151	RQ1414676-07	11/25/14 11:24	0.500	0.502	100	85 - 115

Client: AMEC Environmental & Infrastructure (Formerly MACTEC) **Service Request:** R1409445

Project: NYSDEC Primoshield/3612122251-04

Continuing Calibration Blank (CCB) Summary
Cyanide, Total

Analytical Method: 9012B **Units:** mg/L

	Analysis Lot	Lab Code	Date Analyzed	MRL	Result	Q
CCB1	423151	RQ1414676-02	11/25/14 10:56	0.010	0.010	U
CCB2	423151	RQ1414676-04	11/25/14 11:06	0.010	0.010	U
CCB3	423151	RQ1414676-06	11/25/14 11:15	0.010	0.010	U
CCB4	423151	RQ1414676-08	11/25/14 11:25	0.010	0.010	U

Analytical Results Summary

Instrument Name: R-FIA-05 **Analyst:** GNITAJOUPPI **Analysis Lot:** 423151 **Method/Testcode:** SM 4500-CN-E-2001(2011)/CN T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ1414676-01	Cyanide	CCV		Water	0.50 mg/L	6 mL	0.503 mg/L	1					11/25/14 10:55:59	N	III
RQ1414676-01	Cyanide, Total	CCV		Water	0.50 mg/L	6 mL	0.503 mg/L	1					11/25/14 10:55:59	N	III
RQ1414676-01	Cyanide, Total	CCV		Water	0.50 mg/L	6 mL	0.503 mg/L	1					11/25/14 10:55:59	N	III
RQ1414676-02	Cyanide	CCB		Water	0.00 mg/L	6 mL	0.010 mg/L U	1	0.001	0.010			11/25/14 10:56:46	N	III
RQ1414676-02	Cyanide, Total	CCB		Water	0.00 mg/L	6 mL	0.010 mg/L U	1	0.003	0.010			11/25/14 10:56:46	N	III
RQ1414676-02	Cyanide, Total	CCB		Water	0.00 mg/L	6 mL	0.010 mg/L U	1	0.001	0.010			11/25/14 10:56:46	N	III
RQ1414642-01	Cyanide	MB		Water	0.00 mg/L	6 mL	0.010 mg/L U	1	0.001	0.010			11/25/14 11:00:41	N	III
RQ1414642-01	Cyanide, Total	MB		Water	0.00 mg/L	6 mL	0.010 mg/L U	1	0.003	0.010			11/25/14 11:00:41	N	III
RQ1414642-01	Cyanide, Total	MB		Water	0.00 mg/L	6 mL	0.010 mg/L U	1	0.001	0.010			11/25/14 11:00:41	N	III
RQ1414642-02	Cyanide	LCS		Water	0.10 mg/L	6 mL	0.101 mg/L	1	0.001	0.010	101		11/25/14 11:01:29	N	III
RQ1414642-02	Cyanide, Total	LCS		Water	0.10 mg/L	6 mL	0.101 mg/L	1	0.003	0.010	101		11/25/14 11:01:29	N	III
RQ1414642-02	Cyanide, Total	LCS		Water	0.10 mg/L	6 mL	0.101 mg/L	1	0.001	0.010	101		11/25/14 11:01:29	N	III
RQ1414642-03	Cyanide	LCS		Water	0.40 mg/L	6 mL	0.399 mg/L	1	0.001	0.010	100		11/25/14 11:02:16	N	III
RQ1414642-03	Cyanide, Total	LCS		Water	0.40 mg/L	6 mL	0.399 mg/L	1	0.003	0.010	100		11/25/14 11:02:16	N	III
RQ1414642-03	Cyanide, Total	LCS		Water	0.40 mg/L	6 mL	0.399 mg/L	1	0.001	0.010	100		11/25/14 11:02:16	N	III
RQ1414676-03	Cyanide	CCV		Water	0.51 mg/L	6 mL	0.508 mg/L	1					11/25/14 11:05:24	N	III
RQ1414676-03	Cyanide, Total	CCV		Water	0.51 mg/L	6 mL	0.508 mg/L	1					11/25/14 11:05:24	N	III
RQ1414676-03	Cyanide, Total	CCV		Water	0.51 mg/L	6 mL	0.508 mg/L	1					11/25/14 11:05:24	N	III
RQ1414676-04	Cyanide	CCB		Water	0.00 mg/L	6 mL	0.010 mg/L U	1	0.001	0.010			11/25/14 11:06:11	N	III
RQ1414676-04	Cyanide, Total	CCB		Water	0.00 mg/L	6 mL	0.010 mg/L U	1	0.003	0.010			11/25/14 11:06:11	N	III
RQ1414676-04	Cyanide, Total	CCB		Water	0.00 mg/L	6 mL	0.010 mg/L U	1	0.001	0.010			11/25/14 11:06:11	N	III
RQ1414676-05	Cyanide	CCV		Water	0.50 mg/L	6 mL	0.502 mg/L	1					11/25/14 11:14:49	N	III
RQ1414676-05	Cyanide, Total	CCV		Water	0.50 mg/L	6 mL	0.502 mg/L	1					11/25/14 11:14:49	N	III
RQ1414676-05	Cyanide, Total	CCV		Water	0.50 mg/L	6 mL	0.502 mg/L	1					11/25/14 11:14:49	N	III
RQ1414676-06	Cyanide	CCB		Water	0.00 mg/L	6 mL	0.010 mg/L U	1	0.001	0.010			11/25/14 11:15:36	N	III
RQ1414676-06	Cyanide, Total	CCB		Water	0.00 mg/L	6 mL	0.010 mg/L U	1	0.003	0.010			11/25/14 11:15:36	N	III
RQ1414676-06	Cyanide, Total	CCB		Water	0.00 mg/L	6 mL	0.010 mg/L U	1	0.001	0.010			11/25/14 11:15:36	N	III
R1409428-013	Cyanide, Total	N/A		Water	0.00 mg/L	6 mL	0.010 mg/L U	1	0.003	0.010			11/25/14 11:17:56	N	III
R1409394-001	Cyanide, Total	N/A		Water	0.00 mg/L	0.6000 mL	0.10 mg/L U	1	0.01	0.10			11/25/14 11:18:43	N	II
R1409442-001	Cyanide	N/A		Water	0.00 mg/L	6 mL	0.010 mg/L U	1	0.001	0.010			11/25/14 11:19:30	N	II
R1409445-001	Cyanide, Total	N/A		Water	0.00 mg/L	6 mL	0.010 mg/L U	1	0.003	0.010			11/25/14 11:20:17	N	IV
RQ1414676-07	Cyanide	CCV		Water	0.50 mg/L	6 mL	0.502 mg/L	1					11/25/14 11:24:12	N	IV
RQ1414676-07	Cyanide, Total	CCV		Water	0.50 mg/L	6 mL	0.502 mg/L	1					11/25/14 11:24:12	N	IV
RQ1414676-07	Cyanide, Total	CCV		Water	0.50 mg/L	6 mL	0.502 mg/L	1					11/25/14 11:24:12	N	IV
RQ1414676-08	Cyanide	CCB		Water	0.00 mg/L	6 mL	0.010 mg/L U	1	0.001	0.010			11/25/14 11:25:00	N	IV
RQ1414676-08	Cyanide, Total	CCB		Water	0.00 mg/L	6 mL	0.010 mg/L U	1	0.003	0.010			11/25/14 11:25:00	N	IV

indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-FIA-05 **Analyst:** GNITAJOUPPI **Analysis Lot:** 423151 **Method/Testcode:** SM 4500-CN- E/CN T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ1414676-08	Cyanide, Total	CCB		Water	0.00 mg/L	6 mL	0.010 mg/L U	1	0.001	0.010			11/25/14 11:25:00	N	IV

15637

indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Preparation Information Benchsheet

Prep Run#: 224287
Team: GenChem/GNITAJOUPPI

Prep WorkFlow: Gen Dist CN
Prep Method: Method

Status: Prepped
Prep Date/Time: 11/24/14 02:00 PM

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ1414642-01	MB		6mL	9012B/CN Tot				6.00mL			
2	RQ1414642-01	MB		6mL	SM 4500-CN- E/CN T				6.00mL			
3	RQ1414642-01	MB		6mL	SM 4500-CN-E-2001(2011)/CN T				6.00mL			
4	RQ1414642-02	LCS		6mL	9012B/CN Tot				6.00mL		0.0600 mL/71940	
5	RQ1414642-02	LCS		6mL	SM 4500-CN- E/CN T				6.00mL		0.0600 mL/71940	
6	RQ1414642-02	LCS		6mL	SM 4500-CN-E-2001(2011)/CN T				6.00mL		0.0600 mL/71940	
7	RQ1414642-03	LCS		6mL	9012B/CN Tot				6.00mL		0.2400 mL/71940	
8	RQ1414642-03	LCS		6mL	SM 4500-CN- E/CN T				6.00mL		0.2400 mL/71940	
9	RQ1414642-03	LCS		6mL	SM 4500-CN-E-2001(2011)/CN T				6.00mL		0.2400 mL/71940	
10	R1409428-013	1411191410C 400-C-118	.01	6mL	9012B/CN Tot				6.00mL			
11	R1409394-001	RINSE WATER	.09	0.6000mL	SM 4500-CN- E/CN T				6.00mL			
12	R1409442-001	FRACK TANK.	.09	6mL	SM 4500-CN-E-2001(2011)/CN T				6.00mL			
13	R1409445-001	633027 EFFLUENT	.04	6mL	9012B/CN Tot				6.00mL			

Spiking Solutions

Name: Cyanide 10 ppm as CN Inventory ID 71940 Logbook Ref: FRESH DAILY Expires On: 06/20/2015

Preparation Steps

Step: Distillation
Started: 11/24/14 14:00
Finished: 11/24/14 15:00
By: KMENGS
Comments

Comments: _____

Reviewed By: _____ Date: _____ Spike Witness: KMENGS Date: _____

Preparation Information Benchsheet

Prep Run#: 224287
Team: GenChem/GNITAJOUPPI

Prep WorkFlow: Gen Dist CN
Prep Method: Method

Status: Prepped
Prep Date/Time: 11/24/14 02:00 PM

Chain of Custody

Relinquished By:		Date:		Extracts Examined
Received By:		Date:		Yes No

Columbia Analytical Services, Inc.
Now Part of the ALS Group

Analyte: Cyanide Micro Distillation

Analyst: GNITA Date: 11/24/14

Pipet ID: #1, #2a Spk Witness: KM

Balance ID: NA

Distillation Start Time: 10:00 End Time: 11:00

Still #	Order #	Dist. Vol.	Final Vol.	Method	pH	H2S +/-	Comments
1	MB1	6	6	335.4	NA	—	
✓ 2	LCS-LL1	6	6	335.4	NA	—	0.060mL 10ppm
✓ 3	LCS-HL1	6	6	335.4	NA	—	0.240mL 10ppm
4	R1409296-002	6	6	335.4	>12	—	
✓ 5	9296-002 MS	6	6	335.4	>12	—	0.060mL 10ppm
✓ 6	9296-002 MSD	6	6	335.4	>12	—	0.060mL 10ppm
7	R1409299-012	6	6	335.4	>12	—	
8	R1409253-001	6	6	335.4	>12	—	
9	R1409387-003	6	6	335.4	>12	—	
10	R1409387-004	6	6	335.4	>12	—	
11	R1409387-006	6	6	335.4	>12	—	
✓ 12	9387-006 MS	6	6	335.4	>12	—	0.060mL 10ppm
✓ 13	9387-006 MSD	6	6	335.4	>12	—	0.060mL 10ppm
14	R1409364-001	6	6	335.4	>12	—	
15	R1409373-001	D, 6	6	335.4	>12	—	
16	R1409373-002	6	6	335.4	>12	—	
17	R1409373-004	6	6	335.4	>12	—	
18	R1409373-006	6	6	335.4	>12	—	
19	R1409425-003	6	6	335.4	>12	—	
20	R1409425-004	6	6	335.4	>12	—	
21	R1409425-005	6	6	335.4	>12	—	
22	R1409425-006	6	6	335.4	>12	—	
23	R1409425-008	6	6	335.4	>12	—	
24	R1409425-010	6	6	335.4	>12	—	
25	R1409425-011	6	6	335.4	>12	—	
26	R1409425-012	6	6	335.4	>12	—	
27	R1409425-013	6	6	335.4	>12	—	
28	MB2	6	6	335.4	NA	—	
✓ 29	LCS-LL2	6	6	335.4	NA	—	0.060mL 10ppm
✓ 30	LCS-HL2	6	6	335.4	NA	—	0.240mL 10ppm
31	R1409402-001	6	6	335.4	>12	—	
32	9402-001 DUP	6	6	335.4	>12	—	
✓ 33	9402-001 SPK	6	6	335.4	>12	—	0.060mL 10ppm
34	R1409402-002	6	6	335.4	>12	—	
35	R1409402-003	6	6	335.4	>12	—	
36	R1409402-005	6	6	335.4	>12	—	
37	R1409402-006	6	6	335.4	>12	—	
38	R1409402-007	6	6	335.4	>12	—	
39	R1409402-008	6	6	335.4	>12	—	
40	R1409402-009	6	6	335.4	>12	—	
41	R1409400-001	6	6	335.4	>12	—	
42	R1409400-002	6	6	335.4	>12	—	

Columbia Analytical Services, Inc.
Now Part of the ALS Group

Analyte: Cyanide Micro Distillation

Analyst: GNITA Date: 11/24/14

Pipet ID: #2 | Beta Spk Witness: KA

Balance ID: NA

Distillation Start Time: 11:30 End Time: 13:30

Still #	Order #	Dist. Vol.	Final Vol.	Method	pH	H2S +/-	Comments
1	MB3	6	6	9012B	NA	—	
2	LCS-LL3	6	6	9012B	NA	—	0.060mL 10ppm
3	LCS-HL3	6	6	9012B	NA	—	0.240mL 10ppm
4	R1409104-014	6	6	9012B	>12	—	
5	R1409104-015	6	6	9012B	>12	—	
6	R1409104-016	6	6	9012B	>12	—	
7	R1409104-017	6	6	9012B	>12	—	
8	R1409104-018	6	6	9012B	>12	—	
9	9104-018 DUP	6	6	9012B	>12	—	
10	9104-018 SPK	6	6	9012B	>12	—	0.060mL 10ppm
11	R1409104-019	6	6	9012B	>12	—	
12	R1409199-002	6	6	9012B	>12	—	
13	R1409199-003	6	6	9012B	>12	—	
14	R1409199-004	6	6	9012B	>12	—	
15	9199-004 DUP	6	6	9012B	>12	—	
16	9199-004 SPK	6	6	9012B	>12	—	0.060mL 10ppm
17	R1409263-001	0.6	6	9012B	9	—	
18	R1409263-002	6	6	9012B	>12	—	
19	R1409263-003	6	6	9012B	12	—	
20	R1409263-004	6	6	9012B	>12	—	
21	R1409263-005	6	6	9012B	7	—	
22	R1409263-006	6	6	9012B	>12	—	
23	R1409263-007	6	6	9012B	>12	—	
24	R1409340-001	6	6	9012B	>12	—	
25	R1409369-001	6	6	9012B	11	—	
26	R1409368-001	6	6	9012B	>12	—	
27	R1409395-002	6	6	9012B	>12	—	
28	MB 4	6	6	9012B	NA	—	
29	LCS-LL4	6	6	9012B	NA	—	0.060mL 10ppm
30	LCS-HL 4	6	6	9012B	NA	—	0.240mL 10ppm
31	R1409395-003	6	6	9012B	>12	—	
32	R1409395-004	6	6	9012B	>12	—	
33	R1409395-005	6	6	9012B	>12	—	
34	R1409395-006	6	6	9012B	>12	—	
35	9395-006 DUP	6	6	9012B	>12	—	
36	9395-006 SPK	6	6	9012B	>12	—	0.060mL 10ppm
37	R1409395-007	6	6	9012B	>12	—	
38	R1409395-008	6	6	9012B	>12	—	
39	R1409395-009	6	6	9012B	>12	—	
40	R1409395-010	6	6	9012B	>12	—	
41	R1409395-011	6	6	9012B	>12	—	
42	R1409396-002	6	6	9012B	>12	—	

Columbia Analytical Services, Inc.
Now Part of the ALS Group

Analyte: Cyanide Micro Distillation

Analyst: GNITA Date: 11/24/14
Pipet ID: 421, 422 Spk Witness: KM
Balance ID: NA
Distillation Start Time: 14:00 End Time: 15:00

Still #	Order #	Dist. Vol.	Final Vol.	Method	pH	H2S +/-	Comments
1	MB 5	6	6		NA	—	
✓ (2)	LCS-LL5	6	6		NA	—	0.060mL 10ppm
✓ (3)	LCS-HL5	6	6		NA	—	0.240mL 10ppm
4	R1409196-001	0.6	6	9012B ASPHT	9	—	
5	R1409196-002	6	6	9012B ASPHT	>12	—	
6	R1409196-003	0.6	6	9012B ASPHT	1	—	
7	R1409196-004	6	6	9012B ASPHT	>12	—	
8	R1409196-005	6	6	9012B ASPHT	>12	—	
9	9196-005 DUP	6	6	9012B ASPHT	>12	—	
✓ (10)	9196-005 SPK	6	6	9012B ASPHT	>12	—	0.060mL 10ppm
11	R1409316-001	6	6	9012B ASPHT	>12	—	
12	R1409316-002	6	6	9012B ASPHT	>12	—	
13	R1409316-003	6	6	9012B ASPHT	>12	—	
14	R1409316-004	6	6	9012B ASPHT	>12	—	
15	R1409316-006	6	6	9012B ASPHT	>12	—	
16	9316-006 DUP	6	6	9012B ASPHT	>12	—	
✓ (17)	9316-006 SPK	6	6	9012B ASPHT	>12	—	0.060mL 10ppm
18	R1409316-007	0.6	6	9012B ASPHT	10	—	
19	R1409428-013	6	6	9012B	>12	—	
20	R1409394-001	0.6	6	SM4500	>12	—	
21	R1409442-001	6	6	SM4500	>12	—	
22	R1409445-001	6	6	9012B	>12	—	
23	MB RES	6	6	Residual	>12	—	
24	LCS RES	6	6	Residual	>12	—	
25	R1409369-001	6	6	Residual	>12	—	
26	9369-001 DUP	6	6	Residual	>12	—	
27	R1409368-001	6	6	Residual	>12	—	
28			6				
29			6				
30			6				
31	GN 11/24/14		6				
32			6				
33			6				
34			6				
35			6				
36			6				
37			6				
38			6				
39			6				
40			6				
41			6				
42			6				

Columbia Analytical Services, Inc.
Now Part of the ALS Group

Analyte: Cyanide Micro Distillation

Analyst: GNITA Date: 11/24/14

Pipet ID: Alj, Beta Spk Witness: KM

Balance ID: R-200

Distillation Start Time: 14:00 End Time: 15:05

Still #	Order #	Dist. Vol.	Final Vol.	Method	pH	H2S +/-	Comments
1	MB s	0.6	6	9012B	NA	—	
✓ (2)	LCS-LL s	0.6	6	9012B	NA	—	0.060mL 10ppm
✓ (3)	LCS-HL s	0.6	6	9012B	NA	—	0.240mL 10ppm
4	R1409257-001	0.6530	6	9012B	NA	—	
5	R1409257-002	0.6964	6	9012B	NA	—	
6	9257-002 DUP	0.6882	6	9012B	NA	—	
✓ (7)	9257-002 SPK	0.6140	6	9012B	NA	—	0.060mL 10ppm
8	R1409257-003	0.6458	6	9012B	NA	—	
9	R1409257-004	0.6171	6	9012B	NA	—	
10	R1409257-005	0.6330	6	9012B	NA	—	
11	R1409304-001	0.6446	6	9012B	NA	—	
12	9304-001 DUP	0.6407	6	9012B	NA	—	
✓ (13)	9304-001 SPK	0.6127	6	9012B	NA	—	0.060mL 10ppm
14	R1409304-002	0.6090	6	9012B	NA	—	
15	R1409362-001	0.6876	6	9012B	NA	—	
16	R1409338-001	0.6821	6	9012B	NA	—	
17	R1409338-002	0.6899	6	9012B	NA	—	
18	R1409338-003	0.6290	6	9012B	NA	—	
19	R1409338-004	0.6909	6	9012B	NA	—	
20	R1409338-005	0.6500	6	9012B	NA	—	
21	R1409396-003	0.6490	6	9012B	NA	—	
22			6				
23			6				
24	GN	11/24/14	6				
25			6				
26			6				
27			6				
28			6				
29			6				
30			6				
31			6				
32			6				
33			6				
34			6				
35			6				
36			6				
37			6				
38			6				
39			6				
40			6				
41			6				
42			6				

Creator : GABRIELA NITA-JOUPPI
Creation Date : 8/30/2013 5:49:02 PM
Last Modified : 8/14/2014 4:21:57 PM
Description :

Cup	Sample ID	MDF	Weight	Sample Type	Comments
S1	1.0 ppm CN			Calibration Standard	
S2	0.50 ppm CN			Calibration Standard	
S3	0.20 ppm CN			Calibration Standard	
S4	0.10 ppm CN			Calibration Standard	
S5	0.05 ppm CN			Calibration Standard	
S6	0.02 ppm CN			Calibration Standard	
S7	0.01 ppm CN			Calibration Standard	
S8	0.00 ppm CN			Calibration Standard	
1	ICV TV=0.5			Unknown	
2	ICB			Unknown	
3	CRDL - 0.0200			Unknown	
4	CRDL - 0.0100			Unknown	
5	CCV			Unknown	
6	CCB			Unknown	
7	MB-1			Unknown	
8	LCS-1 LL			Unknown	
9	LCS-1 HL			Unknown	
10	R1409296-002			Unknown	
11	9296-002 MS			Unknown	
12	9296-002 MSD			Unknown	
13	R1409299-012			Unknown	
14	R1409253-001			Unknown	
15	R1409387-003			Unknown	
16	R1409387-004			Unknown	
17	CCV			Unknown	
18	CCB			Unknown	
19	R1409387-006			Unknown	
20	9387-006 MS			Unknown	
21	9387-006 MSD			Unknown	
22	R1409364-001			Unknown	
23	R1409373-001			Unknown	
24	R1409373-002			Unknown	
25	R1409373-004			Unknown	
26	R1409373-006			Unknown	
27	R1409425-003			Unknown	
28	R1409425-004			Unknown	
29	CCV			Unknown	
30	CCB			Unknown	
31	R1409425-005			Unknown	
32	R1409425-006			Unknown	

33	R1409425-008			Unknown	
34	R1409425-010			Unknown	
35	R1409425-011			Unknown	
36	R1409425-012			Unknown	
37	R1409425-013			Unknown	
38	MB 2			Unknown	
39	LCS 2 LL			Unknown	
40	LCS 2 HL			Unknown	
41	CCV			Unknown	
42	CCB			Unknown	
43	R1409402-001			Unknown	
44	9402-001 DUP			Unknown	
45	9402-001 SPK			Unknown	
46	R1409402-002			Unknown	
47	R1409402-003			Unknown	
48	R1409402-005			Unknown	
49	R1409402-006			Unknown	
50	R1409402-007			Unknown	
51	R1409402-008			Unknown	
52	R1409402-009			Unknown	
53	CCV			Unknown	
54	CCB			Unknown	
55	R1409400-001			Unknown	
56	R1409400-002			Unknown	
57	MB 3			Unknown	
58	LCS 3 LL			Unknown	
59	LCS 3 HL			Unknown	
60	R1409104-014			Unknown	
61	R1409104-015			Unknown	
62	R1409104-016			Unknown	
63	R1409104-017			Unknown	
64	R1409104-018			Unknown	
65	CCV			Unknown	
66	CCB			Unknown	
67	9104-018 DUP			Unknown	
68	9104-018 SPK			Unknown	
69	R1409104-019			Unknown	
70	R1409199-002			Unknown	
71	R1409199-003			Unknown	
72	R1409199-004			Unknown	
73	9199-004 DUP			Unknown	
74	9199-004 SPK			Unknown	
75	R1409263-001			Unknown	
76	R1409263-002			Unknown	
77	CCV			Unknown	

78	CCB			Unknown	
79	R1409263-003			Unknown	
80	R1409263-004			Unknown	
81	R1409263-005			Unknown	
82	R1409263-006			Unknown	
83	R1409263-007			Unknown	
84	R1409340-001			Unknown	
85	R1409369-001			Unknown	
86	R1409368-001			Unknown	
87	R1409395-002			Unknown	
88	MB4			Unknown	
89	CCV			Unknown	
90	CCB			Unknown	
91	LCS-LL4			Unknown	
92	LCS-HL4			Unknown	
93	R1409395-003			Unknown	
94	R1409395-004			Unknown	
95	R1409395-005			Unknown	
96	R1409395-006			Unknown	
97	9395-006 DUP			Unknown	
98	9395-006 SPK			Unknown	
99	R1409395-007			Unknown	
100	R1409395-008			Unknown	
101	CCV			Unknown	
102	CCB			Unknown	
103	R1409395-009			Unknown	
104	R1409395-010			Unknown	
105	R1409395-011			Unknown	
106	R1409396-002			Unknown	
107	MB 5			Unknown	
108	LCS-LL 5			Unknown	
109	LCS-HL 5			Unknown	
110	R1409196-001			Unknown	
111	R1409196-002			Unknown	
112	R1409196-003			Unknown	
113	CCV			Unknown	
114	CCB			Unknown	
115	R1409196-004			Unknown	
116	R1409196-005			Unknown	
117	9196-005 DUP			Unknown	
118	9196-005 SPK			Unknown	
119	R1409316-001			Unknown	
120	R1409316-002			Unknown	
121	R1409316-003			Unknown	
122	R1409316-004			Unknown	

Creator : GABRIELA NITA-JOUPPI
Creation Date : 11/25/2014 9:15:28 AM
Last Modified : 11/25/2014 10:41:01 AM
Description :

Cup	Sample ID	MDF	Weight	Sample Type	Comments
S1	1.0 ppm CN			Calibration Standard	
S2	0.50 ppm CN			Calibration Standard	
S3	0.20 ppm CN			Calibration Standard	
S4	0.10 ppm CN			Calibration Standard	
S5	0.05 ppm CN			Calibration Standard	
S6	0.02 ppm CN			Calibration Standard	
S7	0.01 ppm CN			Calibration Standard	
S8	0.00 ppm CN			Calibration Standard	
1	ICV TV=0.5			Unknown	
2	ICB			Unknown	
3	CRDL - 0.0200			Unknown	
4	CRDL - 0.0100			Unknown	
5	CCV			Unknown	
6	CCB			Unknown	
7	MB-1			Unknown	
8	LCS-1 LL			Unknown	
9	LCS-1 HL			Unknown	
10	R1409296-002			Unknown	
11	9296-002 MS			Unknown	
12	9296-002 MSD			Unknown	
13	R1409299-012			Unknown	
14	R1409253-001			Unknown	
15	R1409387-003			Unknown	
16	R1409387-004			Unknown	
17	CCV			Unknown	
18	CCB			Unknown	
19	R1409387-006			Unknown	
20	9387-006 MS			Unknown	
21	9387-006 MSD			Unknown	
22	R1409364-001			Unknown	
23	R1409373-001			Unknown	
24	R1409373-002			Unknown	
25	R1409373-004			Unknown	
26	R1409373-006			Unknown	
27	R1409425-003			Unknown	
28	R1409425-004			Unknown	
29	CCV			Unknown	
30	CCB			Unknown	
31	R1409425-005			Unknown	
32	R1409425-006			Unknown	

123	R1409316-006			Unknown	
124	9316-006 DUP			Unknown	
125	CCV			Unknown	
126	CCB			Unknown	
127	9316-006 SPK			Unknown	
128	R1409316-007			Unknown	
129	R1409428-013			Unknown	
130	R1409394-001			Unknown	
131	R1409442-001			Unknown	
132	R1409445-001			Unknown	
133	MB RES			Unknown	
134	LCS RES			Unknown	
135	R1409369-001 RES			Unknown	
136	9369-001 DUP RES			Unknown	
137	CCV			Unknown	
138	CCB			Unknown	
139	R1409368-001 RES			Unknown	
140	MB s			Unknown	
141	LCS-LL s			Unknown	
142	LCS-HL s			Unknown	
143	R1409257-001			Unknown	
144	R1409257-002			Unknown	
145	9257-002 DUP			Unknown	
146	9257-002 SPK			Unknown	
147	R1409257-003			Unknown	
148	R1409257-004			Unknown	
149	CCV			Unknown	
150	CCB			Unknown	
151	R1409257-005			Unknown	
152	R1409304-001			Unknown	
153	9304-001 DUP			Unknown	
154	9304-001 SPK			Unknown	
155	R1409304-002			Unknown	
156	R1409362-001			Unknown	
157	R1409338-001			Unknown	
158	R1409338-002			Unknown	
159	R1409338-003			Unknown	
160	R1409338-004			Unknown	
161	CCV			Unknown	
162	CCB			Unknown	
163	R1409338-005			Unknown	
164	R1409396-003			Unknown	
165	Sample173			Unknown	
166	Sample174			Unknown	
167	Sample175			Unknown	

168	Sample176			Unknown	
169	Sample177			Unknown	
170	Sample178			Unknown	
171	Sample179			Unknown	
172	R1409396-003			Unknown	

Analyte Table	Cyanide 9012B/SM450
	(mg CN/L)
1.0 ppm CN	1.00000
0.50 ppm CN	0.50000
0.20 ppm CN	0.20000
0.10 ppm CN	0.10000
0.05 ppm CN	0.05000
0.02 ppm CN	0.02000
0.01 ppm CN	0.01000
0.00 ppm CN	0.00000

00369

33	R1409425-008			Unknown	
34	R1409425-010			Unknown	
35	R1409425-011			Unknown	
36	R1409425-012			Unknown	
37	R1409425-013			Unknown	
38	MB 2			Unknown	
39	LCS 2 LL			Unknown	
40	LCS 2 HL			Unknown	
41	CCV			Unknown	
42	CCB			Unknown	
43	R1409402-001			Unknown	
44	9402-001 DUP			Unknown	
45	9402-001 SPK			Unknown	
46	R1409402-002			Unknown	
47	R1409402-003			Unknown	
48	R1409402-005			Unknown	
49	R1409402-006			Unknown	
50	R1409402-007			Unknown	
51	R1409402-008			Unknown	
52	R1409402-009			Unknown	
53	CCV			Unknown	
54	CCB			Unknown	
55	R1409400-001			Unknown	
56	R1409400-002			Unknown	
57	MB 3			Unknown	
58	LCS 3 LL			Unknown	
59	LCS 3 HL			Unknown	
60	R1409104-014			Unknown	
61	R1409104-015			Unknown	
62	R1409104-016			Unknown	
63	R1409104-017			Unknown	
64	R1409104-018			Unknown	
65	CCV			Unknown	
66	CCB			Unknown	
67	9104-018 DUP			Unknown	
68	9104-018 SPK			Unknown	
69	R1409104-019			Unknown	
70	R1409199-002			Unknown	
71	R1409199-003			Unknown	
72	R1409199-004			Unknown	
73	9199-004 DUP			Unknown	
74	9199-004 SPK			Unknown	
75	R1409263-001			Unknown	
76	R1409263-002			Unknown	
77	CCV			Unknown	

Creator : GABRIELA NITA-JOUPPI
Creation Date : 11/25/2014 10:42:42 AM
Last Modified : 11/25/2014 11:50:03 AM
Description :

Cup	Sample ID	MDF	Weight	Sample Type	Comments
88	STD 1.0ppm			Unknown	
89	CCV			Unknown	
90	CCB			Unknown	
91	LCS-LL4			Unknown	
92	LCS-HL4			Unknown	
93	R1409395-003			Unknown	
94	R1409395-004			Unknown	
95	R1409395-005			Unknown	
96	R1409395-006			Unknown	
97	9395-006 DUP			Unknown	
98	9395-006 SPK			Unknown	
99	R1409395-007			Unknown	
100	R1409395-008			Unknown	
101	CCV			Unknown	
102	CCB			Unknown	
103	R1409395-009			Unknown	
104	R1409395-010			Unknown	
105	R1409395-011			Unknown	
106	R1409396-002			Unknown	
107	MB 5			Unknown	
108	LCS-LL 5			Unknown	
109	LCS-HL 5			Unknown	
110	R1409196-001			Unknown	
111	R1409196-002			Unknown	
112	R1409196-003			Unknown	
113	CCV			Unknown	
114	CCB			Unknown	
115	R1409196-004			Unknown	
116	R1409196-005			Unknown	
117	9196-005 DUP			Unknown	
118	9196-005 SPK			Unknown	
119	R1409316-001			Unknown	
120	R1409316-002			Unknown	
121	R1409316-003			Unknown	
122	R1409316-004			Unknown	
123	R1409316-006			Unknown	
124	9316-006 DUP			Unknown	
125	CCV			Unknown	
126	CCB			Unknown	
127	9316-006 SPK			Unknown	

128	R1409316-007			Unknown	
129	R1409428-013			Unknown	
130	R1409394-001			Unknown	
131	R1409442-001			Unknown	
132	R1409445-001			Unknown	
133	MB RES			Unknown	
134	LCS RES			Unknown	
135	R1409369-001 RES			Unknown	
136	9369-001 DUP RES			Unknown	
137	CCV			Unknown	
138	CCB			Unknown	
139	R1409368-001 RES			Unknown	
140	MB s			Unknown	
141	LCS-LL s			Unknown	
142	LCS-HL s			Unknown	
143	R1409257-001			Unknown	
144	R1409257-002			Unknown	
145	9257-002 DUP			Unknown	
146	9257-002 SPK			Unknown	
147	R1409257-003			Unknown	
148	R1409257-004			Unknown	
149	CCV			Unknown	
150	CCB			Unknown	
151	R1409257-005			Unknown	
152	R1409304-001			Unknown	
153	9304-001 DUP			Unknown	
154	9304-001 SPK			Unknown	
155	R1409304-002			Unknown	
156	R1409362-001			Unknown	
157	R1409338-001			Unknown	
158	R1409338-002			Unknown	
159	R1409338-003			Unknown	
160	R1409338-004			Unknown	
161	CCV			Unknown	
162	CCB			Unknown	
163	R1409338-005			Unknown	
164	R1409396-003			Unknown	
165	FILTER BLANK			Unknown	
166	FILTER LCS			Unknown	
167	CCV			Unknown	
168	CCB			Unknown	

Analyte Table

Cyanide 9012B/SM450
(mg CN/L)

00372

Author: GABRIELA NITA-JOUPPI Date : 11/25/2014

Original Run Filename: OM_11-25-2014_09-15-28AM.OMN Created: 11/25/2014 9:15:28 AM
Original Run Author's Signature: [GABRIELA NITA-JOUPPI]
Current Run Filename: OM_11-25-2014_09-15-28AM.OMN Last Modified: 11/25/2014 10:41:01 AM
Current Run Author's Signature: [GABRIELA NITA-JOUPPI]
Description: 10-204-00-1-A

Sample	Cup No.	Channel 2 Cyanide 9012B/SM4500CN QC8500 Conc. (mg CN/L)	Area (V.s)	Detection Time	MDF
1.0 ppm CN	S1	1.00000	10.94714	11/25/2014@9:16:39 AM	
0.50 ppm CN	S2	0.50000	5.75572	11/25/2014@9:17:25 AM	
0.20 ppm CN	S3	0.20000	2.30293	11/25/2014@9:18:11 AM	
0.10 ppm CN	S4	0.10000	1.19938	11/25/2014@9:18:58 AM	
0.05 ppm CN	S5	0.05000	0.62257	11/25/2014@9:19:45 AM	
0.02 ppm CN	S6	0.02000	0.24090	11/25/2014@9:20:31 AM	
0.01 ppm CN	S7	0.01000	0.12879	11/25/2014@9:21:18 AM	
0.00 ppm CN	S8	0.00000	0.00481	11/25/2014@9:22:04 AM	
DQM Test: Minimum Correlation Coefficient					
Result:		0.99994 > 0.99700			
Message		Pass			
Action					
ICV TV=0.5	1	0.50266	5.65669	11/25/2014@9:24:25 AM	
Calibration:		Table/Fig. : 1			
ICB	2	-0.00106	0.00648	11/25/2014@9:25:13 AM	
CRDL - 0.0200	3	0.01998	0.24248	11/25/2014@9:26:01 AM	
CRDL - 0.0100	4	0.01016	0.13239	11/25/2014@9:26:49 AM	
CCV	5	0.50208	5.65022	11/25/2014@9:27:36 AM	
CCB	6	-0.00063	0.01132	11/25/2014@9:28:23 AM	
MB-1	7	-0.00131	0.00375	11/25/2014@9:29:10 AM	
LCS-1 LL	8	0.10062	1.14705	11/25/2014@9:29:56 AM	
LCS-1 HL	9	0.40339	4.54317	11/25/2014@9:30:43 AM	
R1409296-002	10	0.01148	0.14716	11/25/2014@9:31:30 AM	
9296-002 MS	11	0.11350	1.29151	11/25/2014@9:32:16 AM	
9296-002 MSD	12	0.11341	1.29054	11/25/2014@9:33:02 AM	
R1409299-012	13	0.00134	0.03349	11/25/2014@9:33:48 AM	
R1409253-001	14	-0.00109	0.00618	11/25/2014@9:34:34 AM	
R1409387-003	15	0.00024	0.02112	11/25/2014@9:35:20 AM	
R1409387-004	16	0.00090	0.02849	11/25/2014@9:36:08 AM	
CCV	17	0.50241	5.65386	11/25/2014@9:36:56 AM	
CCB	18	-0.00091	0.00817	11/25/2014@9:37:44 AM	
R1409387-006	19	0.01094	0.14111	11/25/2014@9:38:31 AM	
9387-006 MS	20	0.11505	1.30888	11/25/2014@9:39:18 AM	
9387-006 MSD	21	0.11445	1.30223	11/25/2014@9:40:05 AM	
R1409364-001	22	0.00171	0.03765	11/25/2014@9:40:52 AM	
R1409373-001	23	-0.00051	0.01271	11/25/2014@9:41:38 AM	
R1409373-002	24	-0.00093	0.00801	11/25/2014@9:42:25 AM	
R1409373-004	25	-0.00086	0.00874	11/25/2014@9:43:12 AM	
R1409373-006	26	-0.00098	0.00745	11/25/2014@9:43:58 AM	
R1409425-003	27	-0.00038	0.01411	11/25/2014@9:44:45 AM	
R1409425-004	28	-0.00119	0.00502	11/25/2014@9:45:31 AM	
CCV	29	0.50701	5.70547	11/25/2014@9:46:17 AM	
CCB	30	-0.00092	0.00811	11/25/2014@9:47:03 AM	
R1409425-005	31	-0.00003	0.01809	11/25/2014@9:47:50 AM	
R1409425-006	32	-0.00082	0.00920	11/25/2014@9:48:38 AM	
R1409425-008	33	-0.00102	0.00695	11/25/2014@9:49:26 AM	
R1409425-010	34	-0.00064	0.01126	11/25/2014@9:50:13 AM	
R1409425-011	35	-4.52464e-6	0.01837	11/25/2014@9:51:01 AM	
R1409425-012	36	-0.00054	0.01231	11/25/2014@9:51:47 AM	
R1409425-013	37	-0.00052	0.01262	11/25/2014@9:52:34 AM	
MB 2	38	-0.00044	0.01344	11/25/2014@9:53:21 AM	
LCS 2 LL	39	0.10271	1.17051	11/25/2014@9:54:08 AM	
LCS 2 HL	40	0.39111	4.40550	11/25/2014@9:54:54 AM	
CCV	41	0.49783	5.60253	11/25/2014@9:55:41 AM	
CCB	42	-0.00087	0.00863	11/25/2014@9:56:28 AM	
R1409402-001	43	-0.00029	0.01517	11/25/2014@9:57:14 AM	
9402-001 DUP	44	-0.00079	0.00956	11/25/2014@9:58:01 AM	

9402-001 SPK	45	0.10059	1.14673	11/25/2014@9:58:47 AM	
R1409402-002	46	-0.00017	0.01655	11/25/2014@9:59:35 AM	
R1409402-003	47	0.00022	0.02094	11/25/2014@10:00:23 AM	
R1409402-005	48	0.00013	0.01985	11/25/2014@10:01:11 AM	
R1409402-006	49	0.00008	0.01934	11/25/2014@10:01:59 AM	
R1409402-007	50	-0.00039	0.01403	11/25/2014@10:02:46 AM	
R1409402-008	51	-0.00041	0.01381	11/25/2014@10:03:33 AM	
R1409402-009	52	-0.00072	0.01040	11/25/2014@10:04:19 AM	
CCV	53	0.49978	5.62446	11/25/2014@10:05:06 AM	
CCB	54	-0.00164	0.00004	11/25/2014@10:05:53 AM	
R1409400-001	55	-0.00074	0.01012	11/25/2014@10:06:40 AM	
R1409400-002	56	-0.00070	0.01059	11/25/2014@10:07:26 AM	
MB 3	57	-0.00106	0.00649	11/25/2014@10:08:13 AM	
LCS 3 LL	58	0.09714	1.10805	11/25/2014@10:08:59 AM	
LCS 3 HL	59	0.39173	4.41239	11/25/2014@10:09:45 AM	
R1409104-014	60	0.00184	0.03904	11/25/2014@10:10:32 AM	
R1409104-015	61	-0.00201	-0.00414	11/25/2014@10:11:19 AM	
R1409104-016	62	-0.00091	0.00819	11/25/2014@10:12:07 AM	
R1409104-017	63	-0.00104	0.00671	11/25/2014@10:12:55 AM	
R1409104-018	64	-0.00146	0.00208	11/25/2014@10:13:42 AM	
CCV	65	0.49831	5.60794	11/25/2014@10:14:29 AM	
CCB	66	-0.00099	0.00732	11/25/2014@10:15:16 AM	
9104-018 DUP	67	-0.00084	0.00898	11/25/2014@10:16:03 AM	
9104-018 SPK	68	0.10322	1.17619	11/25/2014@10:16:49 AM	
R1409104-019	69	-0.00092	0.00811	11/25/2014@10:17:36 AM	
R1409199-002	70	-0.00011	0.01718	11/25/2014@10:18:23 AM	
R1409199-003	71	-0.00105	0.00665	11/25/2014@10:19:09 AM	
R1409199-004	72	-0.00081	0.00935	11/25/2014@10:19:55 AM	
9199-004 DUP	73	-0.00100	0.00716	11/25/2014@10:20:42 AM	
9199-004 SPK	74	0.10117	1.15329	11/25/2014@10:21:28 AM	
R1409263-001	75	0.00156	0.03594	11/25/2014@10:22:14 AM	
R1409263-002	76	-0.00077	0.00977	11/25/2014@10:23:02 AM	
CCV	77	0.49813	5.60587	11/25/2014@10:23:50 AM	
CCB	78	-0.00150	0.00159	11/25/2014@10:24:37 AM	
R1409263-003	79	0.00233	0.04456	11/25/2014@10:25:25 AM	
R1409263-004	80	-0.00078	0.00970	11/25/2014@10:26:12 AM	
R1409263-005	81	0.00040	0.02289	11/25/2014@10:26:59 AM	
R1409263-006	82	-0.00107	0.00644	11/25/2014@10:27:45 AM	
R1409263-007	83	-0.00214	-0.00556	11/25/2014@10:28:32 AM	
R1409340-001	84	0.00026	0.02137	11/25/2014@10:29:19 AM	
R1409369-001	85	0.00090	0.02856	11/25/2014@10:30:06 AM	
R1409368-001	86	0.00075	0.02683	11/25/2014@10:30:52 AM	
R1409395-002	87	-0.00070	0.01057	11/25/2014@10:31:39 AM	
MB4	88	-0.00095	0.00779	11/25/2014@10:32:25 AM	
CCV	89	0.49990	5.62577	11/25/2014@10:33:12 AM	
CCB	90	-0.00050	0.01284	11/25/2014@10:33:58 AM	
LCS-LL4	91	0.10066	1.14754	11/25/2014@10:34:46 AM	
LCS-HL4	92	0.39540	4.45362	11/25/2014@10:35:34 AM	
R1409395-003	93	-0.00294	-0.01457	11/25/2014@10:36:21 AM	
R1409395-004	94	0.00212	0.04223	11/25/2014@10:37:09 AM	
R1409395-005	95	-0.05271	-0.57277	11/25/2014@10:37:56 AM	
R1409395-006	96	-0.01661	-0.16788	11/25/2014@10:38:43 AM	
9395-006 DUP	97	-0.08994	-0.99040	11/25/2014@10:39:30 AM	

not reported

Low reagent out of bulbs ; restart w/ICV, CCB at #89,90, at 10:42:41

Analyte Properties Table for : OM_11-25-2014_09-15-28AM.OMN

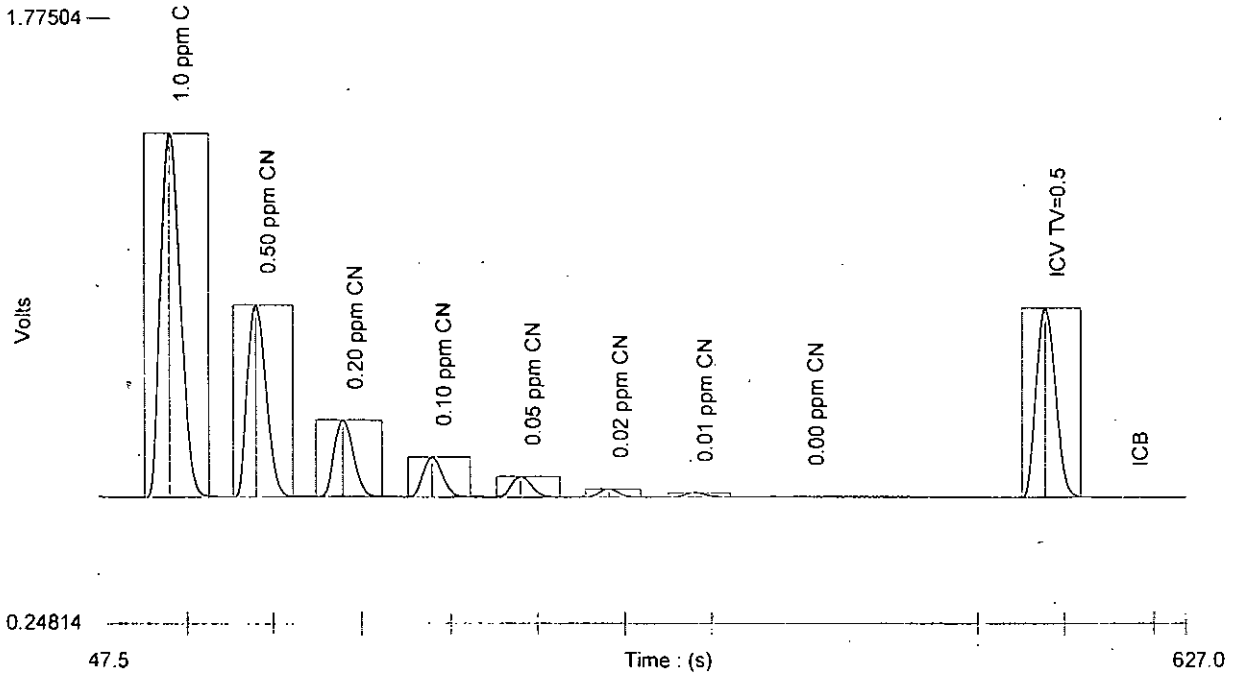
Property	Channel 2 Cyanide 9012B/SM450 0CN QC8500
Concentration Units	mg CN/L
Calibration Fit Type	First Order
Clear Calibration	Yes
Force through Zero	No
Calibration Weighting	1/x
Auto Dilution Trigger	No
% of High Standard	110
Quik Chem Method	10-204-00-1-A

Author: GABRIELA NITA-JOUPPI

Date : 11/25/2014

Chemistry	Direct/Bipolar
Calibration by Height	No
Inject to Peak Start	23
Peak Base Width	36

Channel 2 (cyanide) - Set: 1 / 11



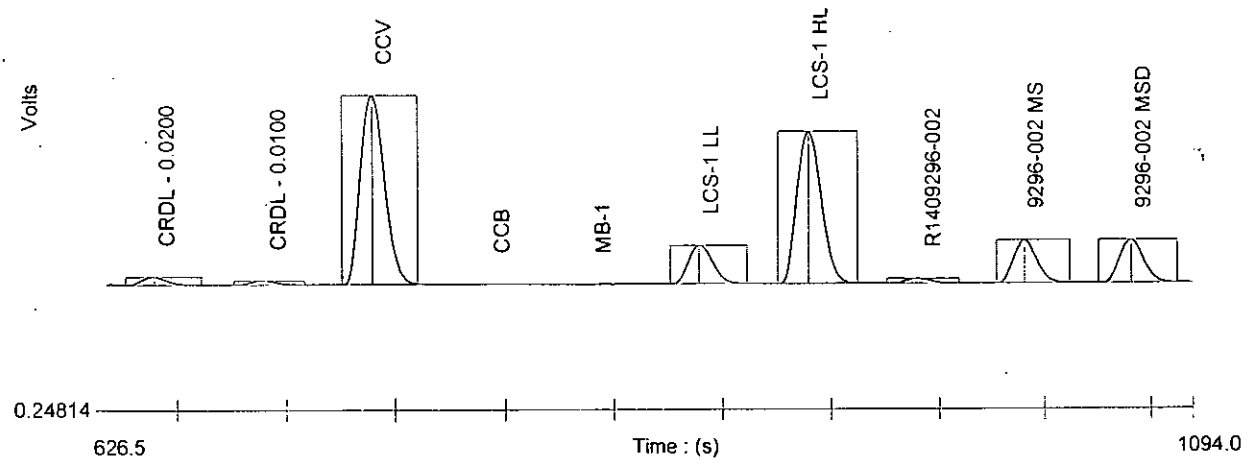
00375

Author: GABRIELA NITA-JOUPPI

Date : 11/25/2014

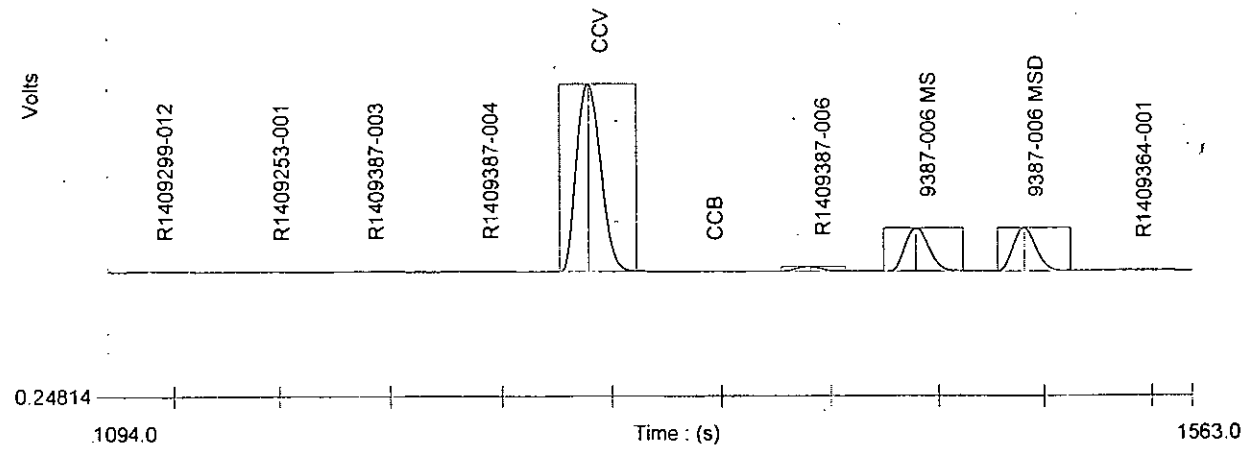
Channel 2 (cyanide) - Set: 2 / 11

1.77504



Channel 2 (cyanide) - Set: 3 / 11

1.77504 —



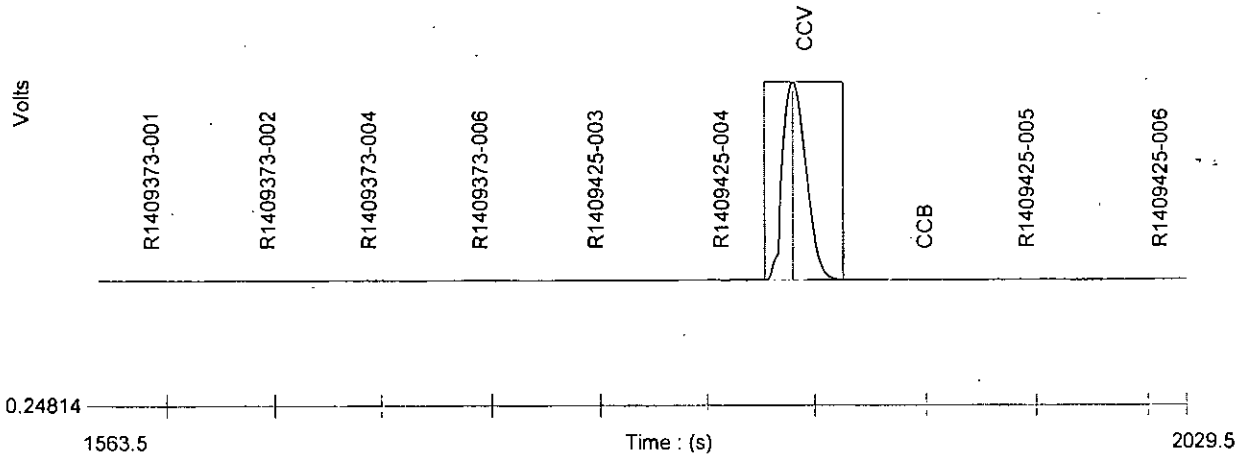
00376

Author: GABRIELA NITA-JOUPPI

Date : 11/25/2014

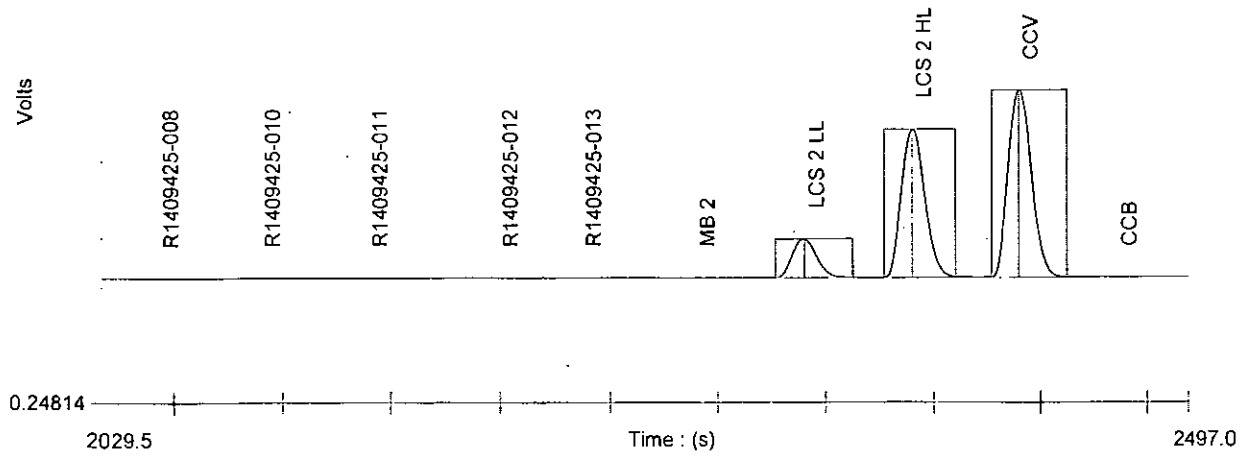
Channel 2 (cyanide) - Set: 4 / 11

1.77504



Channel 2 (cyanide) - Set: 5 / 11

1.77504 —



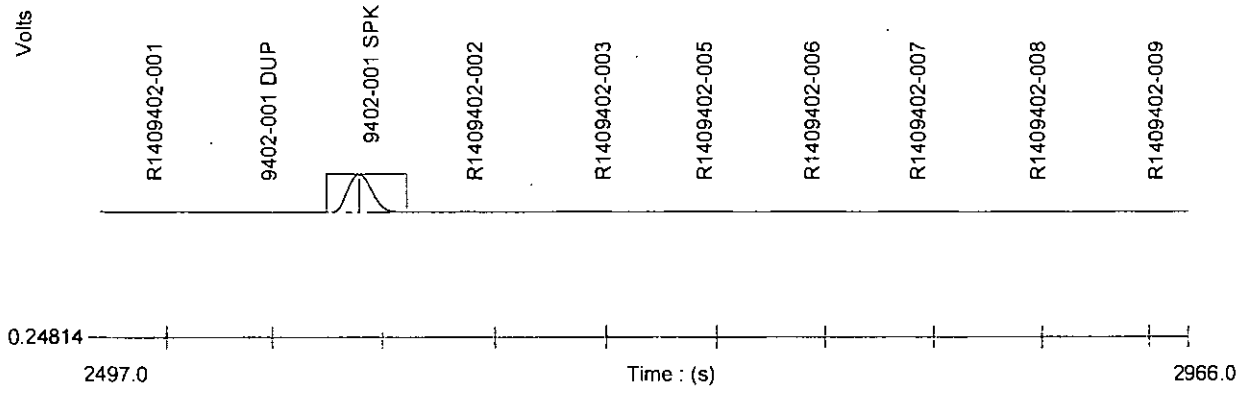
00377

Author: GABRIELA NITA-JOUPPI

Date : 11/25/2014

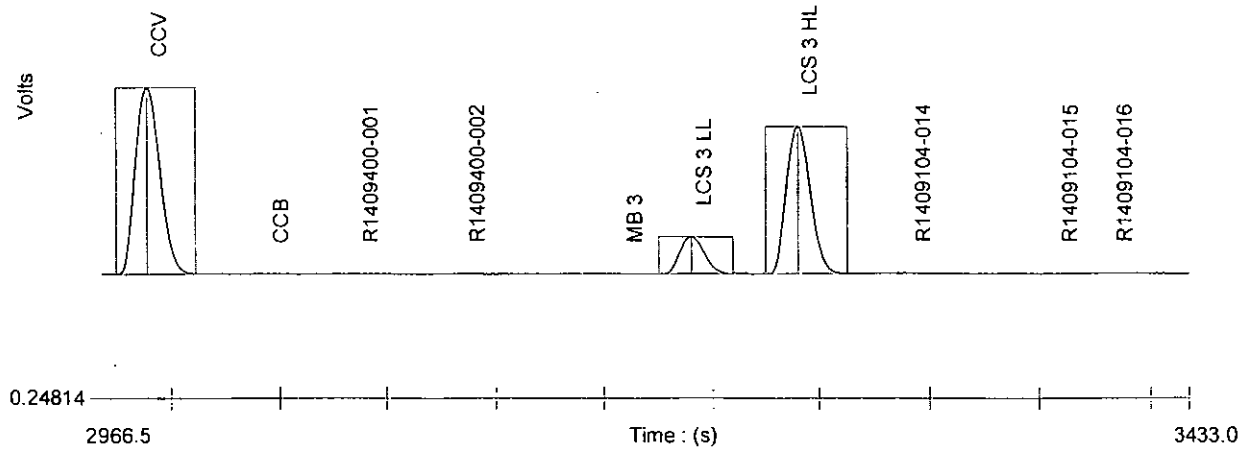
Channel 2 (cyanide) - Set: 6 / 11

1.77504



Channel 2 (cyanide) - Set: 7 / 11

1.77504 —

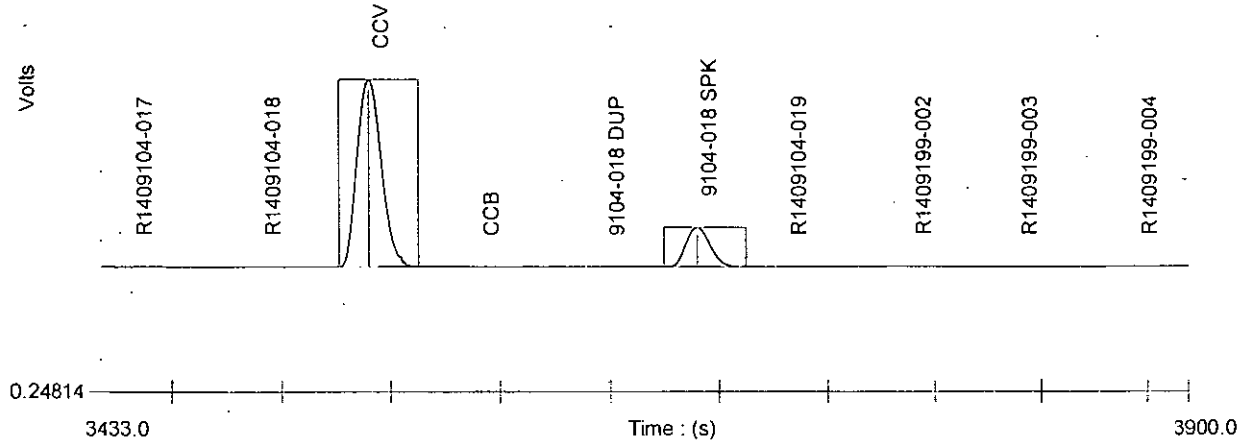


00378

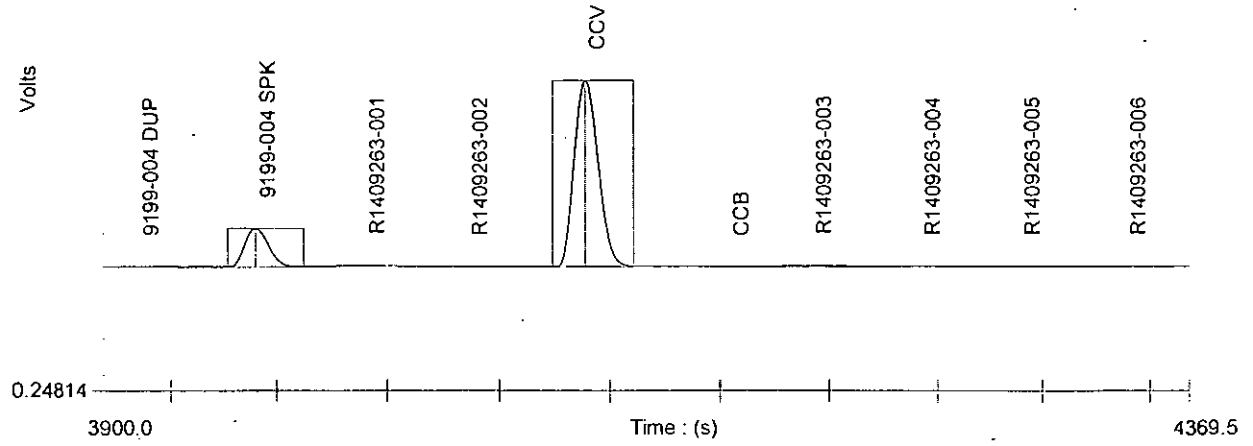
Author: GABRIELA NITA-JOUPPI

Date : 11/25/2014

Channel 2 (cyanide) - Set: 8 / 11



Channel 2 (cyanide) - Set: 9 / 11

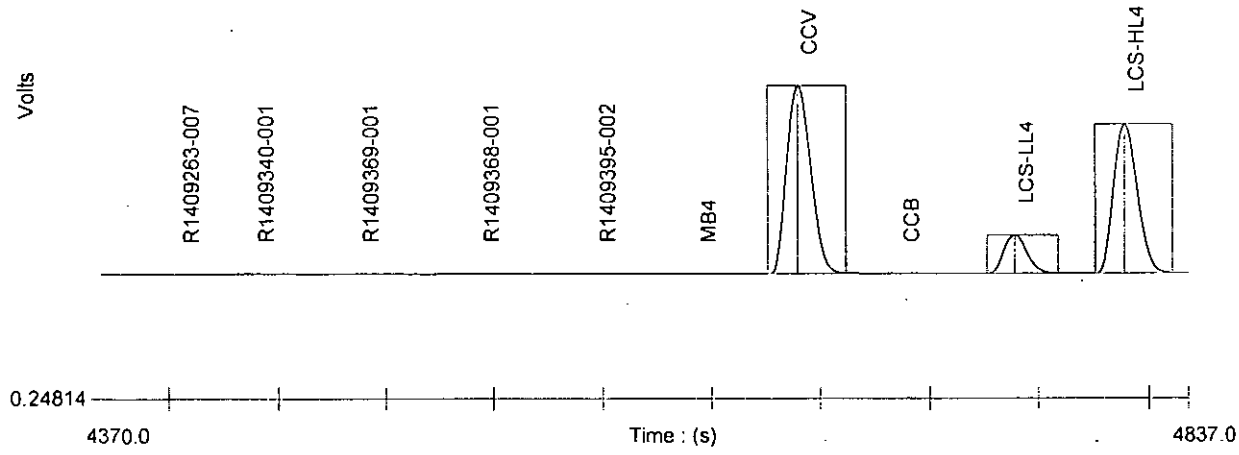


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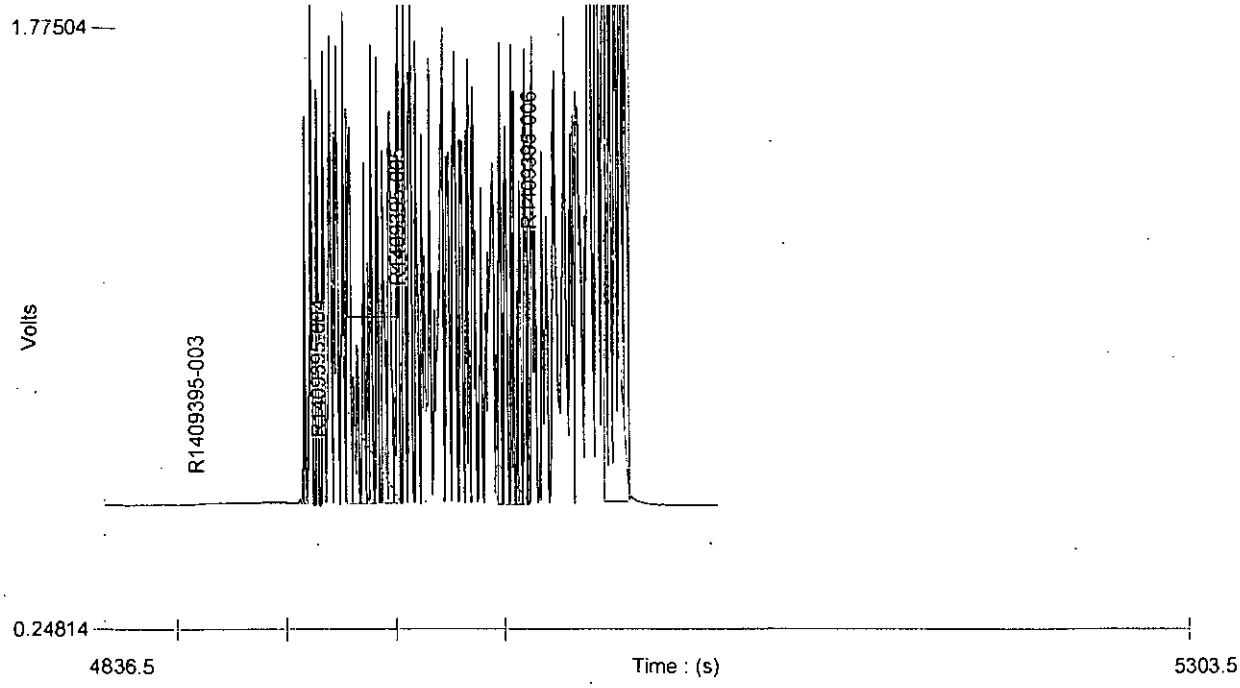
Author: GABRIELA NITA-JOUPPI

Date : 11/25/2014

Channel 2 (cyanide) - Set: 10 / 11



Channel 2 (cyanide) - Set: 11 / 11



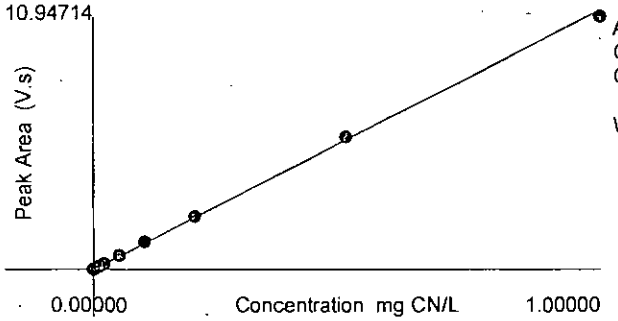
00380

Author: GABRIELA NITA-JOUPPI Date : 11/25/2014

Table : 1 (Cyanide 9012B/SM4500CN QC8500)

	Known Conc. (mg CN/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg CN/L)	Detection Date	Detection Time
1	1.00000	1	10.94714	0.91800	0.0	2.5	0.97431	11/25/2014	9:16:39 AM
2	0.50000	1	5.75572	0.48587	0.0	-2.4	0.51149	11/25/2014	9:17:25 AM
3	0.20000	1	2.30293	0.19448	0.0	-1.9	0.20367	11/25/2014	9:18:11 AM
4	0.10000	1	1.19938	0.10128	0.0	-5.3	0.10528	11/25/2014	9:18:58 AM
5	0.05000	1	0.62257	0.05193	0.0	-7.5	0.05386	11/25/2014	9:19:45 AM
6	0.02000	1	0.24090	0.02010	0.0	0.8	0.01983	11/25/2014	9:20:31 AM
7	0.01000	1	0.12879	0.01010	0.0	1.5	0.00984	11/25/2014	9:21:18 AM
8	0.00000	1	0.00481	0.00073			-0.00121	11/25/2014	9:22:04 AM

Figure : 1 (Cyanide 9012B/SM4500CN QC8500)



Area = 11.20563 * Conc + 0.01869
Conc = 0.08915 * Area - 0.00164
Correlation Coefficient (r) = 0.99994

Weighting : 1/x

00381

Author: GABRIELA NITA-JOUPPI Date : 11/25/2014

Original Run Filename: OM_11-25-2014_10-42-42AM.OMN Created: 11/25/2014 10:42:42 AM
Original Run Author's Signature: [GABRIELA NITA-JOUPPI]
Current Run Filename: OM_11-25-2014_10-42-42AM.OMN Last Modified: 11/25/2014 11:50:03 AM
Current Run Author's Signature: [GABRIELA NITA-JOUPPI]
Description: 10-204-00-1-A

Sample	Cup No.	Channel 2 Cyanide 9012B/SM4500CN QC8500		Detection Time	MDF
		Conc. (mg CN/L)	Area (V.s)		
STD 1.0ppm	88	0.98410	11.05696	11/25/2014@10:43:53 AM	
Calibration:		Table/Fig. : 1			
CCV	89	0.50340	5.66499	11/25/2014@10:46:35 AM	
CCB	90	-0.00180	-0.00177	11/25/2014@10:47:21 AM	
LCS-LL4	91	0.10091	1.15036	11/25/2014@10:48:08 AM	
LCS-HL4	92	0.39791	4.48175	11/25/2014@10:48:56 AM	
R1409395-003	93	-0.00089	0.00849	11/25/2014@10:49:44 AM	
R1409395-004	94	-0.00060	0.01174	11/25/2014@10:50:32 AM	
R1409395-005	95	0.00089	0.02844	11/25/2014@10:51:19 AM	
R1409395-006	96	-0.00088	0.00858	11/25/2014@10:52:06 AM	
9395-006 DUP	97	-0.00055	0.01228	11/25/2014@10:52:53 AM	
9395-006 SPK	98	0.09851	1.12340	11/25/2014@10:53:39 AM	
R1409395-007	99	-0.00048	0.01308	11/25/2014@10:54:26 AM	
R1409395-008	100	-0.00047	0.01309	11/25/2014@10:55:13 AM	
CCV	101	0.50259	5.65597	11/25/2014@10:55:59 AM	
CCB	102	-0.00072	0.01030	11/25/2014@10:56:46 AM	
R1409395-009	103	-0.00102	0.00698	11/25/2014@10:57:32 AM	
R1409395-010	104	0.00004	0.01891	11/25/2014@10:58:19 AM	
R1409395-011	105	-0.00229	-0.00722	11/25/2014@10:59:06 AM	
R1409396-002	106	-0.00041	0.01379	11/25/2014@10:59:53 AM	
MB 5	107	-0.00235	-0.00791	11/25/2014@11:00:41 AM	
LCS-LL 5	108	0.10143	1.15610	11/25/2014@11:01:29 AM	
LCS-HL 5	109	0.39911	4.49520	11/25/2014@11:02:16 AM	
R1409196-001	110	0.00162	0.03656	11/25/2014@11:03:04 AM	
R1409196-002	111	-0.00141	0.00261	11/25/2014@11:03:51 AM	
R1409196-003	112	0.00131	0.03310	11/25/2014@11:04:37 AM	
CCV	113	0.50843	5.72142	11/25/2014@11:05:24 AM	
CCB	114	-0.00033	0.01473	11/25/2014@11:06:11 AM	
R1409196-004	115	-0.00047	0.01318	11/25/2014@11:06:58 AM	
R1409196-005	116	-0.00105	0.00660	11/25/2014@11:07:44 AM	
9196-005 DUP	117	-0.00094	0.00791	11/25/2014@11:08:31 AM	
9196-005 SPK	118	0.10141	1.15591	11/25/2014@11:09:18 AM	
R1409316-001	119	0.00230	0.04420	11/25/2014@11:10:04 AM	
R1409316-002	120	-0.00128	0.00410	11/25/2014@11:10:51 AM	
R1409316-003	121	0.01098	0.14156	11/25/2014@11:11:39 AM	
R1409316-004	122	0.00291	0.05111	11/25/2014@11:12:27 AM	
R1409316-006	123	-0.00008	0.01752	11/25/2014@11:13:14 AM	
9316-006 DUP	124	-0.00228	-0.00711	11/25/2014@11:14:02 AM	
CCV	125	0.50199	5.64918	11/25/2014@11:14:49 AM	
CCB	126	-0.00136	0.00313	11/25/2014@11:15:36 AM	
9316-006 SPK	127	0.10069	1.14781	11/25/2014@11:16:23 AM	
R1409316-007	128	-0.00082	0.00924	11/25/2014@11:17:09 AM	
R1409428-013	129	-0.00169	-0.00049	11/25/2014@11:17:56 AM	
R1409394-001	130	-0.00123	0.00467	11/25/2014@11:18:43 AM	
R1409442-001	131	-0.00037	0.01428	11/25/2014@11:19:30 AM	
R1409445-001	132	0.00494	0.07385	11/25/2014@11:20:17 AM	
MB RES	133	-0.00101	0.00709	11/25/2014@11:21:03 AM	
LCS RES	134	-0.00290	-0.01409	11/25/2014@11:21:50 AM	
R1409369-001 RES	135	0.00067	0.02592	11/25/2014@11:22:37 AM	
9369-001 DUP RES	136	0.00146	0.03483	11/25/2014@11:23:24 AM	
CCV	137	0.50182	5.64727	11/25/2014@11:24:12 AM	
CCB	138	-0.00088	0.00858	11/25/2014@11:25:00 AM	
R1409368-001 RES	139	0.00357	0.05844	11/25/2014@11:25:47 AM	
MB s	140	-0.00205	-0.00461	11/25/2014@11:26:35 AM	
LCS-LL s	141	0.10159	1.15797	11/25/2014@11:27:21 AM	
LCS-HL s	142	0.40138	4.52072	11/25/2014@11:28:08 AM	

— air ppk < MRL

00382

R1409257-001 F	143	-0.00053	0.01252	11/25/2014@11:28:55 AM	
R1409257-002 F	144	-0.00115	0.00548	11/25/2014@11:29:42 AM	
9257-002 DUP F	145	-0.00186	-0.00241	11/25/2014@11:30:29 AM	
9257-002 SPK F	146	0.06236	0.71793	11/25/2014@11:31:15 AM	
R1409257-003 F	147	0.00225	0.04367	11/25/2014@11:32:02 AM	
R1409257-004	148	0.00095	0.02912	11/25/2014@11:32:49 AM	
CCV	149	0.50501	5.68307	11/25/2014@11:33:36 AM	
CCB	150	-0.00151	0.00144	11/25/2014@11:34:23 AM	
R1409257-005	151	0.00712	0.09833	11/25/2014@11:35:10 AM	
R1409304-001	152	-0.00128	0.00402	11/25/2014@11:35:58 AM	
9304-001 DUP	153	-0.00030	0.01508	11/25/2014@11:36:45 AM	
9304-001 SPK	154	0.09847	1.12293	11/25/2014@11:37:33 AM	
R1409304-002	155	-0.00029	0.01519	11/25/2014@11:38:20 AM	
R1409362-001	156	0.00608	0.08667	11/25/2014@11:39:07 AM	
R1409338-001	157	0.00024	0.02106	11/25/2014@11:39:54 AM	
R1409338-002	158	-0.00016	0.01657	11/25/2014@11:40:41 AM	
R1409338-003	159	0.00252	0.04669	11/25/2014@11:41:28 AM	
R1409338-004	160	0.00049	0.02396	11/25/2014@11:42:15 AM	
CCV	161	0.50397	5.67141	11/25/2014@11:43:01 AM	
CCB	162	-0.00097	0.00754	11/25/2014@11:43:48 AM	
R1409338-005	163	-0.00006	0.01769	11/25/2014@11:44:35 AM	
R1409396-003	164	0.00572	0.08262	11/25/2014@11:45:22 AM	
FILTER BLANK	165	-0.00105	0.00669	11/25/2014@11:46:09 AM	
FILTER LCS	166	0.09961	1.13572	11/25/2014@11:46:56 AM	
CCV	167	0.50131	5.64157	11/25/2014@11:47:44 AM	
CCB	168	-0.00258	-0.01049	11/25/2014@11:48:32 AM	

Analyte Properties Table for : OM_11-25-2014_10-42-42AM.OMN

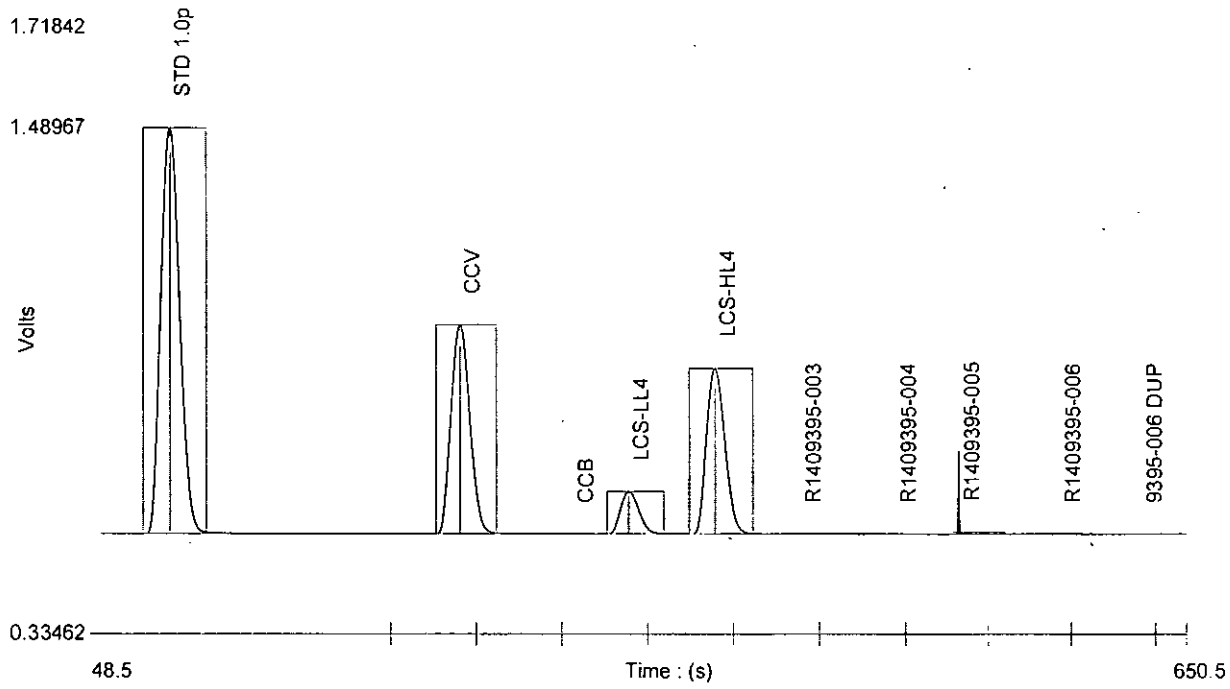
F - Filtered

Property	Channel 2
	Cyanide 9012B/SM450 0CN QC8500
Concentration Units	mg CN/L
Calibration Fit Type	First Order
Clear Calibration	Yes
Force through Zero	No
Calibration Weighting	1/x
Auto Dilution Trigger	No
% of High Standard	110
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	No
Inject to Peak Start	23
Peak Base Width	36

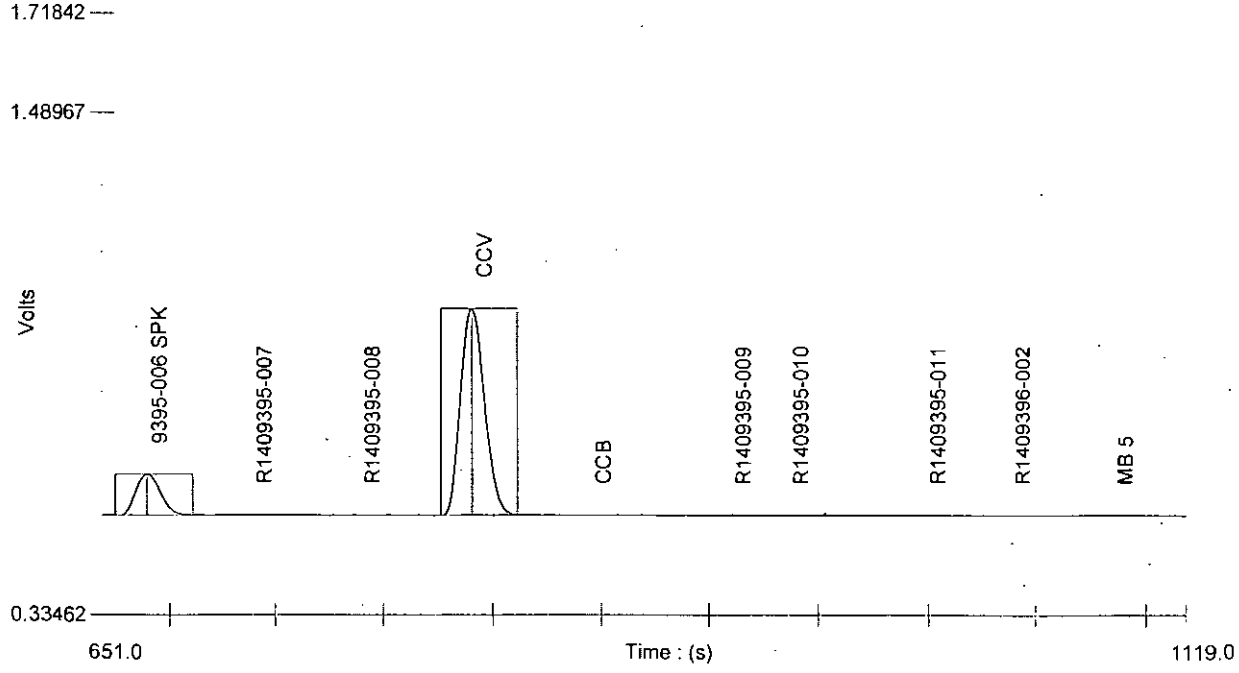
Author: GABRIELA NITA-JOUPPI

Date : 11/25/2014

Channel 2 (cyanide) - Set: 1 / 9



Channel 2 (cyanide) - Set: 2 / 9

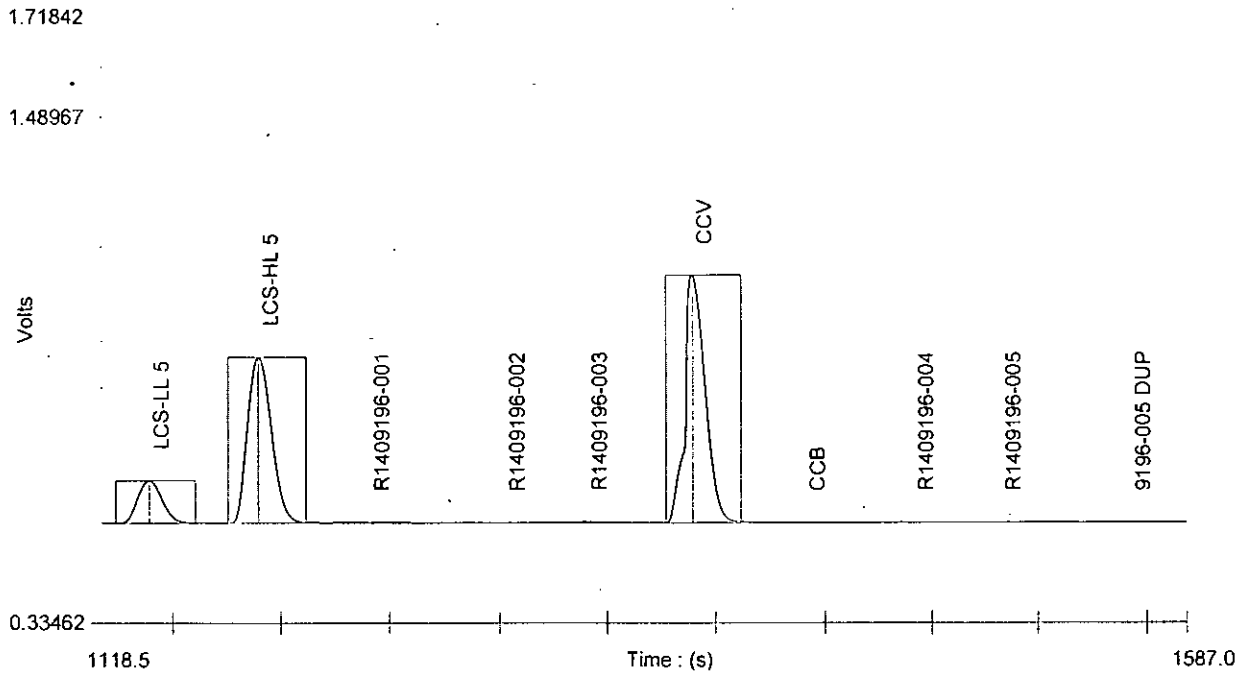


00384

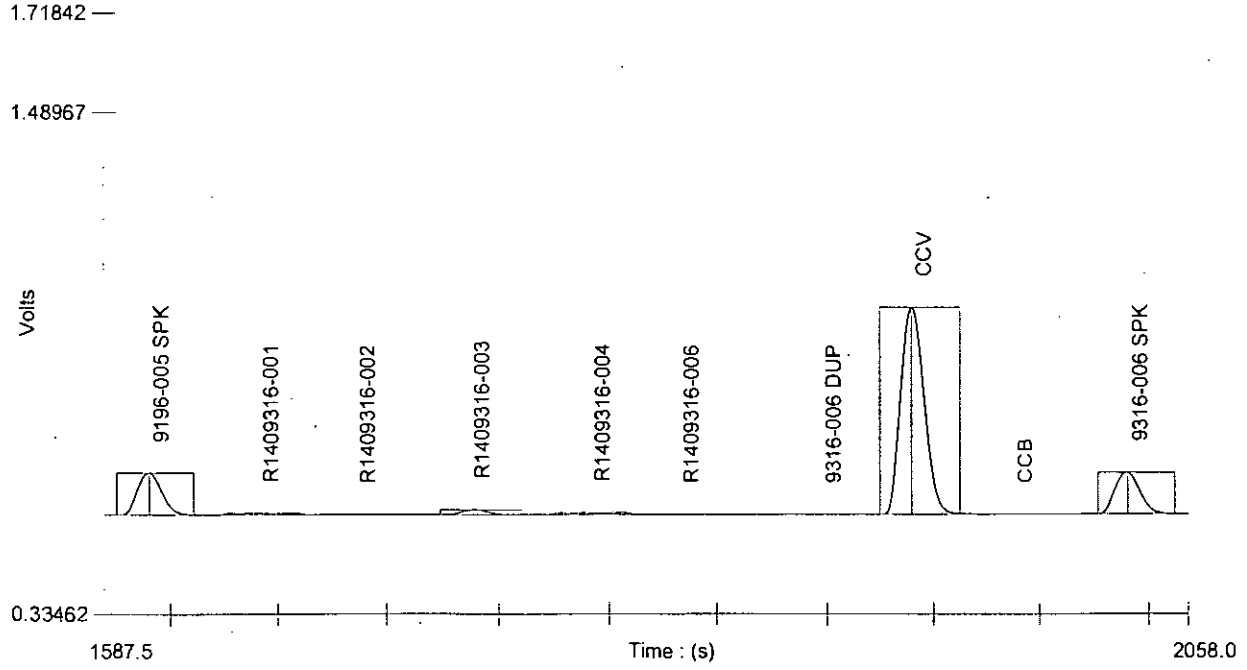
Author: GABRIELA NITA-JOUPPI

Date : 11/25/2014

Channel 2 (cyanide) - Set: 3 / 9



Channel 2 (cyanide) - Set: 4 / 9

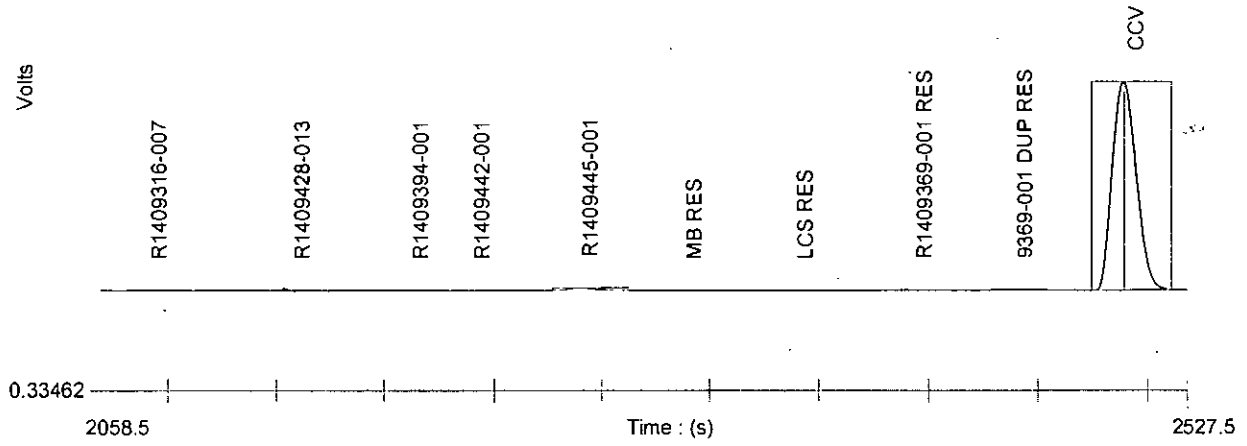


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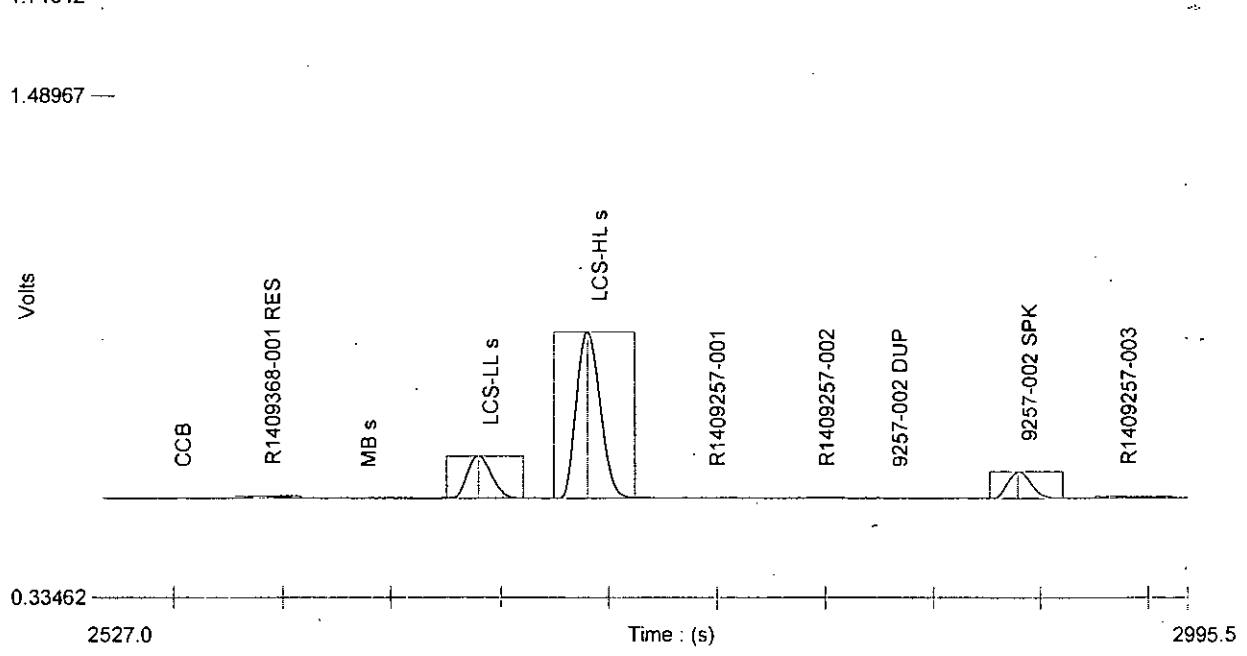
Author: GABRIELA NITA-JOUPPI

Date : 11/25/2014

Channel 2 (cyanide) - Set: 5 / 9



Channel 2 (cyanide) - Set: 6 / 9

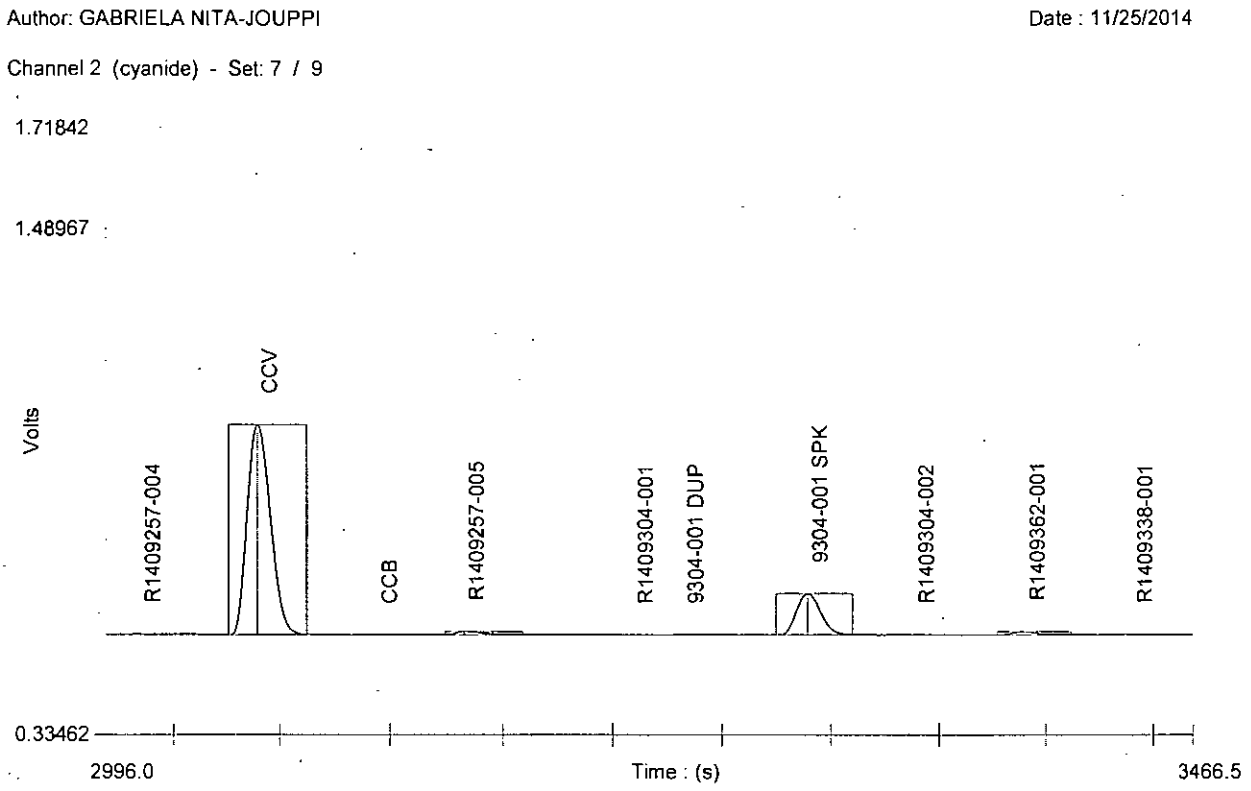


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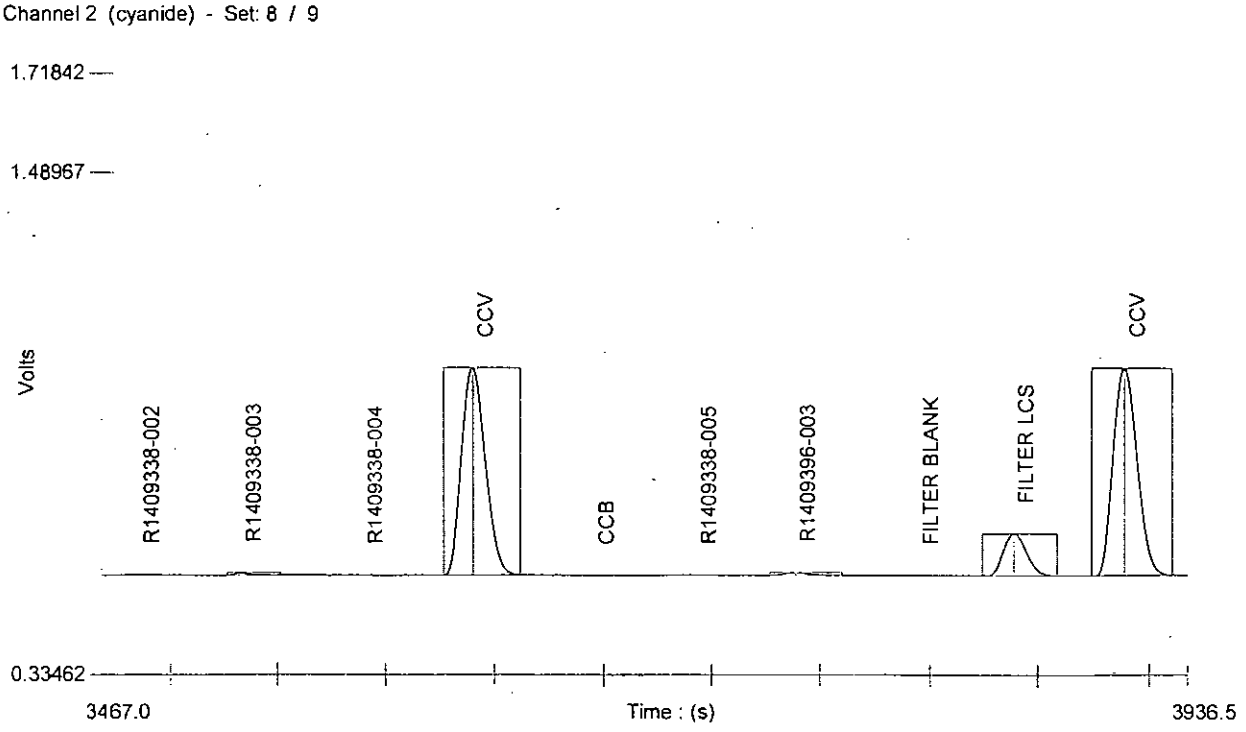
Author: GABRIELA NITA-JOUPPI

Date : 11/25/2014

Channel 2 (cyanide) - Set: 7 / 9



Channel 2 (cyanide) - Set: 8 / 9



00387

Author: GABRIELA NITA-JOUPPI Date : 11/25/2014

Channel 2 (cyanide) - Set: 9 / 9

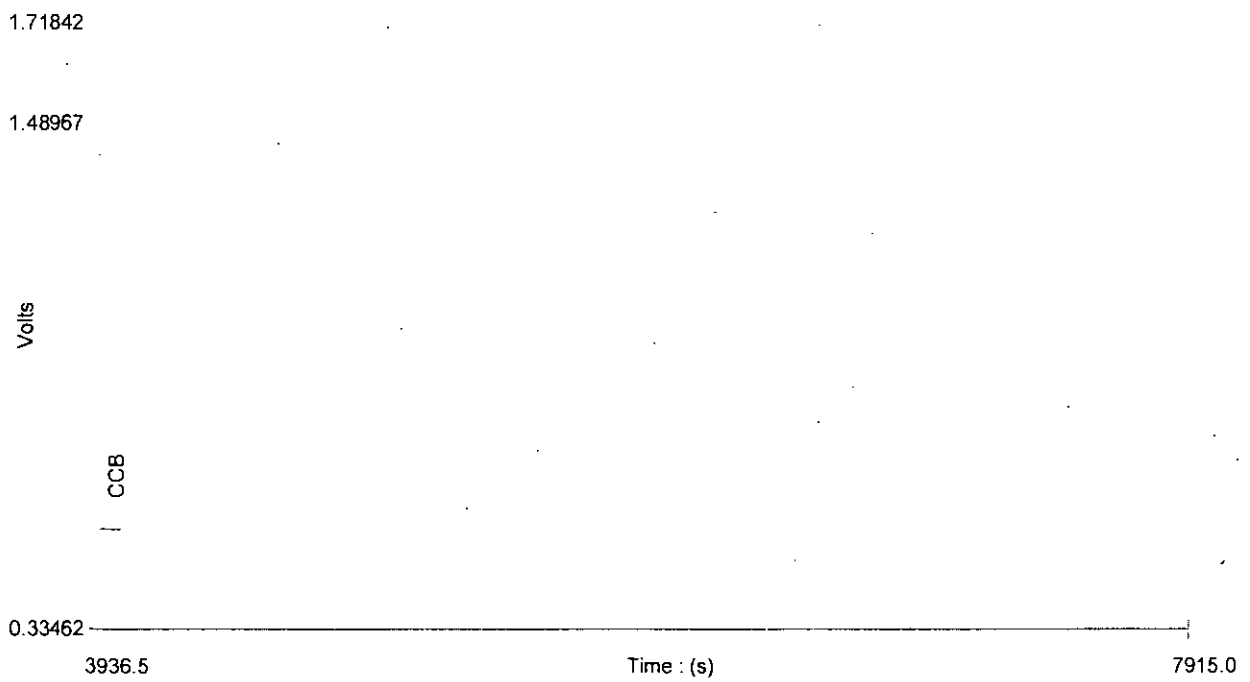
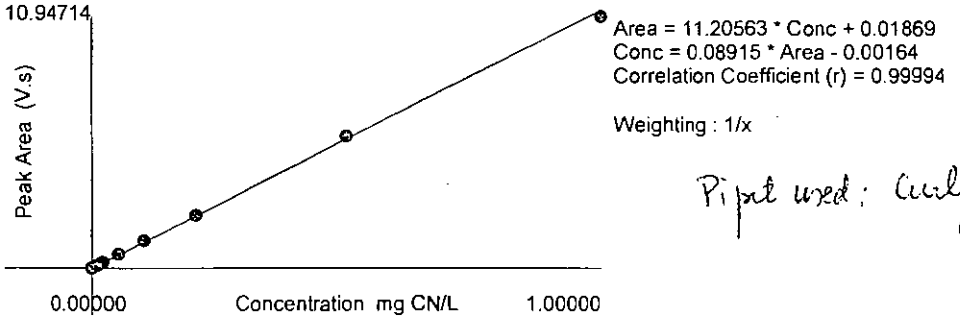


Table : 1 (Cyanide 9012B/SM4500CN QC8500)

	Known Conc. (mg CN/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg CN/L)	Detection Date	Detection Time
1	1.00000	1	10.94714	0.91800	0.0	2.5	0.97431	11/25/2014	9:16:39 AM
2	0.50000	1	5.75572	0.48587	0.0	-2.4	0.51149	11/25/2014	9:17:25 AM
3	0.20000	1	2.30293	0.19448	0.0	-1.9	0.20367	11/25/2014	9:18:11 AM
4	0.10000	1	1.19938	0.10128	0.0	-5.3	0.10528	11/25/2014	9:18:58 AM
5	0.05000	1	0.62257	0.05193	0.0	-7.5	0.05386	11/25/2014	9:19:45 AM
6	0.02000	1	0.24090	0.02010	0.0	0.8	0.01983	11/25/2014	9:20:31 AM
7	0.01000	1	0.12879	0.01010	0.0	1.5	0.00984	11/25/2014	9:21:18 AM
8	0.00000	1	0.00481	0.00073			-0.00121	11/25/2014	9:22:04 AM

Figure : 1 (Cyanide 9012B/SM4500CN QC8500)



Pipet used: Curly

00388

6/20/14 VP

TCN stock standardization

(A) Std'n of 1000 ppm stock #1 (WC.126286B)

Trial #	mLs stock #1	mLs 0.0192N $AgNO_3$ (WC126287A)	← BLK
BLK	0.0	0.03	–
1	5.0	4.93	4.90
2	5.0	4.87	4.84
3	5.0	4.92	4.89
			$\bar{x}$ = 4.8766

$$mg/L\ CN = \frac{(4.8766)(0.0192N)(52)(1000)}{5mL\ stock\ \#1} = 973.7595$$

~~@ 6/20/14~~

D.I'n factor: 1000/973.7595 = ~~1.03 mL~~ 1.027 mL of 10ppm

(B) Std'n of 1000ppm stock #2 (WC126286C)

Trial #	mLs stock #2	mLs 0.0192N $AgNO_3$ (WC126287A)	← BLK
BLK	0.0	0.03	–
1	5.0	4.75	4.72
2	5.0	4.79	4.76
3	5.0	4.74	4.71
			$\bar{x}$ = 4.73

$$mg/L\ CN = \frac{(4.73)(0.0192N)(52)(1000)}{5mL\ stock\ \#2} = 944.4864$$

D.I'n factor: 1000/944.4864 = 1.059 of 10ppm

6/20/14 GN

(C) Standardization of 0.02500 N Iodine

$(5.0mL\ I_2)N = (5.05mL\ Na_2S_2O_3)(0.0250)$

$N = 0.02525$

(D) Standardization of Sulfide Reference

$$\frac{16.03[(5.0mL\ I_2)(0.02525) - (2.45mL\ Na_2S_2O_3)(0.02500)]}{0.002}$$

$= 520.975$ ppm

WC85

3/08 (A) 0.25N NaOH

26.14 mls conc. NaOH (WC85011C) → Liter w/ DI.
Fresh per run.

(B) 10ppm TCN Std. Stock

1.022 mls of the 978.432 ppm TCN Std. Stock (WC85007E)
→ 100 mls w/ 0.25N NaOH (WC85134A)

(C) 10ppm TCN Ref. Stock

1.002 mls of the 998.4 ppm TCN Ref. Stock (WC85009F)
→ 100 mls w/ 0.25N NaOH (WC85134A)

(D) TCN Calibration Stds. Fresh per run

Conc.	mls 10ppm TCN Std. Stock (WC85134B)	mls 0.25N NaOH
1.00	1.0	9.0
0.50	0.50	9.50
0.20	0.20	9.80
0.10	1/10 dilution of 1.00 ppm Std	
0.05	1/10 dilution of 0.50 ppm Std	
0.02	1/10 dilution of 0.20 ppm Std	
0.01	1/10 dilution of 0.10 ppm Std	
0.00	0.00	10.0

(E) ICV/CCV TV=0.70 Fresh per run

0.70 mls 10ppm TCN Ref. Stock (WC85134C) + 9.30 mls 0.25N NaOH (WC85134A)

4/3/08 NM (F) NH_3 Carrier/Diluent

-same as WC85073F. Prepared solution X 3.

(G) Hypochlorite - NH_3

-same as WC85109F. Prepare fresh each run.

4/3/08 (F) Iodide - Iodate Titrant - Sulfite

c 4.458g KIO_3 (WC85001E) + 4.25g KI (WC70272E) + 0.310g $NaHCO_3$ (WC70115E)
dissolved in DI in 1L volumetric flask and brought to volume. Store at 4°C exp 4/3/09

(G) Ascorbic Acid - Kemlab

Same as WC85113C Store at 4°C exp 2 weeks 4/17/08

4/3/08 NM Reagents for

(A) (1) x
CPE.

(B) (4) x
CPE

Reagents for

(C) (1) x
Orion
431-
Expir

4/4/08 NM (D) Post-D

To a 2-L
(WC85133
Pour off
w/ UPDI.

(E) Hypochlo

-same as

4/4/08 NM (F) Color

To a
-75.0g
-0.50g
-454g
stir unt

(G) Buffer -

-same as

4/8/08 NM (H) Post -

-some

(I) Hypoc

-same

TITLE PROJECT

Continued from page

6/16/10 (A) TCN/WAD Low Level LCS:

For waters add 0.06ml 10ppm Standard Working Stock (WC091608) to 6 ml DI. TV= 0.1000

For soils add 0.06ml 10 ppm Standard Working Stock to 1g Ottawa Sand and 5ml DI TV=0.600
exp 6/16/10

(B) TCN/WAD High Level LCS:

For waters add 0.24ml 10ppm Standard Working Stock (WC091608) to 6ml DI. TV=0.400

For soils add 0.24ml 10ppm Standard Working Stock to 1.0g Ottawa Sand and 5ml DI TV=2.40

(C) TCN/WAD Matrix Spike

For waters add 0.06ml 10ppm Standard Working Stock (WC091608) to 6ml sample. TV=0.1000

For soils add 0.06ml 10ppm Standard Working Stock to 1g sample and 5ml DI. TV=0.600

6/17/10 BLR (D) Eriochrome Black-T: Hardness Indicator

Add 100.0g NaCl (WC92151B) an 0.50g Eriochrome Black-T (WC92197C) to a tared B-cup. Cap and shake well to mix. Store @ R.T.

exp: 5/13/15

RP 6/17/10 (E) 0.00564N Sodium Thiosulfate:

Dilute 28.2ml of 0.1N $Na_2S_2O_3$ (WC92138A) to 500mL w/ DI water (volumetrically).

Expires 2 weeks → 7/1/10

(F) 10% Phosphoric acid

Add 10.0mLs of Concentrated H_3PO_4 (WC92115F) to ~70mL of DI water, mix and dilute to 100mL volumetrically. Store at room temperature.

expires 1 yr 6/17/10

(G) Standard Iodate Titrant (0.00564N) (WC85239A)

Weigh out 0.2012g of dried KIO_3 into a 1 Liter volumetric flask, dissolve in DI water and dilute to volume.

Prepare fresh each run.

Continued to page

SIGNATURE DATE

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PROPRIETARY INFORMATION

E PROJECT

ued from page

20/09 (A) TDS Reference
EW 0.9153g NaCl (WC852151H) diluted volumetrically to 1 liter w/ DI. Store in plastic bottle @ 4°C.
TV = 915 mg/L Exp: 8/20/10 (11634)

20/09 (B) Color Reagent - TKN
VM - same as WC92059G. Exp 1 month, 9/20/09.

(C) NH3 Carrier/Diluent
TO a 2 liter plastic bottle add:
- 998g UPDI
- 3.68g conc. instra-analyzed H_2SO_4 (WC92064B)
- Prepared solution x4.

d09 As of 8/18/09 for Konelab:

(D) ICV/CCV TCN TV = 0.50
0.50 mls 10ppm TCN Ref Stock (WC85134C) + 9.50 mls 0.25N NaOH (WC85134H) 9.50 chkm 8/20/09

(E) ICV/CCV OPO_4^{-3} TV = 0.45 chkm 8/20/09 0.045
0.25 mls 1.80ppm OPO_4 Ref Stock (WC85130G) + 9.75 mls UPDI.

(F) ICV/CCV OPO_4 TV = 0.45 0.36 chkm 8/24/09
0.25ml 18.0ppm OPO_4 Ref Stock (WC85130F) + 9.75 mls UPDI.
0.20ml 9.80

(G) ICV/CCV NO_2 TV = 0.45
0.25ml 18.0ppm NO_2 Ref Stock (1/10 dil of WC85135B) WC72007G chkm 8/24/09 + 9.75mls UPDI

(H) ICV/CCV Cr^{+6} TV = 0.25
0.25mls 10ppm Cr^{+6} Ref Stock (WC85129G) + 9.75 mls UPDI

(I) ICV/CCV NH_3 TV = 0.90
0.50mls 180ppm NH_3 Reference Stock (1/10 dil of WC85257G) + 9.50 mls diluent (WC92045D)

8/20/09 (J) ICV/CCV TKN's (TV = 4.00)
V Mead 9.9mls PDMM + 0.1 mls 400ppm Reference working stock (WC04200)

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PROPRIETARY INFORMATION

00382

ALS Environmental
1565 Jefferson Rd., Rochester NY 14623

Analyst: GNITA Distillation Date: 11/24/14

Analysis: Total Cyanide Instrument: Lachat 8500 Analyzer Date: 11/25/14

Quality Control:

	Same as Log #, Date	Stock Sol (mLs)	Stock Sol (mg/L)	Final Vol mLs	True Value (mg/L)
a) Stds. Prep. :	WC85134D, 4/3/08				
10 ppm Working Stock:	WC85134B, 4/3/08	1.027	973.7595	100	10.0
b) ICCV (Ref.) Prep.:	WC92067D, 8/20/09	0.5	10	10	0.500
10 ppm Working Stock:	WC85134C, 4/3/08	1.059	944.4864	100	10.0
c) LCS (water) Prep:	WC92218B , 6/16/10	0.24	10	6	0.4
LCS (water) Prep:	WC92218A , 6/16/10	0.06	10	6	0.1
LCS (soil) Prep. :	WC92218B , 6/16/10	0.24	10	0.6g	4 (see bench sheet)
LCS (soil) Prep:	WC92218A , 6/16/10	0.06	10	0.6g	1 (see bench sheet)
d) Mtx Spk (water) Prep:	WC92218C , 6/16/10	0.06	10	6	0.1
Mtx Spk (soil) Prep:	WC92218C , 6/16/10	0.06	10	~0.6g.	~1(see bench sheet)

Method Reference: EPA 335.4; 9012B

Instrument log filled in? (Y) (N)

Stock Prep:
1000 mg/L TCN Std. Stock prepared 6/20/14, WC126286B, standardized 6/20/14, WC1150072A
1000 mg/L TCN Ref. Stock prepared 6/20/14, WC126286C, standardized 6/20/14, WC115072B

10 mg/L Std. And Ref. working stocks are prepared weekly using the above stock solutions, diluting to volume with 0.25N NaOH

Reagents, Distillation:	**Log Book #**	**Comments**
Sulfamic Acid	WC140103C	
H2SO4/MgCl2 Solution	WC140103B	
1M NaOH	WC140100A	
Calcium Hypochlorite	WC126245D	
Na2S2O3	WC103219A	
Acetate Buffer/Zinc Acetate	WC126135E	
Cadmium Carbonate	WC103273C	
Anti-foam	NA	

Reagents, Autoanalyzer:		
Buffer	WC140100C	Exp.12/10/2014
Pyridine Barbituric Acid	WC140105A	Exp:04/15/2015

Chloramine-T, fresh daily: 2.00 g Chloramine-T WC126240d diluted to 500 mL with DI

Comments: Fisher Lot #2183895

00393

Analytical Results Summary

Instrument Name: R-pH-05 **Analyst:** GLAFORCE **Analysis Lot:** 423602 **Method/Testcode:** 9045D/pH

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
R1409396-003	pH	N/A		Soil	7.16 pH Units		7.16 pH Units #	1					11/24/14 11:35:00	N	II
R1409401-001	pH	N/A		Soil	8.18 pH Units		8.18 pH Units	1					11/24/14 11:35:00	N	II
R1409432-001	pH	N/A		Soil	7.45 pH Units		7.45 pH Units	1					11/24/14 11:35:00	N	IV
R1409432-002	pH	N/A		Soil	7.42 pH Units		7.42 pH Units	1					11/24/14 11:35:00	N	IV
R1409432-003	pH	N/A		Soil	7.87 pH Units		7.87 pH Units	1					11/24/14 11:35:00	N	IV
R1409432-004	pH	N/A		Soil	7.74 pH Units		7.74 pH Units	1					11/24/14 11:35:00	N	IV
R1409432-005	pH	N/A		Soil	7.18 pH Units		7.18 pH Units	1					11/24/14 11:35:00	N	IV
R1409432-006	pH	N/A		Soil	7.55 pH Units		7.55 pH Units	1					11/24/14 11:35:00	N	IV
R1409432-007	pH	N/A		Soil	6.77 pH Units		6.77 pH Units	1					11/24/14 11:35:00	N	IV
R1409432-008	pH	N/A		Soil	7.40 pH Units		7.40 pH Units	1					11/24/14 11:35:00	Y	IV
R1409432-009	pH	N/A		Soil	6.95 pH Units		6.95 pH Units	1					11/24/14 11:35:00	N	IV
R1409432-010	pH	N/A		Soil	7.79 pH Units		7.79 pH Units	1					11/24/14 11:35:00	N	IV
R1409432-011	pH	N/A		Soil	7.70 pH Units		7.70 pH Units	1					11/24/14 11:35:00	N	IV
R1409432-012	pH	N/A		Soil	7.45 pH Units		7.45 pH Units	1					11/24/14 11:35:00	N	IV
R1409432-013	pH	N/A		Soil	7.15 pH Units		7.15 pH Units	1					11/24/14 11:35:00	N	IV
R1409432-014	pH	N/A		Soil	7.20 pH Units		7.20 pH Units	1					11/24/14 11:35:00	N	IV
R1409434-001	pH	N/A		Soil	7.06 pH Units		7.06 pH Units	1					11/24/14 11:35:00	N	IV
R1409434-002	pH	N/A		Soil	7.15 pH Units		7.15 pH Units	1					11/24/14 11:35:00	N	IV
R1409434-003	pH	N/A		Soil	7.38 pH Units		7.38 pH Units	1					11/24/14 11:35:00	N	IV
R1409434-004	pH	N/A		Soil	7.46 pH Units		7.46 pH Units	1					11/24/14 11:35:00	N	IV
R1409434-005	pH	N/A		Soil	7.94 pH Units		7.94 pH Units	1					11/24/14 11:35:00	N	IV
R1409434-006	pH	N/A		Soil	8.03 pH Units		8.03 pH Units	1					11/24/14 11:35:00	N	IV
R1409434-007	pH	N/A		Soil	7.38 pH Units		7.38 pH Units	1					11/24/14 11:35:00	Y	IV
R1409434-011	pH	N/A		Soil	7.00 pH Units		7.00 pH Units	1					11/24/14 11:35:00	N	IV
R1409434-012	pH	N/A		Soil	7.11 pH Units		7.11 pH Units	1					11/24/14 11:35:00	N	IV
R1409434-013	pH	N/A		Soil	6.84 pH Units		6.84 pH Units	1					11/24/14 11:35:00	N	IV
R1409434-014	pH	N/A		Soil	7.14 pH Units		7.14 pH Units	1					11/24/14 11:35:00	N	IV
R1409434-015	pH	N/A		Soil	7.38 pH Units		7.38 pH Units	1					11/24/14 11:35:00	N	IV
R1409434-016	pH	N/A		Soil	6.06 pH Units		6.06 pH Units	1					11/24/14 11:35:00	N	IV
R1409441-001	pH	N/A		Water	7.43 pH Units		7.43 pH Units	1					11/24/14 11:35:00	N	I
R1409441-001	Temperature of pH Analysis	N/A		Water	20.80 deg C		20.8 deg C	1					11/24/14 11:35:00	N	I
R1409442-001	pH	N/A		Water	9.64 pH Units		9.64 pH Units	1					11/24/14 11:35:00	N	II
R1409442-001	Temperature of pH Analysis	N/A		Water	20.70 deg C		20.7 deg C	1					11/24/14 11:35:00	N	II
R1409445-001	pH	N/A		Water	7.40 pH Units		7.40 pH Units	1					11/24/14 11:35:00	N	IV

indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

R9396 MR R9434
R9432 R9445

Analytical Results Summary

Instrument Name: R-pH-05 **Analyst:** GLAFORCE **Analysis Lot:** 423602 **Method/Testcode:** SM 4500-H+ B/pH

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
R1409445-001	Temperature of pH Analysis	N/A		Water	18.20 deg C		18.2 deg C	1					11/24/14 11:35:00	N	IV
R1409470-002	pH	N/A		Water	7.13 pH Units		7.13 pH Units	1					11/24/14 11:35:00	N	II
R1409470-002	Temperature of pH Analysis	N/A		Water	20.70 deg C		20.7 deg C	1					11/24/14 11:35:00	N	II
RQ1414828-01	pH	DUP	R1409432-006	Soil	7.56 pH Units		7.56 pH Units	1				<1	11/24/14 11:35:00	N	IV

5693

indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Limits for DI Water if pH < 5.5, or > 7.5 Notify QA!
Limits for Spec. Cond. >= 1 - Notify QA! (Limit is 2 umohs/cm)
pH holding time is 15 minutes from collection

Date: 11/24/14

Folder #	Order #	pH SM4500H+B 9040C	Corrosivity 9045D	CONDUCTIVITY 120.1 raw data	units	umhos/cm	TEMP °C	Analyst	Time	HT** (y/n)
MBLK	DIH_2O	6.120					15.4	@	1135	
R14-9434	-001		7.062				19.3°			Y
	-002		7.153				19.5°			
	-003		7.376				19.8°			
	-004		7.463				20.0°			
	-005		7.938				20.0°			
	-006		8.034				19.9°			
	-007		7.378				20.0°			
	-011		7.003				19.9°			
	-012		7.105				19.8°			
	-013		6.844				19.8°			
	-014		7.136				19.7°			
	-015		7.376				19.8°			
	-016		6.057				19.8°			
R14-9432	-001		7.445				19.7°			
	-002		7.421				19.6°			
	-003		7.870				19.6°			
	-004		7.742				19.7°			
	-005		7.183				19.6°			
	-006		7.554				19.5°			
	-006.DUP		7.560				19.5°			
CCV	4.01	4.034					19.5°			N/A
R14-9432	-007		6.774				19.8°			Y

** HT = holding time

pH Meter Calibration

STANDARDS 4.01 ✓ @19.3 °C 10.01 ✓ @19.4 °C ICV check 7.00 7.03 @19.4 °C

LOT #: BDB26137B Exp. 5/16 BDB26137C Exp. 5/16 BDB26136G Exp. 3/16

Conductivity Meter Calibration (calibrate to 1412 and test 2767 & 146.9 standard)

N KCL: 1412 **Calibrated (Yes / No)** **LOT #:** _____

Cell Constant: _____

N KCL: 2767 **LOT #:** _____ **Reading** _____

10% Limits: 2490.3 to 3043.7

N KCL: 146.9 **LOT #:** _____ **Reading** _____

10% Limits: 132.2 TO 161.6

uS = 1 umhos/cm mS = 1,000 umhos/cm S = 1,000,000 umhos/cm

Analyst: @ DATE: 11/24/14 TIME: 1105

Limits for DI Water if pH < 5.5, or > 7.5 Notify QA!
Limits for Spec. Cond. >= 1 - Notify QA! (Limit is 2 umohs/cm)
pH holding time is 15 minutes from collection

Date: 11/24/14

Folder #	Order #	pH SM4500H+B 9040C	Corrosivity 9045D	CONDUCTIVITY 120.1 raw data	units	umhos/cm	TEMP °C	Analyst	Time	HT** (y/n)
R14-9482	-008		7.399				19.8°	@	1130	Y
	-009		6.950				19.8°			
	-010		7.792				19.7°			
	-011		7.704				19.6°			
	-012		7.454				20.0°			
	-013		7.152				19.8°			
	-014	@ 11/24/14	~~7.188~~ 7.198				19.9°			
	-018		6.993				19.8°			
	-019		7.770				19.8°			
	-020		7.905				19.9°			
	-021		7.573				19.8°			
	-022		7.614				19.8°			
	-022DUP		7.597				19.8°			
~~CCV~~	~~10.01~~	@ 11/24/14								
R14-9401	-001		8.183				19.7°			Y
R14-9396	-003		7.155				19.8°			
CCV	10.01	10.032					19.8°			N/A
R14-9442	-001	9.640					20.7°			N
R14-9445	-001	7.399					18.2°			
R14-9470	-002	7.134					20.7°			
R14-9491	-001	7.433					20.8°			Y
CCV	4.01	4.022					20.0°			N/A

$500 limit

** HT = holding time

pH Meter Calibration

STANDARDS 4.01 @ °C 10.01 @ °C ICV check 7.00 @ °C

LOT #:

see pg. 45

Conductivity Meter Calibration (calibrate to 1412 and test 2767 & 146.9 standard)

N KCL: 1412 **Calibrated (Yes / No)** **LOT #:**

Cell Constant:

N KCL: 2767 **LOT #:** **Reading**

10% Limits: 2490.3 to 3043.7

N KCL: 146.9 **LOT #:** **Reading**

10% Limits: 132.2 TO 161.6

uS = 1 umhos/cm mS = 1,000 umhos/cm S = 1,000,000 umhos/cm

Analyst: (M) DATE: 11/24/14 TIME: 1130